



**138 Forward Avenue –  
Stormwater Management and  
Servicing Report**

Stantec Project No.  
160401680

April 18, 2022

Prepared for:

VIKA Land Development Group Inc.

Prepared by:

Stantec Consulting Ltd.  
300 -1331 Clyde Avenue  
Ottawa, ON K2C 3G4

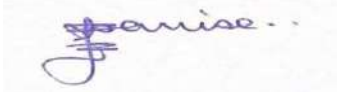


<b>Revision</b>	<b>Description</b>	<b>Author</b>		<b>Quality Check</b>		<b>Independent Review</b>	
2	Issued for SPCA approval	2022-04-18	NN	2022-04-26	DT	2022-04-26	KK
1	Issued for SPCA approval	2021-12-21	AS, NN	2021-12-22	DT	2021-12-22	AG



## 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

This document entitled 138 Forward Avenue – Stormwater Management and Servicing Report was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of VIKA Land Development Group Inc. (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by  \_\_\_\_\_

**Nwanise, EIT**

Reviewed by  \_\_\_\_\_

**Alyssa Gladish, EIT**

Approved by  \_\_\_\_\_

**Dustin Thiffault, P.Eng.**



## Table of Contents

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1.1</b>
1.1	OBJECTIVE .....	1.2
<b>2.0</b>	<b>BACKGROUND.....</b>	<b>2.1</b>
<b>3.0</b>	<b>WATER SERVICING.....</b>	<b>3.1</b>
3.1	BACKGROUND.....	3.1
3.2	WATER DEMANDS.....	3.1
3.3	LEVEL OF SERVICING.....	3.2
	3.3.1 Allowable Pressures.....	3.2
	3.3.2 Fire Flow Demands.....	3.2
3.4	PROPOSED WATER SERVICING.....	3.3
<b>4.0</b>	<b>WASTEWATER SERVICING.....</b>	<b>4.1</b>
4.1	DESIGN CRITERIA.....	4.1
4.2	WASTEWATER GENERATION AND SERVICING DESIGN.....	4.1
4.3	PROPOSED SANITARY SERVICING.....	4.2
<b>5.0</b>	<b>STORMWATER MANAGEMENT AND SERVICING.....</b>	<b>5.1</b>
5.1	OBJECTIVES.....	5.1
5.2	EXISTING CONDITIONS AND SWM CRITERIA.....	5.1
5.3	STORMWATER MANAGEMENT DESIGN.....	5.2
	5.3.1 Allowable Release Rate .....	5.2
	5.3.2 Quantity Control: Storage Requirements.....	5.3
	5.3.3 Quality Control .....	5.6
5.4	PROPOSED STORMWATER SERVICING.....	5.6
<b>6.0</b>	<b>SITE GRADING .....</b>	<b>6.1</b>
<b>7.0</b>	<b>UTILITIES .....</b>	<b>7.1</b>
<b>8.0</b>	<b>APPROVALS .....</b>	<b>8.1</b>
<b>9.0</b>	<b>EROSION CONTROL DURING CONSTRUCTION.....</b>	<b>9.1</b>
<b>10.0</b>	<b>GEOTECHNICAL INVESTIGATION .....</b>	<b>10.1</b>
<b>11.0</b>	<b>ENVIRONMENTAL SITE ASSESSMENT (PHASE I).....</b>	<b>11.2</b>
<b>12.0</b>	<b>CONCLUSIONS.....</b>	<b>12.1</b>
12.1	WATER SERVICING.....	12.1
12.2	SANITARY SERVICING.....	12.1
12.3	STORMWATER SERVICING AND MANAGEMENT .....	12.1
12.4	GRADING .....	12.2
12.5	UTILITIES .....	12.2



12.6 APPROVALS/RESTRICTIONS ..... 12.2

**LIST OF TABLES**

Table 3.1: Estimated Water Demands.....3.1  
 Table 3.2: Boundary Conditions .....3.2  
 Table 4.1: Estimated Wastewater Peak Flow .....4.1  
 Table 5.1: Target Release Rate .....5.3  
 Table 5.2: Roof Control Areas.....5.4  
 Table 5.3: Uncontrolled Area (UNC-1) .....5.4  
 Table 5.4: Summary of Total 5-Year and 100-Year Event Release Rates .....5.5  
 Table 5-5 Comparison of Pre- to Post-Development Release Rates .....5.6

**LIST OF FIGURES**

Figure 1: Key Plan of Site ..... 1.1

**LIST OF APPENDICES**

**APPENDIX A POTABLE WATER SERVICING ..... A.1**  
 A.1 Domestic Water Demand Calculations ..... A.1  
 A.2 Fire Flow Requirements Per OFM Guidelines..... A.2  
 A.3 Boundary Conditions ..... A.3  
 A.4 Hydraulic Conditions Calculations ..... A.4  
 A.5 Confirmation of Building Construction: Correspondence with Architect..... A.5

**APPENDIX B DRAFT SITE PLAN AND ROOF PLAN, MAR. 2, 2022 ..... B.1**

**APPENDIX C WASTEWATER SERVICING..... C.1**  
 C.1 Sanitary Sewer Calculation Sheet ..... C.1  
 C.2 Confirmation of Sanitary Sewer Capacity..... C.1

**APPENDIX D STORMWATER SERVICING..... D.1**  
 D.1 Modified Rational Method Sheet..... D.1  
 D.2 Storm Sewer Design Sheet ..... D.2  
 D.3 Preconsultation Notes ..... D.3  
 D.4 Correspondence with the RVCA..... D.4  
 D.5 Watts Drainage Adjustable Accutrol Weir Detail ..... D.5

**APPENDIX E BACKGROUND STUDIES ..... E.1**  
 E.1 Geotechnical Investigation By Paterson Group Inc (November 21, 2021)..... E.1  
 E.2 Environmental Site Assessment (Phase I) by Paterson Group (Nov. 16, 2021) ..... E.2  
 E.3 Roadway Traffic Noise Assessment BY Gradient Wind (Dec. 10, 2021)..... E.3  
 E.4 Surveyor’s Real Property Report by Annis, O’Sullivan, Vollebakk Ltd. Mar. 20, 2020. .... E.4

**APPENDIX F OTHER CORRESPONDENCE ..... F.1**  
 F.1 First Submission Civil Comment Response Letter ..... F.1

**APPENDIX G DRAWINGS ..... G.1**





# 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

Introduction  
April 18, 2022

## 1.0 INTRODUCTION

Stantec Consulting Ltd. has been commissioned by VIKA Land Development group Inc. to prepare the following servicing and stormwater management report in support of a site plan control application for the proposed development located at 138 Forward Avenue in the City of Ottawa.

The current site measures 0.045ha and is currently zoned R4UD. It contains a two-storey building, driveway, and surface parking. The site is bounded by Forward Avenue to the east, a city laneway on the west, and existing developments on the north and south, (see **Figure 1** below).



**Figure 1: Key Plan of Site**

The proposed development consists of a four-storey apartment building with a basement level, consisting of 20 residential units. The proposed building will include 6 one-bedroom, 5 bachelor, and 9 two-bedroom apartment units with a mechanical room located in the basement. Susan D. Smith Architect has prepared a draft site plan dated January 2021 to support the proposed development (see **Appendix B**).



# 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

Introduction

April 18, 2022

## 1.1 OBJECTIVE

This site servicing and SWM report has been prepared to present a servicing scheme that is free of conflicts and utilizes the existing infrastructure. Details of the existing infrastructure were obtained from available as-built drawings and in consultation with City of Ottawa staff. Infrastructure requirements for water supply, sanitary and storm sewer services are presented in this report.

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 elements and potential development constraints to be addressed are as follows:

- Prepare a grading plan in accordance with the proposed site plan and existing grades.
- 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 300 mm diameter storm sewer on Forward Avenue.
- Wastewater Servicing
  - Define and size the sanitary service lateral which will be connected to the existing 250 mm diameter sanitary sewer on Forward Avenue.
- Water Servicing
  - Estimate water demands to characterize the proposed feed for the proposed development which will be serviced from the existing 203 mm diameter watermain on Forward Avenue.
  - 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 50 to 80 psi (345 to 552 kPa).
  - Under fire flow (emergency) conditions, the water distribution system is to maintain a minimum pressure greater than 20 psi (140 kPa).

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





# 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

Background

April 18, 2022

## 2.0 BACKGROUND

Documents referenced in preparation of this stormwater and servicing report for 138 Forward 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, 2008.
- *Fire Protection Water Supply Guideline for Part 3 in the Ontario Building Code*, Office of the Fire Marshal (OFM), October 1999.
- *Geotechnical Investigation – Report PG6026-1*, Paterson Group Inc., November 2021.
- *Ontario F-6-1 Procedures to Govern Separation of Sewers and Watermains, Part 4 – Parallel installations for separation* (<https://www.ontario.ca/page/f-6-1-procedures-govern-separation-sewers-and-watermains#section-4>).
- *Phase I – Environmental Site Assessment Report PE5478-1*, Paterson Group Inc., November 2021.
- *Water Supply for Public Fire Protection*, Fire Underwriters Survey (FUS), CGI Group Inc, 1999.



Water Servicing  
 April 18, 2022

## 3.0 WATER SERVICING

### 3.1 BACKGROUND

The proposed building is located in Pressure Zone 1W of the City of Ottawa’s Water Distribution System. It will be serviced via a 150mm building service connection to the existing 203 mm diameter watermain on Forward Avenue as shown on the Site Servicing Plan (see **Drawing SSP-1** in **Appendix G**).

### 3.2 WATER DEMANDS

The proposed four-storey with basement building consists of one-bedroom (6 units), bachelor apartment (5 units) and two-bedroom apartments (9 units).

The City of Ottawa Water Distribution Guidelines (July 2010) and ISTB 2021-03 technical bulletin were used to determine water demands based on population densities for residential areas. A daily rate of 280 L/cap/day has been applied for residential units. The MOE water demand criteria were used to estimate peak demand rates for the site (i.e., residential areas < 500 equivalent population) as follows: The average daily (AVDY) residential demand was estimated using an occupancy of 1.4 persons per unit for a one-bedroom and bachelor apartment and 2.1 persons per unit for a two-bedroom apartment. Maximum day (MXDY) demands were determined by multiplying the AVDY demands by a factor of 9.5 for residential areas. Peak hourly (PKHR) demands were determined by multiplying the AVDY demands by a factor of 14.3 (see **Appendix A.1**). The estimated demands are summarized in **Table 3.1**

**Table 3.1: Estimated Water Demands**

	Population	AVDY (L/s)	MXDY (L/s)	PKHR (L/s)
Residential	34 persons	0.11	1.06	1.59
<b>Total Site</b>		<b>0.11</b>	<b>1.06</b>	<b>1.59</b>

As no on-site watermains or fire hydrants are proposed for the current development, the fire flow demand was calculated in accordance with the Office of the Fire Marshal (OFM) fire protection water supply guidelines for the Ontario Building Code (OBC) methodology. The OFM estimate is based on a wood-frame construction building with unprotected building openings. The floor area was estimated as the area of the ground floor and taking into consideration the storeys above ground level. Additionally, it is anticipated that the building will be sprinklered, with final sprinkler design to conform to NFPA 13 (See calculations in **Appendix A.2**). Required fire flows were determined to be approximately 5400 L/min (90.0 L/s).

**Table 3.2** outlines the boundary conditions provided by the City of Ottawa on March 29, 2022 (See **Appendix A.3**).



**Table 3.2: Boundary Conditions**

	Connection @ Forward Avenue
Min. HGL (m)	107.6
Max. HGL (m)	114.8
Max. Day + Fire Flow (90 L/s)	107.1
Max. Day + Fire Flow (100 L/s)	106.5

### 3.3 LEVEL OF SERVICING

#### 3.3.1 Allowable Pressures

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

The proposed finished floor elevation at the ground floor of 63.55m will serve as ground elevation for the calculation of residual pressures at ground level. On-site pressures are expected to range from 434kPa (63 psi) to 503 kPa (73 psi) under normal operating conditions. Due to head loss of about 5 psi for each storey, it is expected that the upper storey (the fourth floor) will experience minimum pressure in the range of 48psi – 58psi. Calculations of the residual pressures have been provided in **Appendix A.4**. These values are within the normal operating pressure range as defined by City of Ottawa design guidelines which requires 40 to 80 psi. Consequently, we do not anticipate a requirement for booster pumps for the proposed development.

#### 3.3.2 Fire Flow Demands

Based on anticipated maximum daily demand and fire flow requirements as per the OFM methodology of 90L/s, the boundary conditions provided by the City of Ottawa indicate that the 203 mm dia. watermain within Forward Avenue is expected to maintain a residual pressure of 43.1m equivalent to 428kPa (62 psi) under the specified fire flow conditions. This demonstrates that the existing watermain and nearby hydrants can provide the required fire flows while maintaining a residual pressure of 20psi.

In summary, the existing 203 mm diameter watermain on Forward Avenue can provide adequate fire and domestic flows and pressures for the subject site based on City of Ottawa Design Guidelines. An existing hydrant located approximately 37.1 m south of the subject site can be used for fire suppression. The existing hydrant is within 45m of the Siamese connection on the building as per OBC. The proposed water servicing is shown on **Drawing SSP-1** contained in **Appendix F**.



Water Servicing  
April 18, 2022

### **3.4 PROPOSED WATER SERVICING**

The development will be serviced via a single 150mm building service connection to the existing 203 mm diameter watermain on Forward Avenue. The sizing of the service connection is to be confirmed by the mechanical consultant. Thermal insulation is not required on the water service lateral as more than 2.4m cover is provided per W22.



Wastewater Servicing  
 April 18, 2022

## 4.0 WASTEWATER SERVICING

The site will be serviced from the existing 250 mm diameter PVC sanitary sewer on Forward Avenue. A 150 mm diameter sanitary service lateral connected directly to the 250 mm diameter main will service the building from its east side. See Drawing SSP-1 (in **Appendix G**) for the proposed location of the service lateral.

### 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
- 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/bachelor apartments – 1.4 persons/apartment
- Population density for two-bedroom apartments – 2.1 persons/apartment

### 4.2 WASTEWATER GENERATION AND SERVICING DESIGN

The proposed 0.05 ha development area will consist of a 4-storey plus basement residential apartment building consisting of bachelor (5 units), one-bed (6 units), two-bed (9 units) for a total of 20 units. The anticipated wastewater peak flow generated from the proposed development is summarized in **Table 4.1** below:

**Table 4.1: Estimated Wastewater Peak Flow**

Residential Peak Flows					Infiltration Flow (L/s)	Total Peak Flow (L/s)
	No. of Units	Population	Peak Factor	Peak Flow (L/s)		
Residential	20 units	34	3.68	0.4	0.02	0.42



## 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

Wastewater Servicing

April 18, 2022

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

The proposed sewage peak flows were provided to City of Ottawa staff to conduct a capacity analysis of the sanitary sewer system in the vicinity of the site and confirmation was received that there are no concerns with respect to adding the proposed sanitary peak flows to the existing sewer on Forward Avenue. Also, it was confirmed that there is sufficient downstream residual capacity in the City System to accommodate this minor additional peak flow (see correspondence in **Appendix C.2**).

### 4.3 PROPOSED SANITARY SERVICING

A 150mm diameter stormwater building service, complete with full port backwater valve as per City standard S14.1 is proposed for the sanitary sewage from the proposed development. Final sizing of the lateral is to be confirmed by the mechanical consultant.

The depths of the sewers and watermain in Forward Avenue make the connections challenging for the sanitary and stormwater services. Gravity connections for the storm and sanitary sewer laterals are proposed with a minimum clearance of 0.3m (from the bottom of the service lateral pipe to the top of the Forward Avenue watermain) at each crossing. In compliance with *Ontario F-6-1 Procedures to Govern Separation of Sewers and Watermains, Part 4 – Parallel Installations: for separation less than 0.5m* the STM and SAN laterals shall be constructed of materials and with joints that are equivalent to watermain standards of construction (pressure rated pipe to 350kPa or greater). Thermal insulation shall be provided for the full length of both stormwater and sanitary sewer laterals to protect from freezing. The sewer is to connect to the main with a riser pipe as per City standard S11.1.



## 5.0 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 and construction.

### 5.2 EXISTING CONDITIONS AND SWM CRITERIA

The existing development area (0.045ha) currently consists of a two-storey building, a paved parking lot, and minimal landscaping. Existing structures will be removed to allow for the proposed development.

The Stormwater Management (SWM) criteria were established by combining current design practices outlined by the City of Ottawa Design Guidelines (2012), 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).
- Wherever feasible and practical, site-level measures should be used to reduce and control the volume and rate of runoff. (City of Ottawa)
- Assess impact of 100-year event outlined in the City of Ottawa Sewer Design Guidelines on major & minor drainage system (City of Ottawa)
- The proposed site is not subject to quality control criteria due to the small site size and land usage of the development (City of Ottawa).

#### Storm Sewer & Inlet Controls

- Size storm sewers to convey 5-year storm event under free-flow conditions using City of Ottawa I-D-F parameters (City of Ottawa)
- Site discharge rates for each storm event to be restricted to a 5-year storm event pre-development rates with a maximum pre-development C coefficient of 0.5 (City of Ottawa)
- Proposed site to discharge into the existing 300mm dia. storm sewer within Forward Avenue ROW (City of Ottawa).
- The foundation drainage system is to be independently connected to the storm sewer main unless being pumped with appropriate back up power, sufficient sized pump and backflow prevention. (City of Ottawa)
- Tc should be not less than 10 minutes since IDF curves become unrealistic at less than 10 min (City of Ottawa).



## 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

Stormwater Management and Servicing  
April 18, 2022

### Surface Storage & Overland Flow

- Any additional peak flows generated by events greater than the 5-year storm event up to and including the 100-year storm event must be detained on site. Alternatively, City of Ottawa staff noted during pre-consultation that it would be acceptable to control the roof portion of the development only so long as the remainder of the uncontrolled site is directed towards the Forward Avenue right of way (ROW).
- Building openings to be a minimum of 0.30m above the 100-year water level (City of Ottawa)
- Maximum depth of flow under either static or dynamic conditions shall be less than 0.30m (City of Ottawa)
- Provide adequate emergency overflow conveyance off-site with a minimum vertical clearance of 15cm 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)

The stormwater system outlet for this site is the Forward Avenue ROW and the stormwater sewer within. A single connection has been proposed for the foundation drain and floor/area drains. The existing storm sewer connection to the existing building will be removed in accordance with the City of Ottawa's infrastructure requirements. A full port backwater valve will be installed on the building's storm service to provide protection from the uncontrolled sewer system.

## 5.3 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) tributary to stormwater controls as defined by the location, nature, or presence/absence of inlet control devices (ICD's). A summary of subareas and runoff coefficients is provided in **Appendix D.1** and **Drawing SD-1** indicates the stormwater management sub catchments.

### 5.3.1 Allowable Release Rate

Based on consultation with City of Ottawa staff, the peak post-development discharge from the subject site would traditionally be limited to the discharge resulting from the 5-year event using a maximum site runoff coefficient of  $C = 0.5$ . Under existing conditions, the site is nearly entirely paved; hence, the maximum allowable runoff coefficient of 0.5 was selected for the SWM analysis pre-development conditions. The actual runoff coefficient under existing conditions is likely much closer to 0.8-0.9. The predevelopment release rate for the area has been determined using the modified rational method and the criteria above. A time of concentration for the predevelopment area (10 minutes) was assigned based on the small site size and its proximity to the existing drainage outlet. C coefficient values have been increased by 25% for the post-development 100-year storm event based on the MTO Drainage Manual recommendations. Peak flow rates have been calculated using the modified rational method as follows:

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

Where:

$Q$  = peak flow rate, L/s





Stormwater Management and Servicing  
 April 18, 2022

$C$  = site runoff coefficient

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

$A$  = drainage area, ha

**Table 5.1: Target Release Rate**

Design Storm	Target Flow Rate (L/s)
All Events	6.52

### 5.3.2 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 be used to reduce site peak outflow. A spreadsheet using the Modified Rational Method (MRM) was used to size the subsurface storage.

#### 5.3.2.1 Rooftop Storage

It is proposed to retain stormwater on the building rooftops by installing restricted flow roof drains. The following calculations assume the roof will be equipped with three standard Watts model roof drains complete with Adjustable Accutrol Weirs. Two drains are located on Roof A, and the third is located on Roof B. The roof drains will discharge to the surface to front via a roof downspout located at the southeast corner of the building, 0.3m above the finished surface. The roof release is directed to the front yard and Forward Avenue ROW with a splash pad.

Watts Drainage Adjustable *Accutrol* roof drain weir data (see **Appendix D.5**) and actual rooftop stage-storage data (see **Appendix B**) has been used to calculate a practical roof release rate and detention storage volume for the rooftop areas. It should be noted that 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 5.1**
- sufficient roof storage is provided to meet (or exceed) the required volume of detained stormwater
- the maximum ponding depth of 150mm is not exceeded during a design storm event.

Proposed drain release rates have been calculated based on the weir setting at 25% open. Storage volumes and controlled release rates are summarized in **Table 5.2**.



**Table 5.2: Roof Control Areas**

Design Storm	Storage Depth (mm)	Discharge (L/s)	Volume Stored (m <sup>3</sup> )
5-Year (Roof A)	102.1	1.59	2.94
100-Year (Roof A)	137.8	1.82	7.31
5-Year (Roof B)	38.9	0.49	0.8
100-Year (Roof B)	84.5	0.74	0.15

**5.3.2.2 Uncontrolled Areas**

Ideally, this site would utilize rear and side-yard infrastructure to capture and direct as much of the remaining site area (non-roof portion) as possible to the Forward Avenue ROW. This method was explored and evaluated for feasibility. Due to the existing site conditions, narrow side yards, and conflicting municipal infrastructure within Forward Avenue, it was found that rear/sideyard infrastructure was not a viable stormwater management plan for the remaining site area.

- the 1.0m offset of the pipe from the foundation could not be met (per Sewer Connection Bylaw 2003-513, GP#19), and there was insufficient room for the required structures.
- the CB lead and WM conflicted (0.28m clearance)
- the footing was being undermined by the side yard pipe

Without the use of side-yard infrastructure, it was no longer practical to direct the remaining site area drainage to the Forward Avenue ROW. The topographic survey (see **Appendix E.4**) indicates that the existing site is relatively flat, with a subtle split-grade yard; with the rear yard draining toward the city laneway located along the rear property line while the front portion of the yard drains toward the Forward Avenue ROW. A significant retaining wall around the rear yard would be required to provide minimum slopes to allow for surface drainage to the Forward Avenue ROW. The required retaining wall would be over 1.0m high and would require a substantial volume and thickness of fill. This scenario would be prohibitively expensive for such a small infill development site.

Due to the site restrictions described above, neither the rear/side yard infrastructure nor the regrading/retaining wall scenarios are feasible stormwater management solutions for the remaining site area. The only reasonable and feasible option is to allow the remaining site area to drain as per existing conditions. Consequently, the remaining site area has been designated as subcatchment area UNC-1. This uncontrolled area has been designed without a storage or flow rate restriction component. The rear portion of UNC-1 discharges as per existing conditions to the rear laneway and the front portion drains uncontrolled to the Forward Avenue ROW. Peak discharges from the uncontrolled area have been considered in the overall SWM plan.

**Table 5.3: Uncontrolled Area (UNC-1)**

Design Storm	Discharge (L/s)
5-year	2.95
100-Year	6.33



Stormwater Management and Servicing  
 April 18, 2022

**5.3.2.3 Results**

**Table 5.4** provides a summary of the peak design discharge rates from the MRM analysis based on the proposed stormwater management plan. As the table demonstrates, there is a minor exceedance in the 100-year peak discharge when considering control to the 5-year storm predevelopment criteria. The SWM plan meets requirements identified during pre-consultation that it would be acceptable to control the roof portion of the development only, provided the remainder of the site is directed towards the ROW uncontrolled. The rear yard area is unable to drain to the Forward Avenue ROW due to site grading restrictions and conflicts with adding rear and side-yard infrastructure on this site. As a result of these restrictions, the existing drainage patterns within the site have been maintained. A portion drains to the Forward Avenue ROW, and a portion to the rear laneway ROW as per existing conditions.

A curb retaining wall is proposed along the north and south property lines to ensure that the drainage is not allowed to enter the adjoining residential properties. The existing site is almost entirely paved. Redeveloping the site, re-introducing landscaping, and controlling the rooftop stormwater have significantly reduced the site’s overall runoff coefficient and release rates.

**Table 5.4: Summary of Total 5-Year and 100-Year Event Release Rates**

<b>Drainage areas</b>	<b>5-year Peak Discharge (L/s)</b>	<b>100-Year Peak Discharge (L/s)</b>
Uncontrolled Areas	2.95	6.33
Controlled Areas	2.08	2.56
<b>Total (L/s)</b>	<b>5.03</b>	<b>8.88</b>
<b>Target (L/s)</b>	<b>6.52</b>	<b>6.52</b>

The release rates show that the proposed stormwater management approach meets the site’s target stormwater release in a 5-year period and slightly exceeds the target release in a 100-year event by 2.36L/s.

Table 5-5 compares the pre- and post-development peak stormwater release rates from this site. It demonstrates that by developing the site, controlling the rooftop storage, and re-introducing some permeable/landscaped areas, the overall stormwater release rate from the site will be reduced by 23% for the 5-year event and by 20% for the 100-year event compared to existing conditions. These significant reductions to the release rates justify the 2.63L/s exceedance of the restrictive target. An exceedance of 2.36 L/s is comparable to the overall 100-year event reduction of the release rate from the site, 2.28 L/s; and consequently, this to be an acceptable deviation from the stormwater management criteria.



Stormwater Management and Servicing  
 April 18, 2022

**Table 5-5 Comparison of Pre- to Post-Development Release Rates**

	5-Year Peak Discharge @ C=0.5				100-Year Peak Discharge @ C=0.5			
	Pre-Dev.	Post-Dev.	Difference		Pre-Dev.	Post-Dev.	Difference	
	(L/s)	(L/s)	(L/s)	%	(L/s)	(L/s)	(L/s)	%
Uncontrolled – Surface	6.52	2.95	-3.57	-	11.17	6.33	-4.84	-
Controlled – Rooftop Storage	-	2.08	2.08	-		2.56	2.56	-
<b>Total</b>	<b>6.52</b>	<b>5.03</b>	<b>-1.49</b>	<b>-23%</b>	<b>11.17</b>	<b>8.88</b>	<b>-2.28</b>	<b>-20%</b>

### 5.3.3 Quality Control

The RVCA confirmed in a correspondence attached in that no quality control measures are required for the site, refer to **Appendix D.4** for correspondence with the RVCA.

## 5.4 PROPOSED STORMWATER SERVICING

A 150mm diameter stormwater building service, complete with full port backwater valve as per City standard S14.1 is proposed for the foundation drain and the three floor drains. Final sizing of the lateral is to be confirmed by the mechanical consultant. The roof drainage is to discharge from a downspout located 0.3m above the finished surface on the southeast corner of the building. A splash pad will direct the roof drainage as surface flow toward the Forward Avenue ROW.

In compliance with *Ontario F-6-1 Procedures to Govern Separation of Sewers and Watermains, Part 4 – Parallel installations for separation less than 0.5m* the STM and SAN laterals shall be constructed of materials and with joints that are equivalent to watermain standards of construction (pressure rated pipe to 350kPa or greater) ,as described in **Section 4.3**. The full length of the storm lateral will be insulated. The lateral is to connect to the main with a riser pipe as per City standard S11.1



Site Grading  
April 18, 2022

## 6.0 SITE GRADING

The proposed re-development site measures approximately 0.045 ha in area. A detailed grading plan (see **Drawing GP-1**) has been prepared to satisfy the stormwater management requirements described in **Section 5.0** and to allow for positive drainage away from the face of the building.

Two curb retaining walls and north side outdoor stairs are proposed. An artificial high point is proposed to achieve the split-lot drainage pattern.

The proposed grading respects the existing grades at the property lines and maintains the existing drainage conditions for the rear portion of the site. A depressed curb at the central front entrance is proposed to allow for waste management receptacles to be moved to the curb.

## 7.0 UTILITIES

Overhead wires run north-south on the westside of Forward Avenue, north-south along the rear laneway, and along the north and south sides of the rear yard. Overhead wires along the north side of the property lead to the existing building and will require relocation. The remaining wires on the west, east and south sides of the site will restrict the movement of heavy machinery during the construction works but otherwise, should not cause any conflicts with the proposed services and site works. The existing utility poles are to be protected during construction.

Hydro Ottawa, Bell, Rogers, and Enbridge all have existing utility plants in the area, which will be used to service the 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 moved/reconfigured to allow sufficient clearance to the proposed building. The relocation of existing utilities will be coordinated with the individual utility providers upon design circulation.



Approvals  
April 18, 2022

## 8.0 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.

As is mentioned in the geotechnical report for the site, for typical ground or surface water volumes being pumped during the construction phase (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 preparation of the Water Taking and Discharge Plan by a Qualified Person as stipulated under O.Reg. 63/16. A Permit to Take Water (PTTW) through the MECP would be required for dewatering in excess of 400,000 L/day, which is unlikely for this site. However, if a PTTW is required, at least 4 to 5 months should be allowed for completion of the application and issuance of the permit by the MECP. If a project qualifies for a PTTW based upon anticipated conditions, an EASR will not be allowed as a temporary dewatering measure while awaiting the MECP review of the PTTW application.



Erosion Control During Construction  
April 18, 2022

## 9.0 EROSION CONTROL DURING CONSTRUCTION

In order 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. Provide sediment traps and basins during dewatering works.
7. Install sediment traps (such as SiltSack® by Terrafix) between catch basins and frames.
8. 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** for the proposed location of silt fences, sediment traps, and other erosion control measures.



Geotechnical Investigation  
April 18, 2022

## 10.0 GEOTECHNICAL INVESTIGATION

A geotechnical investigation report for 138 Forward Avenue was completed by Paterson Group on November 24, 2021. Field testing consisting of the advancement of three (3) boreholes to a maximum depth of 0.9 m below existing grade was carried out throughout the subject site on November 2, 2021, while taking into consideration underground utilities and site features. The borehole locations are presented in geotechnical investigation report is included in Error! Reference source not found.

Currently, the subject site is occupied by two storey residential building which is surrounded by asphalt-paved parking areas with an existing ground surface at approximate geodetic elevation of 62m. The subsurface profile encountered at the test hole locations consists of fill, extending to depths of 0.6 to 0.9m below the existing ground surface, where there was a refusal of augers at the bedrock surface. The fill material generally consists of crushed stone with some sand and occasional traces of clay. Considering the available geological mapping, the bedrock in the subject area is reported to consist of limestone of the Bobcaygeon formation.

Groundwater levels were not observed in the boreholes before backfilling but based on previous experience at an adjacent site, it is speculated that the groundwater level is at approximate depths of 2 to 3 m below the existing ground surface; however, these levels are subject to seasonal fluctuations. In consideration of the groundwater conditions at the site, an underslab drainage system, consisting of lines of perforated drainage pipe subdrains connected to a positive outlet, is proposed in the 19 mm clear crushed stone layer under the lower basement floor.

According to the geotechnical investigation, the site is considered satisfactory for the proposed development from a geotechnical perspective. It is recommended that the foundation be conventional spread footings placed on clean, surface sounded bedrock. However, anticipated excavation depth and the proximity of the proposed development to the site boundaries, a temporary excavation support system will be required to support the overburden during the construction period.

In order to construct the basement level, bedrock removal will be required. Paterson also recommends line drilling and controlled blasting for the removal of large quantities of bedrock while for small quantities of bedrock or weathered bedrock, hoe-ramming will be sufficient. For the blasting operation, it is advised that it should be planned and completed under the guidance of a professional engineer with experience in blasting operations.





# 138 FORWARD AVENUE – STORMWATER MANAGEMENT AND SERVICING REPORT

Environmental Site Assessment (Phase I)  
April 18, 2022

## 11.0 ENVIRONMENTAL SITE ASSESSMENT (PHASE I)

Paterson Group was retained by VIKA Land Development Group Inc. to conduct a Phase I – Environmental Site Assessment (Phase I ESA) for the property addressed 138 Forward Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property, refer to Appendix E.2 for detailed ESA Phase 1 report.

Based on a review of available historical information, the Phase I Property was first developed sometime prior to 1912 for residential purposes and has remained as such ever since. No environmental concerns were identified with respect to the historical use of the Phase I Property.

The neighbouring lands in the vicinity of the Phase I Property have historically been developed for residential with occasional commercial purposes. No environmental concerns were identified with respect to the historical use of the neighbouring properties.

The Phase I Property is currently occupied with a two (2) storey residential dwelling. No environmental concerns were identified with respect to the current use of the Phase I Property. The surrounding lands within the vicinity of the Phase I Property were generally observed to be used for residential with occasional commercial purposes. An existing automotive service garage was identified across the street from the Phase I Property at 140 Hinchey Avenue. However, the actual garage building is 70 m to the northeast of the Phase I Property and is located in a cross-gradient orientation with respect to groundwater flow. Therefore, no environmental concerns were identified with respect to the current use of the surrounding lands. Based on the findings of this assessment, it is our opinion that a Phase II – Environmental Site Assessment will not be required.



Conclusions  
April 18, 2022

## 12.0 CONCLUSIONS

### 12.1 WATER SERVICING

Based on the supplied boundary conditions for existing watermains and calculated domestic and fire flow demands for the subject site, the adjacent watermain on Forward Avenue has sufficient capacity to sustain both the required domestic demands and emergency fire flow demands for the development. The proposed development requires a 150 mm diameter water service which will be connected to the existing 203mm watermain on Forward Avenue.

### 12.2 SANITARY SERVICING

The proposed sanitary sewer service is sufficiently sized to provide gravity drainage of the site. The proposed development will be serviced by a 150 mm dia. sanitary service lateral directing wastewater by gravity to the existing 250 mm diameter sanitary sewer on Forward Avenue. Existing connections are to be removed 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. The proposed sanitary lateral for the property will be installed through the foundation wall below the basement floor slab to provide a gravity outlet for the basement level and all floors above grade. In compliance with *Ontario F-6-1* the SAN lateral shall be constructed of materials and with joints that are equivalent to watermain standards of construction and thermal insulation will be provided for the full length.

### 12.3 STORMWATER SERVICING AND MANAGEMENT

A 150 mm diameter gravity storm service is proposed for the building's foundation drain and floor drains with a full-port backwater valve on the stormwater service which will prevent flooding if the storm sewer on Forward Avenue surcharges. The proposed stormwater lateral for the building will be installed through the foundation wall below the basement floor slab to provide a gravity outlet for drains. In compliance with *Ontario F-6-1* the STM lateral shall be constructed of materials and with joints that are equivalent to watermain standards of construction and thermal insulation will be provided for the full length.

Roof storage has been proposed to limit the peak 5-year and 100-year stormwater discharge rate for the development. The controlled/restricted roof drainage is to discharge from a downspout located on the southeast corner of the building. A splash pad will direct the roof drainage as surface flow toward the Forward Avenue ROW. Due to site grading and servicing restrictions, the remainder of the site will drain as per existing conditions (split yard drainage), with the rear yard draining to the rear City Laneway and the front yard draining to the Forward Avenue ROW. Proposed curb retaining walls on the north and south sides of the property will prevent stormwater from entering the adjacent residential properties.



Conclusions  
April 18, 2022

## 12.4 GRADING

Site grading has been designed to provide an emergency overland flow route as per City requirements on the front end, maintain existing drainage pattern at the rear yard and to follow the recommendations made in the geotechnical investigation report prepared by Paterson Group. 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 existing facilities.

## 12.5 UTILITIES

Utility infrastructure exists within overhead lines from the rear laneway and subsurface plant within the Forward Avenue ROW. It is anticipated that existing infrastructure will be sufficient to provide a means of distribution for the proposed site. Exact size, location and routing of utilities will be finalized after design circulation.

## 12.6 APPROVALS/RESTRICTIONS

An MECP Environmental Compliance Approval (ECA) is not required for the site, as the development lies on a private site under singular ownership draining to an approved sewer outlet, it does not drain to a combined sewer, and it 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 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 will only be required for dewatering needs in excess of 400,000 L/day which is not expected for this site.



# APPENDICES

## Appendix A POTABLE WATER SERVICING

### A.1 DOMESTIC WATER DEMAND CALCULATIONS



**138 Forward Avenue - Domestic Water Demand Estimates**

Site Plan provided by Susan D. Smith Architect (Dated 2022-03-02)

Project No. 160401680

Densities as per City Guidelines:			
Apartment Units			
1 Bedroom	1.4	ppu	
2 Bedroom	2.1	ppu	



Building ID	Amenity Areas (m <sup>2</sup> )	No. of Units	Population	Daily Rate of Demand <sup>1</sup> (L/cap/day)	Avg Day Demand		Night Minimum Hour <sup>2</sup>		Max Day Demand <sup>2</sup>		Peak Hour Demand <sup>2</sup>	
					(L/min)	(L/s)	(L/min)	(L/s)	(L/min)	(L/s)	(L/min)	(L/s)
Bachelor unit		5	7	280	1.4	0.02	0.14	0.00	12.9	0.22	19.5	0.32
1 Bedroom		6	8	280	1.6	0.03	0.16	0.00	15.5	0.26	23.4	0.39
2 Bedroom		9	19	280	3.7	0.06	0.37	0.01	34.9	0.58	52.6	0.88
<b>Total Site :</b>		<b>20</b>	<b>34</b>		<b>7</b>	<b>0.11</b>	<b>0.67</b>	<b>0.01</b>	<b>63</b>	<b>1.06</b>	<b>95</b>	<b>1.59</b>

<sup>1</sup> Average day water demand for residential areas: 280L/cap/day per ISTB 2021-03

<sup>2</sup> The MOE water demand criteria used to estimate peak demand rates for residential areas < 500 equivalent population are as follows:

Night Minimum Hour Factor = 0.1 x average day demand rate

Maximum day demand rate = 9.5 x average day demand rate

Peak hour demand rate = 14.3 x average day demand rate

## A.2 FIRE FLOW REQUIREMENTS PER OFM GUIDELINES



**Fire Flow Calculations as per Ontario Building Code 2006 (Appendix A) & OFM 1999 Guideline**

<b>Project</b>	138 Forward Avenue	<b>Designed by:</b>	AG
<b>Project #</b>	160401680	<b>Checked by:</b>	DT
<b>Date</b>	26-Apr-22	<b>Description:</b>	4- storey +basement residential building with 20 dwelling units

$Q = KVS_{tot}$

**Q =** Volume of water required (L)  
**V =** Total building volume (m<sup>3</sup>)  
**K =** Water supply coefficient from Table 1  
**S<sub>tot</sub> =** Total of spatial coefficient values from property line exposures on all sides as obtained from the formula  
 $S_{tot} = 1.0 + [S_{side1} + S_{side2} + S_{side3} + S_{side4}]$

1	<b>Type of construction</b>	<b>Building Classification</b>		<b>Water Supply Coefficient</b>
	combustible without Fire-Resistance Ratings	A-2, B-1, B-2, B-3, C, D		23
2	<b>Area of one floor (m<sup>2</sup>)</b>	<b>Number of floors</b>	<b>Height of ceiling (m)</b>	<b>Total Building Volume (m<sup>3</sup>)</b>
	257.2	5	2.74	3,524
3	<b>Side</b>	<b>Exposure Distance (m)</b>	<b>Spatial Coefficient</b>	<b>Total Spatial Coefficient</b>
	North	2.18	0.5	2
	East	15.00	0.0	
	South	1.90	0.5	
	West	21.79	0.0	
4	<b>Established Fire Safety Plan?</b>	<b>Reduction in Volume (%)</b>		<b>Total Volume Reduction</b>
	no	0%		0%
5	<b>Total Volume 'Q' (L)</b>			
				162,104
				<b>Minimum Required Fire Flow (L/min)</b>
				5,400

**NOTES:**

- Calculation is based on information provided by Susan D. Smith Architects in Site Plan provided March 2, 2022
- Major occupancy classification based on Table 3.1.2.1 of OBC 2020



## A.3 BOUNDARY CONDITIONS



## Nwanise, Nwanise

---

**From:** Bakhit, Reza <reza.bakhit@ottawa.ca>  
**Sent:** Tuesday, March 29, 2022 2:16 PM  
**To:** Nwanise, Nwanise  
**Cc:** Gladish, Alyssa  
**Subject:** RE: BC proposed residential redevelopment at 138 Forward Avenue  
**Attachments:** 138 Forward Avenue March 2022.pdf

Hi Nwanise,

The following are boundary conditions, HGL, for hydraulic analysis at **138 Forward Avenue** (zone 1W) assumed to be connected to the 203 mm watermain on Forward Avenue (see attached PDF for location).

Minimum HGL: 107.6 m

Maximum HGL: 114.8 m

Max Day + FF (90 L/s): 107.1 m

Max Day + FF (100 L/s): 106.5 m

These are for current conditions and are based on computer model simulation.

*Disclaimer: The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation*

Regards,

### **Reza Bakhit, P.Eng, C.E.T**

Project Manager

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

Development Review - Central Branch

City of Ottawa | Ville d'Ottawa

110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1

613.580.2400 ext./poste 19346, [reza.bakhit@ottawa.ca](mailto:reza.bakhit@ottawa.ca)

**Please note: Given the current pandemic, I will be working from home until further notice; reaching me by email is the easiest. I will be checking my voicemail, just not as frequently as I normally would be.**

---

**From:** Nwanise, Nwanise <Nwanise.Nwanise@stantec.com>  
**Sent:** Thursday, March 24, 2022 10:41 AM  
**To:** Bakhit, Reza <reza.bakhit@ottawa.ca>  
**Cc:** Gladish, Alyssa <Alyssa.Gladish@stantec.com>  
**Subject:** proposed residential redevelopment at 138 Forward Avenue

**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.**

Good morning Reza,

In response to recent comments on this application and revised site plan, we would like to make a new request for hydraulic boundary conditions. The proposed development is a 4-storey plus basement apartment building comprising of five bachelor units, six 1-bedroom units and nine 2-bedroom units.

We intend to connect to existing 203mm diameter watermain on Forward Avenue.

Estimated domestic demands (MOE) and fire flow requirements for the site are as follows:

- Domestic demand:
  - Average day: 0.11 L/s
  - Maximum day: 1.06 L/s
  - Peak hour: 1.59 L/s
- Estimated fire flow demand per OBC methodology : 5400 L/min (90 L/s)
- Estimated fire flow demand per FUS methodology : 6000 L/min (100.0 L/s)

Kindly find location map and water demand calculation sheets.

Thank you for your help. Kindly contact me if you need any additional information.

Regards,

**Nwanise Nwanise**,EIT

Engineering intern, Community Development

Mobile: (647) 400-1759

[nwanise.nwanise@stantec.com](mailto:nwanise.nwanise@stantec.com)

Stantec

300 - 1331 Clyde Avenue

Ottawa ON K2C 3G4



**Better Together, Even If We're Apart.** [Read more](#) about Stantec's COVID-19 response, including remote working and business continuity measures.


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.

## A.4 HYDRAULIC CONDITIONS CALCULATIONS



	Project:	138 Forward Avenue	No.	160401680
	<b>SITE PLAN HYDRAULIC ANALYSIS</b>			
	Revision:	01	Prepared By:	AG
Revision Date:	14-Apr-2022	Checked By:	DT	

BOUNDARY CONDITIONS (BC)	
Connection at Forward Avenue	
Site Plan Revision Date	2-Mar-2022
Min. HGL (m)	107.6
Max. HGL (m)	114.8
Max. Day + Fire Flow (90 L/s)	107.1
Max. Day + Fire Flow (100 L/s)	106.5

Ground Floor Elevation (GFE) (m)	63.55
----------------------------------	-------

GROUND FLOOR (GF) PRESSURE RANGE				
	GF HGL (m)	GF Pressure (kPa)	GF Pressure (psi)	Outcome
	= BC HGL (m) - FFE (m)	= GF HGL (m) x 9.804 (kPa/m)	= GF Pressure (kPa) x 0.145 (psi/kPa)	If min <50 psi: booster pump If max >100 psi: pressure reducer
<b>Minimum Normal</b>	44.05	431.9	62.6	No Booster Pump Required
<b>Maximum Normal</b>	51.25	502.5	72.9	No Pressure Reducer Required

Number of Floors Above Ground	4
Approximate Height of One Storey (m)	3.04
Pressure Drop Per Floor (kPa)	29.8
Pressure Drop Per Floor (psi)	4.3

RESIDUAL PRESSURE IN MULTI-LEVEL BUILDINGS			
	Residual Pressure (kPa)	Residual Pressure (psi)	Outcome
Top Floor	342.5	49.7	No Booster Pump Required
Maximum Number of Floors Above Ground at Minimum Pressure	5		

Pressure Check		
	Pressure (kPa)	Pressure (psi)
Pressure Below Minimum	<276	<40
Pressure Below Normal	276-345	40-50
Pressure Within Normal Range	345-552	50-80
Pressure Above Normal Range	552-690	80-100
Pressure Above Maximum	>690	>100

Appendix A Potable Water Servicing  
April 18, 2022

**A.5 CONFIRMATION OF BUILDING CONSTRUCTION:  
CORRESPONDENCE WITH ARCHITECT**



**From:** [Thanh Do](#)  
**To:** [Gladish, Alyssa](#)  
**Subject:** Re: Confirmation of Building Construction - 138 Forward Avenue  
**Date:** Tuesday, April 26, 2022 12:09:05 PM

---

Hi Alyssa,  
See my answers below:

- a: Correct
- b: (iii. Combustible with 1hr. Fire-Resistance Ratings between units and structural elements).
- c. Correct

Best.  
Thanh

On Tue, Apr 26, 2022 at 2:02 PM Gladish, Alyssa <[Alyssa.Gladish@stantec.com](mailto:Alyssa.Gladish@stantec.com)> wrote:

Hello Thanh,

Can you please confirm the following information regarding the building construction and provide any additional details that may be pertinent to the building's fire resistivity (i.e., minimum fire-resistance rating of floors/walls/openings, any intentional fire separations) for 138 Forward Avenue. This will support our OFM fire flow requirement calculations.

- a. Building classification: **C - Residential Occupancy, 4-Storey apartment building with 20 units.**
- b. Type of construction:
  - i. Non-Combustible with Fire-Resistance Ratings
  - ii. Non-Combustible without Fire-Resistance Ratings
  - iii. Combustible with Fire-Resistance Ratings
  - iv. **Combustible without Fire-Resistance Ratings**
- c. **The building will be sprinklered.**

Thank you for your time.

Best Regards,

Alyssa

**Alyssa Gladish** E.I.T.

Project Manager, Community Development

Direct: 780 917-8567  
Mobile: 587 721-1241  
[Alyssa.Gladish@stantec.com](mailto:Alyssa.Gladish@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.

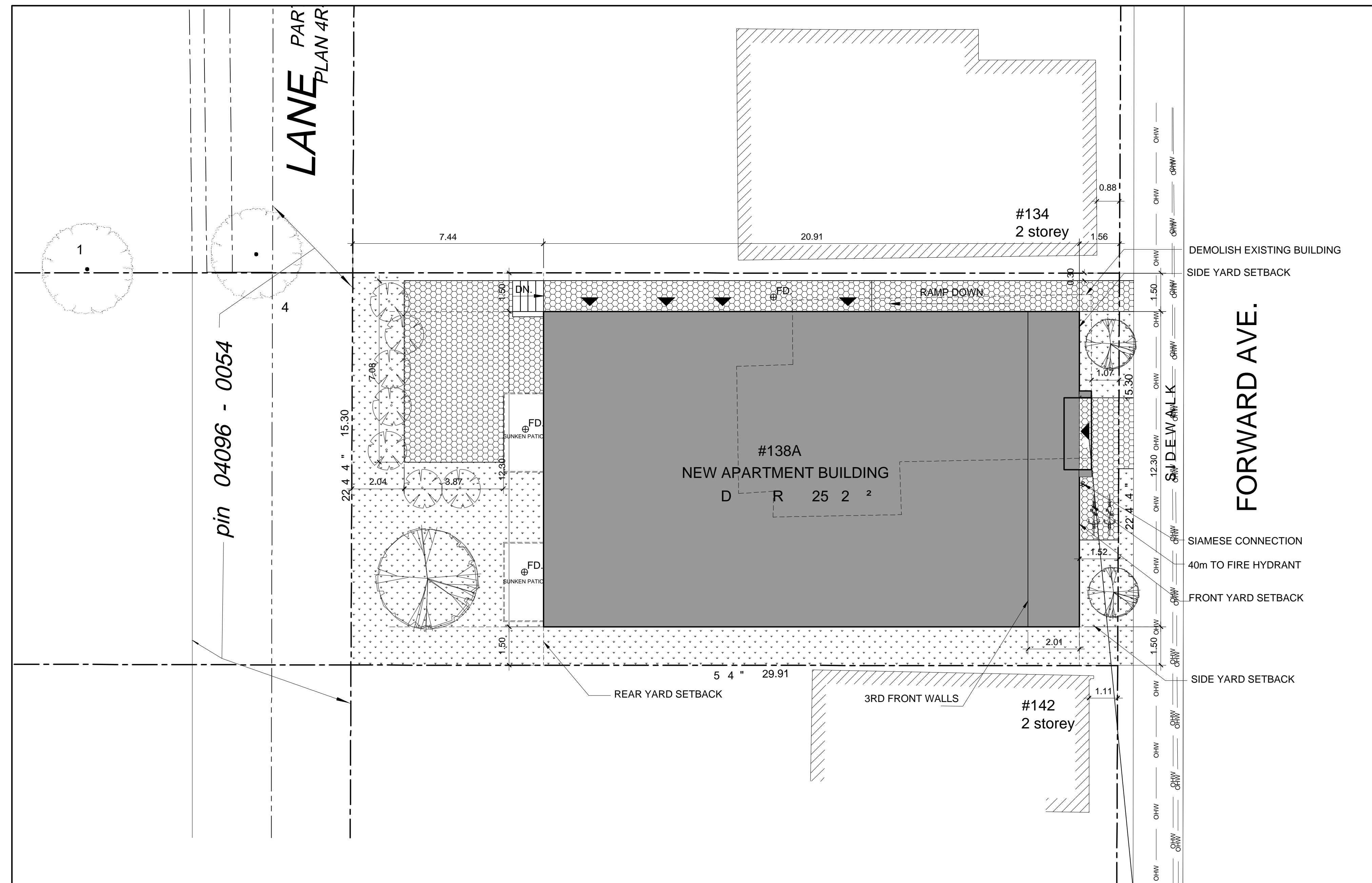
--

**Thanh Do**  
**SDS-Architect**  
613 722 5327



**Appendix B DRAFT SITE PLAN AND ROOF PLAN**



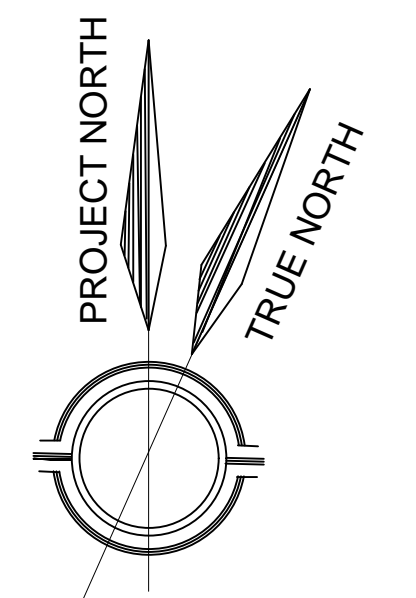


SURVEYOR'S REAL PROPERTY REPORT  
 PART 1 Plan of LOT 4  
 WEST FORWARD AVENUE LOTS  
 REGISTERED PLAN 35  
 CITY OF OTTAWA  
 Surveyed by Annis, O'Sullivan, Vollebakk Ltd.

City of Ottawa Zoning By-law No. 2008-250 and Revised By-law No. 2015-228

R4UD		
LOW RISE APARTMENT 4 STOREY, 20 UNIT	REQUIRED	PROPOSED
MINIMUM LOT WIDTH	15m	15.32m
MINIMUM LOT AREA	45 ²	45 ²
MAXIMUM BUILDING HEIGHT	14.5m	13.76m
MINIMUM FRONT YARD SETBACK	1.5m	1.5m
MINIMUM CORNER SIDE YARD SETBACK	3m	N/A
MINIMUM REAR YARD SETBACK	7.44m (25% of lot depth)	7.44m
MINIMUM INTERIOR SIDE YARD SETBACK	1.5m	1.5m
LANDSCAPE AREA	30%	42%
SOFT LANDSCAPE AT FRONT YARD	20% OF FRONT YARD	50% OF FRONT YARD
SOFT LANDSCAPE AT REAR YARD	50% OF REAR YARD	60% OF REAR YARD
FENESTRATION ON FRONT WALL	25%	30%
RECESSED FRONT WALL	20%	25%
Bicycle Parking (0.5/unit)	18 UNIT @0.5=9	16

CLIENT:  
**VIKA**  
 LAND DEVELOPMENT GROUP INC.



**gba** 1339 Wellington St. W #204  
 Ottawa, ON K1Y 3B8  
 (613) 680-9450

CIVIL ENGINEER AND LANDSCAPE ARCHITECT  
**STANTEC**  
 400 - 1331 Clyde Avenue  
 Ottawa ON K2C 3G4  
 Phone: (613) 724-4337  
 Cell: (613) 297-0571  
 Fax: (613) 722-2799

SURVEYOR  
**ANNIS, O'SULLIVAN, VOLLEBEKK Ltd.**  
 14 Concourse Gate, Suite 500  
 Nepean, Ont. K2E 7S6  
 Phone: (613) 727-0850  
 Fax: (613) 727-1079

**SUSAN D. SMITH ARCHITECT**  
 941 MERIVALE RD  
 Ottawa, Ontario  
 613-722-5327  
 S.SMITH@SDSARCH.CA

3		
2		
1	REISSUED FOR SPC	MAR. 02/22
0	ISSUED FOR SPC	DEC. 16/21
No.	REVISION	DATE

NOTES:  
 1. All dimensions are to be checked on site. Discrepancies or ambiguities should be reported prior to work on site or ordering of materials.  
 2. All work to be in accordance with the Ontario Building Code, latest edition.

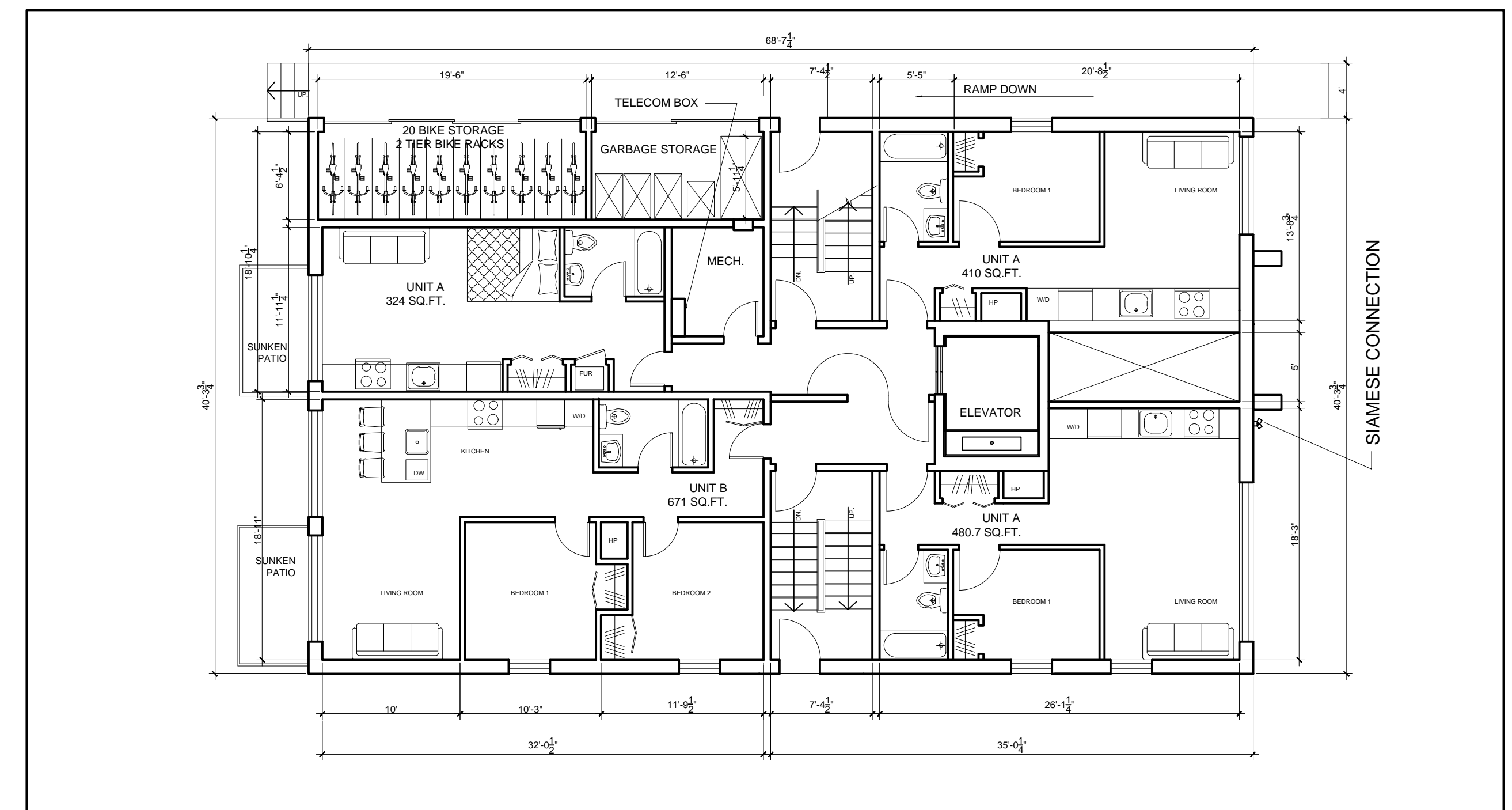
**NEW APARTMENT BUILDING**  
 138 FORWARD AVE.  
 OTTAWA, ONT.  
 K1Y 1E7

**SITE PLAN**

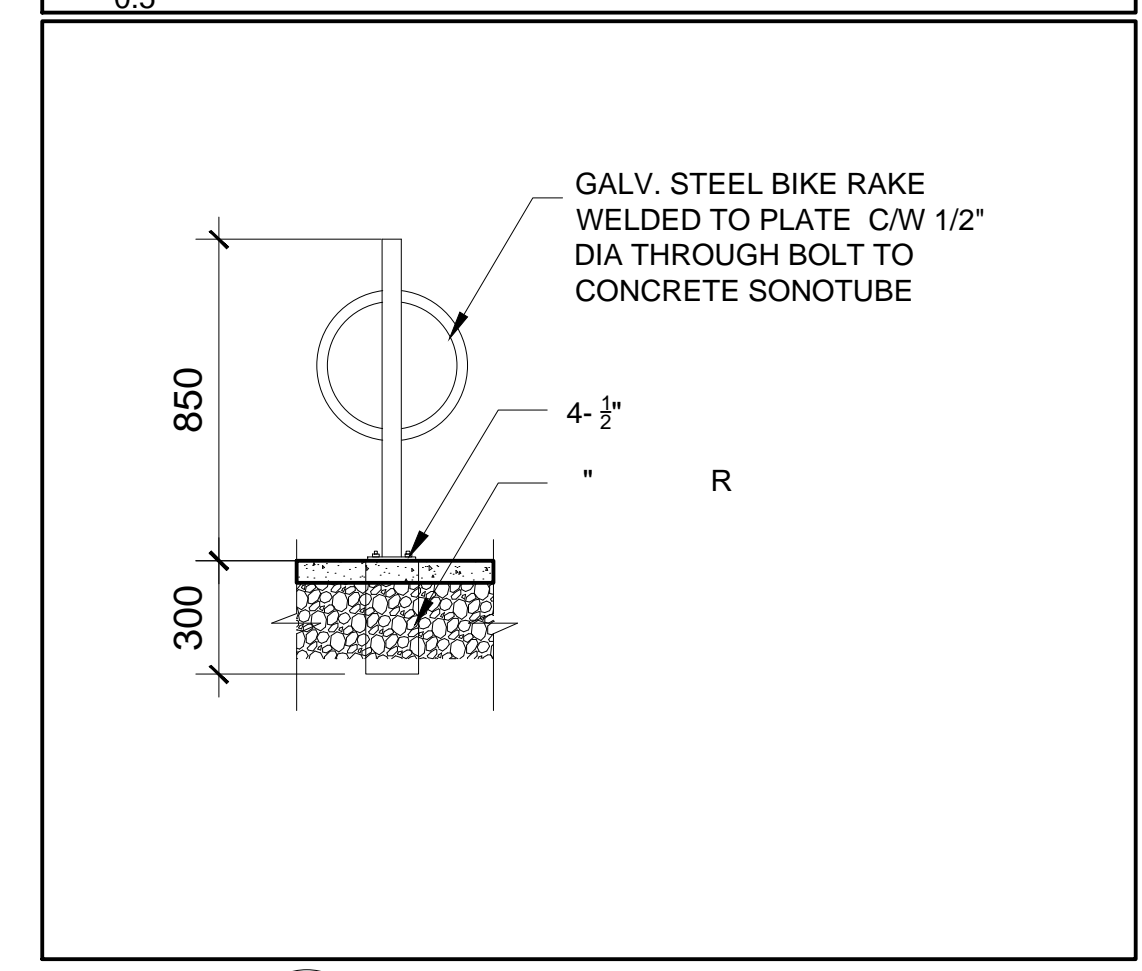
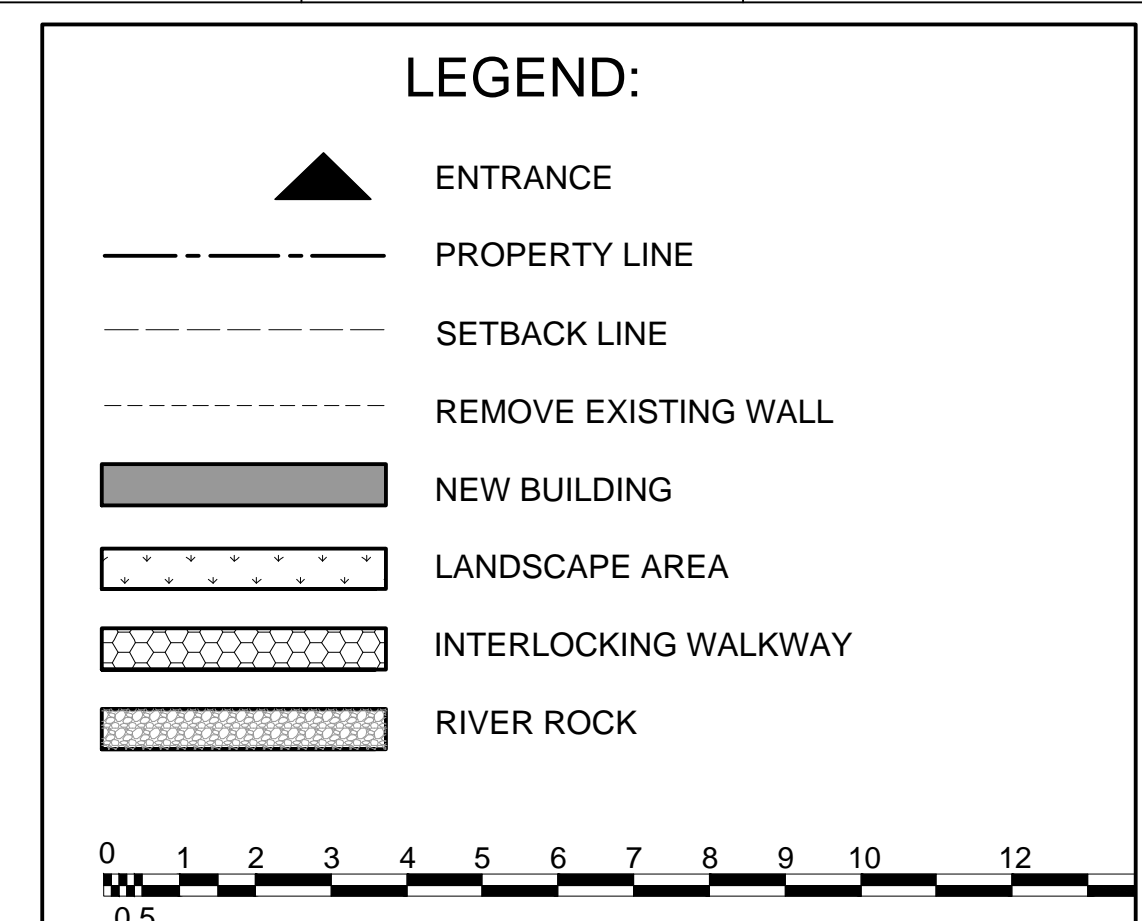
Scale	AS NOTES
Drawn	TD
Checked	SDS
Date	MAR/2020
Job #	2017

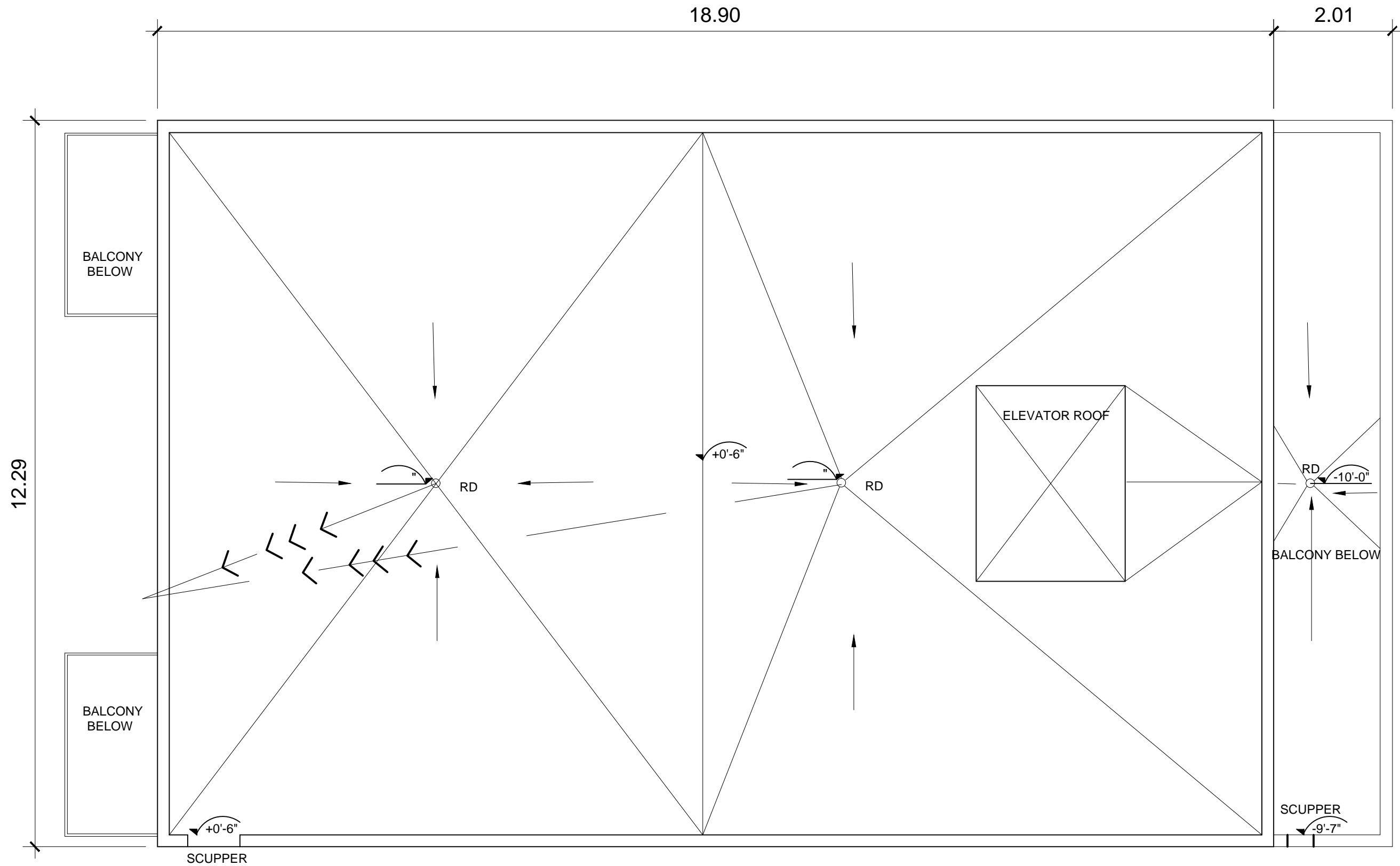
**SP**

**1 SITE PLAN**  
 Scale: 1/100



**2 BASEMENT FLOOR PLAN**  
 Scale: 1/100





NEW APARTMENT BUILDING  
138 FORWARD AVE.  
OTTAWA, ONT.  
K1Y 1E7

CLIENT:  
**VIKA**  
LAND DEVELOPMENT GROUP INC.

SUSAN D. SMITH ARCHITECT  
941 MERIVALE RD  
Ottawa, Ontario  
613-722-5327  
S.SMITH@SDSARCH.CA

# ROOF PLAN

3		
2		
1		
0	ISSUED FOR REVIEW	NOV. 30/21
No.	REVISION	DATE

1/8"=1'-0"	
DRAWN BY:	T.D.
JOB #	2017
DATE	JUL/20

# SK4

## Appendix C WASTEWATER SERVICING

### C.1 SANITARY SEWER CALCULATION SHEET





SUBDIVISION:	
<b>138 Forward Avenue</b>	
DATE:	3/31/2022
REVISION:	1
DESIGNED BY:	NN
CHECKED BY:	DT

160401680
-----------

DESIGN PARAMETERS			
MAX PEAK FACTOR (RES.)=	4.0	AVG. DAILY FLOW / PERSON	280 l/p/day
MIN PEAK FACTOR (RES.)=	2.0	COMMERCIAL	28,000 l/ha/day
PEAKING FACTOR (INDUSTRIAL):	2.4	INDUSTRIAL (HEAVY)	55,000 l/ha/day
PEAKING FACTOR (ICI >20%):	1.5	INDUSTRIAL (LIGHT)	35,000 l/ha/day
1 BEDROOM	1.4	INSTITUTIONAL	28,000 l/ha/day
2 BEDROOM	2.1	INFILTRATION	0.33 l/s/ha
BACHELOR APARTMENT	1.4		
		MINIMUM VELOCITY	0.60 m/s
		MAXIMUM VELOCITY	3.00 m/s
		MANNINGS n	0.013
		BEDDING CLASS	B
		MINIMUM COVER	2.50 m
		HARMON CORRECTION FACTOR	0.8

AREA ID NUMBER	LOCATION		RESIDENTIAL AREA AND POPULATION							COMMERCIAL		INDUSTRIAL (L)		INDUSTRIAL (H)		INSTITUTIONAL		GREEN / UNUSED		C+H PEAK FLOW	INFILTRATION			TOTAL FLOW	LENGTH	DIA	MATERIAL	PIPE							
	FROM M.H.	TO M.H.	AREA (ha)	1 BEDROOM UNIT	BACHELOR UNIT	2 BEDROOM UNIT	POP.	CUMULATIVE AREA (ha)	POP.	PEAK FACT.	PEAK FLOW (l/s)	AREA (ha)	ACCU. (ha)	AREA (ha)	ACCU. (ha)	AREA (ha)	ACCU. (ha)	AREA (ha)	ACCU. (ha)		TOTAL AREA (ha)	ACCU. AREA (ha)	INFILT. FLOW (l/s)					LENGTH (m)	DIA (mm)	MATERIAL	CLASS	SLOPE (%)	CAP. (FULL) (l/s)	CAP. V PEAK FLOW (%)	VEL. (FULL) (m/s)
<b>TOTAL SITE</b>	BLDG	EXT	0.03	6	5	9	34	0.03	34	3.68	0.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.0	0.05	0.05	0.02	0.42	7.3	150	PVC	SDR 35	1.00	15.3	2.76%	0.86	0.31

## C.2 CONFIRMATION OF SANITARY SEWER CAPACITY



**From:** [Bakhit, Reza](#)  
**To:** [Shobowale, Aminat](#)  
**Cc:** [Gladish, Alyssa](#)  
**Subject:** RE: Sanitary Capacity on Forward Avenue  
**Date:** Friday, December 17, 2021 12:30:50 PM

---

Hi Aminat,

I can confirm there is no concern with the proposed flow.

Regards

**Reza Bakhit, P.Eng, C.E.T**

Project Manager

Planning, Infrastructure and Economic Development Department - Services de la planification, de l'infrastructure et du développement économique

Development Review - Central Branch

City of Ottawa | Ville d'Ottawa

110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1

613.580.2400 ext./poste 19346, [reza.bakhit@ottawa.ca](mailto:reza.bakhit@ottawa.ca)

**Please note: Given the current pandemic, I will be working from home until further notice; reaching me by email is the easiest. I will be checking my voicemail, just not as frequently as I normally would be.**

---

**From:** Shobowale, Aminat <Aminat.Shobowale@stantec.com>

**Sent:** Wednesday, December 15, 2021 10:41 AM

**To:** Bakhit, Reza <reza.bakhit@ottawa.ca>

**Cc:** Gladish, Alyssa <Alyssa.Gladish@stantec.com>

**Subject:** Sanitary Capacity on Forward Avenue

**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.**

Good morning Reza,

We are currently working on servicing a proposed residential development at 138 Forward Avenue . The proposed redevelopment of 4-storey with basement apartment building comprises of 4 one-bedroom units, 4 bachelor units and 10 two bedrooms units.

We intend to connect to the existing 250mm sanitary sewer on Forward Avenue. Can you please confirm if there is adequate capacity to capture 0.4L/s into the receiving and downstream wastewater system from the proposed 4-storey+ basement building?

Thank you.

Regards,  
Aminat.

## Aminat Shobowale

Civil Designer, Community Development

Mobile: (437) 833-4988

[Aminat.Shobowale@stantec.com](mailto:Aminat.Shobowale@stantec.com)

Stantec

400 - 1331 Clyde Avenue

Ottawa ON K2C 3G4



**Better Together, Even If We're Apart.** [Read more](#) about Stantec's COVID-19 response, including remote working and business continuity measures.

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.

,



## Appendix D STORMWATER SERVICING

### D.1 MODIFIED RATIONAL METHOD SHEET



## Stormwater Management Calculations

File No: **160401680**  
 Project: **138 Forward Avenue**  
 Date: **14-Apr-22**

SWM Approach:  
 Post-development to Pre-development flows

**Post-Development Site Conditions:**

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

Runoff Coefficient Table									
Catchment Type	Sub-catchment Area		ID / Description	Area (ha) "A"	Runoff Coefficient "C"			"A x C"	Overall Runoff Coefficient
					Hard	Soft	0.9		
Uncontrolled - Tributary			UNC1	0.0089			0.0080		
				0.0111			0.0022		
			Subtotal			0.02		0.0102	0.510
Roof			ROOFB	0.002			0.0018		
				0.000			0.0000		
			Subtotal			0.002		0.0018	0.900
Roof			ROOFA	0.023			0.0207		
				0.000			0.0000		
			Subtotal			0.023		0.0207	0.900
<b>Total</b>						<b>0.045</b>		<b>0.033</b>	<b>0.73</b>
<b>Overall Runoff Coefficient= C:</b>									<b>0.73</b>

Total Roof Areas	0.025 ha
Total Tributary Surface Areas (Controlled and Uncontrolled)	0.000 ha
Total Tributary Area to Outlet	0.025 ha
 Total Uncontrolled Areas (Non-Tributary)	 0.020 ha
 Total Site	 0.045 ha

**Roof Drain Design Calculation Sheet**

**Project #160401680, 138 Forward Avenue  
Roof Drain Design Sheet, Area ROOFA  
Standard Watts Roof Drain with Adjustable Accutrol Weir**

Rating Curve				Volume Estimation				Water Depth (m)
Elevation (m)	Discharge Rate (cu.m/s)	Outlet Discharge (cu.m/s)	Storage (cu. m)	Elevation (m)	Area (sq. m)	Volume (cu. m)		
						Increment	Accumulated	
0.000	0.0000	0.0000	0	0.000	0	0	0	0.000
0.025	0.0003	0.0006	0	0.025	5	0	0	0.025
0.050	0.0006	0.0013	0	0.050	20	0	0	0.050
0.075	0.0007	0.0014	1	0.075	46	1	1	0.075
0.100	0.0008	0.0016	3	0.100	82	2	3	0.100
0.125	0.0009	0.0017	5	0.125	128	3	5	0.125
0.150	0.0009	0.0019	9	0.150	184	4	9	0.150

Drawdown Estimate			
Total Volume (cu.m)	Total Time (sec)	Total Vol (cu.m)	Total Detention Time (hr)
0.0	0.0	0.0	0
0.3	236.3	0.3	0.06564
1.1	570.1	0.8	0.22399
2.7	999.2	1.6	0.50154
5.3	1497.5	2.6	0.91751
9.2	2047.8	3.9	1.48635

**Roof Storage Summary**

Total Building Area (sq.m)		230	
Assume Available Roof Area (sq.m)	80%	184	
Roof Imperviousness		0.99	
Roof Drain Requirement (sq.m/Notch)		232	
Number of Roof Notches*		2	
Max. Allowable Depth of Roof Ponding (m)	0.8	0.15	* As per Ontario Building Code section OBC 7.4.10.4.(2)(c).
Max. Allowable Storage (cu.m)		9	
Estimated 100 Year Drawdown Time (h)		1.2	

Adjustable Accutrol Weir Flow Rate Settings From Watts Drain Catalogue					
Head (m)	L/s				
	Open	0.75	0.5	0.25	Closed
0.025	0.3155	0.31545	0.31545	<b>0.31545</b>	0.31545
0.05	0.6309	0.6309	0.6309	<b>0.6309</b>	0.6309
0.075	0.9464	0.86749	0.78863	<b>0.70976</b>	0.6309
0.1	1.2618	1.10408	0.94635	<b>0.78863</b>	0.6309
0.125	1.5773	1.34067	1.10408	<b>0.86749</b>	0.6309
0.15	1.8927	1.57726	1.2618	<b>0.94635</b>	0.6309

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

Calculation Results	5yr	100yr	Available
Qresult (cu.m/s)	0.002	0.002	-
Depth (m)	0.102	0.138	0.150
Volume (cu.m)	2.9	7.3	9.2
Drain time (hrs)	0.5	1.2	

**Roof Drain Design Calculation Sheet**

**Project #160401680, 138 Forward Avenue**  
**Roof Drain Design Sheet, Area ROOFB**  
**Standard Watts Roof Drain with Adjustable Accutrol Weir**

Rating Curve				Volume Estimation				Water Depth (m)
Elevation (m)	Discharge Rate (cu.m/s)	Outlet Discharge (cu.m/s)	Storage (cu. m)	Elevation (m)	Area (sq. m)	Volume (cu. m)		
						Increment	Accumulated	
0.000	0.0000	0.0000	0	0.000	0	0	0.0	0.000
0.025	0.0003	0.0003	0.00	0.025	0	0.00	0.00	0.025
0.050	0.0006	0.0006	0.0	0.050	2	0.03	0.03	0.050
0.075	0.0007	0.0007	0.1	0.075	4	0.07	0.10	0.075
0.100	0.0008	0.0008	0.2	0.100	7	0.14	0.24	0.100
0.125	0.0009	0.0009	0.5	0.125	11	0.23	0.463	0.125
0.150	0.0009	0.0009	0.8	0.150	16	0.337	0.80	0.150

Drawdown Estimate			
Total Volume (cu.m)	Total Time (sec)	Total Vol (cu.m)	Total Detention Time (hr)
0.0	0.0	0.0	0
0.0	41.1	0.0	0.01141
0.1	99.1	0.1	0.03896
0.2	173.8	0.1	0.08722
0.5	260.4	0.2	0.15957
0.8	356.1	0.3	0.2585

**Rooftop Storage Summary**

Total Building Area (sq.m)		20	
Assume Available Roof Area (sq.m)	80%	16	
Roof Imperviousness		0.99	
Roof Drain Requirement (sq.m/Notch)		232	
Number of Roof Notches*		1	
Max. Allowable Depth of Roof Ponding (m)	0.8	0.15	* As per Ontario Building Code section OBC 7.4.10.4.(2)(c).
Max. Allowable Storage (cu.m)		1	
Estimated 100 Year Drawdown Time (h)		0.1	

Adjustable Accutrol Weir Flow Rate Settings From Watts Drain Catalogue					
Head (m)	L/s				
	Open	0.75	0.5	<b>0.25</b>	Closed
0.025	0.3155	0.31545	0.31545	<b>0.31545</b>	0.31545
0.05	0.6309	0.6309	0.6309	<b>0.6309</b>	0.6309
0.075	0.9464	0.86749	0.78863	<b>0.70976</b>	0.6309
0.1	1.2618	1.10408	0.94635	<b>0.78863</b>	0.6309
0.125	1.5773	1.34067	1.10408	<b>0.86749</b>	0.6309
0.15	1.8927	1.57726	1.2618	<b>0.94635</b>	0.6309

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

Calculation Results	5yr	100yr	Available
Qresult (cu.m/s)	0.000	0.001	-
Depth (m)	0.039	0.084	0.150
Volume (cu.m)	0.0	0.2	0.8
Drain time (hrs)	0.0	0.1	

# Stormwater Management Calculations

## Project #160401680, 138 Forward Avenue Modified Rational Method Calculators for Storage

5 yr Intensity City of Ottawa	$I = a/(t + b)^c$	a = 998.071 b = 6.053 c = 0.814	t (min) 10 20 30 40 50 60 70 80 90 100 110 120	I (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37 26.56 24.29 22.41 20.82 19.47																																																																																												
<b>5 YEAR Predevelopment Target Release from Portion of Site</b>																																																																																																
Subdrainage Area: Predevelopment Tributary Area to Outlet Area (ha): 0.0450 C: 0.50  Typical Time of Concentration																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (5 yr) (mm/hr)</th> <th>Qtarget (L/s)</th> </tr> <tr> <td>10</td> <td>104.19</td> <td>6.52</td> </tr> </table>						tc (min)	I (5 yr) (mm/hr)	Qtarget (L/s)	10	104.19	6.52																																																																																					
tc (min)	I (5 yr) (mm/hr)	Qtarget (L/s)																																																																																														
10	104.19	6.52																																																																																														
<b>5 YEAR Modified Rational Method for Entire Site</b>																																																																																																
Subdrainage Area: UNC1 Area (ha): 0.020 C: 0.51 Uncontrolled - Tributary																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (5 yr) (mm/hr)</th> <th>Qactual (L/s)</th> <th>Qrelease (L/s)</th> <th>Qstored (L/s)</th> <th>Vstored (m³)</th> </tr> <tr><td>10</td><td>104.19</td><td>2.95</td><td>2.95</td><td></td><td></td></tr> <tr><td>20</td><td>70.25</td><td>1.99</td><td>1.99</td><td></td><td></td></tr> <tr><td>30</td><td>53.93</td><td>1.53</td><td>1.53</td><td></td><td></td></tr> <tr><td>40</td><td>44.18</td><td>1.25</td><td>1.25</td><td></td><td></td></tr> <tr><td>50</td><td>37.65</td><td>1.07</td><td>1.07</td><td></td><td></td></tr> <tr><td>60</td><td>32.94</td><td>0.93</td><td>0.93</td><td></td><td></td></tr> <tr><td>70</td><td>29.37</td><td>0.83</td><td>0.83</td><td></td><td></td></tr> <tr><td>80</td><td>26.56</td><td>0.75</td><td>0.75</td><td></td><td></td></tr> <tr><td>90</td><td>24.29</td><td>0.69</td><td>0.69</td><td></td><td></td></tr> <tr><td>100</td><td>22.41</td><td>0.64</td><td>0.64</td><td></td><td></td></tr> <tr><td>110</td><td>20.82</td><td>0.59</td><td>0.59</td><td></td><td></td></tr> <tr><td>120</td><td>19.47</td><td>0.55</td><td>0.55</td><td></td><td></td></tr> </table>						tc (min)	I (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	10	104.19	2.95	2.95			20	70.25	1.99	1.99			30	53.93	1.53	1.53			40	44.18	1.25	1.25			50	37.65	1.07	1.07			60	32.94	0.93	0.93			70	29.37	0.83	0.83			80	26.56	0.75	0.75			90	24.29	0.69	0.69			100	22.41	0.64	0.64			110	20.82	0.59	0.59			120	19.47	0.55	0.55															
tc (min)	I (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)																																																																																											
10	104.19	2.95	2.95																																																																																													
20	70.25	1.99	1.99																																																																																													
30	53.93	1.53	1.53																																																																																													
40	44.18	1.25	1.25																																																																																													
50	37.65	1.07	1.07																																																																																													
60	32.94	0.93	0.93																																																																																													
70	29.37	0.83	0.83																																																																																													
80	26.56	0.75	0.75																																																																																													
90	24.29	0.69	0.69																																																																																													
100	22.41	0.64	0.64																																																																																													
110	20.82	0.59	0.59																																																																																													
120	19.47	0.55	0.55																																																																																													
Subdrainage Area: ROOFB Area (ha): 0.002 C: 0.90 Maximum Storage Depth: Roof 150 mm																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (5 yr) (mm/hr)</th> <th>Qactual (L/s)</th> <th>Qrelease (L/s)</th> <th>Qstored (L/s)</th> <th>Vstored (m³)</th> <th>Depth (mm)</th> </tr> <tr><td>10</td><td>104.19</td><td>0.52</td><td>0.49</td><td>0.03</td><td>0.02</td><td>38.9</td></tr> <tr><td>20</td><td>70.25</td><td>0.35</td><td>0.35</td><td>0.01</td><td>0.01</td><td>27.4</td></tr> <tr><td>30</td><td>53.93</td><td>0.27</td><td>0.27</td><td>0.00</td><td>0.00</td><td>21.3</td></tr> <tr><td>40</td><td>44.18</td><td>0.22</td><td>0.22</td><td>0.00</td><td>0.00</td><td>17.4</td></tr> <tr><td>50</td><td>37.65</td><td>0.19</td><td>0.19</td><td>0.00</td><td>0.00</td><td>14.9</td></tr> <tr><td>60</td><td>32.94</td><td>0.16</td><td>0.16</td><td>0.00</td><td>0.00</td><td>13.0</td></tr> <tr><td>70</td><td>29.37</td><td>0.15</td><td>0.15</td><td>0.00</td><td>0.00</td><td>11.6</td></tr> <tr><td>80</td><td>26.56</td><td>0.13</td><td>0.13</td><td>0.00</td><td>0.00</td><td>10.5</td></tr> <tr><td>90</td><td>24.29</td><td>0.12</td><td>0.12</td><td>0.00</td><td>0.00</td><td>9.6</td></tr> <tr><td>100</td><td>22.41</td><td>0.11</td><td>0.11</td><td>0.00</td><td>0.00</td><td>8.9</td></tr> <tr><td>110</td><td>20.82</td><td>0.10</td><td>0.10</td><td>0.00</td><td>0.00</td><td>8.2</td></tr> <tr><td>120</td><td>19.47</td><td>0.10</td><td>0.10</td><td>0.00</td><td>0.00</td><td>7.7</td></tr> </table>						tc (min)	I (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)	10	104.19	0.52	0.49	0.03	0.02	38.9	20	70.25	0.35	0.35	0.01	0.01	27.4	30	53.93	0.27	0.27	0.00	0.00	21.3	40	44.18	0.22	0.22	0.00	0.00	17.4	50	37.65	0.19	0.19	0.00	0.00	14.9	60	32.94	0.16	0.16	0.00	0.00	13.0	70	29.37	0.15	0.15	0.00	0.00	11.6	80	26.56	0.13	0.13	0.00	0.00	10.5	90	24.29	0.12	0.12	0.00	0.00	9.6	100	22.41	0.11	0.11	0.00	0.00	8.9	110	20.82	0.10	0.10	0.00	0.00	8.2	120	19.47	0.10	0.10	0.00	0.00	7.7
tc (min)	I (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)																																																																																										
10	104.19	0.52	0.49	0.03	0.02	38.9																																																																																										
20	70.25	0.35	0.35	0.01	0.01	27.4																																																																																										
30	53.93	0.27	0.27	0.00	0.00	21.3																																																																																										
40	44.18	0.22	0.22	0.00	0.00	17.4																																																																																										
50	37.65	0.19	0.19	0.00	0.00	14.9																																																																																										
60	32.94	0.16	0.16	0.00	0.00	13.0																																																																																										
70	29.37	0.15	0.15	0.00	0.00	11.6																																																																																										
80	26.56	0.13	0.13	0.00	0.00	10.5																																																																																										
90	24.29	0.12	0.12	0.00	0.00	9.6																																																																																										
100	22.41	0.11	0.11	0.00	0.00	8.9																																																																																										
110	20.82	0.10	0.10	0.00	0.00	8.2																																																																																										
120	19.47	0.10	0.10	0.00	0.00	7.7																																																																																										
Storage: Roof Storage																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>Depth (mm)</th> <th>Head (m)</th> <th>Discharge (L/s)</th> <th>Vreq (cu. m)</th> <th>Vavail (cu. m)</th> <th>Discharge Check</th> </tr> <tr> <td>5-year Water Level</td> <td>38.92</td> <td>0.04</td> <td>0.49</td> <td>0.02</td> <td>0.80</td> <td>0.00</td> </tr> </table>						Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check	5-year Water Level	38.92	0.04	0.49	0.02	0.80	0.00																																																																														
Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check																																																																																											
5-year Water Level	38.92	0.04	0.49	0.02	0.80	0.00																																																																																										
Subdrainage Area: ROOFA Area (ha): 0.023 C: 0.90 Maximum Storage Depth: Roof 150 mm																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (5 yr) (mm/hr)</th> <th>Qactual (L/s)</th> <th>Qrelease (L/s)</th> <th>Qstored (L/s)</th> <th>Vstored (m³)</th> <th>Depth (mm)</th> </tr> <tr><td>10</td><td>104.19</td><td>6.00</td><td>1.57</td><td>4.43</td><td>2.66</td><td>98.9</td></tr> <tr><td>20</td><td>70.25</td><td>4.04</td><td>1.59</td><td>2.45</td><td>2.74</td><td>102.1</td></tr> <tr><td>30</td><td>53.93</td><td>3.10</td><td>1.58</td><td>1.52</td><td>2.74</td><td>100.2</td></tr> <tr><td>40</td><td>44.18</td><td>2.54</td><td>1.54</td><td>1.00</td><td>2.40</td><td>94.8</td></tr> <tr><td>50</td><td>37.65</td><td>2.17</td><td>1.50</td><td>0.66</td><td>1.99</td><td>88.3</td></tr> <tr><td>60</td><td>32.94</td><td>1.90</td><td>1.46</td><td>0.43</td><td>1.56</td><td>81.6</td></tr> <tr><td>70</td><td>29.37</td><td>1.69</td><td>1.42</td><td>0.27</td><td>1.14</td><td>74.8</td></tr> <tr><td>80</td><td>26.56</td><td>1.53</td><td>1.36</td><td>0.17</td><td>0.83</td><td>65.0</td></tr> <tr><td>90</td><td>24.29</td><td>1.40</td><td>1.30</td><td>0.10</td><td>0.53</td><td>55.9</td></tr> <tr><td>100</td><td>22.41</td><td>1.29</td><td>1.23</td><td>0.05</td><td>0.33</td><td>48.9</td></tr> <tr><td>110</td><td>20.82</td><td>1.20</td><td>1.15</td><td>0.04</td><td>0.29</td><td>45.7</td></tr> <tr><td>120</td><td>19.47</td><td>1.12</td><td>1.08</td><td>0.04</td><td>0.26</td><td>43.0</td></tr> </table>						tc (min)	I (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)	10	104.19	6.00	1.57	4.43	2.66	98.9	20	70.25	4.04	1.59	2.45	2.74	102.1	30	53.93	3.10	1.58	1.52	2.74	100.2	40	44.18	2.54	1.54	1.00	2.40	94.8	50	37.65	2.17	1.50	0.66	1.99	88.3	60	32.94	1.90	1.46	0.43	1.56	81.6	70	29.37	1.69	1.42	0.27	1.14	74.8	80	26.56	1.53	1.36	0.17	0.83	65.0	90	24.29	1.40	1.30	0.10	0.53	55.9	100	22.41	1.29	1.23	0.05	0.33	48.9	110	20.82	1.20	1.15	0.04	0.29	45.7	120	19.47	1.12	1.08	0.04	0.26	43.0
tc (min)	I (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)																																																																																										
10	104.19	6.00	1.57	4.43	2.66	98.9																																																																																										
20	70.25	4.04	1.59	2.45	2.74	102.1																																																																																										
30	53.93	3.10	1.58	1.52	2.74	100.2																																																																																										
40	44.18	2.54	1.54	1.00	2.40	94.8																																																																																										
50	37.65	2.17	1.50	0.66	1.99	88.3																																																																																										
60	32.94	1.90	1.46	0.43	1.56	81.6																																																																																										
70	29.37	1.69	1.42	0.27	1.14	74.8																																																																																										
80	26.56	1.53	1.36	0.17	0.83	65.0																																																																																										
90	24.29	1.40	1.30	0.10	0.53	55.9																																																																																										
100	22.41	1.29	1.23	0.05	0.33	48.9																																																																																										
110	20.82	1.20	1.15	0.04	0.29	45.7																																																																																										
120	19.47	1.12	1.08	0.04	0.26	43.0																																																																																										
Storage: Roof Storage																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>Depth (mm)</th> <th>Head (m)</th> <th>Discharge (L/s)</th> <th>Vreq (cu. m)</th> <th>Vavail (cu. m)</th> <th>Discharge Check</th> </tr> <tr> <td>5-year Water Level</td> <td>102.09</td> <td>0.10</td> <td>1.59</td> <td>2.94</td> <td>9.20</td> <td>0.00</td> </tr> </table>						Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check	5-year Water Level	102.09	0.10	1.59	2.94	9.20	0.00																																																																														
Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check																																																																																											
5-year Water Level	102.09	0.10	1.59	2.94	9.20	0.00																																																																																										
<b>SUMMARY TO OUTLET</b>																																																																																																
<table style="width: 100%;"> <tr> <td style="width: 40%;"></td> <td style="width: 20%; text-align: center;">Controlled Area</td> <td style="width: 20%; text-align: center;">0.025 ha</td> <td style="width: 10%; text-align: center;">Vrequired</td> <td style="width: 10%; text-align: center;">Vavailable*</td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total 5yr Flow Controlled</b></td> <td style="text-align: center;">2.08 L/s</td> <td style="text-align: center;">3</td> <td style="text-align: center;">10 m³</td> </tr> <tr> <td></td> <td style="text-align: center;">Uncontrolled Area</td> <td style="text-align: center;">0.020 ha</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total 5yr Flow Uncontrolled</b></td> <td style="text-align: center;">2.95 L/s</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total Area</b></td> <td style="text-align: center;">0.045 ha</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total 5yr Flow Target</b></td> <td style="text-align: center;">5.04 L/s</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">6.52 L/s</td> <td></td> <td></td> </tr> </table>							Controlled Area	0.025 ha	Vrequired	Vavailable*		<b>Total 5yr Flow Controlled</b>	2.08 L/s	3	10 m³		Uncontrolled Area	0.020 ha				<b>Total 5yr Flow Uncontrolled</b>	2.95 L/s				<b>Total Area</b>	0.045 ha				<b>Total 5yr Flow Target</b>	5.04 L/s					6.52 L/s																																																										
	Controlled Area	0.025 ha	Vrequired	Vavailable*																																																																																												
	<b>Total 5yr Flow Controlled</b>	2.08 L/s	3	10 m³																																																																																												
	Uncontrolled Area	0.020 ha																																																																																														
	<b>Total 5yr Flow Uncontrolled</b>	2.95 L/s																																																																																														
	<b>Total Area</b>	0.045 ha																																																																																														
	<b>Total 5yr Flow Target</b>	5.04 L/s																																																																																														
		6.52 L/s																																																																																														

## Project #160401680, 138 Forward Avenue Modified Rational Method Calculators for Storage

100 yr Intensity City of Ottawa	$I = a/(t + b)^c$	a = 1735.688 b = 6.014 c = 0.820	t (min) 10 20 30 40 50 60 70 80 90 100 110 120	I (mm/hr) 178.56 119.95 91.87 75.15 63.95 55.89 49.79 44.99 41.11 37.90 35.20 32.89																																																																																												
<b>100 YEAR Predevelopment Target Release from Portion of Site</b>																																																																																																
Subdrainage Area: Predevelopment Tributary Area to Outlet Area (ha): 0.0450 C: 0.50																																																																																																
<table border="1" style="margin: auto;"> <tr> <td colspan="2" style="text-align: center;"><b>100 Year Post Development Target release rate= 6.52 L/s</b></td> </tr> </table>						<b>100 Year Post Development Target release rate= 6.52 L/s</b>																																																																																										
<b>100 Year Post Development Target release rate= 6.52 L/s</b>																																																																																																
<b>100 YEAR Modified Rational Method for Entire Site</b>																																																																																																
Subdrainage Area: UNC1 Area (ha): 0.020 C: 0.64 Uncontrolled - Tributary																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (100 yr) (mm/hr)</th> <th>Qactual (L/s)</th> <th>Qrelease (L/s)</th> <th>Qstored (L/s)</th> <th>Vstored (m³)</th> </tr> <tr><td>10</td><td>178.56</td><td>6.33</td><td>6.33</td><td></td><td></td></tr> <tr><td>20</td><td>119.95</td><td>4.25</td><td>4.25</td><td></td><td></td></tr> <tr><td>30</td><td>91.87</td><td>3.26</td><td>3.26</td><td></td><td></td></tr> <tr><td>40</td><td>75.15</td><td>2.66</td><td>2.66</td><td></td><td></td></tr> <tr><td>50</td><td>63.95</td><td>2.27</td><td>2.27</td><td></td><td></td></tr> <tr><td>60</td><td>55.89</td><td>1.98</td><td>1.98</td><td></td><td></td></tr> <tr><td>70</td><td>49.79</td><td>1.76</td><td>1.76</td><td></td><td></td></tr> <tr><td>80</td><td>44.99</td><td>1.59</td><td>1.59</td><td></td><td></td></tr> <tr><td>90</td><td>41.11</td><td>1.46</td><td>1.46</td><td></td><td></td></tr> <tr><td>100</td><td>37.90</td><td>1.34</td><td>1.34</td><td></td><td></td></tr> <tr><td>110</td><td>35.20</td><td>1.25</td><td>1.25</td><td></td><td></td></tr> <tr><td>120</td><td>32.89</td><td>1.17</td><td>1.17</td><td></td><td></td></tr> </table>						tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	10	178.56	6.33	6.33			20	119.95	4.25	4.25			30	91.87	3.26	3.26			40	75.15	2.66	2.66			50	63.95	2.27	2.27			60	55.89	1.98	1.98			70	49.79	1.76	1.76			80	44.99	1.59	1.59			90	41.11	1.46	1.46			100	37.90	1.34	1.34			110	35.20	1.25	1.25			120	32.89	1.17	1.17															
tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)																																																																																											
10	178.56	6.33	6.33																																																																																													
20	119.95	4.25	4.25																																																																																													
30	91.87	3.26	3.26																																																																																													
40	75.15	2.66	2.66																																																																																													
50	63.95	2.27	2.27																																																																																													
60	55.89	1.98	1.98																																																																																													
70	49.79	1.76	1.76																																																																																													
80	44.99	1.59	1.59																																																																																													
90	41.11	1.46	1.46																																																																																													
100	37.90	1.34	1.34																																																																																													
110	35.20	1.25	1.25																																																																																													
120	32.89	1.17	1.17																																																																																													
Subdrainage Area: ROOFB Area (ha): 0.002 C: 1.00 Maximum Storage Depth: Roof 150 mm																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (100 yr) (mm/hr)</th> <th>Qactual (L/s)</th> <th>Qrelease (L/s)</th> <th>Qstored (L/s)</th> <th>Vstored (m³)</th> <th>Depth (mm)</th> </tr> <tr><td>10</td><td>178.56</td><td>0.99</td><td>0.74</td><td>0.25</td><td>0.15</td><td>84.5</td></tr> <tr><td>20</td><td>119.95</td><td>0.67</td><td>0.64</td><td>0.03</td><td>0.04</td><td>52.1</td></tr> <tr><td>30</td><td>91.87</td><td>0.51</td><td>0.50</td><td>0.01</td><td>0.02</td><td>39.6</td></tr> <tr><td>40</td><td>75.15</td><td>0.42</td><td>0.41</td><td>0.00</td><td>0.01</td><td>32.7</td></tr> <tr><td>50</td><td>63.95</td><td>0.36</td><td>0.35</td><td>0.00</td><td>0.01</td><td>28.0</td></tr> <tr><td>60</td><td>55.89</td><td>0.31</td><td>0.31</td><td>0.00</td><td>0.00</td><td>24.5</td></tr> <tr><td>70</td><td>49.79</td><td>0.28</td><td>0.28</td><td>0.00</td><td>0.00</td><td>21.9</td></tr> <tr><td>80</td><td>44.99</td><td>0.25</td><td>0.25</td><td>0.00</td><td>0.00</td><td>19.8</td></tr> <tr><td>90</td><td>41.11</td><td>0.23</td><td>0.23</td><td>0.00</td><td>0.00</td><td>18.1</td></tr> <tr><td>100</td><td>37.90</td><td>0.21</td><td>0.21</td><td>0.00</td><td>0.00</td><td>16.6</td></tr> <tr><td>110</td><td>35.20</td><td>0.20</td><td>0.20</td><td>0.00</td><td>0.00</td><td>15.5</td></tr> <tr><td>120</td><td>32.89</td><td>0.18</td><td>0.18</td><td>0.00</td><td>0.00</td><td>14.5</td></tr> </table>						tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)	10	178.56	0.99	0.74	0.25	0.15	84.5	20	119.95	0.67	0.64	0.03	0.04	52.1	30	91.87	0.51	0.50	0.01	0.02	39.6	40	75.15	0.42	0.41	0.00	0.01	32.7	50	63.95	0.36	0.35	0.00	0.01	28.0	60	55.89	0.31	0.31	0.00	0.00	24.5	70	49.79	0.28	0.28	0.00	0.00	21.9	80	44.99	0.25	0.25	0.00	0.00	19.8	90	41.11	0.23	0.23	0.00	0.00	18.1	100	37.90	0.21	0.21	0.00	0.00	16.6	110	35.20	0.20	0.20	0.00	0.00	15.5	120	32.89	0.18	0.18	0.00	0.00	14.5
tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)																																																																																										
10	178.56	0.99	0.74	0.25	0.15	84.5																																																																																										
20	119.95	0.67	0.64	0.03	0.04	52.1																																																																																										
30	91.87	0.51	0.50	0.01	0.02	39.6																																																																																										
40	75.15	0.42	0.41	0.00	0.01	32.7																																																																																										
50	63.95	0.36	0.35	0.00	0.01	28.0																																																																																										
60	55.89	0.31	0.31	0.00	0.00	24.5																																																																																										
70	49.79	0.28	0.28	0.00	0.00	21.9																																																																																										
80	44.99	0.25	0.25	0.00	0.00	19.8																																																																																										
90	41.11	0.23	0.23	0.00	0.00	18.1																																																																																										
100	37.90	0.21	0.21	0.00	0.00	16.6																																																																																										
110	35.20	0.20	0.20	0.00	0.00	15.5																																																																																										
120	32.89	0.18	0.18	0.00	0.00	14.5																																																																																										
Storage: Roof Storage																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>Depth (mm)</th> <th>Head (m)</th> <th>Discharge (L/s)</th> <th>Vreq (cu. m)</th> <th>Vavail (cu. m)</th> <th>Discharge Check</th> </tr> <tr> <td>100-year Water Level</td> <td>84.47</td> <td>0.08</td> <td>0.74</td> <td>0.15</td> <td>0.80</td> <td>0.00</td> </tr> </table>						Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check	100-year Water Level	84.47	0.08	0.74	0.15	0.80	0.00																																																																														
Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check																																																																																											
100-year Water Level	84.47	0.08	0.74	0.15	0.80	0.00																																																																																										
Subdrainage Area: ROOFA Area (ha): 0.023 C: 1.00 Maximum Storage Depth: Roof 150 mm																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>tc (min)</th> <th>I (100 yr) (mm/hr)</th> <th>Qactual (L/s)</th> <th>Qrelease (L/s)</th> <th>Qstored (L/s)</th> <th>Vstored (m³)</th> <th>Depth (mm)</th> </tr> <tr><td>10</td><td>178.56</td><td>11.42</td><td>1.75</td><td>9.66</td><td>5.80</td><td>128.1</td></tr> <tr><td>20</td><td>119.95</td><td>7.67</td><td>1.80</td><td>5.86</td><td>7.04</td><td>136.1</td></tr> <tr><td>30</td><td>91.87</td><td>5.87</td><td>1.82</td><td>4.06</td><td>7.31</td><td>137.8</td></tr> <tr><td>40</td><td>75.15</td><td>4.80</td><td>1.81</td><td>2.99</td><td>7.19</td><td>137.0</td></tr> <tr><td>50</td><td>63.95</td><td>4.09</td><td>1.80</td><td>2.29</td><td>6.87</td><td>135.0</td></tr> <tr><td>60</td><td>55.89</td><td>3.57</td><td>1.78</td><td>1.79</td><td>6.45</td><td>132.3</td></tr> <tr><td>70</td><td>49.79</td><td>3.18</td><td>1.76</td><td>1.42</td><td>5.97</td><td>129.2</td></tr> <tr><td>80</td><td>44.99</td><td>2.88</td><td>1.74</td><td>1.14</td><td>5.45</td><td>125.8</td></tr> <tr><td>90</td><td>41.11</td><td>2.63</td><td>1.71</td><td>0.92</td><td>4.95</td><td>121.4</td></tr> <tr><td>100</td><td>37.90</td><td>2.42</td><td>1.68</td><td>0.74</td><td>4.45</td><td>116.6</td></tr> <tr><td>110</td><td>35.20</td><td>2.25</td><td>1.65</td><td>0.60</td><td>3.95</td><td>111.8</td></tr> <tr><td>120</td><td>32.89</td><td>2.10</td><td>1.62</td><td>0.48</td><td>3.46</td><td>107.1</td></tr> </table>						tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)	10	178.56	11.42	1.75	9.66	5.80	128.1	20	119.95	7.67	1.80	5.86	7.04	136.1	30	91.87	5.87	1.82	4.06	7.31	137.8	40	75.15	4.80	1.81	2.99	7.19	137.0	50	63.95	4.09	1.80	2.29	6.87	135.0	60	55.89	3.57	1.78	1.79	6.45	132.3	70	49.79	3.18	1.76	1.42	5.97	129.2	80	44.99	2.88	1.74	1.14	5.45	125.8	90	41.11	2.63	1.71	0.92	4.95	121.4	100	37.90	2.42	1.68	0.74	4.45	116.6	110	35.20	2.25	1.65	0.60	3.95	111.8	120	32.89	2.10	1.62	0.48	3.46	107.1
tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m³)	Depth (mm)																																																																																										
10	178.56	11.42	1.75	9.66	5.80	128.1																																																																																										
20	119.95	7.67	1.80	5.86	7.04	136.1																																																																																										
30	91.87	5.87	1.82	4.06	7.31	137.8																																																																																										
40	75.15	4.80	1.81	2.99	7.19	137.0																																																																																										
50	63.95	4.09	1.80	2.29	6.87	135.0																																																																																										
60	55.89	3.57	1.78	1.79	6.45	132.3																																																																																										
70	49.79	3.18	1.76	1.42	5.97	129.2																																																																																										
80	44.99	2.88	1.74	1.14	5.45	125.8																																																																																										
90	41.11	2.63	1.71	0.92	4.95	121.4																																																																																										
100	37.90	2.42	1.68	0.74	4.45	116.6																																																																																										
110	35.20	2.25	1.65	0.60	3.95	111.8																																																																																										
120	32.89	2.10	1.62	0.48	3.46	107.1																																																																																										
Storage: Roof Storage																																																																																																
<table border="1" style="margin: auto;"> <tr> <th>Depth (mm)</th> <th>Head (m)</th> <th>Discharge (L/s)</th> <th>Vreq (cu. m)</th> <th>Vavail (cu. m)</th> <th>Discharge Check</th> </tr> <tr> <td>100-year Water Level</td> <td>137.78</td> <td>0.14</td> <td>1.82</td> <td>7.31</td> <td>9.20</td> <td>0.00</td> </tr> </table>						Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check	100-year Water Level	137.78	0.14	1.82	7.31	9.20	0.00																																																																														
Depth (mm)	Head (m)	Discharge (L/s)	Vreq (cu. m)	Vavail (cu. m)	Discharge Check																																																																																											
100-year Water Level	137.78	0.14	1.82	7.31	9.20	0.00																																																																																										
<b>SUMMARY TO OUTLET</b>																																																																																																
<table style="width: 100%;"> <tr> <td style="width: 40%;"></td> <td style="width: 20%; text-align: center;">Controlled Area</td> <td style="width: 20%; text-align: center;">0.025 ha</td> <td style="width: 10%; text-align: center;">Vrequired</td> <td style="width: 10%; text-align: center;">Vavailable*</td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total 100yr Flow Controlled</b></td> <td style="text-align: center;">2.56 L/s</td> <td style="text-align: center;">7.46</td> <td style="text-align: center;">10.0 m³</td> </tr> <tr> <td></td> <td style="text-align: center;">Uncontrolled Area</td> <td style="text-align: center;">0.020 ha</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total 100yr Flow Uncontrolled</b></td> <td style="text-align: center;">6.33 L/s</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total Area</b></td> <td style="text-align: center;">0.045 ha</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Total 100yr Flow Target</b></td> <td style="text-align: center;">8.88 L/s</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">6.52 L/s</td> <td></td> <td></td> </tr> </table>							Controlled Area	0.025 ha	Vrequired	Vavailable*		<b>Total 100yr Flow Controlled</b>	2.56 L/s	7.46	10.0 m³		Uncontrolled Area	0.020 ha				<b>Total 100yr Flow Uncontrolled</b>	6.33 L/s				<b>Total Area</b>	0.045 ha				<b>Total 100yr Flow Target</b>	8.88 L/s					6.52 L/s																																																										
	Controlled Area	0.025 ha	Vrequired	Vavailable*																																																																																												
	<b>Total 100yr Flow Controlled</b>	2.56 L/s	7.46	10.0 m³																																																																																												
	Uncontrolled Area	0.020 ha																																																																																														
	<b>Total 100yr Flow Uncontrolled</b>	6.33 L/s																																																																																														
	<b>Total Area</b>	0.045 ha																																																																																														
	<b>Total 100yr Flow Target</b>	8.88 L/s																																																																																														
		6.52 L/s																																																																																														

## **D.2 STORM SEWER DESIGN SHEET**





138 FORWARD AVENUE

**STORM SEWER  
DESIGN SHEET  
(City of Ottawa)**

**DESIGN PARAMETERS**

$I = a / (t+b)^c$  (As per City of Ottawa Guidelines, 2012)

DATE: 2022-04-05  
REVISION: 2  
DESIGNED BY: NN  
CHECKED BY: DT

FILE NUMBER: 160401680

	1:2 yr	1:5 yr	1:10 yr	1:100 yr
a =	732.951	998.071	1174.184	1735.688
b =	6.199	6.053	6.014	6.014
c =	0.810	0.814	0.816	0.820

MANNING'S n = 0.013  
BEDDING CLASS = B  
MINIMUM COVER: 2.00 m  
TIME OF ENTRY: 10 min

LOCATION			DRAINAGE AREA																	PIPE SELECTION																			
AREA ID NUMBER	FROM M.H.	TO M.H.	AREA (2-YEAR) (ha)	AREA (5-YEAR) (ha)	AREA (10-YEAR) (ha)	AREA (100-YEAR) (ha)	AREA (ROOF) (ha)	C (2-YEAR) (-)	C (5-YEAR) (-)	C (10-YEAR) (-)	C (100-YEAR) (-)	A x C (2-YEAR) (ha)	ACCUM Ax C (2YR) (ha)	A x C (5-YEAR) (ha)	ACCUM. Ax C (5YR) (ha)	A x C (10-YEAR) (ha)	ACCUM. Ax C (10YR) (ha)	A x C (100-YEAR) (ha)	ACCUM. Ax C (100YR) (ha)	T of C (min)	I <sub>2</sub> -YEAR (mm/h)	I <sub>5</sub> -YEAR (mm/h)	I <sub>10</sub> -YEAR (mm/h)	I <sub>100</sub> -YEAR (mm/h)	Q <sub>CONTROL</sub> (L/s)	ACCUM. Q <sub>CONTROL</sub> (L/s)	Q <sub>ACT</sub> (CIA/360) (L/s)	LENGTH (m)	PIPE WIDTH OR DIAMETER (mm)	PIPE HEIGHT (mm)	PIPE SHAPE (-)	MATERIAL (-)	CLASS (-)	SLOPE (%)	Q <sub>cap</sub> (FULL) (L/s)	% FULL (-)	VEL (FULL) (m/s)	VEL (ACT) (m/s)	TIME OF FLOW (min)
SITE	STUB	EXIST.	0.00	0.03	0.00	0.027	0.025	0.00	0.50	0.00	0.63	0.00	0.00	0.01	0.01	0.00	0.00	0.02	0.02	10.00	76.81	104.19	122.14	178.56	0.025	0.025	0.025	8.4	150	150	CIRCULAR	PVC	-	1.00	15.3	0.16%	0.86	0.14	1.02

### D.3 PRECONSULTATION NOTES





**Pre-Application Consultation Meeting Notes**

**138 Forward Avenue**

File Number: PC2021-0323

Wednesday September 22, 2021, Microsoft Teams

---

**Attendees:**

*City of Ottawa:*

Jean-Charles Renaud, Planner, File Lead

Margot Linker, Student Planner

Reza Bakhit, Project Manager

Adrian Van Wyk, Urban Design

Jessica Button, Planner

*Applicant Team:*

Anthony Devonish, Owner

John Moser, GPA Group

Susan D. Smith, SDS Architect

Thanh Do, SDS Architecture

*Community Association Representatives:*

Lorrie Marlow

---

**Subject: 138 Forward Avenue**

**Meeting Notes:**

**Opening & attendee introduction**

- Introduction of meeting attendees

**Proposal Overview**

- Last year, proposal was to combine lot with 139 Parkdale into one property.
- Now proposing two separate buildings on two separate lots.
- Proposal: 3-storeys plus 1 basement, 15 units: eight two-bedroom units, five one-bedroom units, 2 bachelor units
- Proposal complies with all zoning requirements
- Front entrance facing Forward Avenue. Next to entryway is a lift and a set of stairs that lead to the main lobby where bike storage and garbage can be accessed.
- 3<sup>rd</sup> floor – stepback five metres due to overhead wires
- Proposed 3D models – modern look, large setback in rear yard between the two buildings

### Questions:

- JC: Fully compliant?
  - Thanh: Yes.
  - JC: Edit site plan zoning table to remove “(MINOR VARIANCE)” from minimum front yard setback.
- JC: Is the door on the north and south side a main entrance or emergency exit?
  - Thanh: These are emergency exits
  - JC: A concrete landing is required and needs to be kept clear (snow, etc.). Need to show this as a hard surface on the plans.
- JC: Is there vehicular access to the laneway at back
  - Thanh: This is a public laneway. No access for traffic
  - Lorrie: this is an unmaintained laneway. Must be kept as open greenspace.
  - Thanh: Property doesn't include the laneway. No encroachments on laneway. Setbacks are from property line not the laneway.
  - John: when we do apartment on Parkdale side, lane will be used as rear yard setback and will not be part of the building.

### Preliminary Comments from Related Discipline:

#### Planning (JC)

- 10 spaces of bike parking next to a lift, site plan shows 16 spaces.
  - Thanh: Will revise to show stacked bike storage that will maintain 10 bike parking spaces.
  - JC: Encourage you to strive to increase bike storage to one space per unit
- Parking prohibitors, incorporate landscaping to ensure that front lawn doesn't become front yard parking.
- Encourage you to look at opportunities for additional landscaping (front and rear yard)
- Conforming with s.143 waste management access, s.144 alternative setbacks, new r4 provisions in s.161(15)
- Study what happens if the immediate neighbours do what you're doing or taller. You are respecting zoning by-law. Does the proposal remain adequate if neighbours decide to do the exact same thing? There would be 3 m between buildings – access to light through those side windows? Opportunities to remediate pressures on site in this scenario.
  - Discuss this in planning rationale
- Consider how residents are to access the rear yard. Current plans do not make this clear.

#### Urban Design (Adrian)

- What is the relationship between the two parcels?
  - Thanh: Two separate parcels of land. Previously planned to merge them together but there were issues in zoning compliance. Now they will develop separately through two distinct applications.

- John: lane closure application and pre-consultation for 139 Parkdale coming soon. Two distinct developments.
- 139 Parkdale is within Tunney's Pasture mixed use priority area and is subject to UDRP
- 138 Forward is on the border, no requirement for UDRP
- A Design Brief will be required as part of a complete application. Please see the attached terms of reference for requirements. Can combine design brief with planning rationale
- Clarification: Front yard setback and needing to provide additional setback to accommodate hydro line by 5 meters.
  - Setback shown is 1.56 on plan, is currently 3.2 and on the third floor it steps back 2 more metres
- More details are requested on proposed landscaping. It is strongly recommended that trees be planted in the rear yard, and that street trees be planted in the front yard if conditions allow.
  - Consider on front façade trellises, shrubbery to soften the façade
- Bicycle parking – appreciate ratio of 1-1. Visitor bike parking in the front would be appreciated
- It is strongly recommended that sustainable design elements be incorporated into the proposal (e.g. green roofs, passive design interventions, etc.).
- Please review and consider the Low-Rise Infill Design Guidelines and the Transit Oriented Development Guidelines.
- In terms of materiality and architectural expression, it is felt that the front façade of the building is very busy and could benefit from a quieter expression (limiting the amount of dark brick on the ground floor as a suggestion)
- It is strongly recommended that the applicant consider potential future development on adjacent properties and demonstrate how the proposal responds to these future conditions.

#### Transportation (Wally)

- The development site proposes 16 units and no parking spaces. This development would not generate sufficient traffic to warrant a TIA report.
- Forward Avenue is classified as a Local road. There are no additional protected ROW limits identified in the OP.
- The closure of an existing private approach shall reinstate the sidewalk, shoulder, curb and boulevard to City standards.
- The purchaser, tenant or sub-lessee acknowledges the unit being rented/sold is not provided with any on-site parking and should a tenant/purchaser have a vehicle for which they wish to have parking that alternative and lawful arrangements will need to be made to accommodate their parking need at an alternative location. The Purchaser/Tenant also acknowledges that the availability and regulations governing on-street parking vary; that access to on-street parking, including through residential on-street parking permits issued by the City cannot be guaranteed now or in the future; and that a purchaser, tenant or sub-lessee intending to rely on on-street parking for their vehicle or vehicles does so at their own risk.
- Please keep in mind that on street parking is not a viable option for tenants. Ensure that potential tenants are aware that there is no provision for parking.
- The Owner shall be required to enter into maintenance and liability agreement for all pavers, plant and landscaping material placed in the City right-of-way and the Owner shall assume all maintenance and replacement responsibilities in perpetuity.

- Bicycle parking spaces are required as per Section 111 of the Ottawa Comprehensive Zoning By-law. Bicycle parking spaces should be located in safe, secure places near main entrances and preferably protected from the weather.

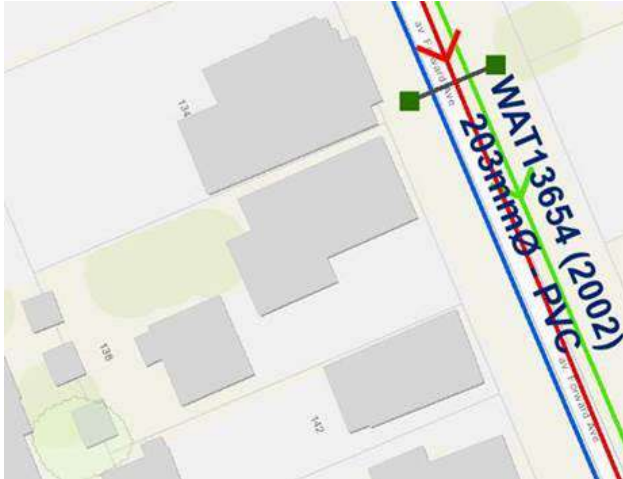
#### Civil Engineer (Reza)

- Standard SPC
- Services – all are present, pretty much new
- Attain an engineering consultant
- Glad to see you consider rear yard for landscape
- Services you have in ROW are storm and sanitary

#### **General:**

- It is the sole responsibility of the consultant to investigate the location of existing underground utilities in the proposed servicing area and submit a request for locates to avoid conflict(s). The location of existing utilities and services shall be documented on an **Existing Conditions Plan**.
- Any easements on the subject site shall be identified and respected by any development proposal and shall adhere to the conditions identified in the easement agreement. A **legal survey plan** shall be provided and all easements shall be shown on the engineering plans.
- Existing buildings require a CCTV inspection and report to ensure existing services to be re-used are in good working order and meet current minimum size requirements. Located services to be placed on site servicing plans.
- Reference documents for information purposes :
  - Ottawa Sewer Design Guidelines (October 2012)
  - Technical Bulletin PIEDTB-2016-01
  - Technical Bulletins ISTB-2018-01, ISTB-2018-02 , ISTB-2021-03, and ISTB-2018-03.
  - Ottawa Design Guidelines - Water Distribution (2010)
  - Geotechnical Investigation and Reporting Guidelines for Development Applications in the City of Ottawa (2007)
  - City of Ottawa Slope Stability Guidelines for Development Applications (revised 2012)
  - City of Ottawa Environmental Noise Control Guidelines (January 2016)
  - City of Ottawa Accessibility Design Standards (2012) (City recommends development be in accordance with these standards on private property)
  - Ottawa Standard Tender Documents (latest version)
  - Ontario Provincial Standards for Roads & Public Works (2013)
  - Record drawings and utility plans are also available for purchase from the City (Contact the City's Information Centre by email at [InformationCentre@ottawa.ca](mailto:InformationCentre@ottawa.ca) or by phone at (613) 580-424 x.44455).

Please note that this is the applicant responsibility to refer to the latest applicable guidelines while preparing reports and studies.



**Disclaimer:**

*The City of Ottawa does not guarantee the accuracy or completeness of the data and information contained on the above image(s) and does not assume any responsibility or liability with respect to any damage or loss arising from the use or interpretation of the image(s) provided. This image is for schematic purposes only.*

**Stormwater Management Criteria and Information:**

- Water Quantity Control:** In the absence of area specific SWM criteria please control post-development runoff from the subject site, up to and including the **100-year storm event**, to a **5-year pre-development level**. The pre-development runoff coefficient will need to be determined **as per existing conditions** but in no case more than 0.5. **[If 0.5 applies it needs to be clearly demonstrated in the report that the pre-development runoff coefficient is greater than 0.5]**. The time of concentration ( $T_c$ ) used to determine the pre-development condition should be calculated.  *$T_c$  should not be less than 10 min. since IDF curves become unrealistic at less than 10 min;  $T_c$  of 10 minutes shall be used for all post-development calculations*.
- Any storm events greater than the established **5-year allowable** release rate, up to and including the **100-year storm event**, shall be detained on-site. The SWM measures required to avoid impact on downstream sewer system will be subject to review.
- Please note that foundation drainage is to be independently connected to sewer main unless being pumped with appropriate back up power, sufficient sized pump and back flow prevention. **It is recommended that the foundation drainage system be drained by a sump pump connection to the storm sewer to minimize risk of basement flooding as it will provide the best protection from the uncontrolled sewer system compared to relying on the backwater valve.**
- Water Quality Control:** Please consult with the local conservation authority (RVCA) regarding water quality criteria prior to submission of a Site Plan Control Proposal application to establish any water quality control restrictions, criteria and measures for the site. Correspondence and clearance shall be provided in the Appendix of the report.
- If Underground Storage proposed:** Please note that the Modified Rational Method for storage computation in the Sewer Design Guidelines was originally intended to be used for above ground storage (i.e. parking lot) where the change in head over the orifice varied from 1.5 m to 1.2 m (assuming a 1.2 m deep CB and a max ponding depth of 0.3 m). This change in head was

small and hence the release rate fluctuated little, therefore there was no need to use an average release rate.

When underground storage is used, the release rate fluctuates from a maximum peak flow based on maximum head down to a release rate of zero. This difference is large and has a significant impact on storage requirements. **We therefore require that an average release rate equal to 50% of the peak allowable rate shall be applied to estimate the required volume. Alternatively, the consultant may choose to use a submersible pump in the design to ensure a constant release rate.**

In the event that there is a disagreement from the designer regarding the required storage, The City will require that the designer demonstrate their rationale utilizing dynamic modelling, that will then be reviewed by City modellers in the Water Resources Group.

Please provide information on UG storage pipe. Provide required cover over pipe and details, chart of storage values, capacity etc. How will this pipe be cleaned of sediment and debris? Provide information on type of underground storage system including product name and model, number of chambers, chamber configuration, confirm invert of chamber system, top of chamber system, required cover over system and details, interior bottom slope (for self-cleansing), chart of storage values, length, width and height, capacity, entry ports (maintenance) etc.

Provide a cross section of underground chamber system showing invert and obvert/top, major and minor HWLs, top of ground, system volume provided during major and minor events. UG storage to provide actual 2- and 100-year event storage requirements.

In regard to all proposed UG storage, ground water levels (and in particular HGW levels) will need to be reviewed to ensure that the proposed system does not become surcharged and thereby ineffective.

Modeling can be provided to ensure capacity for both storm and sanitary sewers for the proposed development by City's Water Distribution Dept. – Modeling Group, through PM and upon request.

- Please note that the minimum orifice dia. for a plug style ICD is **83mm and the minimum flow rate from a vortex ICD is 6 L/s** in order to reduce the likelihood of plugging.
- Post-development site grading shall match existing property line grades in order to minimize disruption to the adjacent residential properties. A **topographical plan of survey** shall be provided as part of the submission and a note provided on the plans.
- Please provide a **Pre-Development Drainage Area Plan** to define the pre-development drainage areas/patterns. **Existing drainage patterns shall be maintained and discussed as part of the proposed SWM solution.**
- **If rooftop control** proposed and storage is proposed as part of the SWM solutions sufficient details (Cl. 8.3.8.4) shall be discussed and document in the report and on the plans. Roof drains are to be connected downstream of any incorporated ICDs within the SWM system and not to the foundation drain system. Provide a **Roof Drain Plan** as part of the submission.
- **Considering the size of the site, it would be acceptable to control the roof portion only and leave the remainder of the site uncontrolled as long as the run off from uncontrolled portion is directed towards the right of way. This approach should be discussed in the SWM report. Also, the**

grading plan should clearly demonstrate that the runoff from the uncontrolled portion of the site will be directed towards the ROW

- If **Window wells** are proposed, they are to be indirectly connected to the footing drains. A detail of window well with indirect connection is required, as is a note at window well location speaking to indirect connection.
- There must be at least **15cm of vertical clearance** between the spill elevation and the ground elevation at the building envelope that is in proximity of the flow route or ponding area. The exception in this case would be at reverse sloped loading dock locations. At these locations, a minimum of 15cm of vertical clearance must be provided below loading dock openings. Ensure to provide discussion in report and ensure grading plan matches if applicable.

#### Storm Sewer:

- A 300mm dia. PVC storm sewer (2000) is available within **Forward Avenue**.

#### Sanitary Sewer Maclaren St:

- A 250 mm dia. PVC Sanitary sewer (2000) is available within **Forward Avenue**.
- Please provide the new Sanitary sewer discharge and we confirm if sanitary sewer main has the capacity. An analysis and demonstration that there is sufficient/adequate residual capacity to accommodate any increase in wastewater flows in the receiving and downstream wastewater system is required to be provided. Needs to be demonstrated that there is adequate capacity to support any increase in wastewater flow.
- Please apply the wastewater design flow parameters in *Technical Bulletin PIEDTB-2018-01*.
- Sanitary sewer monitoring maintenance hole is required to be installed at the property line (on the private side of the property) as per City of Ottawa Sewer-Use By-Law 2003-514 (14) *Monitoring Devices*.
- A backwater valve is required on the sanitary service for protection.

#### Water :

- A 203 mm dia. PVC watermain (2002) is available within **Forward Avenue**.
- Existing residential service to be blanked at the main.
- **Water Supply Redundancy:** Residential buildings with a basic day demand greater than 50m<sup>3</sup>/day (0.57 L/s) are required to be connected to a minimum of two water services separated by an isolation valve to avoid a vulnerable service area as per the *Ottawa Design Guidelines - Water Distribution, WDG001, July 2010 Clause 4.3.1 Configuration*. The basic day demand for this site not expected to exceed 50m<sup>3</sup>/day.
- Please **review Technical Bulletin ISTB-2018-0**, maximum fire flow hydrant capacity is provided in Section 3 Table 1 of Appendix I. A **hydrant coverage figure** shall be provided and **demonstrate there is adequate fire protection for the proposal**. Two or more public hydrants are anticipated to be required to handle fire flow.
- Boundary conditions are required to confirm that the require fire flows can be achieved as well as availability of the domestic water pressure on the City street in front of the development. Use Table 3-3 of the MOE Design Guidelines for Drinking-Water System to determine Maximum Day and Maximum Hour peaking factors for 0 to 500 persons and use Table 4.2 of the Ottawa Design Guidelines, Water Distribution for 501 to 3,000 persons. Please provide the following information to the City of Ottawa via email to request water distribution network boundary conditions for the subject site. Please note that once this information has been provided to the City of Ottawa it takes approximately 5-10 business days to receive boundary conditions.
  - Type of Development and Units

- Site Address
- A plan showing the proposed water service connection location.
- **Average Daily Demand** (L/s)
- **Maximum Daily Demand** (L/s)
- **Peak Hour Demand** (L/s)
- **Fire Flow** (L/min)

*[Fire flow demand requirements shall be based on ISTB-2021-03]*

- **Hydrant capacity shall be assessed to demonstrate the RFF can be achieved.**  
Please identify which hydrants are being considered to meet the RFF on a fire hydrant coverage plan as part of the boundary conditions request.

### **Snow Storage:**

- Any portion of the subject property which is intended to be used for permanent or temporary snow storage shall be as shown on the approved site plan and grading plan. Snow storage shall not interfere with approved grading and drainage patterns or servicing. Snow storage areas shall be setback from the property lines, foundations, fencing or landscaping a minimum of 1.5m. Snow storage areas shall not occupy driveways, aisles, required parking spaces or any portion of a road allowance. If snow is to be removed from the site please indicate this on the plan(s).

### **Trees:**

Please note that a new Tree By-law is now in effect.



General Bulletin\_New  
Tree Protection Bylaw

### **Gas pressure regulating station**

A gas pressure regulating station may be required depending on HVAC needs (typically for 12+ units). Be sure to include this on the Grading, Site Servicing, SWM and Landscape plans. This is to ensure that there are no barriers for overland flow routes (SWM) or conflicts with any proposed grading or landscape features with installed structures and has nothing to do with supply and demand of any product.



Gas Pressure  
Regulating Station.pdf

### **Regarding Quantity Estimates:**

Please note that external Garbage and/or bicycle storage structures are to be added to QE under Landscaping as it is subject to securities. In addition, sump pumps for Sanitary and Storm laterals and/or cisterns are to be added to QE under Hard items as it is subject to securities, even though it is internal and is spoken to under SWM and Site Servicing Report and Plan.

### **Required Engineering Plans and Studies:**



**PLANS:**

- Existing Conditions and Removals Plan
- Site Servicing Plan
- Grade Control and Drainage Plan
- Erosion and Sediment Control Plan
- Roof Drainage Plan ( If roof utilized as a SWM component)
- Topographical survey

**REPORTS:**

- Site Servicing and Stormwater Management Report
- Geotechnical Study/Investigation
- Noise Control Study
- Phase I ESA
- Phase II ESA (Depending on recommendations of Phase I ESA)
- Site lighting certificate

Please refer to the **City of Ottawa Guide to Preparing Studies and Plans [Engineering]**:

Specific information has been incorporated into both the [Guide to Preparing Studies and Plans](#) for a site plan. The guide outlines the requirement for a statement to be provided on the plan about where the property boundaries have been derived from.

Added to the general information for servicing and grading plans is a note that an **O.L.S.** should be engaged when reporting on or relating information to property boundaries or existing conditions. The importance of engaging an **O.L.S.** for development projects is emphasized.

**Phase One Environmental Site Assessment:**

- A Phase I ESA is required to be completed in accordance with Ontario Regulation 153/04 in support of this development proposal to determine the potential for site contamination. Depending on the Phase I recommendations a Phase II ESA may be required.
- The Phase I ESA shall provide all the required Environmental Source Information as required by O. Reg. 153/04. ERIS records are available to public at a reasonable cost and need to be included in the ESA report to comply with O.Reg. 153/04 and the Official Plan. The City will not be in a position to approve the Phase I ESA without the inclusion of the ERIS reports.
- Official Plan Section 4.8.4:

<https://ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan/volume-1-official-plan/section-4-review-development-applications#4-8-protection-health-and-safety>

**Geotechnical Investigation:**

- A Geotechnical Study/Investigation shall be prepared in support of this development proposal.
- Reducing the groundwater level in this area can lead to potential damages to surrounding structures due to excessive differential settlements of the ground. The impact of groundwater lowering on adjacent properties needs to be discussed and investigated to ensure there will be no short term and long term damages associated with lowering the groundwater in this area.
- Geotechnical Study shall be consistent with the **Geotechnical Investigation and Reporting Guidelines for Development Applications**.

[https://documents.ottawa.ca/sites/documents/files/geotech\\_report\\_en.pdf](https://documents.ottawa.ca/sites/documents/files/geotech_report_en.pdf)

**Noise Study:**

- A **Transportation Noise Assessment** is required as the subject development is located within 100m proximity of an Arterial Road
- A **Stationary Noise Assessment** is required in order to assess the noise impact of the proposed sources of stationary noise (mechanical HVAC system/equipment) of the development onto the surrounding residential area to ensure the noise levels do not exceed allowable limits specified in the City Environmental Noise Control Guidelines.

[https://documents.ottawa.ca/sites/default/files/documents/enviro\\_noise\\_guide\\_en.pdf](https://documents.ottawa.ca/sites/default/files/documents/enviro_noise_guide_en.pdf)

**Construction approach** – Please contact the Right-of-Ways Permit Office [TMconstruction@ottawa.ca](mailto:TMconstruction@ottawa.ca) early in the Site Plan process to determine the ability to construct site and copy File Lead Jean Charles [Jean-Charles.Renaud@ottawa.ca](mailto:Jean-Charles.Renaud@ottawa.ca) on this request.

Please note that these comments are considered preliminary based on the information available to date and therefore maybe amended as additional details become available and presented to the City. It is the responsibility of the applicant to verify the above information. The applicant may contact me for follow-up questions related to engineering/infrastructure prior to submission of an application if necessary.

If you have any questions or require any clarification, please let me know.

**Community Association Comments:**

Lorrie Marlow

- Neighbours must be consulted on lane closure.
  - This will occur through separate application that will require public consultation
- Is the glass safe bird complaint? Yes
- HVAC on roof, correct? No ventilation plans exhausting into neighbours. Correct?
  - Thanh: Don't have exact layout. Setback is 1.5 m. Will be designed based on requirements
  - Ensure none of the neighbours are affected by fans
- Please be absolutely upfront with people renting in this building that there is no parking
  - John: Is there permit parking on streets? Lorrie: Hard to get.
- Recommendation: NCC in greenspace have been renting out that land for construction staging.
- Consider a carshare program
- 2 front/back semi approved on 134 and 138/140 Forward

**Next Steps:**

- Follow up email that will include meeting notes and the plans and studies list required for SPC submission
- Lorrie has signed an NDA. Book some time to approach community association to discuss proposal, as well as with the ward Councillor

## D.4 CORRESPONDENCE WITH THE RVCA



**From:** [Eric Lalande](#)  
**To:** [Shobowale, Aminat](#)  
**Cc:** [Gladish, Alyssa](#)  
**Subject:** RE: 138 Forward Avenue Ottawa, Ontario  
**Date:** Thursday, December 2, 2021 7:21:27 AM

---

Thank you Aminat,

The comments are maintained that no quality protection is required based on the site design. Best management practices are encouraged to be integrated where possible.

Thank you,

**Eric Lalande, MCIP, RPP**  
Planner, RVCA  
613-692-3571 x1137

---

**From:** Shobowale, Aminat <[Aminat.Shobowale@stantec.com](mailto:Aminat.Shobowale@stantec.com)>  
**Sent:** Tuesday, November 30, 2021 10:55 AM  
**To:** Eric Lalande <[eric.lalande@rvca.ca](mailto:eric.lalande@rvca.ca)>  
**Cc:** Gladish, Alyssa <[Alyssa.Gladish@stantec.com](mailto:Alyssa.Gladish@stantec.com)>  
**Subject:** RE: 138 Forward Avenue Ottawa, Ontario

Hi Eric,

Thank you for your response and attached is the site plan for the proposed development.

Regards,

Aminat.

**Aminat Shobowale**  
Civil Designer, Community Development

Mobile: (437) 833-4988  
[Aminat.Shobowale@stantec.com](mailto:Aminat.Shobowale@stantec.com)

Stantec  
400 - 1331 Clyde Avenue  
Ottawa ON K2C 3G4



**Better Together, Even If We're Apart.** [Read more](#) about Stantec's COVID-19 response, including remote working and business continuity measures.

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:** Eric Lalande <[eric.lalande@rvca.ca](mailto:eric.lalande@rvca.ca)>  
**Sent:** Tuesday, November 30, 2021 9:05 AM  
**To:** Shobowale, Aminat <[Aminat.Shobowale@stantec.com](mailto:Aminat.Shobowale@stantec.com)>

**Cc:** Gladish, Alyssa <[Alyssa.Gladish@stantec.com](mailto:Alyssa.Gladish@stantec.com)>

**Subject:** RE: 138 Forward Avenue Ottawa, Ontario

Hi Aminat,

I typically look for a site plan, based on the description it would appear likely that no quality control is required, however I will reserve comment until I am able to review the plan.

Thank you,

**Eric Lalande, MCIP, RPP**

Planner, RVCA

613-692-3571 x1137

---

**From:** Shobowale, Aminat <[Aminat.Shobowale@stantec.com](mailto:Aminat.Shobowale@stantec.com)>

**Sent:** Monday, November 29, 2021 4:56 PM

**To:** Eric Lalande <[eric.lalande@rvca.ca](mailto:eric.lalande@rvca.ca)>

**Cc:** Gladish, Alyssa <[Alyssa.Gladish@stantec.com](mailto:Alyssa.Gladish@stantec.com)>

**Subject:** 138 Forward Avenue Ottawa, Ontario

Good afternoon Eric,

Stantec is preparing a civil engineering design submission in support of a site plan control application for a proposed re-development on 138 Forward Avenue in the City of Ottawa.

We have been directed to consult with you to confirm if stormwater quality control requirements are necessary for this site.

Below is a list of some key site information:

- i. The existing building will be replaced by a 3-storeys plus 1 basement building to be serviced through the existing services on Forward Avenue.
- ii. There is an existing 300mm diameter PVC storm sewer fronting the site on Forward Avenue.
- iii. There is no onsite parking at the proposed development.
- iv. Stormwater quantity control for the site is anticipated to be provided via rooftop storage and the remaining site uncontrolled towards the right of way.
- v. The City of Ottawa has indicated that the allowable stormwater release rate is to be calculated using:
  - Allowable Runoff coefficient (C): 0.5.
  - Allowable flowrate: Control the 100-year storm events to the 5-year predevelopment storm event.

Thank you in advance for your help.

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

Regards,

Aminat.

**Aminat Shobowale**

Civil Designer, Community Development

Mobile: (437) 833-4988

[Aminat.Shobowale@stantec.com](mailto:Aminat.Shobowale@stantec.com)

Stantec

400 - 1331 Clyde Avenue

Ottawa ON K2C 3G4



**Better Together, Even If We're Apart.** [Read more](#) about Stantec's COVID-19 response, including remote working and business continuity measures.

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.

## D.5 WATTS ACCUTROL ADJUSTABLE WEIR DETAIL





Adjustable Accutrol Weir  
 Tag: \_\_\_\_\_

**Adjustable Flow Control  
 for Roof Drains**

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

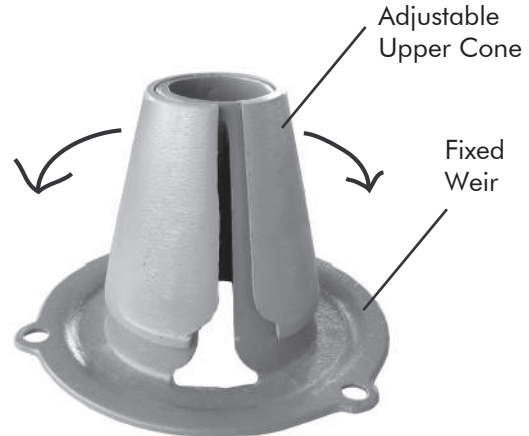
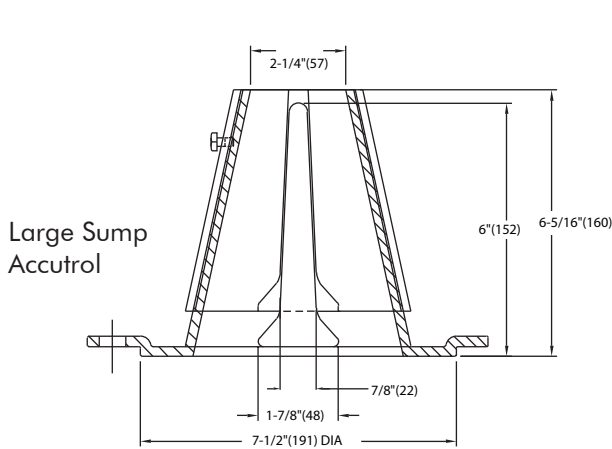
For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol. The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the 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) x 2 inches of head ] + 2-1/2 gpm(for the third inch of head) = 12-1/2 gpm.



1/2 Weir Opening Exposed Shown Above

TABLE 1. Adjustable Accutrol Flow Rate Settings

Weir Opening Exposed	Head of Water					
	1"	2"	3"	4"	5"	6"
	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	10	10	10	10	10

Job Name \_\_\_\_\_ Contractor \_\_\_\_\_  
 Job Location \_\_\_\_\_ Contractor's P.O. No. \_\_\_\_\_  
 Engineer \_\_\_\_\_ Representative \_\_\_\_\_

WATTS Drainage reserves the right to modify or change product design or construction without prior notice and without incurring any obligation to make similar changes and modifications to products previously or subsequently sold. See your WATTS Drainage representative for any clarification. Dimensions are subject to manufacturing tolerances.



CANADA: 5435 North Service Road, Burlington, ON, L7L 5H7 TEL: 905-332-6718 TOLL-FREE: 1-888-208-8927 Website: www.wattsdrainage.ca





## Appendix E BACKGROUND STUDIES

### E.1 GEOTECHNICAL INVESTIGATION BY PATERSON GROUP INC (NOVEMBER 21, 2021)



Geotechnical  
Engineering

Environmental  
Engineering

Hydrogeology

Geological  
Engineering

Materials Testing

Building Science

Noise and Vibration  
Studies

**Geotechnical Investigation**  
Proposed Residential Building  
138 Forward Avenue  
Ottawa, Ontario

Prepared For

VIKA Land Development Group Inc.

**Paterson Group Inc.**

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

Tel: (613) 226-7381  
Fax: (613) 226-6344  
[www.patersongroup.ca](http://www.patersongroup.ca)

November 24, 2021

Report: PG6026-1

## Table of Contents

	PAGE
<b>1.0 Introduction .....</b>	<b>1</b>
<b>2.0 Proposed Development.....</b>	<b>1</b>
<b>3.0 Method of Investigation .....</b>	<b>2</b>
3.1 Field Investigation .....	2
3.2 Field Survey .....	3
3.3 Laboratory Testing .....	3
3.4 Analytical Testing .....	3
<b>4.0 Observations .....</b>	<b>4</b>
4.1 Surface Conditions .....	4
4.2 Subsurface Profile .....	4
4.3 Groundwater .....	4
<b>5.0 Discussion .....</b>	<b>5</b>
5.1 Geotechnical Assessment .....	5
5.2 Site Grading and Preparation.....	5
5.3 Foundation Design .....	7
5.4 Design for Earthquakes .....	8
5.5 Basement Floor Slab.....	8
5.6 Basement Wall .....	8
5.7 Pavement Design.....	9
<b>6.0 Design and Construction Precautions.....</b>	<b>11</b>
6.1 Foundation Drainage and Backfill .....	11
6.2 Protection of Footings Against Frost Action .....	12
6.3 Excavation Side Slopes .....	12
6.4 Pipe Bedding and Backfill .....	13
6.5 Groundwater Control.....	14
6.6 Winter Construction.....	15
6.7 Corrosion Potential and Sulphate .....	15
<b>7.0 Recommendations .....</b>	<b>16</b>
<b>8.0 Statement of Limitations.....</b>	<b>17</b>

## **Appendices**

- Appendix 1**      Soil Profile and Test Data Sheets  
                         Symbols and Terms  
                         Analytical Test Results
- Appendix 2**      Figure 1 - Key Plan  
                         Drawing PG6026-1 - Test Hole Location Plan

## 1.0 Introduction

Paterson Group (Paterson) was commissioned by VIKA Land Development Group Inc. to conduct a geotechnical investigation for the proposed residential building site to be located at 138 Forward Avenue in the City of Ottawa (refer to Figure 1 - Key Plan in Appendix 2 of this report).

The objectives of the geotechnical investigation were to:

- Determine the subsoil and groundwater conditions at this site by means of test holes.
- Provide geotechnical recommendations pertaining to the design of the proposed development including construction considerations which may affect the 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.

## 2.0 Proposed Development

Based on the available drawings, it is understood that the proposed development will consist of a multi-storey residential building with one basement level, which will occupy most of the subject site.

Associated walkways and landscaped areas are anticipated surrounding the proposed building. It is also expected that the proposed building will be municipally serviced.

## **3.0 Method of Investigation**

### **3.1 Field Investigation**

#### **Field Program**

The field program for the current geotechnical investigation was carried out on November 2, 2021 and consisted of advancing a total of 3 boreholes to a maximum depth of 0.9 m below existing grade. The test hole locations were distributed in a manner to provide general coverage of the subject site and taking into consideration underground utilities and site features. The borehole locations are shown on Drawing PG6026-1 - Test Hole Location Plan included in Appendix 2.

The boreholes were drilled using a low clearance drill rig operated by a two-person crew. All fieldwork was conducted under the full-time supervision of Paterson personnel under the direction of a senior engineer. The drilling procedure consisted of drilling to the required depths at the selected locations, and sampling and testing the overburden.

#### **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 and split-spoon samples were recovered from the boreholes are shown as AU and SS, 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.

The subsurface conditions observed in the boreholes 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.

#### **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 borehole locations were selected by Paterson to provide general coverage of the proposed development, taking into consideration the existing site features and underground utilities. The test hole locations and ground surface elevation at each test hole location were surveyed by Paterson using a handheld GPS and referenced to a geodetic datum.

The location of the boreholes and ground surface elevation at each test hole location are presented on Drawing PG6026-1 - Test Hole Location Plan in Appendix 2.

### **3.3 Laboratory Testing**

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. 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 are discussed further in Section 6.7.

## **4.0 Observations**

### **4.1 Surface Conditions**

The subject site is currently occupied by a two-storey residential building, which is surrounded by asphalt-paved parking areas. The site is bordered by Forward Avenue to the east, and residential properties to the north, south and west. The existing ground surface across the site is relatively level at approximate geodetic elevation 62 m.

### **4.2 Subsurface Profile**

#### **Overburden**

Generally, the soil profile at the borehole locations consists of fill, extending to approximate depths of 0.6 to 0.9 m below the existing ground surface, where practical refusal of the augers was encountered on the inferred bedrock surface. The fill was generally observed to consist of a crushed stone with some sand and occasional traces of clay.

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

#### **Bedrock**

Based on available geological mapping, the bedrock in the subject area consists of limestone of the Bobcaygeon formation.

### **4.3 Groundwater**

Groundwater was not observed in the completed boreholes prior to backfilling. However, based on our experience at an adjacent site, the groundwater level is expected at approximate depths of 2 to 3 m below the existing ground surface.

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



## **5.0 Discussion**

### **5.1 Geotechnical Assessment**

From a geotechnical perspective, the subject site is suitable for the proposed development. The proposed building is recommended to be founded on conventional spread footings placed on clean, surface sounded bedrock.

Bedrock removal will be required to construct the basement level. Hoe ramming is an option where the bedrock is weathered and/or where only small quantities of bedrock need to be removed. Line drilling and controlled blasting may be required where large quantities of bedrock need to be removed. The blasting operations should be planned and completed under the guidance of a professional engineer with experience in blasting operations.

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

### **5.2 Site Grading and Preparation**

#### **Stripping Depth**

Due to the depth of the bedrock at the subject site and the anticipated founding level for the proposed multi-storey building, it is anticipated that all existing overburden material will be excavated from within the footprint of the proposed multi-storey building.

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

#### **Bedrock Removal**

As noted above, bedrock removal can be accomplished by hoe ramming where the bedrock is weathered and/or where only small quantities of the bedrock need to be removed. Sound bedrock may be removed by line drilling in conjunction with 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 the proximity of the blasting operations should be carried out 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 or claims related to the blasting operations.

As a general guideline, peak particle velocities (measured at the structures) should not exceed 25 mm/s during the blasting program to reduce the risks of damage to the existing surrounding structures. The blasting operations should be planned and conducted under the supervision of a licensed professional engineer who is also an experienced blasting consultant

### **Vibration Considerations**

Construction operations are also the cause of vibrations, and possibly, sources of nuisance to the community. Therefore, means to reduce the vibration levels 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 a source of vibrations: hoe ram, compactor, dozer, crane, truck traffic, etc. Vibrations, whether caused by blasting operations or by construction operations, could be the cause of the source of detrimental vibrations on the nearby buildings and structures. Therefore, it is recommended that all vibrations 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 a guideline, the peak particle velocity should be less than 15 mm/s between frequencies of 4 to 12 Hz, and 50 mm/s above a frequency of 40 Hz (interpolate between 12 and 40 Hz).

It should be noted that these guidelines are for today's construction standards. Considering that these guidelines are above perceptible human level and, in some cases, could be very disturbing to some people, it is recommended that a pre-construction survey be completed to minimize the risks of claims during or following the construction of the proposed building.

### **Fill Placement**

Fill used for grading beneath the building area should consist, unless otherwise specified, of clean imported granular fill, such as Ontario Provincial Standard Specifications (OPSS) Granular A or Granular B Type II. The imported fill material should be tested and approved prior to delivery to the site. The fill should be placed in maximum 300 mm thick loose lifts and compacted by suitable compaction

equipment. Fill placed beneath the building should be compacted to a minimum of 98% of the standard Proctor maximum dry density (SPMDD).

Non-specified existing fill along with site-excavated soil could be placed as general landscaping fill and beneath exterior parking where settlement of the ground surface is of minor concern. These materials should be spread in lifts with a maximum thickness of 300 mm and compacted by the tracks of the spreading equipment to minimize voids.

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

## **5.3 Foundation Design**

### **Bearing Resistance Values**

Footings placed on clean, surface sounded bedrock can be designed using a bearing resistance value at ultimate limits states (ULS) of **1,000 kPa**. A geotechnical factor of 0.5 was applied to the above noted bearing resistance value. Minimum dimensions of 1 m and 0.5 m should be provided for all spread and strip footings, respectively.

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.

Footings bearing on an acceptable bedrock bearing surface and designed for 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 1H:6V (or flatter) passes only through sound bedrock or a material of the same or higher capacity as the bedrock, such as concrete. A weathered bedrock bearing medium will require a lateral support zone of 1H:1V (or flatter).

## 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. A higher site class, such as Class A or B, may be provided for foundations placed on bedrock. However, the higher site class would need to be confirmed by a site-specific seismic shear wave velocity test.

The soils underlying the subject site 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 Floor Slab

All overburden soil will be removed from the subject site leaving the bedrock as the founding medium for the basement floor slab. It is recommended that the upper 200 mm of sub-slab fill consists of 19 mm clear crushed stone.

In consideration of the groundwater conditions at the site, an underslab drainage system, consisting of lines of perforated drainage pipe subdrains connected to a positive outlet, should be provided in the 19 mm clear crushed stone layer under the lower basement floor. This is discussed further in Subsection 6.1.

## 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 bulk (drained) unit weight of 20 kN/m<sup>3</sup>.

Two distinct conditions, static and seismic, should be reviewed for design calculations. The corresponding parameters are presented below.

### Lateral Earth Pressures

The static horizontal earth pressure ( $p_o$ ) can be calculated using a triangular earth pressure distribution equal to  $K_o \cdot \gamma \cdot H$  where:

- $K_o$  = at-rest earth pressure coefficient of the applicable retained material (0.5)
- $\gamma$  = 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  $K_o \cdot q$  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 ( $P_o$ ) 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 m/s<sup>2</sup>

The peak ground acceleration, ( $a_{max}$ ), for the Ottawa 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  $P_o = 0.5 K_o \gamma H^2$ , where  $K_o = 0.5$  for the soil conditions noted above.

The total earth force ( $P_{AE}$ ) is considered to act at a height,  $h$  (m), from the base of the wall, where:

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

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 pavement structures presented in the following tables are recommended for the design of car only parking areas and access lanes, should they be required as part of the proposed development.

<b>Table 1 - Recommended Pavement Structure - Car Only Parking Areas</b>	
<b>Thickness (mm)</b>	<b>Material Description</b>
50	<b>Wear Course</b> - HL-3 or Superpave 12.5 Asphaltic Concrete
150	<b>BASE</b> - OPSS Granular A Crushed Stone
300	<b>SUBBASE</b> - OPSS Granular B Type II
<b>SUBGRADE</b> - Either fill, in situ soil, or OPSS Granular B Type I or II material placed over in situ soil or fill	

<b>Table 2 - Recommended Pavement Structure Access Lanes and Heavy Truck Parking Areas</b>	
<b>Thickness (mm)</b>	<b>Material Description</b>
40	<b>Wear Course</b> – HL-3 or Superpave 12.5 Asphaltic Concrete
50	<b>Binder Course</b> – HL-8 or Superpave 19.0 Asphaltic Concrete
150	<b>BASE</b> - OPSS Granular A Crushed Stone
450	<b>SUBBASE</b> - OPSS Granular B Type II
<b>SUBGRADE</b> - Either fill, in situ soil, or OPSS Granular B Type I or II material placed over in situ soil or fill	

Minimum Performance Graded (PG) 58-34 asphalt cement should be used for this project. The pavement granular base and subbase should be placed in maximum 300 mm thick lifts and compacted to a minimum of 99% of the material's SPMDD using suitable vibratory equipment, noting that excessive compaction can result in subgrade softening.

If bedrock is encountered at the subgrade level, the total thickness of the pavement granular materials (base and subbase) could be reduced to 300 mm. The upper 300 mm of the bedrock surface should be reviewed and approved by Paterson prior to placing the base and subbase materials. Care should be exercised to ensure that the bedrock subgrade does not have depressions that will trap water.

## **6.0 Design and Construction Precautions**

### **6.1 Foundation Drainage and Backfill**

#### **Foundation Drainage**

It is recommended that a perimeter foundation drainage system be provided for the proposed building. The system should consist of a 150 mm diameter perforated and corrugated plastic pipe, surrounded on all sides by 150 mm of 19 mm clear crushed stone, which is placed at the footing level around the exterior perimeter of the structure. The clear crushed stone layer should be wrapped in a non-woven geotextile. The pipe should have a positive outlet, such as a gravity connection to the storm sewer.

Where insufficient room is available for exterior backfill, it is suggested that the composite drainage system (such as Delta Drain 6000 or equivalent) be secured against the vertical bedrock face extending to a series of drainage sleeves inlets through the building foundation wall at the footing/foundation wall interface. The drainage sleeves should be at least 150 mm diameter and be spaced 3 m along the perimeter foundation walls. An interior perimeter drainage pipe should be placed along the building perimeter along with the underslab drainage system. The perimeter drainage pipe and sub-slab drainage system should direct water to sump pit(s) within the lower underground area.

#### **Underslab Drainage**

Sub-slab drainage is recommended to control water infiltration below the basement slab. For preliminary design purposes, we recommend that 100 to 150 mm diameter perforated PVC pipes be placed at 3 to 6 m centres underlying the basement slab. The spacing of the underslab drainage system should be confirmed at the time of completing the excavation when water infiltration can be better assessed.

#### **Foundation Backfill**

Where sufficient space is available for conventional backfilling, backfill against the exterior sides of the foundation wall 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 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. A waterproofing system should be provided for any elevator pits.

## **6.2 Protection of Footings Against Frost Action**

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

Other exterior unheated footings, such as those for isolated exterior, are more prone to deleterious movement associated with frost action. These should be provided with a minimum 2.1 m thick soil cover (or insulation equivalent).

However, foundations which are founded directly on clean, surface-sounded bedrock with no cracks or fissures, and which is approved by Paterson at the time of construction, is not considered frost susceptible and does not require soil cover.

## **6.3 Excavation Side Slopes**

The side slopes of shallow excavations anticipated at this site should either be cut back at acceptable slopes or be retained by temporary shoring systems from the start of the excavation until the structure is backfilled. Given the limited overburden encountered at this site, it is expected that there will be sufficient space to slope the overburden, followed by a vertical excavation in the underlying bedrock.

### **Unsupported Excavations**

The excavation side slopes in the overburden and 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.



## **Rock stabilization**

Excavation side slopes in sound bedrock can be carried out using almost vertical side walls. A minimum 1 m horizontal ledge should be left between the bottom of the overburden excavation and the top of the bedrock surface to provide an area to allow for potential sloughing or to provide a stable base for the overburden shoring system.

Horizontal rock anchors may be required at specific locations to prevent pop-outs of the bedrock, especially in areas where fractures in the bedrock are conducive to the failure of the bedrock surface.

The requirements for horizontal rock anchors and bedrock stabilization measures will be evaluated during the excavation program and determined by Paterson at the time of construction.

## **Underpinning**

Considering the shallow depth to bedrock, it is expected that the adjacent buildings are founded on bedrock. Therefore, underpinning is not expected to be required at this site. However, an assessment should be completed by the geotechnical engineer at the time of excavation to confirm founding conditions of the existing buildings adjacent to the proposed building, in order to evaluate rock bolt locations and specific rock bolt details, should they be required.

## **6.4 Pipe Bedding and Backfill**

Bedding and backfill materials should be in accordance with the most recent Material Specifications and Standard Detail Drawings from the Department of Public Works and Services, Infrastructure Services Branch of the City of Ottawa.

At least 300 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 and cover materials should be placed in maximum 225 mm thick lifts compacted to 99% of the material's standard Proctor maximum dry density.

Well fractured bedrock should be acceptable as backfill for the lower portion of the trenches when the excavation is within bedrock provided the rock fill is placed only from at least 300 mm above the top of the service pipe and that all stones are 300 mm or smaller in their longest dimension.

Where hard surface areas are considered above the trench backfill, the trench 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 trench 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 low and controllable using open sumps. 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. If a project qualifies for a PTTW based upon anticipated conditions, an EASR will not be allowed as a temporary dewatering measure while awaiting the MECP review of the PTTW application.

### **Impacts on Neighbouring Properties**

Based on the existing groundwater level and the depth of the proposed building, groundwater lowering is not expected to be required as part of construction. Further, due to the presence of shallow bedrock at, and in the vicinity of, the subject site, the neighbouring structures are expected to be founded on bedrock. Therefore, no issues are expected with respect to groundwater lowering that would cause long term adverse effects to adjacent structures surrounding the proposed building.

## **6.6 Winter Construction**

Precautions must be taken if winter construction is considered for this project.

The subsoil conditions at this site 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. Additional information could be provided, if required.

## **6.7 Corrosion Potential and Sulphate**

The results of analytical testing show that the sulphate content is less than 0.1%. This result is indicative that Type 10 Portland cement (normal 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 low to slightly aggressive corrosive environment.

## 7.0 Recommendations

It is a requirement for the foundation design data provided herein to be applicable that the following material testing, and observation program be performed by the geotechnical consultant.

- 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 determine the level of compaction achieved.
- Sampling and testing of the bituminous concrete including mix design reviews.

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.

## 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 the VIKA Land Development Group Inc., or their agents, is not authorized without review by Paterson for the applicability of our recommendations to the alternative use of the report.

### Paterson Group Inc.



Puneet Bandi, MSc (Eng)



Scott S. Dennis, P.Eng.

### Report Distribution:

- VIKA Land Development Group Inc. (email copy)
- Paterson Group (1 copy)

# APPENDIX 1

SOIL PROFILE AND TEST DATA SHEETS

SYMBOLS AND TERMS

ANALYTICAL TESTING RESULTS









# 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

### SAMPLE TYPES

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, %
LL	-	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 = $(D_{30})^2 / (D_{10} \times D_{60})$
Cu	-	Uniformity coefficient = $D_{60} / D_{10}$

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

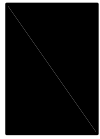
$p'_o$	-	Present effective overburden pressure at sample depth
$p'_c$	-	Preconsolidation pressure of (maximum past pressure on) sample
Ccr	-	Recompression index (in effect at pressures below $p'_c$ )
Cc	-	Compression index (in effect at pressures above $p'_c$ )
OC Ratio		Overconsolidation ratio = $p'_c / p'_o$
Void Ratio		Initial sample void ratio = volume of voids / volume of solids
Wo	-	Initial water content (at start of consolidation test)

### PERMEABILITY TEST

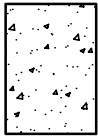
k	-	Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during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

## SYMBOLS AND TERMS (continued)

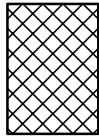
### STRATA PLOT



Topsoil



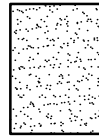
Asphalt



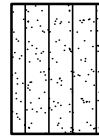
Fill



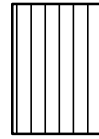
Peat



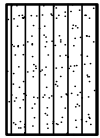
Sand



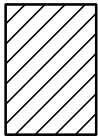
Silty Sand



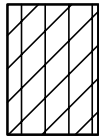
Silt



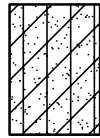
Sandy Silt



Clay



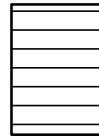
Silty Clay



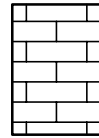
Clayey Silty Sand



Glacial Till



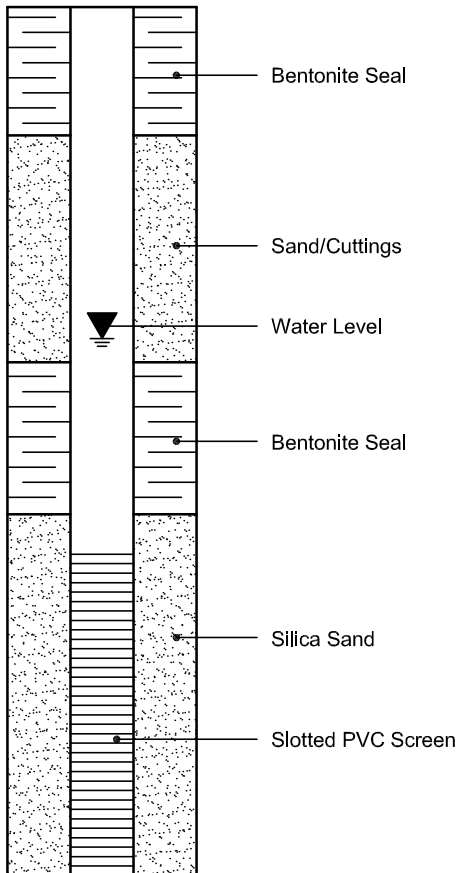
Shale



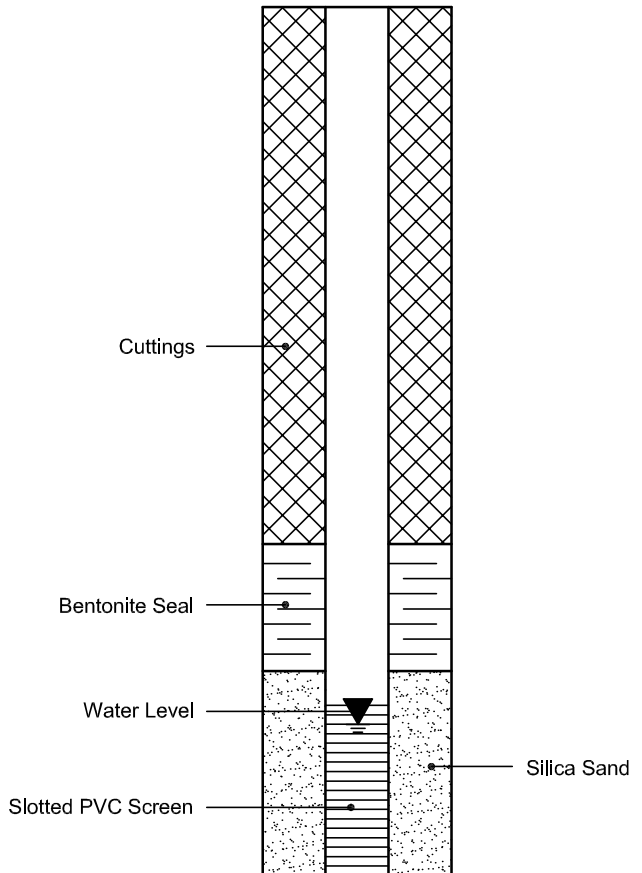
Bedrock

### MONITORING WELL AND PIEZOMETER CONSTRUCTION

#### MONITORING WELL CONSTRUCTION



#### PIEZOMETER CONSTRUCTION



Certificate of Analysis

Report Date: 09-Nov-2021

Client: Paterson Group Consulting Engineers

Order Date: 3-Nov-2021

Client PO: 33343

Project Description: PG6026

<b>Client ID:</b>	BH3-21 AU1 1'-2'	-	-	-
<b>Sample Date:</b>	02-Nov-21 09:00	-	-	-
<b>Sample ID:</b>	2145331-01	-	-	-
<b>MDL/Units</b>	Soil	-	-	-

**Physical Characteristics**

% Solids	0.1 % by Wt.	92.8	-	-	-
----------	--------------	------	---	---	---

**General Inorganics**

pH	0.05 pH Units	7.46	-	-	-
Resistivity	0.10 Ohm.m	82.0	-	-	-

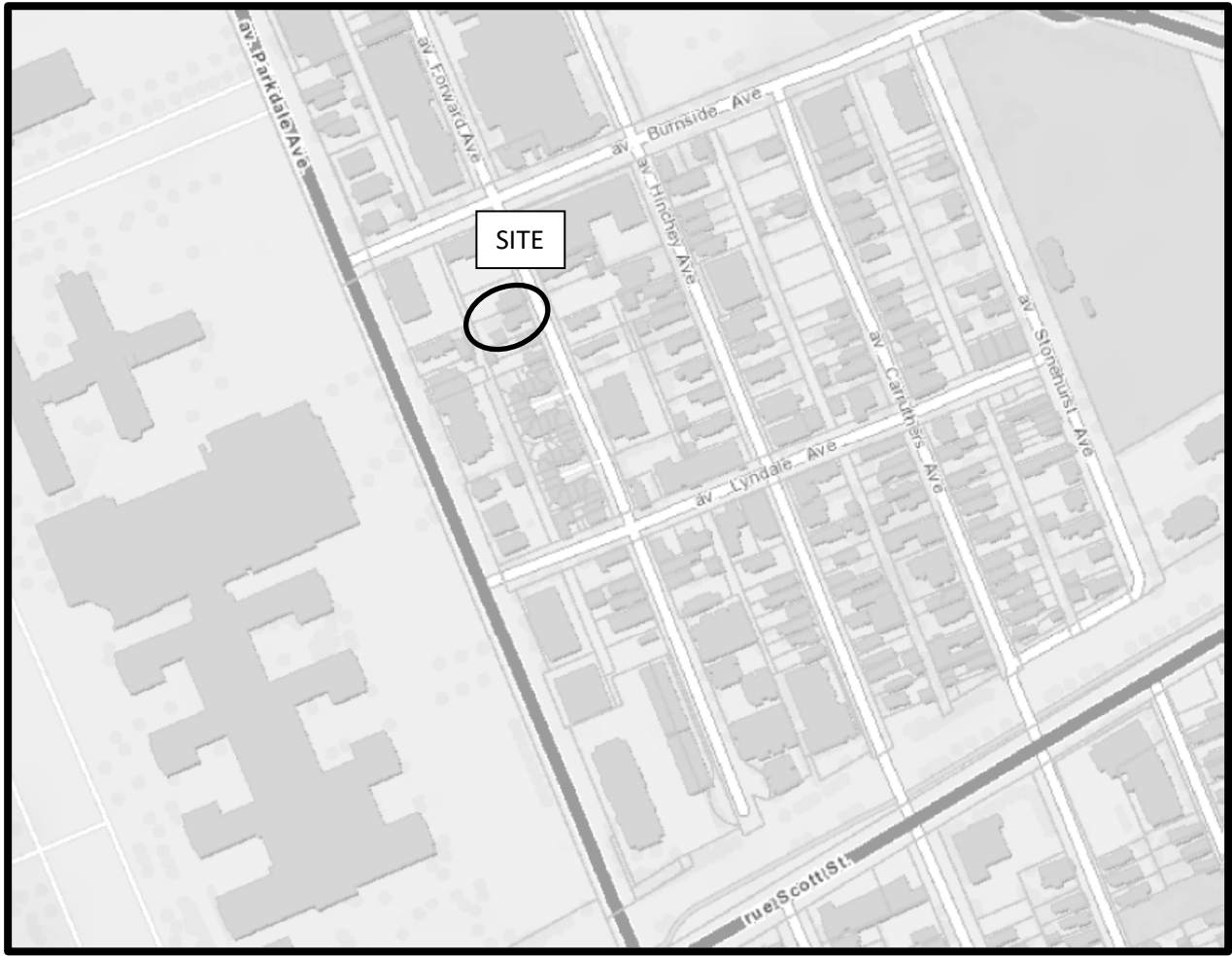
**Anions**

Chloride	5 ug/g dry	11	-	-	-
Sulphate	5 ug/g dry	35	-	-	-

# APPENDIX 2

FIGURE 1 – KEY PLAN

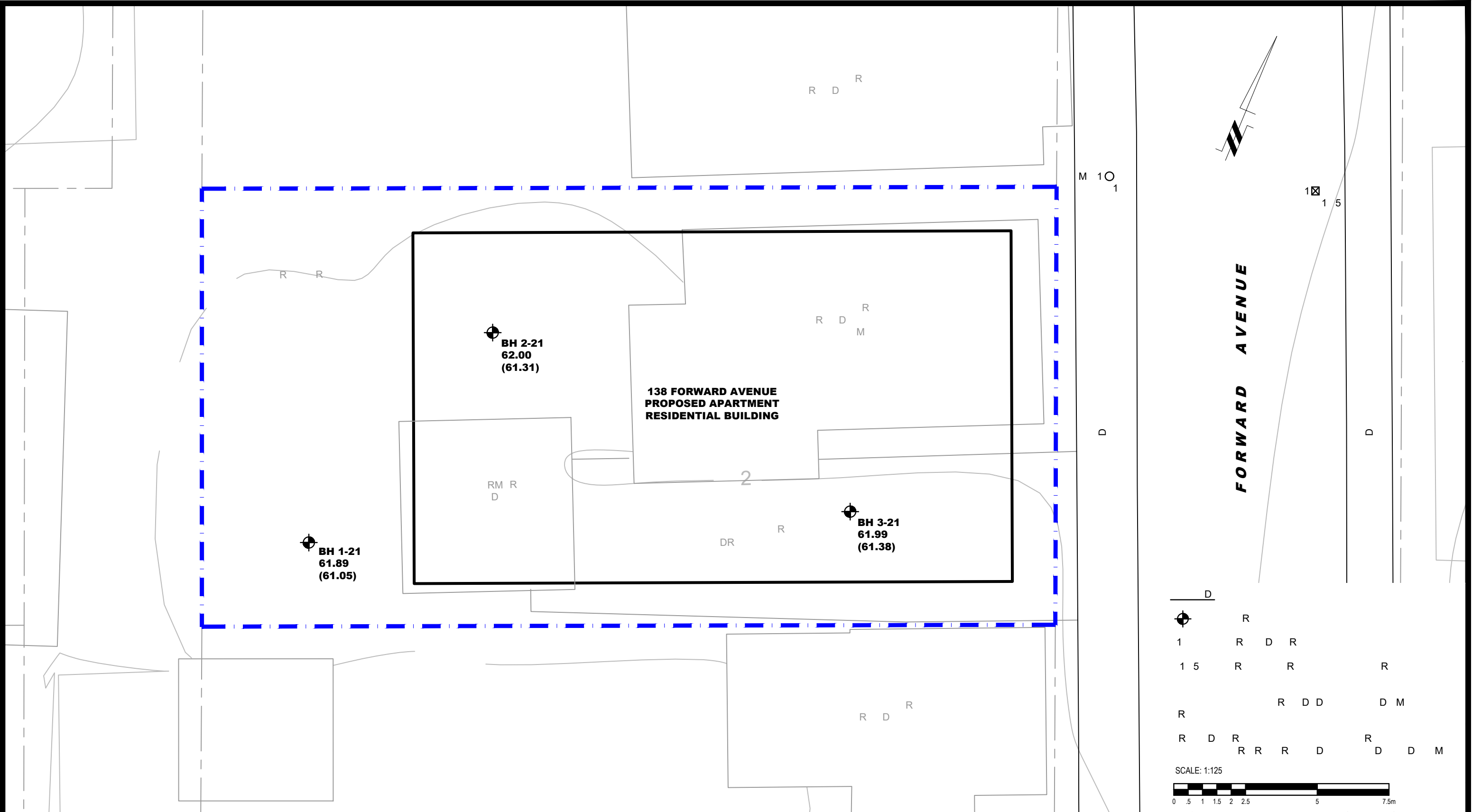
DRAWING PG6026-1 – TEST HOLE LOCATION PLAN



# FIGURE 1

## KEY PLAN





**patersongroup**  
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL

VIKA LAND DEVELOPMENT GROUP INC.  
GEOTECHNICAL INVESTIGATION  
PROPOSED RESIDENTIAL BUILDING  
138 FORWARD AVENUE  
ONTARIO

OTTAWA,  
Title:

## SITE PLAN

Scale:	1:125	Date:	11/2021
Drawn by:	JM	Report No.:	PG6026-1
Checked by:	PB	Dwg. No.:	<b>PG6026-1</b>
Approved by:	SD	Revision No.:	

**E.2 ENVIRONMENTAL SITE ASSESSMENT (PHASE I) BY PATERSON  
GROUP (NOVEMBER 16, 2021)**





Geotechnical  
Engineering

Environmental  
Engineering

Hydrogeology

Geological  
Engineering

Materials Testing

Building Science

## Phase I - Environmental Site Assessment

138 Forward Avenue  
Ottawa, Ontario

Prepared For

VIKA Land Development Group Inc.

### Paterson Group Inc.

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

Tel: (613) 226-7381  
Fax: (613) 226-6344  
[www.patersongroup.ca](http://www.patersongroup.ca)

November 16, 2021

Report: PE5478-1

---

## TABLE OF CONTENTS

	<b>PAGE</b>
EXECUTIVE SUMMARY.....	ii
1.0 INTRODUCTION .....	1
2.0 PROPERTY INFORMATION .....	2
3.0 SCOPE OF INVESTIGATION.....	3
4.0 RECORDS REVIEW.....	4
4.1 General.....	4
4.2 Environmental Source Information .....	7
4.3 Physical Setting Sources .....	10
5.0 PERSONAL INTERVIEWS .....	13
6.0 SITE RECONNAISSANCE .....	13
6.1 General Requirements.....	13
6.2 Site Inspection Observations .....	13
7.0 REVIEW AND EVALUATION OF INFORMATION .....	17
7.1 Land Use History .....	17
7.2 Conceptual Site Model.....	18
8.0 CONCLUSIONS .....	20
9.0 STATEMENT OF LIMITATIONS.....	21
10.0 REFERENCES .....	22

### List of Figures

- Figure 1 Key Plan
- Figure 2 Topographic Map
- Drawing PE5478-1 Site Plan
- Drawing PE5478-2 Surrounding Land Use Plan

### List of Appendices

- Appendix 1 Aerial Photographs  
Site Photographs
- Appendix 2 MECP Freedom of Information Search Request  
MECP Water Well Records  
TSSA Correspondence  
City of Ottawa HLUI Request Form  
ERIS Database Report
- Appendix 3 Qualifications of Assessors

## EXECUTIVE SUMMARY

### Assessment

Paterson Group was retained by VIKA Land Development Group Inc. to conduct a Phase I Environmental Site Assessment (Phase I ESA) for the property addressed 138 Forward Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property.

Based on a review of available historical information, the Phase I Property was first developed sometime prior to 1912 for residential purposes and has remained as such ever since. No environmental concerns were identified with respect to the historical use of the Phase I Property.

The neighbouring lands in the vicinity of the Phase I Property have historically been developed for residential with occasional commercial purposes. No environmental concerns were identified with respect to the historical use of the neighbouring properties.

The Phase I Property is currently occupied with a two (2) storey residential dwelling. No environmental concerns were identified with respect to the current use of the Phase I Property.

The surrounding lands within the vicinity of the Phase I Property were generally observed to be used for residential with occasional commercial purposes. An existing automotive service garage was identified across the street from the Phase I Property at 140 Hinchey Avenue. However the actual garage building is 70 m to the northeast of the Phase I Property and is located in a cross-gradient orientation with respect to groundwater flow. Therefore, no environmental concerns were identified with respect to the current use of the surrounding lands.

Based on the findings of this assessment, it is our opinion that **a Phase II – Environmental Site Assessment will not be required.**

## **1.0 INTRODUCTION**

At the request of VIKA Land Development Group Inc., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) for 138 Forward Avenue, in the City of Ottawa, Ontario, henceforth referred to as the Phase I Property. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I Study Area as well as to identify any environmental concerns with the potential to have impacted the Phase I Property.

Paterson was engaged to conduct this Phase I ESA by Mr. Anthony Devonish of VIKA Land Development Group Inc. Mr. Devonish can be contacted via telephone at 613-878-5762.

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 153/04, as amended under the Environmental Protection Act, and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical, and regulatory information, as well as a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as local, provincial, and federal agencies, and was limited within the scope-of-work, time, and budget of the project herein.

## 2.0 PROPERTY INFORMATION

Address:	138 Forward Avenue, Ottawa, Ontario.
Legal Description:	Part of Lot 36, Concession A (Ottawa Front), Formerly the Township of Nepean, in the City of Ottawa, Ontario.
Location:	The Phase I Property is located on the west side of Forward Avenue, between Lyndale Avenue and Burnside Avenue, in the City of Ottawa, Ontario. Refer to Figure 1 Key Plan for the site location.
Latitude and Longitude:	45° 24' 29" N, 75° 43' 57" W.

### **Site Description:**

Configuration:	Rectangular.
Site Area:	460 m <sup>2</sup> (approximate).
Zoning:	R4UD Residential Fourth Density Zone
Current Use:	The Phase I Property is currently occupied with a two (2) storey residential dwelling.
Services:	The Phase I Property is located within a municipally serviced area.

### **3.0 SCOPE OF INVESTIGATION**

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

- Determine the historical activities on the Phase I Property 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 Phase I Property and Study Area by conducting site reconnaissance;
- Conduct interviews with persons knowledgeable of current and historic operations on the Phase I Property and, if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.



## **4.0 RECORDS REVIEW**

### **4.1 General**

#### **Phase I ESA Study Area Determination**

A radius of approximately 250 m was determined to be appropriate as a Phase I ESA Study Area for this assignment. Properties located outside of this 250 m radius are not considered to have had the potential to impact the Phase I Property, based on their significant distances.

#### **First Developed Use Determination**

Based on a review of available historical information, the Phase I Property was first developed with the existing residential dwelling sometime prior to 1912.

#### **Fire Insurance Plans**

Fire insurance plans (FIPs) from 1912 and 1956 were reviewed for the general area of the Phase I Property as part of this assessment.

##### **□ 1912 FIPs:**

The Phase I Property appears to be occupied with a residential dwelling. No environmental concerns were identified with respect to the use of the Phase I Property during this time period.

The surrounding lands are shown to be comprised mainly of residential properties, with a school to the southeast. No environmental concerns were identified with respect to the surrounding land use in the Phase I Study Area during this time period.

##### **□ 1956 FIPs:**

The Phase I Property appears to be occupied with a residential dwelling. No environmental concerns were identified with respect to the use of the Phase I Property during this time period.

The surrounding lands are shown to be comprised mainly of residential properties, with a school and a church to the southeast, and a magazine/news paper distributing and storage warehouse further to the south.

One automotive service garage was identified at 55 Carruthers Avenue (180 m to the east of the Phase I Property) and another automotive service garage was identified to the south of the Phase I Property at 193 Forward Avenue (240 m to the south of the Phase I Property). Based on the distances from the Phase I Property, neither of these garages are considered to have had the potential to have impacted the Phase I Property and therefore do not pose an environmental concern.

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

As part of this assessment, the City of Ottawa street directories for the general area of the Phase I Property were reviewed in approximate ten (10) year intervals, from 1910 to 2010. According to the city directories, the Phase I Property has always been used for residential purposes during the time period reviewed.

Surrounding lands have historically been used for residential with occasional commercial purposes during the time period reviewed. The city street directories identified several off-site potentially contaminating activities (PCAs) within the Phase I Study Area. A summary of these PCAs is provided below in Table 1.

<b>Table 1 City Street Directories Potentially Contaminating Activities Identified Within Phase I Study Area</b>			
<b>Address</b>	<b>Listed Activity (years listed)</b>	<b>Distance / Orientation from Phase I Property</b>	<b>APEC? (Y/N)</b>
154 Hinchey Avenue	Bastien Fuels Ltd. (1965 - 1985)	80 m Southeast	N
140 Hinchey Avenue	M r r 1 -1984) Crawford Motors Garage (1970) Rideau Services Ltd Garage (1965) Rideau Pump Service Ltd. (1960)	70 m Northeast	N
52-54 Carruthers Avenue	r r 1 Vachon & Sons Ice, Wood & Coal (1931-1950) Vachon Charles Blacksmith (1910)	160 m Northeast	N
55 Carruthers Avenue	r r (1960-2010) rd dr r 1 r 1 5	180 m Northeast	N
195 Hinchey Avenue	R d 1 -2010) r d 1	240 m Southeast	N
124 Parkdale Avenue	Parfield Oils Ltd. (1941)	240 m Northwest	N

The activity noted at 154 Hinchey Avenue is hypothesized to be the office mailing address for a former fuel supply company, not an actual fuel storage facility, based on our observations and research.

Based on their separation distance and respective down-gradient or cross-gradient orientation with respect to groundwater flow from the Phase I Property, these PCAs do not represent any areas of potential environmental concern (APEC).

## **4.2 Environmental Source Information**

### **National Pollutant Release Inventory**

A search of the National Pollutant Release Inventory (NPRI) was conducted as part of this assessment. No records of any pollutant releases were identified for the Phase I Property or for any properties situated within the Phase I Study Area.

### **PCB Waste Storage Site Inventory**

A search of the provincial PCB waste storage site inventory was conducted as part of this assessment. No former PCB waste storage sites were identified on the Phase I Property or within the Phase I Study Area.

### **MECP Waste Disposal Site Inventory**

The Ontario Ministry of Environment, Conservation and Parks document entitled, "*Waste Disposal Site Inventory in Ontario, 1991*" was reviewed as part of this assessment. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants, and coal tar distillation plants situated in the Province of Ontario. No former waste disposal sites were identified within the Phase I Study Area.

### **MECP Incident Reports**

A request was submitted to the MECP Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants, or inspections maintained by the MECP for the Phase I Property or neighbouring properties. A response from the MECP had not been received prior to the issuance of this report.

### **MECP Submissions**

A request was submitted to the MECP Freedom of Information office for information with respect to reports related to environmental conditions for the Phase I Property. A response from the MECP had not been received prior to the issuance of this report.

---

### **MECP Instruments**

A request was submitted to the MECP Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use, or any other similar MECP issued instruments for the Phase I Property. A response from the MECP had not been received prior to the issuance of this report.

### **MECP Waste Management Records**

A request was submitted to the MECP Freedom of Information office for information with respect to waste management records for the Phase I Property. A response from the MECP had not been received prior to the issuance of this report.

### **MECP Coal Gasification Plant Inventory**

The Ontario Ministry of Environment, Conservation and Parks document entitled, "*Municipal Coal Gasification Plant Site Inventory, 1991*" was reviewed as part of this assessment. This document provides a reference to the locations of former plants with respect to the Phase I Property. A review of this document did not identify any former coal gasification plants located on the Phase I Property or within the Phase I Study Area.

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

A search of the MECP Brownfields Environmental Site Registry was conducted as part of this assessment. No Records of Site Condition (RSCs) were identified in the database as having been filed for the Phase I Property.

One (1) record of site condition was filed for a property situated within the Phase I Study Area. The property addressed 55 Carruthers Avenue, located approximately 180 m to the east of the Phase I Property, had an RSC (# 223048) filed in March 2017 by Paterson Group Inc. According to the RSC, approximately 220 m<sup>3</sup> of contaminated soil was removed from this property as part of a remediation program carried out in conjunction with redevelopment activities. No contaminated groundwater was encountered on this property during the subsurface investigation. Based on its separation distance, as well as its successful remediation, this property is not considered to pose an environmental concern to the Phase I Property.

### **OMNRF Areas of Natural and Scientific Interest (ANSI)**

A search for areas of natural and scientific interest (ANSI) situated within the Phase I Study Area was conducted electronically via the Ontario Ministry of Natural Resources and Forestry (OMNRF) website. No ANSI sites were identified on the Phase I Property or within the Phase I Study Area.

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

The TSSA Fuels Safety Branch in Toronto was contacted electronically, as part of this assessment, to inquire about current and former underground fuel storage tanks, spills, and historical incidents for the Phase I Property and neighbouring properties. The response from the TSSA indicated that no records were identified pertaining to the Phase I Property or the neighbouring properties. A copy of the correspondence with the TSSA is included in Appendix 2.

### **City of Ottawa Old Landfill Sites**

The document prepared by Golder Associates entitled, "*Old Landfill Management Strategy, Phase I - Identification of Sites, City of Ottawa*", was reviewed as part of this assessment. No former landfill sites were identified on the Phase I Property or within the Phase I Study Area.

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

As part of this assessment, a requisition form was submitted to the City of Ottawa requesting any environmental records pertaining to the Phase I Property as well as any properties situated within the Phase I Study Area.

A response from the City had not been received prior to the issuance of this report. A copy of the response will be forwarded to the client should it contain any pertinent information. A copy of the submission request has been included in Appendix 2.

### **City of Ottawa Former Industrial Sites**

The document prepared by Intera Technologies Limited entitled, "*Mapping and Assessment of Former Industrial Sites, City of Ottawa*", was reviewed as part of this assessment. No former industrial sites were identified on the Phase I Property or within the Phase I Study Area.

---

## **ERIS Database Report**

A database report, prepared by ERIS (Environmental Risk Information Services) Ltd., dated March 31, 2021, was acquired and reviewed as part of this assessment. The complete ERIS report has been included in Appendix 2.

### *On-Site Records:*

The ERIS report did not identify any records pertaining to the Phase I Property.

### *Off-Site Records:*

The ERIS report identified one-hundred and forty-one (141) records pertaining to properties located within a 250 m radius of the Phase I Property.

Pasture government complex, located to the west of the Phase I Property, contains several waste generator summary records for multiple types of different waste classes. Based on its separation distance and cross-gradient orientation with respect to anticipated groundwater flow, the waste products generated on this property are not considered to pose an environmental concern to the Phase I Property. The remaining off-site records identified in the ERIS report are listed for properties which are situated at a significant distance away, or are situated in a down-gradient or cross-gradient orientation, with respect to anticipated groundwater flow, and thus are not considered to pose an environmental concern to the Phase I Property.

## **Previous Engineering Reports**

Paterson has previously completed various Phase I ESAs for properties in the Phase I Study Area. No environmental concerns were identified with respect 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, commencing with the earliest available photograph. Based on the review, the following observations have been made:

- 1928 *(City of Ottawa Website)* The Phase I Property appears to be occupied with a residential dwelling at this time. The lands to the north, east, south, and west appear to be used for residential purposes. The lands to the west of the Phase I Property, opposite Parkdale Avenue, appear to be vacant. Forward Avenue can be seen in its current configuration.
  
- 1958 *(Poor Scale)* No significant changes are apparent with respect to the Phase I Property. A multi-storey residential building is seen to the west of the Phase I Property, opposite Parkdale Avenue.
  
- 1965 *(City of Ottawa Website)* No significant changes are apparent with respect to the Phase I Property. A neighbouring property to the north appears to have been redeveloped with a multi-storey residential apartment building.
  
- 1976 *(City of Ottawa Website)* No significant changes are apparent with respect to the Phase I Property. A multi-storey office building can be seen to the west of the Phase I Property, opposite Parkdale Avenue.
  
- 1991 *(City of Ottawa Website)* The residential dwelling on the Phase I Property appears to be in its current configuration with an additional garage on the western portion of the property. No significant changes are apparent with respect to the neighbouring properties.
  
- 2002 *(City of Ottawa Website)* No significant changes are apparent with respect to the Phase I Property. A neighbouring property to the south appears to have been redeveloped with a multi-storey residential apartment building.
  
- 2011 *(City of Ottawa Website)* No significant changes are apparent with respect to the Phase I Property or the neighbouring properties.
  
- 2019 *(City of Ottawa Website)* The garage on the western portion of the property appears to have been demolished. No significant changes are apparent with respect to the neighbouring properties. The Phase I Property appears as it does today.

Copies of selected aerial photographs reviewed are included in Appendix 1.



## **Geological Maps**

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was reviewed as part of this assessment. Based on the available information, the bedrock in the area of the Phase I Property consists of limestone of the Bobcaygeon Formation, whereas the surficial geology consists of glacial till plains with an overburden thickness ranging from approximately 1 m to 2 m.

## **Topographic Maps**

A topographic map was reviewed from the Natural Resources Canada The Atlas of Canada website as part of this assessment. The topographic map indicates that the general elevation of the Phase I Property is approximately 60 m above sea level. The regional topography in the general area of the Phase I Property slopes down towards the northwest, in the direction of the Ottawa River. An illustration of the referenced topographic map is presented on Figure 2 Topographic Map, appended to this report.

## **Physiographic Maps**

A physiographic map was reviewed from the Natural Resources Canada The Atlas of Canada website, as a part of this assessment. According to the publication and mapping information, the Phase I Property is situated within the St. Lawrence Lowlands. According to the description provided: *“The lowlands are plain-like areas that were 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 specifically located within the Central St. Lawrence Lowland area, which is rarely more than 150 m above sea level.

## **Water Bodies**

No water bodies are present on the Phase I Property. The nearest named water body with respect to the Phase I Property is the Ottawa River, located approximately 350 m to the north.

## **MECP Water Well Records**

A search of the MECPs website for all drilled well records within a 250 m radius of the Phase I Property was conducted as part of this assessment. The search identified seven (7) well records within the Phase I Study Area. These records pertain to wells installed between 2012 and 2019 and used for groundwater observation purposes.

Based on the availability of municipal services, no drinking water wells are expected to be in use within the Phase I Study Area.

According to the well records, the overburden stratigraphy in the area of the Phase I Property generally consists of brown silty sand and gravel underlain by shallow limestone bedrock, typically encountered at an average depth of 1.0 m below ground surface. Copies of the aforementioned well records have been included in Appendix 2.

## **5.0 PERSONAL INTERVIEWS**

Ms. Carmen Sauve, the superintendent for 138 Forward Avenue, was available at the time of the site inspection to respond to questioning about the history of the Phase I Property.

Ms. Sauve has only been affiliated with the Phase I Property for five years and had limited knowledge regarding the history of the property. Ms. Sauve stated that the building has always been used for residential purposes and was unaware of any fuel tanks historically used as a former heating source for the subject building or any environmental concerns associated with the property.

## **6.0 SITE RECONNAISSANCE**

### **6.1 General Requirements**

A site inspection was conducted for the Phase I Property on November 5, 2021, between 10:00 AM and 11:00 AM. Weather conditions were clear, with a temperature of approximately 5°C. Mr. Nick Sullivan, from the Environmental Department of Paterson Group, conducted the inspection. In addition to the Phase I Property, the uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site inspection.

### **6.2 Site Inspection Observations**

#### **Site Description**

The Phase I Property is currently occupied with a two (2) storey residential dwelling, located within the eastern portion of the property. The remainder of the Phase I Property consists of a small asphaltic concrete parking area in the eastern portion of the property as well as a gravel parking area in the western portion of the property.

The site topography appears to slope gently to the west towards Parkdale Avenue, whereas the regional topography appears to slope down to the northwest, in the general direction of the Ottawa River. The Phase I Property is considered to be at grade with respect to the adjacent streets and the neighbouring properties.

Water drainage on the Phase I Property occurs primarily via infiltration within the gravel parking area, as well as via sheet flow towards catch basins located along Forward Avenue and Parkdale Avenue. No ponded water, stressed vegetation, surficial staining, or any other indications of potential subsurface contamination were observed on the Phase I Property at time of the site inspection.

A depiction of the Phase I Property is illustrated on Drawing PE5478-1 Site Plan, in the Figures section of this report.

### **Buildings and Structures**

The Phase I Property is currently occupied with a two (2) storey residential dwelling, with a half basement level. Built sometime prior to 1912, the subject building is constructed with a stone foundation and is finished on the exterior with vinyl siding, as well as a sloped-shingled roof. The subject building is currently heated via a natural gas-fired furnace, located in a utility room on the ground floor.

### **Potential Environmental Concerns**

#### **Hazardous Materials and Unidentified Substances**

No hazardous materials, unidentified substances, spills, surficial staining, abnormal odours, stressed vegetation, or any other indications of potential subsurface contamination were observed on the exterior of the Phase I Property at the time of the site inspection.

#### **Fuels and Chemical Storage**

No chemical storage areas, above ground 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.

#### **Polychlorinated Biphenyls (PCBs) and Transformer Oil**

No potential sources of PCBs were identified on the exterior of the Phase I Property at the time of the site inspection.

**Waste Management**

Solid, non-hazardous domestic waste and recyclable products are stored in plastic bins on the exterior of the Phase I Property and are collected by the municipality on a regular basis. No environmental concerns were identified with respect to waste management practices on the Phase I Property.

**Interior Assessment**

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

- The floors consist of linoleum, carpet, and laminate flooring;
- The walls consist of drywall;
- The ceilings consist of drywall;
- Lighting throughout the building is provided by LED, incandescent, and fluorescent light fixtures.

**Potentially Hazardous Building Products**

**Asbestos-Containing Materials (ACMs)**

Based on the age of the subject building, asbestos containing building materials may be present within the structure. Potential ACMs observed at the time of the site inspection include: linoleum flooring and drywall joint compound. These building materials were observed to be in good condition at the time of the site inspection and do not represent an immediate concern.

**Lead-Based Paints**

Based on the age of the subject building, lead-based paints may be present on any original or older painted surfaces. Painted surfaces were generally observed to be in good condition at the time of the site inspection and do not represent an immediate concern.

**Polychlorinated Biphenyls (PCBs) and Transformer Oil**

No potential sources of PCBs or transformer oils were identified inside the subject building at the time of the site inspection.

**Urea Formaldehyde Foam Insulation (UFFI)**

UFFI was not observed at the time of the site inspection. Fibreglass insulation was observed within wall cavities.

**Other Potential Environmental Concerns**

**Interior Fuel and Chemical Storage**

No vent and fill pipes, aboveground fuel storage tanks, or signs of underground fuel storage tanks were observed within the subject building at the time of the site inspection.

Chemical products identified in the subject building were observed to be limited to domestically available cleaning products, stored properly in their original containers.

**Ozone Depleting Substances (ODSs)**

Potential sources of ODSs observed on-site include an exterior air conditioning unit, refrigerators and fire extinguishers. These appliances appeared to be in good condition at the time of the site inspection and should be regularly serviced by a licensed contractor.

**Wastewater Discharges**

No sump pits or floor drains were observed inside the subject building at the time of the site inspection.

Wastewater from the subject building (wash water and sewage) is discharged into the City of Ottawa sanitary sewer system. Roof drainage is discharged into the gravel parking area on the Phase I Property or to catch basins located on Forward Avenue and Parkdale Avenue, which drain into the City of Ottawa storm water sewer system via surface runoff. No concerns were identified with respect to wastewater discharge on the Phase I Property.

**Neighbouring Properties**

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

- 
- North:* Residential dwellings and an apartment building, followed by Burnside Avenue;
- South:* Residential dwellings and an apartment building;
- East:* Forward Avenue, followed by residential dwellings and an automotive service garage;
- West:* Residential dwellings, followed by Parkdale Avenue.

No environmental concerns were identified with respect to the current uses of the adjacent properties. Based on the inferred cross-gradient orientation with respect to anticipated groundwater flow, the automotive service garage does not present an environmental concern.

The neighbouring land use within the Phase I Study Area is shown on Drawing PE5478-2 – Surrounding Land Use Plan, in the Figures section of this report.

## **7.0 REVIEW AND EVALUATION OF INFORMATION**

### **7.1 Land Use History**

Based on a review of available historical information, the Phase I Property was first developed prior to 1912 for residential purposes and has been used for residential purposes ever since.

#### **Potentially Contaminating Activities (PCAs)**

Based on the findings of this Phase I ESA, no potentially contaminating activities (PCAs) were identified on the Phase I Property.

Off-site PCAs were identified within the Phase I Study Area but were deemed not to be of any environmental concern to the Phase I Property based on their separation distances as well as their inferred down-gradient or cross-gradient orientation with respect to anticipated groundwater flow.

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

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

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

No contaminants of concern were identified on the Phase I Property.

## **7.2 Conceptual Site Model**

### **Geological and Hydrogeological Setting**

Based on the available information, the bedrock in the area of the Phase I Property consists of limestone of the Bobcaygeon Formation, whereas the surficial geology consists of glacial till plains with an overburden thickness ranging from approximately 1 m to 2 m.

Groundwater is anticipated to be encountered within the bedrock and flow in a northern direction towards the Ottawa River.

### **Water Bodies and Areas of Natural and Scientific Interest**

No water bodies or areas of natural and scientific interest were identified within the Phase I Study Area. The nearest named water body with respect to the Phase I Property is the Ottawa River, located approximately 350 m to the north.

### **Existing Buildings and Structures**

The Phase I Property is currently occupied with a two (2) storey residential dwelling.

### **Current and Future Property Use**

The Phase I Property is currently being used for residential purposes. It is our understanding that the Phase I Property is to be redeveloped with a three (3) storey apartment building.

### **Drinking Water Wells**

Based on the availability of municipal services, no drinking water wells are expected to be present within the Phase I Study Area.

### **Neighbouring Land Use**

The surrounding lands within the Phase I Study Area consist predominantly of residential properties in addition to some commercial properties. Current land use is shown on Drawing PE5478-2 Surrounding Land Use Plan, in the Figures section of this report.

### **Potentially Contaminating Activities and Areas of Potential Environmental Concern**

As per Section 7.1 of this report, no potentially contaminating activities (PCAs) or areas of potential environmental concern (APECs), were identified on the Phase I Property.

Off-site PCAs were identified within the Phase I Study Area but were deemed not to be of any environmental concern to the Phase I Property based on their separation distances as well as their inferred down-gradient or cross-gradient orientation with respect to anticipated groundwater flow.

### **Contaminants of Potential Concern**

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 or APECs associated with the Phase I Property.

The absence of any PCAs was confirmed by a variety of independent sources, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.



## 8.0 CONCLUSIONS

### Assessment

Paterson Group was retained by VIKA Land Development Group Inc. to conduct a Phase I Environmental Site Assessment (Phase I ESA) for the property addressed 138 Forward Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property.

Based on a review of available historical information, the Phase I Property was first developed sometime prior to 1912 for residential purposes and has remained as such ever since. No environmental concerns were identified with respect to the historical use of the Phase I Property.

The neighbouring lands in the vicinity of the Phase I Property have historically been developed for residential with occasional commercial purposes. No environmental concerns were identified with respect to the historical use of the neighbouring properties.

The Phase I Property is currently occupied with a two (2) storey residential dwelling. No environmental concerns were identified with respect to the current use of the Phase I Property.

The surrounding lands within the vicinity of the Phase I Property were generally observed to be used for residential with occasional commercial purposes. An existing automotive service garage was identified across the street from the Phase I Property at 140 Hinchey Avenue. However the actual garage building is 70 m to the northeast of the Phase I Property and is located in a cross-gradient orientation with respect to groundwater flow. Therefore, no environmental concerns were identified with respect to the current use of the surrounding lands.

Based on the findings of this assessment, it is our opinion that **a Phase II – Environmental Site Assessment will not be required.**

## 9.0 STATEMENT OF LIMITATIONS

This Phase I Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04, as amended, and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical, and regulatory information as well as 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 Phase I Property 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 VIKA Land Development Group Inc. Permission and notification from VIKA Land Development Group Inc. and Paterson Group will be required prior to the release of this report to any other party.

### **Paterson Group Inc.**



Nick Sullivan, B.Sc.



Mark S. D'Arcy, P.Eng., QP<sub>ESA</sub>



### **Report Distribution:**

- VIKA Land Development Group Inc.
- Paterson Group Inc.

## 10.0 REFERENCES

### Federal Records

- Natural Resources Canada: Air Photo Library.
- Natural Resources Canada: The Atlas of Canada.
- Geological Survey of Canada: Surficial and Subsurface Mapping.
- Environment Canada: National Pollutant Release Inventory.
- National Archives of Canada.

### Provincial Records

- MECP: Freedom of Information and Privacy Office.
- MECP: Municipal Coal Gasification Plant Site Inventory, 1991.
- MECP: Waste Disposal Site Inventory, 1991.
- MECP: Brownfields Environmental Site Registry.
- MECP: Water Well Inventory.
- Provincial PCB Waste Storage Site Inventory.
- Office of Technical Standards and Safety Authority, Fuels Safety Branch.
- Ministry of Natural Resources and Forestry Areas of Natural Significance.
- Chapman, L.J., and Putnam, D. 1 4 r 2 r

### Municipal Records

- City of Ottawa: eMap website.
- City of Ottawa: Historical Land Use Inventory Database
- City of d d d d M r
- l d r r d d r 2 4

### Local Information Sources

- Personal Interviews.

### Public Information Sources

- ERIS Database Report.
- Google Earth.
- Google Maps/Street View.

# **FIGURES**

**FIGURE 1 – KEY PLAN**

**FIGURE 2 – TOPOGRAPHIC MAP**

**DRAWING PE5478-1 – SITE PLAN**

**DRAWING PE5478-2 – SURROUNDING LAND USE PLAN**

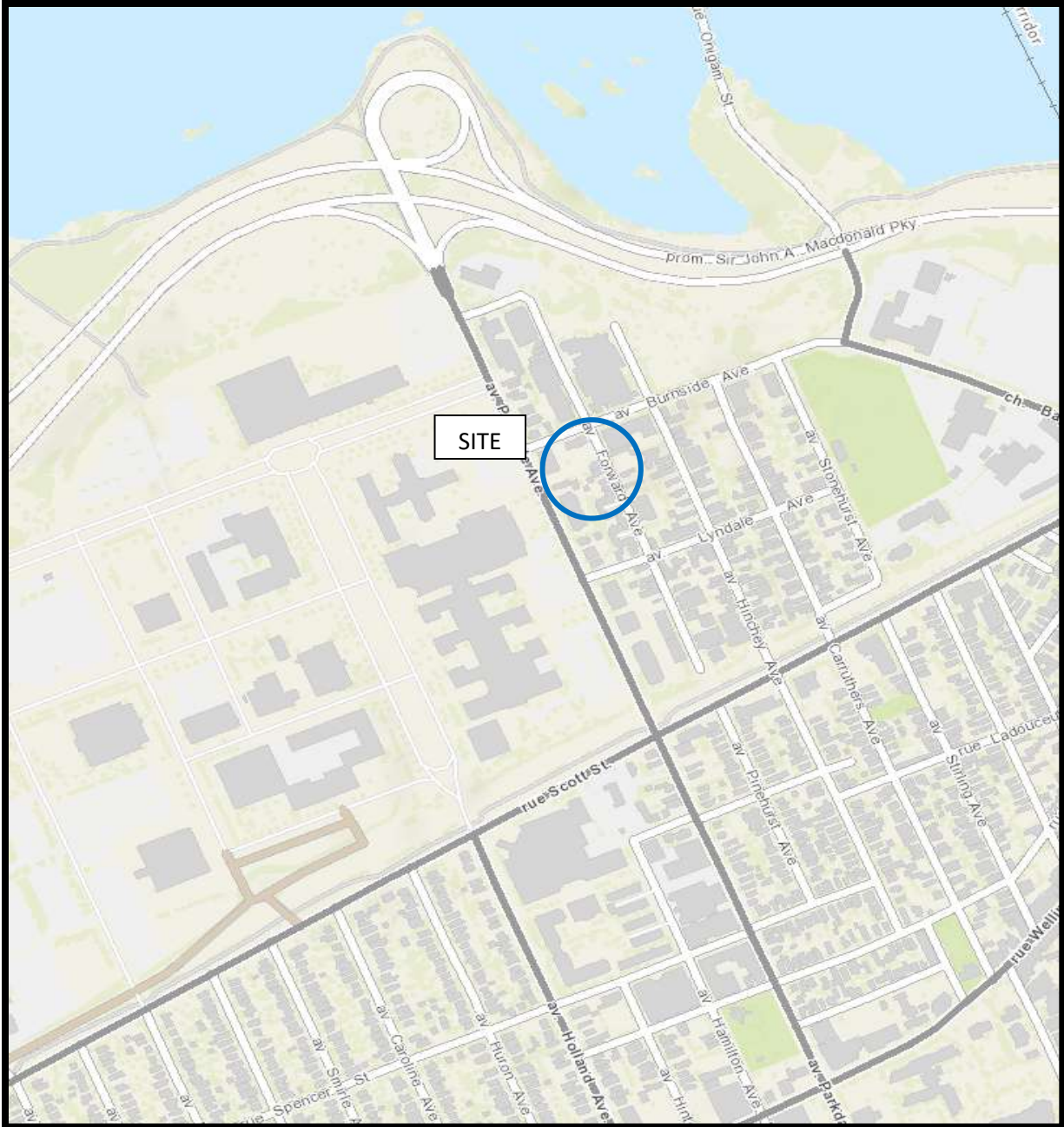


FIGURE 1  
KEY PLAN

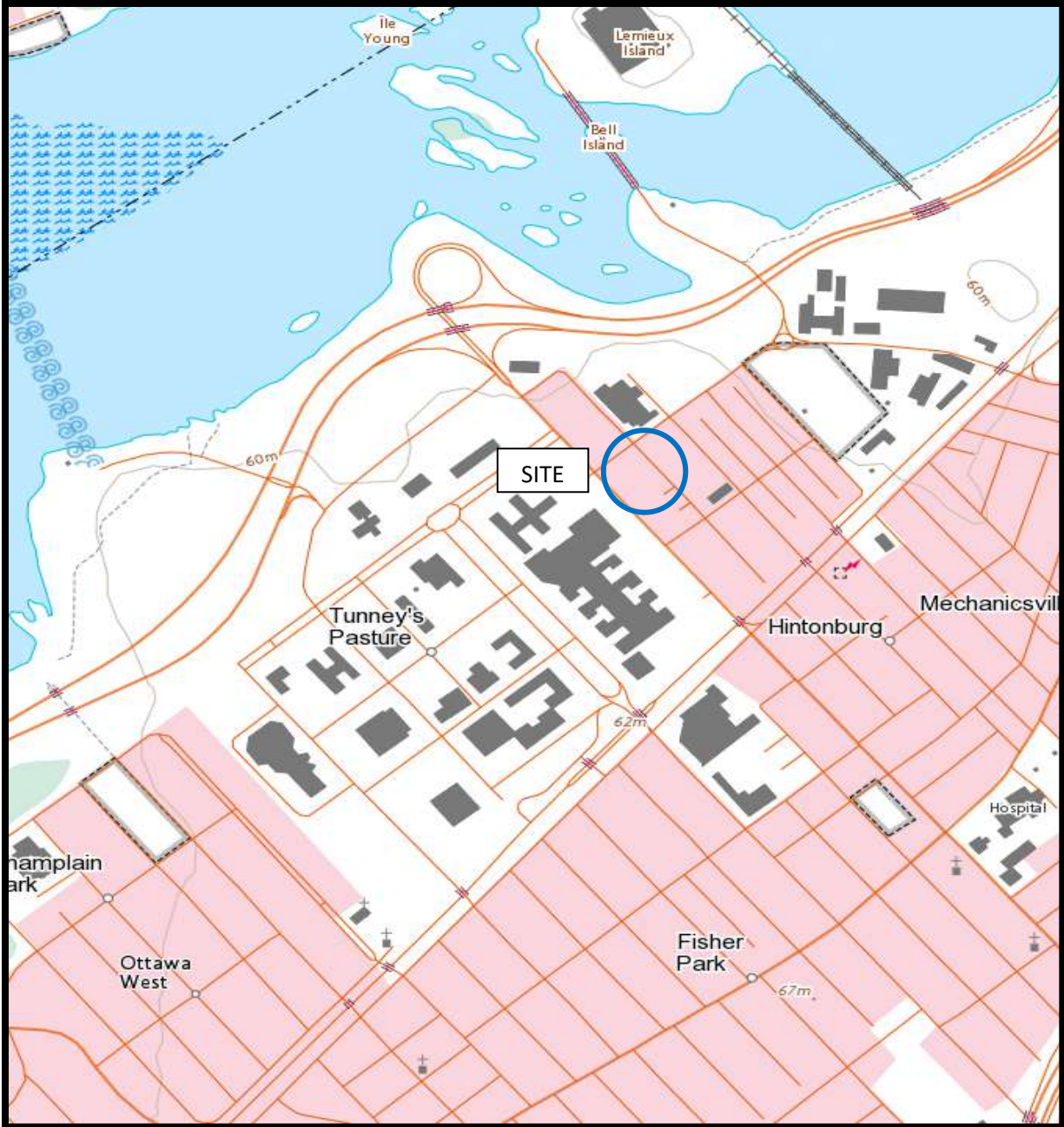
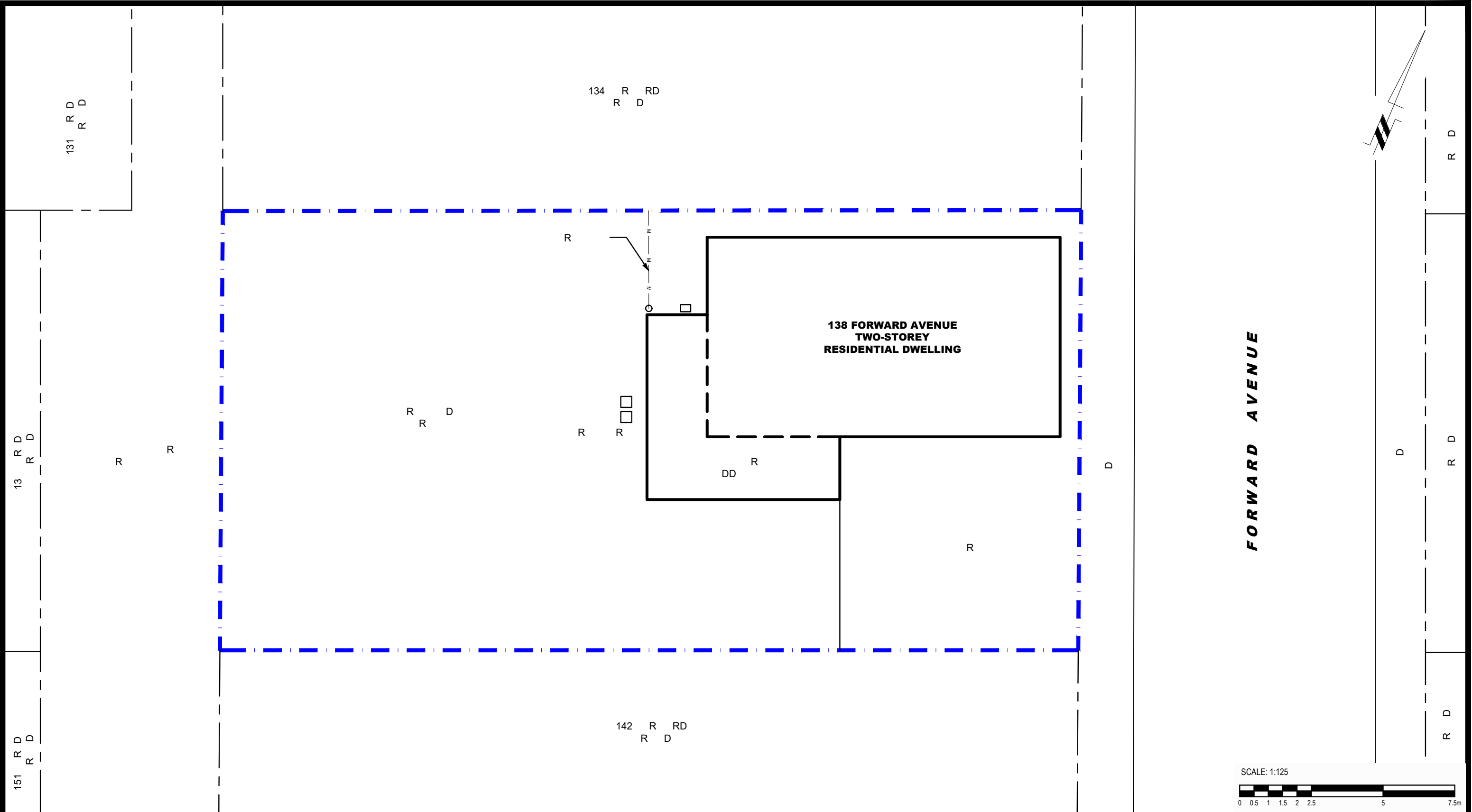


FIGURE 2  
TOPOGRAPHIC MAP



**patersongroup**  
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL

VIKA LAND & DEVELOPMENT GROUP  
PHASE I - ENVIRONMENTAL SITE ASSESSMENT  
138 FORWARD AVENUE  
OTTAWA, ONTARIO  
Title: **SITE PLAN**

Scale:	1:125	Date:	11/2021
Drawn by:	JM	Report No.:	PE5478-1
Checked by:	NS	Dwg. No.:	<b>PE5478-1</b>
Approved by:	MSD	Revision No.:	





# **APPENDIX 1**

**AERIAL PHOTOGRAPHS**

**SITE PHOTOGRAPHS**



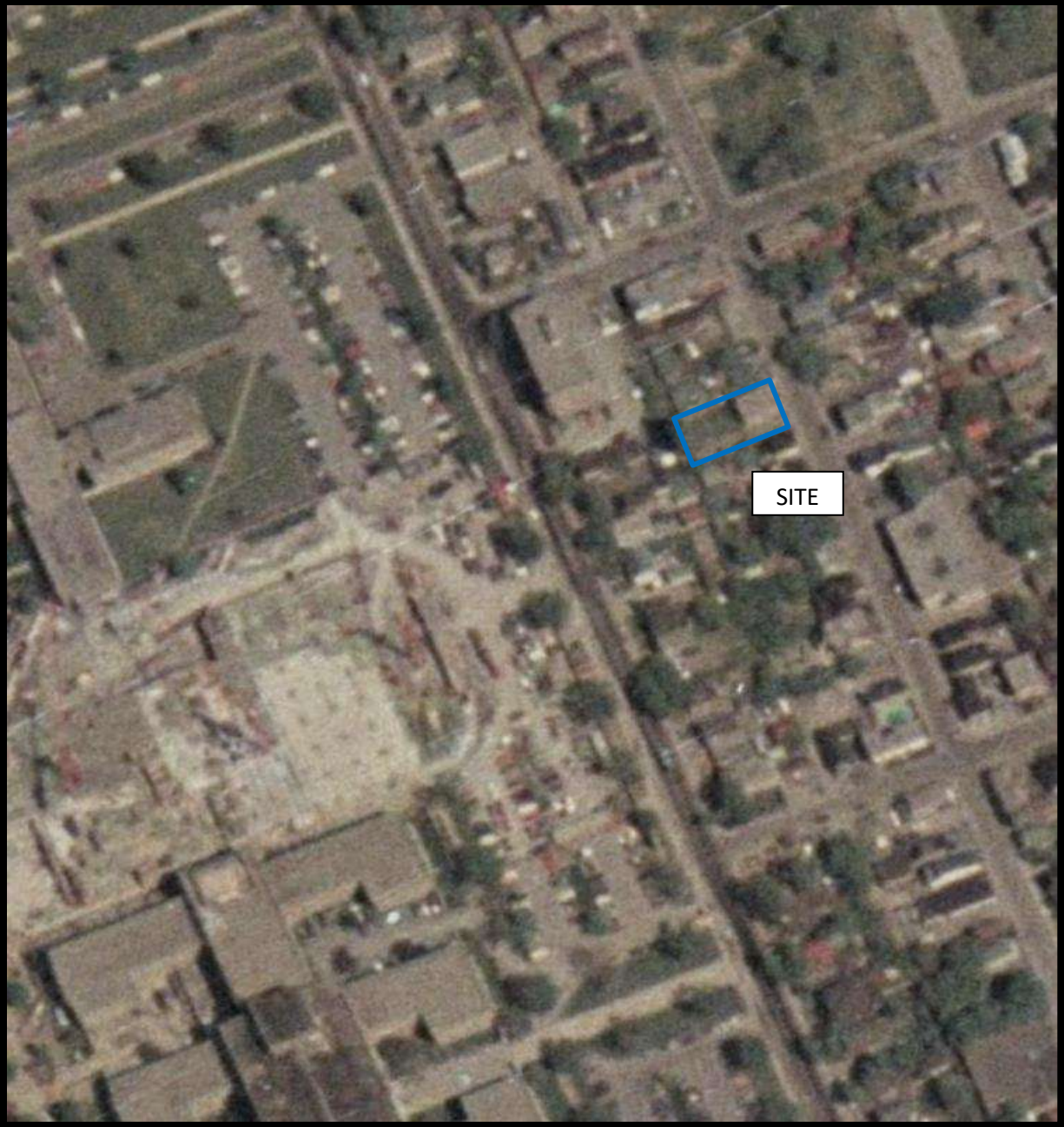
AERIAL PHOTOGRAPH  
1928



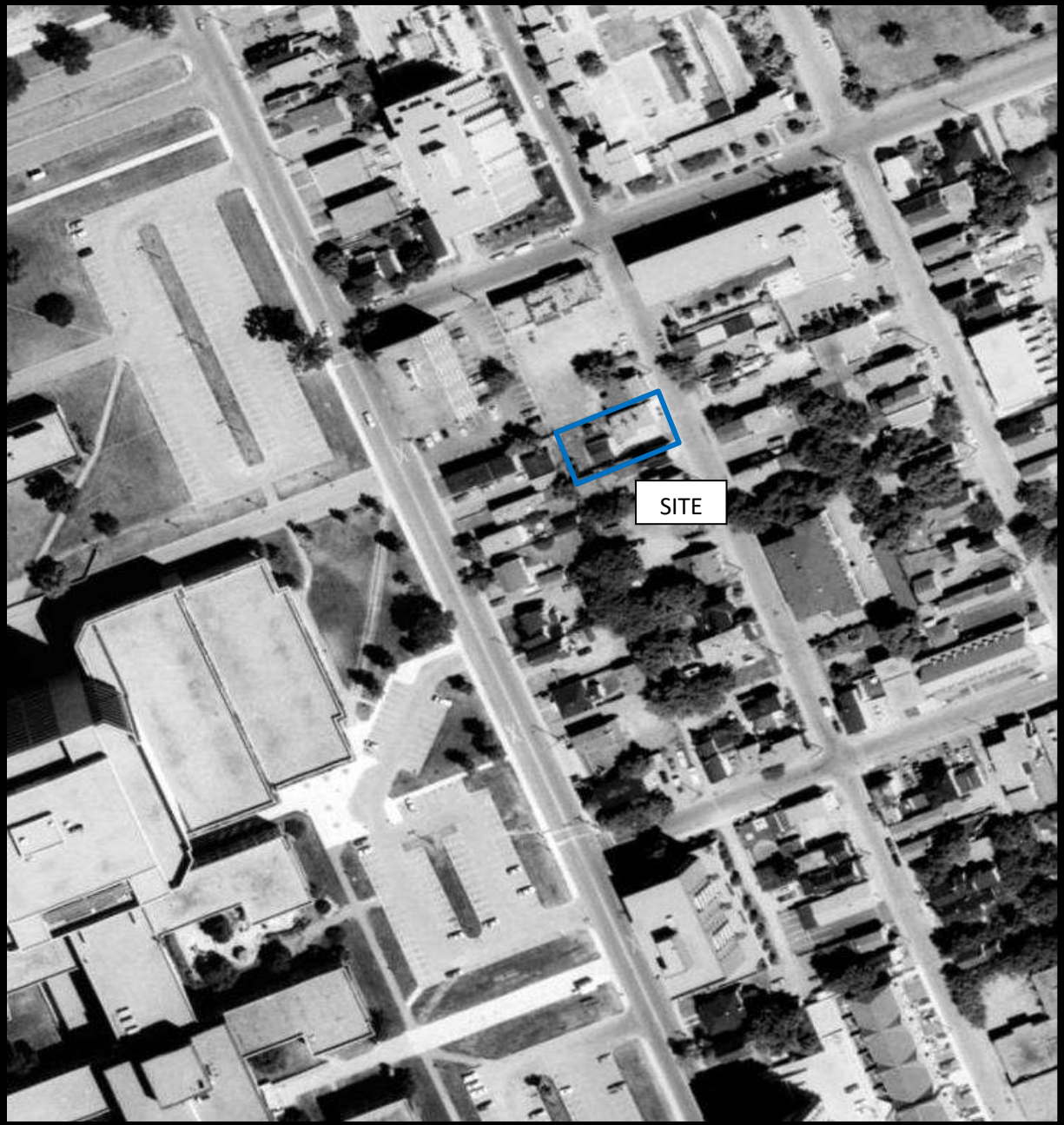
AERIAL PHOTOGRAPH  
1958



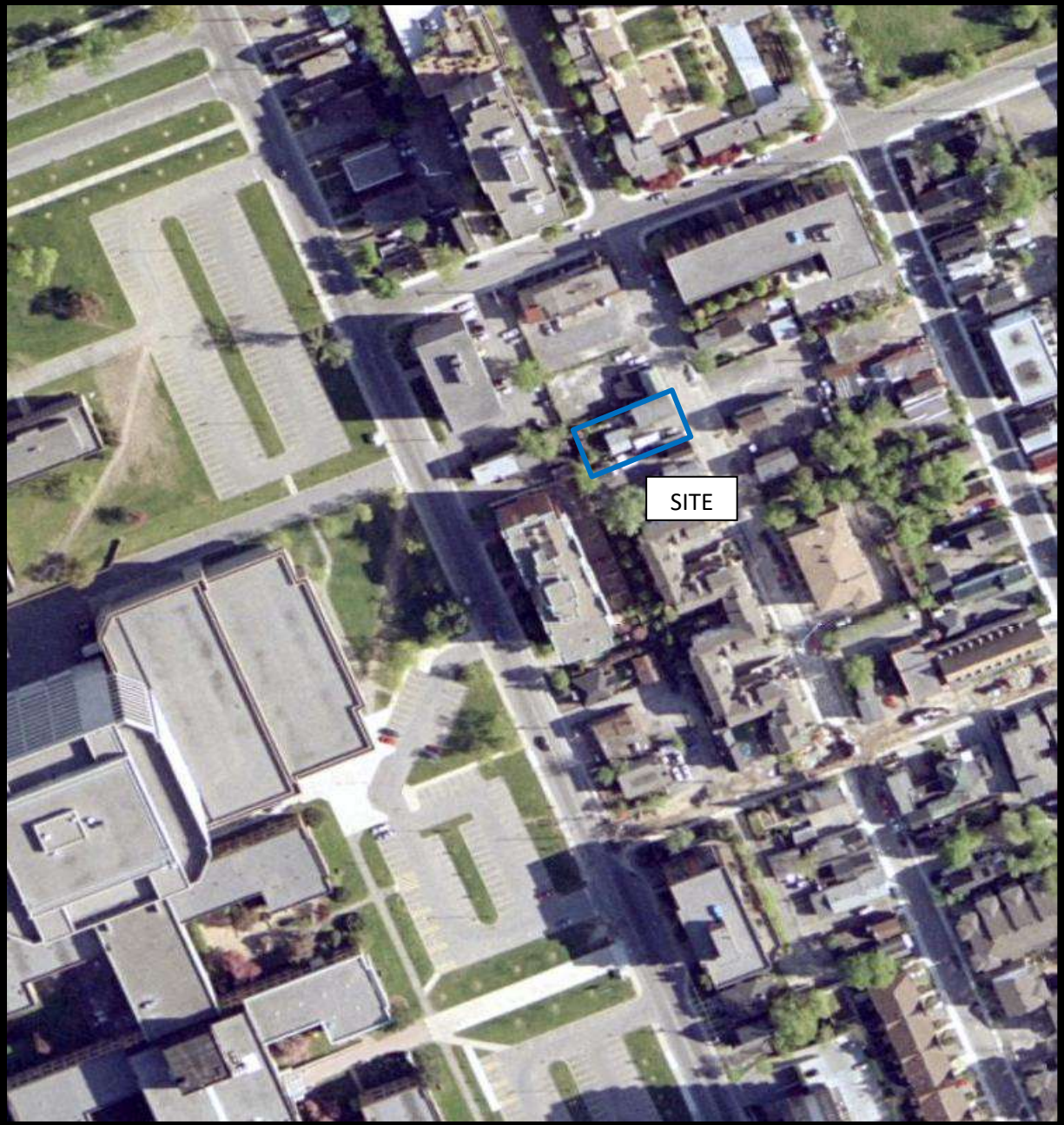
AERIAL PHOTOGRAPH  
1965



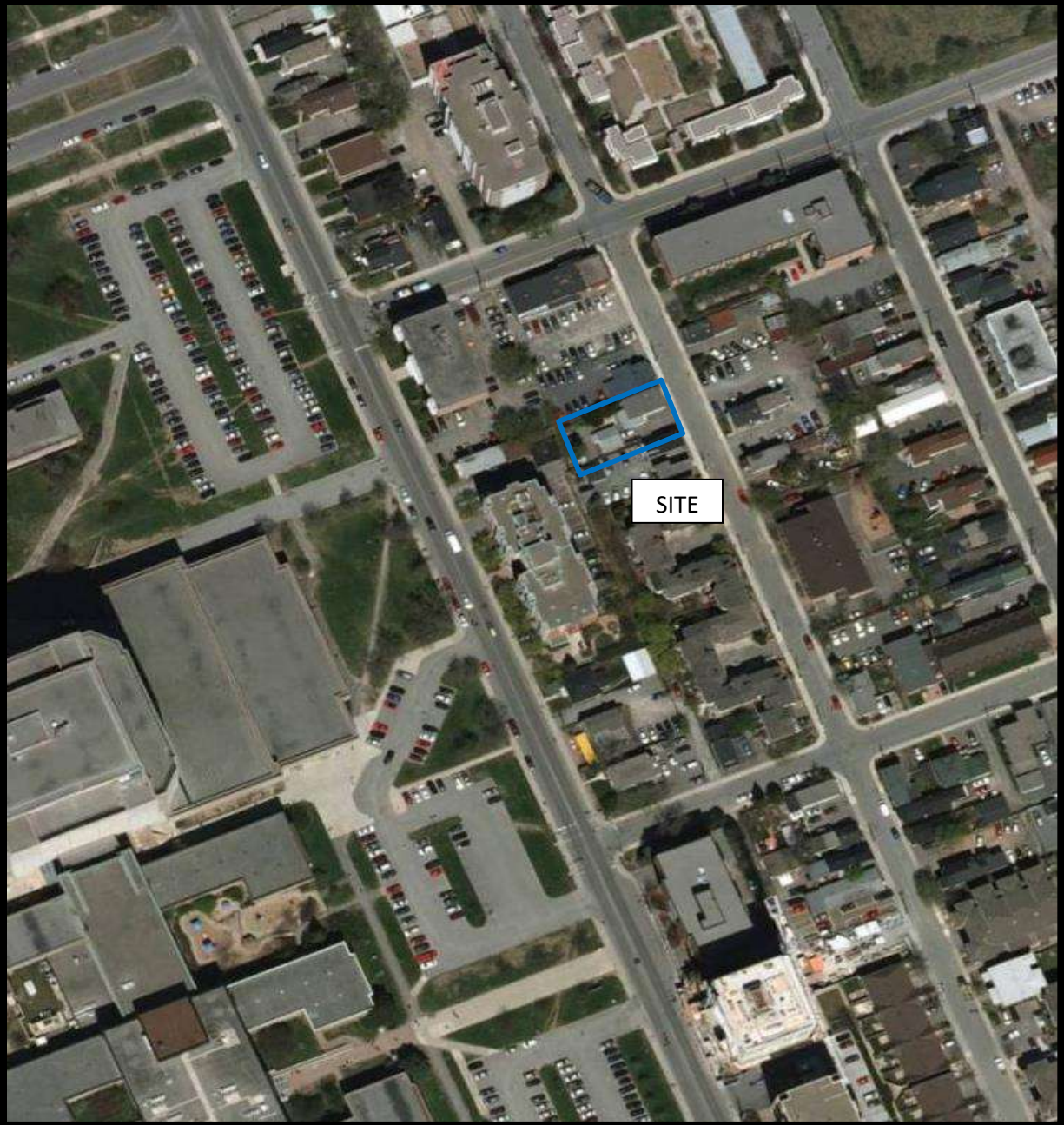
AERIAL PHOTOGRAPH  
1976



AERIAL PHOTOGRAPH  
1991



AERIAL PHOTOGRAPH  
2002



AERIAL PHOTOGRAPH  
2011





AERIAL PHOTOGRAPH  
2019

## Site Photographs

PE5478

138 Forward Avenue Ottawa, ON

November 5, 2021



Photograph 1: View of the eastern side of the residential dwelling, facing west from Forward Avenue.



Photograph 2: View of the southern side of the residential dwelling, facing north from the asphalt parking area.

## Site Photographs

PE5478

138 Forward Avenue Ottawa, ON

November 5, 2021



Photograph 3: View of southwestern side of the residential dwelling, facing northeast from the gravel parking area.



Photograph 4: View of western side of the residential dwelling, facing east from the gravel parking area.

# **APPENDIX 2**

**MECP FREEDOM OF INFORMATION SEARCH REQUEST**

**MECP WATER WELL RECORDS**

**TSSA CORRESPONDENCE**

**CITY OF OTTAWA HLUI SEARCH REQUEST**

**ERIS DATABASE REPORT**

## Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on completion and use of this form. Our fax no. is (416) 314-4285.

Requester Data			For Ministry Use Only	
Name, Company Name, Mailing Address and Email Address of Requester Nick Sullivan Paterson Group Inc. 154 Colonnade Road Ottawa, ON K2E 7J5 Email address: nsullivan@patersongroup.ca			FOI Request No.	Date Request Received
			Fee Paid <input type="checkbox"/> ACCT <input type="checkbox"/> CHQ <input type="checkbox"/> VISA/MC <input type="checkbox"/> CASH	
Telephone/Fax Nos. Tel.     613-226-7381 Fax     613-226-6344	Your Project/Reference No. PE5478	Signature/Print /Name of Requester Nick Sullivan	<input type="checkbox"/> CNR <input type="checkbox"/> ER <input type="checkbox"/> NOR <input type="checkbox"/> SWR <input type="checkbox"/> WCR <input type="checkbox"/> SAC <input type="checkbox"/> IEB <input type="checkbox"/> EAA <input type="checkbox"/> EMR <input type="checkbox"/> SWA	
Request Parameters				
Municipal Address / Lot, Concession, Geographic Township ( <b>Municipal address essential for cities, towns or regions</b> ) 138 Forward Avenue; Part of Lot 36, Concession A (Ottawa Front), Formerly the Township of Nepean, in the City of Ottawa, Ontario				
Present Property Owner(s) and Date(s) of Ownership VIKA Land Development Group Inc.				
Previous Property Owner(s) and Date(s) of Ownership				
Present/Previous Tenant(s), (if applicable)				
Search Parameters			Specify Year(s) Requested	
<i>Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.</i>				
Environmental concerns (General correspondence, occurrence reports, abatement)			all	
Orders			all	
Spills			all	
Investigations/prosecutions ➤ Owner <b>AND</b> tenant information must be provided			all	
Waste Generator number/classes			all	
Certificates of Approval ➤ Proponent information must be provided				
1985 and prior records are searched manually. <b>Search fees in excess of \$300.00</b> could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). <b>If supporting documents are also required, mark SD box</b> and specify type e.g. maps, plans, reports, etc.				
			<b>SD</b>	<b>Specify Year(s) Requested</b>
air - emissions				1986-present
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)				1986-present
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations				1986-present
waste water - industrial discharges				1986-present
waste sites - disposal, landfill sites, transfer stations, processing sites, incinerator sites				1986-present
waste systems - PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste				1986-present
pesticides - licenses				1986-present

A \$5.00 non-refundable application fee, payable to the Minister of Finance, is mandatory. The cost of locating on-site and/or preparing any record is \$30.00/hour and 20 cents/page for photocopying and you will be contacted for approval for fees in excess of \$30.00.



Ministry of the Environment

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

5-1389 + Well Record  
Regulation 903 Ontario Water Resources Act

Measurements recorded in:  Metric  Imperial

A145384

Tag#: A145384

Page \_\_\_\_\_ of \_\_\_\_\_

Address of Well Location (Street Number/Name): 57 Carruthers Ave.  
 Township: \_\_\_\_\_ Lot: \_\_\_\_\_ Concession: \_\_\_\_\_  
 County/District/Municipality: \_\_\_\_\_ City/Town/Village: Ottawa Province: Ontario Postal Code: \_\_\_\_\_  
 UTM Coordinates: Zone 18 Easting 442809 Northing 5028596 Municipal Plan and Sublot Number: \_\_\_\_\_ Other: \_\_\_\_\_

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
<u>BRN</u>	<u>gravel</u>	<u>top soil</u>	<u>soft</u>	<u>0</u>	<u>0.61</u>
<u>GRY</u>	<u>limestone</u>		<u>fractured</u>	<u>0.61</u>	<u>4.88</u>

**Annular Space**

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
<u>0</u> to <u>1.31</u>	<u>concrete flush mount</u>	
<u>1.31</u> to <u>1.52</u>	<u>bentonite</u>	
<u>1.52</u> to <u>4.88</u>	<u>filter sand</u>	

**Results of Well Yield Testing**

After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:  Pump intake set at (m/ft)  Pumping rate (l/min / GPM)  Duration of pumping _____ hrs + _____ min Final water level end of pumping (m/ft)  If flowing give rate (l/min / GPM)  Recommended pump depth (m/ft)  Recommended pump rate (l/min / GPM)  Well production (l/min / GPM)  Disinfected? <input type="checkbox"/> Yes <input type="checkbox"/> No	Static Level			
	1		1	
	2		2	
	3		3	
	4		4	
	5		5	
	10		10	
	15		15	
	20		20	
	25		25	
	30		30	
	40		40	
	50		50	
	60		60	

**Method of Construction**

Cable Tool  Diamond  Public  Commercial  Not used  
 Rotary (Conventional)  Jetting  Domestic  Municipal  Dewatering  
 Rotary (Reverse)  Driving  Livestock  Test Hole  Monitoring  
 Boring  Digging  Irrigation  Cooling & Air Conditioning  
 Air percussion  Industrial  Other, specify \_\_\_\_\_  
 Other, specify Direct Push

**Construction Record - Casing**

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		Status of Well
			From	To	
<u>57.0</u>	<u>PVC</u>	<u>3.90</u>	<u>0</u>	<u>1.83</u>	<input type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify _____ <input type="checkbox"/> Other, specify _____

**Construction Record - Screen**

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		Status of Well
			From	To	
<u>6.03</u>	<u>PVC</u>	<u>10</u>	<u>1.83</u>	<u>4.88</u>	<input type="checkbox"/> Other, specify _____

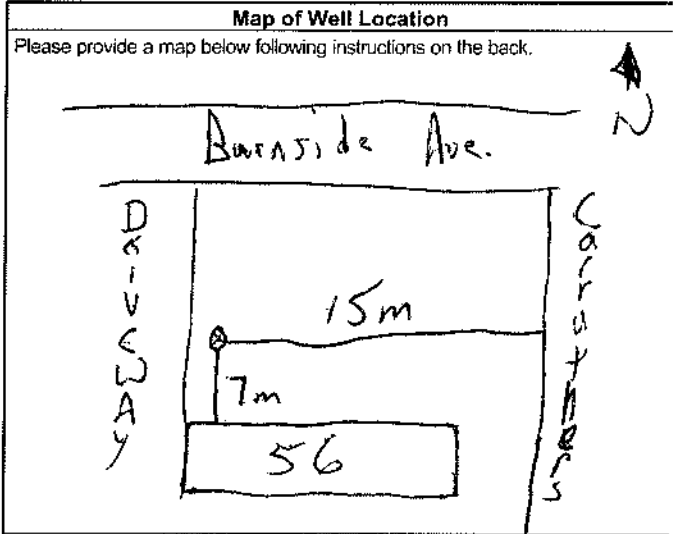
**Water Details**

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	Hole Diameter	
		Depth (m/ft)	Diameter (cm/in)
<u>0</u>	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	<u>0</u> to <u>1.22</u>	<u>11.43</u>
<u>1.22</u>	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	<u>1.22</u> to <u>4.88</u>	<u>7.62</u>

**Well Contractor and Well Technician Information**

Business Name of Well Contractor: Strata Soil Sampling Inc. Well Contractor's Licence No.: 7 214 1  
 Business Address (Street Number/Name): 147-2 West Beaver Creek Road Municipality: Richmond Hill  
 Province: Ontario Postal Code: L4B 1C6 Business E-mail Address: wrecords@stratasoil.com

Bus. Telephone No. (inc. area code): 905-764-9304 Name of Well Technician (Last Name, First Name): MCCOY JAMES  
 Well Technician's Licence No.: 31656 Signature of Technician and/or Contractor: \_\_\_\_\_ Date Submitted: 2013 05/17



Comments: \_\_\_\_\_

Well owner's information package delivered:  Yes  No

Date Package Delivered: \_\_\_\_\_ Date Work Completed: 2013 04 05

**Ministry Use Only**  
 Audit No.: Z 151017



Measurements recorded in:  Metric  Imperial

A 147953

Page 1 of 1

Well Owner's Information

First Name: Last Name / Organization: TEGA DEVELOPMENTS E-mail Address:  Well Constructed by Well Owner

Mailing Address (Street Number/Name): 200-266 COLONNADE ROAD Municipality: OTTAWA Province: ONTARIO Postal Code: K2E7K7 Telephone No. (inc. area code): 613 632 7769

Well Location

Address of Well Location (Street Number/Name): 111-121 PARKDALE AVENUE Township: Lot: Concession: City/Town/Village: OTTAWA Province: Ontario Postal Code:

UTM Coordinates: Zone: Easting: Northing: Municipal Plan and Sublot Number: Other:

NAD 83 18 44426116 50285916 BH2

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

Table with columns: General Colour, Most Common Material, Other Materials, General Description, Depth (m/f) From, To. Rows include: BROWN SILTY SAND GRAVEL (0 to 0.6), BROWN SILTY SAND (FILL) GRAVEL, COBBLE, CLAY, WOOD CHIPS (0.6 to 1.19), GREY BEDROCK/LIMESTONE (1.19 to 18.4)

Annular Space table with columns: Depth Set at (m/f) From, To; Type of Sealant Used (Material and Type); Volume Placed (m³/R³). Row: 0.4 to 14.9 BENTONITE

Results of Well Yield Testing table with columns: Draw Down (Time, Water Level), Recovery (Time, Water Level). Includes pumping rate, duration, and final water level.

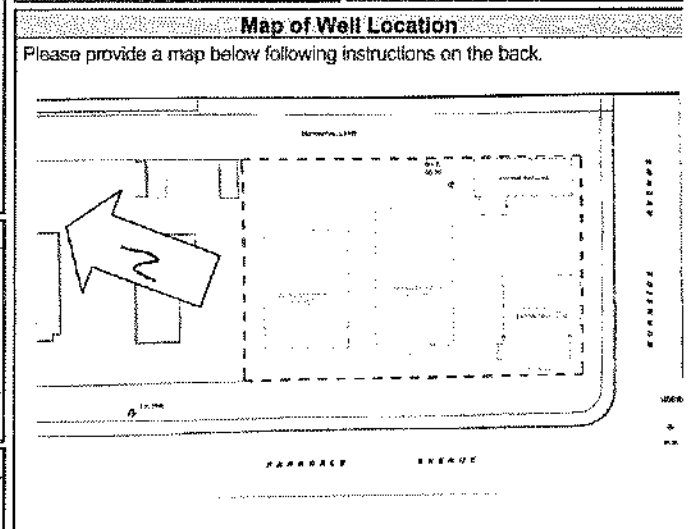
Method of Construction and Well Use table with checkboxes for Cable Tool, Rotary, Boring, etc., and Public, Commercial, Domestic, etc.

Construction Record - Casing and Status of Well table with columns for Inside Diameter, Open Hole OR Material, Wall Thickness, Depth, and checkboxes for Water Supply, Replacement Well, etc.

Construction Record - Screen table with columns for Outside Diameter, Material, Slot No., Depth.

Water Details and Hole Diameter table with columns for Water found at Depth, Kind of Water, Depth, Diameter.

Well Contractor and Well Technician Information table with fields for Business Name, Address, Licence No., Name of Well Technician, Signature, Date Submitted.



Comments: SEE ALSO ATTACHED. Ministry Use Only table with fields for Audit No. (2171309), Date Package Delivered, Date Work Completed (20120912).



PARKDALE AVENUE

MUNICIPAL LANE

BURNSIDE AVENUE

FA-TBM

BH 2  
60.54

EXISTING GENERATOR BUILDING

EXISTING AVENUE

EXISTING DWELLING

EXISTING DWELLING

LEGEND:  
 BOREHOLE LOCATION, MONITORING WELL INSTALLED  
 61.28 GROUND SURFACE ELEVATION (M)

C-1844  
 Z171309

AVOIT #  
 Z171309

TAG #  
 A147953



## Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the [Open Data catalogue](#).

[Go Back to Map](#)

## Well ID

Well ID Number: 7240369

Well Audit Number: Z207413

Well Tag Number: A178458

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

## Well Location

<b>Address of Well Location</b>	50 COLOMBINE DRIVEWAY
<b>Township</b>	OTTAWA CITY
<b>Lot</b>	
<b>Concession</b>	
<b>County/District/Municipality</b>	OTTAWA-CARLETON
<b>City/Town/Village</b>	Ottawa
<b>Province</b>	ON
<b>Postal Code</b>	n/a
<b>UTM Coordinates</b>	NAD83 — Zone 18 Easting: 442510.00 Northing: 5028678.00
<b>Municipal Plan and Sublot Number</b>	
<b>Other</b>	

## Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	1.22 m
GREY	LMSN		FCRD	1.22 m	6.1 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/FLUSHMOUNT	
.31 m	1.5 m	HOLEPLUG	
1.5 m	6.1 m	SAND	

## Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

## Status of Well

Test Hole

## Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	1.5 m

## Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	1.5 m	6.1 m

# Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## Results of Well Yield Testing

After test of well yield, water was

If pumping discontinued, give reason

Pump intake set at

Pumping Rate

Duration of Pumping

Final water level

If flowing give rate

Recommended pump depth

Recommended pump rate

Well Production

Disinfected?

## Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
---------------------	-----------------------	--------------------	----------------------

SWL

1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	

40	40
45	45
50	50
60	60

## Water Details

<b>Water Found at Depth</b>	<b>Kind</b>
-----------------------------	-------------

## Hole Diameter

<b>Depth From</b>	<b>Depth To</b>	<b>Diameter</b>
0 m	1.5 m	11.43 cm
1.5 m	6.1 m	7.62 cm

**Audit Number:** Z207413

**Date Well Completed:** March 30, 2015

**Date Well Record Received by MOE:** April 22, 2015

Updated: January 24, 2020

## Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the [Open Data catalogue](#).

[Go Back to Map](#)

## Well ID

Well ID Number: 7240370

Well Audit Number: Z207414

Well Tag Number: A178457

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

## Well Location

<b>Address of Well Location</b>	50 COLOMBINE DRIVEWAY
<b>Township</b>	OTTAWA CITY
<b>Lot</b>	
<b>Concession</b>	
<b>County/District/Municipality</b>	OTTAWA-CARLETON
<b>City/Town/Village</b>	Ottawa
<b>Province</b>	ON
<b>Postal Code</b>	n/a
<b>UTM Coordinates</b>	NAD83 — Zone 18 Easting: 442482.00 Northing: 5028666.00
<b>Municipal Plan and Sublot Number</b>	
<b>Other</b>	

## Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	.91 m
GREY	LMSN		FCRD	.91 m	5.79 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/FLUSHMOUNT	
.31 m	1.22 m	HOLEPLUG	
1.22 m	5.79 m	SAND	

## Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

## Status of Well

Test Hole

## Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	1.5 m

## Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	1.5 m	5.79 m

# Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## Results of Well Yield Testing

After test of well yield, water was

If pumping discontinued, give reason

Pump intake set at

Pumping Rate

Duration of Pumping

Final water level

If flowing give rate

Recommended pump depth

Recommended pump rate

Well Production

Disinfected?

## Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
---------------------	-----------------------	--------------------	----------------------

SWL

1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	

40	40
45	45
50	50
60	60

## Water Details

<b>Water Found at Depth</b>	<b>Kind</b>
-----------------------------	-------------

## Hole Diameter

<b>Depth From</b>	<b>Depth To</b>	<b>Diameter</b>
0 m	1.5 m	11.43 cm
1.5 m	5.79 m	7.62 cm

**Audit Number:** Z207414

**Date Well Completed:** March 30, 2015

**Date Well Record Received by MOE:** April 22, 2015

Updated: January 24, 2020



## Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the [Open Data catalogue](#).

[Go Back to Map](#)

## Well ID

Well ID Number: 7240371

Well Audit Number: Z207415

Well Tag Number: A178460

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

## Well Location

<b>Address of Well Location</b>	50 COLOMBINE DRIVEWAY
<b>Township</b>	OTTAWA CITY
<b>Lot</b>	
<b>Concession</b>	
<b>County/District/Municipality</b>	OTTAWA-CARLETON
<b>City/Town/Village</b>	Ottawa
<b>Province</b>	ON
<b>Postal Code</b>	n/a
<b>UTM Coordinates</b>	NAD83 — Zone 18 Easting: 442502.00 Northing: 5028694.00
<b>Municipal Plan and Sublot Number</b>	
<b>Other</b>	

## Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	1.22 m
GREY	LMSN		FCRD	1.22 m	4.51 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/FLUSHMOUNT	
.31 m	1.5 m	HOLEPLUG	
1.5 m		SAND	

## Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

## Status of Well

Test Hole

## Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	1.5 m

## Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	1.5 m	

# Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## Results of Well Yield Testing

After test of well yield, water was

If pumping discontinued, give reason

Pump intake set at

Pumping Rate

Duration of Pumping

Final water level

If flowing give rate

Recommended pump depth

Recommended pump rate

Well Production

Disinfected?

## Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
---------------------	-----------------------	--------------------	----------------------

SWL

1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	

40	40
45	45
50	50
60	60

## Water Details

<u>Water Found at Depth</u>	<u>Kind</u>
-----------------------------	-------------

## Hole Diameter

<u>Depth From</u>	<u>Depth To</u>	<u>Diameter</u>
2.5 m		7.62 cm
0 m	2.5 m	11.43 cm

**Audit Number:** Z207415

**Date Well Completed:** March 30, 2015

**Date Well Record Received by MOE:** April 22, 2015

Updated: January 24, 2020

## Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the [Open Data catalogue](#).

[Go Back to Map](#)

## Well ID

Well ID Number: 7240373

Well Audit Number: Z207416

Well Tag Number: A178459

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

## Well Location

<b>Address of Well Location</b>	50 COLOMBINE DRIVEWAY
<b>Township</b>	OTTAWA CITY
<b>Lot</b>	
<b>Concession</b>	
<b>County/District/Municipality</b>	OTTAWA-CARLETON
<b>City/Town/Village</b>	Ottawa
<b>Province</b>	ON
<b>Postal Code</b>	n/a
<b>UTM Coordinates</b>	NAD83 — Zone 18 Easting: 442482.00 Northing: 5028713.00
<b>Municipal Plan and Sublot Number</b>	
<b>Other</b>	

## Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	.91 m
GREY	LMSN		FCRD	.91 m	6.1 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/CONCRETE	
.31 m	1.22 m	HOLEPLUG	
1.22 m	6.1 m	SAND	

## Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring and Test Hole

## Status of Well

Test Hole

## Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	1.5 m

## Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	1.5 m	6.1 m

# Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## Results of Well Yield Testing

After test of well yield, water was

If pumping discontinued, give reason

Pump intake set at

Pumping Rate

Duration of Pumping

Final water level

If flowing give rate

Recommended pump depth

Recommended pump rate

Well Production

Disinfected?

## Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
---------------------	-----------------------	--------------------	----------------------

SWL

1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	

40	40
45	45
50	50
60	60

## Water Details

<b>Water Found at Depth</b>	<b>Kind</b>
-----------------------------	-------------

## Hole Diameter

<b>Depth From</b>	<b>Depth To</b>	<b>Diameter</b>
0 m	1.5 m	11.43 cm
1.5 m	6.1 m	7.62 cm

**Audit Number:** Z207416

**Date Well Completed:** March 30, 2015

**Date Well Record Received by MOE:** April 22, 2015

Updated: January 24, 2020



## Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the [Open Data catalogue](#).

[Go Back to Map](#)

## Well ID

Well ID Number: 7342420

Well Audit Number: Z317319

Well Tag Number: A268943

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

## Well Location

<b>Address of Well Location</b>	_59 Forward Ave
<b>Township</b>	NEPEAN TOWNSHIP
<b>Lot</b>	
<b>Concession</b>	
<b>County/District/Municipality</b>	OTTAWA-CARLETON
<b>City/Town/Village</b>	Ottawa
<b>Province</b>	ON
<b>Postal Code</b>	n/a
<b>UTM Coordinates</b>	NAD83 — Zone 18 Easting: 442735.00 Northing: 5028517.00
<b>Municipal Plan and Sublot Number</b>	
<b>Other</b>	

## Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	FILL		0 m	.61 m
GREY	LMSN		FCRD	.61 m	3.35 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE FLUSHMOUNT	
.31 m	1.5 m	BENSEAL	
1.5 m	3.35 m	SAND	

## Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring and Test Hole

## Status of Well

Monitoring and Test Hole

## Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
3.45 cm	PLASTIC	0 m	1.83 m

## Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.21 cm	PLASTIC	1.83 m	3.35 m

# Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## Results of Well Yield Testing

After test of well yield, water was

If pumping discontinued, give reason

Pump intake set at

Pumping Rate

Duration of Pumping

Final water level

If flowing give rate

Recommended pump depth

Recommended pump rate

Well Production

Disinfected?

## Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
---------------------	-----------------------	--------------------	----------------------

SWL

1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	

40	40
45	45
50	50
60	60

## Water Details

<b>Water Found at Depth</b>	<b>Kind</b>
-----------------------------	-------------

## Hole Diameter

<b>Depth From</b>	<b>Depth To</b>	<b>Diameter</b>
0 m	1.22 m	11.43 cm
1.22 m	3.35 m	7.62 cm

**Audit Number:** Z317319

**Date Well Completed:** August 08, 2019

**Date Well Record Received by MOE:** September 06, 2019

Updated: January 24, 2020

## Emily Forster

---

**From:** Public Information Services <publicinformationsservices@tssa.org>  
**Sent:** Thursday, October 7, 2021 12:17 PM  
**To:** Emily Forster  
**Subject:** RE: Records Search Request (PE5478)

**Please refrain from sending documents to head office and only submit your requests electronically via email along with credit card payment. We are all working remotely and mailing in applications with cheques will lengthen the overall processing time.**

### NO RECORD FOUND

Hello Emily,

Thank you for your request for confirmation of public information.

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

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

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,

Mariah



#### **Public Information Agent**

Facilities and Business Services

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-6222 | Fax: +1-416-734-3568 | E-Mail: [publicinformationsservices@tssa.org](mailto:publicinformationsservices@tssa.org)

[www.tssa.org](http://www.tssa.org)



---

**From:** Emily Forster

<EForster@patersongroup.ca>

**Sent:** October 6, 2021 3:38 PM

**To:** Public Information Services <publicinformationsservices@tssa.org>

**Cc:** Nick Sullivan <NSullivan@patersongroup.ca>

**Subject:** Records Search Request (PE5478)

**[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 day,

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:

Parkdale Avenue: 131, 139, 151, 159, 163;

Forward Avenue: 122, 134, 138, 142, 146

Many thanks,

Emily Forster, Co-op Student

**paterongroup**  
**solution oriented engineering**  
**over 60 years serving our clients**

154 Colonnade Road South  
Ottawa, Ontario, K2E 7J5  
Tel: (613) 226-7381  
Cell: (613) 325-0965

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 Only

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



# Historic Land Use Inventory

## Application Form

### Notice of Public Record

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

### Municipal Freedom of Information and Protection Act

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

### Background Information

\*Site Address or Location:

138 Forward Avenue, Ottawa, Ontario

\*Mandatory Field

### Applicant/Agent Information:

Name: Paterson Group Inc.

Mailing Address: 154 Colonnade Road South, Ottawa, ON, K2E 7J5

Telephone: 613-226-7381 Email Address: nsullivan@patersongroup.ca

Registered Property Owner Information:  Same as above

Name: VIKa Land & Development Group Inc

Mailing Address: 2727 Grand Vista Circle, Ottawa, Ontario, K2J 0W5

Telephone: 613-878-5762 Email Address: adevonish50@gmail.com

## Site Details

Legal Description and PIN:

Part of Lot 36, Concession A (Ottawa Front), Formerly the Township of Nepean, in the City of Ottawa, Ontario.

What is the land currently used for?

Two story residential dwelling

Lot frontage:  m Lot depth:  m Lot area:  m<sup>2</sup>

OR Lot area: (irregular lot)  m<sup>2</sup>

Does the site have Full Municipal Services:  Yes  No

## 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

## 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, Infrastructure and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3.** A site plan or key plan of the property, its location and particular features.
- 4.** Any significant dates or time frames that you would like researched.



**Disclaimer**  
**For use with HLUI Database**

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

The City, in providing information from the HLUI, to Paterson Group Inc. ("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: Emily Forster

Dated (dd/mm/yyyy): 06/10/2021

Per: Emily Forster  
(Please print name)

Title: Environmental Engineer

Company: Paterson Group Inc.

October 6, 2021  
File: PE5478-HLUI

**City of Ottawa**  
110 Laurier Avenue West  
Ottawa, Ontario  
K1P 1J1

**Subject: Authorization Letter: HLUI Search  
Phase I - Environmental Site Assessment  
138 Forward Avenue  
Ottawa, Ontario**

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

Geotechnical Engineering  
Environmental Engineering  
Hydrogeology  
Geological Engineering  
Materials Testing  
Building Science

[www.patersongroup.ca](http://www.patersongroup.ca)

Dear Sir or Madam,

Please consider this letter as confirmation that Paterson Group has been retained to conduct a Phase I - Environmental Site Assessment at the aforementioned property.

With this letter, the property owner authorizes the City of Ottawa and other regulatory bodies to release, to Paterson Group, information requested for the purpose of completing an environmental assessment of the property.

**Name of Company/Property Owner:**

1881 Investment LTD.

**Name of Representative**

Anthony Devonish

**Authorization of Representative**



**Date**

Oct 06<sup>th</sup> 2021



# DATABASE REPORT

**Project Property:** *Phase I ESA  
139 Parkdale Avenue  
Ottawa ON K1Y 1E7  
PE5241*

**Project No:** *PE5241*

**Report Type:** *Standard Report*

**Order No:** *21032600420*

**Requested by:** *Paterson Group Inc.*

**Date Completed:** *March 31, 2021*

# Table of Contents

Table of Contents.....	2
Executive Summary.....	3
Executive Summary: Report Summary.....	4
Executive Summary: Site Report Summary - Project Property.....	6
Executive Summary: Site Report Summary - Surrounding Properties.....	7
Executive Summary: Summary By Data Source.....	19
Map.....	34
Aerial.....	35
Topographic Map.....	36
Detail Report.....	37
Unplottable Summary.....	128
Unplottable Report.....	130
Appendix: Database Descriptions.....	142
Definitions.....	151

## **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

## Property Information:

**Project Property:** *Phase I ESA  
139 Parkdale Avenue Ottawa ON K1Y 1E7*

**Project No:** *PE5241*

## **Coordinates:**

**Latitude:** *45.4078387*  
**Longitude:** *-75.733102*  
**UTM Northing:** *5,028,519.10*  
**UTM Easting:** *442,631.74*  
**UTM Zone:** *18T*

**Elevation:** *200 FT  
60.88 M*

## Order Information:

**Order No:** *21032600420*  
**Date Requested:** *March 26, 2021*  
**Requested by:** *Paterson Group Inc.*  
**Report Type:** *Standard Report*

## Historical/Products:

## Executive Summary: Report Summary

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.25 km</i>	<i>Total</i>
AAGR	<i>Abandoned Aggregate Inventory</i>	Y	0	0	0
AGR	<i>Aggregate Inventory</i>	Y	0	0	0
AMIS	<i>Abandoned Mine Information System</i>	Y	0	0	0
ANDR	<i>Anderson's Waste Disposal Sites</i>	Y	0	0	0
AST	<i>Aboveground Storage Tanks</i>	Y	0	0	0
AUWR	<i>Automobile Wrecking &amp; Supplies</i>	Y	0	0	0
BORE	<i>Borehole</i>	Y	0	2	2
CA	<i>Certificates of Approval</i>	Y	0	3	3
CDRY	<i>Dry Cleaning Facilities</i>	Y	0	0	0
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Manufacturers and Distributors</i>	Y	0	0	0
CHM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
COAL	<i>Inventory of Coal Gasification Plants and Coal Tar Sites</i>	Y	0	0	0
CONV	<i>Compliance and Convictions</i>	Y	0	0	0
CPU	<i>Certificates of Property Use</i>	Y	0	0	0
DRL	<i>Drill Hole Database</i>	Y	0	0	0
DTNK	<i>Delisted Fuel Tanks</i>	Y	0	0	0
EASR	<i>Environmental Activity and Sector Registry</i>	Y	0	0	0
EBR	<i>Environmental Registry</i>	Y	0	0	0
ECA	<i>Environmental Compliance Approval</i>	Y	0	6	6
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	0	21	21
EIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
EMHE	<i>Emergency Management Historical Event</i>	Y	0	0	0
EPAR	<i>Environmental Penalty Annual Report</i>	Y	0	0	0
EXP	<i>List of Expired Fuels Safety Facilities</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	1	1
FOFT	<i>Fisheries &amp; Oceans Fuel Tanks</i>	Y	0	0	0
FRST	<i>Federal Identification Registry for Storage Tank Systems (FIRSTS)</i>	Y	0	0	0
FST	<i>Fuel Storage Tank</i>	Y	0	0	0
FSTH	<i>Fuel Storage Tank - Historic</i>	Y	0	0	0
GEN	<i>Ontario Regulation 347 Waste Generators Summary</i>	Y	0	68	68
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
HINC	<i>TSSA Historic Incidents</i>	Y	0	2	2

<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Within 0.25 km</b>	<b>Total</b>
IAFT	<i>Indian &amp; Northern Affairs Fuel Tanks</i>	Y	0	0	0
INC	<i>Fuel Oil Spills and Leaks</i>	Y	0	0	0
LIMO	<i>Landfill Inventory Management Ontario</i>	Y	0	0	0
MINE	<i>Canadian Mine Locations</i>	Y	0	0	0
MNR	<i>Mineral Occurrences</i>	Y	0	0	0
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0
NDFT	<i>National Defense &amp; Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense &amp; Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence &amp; Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBP	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	1	1
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	1	1
OGWE	<i>Oil and Gas Wells</i>	Y	0	0	0
OOGW	<i>Ontario Oil and Gas Wells</i>	Y	0	0	0
OPCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
ORD	<i>Orders</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PES	<i>Pesticide Register</i>	Y	0	2	2
PINC	<i>Pipeline Incidents</i>	Y	0	1	1
PRT	<i>Private and Retail Fuel Storage Tanks</i>	Y	0	0	0
PTTW	<i>Permit to Take Water</i>	Y	0	1	1
REC	<i>Ontario Regulation 347 Waste Receivers Summary</i>	Y	0	0	0
RSC	<i>Record of Site Condition</i>	Y	0	1	1
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	1	1
SPL	<i>Ontario Spills</i>	Y	0	23	23
SRDS	<i>Wastewater Discharger Registration Database</i>	Y	0	0	0
TANK	<i>Anderson's Storage Tanks</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
VAR	<i>Variances for Abandonment of Underground Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Sites - MOE CA Inventory</i>	Y	0	0	0
WDSH	<i>Waste Disposal Sites - MOE 1991 Historical Approval Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Information System</i>	Y	0	7	7
<b>Total:</b>			0	141	141

## Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
--------------------	-----------	--------------------------	----------------	---------------------	--------------------------	------------------------

No records found in the selected databases for the project property.



## Executive Summary: Site Report Summary - Surrounding Properties

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
<a href="#">1</a>	EHS		131 Parkdale Ave Ottawa ON K1Y1E7	NNW/29.9	0.00	<a href="#">37</a>
<a href="#">2</a>	EHS		131 PARKDALE AVENUE OTTAWA ON K1Y 1E7	NW/30.0	0.00	<a href="#">37</a>
<a href="#">3</a>	ECA	8609454 Canada Inc.	121 Parkdale Ave Ottawa ON K1J 7S6	NW/72.2	0.00	<a href="#">37</a>
<a href="#">3</a>	EHS		121 Parkdale Ave Ottawa ON K1Y2M3	NW/72.2	0.00	<a href="#">37</a>
<a href="#">3</a>	SPL	Enbridge Gas Distribution Inc.	121 Parkdale Ave Ottawa ON	NW/72.2	0.00	<a href="#">38</a>
<a href="#">3</a>	PINC	ENBRIDGE GAS INC	121 PARKDALE AVE,,OTTAWA,ON,K1Y 1E6,CA ON	NW/72.2	0.00	<a href="#">38</a>
<a href="#">3</a>	EHS		121 Parkdale Avenue Ottawa ON K1Y 1E6	NW/72.2	0.00	<a href="#">39</a>
<a href="#">4</a>	WWIS		111 PARKDALE AVENUE 121 Ottawa ON <b>Well ID:</b> 7205866	NNW/78.5	0.00	<a href="#">39</a>
<a href="#">5</a>	BORE		ON	W/81.1	0.00	<a href="#">42</a>
<a href="#">6</a>	SPL	BROOKFIELD LEPAGE JOHNSON CONT	PROPERTY MANAGEMENT CO. 120 PARKDALE AVE, SUITE 1401, OTTAWA OTTAWA CITY ON K1A 0K9	WNW/87.8	0.00	<a href="#">43</a>
<a href="#">6</a>	SPL	STATISTICS CANADA BUILDING	120 PARKDALE AVE 120 PARDALE AVENUE, OTTAWA OTTAWA CITY ON K1A 0K9	WNW/87.8	0.00	<a href="#">43</a>
<a href="#">6</a>	GEN	GVT. OF CAN.-PUBLIC WORKS OF CAN.	REALTY BRANCH TUNNEY'S PASTURE ASS.BLDG C/O TUNNEY'S PASTURE DBS BLDG RM 1005	WNW/87.8	0.00	<a href="#">44</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
			OTTAWA-CARLETON ON K1A 0M3			
<a href="#">6</a>	GEN	PUBLIC WORKS & GOVERNMENT SERVS. CANADA	ASSORTED BUILDINGS TUNNEY'S PASTURE (FEDERAL COMPLEX) OTTAWA ON K1A 0M3	WNW/87.8	0.00	<a href="#">44</a>
<a href="#">6</a>	GEN	GVT. OF CAN.-PUBLIC WORKS OF CAN. 18-337	REALTY BRANCH TUNNEY'S PASTURE ASS.BLDG OTTAWA,C/O 1000-38 ANTARES DRIVE NEPEAN ON K1A 0M3	WNW/87.8	0.00	<a href="#">45</a>
<a href="#">6</a>	GEN	PUBLIC WORKS & GOVERNMENT SERVICES CAN.	ASSORTED BUILDING TUNNEY'S PASTURE (FEDERAL COMPLEX) OTTAWA ON K1A 0M3	WNW/87.8	0.00	<a href="#">46</a>
<a href="#">6</a>	GEN	PUBLIC WORKS CANADA	TUNNEY'S PASTURE - FEDERAL COMPLEX ASSORTED BUILDINGS OTTAWA ON	WNW/87.8	0.00	<a href="#">47</a>
<a href="#">6</a>	GEN	BROOKFIELD LEPAGE JOHNSON CONTROLS	TUNNEY'S PASTURE FEDERAL COMPLEX ASSORTED BUILDINGS OTTAWA ON	WNW/87.8	0.00	<a href="#">47</a>
<a href="#">6</a>	SCT	Statistics Canada	120 Parkdale Ave Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">48</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1B4	WNW/87.8	0.00	<a href="#">48</a>
<a href="#">6</a>	GEN	Public Works and Government Services	120 Parkdale Ottawa ON K1A 1B4	WNW/87.8	0.00	<a href="#">50</a>
<a href="#">6</a>	SPL		120 Parkdale Avenue Ottawa ON K1A 1K6	WNW/87.8	0.00	<a href="#">50</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW/87.8	0.00	<a href="#">51</a>
<a href="#">6</a>	GEN	Public Works and Government Services	120 Parkdale Ottawa ON K1A 1B4	WNW/87.8	0.00	<a href="#">52</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings	WNW/87.8	0.00	<a href="#">52</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
			Ottawa ON K1A 1K6			
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW/87.8	0.00	<a href="#">53</a>
<a href="#">6</a>	GEN	SNC LAVALIN O & M	120 PARKDALE AVENUE VARIOUS BUILDINGS OTTAWA ON	WNW/87.8	0.00	<a href="#">54</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW/87.8	0.00	<a href="#">55</a>
<a href="#">6</a>	NPRI	SNC-LAVALIN PROFAC	120 Parkdale Avenue Ottawa ON K1A6T6	WNW/87.8	0.00	<a href="#">56</a>
<a href="#">6</a>	GEN	SNC LAVALIN O & M	120 PARKDALE AVENUE VARIOUS BUILDINGS OTTAWA ON	WNW/87.8	0.00	<a href="#">57</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON	WNW/87.8	0.00	<a href="#">58</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">59</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">60</a>
<a href="#">6</a>	GEN	Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">61</a>
<a href="#">6</a>	GEN	Public Services & Procurement Canada ESD/AFD	120 Parkdale, Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">62</a>
<a href="#">6</a>	GEN	Public Services & Procurement Canada ESD/AFD	120 Parkdale, Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">63</a>
<a href="#">6</a>	GEN	Public Services & Procurement Canada ESD/AFD	120 Parkdale, Ottawa ON K1A 0K9	WNW/87.8	0.00	<a href="#">65</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">7</a>	EHS		159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE/95.0	0.00	<a href="#">67</a>
<a href="#">7</a>	EHS		159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE/95.0	0.00	<a href="#">67</a>
<a href="#">7</a>	EHS		159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE/95.0	0.00	<a href="#">67</a>
<a href="#">7</a>	EHS		159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE/95.0	0.00	<a href="#">67</a>
<a href="#">8</a>	GEN	Golder Associates Ltd.	159 Forward Ave. Ottawa ON K1Y 1K9	E/110.0	0.00	<a href="#">67</a>
<a href="#">9</a>	EHS		159 Forward Avenue Ottawa ON K1Y 1K9	ESE/110.1	0.00	<a href="#">68</a>
<a href="#">10</a>	SPL		50 Burnside Ave Ottawa ON	ENE/111.8	1.00	<a href="#">68</a>
<a href="#">11</a>	EHS		Ottawa Ottawa ON	NNW/118.8	0.00	<a href="#">68</a>
<a href="#">12</a>	ECA	City of Ottawa	Forward Avenue, Lyndale Avenue and Hinchey Avenue Ottawa ON K1N 5A1	NNE/124.3	1.00	<a href="#">69</a>
<a href="#">13</a>	EHS		99-107 Parkdale Avenue (odd numbers only) Ottawa ON	NNW/127.2	0.02	<a href="#">69</a>
<a href="#">14</a>	SPL	PRIVATE RESIDENCE	AT RESIDENCE AT 154 HINCHY AVE. FURNACE OIL TANK OTTAWA CITY ON	E/132.0	0.00	<a href="#">69</a>
<a href="#">15</a>	EHS		101 Parkdale Avenue Ottawa ON K1Y 1E6	NW/140.9	0.03	<a href="#">70</a>
<a href="#">16</a>	EHS		99 Parkdale Avenue Ottawa ON K1Y 1E6	NW/141.8	-0.57	<a href="#">70</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">17</a>	SPL		170 Tunney's Pasture Lane STATISTICS CANADA LOADING DOCK<UNOFFICIAL> Ottawa ON	WSW/142.7	0.00	<a href="#">70</a>
<a href="#">17</a>	SPL		170 Tunneys Pasture Driveway Ottawa ON	WSW/142.7	0.00	<a href="#">70</a>
<a href="#">17</a>	SPL		170 Tunney's Pasture Drive Ottawa ON	WSW/142.7	0.00	<a href="#">71</a>
<a href="#">17</a>	SPL		170 Tunneys Pasture Ottawa ON	WSW/142.7	0.00	<a href="#">71</a>
<a href="#">17</a>	SPL	Waste Connections of Canada Inc.	170 Tunney's Pasture Dr Ottawa ON	WSW/142.7	0.00	<a href="#">72</a>
<a href="#">18</a>	PTTW	Les Constructions Brigil Inc.	99 Parkdale Avenue Ottawa, ON K1Y1E6 Canada ON	NNW/143.4	0.03	<a href="#">72</a>
<a href="#">19</a>	ECA	City of Ottawa	Forward Avenue, Lyndale Avenue and Hinchey Avenue Ottawa ON K1N 5A1	ESE/144.1	0.00	<a href="#">73</a>
<a href="#">20</a>	CA	OTTAWA CITY	BURNSIDE AVE./HINCHEY AVE. OTTAWA CITY ON	NE/152.5	1.00	<a href="#">73</a>
<a href="#">21</a>	PES	DANIEL C BAKER	921-100 HINCHEY AVENUE OTTAWA ON K1Y 4L9	NE/154.7	1.00	<a href="#">73</a>
<a href="#">21</a>	PES	DANIEL BAKER	100 HINCHEY AVE; #921 OTTAWA ON K1Y4L9	NE/154.7	1.00	<a href="#">74</a>
<a href="#">22</a>	EHS		200 Tunneys Pasture Driveway Ottawa ON K1Y4G8	W/174.1	0.00	<a href="#">74</a>
<a href="#">23</a>	EHS		161 Hinchey Ave Ottawa ON K1Y 1L5	E/176.9	0.00	<a href="#">74</a>
<a href="#">23</a>	EHS		161 Hinchey Ave Ottawa ON K1Y 1L5	E/176.9	0.00	<a href="#">75</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">23</a>	EHS		161 Hinchey Ave Ottawa ON K1Y 1L5	E/176.9	0.00	<a href="#">75</a>
<a href="#">24</a>	EHS		161 Hinchey Ave Ottawa Ontario Ottawa ON K1Y 1L5	E/176.9	0.00	<a href="#">75</a>
<a href="#">25</a>	GEN	FRANK & SONS PAINTING & DECORATING LTD.	184 FORWARD AVENUE OTTAWA ON K1Y 1L2	SE/177.1	0.00	<a href="#">75</a>
<a href="#">25</a>	GEN	FRANK & SONS PAINTING & DECORATING LTD.	184 FORWARD AVENUE OTTAWA ON K1Y 1L2	SE/177.1	0.00	<a href="#">76</a>
<a href="#">25</a>	GEN	FRANK & SONS PAINTING & DECORATING LTD.	184 FORWARD AVENUE OTTAWA ON K1Y 1L2	SE/177.1	0.00	<a href="#">76</a>
<a href="#">26</a>	BORE		ON	NW/186.8	-1.00	<a href="#">76</a>
<a href="#">27</a>	NPCB	HEALTH AND WELFARE CANADA	LAB. CENTRE FOR DISEASE CONT.; HOLLAND AVE. OTTAWA ON K1A 0L2	SSW/189.3	0.00	<a href="#">77</a>
<a href="#">27</a>	SPL	BFI	TUNNY'S PASTURE-PUBLIC WORKS STATS. BUILDING LOADING DOCK MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY ON	SSW/189.3	0.00	<a href="#">78</a>
<a href="#">27</a>	CA	PUBLIC WORKS & GOVT. SERVICES CANADA, CS	TUNNEY'S PASTURE, BUILDING #4 OTTAWA CITY ON	SSW/189.3	0.00	<a href="#">78</a>
<a href="#">27</a>	GEN	CAMECO-CANADIAN MINING&ENERGY CORP	C/O 360 ALBERT ST. SUITE 700 R & D TUNNEY'S PASTURE OTTAWA ON K1R 7X7	SSW/189.3	0.00	<a href="#">78</a>
<a href="#">27</a>	GEN	CAMECO-CANADIAN MINING&ENERGY CORP	C/O P.O. BOX 3430 STATION "C" R & D TUNNEY'S PASTURE OTTAWA ON K1R 4J6	SSW/189.3	0.00	<a href="#">79</a>
<a href="#">27</a>	GEN	CAMECO-CANADIAN MINING&ENERGY CORP14-102	C/O P.O. BOX 3430 STATION "C" R & D TUNNEY'S PASTURE OTTAWA ON K1R 4J6	SSW/189.3	0.00	<a href="#">79</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">27</a>	GEN	GVT. OF CAN. - HEALTH AND WELFARE	TUNNEY'S PASTURE C/O 140 PROMENADE DU PORTAGE (P.WORKS) OTTAWA ON K1A 0M3	SSW/189.3	0.00	<a href="#">80</a>
<a href="#">27</a>	GEN	HEALTH AND WELFARE CANADA	TUNNEY'S PASTURE OTTAWA ON K1A 0L2	SSW/189.3	0.00	<a href="#">81</a>
<a href="#">27</a>	GEN	HEALTH AND WELFARE CANADA	HEALTH UNIT #12, RM. 1002, RH COATS BLDG (STATS, CAN.), TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">81</a>
<a href="#">27</a>	GEN	GVT OF CAN-HEALTH&WELFARE CAN.MED. 16-298	SER.BR,HEALTH UNIT#12,RM 1002,RH COATS BLDG,TUNNEY'S PASTURE,C/O 301 ELGIN ST OTTAWA ON K1A 0L3	SSW/189.3	0.00	<a href="#">82</a>
<a href="#">27</a>	GEN	GVT. OF CAN. PUBLIC WORKS	NATIONAL REASEARCH COUNCIL, BLDG. SRVCS HEALTH PROT. BLDG.7, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	SSW/189.3	0.00	<a href="#">82</a>
<a href="#">27</a>	GEN	GVT. OF CAN. PUBLIC WORKS 18-245	NATIONAL REASEARCH COUNCIL, BLDG. SRVCS HEALTH PROT. BLDG.7, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	SSW/189.3	0.00	<a href="#">82</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">82</a>
<a href="#">27</a>	GEN	NATIONAL ARCHIVES OF CANADA	STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">83</a>
<a href="#">27</a>	GEN	GVT. OF CAN. - NATIONAL ARCHIVES CANADA	STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">83</a>
<a href="#">27</a>	GEN	NATIONAL ARCHIVES CANADA	STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">84</a>
<a href="#">27</a>	GEN	GVT. OF CANADA-INDUSTRY CANADA	STANDARDS BUILDING TUNNEY'S PASTURE, HOLLAND AVE. OTTAWA ON	SSW/189.3	0.00	<a href="#">84</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW/189.3	0.00	<a href="#">84</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW/189.3	0.00	<a href="#">85</a>
<a href="#">27</a>	GEN	Lexus Mechanical	150 Tunney's Pasture Ottawa ON	SSW/189.3	0.00	<a href="#">85</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW/189.3	0.00	<a href="#">86</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">86</a>
<a href="#">27</a>	GEN	Statistics Canada	150Tunney's Pasture Driveway Main Bldg, SC0005 Ottawa ON	SSW/189.3	0.00	<a href="#">87</a>
<a href="#">27</a>	GEN	Health Canada	150 Tunney's Pasture Drwy Ottawa ON	SSW/189.3	0.00	<a href="#">87</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW/189.3	0.00	<a href="#">87</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">88</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">89</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">89</a>
<a href="#">27</a>	GEN	Statistics Canada	150Tunney's Pasture Driveway Main Bldg, SC0005 Ottawa ON K1A0T6	SSW/189.3	0.00	<a href="#">90</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division	1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">90</a>



<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">27</a>	SPL		150 Tunneys Pasture Driveway Ottawa ON	SSW/189.3	0.00	<a href="#">91</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division	1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">91</a>
<a href="#">27</a>	GEN	GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division	1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	SSW/189.3	0.00	<a href="#">92</a>
<a href="#">28</a>	SPL	S. 21(1)(f)	58 Carruthers Avenue Ottawa ON K1Y 1N2	ENE/190.8	0.00	<a href="#">93</a>
<a href="#">28</a>	HINC		58 CARRUTHERS AVENUE OTTAWA ON K1Y 1N2	ENE/190.8	0.00	<a href="#">94</a>
<a href="#">29</a>	WWIS		52 CARRUTHERS AVE Ottawa ON <b>Well ID:</b> 7201623	ENE/193.2	0.00	<a href="#">94</a>
<a href="#">30</a>	SPL		56 Carruthers Avenue Ottawa ON K1Y 1N2	ENE/194.5	0.00	<a href="#">97</a>
<a href="#">30</a>	HINC		56 CARRUTHERS AVENUE OTTAWA ON K1Y 1N2	ENE/194.5	0.00	<a href="#">97</a>
<a href="#">31</a>	EHS		192 Forward Ave Ottawa ON K1Y1E8	SE/195.3	0.00	<a href="#">98</a>
<a href="#">32</a>	WWIS		50 COLOMBINE DRIVEWAY Ottawa ON <b>Well ID:</b> 7240369	NW/200.2	-1.00	<a href="#">98</a>
<a href="#">33</a>	GEN	CCC384	44 EMMERSON AVE OTTAWA ON K1Y 2L8	NNW/204.1	-1.03	<a href="#">101</a>
<a href="#">34</a>	WWIS		50 COLOMBINE DRIVEWAY Ottawa ON <b>Well ID:</b> 7240370	NW/209.8	-1.00	<a href="#">101</a>
<a href="#">35</a>	GEN	JOHANNES POTHUMA	80 CARRUTHERS AVE. OTTAWA ON K1Y 1N2	E/210.4	-1.00	<a href="#">104</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">35</a>	GEN	JOHANNES POTHUMA 22-285	80 CARRUTHERS AVE. OTTAWA ON K1Y 1N2	E/210.4	-1.00	<a href="#">104</a>
<a href="#">36</a>	GEN	NATIONAL RESEARCH COUNCIL	HEALTH PROTECTION BUILDING 7 HOLLAND AVENUE, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	W/214.7	0.00	<a href="#">104</a>
<a href="#">36</a>	GEN	GVT. OF CAN. - ATOMIC ENERGY CONT.	L B, TUNNEY'S PASTURE (HPB BUILDING) C/O P O BOX 1046 OTTAWA ON K1P 5S9	W/214.7	0.00	<a href="#">105</a>
<a href="#">36</a>	GEN	ATOMIC ENERGY CONTROL BOARD	HPB BUILDING (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1P 5S9	W/214.7	0.00	<a href="#">105</a>
<a href="#">36</a>	GEN	GVT. OF CAN. - ATOMIC ENERGY CONT.18-029	L B, TUNNEY'S PASTURE (HPB BUILDING) C/O P O BOX 1046 OTTAWA ON K1P 5S9	W/214.7	0.00	<a href="#">106</a>
<a href="#">36</a>	GEN	ATOMIC ENERGY CONTROL BOARD	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1A 0L2	W/214.7	0.00	<a href="#">106</a>
<a href="#">36</a>	GEN	CANADIAN NUCLEAR SAFETY COMMISSION	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1A 0L2	W/214.7	0.00	<a href="#">106</a>
<a href="#">36</a>	GEN	CANADIAN NUCLEAR SAFETY COMMISSION	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON	W/214.7	0.00	<a href="#">107</a>
<a href="#">36</a>	GEN	CANADIAN NUCLEAR SAFETY COMMISSION	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON	W/214.7	0.00	<a href="#">107</a>
<a href="#">37</a>	WWIS		50 COLOMBINE DRIVEWAY Ottawa ON <b>Well ID:</b> 7240371	NW/217.8	-1.00	<a href="#">108</a>
<a href="#">38</a>	SPL	PRIVATE RESIDENCE	63 CARRUTHURS AVENUE FURNACE OIL TANK OTTAWA CITY ON	ENE/226.5	-1.00	<a href="#">111</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">39</a>	SPL		18 Burnside Ave. OTTAWA HOUSING GARAGE<UNOFFICIAL> Ottawa ON K1Y 4V7	ENE/228.3	-1.00	<a href="#">111</a>
<a href="#">39</a>	GEN	OTTAWA COMMUNITY HOUSING CORP.	18 BURNSIDE AVE., OTTAWA ON K1Y 4V7	ENE/228.3	-1.00	<a href="#">112</a>
<a href="#">40</a>	SPL		In front of 55 Carruthers Street<UNOFFICIAL> Ottawa ON K1Y 1N3	ENE/231.6	-1.00	<a href="#">112</a>
<a href="#">40</a>	SPL	Unknown<UNOFFICIAL>	55 Carruthers Ave. Ottawa Ottawa ON	ENE/231.6	-1.00	<a href="#">112</a>
<a href="#">41</a>	FCS	Environmental Health Centre	Ottawa ON	WNW/232.7	-1.00	<a href="#">113</a>
<a href="#">42</a>	RSC	JOHN HOWARD SOCIETY OF OTTAWA	59 CARRUTHERS AVENUE, OTTAWA, ON K1Y 1N3 Ottawa ON	ENE/236.0	-1.00	<a href="#">117</a>
<a href="#">43</a>	WWIS		55 CARRUTHERS AVENUE OTTAWA ON <b>Well ID:</b> 7264754	ENE/240.4	-1.00	<a href="#">118</a>
<a href="#">44</a>	CA	City of Ottawa	Emmerson Avenue and Parkdale Avenue Ottawa ON	NW/244.8	-1.31	<a href="#">120</a>
<a href="#">44</a>	ECA	City of Ottawa	Emmerson Avenue and Parkdale Ave Ottawa ON K1S 5K2	NW/244.8	-1.31	<a href="#">121</a>
<a href="#">44</a>	ECA	City of Ottawa	Emmerson Avenue and Parkdale Ave Ottawa ON K1S 5K2	NW/244.8	-1.31	<a href="#">121</a>
<a href="#">45</a>	EHS		187 Forward Avenue Ottawa ON K1Y 1L2	SE/245.0	0.00	<a href="#">121</a>
<a href="#">46</a>	WWIS		50 COLOMBINE DRIVEWAY Ottawa ON <b>Well ID:</b> 7240373	NW/245.0	-1.00	<a href="#">121</a>
<a href="#">47</a>	EHS		71 Carruthers Ave Ottawa ON K1Y1N3	E/245.4	-1.00	<a href="#">124</a>

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
<a href="#">48</a>	SPL	PRIVATE RESIDENCE	185 HINCHEY AVE. FURNACE OIL TANK OTTAWA CITY ON K1Y 1L6	ESE/247.2	-0.32	<a href="#">124</a>
<a href="#">48</a>	SPL	PRIVATE RESIDENCE	185 HINCHEY FURNACE OIL TANK OTTAWA CITY ON K1Y 1L6	ESE/247.2	-0.32	<a href="#">125</a>
<a href="#">49</a>	SPL		70 Colombine Driveway Ottawa ON	WNW/249.4	-0.24	<a href="#">125</a>
<a href="#">49</a>	SPL		70 Colombine Driveway Ottawa ON K1A 0K9	WNW/249.4	-0.24	<a href="#">126</a>
<a href="#">49</a>	GEN	BROOKFIELD GLOBAL INTEGRATED SOLUTIONS	70 COLOMBINE DRIVWAY TUNNEY'S PASTURE OTTAWA ON K1A 0K9	WNW/249.4	-0.24	<a href="#">126</a>
<a href="#">50</a>	ECA	The Corporation of the City of Ottawa	Carruthers Ave., Hinchey Ave. & Lyndale Ave. Ottawa ON K1N 5A1	E/249.9	-1.00	<a href="#">127</a>

# Executive Summary: Summary By Data Source

## **BORE - Borehole**

A search of the BORE database, dated 1875-Jul 2018 has found that there are 2 BORE site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	ON	W	81.11	<a href="#"><u>5</u></a>

<b><u>Lower Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	ON	NW	186.79	<a href="#"><u>26</u></a>

## **CA - Certificates of Approval**

A search of the CA database, dated 1985-Oct 30, 2011\* has found that there are 3 CA site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
OTTAWA CITY	BURNSIDE AVE./HINCHEY AVE. OTTAWA CITY ON	NE	152.52	<a href="#"><u>20</u></a>

PUBLIC WORKS & GOVT. SERVICES CANADA, CS	TUNNEY'S PASTURE, BUILDING #4 OTTAWA CITY ON	SSW	189.29	<a href="#"><u>27</u></a>
---	---	-----	--------	---------------------------

<b><u>Lower Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
City of Ottawa	Emmerson Avenue and Parkdale Avenue Ottawa ON	NW	244.81	<a href="#"><u>44</u></a>

## **ECA - Environmental Compliance Approval**

A search of the ECA database, dated Oct 2011- Jan 31, 2021 has found that there are 6 ECA site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
8609454 Canada Inc.	121 Parkdale Ave Ottawa ON K1J 7S6	NW	72.21	<a href="#">3</a>
City of Ottawa	Forward Avenue, Lyndale Avenue and Hinchey Avenue Ottawa ON K1N 5A1	NNE	124.28	<a href="#">12</a>
City of Ottawa	Forward Avenue, Lyndale Avenue and Hinchey Avenue Ottawa ON K1N 5A1	ESE	144.09	<a href="#">19</a>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
City of Ottawa	Emmerson Avenue and Parkdale Ave Ottawa ON K1S 5K2	NW	244.81	<a href="#">44</a>
City of Ottawa	Emmerson Avenue and Parkdale Ave Ottawa ON K1S 5K2	NW	244.81	<a href="#">44</a>
The Corporation of the City of Ottawa	Carruthers Ave., Hinchey Ave. & Lyndale Ave. Ottawa ON K1N 5A1	E	249.91	<a href="#">50</a>

## EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Jan 31, 2021 has found that there are 21 EHS site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	131 Parkdale Ave Ottawa ON K1Y1E7	NNW	29.86	<a href="#">1</a>
	131 PARKDALE AVENUE OTTAWA ON K1Y 1E7	NW	29.97	<a href="#">2</a>
	121 Parkdale Ave Ottawa ON K1Y2M3	NW	72.21	<a href="#">3</a>
	121 Parkdale Avenue Ottawa ON K1Y 1E6	NW	72.21	<a href="#">3</a>

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE	94.98	<a href="#"><u>7</u></a>
	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE	94.98	<a href="#"><u>7</u></a>
	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE	94.98	<a href="#"><u>7</u></a>
	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	SSE	94.98	<a href="#"><u>7</u></a>
	159 Forward Avenue Ottawa ON K1Y 1K9	ESE	110.12	<a href="#"><u>9</u></a>
	Ottawa Ottawa ON	NNW	118.78	<a href="#"><u>11</u></a>
	99-107 Parkdale Avenue (odd numbers only) Ottawa ON	NNW	127.21	<a href="#"><u>13</u></a>
	101 Parkdale Avenue Ottawa ON K1Y 1E6	NW	140.86	<a href="#"><u>15</u></a>
	200 Tunneys Pasture Driveway Ottawa ON K1Y4G8	W	174.05	<a href="#"><u>22</u></a>
	161 Hinchey Ave Ottawa ON K1Y 1L5	E	176.85	<a href="#"><u>23</u></a>
	161 Hinchey Ave Ottawa ON K1Y 1L5	E	176.85	<a href="#"><u>23</u></a>

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	161 Hinchey Ave Ottawa ON K1Y 1L5	E	176.85	<a href="#">23</a>
	161 Hinchey Ave Ottawa Ontario Ottawa ON K1Y 1L5	E	176.90	<a href="#">24</a>
	192 Forward Ave Ottawa ON K1Y1E8	SE	195.30	<a href="#">31</a>
	187 Forward Avenue Ottawa ON K1Y 1L2	SE	244.98	<a href="#">45</a>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	99 Parkdale Avenue Ottawa ON K1Y 1E6	NW	141.81	<a href="#">16</a>
	71 Carruthers Ave Ottawa ON K1Y1N3	E	245.45	<a href="#">47</a>

### **FCS - Contaminated Sites on Federal Land**

A search of the FCS database, dated Jun 2000-Jan 2021 has found that there are 1 FCS site(s) within approximately 0.25 kilometers of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Environmental Health Centre	Ottawa ON	WNW	232.74	<a href="#">41</a>

### **GEN - Ontario Regulation 347 Waste Generators Summary**

A search of the GEN database, dated 1986-Jan 31, 2021 has found that there are 68 GEN site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
GVT. OF CAN.-PUBLIC WORKS OF CAN.	REALTY BRANCH TUNNEY'S PASTURE ASS.BLDG C/O TUNNEY'S PASTURE DBS BLDG RM 1005 OTTAWA-CARLETON ON K1A 0M3	WNW	87.80	<a href="#">6</a>



<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
PUBLIC WORKS & GOVERNMENT SERVS. CANADA	ASSORTED BUILDINGS TUNNEY'S PASTURE (FEDERAL COMPLEX) OTTAWA ON K1A 0M3	WNW	87.80	<a href="#">6</a>
GVT. OF CAN.-PUBLIC WORKS OF CAN. 18-337	REALTY BRANCH TUNNEY'S PASTURE ASS.BLDG OTTAWA,C/O 1000-38 ANTARES DRIVE NEPEAN ON K1A 0M3	WNW	87.80	<a href="#">6</a>
PUBLIC WORKS & GOVERNMENT SERVICES CAN.	ASSORTED BUILDING TUNNEY'S PASTURE (FEDERAL COMPLEX) OTTAWA ON K1A 0M3	WNW	87.80	<a href="#">6</a>
PUBLIC WORKS CANADA	TUNNEY'S PASTURE - FEDERAL COMPLEX ASSORTED BUILDINGS OTTAWA ON	WNW	87.80	<a href="#">6</a>
BROOKFIELD LEPAGE JOHNSON CONTROLS	TUNNEY'S PASTURE FEDERAL COMPLEX ASSORTED BUILDINGS OTTAWA ON	WNW	87.80	<a href="#">6</a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1B4	WNW	87.80	<a href="#">6</a>
Public Works and Government Services	120 Parkdale Ottawa ON K1A 1B4	WNW	87.80	<a href="#">6</a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW	87.80	<a href="#">6</a>
Public Works and Government Services	120 Parkdale Ottawa ON K1A 1B4	WNW	87.80	<a href="#">6</a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW	87.80	<a href="#">6</a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW	87.80	<a href="#">6</a>

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
SNC LAVALIN O & M	120 PARKDALE AVENUE VARIOUS BUILDINGS OTTAWA ON	WNW	87.80	<a href="#"><u>6</u></a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	WNW	87.80	<a href="#"><u>6</u></a>
SNC LAVALIN O & M	120 PARKDALE AVENUE VARIOUS BUILDINGS OTTAWA ON	WNW	87.80	<a href="#"><u>6</u></a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON	WNW	87.80	<a href="#"><u>6</u></a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
Public Works and Government Services Canada	120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
Public Services & Procurement Canada ESD/AFD	120 Parkdale, Ottawa ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
Public Services & Procurement Canada ESD/AFD	120 Parkdale, Ottawa ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
Public Services & Procurement Canada ESD/AFD	120 Parkdale, Ottawa ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
Golder Associates Ltd.	159 Forward Ave. Ottawa ON K1Y 1K9	E	110.04	<a href="#"><u>8</u></a>
FRANK & SONS PAINTING & DECORATING LTD.	184 FORWARD AVENUE OTTAWA ON K1Y 1L2	SE	177.13	<a href="#"><u>25</u></a>

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
FRANK & SONS PAINTING & DECORATING LTD.	184 FORWARD AVENUE OTTAWA ON K1Y 1L2	SE	177.13	<a href="#">25</a>
FRANK & SONS PAINTING & DECORATING LTD.	184 FORWARD AVENUE OTTAWA ON K1Y 1L2	SE	177.13	<a href="#">25</a>
CAMECO-CANADIAN MINING&ENERGY CORP	C/O 360 ALBERT ST. SUITE 700 R & D TUNNEY'S PASTURE OTTAWA ON K1R 7X7	SSW	189.29	<a href="#">27</a>
CAMECO-CANADIAN MINING&ENERGY CORP	C/O P.O. BOX 3430 STATION "C" R & D TUNNEY'S PASTURE OTTAWA ON K1R 4J6	SSW	189.29	<a href="#">27</a>
CAMECO-CANADIAN MINING&ENERGY CORP14-102	C/O P.O. BOX 3430 STATION "C" R & D TUNNEY'S PASTURE OTTAWA ON K1R 4J6	SSW	189.29	<a href="#">27</a>
GVT. OF CAN. - HEALTH AND WELFARE	TUNNEY'S PASTURE C/O 140 PROMENADE DU PORTAGE (P. WORKS) OTTAWA ON K1A 0M3	SSW	189.29	<a href="#">27</a>
HEALTH AND WELFARE CANADA	TUNNEY'S PASTURE OTTAWA ON K1A 0L2	SSW	189.29	<a href="#">27</a>
HEALTH AND WELFARE CANADA	HEALTH UNIT #12, RM. 1002, RH COATS BLDG (STATS, CAN.), TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#">27</a>
GVT OF CAN-HEALTH&WELFARE CAN.MED. 16-298	SER.BR,HEALTH UNIT#12,RM 1002, RH COATS BLDG,TUNNEY'S PASTURE,C/O 301 ELGIN ST OTTAWA ON K1A 0L3	SSW	189.29	<a href="#">27</a>
GVT. OF CAN. PUBLIC WORKS	NATIONAL REASEARCH COUNCIL, BLDG. SRVCS HEALTH PROT. BLDG. 7, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	SSW	189.29	<a href="#">27</a>
GVT. OF CAN. PUBLIC WORKS 18-245	NATIONAL REASEARCH COUNCIL, BLDG. SRVCS HEALTH PROT. BLDG. 7, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	SSW	189.29	<a href="#">27</a>

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#">27</a>
NATIONAL ARCHIVES OF CANADA	STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#">27</a>
GVT. OF CAN. - NATIONAL ARCHIVES CANADA	STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#">27</a>
NATIONAL ARCHIVES CANADA	STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#">27</a>
GVT. OF CANADA-INDUSTRY CANADA	STANDARDS BUILDING TUNNEY'S PASTURE, HOLLAND AVE. OTTAWA ON	SSW	189.29	<a href="#">27</a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW	189.29	<a href="#">27</a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW	189.29	<a href="#">27</a>
Lexus Mechanical	150 Tunney's Pasture Ottawa ON	SSW	189.29	<a href="#">27</a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW	189.29	<a href="#">27</a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#">27</a>
Statistics Canada	150Tunney's Pasture Driveway Main Bldg, SC0005 Ottawa ON	SSW	189.29	<a href="#">27</a>

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
Health Canada	150 Tunney's Pasture Drwy Ottawa ON	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA	1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#"><u>27</u></a>
Statistics Canada	150Tunney's Pasture Driveway Main Bldg, SC0005 Ottawa ON K1A0T6	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division	1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division	1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#"><u>27</u></a>
GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division	1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	SSW	189.29	<a href="#"><u>27</u></a>
CANADIAN NUCLEAR SAFETY COMMISSION	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1A 0L2	W	214.74	<a href="#"><u>36</u></a>
CANADIAN NUCLEAR SAFETY COMMISSION	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON	W	214.74	<a href="#"><u>36</u></a>

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
CANADIAN NUCLEAR SAFETY COMMISSION	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON	W	214.74	<a href="#"><u>36</u></a>
NATIONAL RESEARCH COUNCIL	HEALTH PROTECTION BUILDING 7 HOLLAND AVENUE, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	W	214.74	<a href="#"><u>36</u></a>
GVT. OF CAN. - ATOMIC ENERGY CONT.	L B, TUNNEY'S PASTURE (HPB BUILDING) C/O P O BOX 1046 OTTAWA ON K1P 5S9	W	214.74	<a href="#"><u>36</u></a>
ATOMIC ENERGY CONTROL BOARD	HPB BUILDING (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1P 5S9	W	214.74	<a href="#"><u>36</u></a>
GVT. OF CAN. - ATOMIC ENERGY CONT.18-029	L B, TUNNEY'S PASTURE (HPB BUILDING) C/O P O BOX 1046 OTTAWA ON K1P 5S9	W	214.74	<a href="#"><u>36</u></a>
ATOMIC ENERGY CONTROL BOARD	HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1A 0L2	W	214.74	<a href="#"><u>36</u></a>
<b><u>Lower Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
CCC384	44 EMMERSON AVE OTTAWA ON K1Y 2L8	NNW	204.14	<a href="#"><u>33</u></a>
JOHANNES POTHUMA	80 CARRUTHERS AVE. OTTAWA ON K1Y 1N2	E	210.45	<a href="#"><u>35</u></a>
JOHANNES POTHUMA 22-285	80 CARRUTHERS AVE. OTTAWA ON K1Y 1N2	E	210.45	<a href="#"><u>35</u></a>
OTTAWA COMMUNITY HOUSING CORP.	18 BURNSIDE AVE., OTTAWA ON K1Y 4V7	ENE	228.27	<a href="#"><u>39</u></a>
BROOKFIELD GLOBAL INTEGRATED SOLUTIONS	70 COLOMBINE DRIVWAY TUNNEY'S PASTURE OTTAWA ON K1A 0K9	WNW	249.42	<a href="#"><u>49</u></a>

## **HINC - TSSA Historic Incidents**

A search of the HINC database, dated 2006-June 2009\* has found that there are 2 HINC site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	58 CARRUTHERS AVENUE OTTAWA ON K1Y 1N2	ENE	190.79	<a href="#"><u>28</u></a>
	56 CARRUTHERS AVENUE OTTAWA ON K1Y 1N2	ENE	194.50	<a href="#"><u>30</u></a>

## **NPCB - National PCB Inventory**

A search of the NPCB database, dated 1988-2008\* has found that there are 1 NPCB site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
HEALTH AND WELFARE CANADA	LAB. CENTRE FOR DISEASE CONT.; HOLLAND AVE. OTTAWA ON K1A 0L2	SSW	189.29	<a href="#"><u>27</u></a>

## **NPRI - National Pollutant Release Inventory**

A search of the NPRI database, dated 1993-May 2017 has found that there are 1 NPRI site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
SNC-LAVALIN PROFAC	120 Parkdale Avenue Ottawa ON K1A6T6	WNW	87.80	<a href="#"><u>6</u></a>

## **PES - Pesticide Register**

A search of the PES database, dated Oct 2011-Jan 31, 2021 has found that there are 2 PES site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
DANIEL C BAKER	921-100 HINCHEY AVENUE OTTAWA ON K1Y 4L9	NE	154.70	<a href="#"><u>21</u></a>

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
DANIEL BAKER	100 HINCHEY AVE; #921 OTTAWA ON K1Y4L9	NE	154.70	<a href="#">21</a>

### **PINC - Pipeline Incidents**

A search of the PINC database, dated Oct 31, 2020 has found that there are 1 PINC site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
ENBRIDGE GAS INC	121 PARKDALE AVE,,OTTAWA,ON, K1Y 1E6,CA ON	NW	72.21	<a href="#">3</a>

### **PTTW - Permit to Take Water**

A search of the PTTW database, dated 1994-Feb 28, 2021 has found that there are 1 PTTW site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Les Constructions Brigil Inc.	99 Parkdale Avenue Ottawa, ON K1Y1E6 Canada ON	NNW	143.37	<a href="#">18</a>

### **RSC - Record of Site Condition**

A search of the RSC database, dated 1997-Sept 2001, Oct 2004-Jan 2021 has found that there are 1 RSC site(s) within approximately 0.25 kilometers of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
JOHN HOWARD SOCIETY OF OTTAWA	59 CARRUTHERS AVENUE, OTTAWA, ON K1Y 1N3 Ottawa ON	ENE	235.99	<a href="#">42</a>

### **SCT - Scott's Manufacturing Directory**

A search of the SCT database, dated 1992-Mar 2011\* has found that there are 1 SCT site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Statistics Canada	120 Parkdale Ave Ottawa ON K1A 0K9	WNW	87.80	<a href="#">6</a>



## SPL - Ontario Spills

A search of the SPL database, dated 1988-Mar 2020; Jul 2020 - Aug 2020 has found that there are 23 SPL site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Enbridge Gas Distribution Inc.	121 Parkdale Ave Ottawa ON	NW	72.21	<a href="#"><u>3</u></a>
STATISTICS CANADA BUILDING	120 PARKDALE AVE 120 PARDALE AVENUE, OTTAWA OTTAWA CITY ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
	120 Parkdale Avenue Ottawa ON K1A 1K6	WNW	87.80	<a href="#"><u>6</u></a>
BROOKFIELD LEPAGE JOHNSON CONT	PROPERTY MANAGEMENT CO. 120 PARKDALE AVE, SUITE 1401, OTTAWA OTTAWA CITY ON K1A 0K9	WNW	87.80	<a href="#"><u>6</u></a>
	50 Burnside Ave Ottawa ON	ENE	111.77	<a href="#"><u>10</u></a>
PRIVATE RESIDENCE	AT RESIDENCE AT 154 HINCHY AVE. FURNACE OIL TANK OTTAWA CITY ON	E	132.03	<a href="#"><u>14</u></a>
	170 Tunney's Pasture Lane STATISTICS CANADA LOADING DOCK<UNOFFICIAL> Ottawa ON	WSW	142.65	<a href="#"><u>17</u></a>
	170 Tunneys Pasture Driveway Ottawa ON	WSW	142.65	<a href="#"><u>17</u></a>
	170 Tunney's Pasture Drive Ottawa ON	WSW	142.65	<a href="#"><u>17</u></a>
	170 Tunneys Pasture Ottawa ON	WSW	142.65	<a href="#"><u>17</u></a>

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
Waste Connections of Canada Inc.	170 Tunney's Pasture Dr Ottawa ON	WSW	142.65	<a href="#"><u>17</u></a>
BFI	TUNNY'S PASTURE-PUBLIC WORKS STATS. BUILDING LOADING DOCK MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY ON	SSW	189.29	<a href="#"><u>27</u></a>
	150 Tunneys Pasture Driveway Ottawa ON	SSW	189.29	<a href="#"><u>27</u></a>
S. 21(1)(f)	58 Carruthers Avenue Ottawa ON K1Y 1N2	ENE	190.79	<a href="#"><u>28</u></a>
	56 Carruthers Avenue Ottawa ON K1Y 1N2	ENE	194.50	<a href="#"><u>30</u></a>
<b><u>Lower Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
PRIVATE RESIDENCE	63 CARRUTHURS AVENUE FURNACE OIL TANK OTTAWA CITY ON	ENE	226.46	<a href="#"><u>38</u></a>
	18 Burnside Ave. OTTAWA HOUSING GARAGE<UNOFFICIAL> Ottawa ON K1Y 4V7	ENE	228.27	<a href="#"><u>39</u></a>
	In front of 55 Carruthers Street<UNOFFICIAL> Ottawa ON K1Y 1N3	ENE	231.55	<a href="#"><u>40</u></a>
Unknown<UNOFFICIAL>	55 Carruthers Ave. Ottawa Ottawa ON	ENE	231.55	<a href="#"><u>40</u></a>
PRIVATE RESIDENCE	185 HINCHEY AVE. FURNACE OIL TANK OTTAWA CITY ON K1Y 1L6	ESE	247.15	<a href="#"><u>48</u></a>
PRIVATE RESIDENCE	185 HINCHEY FURNACE OIL TANK OTTAWA CITY ON K1Y 1L6	ESE	247.15	<a href="#"><u>48</u></a>

70 Colombine Driveway Ottawa ON	WNW	249.42	<a href="#">49</a>
------------------------------------	-----	--------	--------------------

70 Colombine Driveway Ottawa ON K1A 0K9	WNW	249.42	<a href="#">49</a>
--	-----	--------	--------------------

### **WWIS - Water Well Information System**

A search of the WWIS database, dated Apr 30, 2020 has found that there are 7 WWIS site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
--------------------------------------	-----------------------	-------------------------	----------------------------	-----------------------

111 PARKDALE AVENUE 121 Ottawa ON	NNW	78.49	<a href="#">4</a>
--------------------------------------	-----	-------	-------------------

**Well ID:** 7205866

52 CARRUTHERS AVE Ottawa ON	ENE	193.22	<a href="#">29</a>
--------------------------------	-----	--------	--------------------

**Well ID:** 7201623

<b><u>Lower Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
-------------------------------	-----------------------	-------------------------	----------------------------	-----------------------

50 COLOMBINE DRIVEWAY Ottawa ON	NW	200.17	<a href="#">32</a>
------------------------------------	----	--------	--------------------

**Well ID:** 7240369

50 COLOMBINE DRIVEWAY Ottawa ON	NW	209.76	<a href="#">34</a>
------------------------------------	----	--------	--------------------

**Well ID:** 7240370

50 COLOMBINE DRIVEWAY Ottawa ON	NW	217.77	<a href="#">37</a>
------------------------------------	----	--------	--------------------

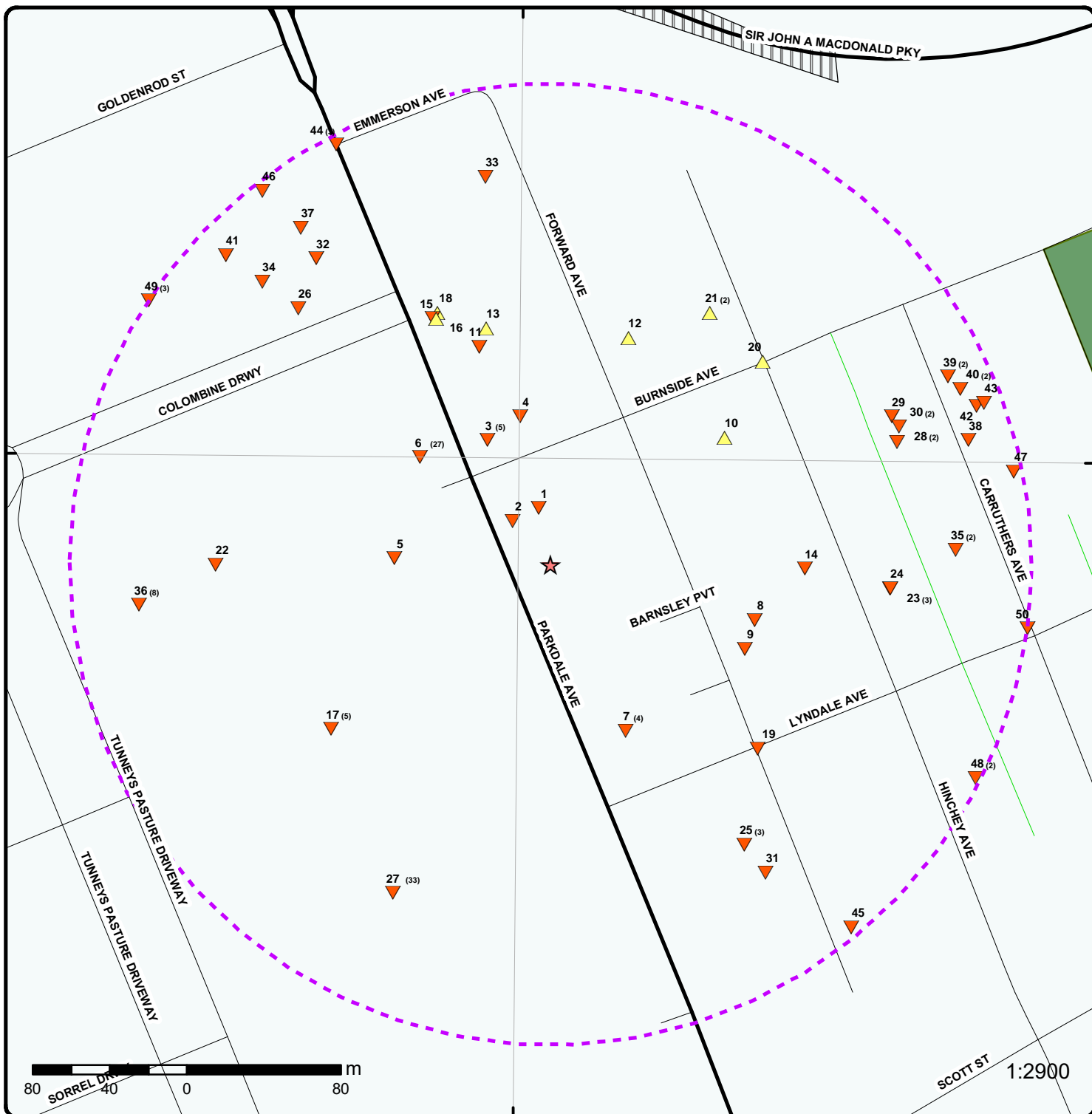
**Well ID:** 7240371

55 CARRUTHERS AVENUE OTTAWA ON	ENE	240.38	<a href="#">43</a>
-----------------------------------	-----	--------	--------------------

**Well ID:** 7264754

50 COLOMBINE DRIVEWAY Ottawa ON	NW	244.99	<a href="#">46</a>
------------------------------------	----	--------	--------------------

**Well ID:** 7240373



1:2900

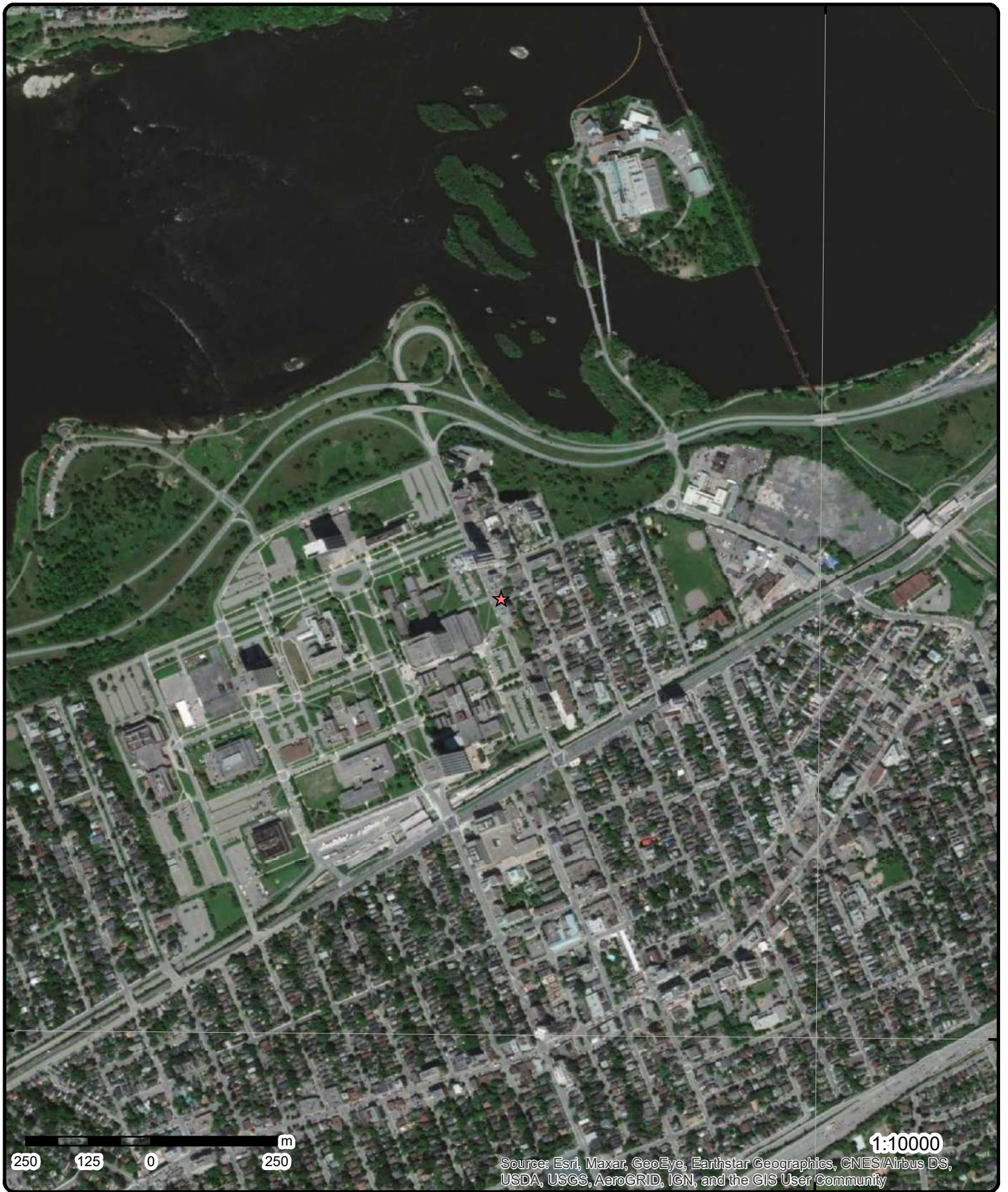
### Map: 0.25 Kilometer Radius

Order Number: 21032600420

Address: 139 Parkdale Avenue, Ottawa, ON



Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range
Eris Sites with Lower Elevation	Local road	Abandoned Line	Park or Sports Field
Eris Sites with Unknown Elevation	Trail	Proposed Road	Other Recreation Area
	Ferry Route/Ice Road		



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Aerial** Year: 2008

**Address: 139 Parkdale Avenue, Ottawa, ON**

Source: ESRI World Imagery

Order Number: 21032600420



© ERIS Information Limited Partnership



# Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#"><u>1</u></a>	1 of 1	NNW/29.9	60.9 / 0.00	131 Parkdale Ave Ottawa ON K1Y1E7	EHS
<b>Order No:</b> 20150130072 <b>Status:</b> C <b>Report Type:</b> Custom Report <b>Report Date:</b> 05-FEB-15 <b>Date Received:</b> 30-JAN-15 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b>		<b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .25 <b>X:</b> -75.733185 <b>Y:</b> 45.408101			
<a href="#"><u>2</u></a>	1 of 1	NW/30.0	60.9 / 0.00	131 PARKDALE AVENUE OTTAWA ON K1Y 1E7	EHS
<b>Order No:</b> 20070322027 <b>Status:</b> C <b>Report Type:</b> CAN - Custom Report <b>Report Date:</b> 4/2/2007 <b>Date Received:</b> 3/22/2007 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b> Fire Insur. Maps And /or Site Plans		<b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> <b>Search Radius (km):</b> 0.25 <b>X:</b> -75.733357 <b>Y:</b> 45.40804			
<a href="#"><u>3</u></a>	1 of 5	NW/72.2	60.9 / 0.00	8609454 Canada Inc. 121 Parkdale Ave Ottawa ON K1J 7S6	ECA
<b>Approval No:</b> 0456-ATJM6R <b>Approval Date:</b> 2017-11-30 <b>Status:</b> Approved <b>Record Type:</b> ECA <b>Link Source:</b> IDS <b>SWP Area Name:</b> <b>Approval Type:</b> ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS <b>Project Type:</b> MUNICIPAL AND PRIVATE SEWAGE WORKS <b>Business Name:</b> 8609454 Canada Inc. <b>Address:</b> 121 Parkdale Ave <b>Full Address:</b> <b>Full PDF Link:</b> <a href="https://www.accessenvironment.ene.gov.on.ca/instruments/7476-ATET63-14.pdf">https://www.accessenvironment.ene.gov.on.ca/instruments/7476-ATET63-14.pdf</a>		<b>MOE District:</b> <b>City:</b> <b>Longitude:</b> <b>Latitude:</b> <b>Geometry X:</b> <b>Geometry Y:</b>			
<a href="#"><u>3</u></a>	2 of 5	NW/72.2	60.9 / 0.00	121 Parkdale Ave Ottawa ON K1Y2M3	EHS
<b>Order No:</b> 20180406111 <b>Status:</b> C <b>Report Type:</b> Site Report <b>Report Date:</b> 09-APR-18 <b>Date Received:</b> 06-APR-18 <b>Previous Site Name:</b> <b>Lot/Building Size:</b>		<b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .001 <b>X:</b> -75.73346 <b>Y:</b> 45.408451			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<i>Additional Info Ordered:</i>					
<a href="#">3</a>	3 of 5	NW/72.2	60.9 / 0.00	Enbridge Gas Distribution Inc. 121 Parkdale Ave Ottawa ON	SPL
<b>Ref No:</b>	4742-B8USMA			<b>Discharger Report:</b>	
<b>Site No:</b>	NA			<b>Material Group:</b>	
<b>Incident Dt:</b>	2019/01/28			<b>Health/Env Conseq:</b>	2 - Minor Environment
<b>Year:</b>				<b>Client Type:</b>	Corporation
<b>Incident Cause:</b>				<b>Sector Type:</b>	Miscellaneous Communal
<b>Incident Event:</b>	Leak/Break			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	35			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	NATURAL GAS (METHANE)			<b>Site Address:</b>	121 Parkdale Ave
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>	n/a			<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>	1075			<b>Site Region:</b>	Eastern
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>	Air			<b>Northing:</b>	
<b>MOE Response:</b>	No			<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	2019/01/28			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>	2019/03/08			<b>SAC Action Class:</b>	TSSA - Fuel Safety Branch - Hydrocarbon Fuel Release/Spill
<b>Incident Reason:</b>	Operator/Human Error			<b>Source Type:</b>	Pipeline/Components
<b>Site Name:</b>	commercial<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	TSSA FSB: 4 inch plastic gas main IP dmge, ongoing				
<b>Contaminant Qty:</b>	0 n/a				
<a href="#">3</a>	4 of 5	NW/72.2	60.9 / 0.00	ENBRIDGE GAS INC 121 PARKDALE AVE,,OTTAWA,ON,K1Y 1E6,CA ON	PINC
<b>Incident ID:</b>				<b>Fuel Category:</b>	
<b>Incident No:</b>	2492780			<b>Health Impact:</b>	
<b>Incident Reported Dt:</b>	1/29/2019			<b>Environment Impact:</b>	
<b>Type:</b>	FS-Pipeline Incident			<b>Property Damage:</b>	
<b>Status Code:</b>				<b>Service Interupt:</b>	
<b>Customer Acct Name:</b>	ENBRIDGE GAS INC			<b>Enforce Policy:</b>	
<b>Incident Address:</b>	121 PARKDALE AVE,,OTTAWA,ON,K1Y 1E6, CA			<b>Public Relation:</b>	
<b>Tank Status:</b>	Pipeline Damage Reason Est			<b>Pipeline System:</b>	
<b>Task No:</b>				<b>Depth:</b>	
<b>Spills Action Centre:</b>				<b>Pipe Material:</b>	
<b>Fuel Type:</b>				<b>PSIG:</b>	
<b>Fuel Occurrence Tp:</b>				<b>Attribute Category:</b>	
<b>Date of Occurrence:</b>				<b>Regulator Location:</b>	
<b>Occurrence Start Dt:</b>				<b>Method Details:</b>	
<b>Operation Type:</b>					
<b>Pipeline Type:</b>					
<b>Regulator Type:</b>					
<b>Summary:</b>					
<b>Reported By:</b>					
<b>Affiliation:</b>					
<b>Occurrence Desc:</b>					
<b>Damage Reason:</b>					
<b>Notes:</b>					



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">3</a>	5 of 5	NW/72.2	60.9 / 0.00	121 Parkdale Avenue Ottawa ON K1Y 1E6	EHS
<b>Order No:</b>	20321800156			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	23-DEC-20			<b>Search Radius (km):</b>	.25
<b>Date Received:</b>	18-DEC-20			<b>X:</b>	-75.733527
<b>Previous Site Name:</b>				<b>Y:</b>	45.4084156
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>	Fire Insur. Maps and/or Site Plans; City Directory; Aerial Photos				

<a href="#">4</a>	1 of 1	NNW/78.5	60.9 / 0.00	111 PARKDALE AVENUE 121 Ottawa ON	WWIS
<b>Well ID:</b>	7205866			<b>Data Entry Status:</b>	
<b>Construction Date:</b>				<b>Data Src:</b>	
<b>Primary Water Use:</b>	Monitoring			<b>Date Received:</b>	8/6/2013
<b>Sec. Water Use:</b>				<b>Selected Flag:</b>	Yes
<b>Final Well Status:</b>	Observation Wells			<b>Abandonment Rec:</b>	
<b>Water Type:</b>				<b>Contractor:</b>	7328
<b>Casing Material:</b>				<b>Form Version:</b>	7
<b>Audit No:</b>	Z171309			<b>Owner:</b>	
<b>Tag:</b>	A147953			<b>Street Name:</b>	111 PARKDALE AVENUE 121
<b>Construction Method:</b>				<b>County:</b>	OTTAWA
<b>Elevation (m):</b>				<b>Municipality:</b>	OTTAWA CITY
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	
<b>Well Depth:</b>				<b>Concession:</b>	
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					

**PDF URL (Map):** [https://d2khazk8e83rdv.cloudfront.net/moe\\_mapping/downloads/2Water/Wells\\_pdfs/720\7205866.pdf](https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/720\7205866.pdf)

#### Bore Hole Information

<b>Bore Hole ID:</b>	1004490019	<b>Elevation:</b>	60.758419
<b>DP2BR:</b>		<b>Elevrc:</b>	
<b>Spatial Status:</b>		<b>Zone:</b>	18
<b>Code OB:</b>		<b>East83:</b>	442616
<b>Code OB Desc:</b>		<b>North83:</b>	5028596
<b>Open Hole:</b>		<b>Org CS:</b>	UTM83
<b>Cluster Kind:</b>		<b>UTMRC:</b>	4
<b>Date Completed:</b>	3/12/2012	<b>UTMRC Desc:</b>	margin of error : 30 m - 100 m
<b>Remarks:</b>		<b>Location Method:</b>	wwr
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>			
<b>Improvement Location Method:</b>			
<b>Source Revision Comment:</b>			
<b>Supplier Comment:</b>			

#### Overburden and Bedrock Materials Interval

<b>Formation ID:</b>	1004918952
<b>Layer:</b>	3

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>		26			
<b>Most Common Material:</b>		ROCK			
<b>Mat2:</b>		15			
<b>Mat2 Desc:</b>		LIMESTONE			
<b>Mat3:</b>					
<b>Mat3 Desc:</b>					
<b>Formation Top Depth:</b>		1.19			
<b>Formation End Depth:</b>		18.44			
<b>Formation End Depth UOM:</b>		m			
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>		1004918951			
<b>Layer:</b>		2			
<b>Color:</b>		6			
<b>General Color:</b>		BROWN			
<b>Mat1:</b>		28			
<b>Most Common Material:</b>		SAND			
<b>Mat2:</b>		11			
<b>Mat2 Desc:</b>		GRAVEL			
<b>Mat3:</b>		05			
<b>Mat3 Desc:</b>		CLAY			
<b>Formation Top Depth:</b>		.6			
<b>Formation End Depth:</b>		1.19			
<b>Formation End Depth UOM:</b>		m			
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>		1004918950			
<b>Layer:</b>		1			
<b>Color:</b>		6			
<b>General Color:</b>		BROWN			
<b>Mat1:</b>		11			
<b>Most Common Material:</b>		GRAVEL			
<b>Mat2:</b>		28			
<b>Mat2 Desc:</b>		SAND			
<b>Mat3:</b>		84			
<b>Mat3 Desc:</b>		SILTY			
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		.6			
<b>Formation End Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment</u></b>					
<b><u>Sealing Record</u></b>					
<b>Plug ID:</b>		1004918960			
<b>Layer:</b>		1			
<b>Plug From:</b>		0.4			
<b>Plug To:</b>		14.9			
<b>Plug Depth UOM:</b>		m			
<b><u>Method of Construction &amp; Well</u></b>					
<b><u>Use</u></b>					
<b>Method Construction ID:</b>		1004918959			
<b>Method Construction Code:</b>		B			
<b>Method Construction:</b>		Other Method			
<b>Other Method Construction:</b>		HSA, DIAMOND			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>			1004918949		
<b>Casing No:</b>			0		
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>			1004918956		
<b>Layer:</b>					
<b>Material:</b>					
<b>Open Hole or Material:</b>					
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>			cm		
<b>Casing Depth UOM:</b>			m		
<b><u>Construction Record - Screen</u></b>					
<b>Screen ID:</b>			1004918957		
<b>Layer:</b>					
<b>Slot:</b>					
<b>Screen Top Depth:</b>					
<b>Screen End Depth:</b>					
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>			m		
<b>Screen Diameter UOM:</b>			cm		
<b>Screen Diameter:</b>					
<b><u>Water Details</u></b>					
<b>Water ID:</b>			1004918955		
<b>Layer:</b>					
<b>Kind Code:</b>					
<b>Kind:</b>					
<b>Water Found Depth:</b>					
<b>Water Found Depth UOM:</b>			m		
<b><u>Hole Diameter</u></b>					
<b>Hole ID:</b>			1004918953		
<b>Diameter:</b>			20.3		
<b>Depth From:</b>			0		
<b>Depth To:</b>			1.19		
<b>Hole Depth UOM:</b>			m		
<b>Hole Diameter UOM:</b>			cm		
<b><u>Hole Diameter</u></b>					
<b>Hole ID:</b>			1004918954		
<b>Diameter:</b>			7.62		
<b>Depth From:</b>			1.19		
<b>Depth To:</b>			18.44		
<b>Hole Depth UOM:</b>			m		
<b>Hole Diameter UOM:</b>			cm		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>5</u>	1 of 1	W/81.1	60.9 / 0.00	ON	BORE
<b>Borehole ID:</b>	613172			<b>Inclin FLG:</b>	No
<b>OGF ID:</b>	215514475			<b>SP Status:</b>	Initial Entry
<b>Status:</b>				<b>Surv Elev:</b>	No
<b>Type:</b>	Borehole			<b>Piezometer:</b>	No
<b>Use:</b>				<b>Primary Name:</b>	
<b>Completion Date:</b>	JUN-1966			<b>Municipality:</b>	
<b>Static Water Level:</b>				<b>Lot:</b>	
<b>Primary Water Use:</b>				<b>Township:</b>	
<b>Sec. Water Use:</b>				<b>Latitude DD:</b>	45.40786
<b>Total Depth m:</b>	4.8			<b>Longitude DD:</b>	-75.734138
<b>Depth Ref:</b>	Ground Surface			<b>UTM Zone:</b>	18
<b>Depth Elev:</b>				<b>Easting:</b>	442551
<b>Drill Method:</b>				<b>Northing:</b>	5028522
<b>Orig Ground Elev m:</b>	60.8			<b>Location Accuracy:</b>	
<b>Elev Reliabil Note:</b>				<b>Accuracy:</b>	Not Applicable
<b>DEM Ground Elev m:</b>	61.1				
<b>Concession:</b>					
<b>Location D:</b>					
<b>Survey D:</b>					
<b>Comments:</b>					

**Borehole Geology Stratum**

<b>Geology Stratum ID:</b>	218394002			<b>Mat Consistency:</b>	
<b>Top Depth:</b>	0			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>	.8			<b>Material Texture:</b>	
<b>Material Color:</b>				<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>				<b>Geologic Formation:</b>	
<b>Material 2:</b>	Fill			<b>Geologic Group:</b>	
<b>Material 3:</b>	Gravel			<b>Geologic Period:</b>	
<b>Material 4:</b>	Sand			<b>Depositional Gen:</b>	
<b>Gsc Material Description:</b>					
<b>Stratum Description:</b>	ARTIFICIAL.				
<b>Geology Stratum ID:</b>	218394005			<b>Mat Consistency:</b>	Dense
<b>Top Depth:</b>	3.3			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>	4.8			<b>Material Texture:</b>	Fine
<b>Material Color:</b>				<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>	Bedrock			<b>Geologic Formation:</b>	
<b>Material 2:</b>				<b>Geologic Group:</b>	
<b>Material 3:</b>				<b>Geologic Period:</b>	
<b>Material 4:</b>				<b>Depositional Gen:</b>	
<b>Gsc Material Description:</b>					
<b>Stratum Description:</b>	BEDROCK. 00025 008 00060 020 00025042000600860060003NE. DENSE. SAND-FINE. VERY **Note: Many records provided by the department have a truncated [Stratum Description] field.				
<b>Geology Stratum ID:</b>	218394004			<b>Mat Consistency:</b>	
<b>Top Depth:</b>	1.8			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>	3.3			<b>Material Texture:</b>	
<b>Material Color:</b>				<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>	Bedrock			<b>Geologic Formation:</b>	
<b>Material 2:</b>				<b>Geologic Group:</b>	
<b>Material 3:</b>				<b>Geologic Period:</b>	
<b>Material 4:</b>				<b>Depositional Gen:</b>	
<b>Gsc Material Description:</b>					
<b>Stratum Description:</b>	BEDROCK.				
<b>Geology Stratum ID:</b>	218394003			<b>Mat Consistency:</b>	
<b>Top Depth:</b>	.8			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>	1.8			<b>Material Texture:</b>	
<b>Material Color:</b>	Brown			<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>				<b>Geologic Formation:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
---------	-------------------	----------------------------	------------------	------	----

**Material 2:** Fill  
**Material 3:** Clay  
**Material 4:** Bedrock  
**Gsc Material Description:**  
**Stratum Description:** ARTIFICIAL. BROWN,GREY.

**Geologic Group:**  
**Geologic Period:**  
**Depositional Gen:**

**Source**

**Source Type:** Data Survey  
**Source Orig:** Geological Survey of Canada  
**Source Date:** 1956-1972  
**Confidence:** H  
**Observatio:**  
**Source Name:** Urban Geology Automated Information System (UGAIS)  
**Source Details:** File: OTTAWA2.txt RecordID: 056800 NTS\_Sheet: 31G05G  
**Confiden 1:** Logged by professional. Exact and complete description of material and properties.

**Source Appl:** Spatial/Tabular  
**Source Iden:** 1  
**Scale or Res:** Varies  
**Horizontal:** NAD27  
**Verticalda:** Mean Average Sea Level

**Source List**

**Source Identifier:** 1  
**Source Type:** Data Survey  
**Source Date:** 1956-1972  
**Scale or Resolution:** Varies  
**Source Name:** Urban Geology Automated Information System (UGAIS)  
**Source Originators:** Geological Survey of Canada

**Horizontal Datum:** NAD27  
**Vertical Datum:** Mean Average Sea Level  
**Projection Name:** Universal Transverse Mercator

<u>6</u>	1 of 27	WNW/87.8	60.9 / 0.00	<b>BROOKFIELD LEPAGE JOHNSON CONT PROPERTY MANAGEMENT CO. 120 PARKDALE AVE, SUITE 1401, OTTAWA OTTAWA CITY ON K1A 0K9</b>	<b>SPL</b>
----------	---------	----------	-------------	---	------------

**Ref No:** 194974  
**Site No:**  
**Incident Dt:** 2/13/2001  
**Year:**  
**Incident Cause:** OTHER TRANSPORTATION ACCIDENT  
**Incident Event:**  
**Contaminant Code:**  
**Contaminant Name:**  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Environment Impact:** Possible  
**Nature of Impact:** Water course or lake  
**Receiving Medium:** Land, Water  
**Receiving Env:**  
**MOE Response:**  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 2/14/2001  
**Dt Document Closed:**  
**Incident Reason:** ERROR  
**Site Name:**  
**Site County/District:**  
**Site Geo Ref Meth:**  
**Incident Summary:** BLJ CONTROLS GLYCOL SPILL TO GROUND CATCH BASIN  
**Contaminant Qty:**

**Discharger Report:**  
**Material Group:**  
**Health/Env Conseq:**  
**Client Type:**  
**Sector Type:**  
**Agency Involved:**  
**Nearest Watercourse:**  
**Site Address:**  
**Site District Office:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** 20107  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Map Datum:**  
**SAC Action Class:**  
**Source Type:**

<u>6</u>	2 of 27	WNW/87.8	60.9 / 0.00	<b>STATISTICS CANADA BUILDING 120 PARKDALE AVE 120 PARDALE AVENUE, OTTAWA OTTAWA CITY ON K1A 0K9</b>	<b>SPL</b>
----------	---------	----------	-------------	--	------------

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Ref No:</b> <b>Site No:</b> <b>Incident Dt:</b> <b>Year:</b> <b>Incident Cause:</b> <b>Incident Event:</b> <b>Contaminant Code:</b> <b>Contaminant Name:</b> <b>Contaminant Limit 1:</b> <b>Contam Limit Freq 1:</b> <b>Contaminant UN No 1:</b> <b>Environment Impact:</b> <b>Nature of Impact:</b> <b>Receiving Medium:</b> <b>Receiving Env:</b> <b>MOE Response:</b> <b>Dt MOE Arvl on Scn:</b> <b>MOE Reported Dt:</b> <b>Dt Document Closed:</b> <b>Incident Reason:</b> <b>Site Name:</b> <b>Site County/District:</b> <b>Site Geo Ref Meth:</b> <b>Incident Summary:</b> <b>Contaminant Qty:</b>	200676 5/15/2001 OTHER CAUSE (N.O.S.) Possible Air Pollution Air 5/15/2001 EQUIPMENT FAILURE			<b>Discharger Report:</b> <b>Material Group:</b> <b>Health/Env Conseq:</b> <b>Client Type:</b> <b>Sector Type:</b> <b>Agency Involved:</b> <b>Nearest Watercourse:</b> <b>Site Address:</b> <b>Site District Office:</b> <b>Site Postal Code:</b> <b>Site Region:</b> <b>Site Municipality:</b> 20107 <b>Site Lot:</b> <b>Site Conc:</b> <b>Northing:</b> <b>Easting:</b> <b>Site Geo Ref Accu:</b> <b>Site Map Datum:</b> <b>SAC Action Class:</b> <b>Source Type:</b>	
STATS CANADA BUILDING: 470 LBS. HALON 1301 TO AIR. FAULTY HEAT DETECTOR					

<u>6</u>	3 of 27	WNW/87.8	60.9 / 0.00	<b>GVT. OF CAN.-PUBLIC WORKS OF CAN.</b> <b>REALTY BRANCH TUNNEY'S PASTURE ASS.</b> <b>BLDG C/O TUNNEY'S PASTURE DBS BLDG RM</b> <b>1005</b> <b>OTTAWA-CARLETON ON K1A 0M3</b>	GEN
<b>Generator No:</b> <b>Status:</b> <b>Approval Years:</b> <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> <b>SIC Description:</b>	ON0144745 89,90 8689 OTHER HEALTH LAB.			<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<b>Detail(s)</b>					
<b>Waste Class:</b> <b>Waste Class Desc:</b>	113 ACID WASTE - OTHER METALS				
<b>Waste Class:</b> <b>Waste Class Desc:</b>	122 ALKALINE WASTES - OTHER METALS				

<u>6</u>	4 of 27	WNW/87.8	60.9 / 0.00	<b>PUBLIC WORKS &amp; GOVERNMENT SERVS.</b> <b>CANADA</b> <b>ASSORTED BUILDINGS TUNNEY'S PASTURE</b> <b>(FEDERAL COMPLEX)</b> <b>OTTAWA ON K1A 0M3</b>	GEN
<b>Generator No:</b> <b>Status:</b> <b>Approval Years:</b> <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> <b>SIC Description:</b>	ON0144745 92,93,97 8159 OTHER GEN. ADMIN.			<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Detail(s)</u>					
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		331			
<b>Waste Class Desc:</b>		WASTE COMPRESSED GASES			
<b>Waste Class:</b>		113			
<b>Waste Class Desc:</b>		ACID WASTE - OTHER METALS			
<b>Waste Class:</b>		122			
<b>Waste Class Desc:</b>		ALKALINE WASTES - OTHER METALS			
<b>Waste Class:</b>		145			
<b>Waste Class Desc:</b>		PAINT/PIGMENT/COATING RESIDUES			
<b>Waste Class:</b>		146			
<b>Waste Class Desc:</b>		OTHER SPECIFIED INORGANICS			
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		251			
<b>Waste Class Desc:</b>		OIL SKIMMINGS & SLUDGES			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		243			
<b>Waste Class Desc:</b>		PCB'S			

<u>6</u>	5 of 27	WNW/87.8	60.9 / 0.00	GVT. OF CAN.-PUBLIC WORKS OF CAN. 18-337 REALTY BRANCH TUNNEY'S PASTURE ASS. BLDG OTTAWA,C/O 1000-38 ANTARES DRIVE NEPEAN ON K1A 0M3	GEN
<b>Generator No:</b>	ON0144745			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	94,95			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8159				
<b>SIC Description:</b>	OTHER GEN. ADMIN.				

<u>Detail(s)</u>					
<b>Waste Class:</b>		122			
<b>Waste Class Desc:</b>		ALKALINE WASTES - OTHER METALS			
<b>Waste Class:</b>		113			
<b>Waste Class Desc:</b>		ACID WASTE - OTHER METALS			
<b>Waste Class:</b>		145			
<b>Waste Class Desc:</b>		PAINT/PIGMENT/COATING RESIDUES			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		243			
<b>Waste Class Desc:</b>		PCB'S			
<b>Waste Class:</b>		251			
<b>Waste Class Desc:</b>		OIL SKIMMINGS & SLUDGES			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			

<u>6</u>	6 of 27	WNW/87.8	60.9 / 0.00	<b>PUBLIC WORKS &amp; GOVERNMENT SERVICES CAN. ASSORTED BUILDING TUNNEY'S PASTURE (FEDERAL COMPLEX) OTTAWA ON K1A 0M3</b>	<b>GEN</b>
<b>Generator No:</b>	ON0144745			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	96			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8159				
<b>SIC Description:</b>	OTHER GEN. ADMIN.				

**Detail(s)**

<b>Waste Class:</b>	113
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	146
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	221
<b>Waste Class Desc:</b>	LIGHT FUELS
<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCB'S
<b>Waste Class:</b>	251
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">6</a>	7 of 27	WNW/87.8	60.9 / 0.00	PUBLIC WORKS CANADA TUNNEY'S PASTURE - FEDERAL COMPLEX ASSORTED BUILDINGS OTTAWA ON	GEN
<b>Generator No:</b>	ON0144745			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	98,99,00,01,02,03,04			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8159				
<b>SIC Description:</b>	OTHER GEN. ADMIN.				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	113				
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS				
<b>Waste Class:</b>	121				
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS				
<b>Waste Class:</b>	122				
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS				
<b>Waste Class:</b>	145				
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES				
<b>Waste Class:</b>	146				
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS				
<b>Waste Class:</b>	148				
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	213				
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES				
<b>Waste Class:</b>	221				
<b>Waste Class Desc:</b>	LIGHT FUELS				
<b>Waste Class:</b>	243				
<b>Waste Class Desc:</b>	PCB'S				
<b>Waste Class:</b>	251				
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES				
<b>Waste Class:</b>	252				
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS				
<b>Waste Class:</b>	263				
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	331				
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES				
<a href="#">6</a>	8 of 27	WNW/87.8	60.9 / 0.00	BROOKFIELD LEPAGE JOHNSON CONTROLS TUNNEY'S PASTURE FEDERAL COMPLEX ASSORTED BUILDINGS OTTAWA ON	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Generator No:</b> ON0554820 <b>Status:</b> <b>Approval Years:</b> 98,99,00,01,02,03,04 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 7512 <b>SIC Description:</b> NON-RES. BLDG. OPER.					
<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>					
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b> 145					
<b>Waste Class Desc:</b> PAINT/PIGMENT/COATING RESIDUES					
<b>Waste Class:</b> 146					
<b>Waste Class Desc:</b> OTHER SPECIFIED INORGANICS					
<b>Waste Class:</b> 148					
<b>Waste Class Desc:</b> INORGANIC LABORATORY CHEMICALS					
<b>Waste Class:</b> 212					
<b>Waste Class Desc:</b> ALIPHATIC SOLVENTS					
<b>Waste Class:</b> 213					
<b>Waste Class Desc:</b> PETROLEUM DISTILLATES					
<b>Waste Class:</b> 251					
<b>Waste Class Desc:</b> OIL SKIMMINGS & SLUDGES					
<b>Waste Class:</b> 252					
<b>Waste Class Desc:</b> WASTE OILS & LUBRICANTS					
<b>Waste Class:</b> 331					
<b>Waste Class Desc:</b> WASTE COMPRESSED GASES					
<b>Waste Class:</b> 263					
<b>Waste Class Desc:</b> ORGANIC LABORATORY CHEMICALS					
<b>Waste Class:</b> 121					
<b>Waste Class Desc:</b> ALKALINE WASTES - HEAVY METALS					
<a href="#">6</a>	9 of 27	WNW/87.8	60.9 / 0.00	Statistics Canada 120 Parkdale Ave Ottawa ON K1A 0K9	SCT
<b>Established:</b>					
<b>Plant Size (ft²):</b>					
<b>Employment:</b>					
<b>--Details--</b>					
<b>Description:</b> Book Publishers					
<b>SIC/NAICS Code:</b> 511130					
<b>Description:</b> Veterinary Services					
<b>SIC/NAICS Code:</b> 541940					
<a href="#">6</a>	10 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1B4	GEN
<b>Generator No:</b> ON4690864					
<b>Status:</b>					
<b>PO Box No:</b>					
<b>Country:</b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Approval Years:</b> <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> <b>SIC Description:</b>	05,06,07,08  911910			<b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>  Other Federal Government Public Administration	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b> <b>Waste Class Desc:</b>		212 ALIPHATIC SOLVENTS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		221 LIGHT FUELS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		213 PETROLEUM DISTILLATES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		251 OIL SKIMMINGS & SLUDGES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		213 PETROLEUM DISTILLATES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		113 ACID WASTE - OTHER METALS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		114 OTHER INORGANIC ACID WASTES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		243 PCB'S			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		331 WASTE COMPRESSED GASES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		252 WASTE OILS & LUBRICANTS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		263 ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		264 PHOTOPROCESSING WASTES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		112 ACID WASTE - HEAVY METALS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		121 ALKALINE WASTES - HEAVY METALS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		122 ALKALINE WASTES - OTHER METALS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		145 PAINT/PIGMENT/COATING RESIDUES			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		146 OTHER SPECIFIED INORGANICS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		148 INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		213 PETROLEUM DISTILLATES			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">6</a>	11 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services 120 Parkdale Ottawa ON K1A 1B4	GEN
<b>Generator No:</b>	ON9360293			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	05,06			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	Other Federal Government Public Administration				
<b>Detail(s)</b>					
<b>Waste Class:</b>	112				
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS				
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	263				
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	331				
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES				
<b>Waste Class:</b>	122				
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS				
<b>Waste Class:</b>	146				
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS				
<b>Waste Class:</b>	121				
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS				
<b>Waste Class:</b>	145				
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES				
<b>Waste Class:</b>	148				
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	252				
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS				

<a href="#">6</a>	12 of 27	WNW/87.8	60.9 / 0.00	120 Parkdale Avenue Ottawa ON K1A 1K6	SPL
<b>Ref No:</b>	2126-5MCP8H			<b>Discharger Report:</b>	
<b>Site No:</b>				<b>Material Group:</b>	Oil
<b>Incident Dt:</b>	5/8/2003			<b>Health/Env Conseq:</b>	
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Unknown
<b>Incident Event:</b>				<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	13			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	GAS OIL			<b>Site Address:</b>	
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	Eastern
<b>Environment Impact:</b>	Possible			<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>	Land			<b>Site Conc:</b>	
<b>Receiving Env:</b>				<b>Northing:</b>	
<b>MOE Response:</b>				<b>Easting:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Dt MOE Arvl on Scn:</b> <b>MOE Reported Dt:</b> <b>Dt Document Closed:</b> <b>Incident Reason:</b> <b>Site Name:</b> <b>Site County/District:</b> <b>Site Geo Ref Meth:</b> <b>Incident Summary:</b> <b>Contaminant Qty:</b>	5/8/2003			<b>Site Geo Ref Accu:</b> <b>Site Map Datum:</b> <b>SAC Action Class:</b> Spills <b>Source Type:</b> NATIONAL DEFENCE CENTRE - PKG LOT, NORTH OF BLDG #16<UNOFFICIAL>  Unkwn amt oil/gas to fed. pkg lot.	

<u>6</u>	13 of 27	WNW/87.8	60.9 / 0.00	<b>Public Works and Government Services Canada</b> <b>120 Parkdale, Tunneys Pasture, Various</b> <b>Buildings</b> <b>Ottawa ON K1A 1K6</b>	GEN
<b>Generator No:</b> <b>Status:</b> <b>Approval Years:</b> <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> <b>SIC Description:</b>	ON4690864  2009  911910			<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>  Other Federal Government Public Administration	

Detail(s)

<b>Waste Class:</b> <b>Waste Class Desc:</b>	112 ACID WASTE - HEAVY METALS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	113 ACID WASTE - OTHER METALS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	114 OTHER INORGANIC ACID WASTES
<b>Waste Class:</b> <b>Waste Class Desc:</b>	121 ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	122 ALKALINE WASTES - OTHER METALS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	145 PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b> <b>Waste Class Desc:</b>	146 OTHER SPECIFIED INORGANICS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	148 INORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	212 ALIPHATIC SOLVENTS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	213 PETROLEUM DISTILLATES
<b>Waste Class:</b> <b>Waste Class Desc:</b>	221 LIGHT FUELS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	243 PCBS
<b>Waste Class:</b> <b>Waste Class Desc:</b>	251 OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		331			
<b>Waste Class Desc:</b>		WASTE COMPRESSED GASES			

<a href="#">6</a>	14 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services 120 Parkdale Ottawa ON K1A 1B4	GEN
-------------------	----------	----------	-------------	---	-----

<b>Generator No:</b>	ON9360293	<b>PO Box No:</b>	
<b>Status:</b>		<b>Country:</b>	
<b>Approval Years:</b>	2010	<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>		<b>Co Admin:</b>	
<b>MHSW Facility:</b>		<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910		
<b>SIC Description:</b>	Other Federal Government Public Administration		

**Detail(s)**

<b>Waste Class:</b>	331
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES
<b>Waste Class:</b>	148
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	112
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS
<b>Waste Class:</b>	146
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS

<a href="#">6</a>	15 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	GEN
-------------------	----------	----------	-------------	---	-----

<b>Generator No:</b>	ON4690864	<b>PO Box No:</b>	
----------------------	-----------	-------------------	--

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Status:</b> <b>Approval Years:</b> 2010 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 911910 <b>SIC Description:</b> Other Federal Government Public Administration				<b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		114			
<b>Waste Class Desc:</b>		OTHER INORGANIC ACID WASTES			
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>		ALKALINE WASTES - HEAVY METALS			
<b>Waste Class:</b>		251			
<b>Waste Class Desc:</b>		OIL SKIMMINGS & SLUDGES			
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		331			
<b>Waste Class Desc:</b>		WASTE COMPRESSED GASES			
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		146			
<b>Waste Class Desc:</b>		OTHER SPECIFIED INORGANICS			
<b>Waste Class:</b>		113			
<b>Waste Class Desc:</b>		ACID WASTE - OTHER METALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		145			
<b>Waste Class Desc:</b>		PAINT/PIGMENT/COATING RESIDUES			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		122			
<b>Waste Class Desc:</b>		ALKALINE WASTES - OTHER METALS			
<b>Waste Class:</b>		243			
<b>Waste Class Desc:</b>		PCBS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>6</b>	16 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6	GEN

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
----------------	--------------------------	------------------------------------	--------------------------	-------------	-----------

<b>Generator No:</b>	ON4690864	<b>PO Box No:</b>
<b>Status:</b>		<b>Country:</b>
<b>Approval Years:</b>	2011	<b>Choice of Contact:</b>
<b>Contam. Facility:</b>		<b>Co Admin:</b>
<b>MHSW Facility:</b>		<b>Phone No Admin:</b>
<b>SIC Code:</b>	911910	
<b>SIC Description:</b>	Other Federal Government Public Administration	

**Detail(s)**

<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	112
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS
<b>Waste Class:</b>	113
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS
<b>Waste Class:</b>	146
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS
<b>Waste Class:</b>	251
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	331
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES
<b>Waste Class:</b>	264
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCBS
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS
<b>Waste Class:</b>	148
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS
<b>Waste Class:</b>	114
<b>Waste Class Desc:</b>	OTHER INORGANIC ACID WASTES
<b>Waste Class:</b>	221
<b>Waste Class Desc:</b>	LIGHT FUELS
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES

<u>6</u>	17 of 27	WNW/87.8	60.9 / 0.00	SNC LAVALIN O & M 120 PARKDALE AVENUE VARIOUS BUILDINGS	GEN
----------	----------	----------	-------------	--	-----



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>OTTAWA ON</b>					
<b>Generator No:</b>	ON8217071			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2012			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	Other Federal Government Public Administration				

<u>6</u>	18 of 27	WNW/87.8	60.9 / 0.00	<b>Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 1K6</b>	<b>GEN</b>
<b>Generator No:</b>	ON4690864			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2012			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	Other Federal Government Public Administration				

**Detail(s)**

<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	113
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	112
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS
<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCBS
<b>Waste Class:</b>	146
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS
<b>Waste Class:</b>	251
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES
<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	221
<b>Waste Class Desc:</b>	LIGHT FUELS
<b>Waste Class:</b>	264
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		114			
<b>Waste Class Desc:</b>		OTHER INORGANIC ACID WASTES			
<b>Waste Class:</b>		331			
<b>Waste Class Desc:</b>		WASTE COMPRESSED GASES			
<b>Waste Class:</b>		122			
<b>Waste Class Desc:</b>		ALKALINE WASTES - OTHER METALS			

<a href="#">6</a>	19 of 27	WNW/87.8	60.9 / 0.00	SNC-LAVALIN PROFAC 120 Parkdale Avenue Ottawa ON K1A6T6	NPRI
<b>NPRI ID:</b>	8800001457			<b>Org ID:</b>	
<b>Other ID:</b>				<b>Submit Date:</b>	
<b>No Other ID:</b>				<b>Last Modified:</b>	
<b>Track ID:</b>				<b>Contact ID:</b>	
<b>Report ID:</b>				<b>Cont Type:</b>	MED
<b>Report Type:</b>				<b>Contact Title:</b>	
<b>Rpt Type ID:</b>				<b>Cont First Name:</b>	
<b>Report Year:</b>	2004			<b>Cont Last Name:</b>	
<b>Not-Current Rpt?:</b>				<b>Contact Position:</b>	
<b>Yr of Last Filed Rpt:</b>				<b>Contact Fax:</b>	
<b>Fac ID:</b>				<b>Contact Ph.:</b>	
<b>Fac Name:</b>	MAIN STATISTICS, JEAN TALON, R.H. COATS			<b>Cont Area Code:</b>	
<b>Fac Address1:</b>				<b>Contact Tel.:</b>	
<b>Fac Address2:</b>				<b>Contact Ext.:</b>	
<b>Fac Postal Zip:</b>				<b>Cont Fax Area Cde:</b>	
<b>Facility Lat:</b>				<b>Contact Fax:</b>	
<b>Facility Long:</b>				<b>Contact Email:</b>	
<b>DLS (Last Filed Rpt):</b>				<b>Latitude:</b>	
<b>Facility DLS:</b>				<b>Longitude:</b>	
<b>Datum:</b>				<b>UTM Zone:</b>	
<b>Facility Cmnts:</b>				<b>UTM Northing:</b>	
<b>URL:</b>				<b>UTM Easting:</b>	
<b>No of Empl.:</b>	4000			<b>Waste Streams:</b>	
<b>Parent Co.:</b>				<b>No Streams:</b>	
<b>No Parent Co.:</b>				<b>Waste Off Sites:</b>	
<b>Pollut Prev Cmnts:</b>				<b>No Off Sites:</b>	
<b>Stacks:</b>				<b>Shutdown:</b>	
<b>No of Stacks:</b>				<b>No of Shutdown:</b>	
<b>Canadian SIC Code (2 digit):</b>					
<b>Canadian SIC Code:</b>					
<b>SIC Code Description:</b>					
<b>American SIC Code:</b>					
<b>NAICS Code (2 digit):</b>	53				
<b>NAICS 2 Description:</b>	Real Estate and Rental and Leasing				
<b>NAICS Code (4 digit):</b>	5311				
<b>NAICS 4 Description:</b>	Lessors of Real Estate				
<b>NAICS Code (6 digit):</b>	531120				
<b>NAICS 6 Description:</b>	Lessors of Non-Residential Buildings (except Mini-Warehouses)				

**Substance Release Report**

<b>CAS No:</b>	11104-93-1
<b>Report ID:</b>	
<b>Rpt Period:</b>	2004
<b>Subst Released:</b>	Nitrogen oxides (expressed as NO2)
<b>Air:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Water:</b>					
<b>Land:</b>					
<b>Total Releases:</b>					
<b>Units:</b>		tonnes			
<b>CAS No:</b> 7446-09-5					
<b>Report ID:</b>					
<b>Rpt Period:</b>		2004			
<b>Subst Released:</b>		Sulphur dioxide			
<b>Air:</b>					
<b>Water:</b>					
<b>Land:</b>					
<b>Total Releases:</b>					
<b>Units:</b>		tonnes			
<b>CAS No:</b> 811-97-2					
<b>Report ID:</b>					
<b>Rpt Period:</b>		2004			
<b>Subst Released:</b>		HFC-134a Hydrofluorocarbon			
<b>Air:</b>					
<b>Water:</b>					
<b>Land:</b>					
<b>Total Releases:</b>					
<b>Units:</b>		tonnes			

<a href="#">6</a>	20 of 27	WNW/87.8	60.9 / 0.00	SNC LAVALIN O & M 120 PARKDALE AVENUE VARIOUS BUILDINGS OTTAWA ON	GEN
<b>Generator No:</b>	ON8217071			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2013			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>					
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	112				
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS				
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	122				
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS				
<b>Waste Class:</b>	145				
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES				
<b>Waste Class:</b>	263				
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	252				
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS				
<b>Waste Class:</b>	331				
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES				
<b>Waste Class:</b>	121				
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS				
<b>Waste Class:</b>	251				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class Desc:</b>		OIL SKIMMINGS & SLUDGES			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			

<u>6</u>	21 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON	GEN
<b>Generator No:</b>	ON4690864			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2013			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>					

**Detail(s)**

<b>Waste Class:</b>	331
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES
<b>Waste Class:</b>	148
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	112
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS
<b>Waste Class:</b>	251
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	221
<b>Waste Class Desc:</b>	LIGHT FUELS
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS
<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCBS
<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	113
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	114
<b>Waste Class Desc:</b>	OTHER INORGANIC ACID WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		146			
<b>Waste Class Desc:</b>		OTHER SPECIFIED INORGANICS			

<u>6</u>	22 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	GEN
<b>Generator No:</b>	ON4690864			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2016			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	911910				

**Detail(s)**

<b>Waste Class:</b>	264
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS
<b>Waste Class:</b>	148
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	112
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS
<b>Waste Class:</b>	221
<b>Waste Class Desc:</b>	LIGHT FUELS
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCBS
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS
<b>Waste Class:</b>	331
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	114
<b>Waste Class Desc:</b>	OTHER INORGANIC ACID WASTES
<b>Waste Class:</b>	146
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		251			
<b>Waste Class Desc:</b>		OIL SKIMMINGS & SLUDGES			
<b>Waste Class:</b>		113			
<b>Waste Class Desc:</b>		ACID WASTE - OTHER METALS			

<u>6</u>	23 of 27	WNW/87.8	60.9 / 0.00	Public Works and Government Services Canada 120 Parkdale, Tunneys Pasture, Various Buildings Ottawa ON K1A 0K9	GEN
<b>Generator No:</b>	ON4690864			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2015			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	911910				

**Detail(s)**

<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCBS
<b>Waste Class:</b>	252
<b>Waste Class Desc:</b>	WASTE OILS & LUBRICANTS
<b>Waste Class:</b>	251
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES
<b>Waste Class:</b>	113
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS
<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	114
<b>Waste Class Desc:</b>	OTHER INORGANIC ACID WASTES
<b>Waste Class:</b>	264
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	331
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES
<b>Waste Class:</b>	146

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class Desc:</b>		OTHER SPECIFIED INORGANICS			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			

6      24 of 27      **WNW/87.8**      **60.9 / 0.00**      **Public Works and Government Services Canada  
120 Parkdale, Tunneys Pasture, Various  
Buildings  
Ottawa ON K1A 0K9**      **GEN**

<b>Generator No:</b>	ON4690864	<b>PO Box No:</b>	
<b>Status:</b>		<b>Country:</b>	Canada
<b>Approval Years:</b>	2014	<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No	<b>Co Admin:</b>	Anna Lacelle
<b>MHSW Facility:</b>	No	<b>Phone No Admin:</b>	613-993-5639 Ext.
<b>SIC Code:</b>	911910		
<b>SIC Description:</b>	911910		

**Detail(s)**

<b>Waste Class:</b>	112
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS
<b>Waste Class:</b>	146
<b>Waste Class Desc:</b>	OTHER SPECIFIED INORGANICS
<b>Waste Class:</b>	148
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	331
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES
<b>Waste Class:</b>	113
<b>Waste Class Desc:</b>	ACID WASTE - OTHER METALS
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	264
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES
<b>Waste Class:</b>	251
<b>Waste Class Desc:</b>	OIL SKIMMINGS & SLUDGES
<b>Waste Class:</b>	243
<b>Waste Class Desc:</b>	PCBS
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	122
<b>Waste Class Desc:</b>	ALKALINE WASTES - OTHER METALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>Waste Class:</b>		114			
<b>Waste Class Desc:</b>		OTHER INORGANIC ACID WASTES			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			

<a href="#">6</a>	25 of 27	WNW/87.8	60.9 / 0.00	Public Services & Procurement Canada ESD/AFD 120 Parkdale, Ottawa ON K1A 0K9	GEN
<b>Generator No:</b>	ON4690864			<b>PO Box No:</b>	
<b>Status:</b>	Registered			<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Dec 2018			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>					
<b>SIC Description:</b>					

**Detail(s)**

<b>Waste Class:</b>	112 C
<b>Waste Class Desc:</b>	Acid solutions - containing heavy metals
<b>Waste Class:</b>	113 C
<b>Waste Class Desc:</b>	Acid solutions - containing other metals and non-metals
<b>Waste Class:</b>	114 C
<b>Waste Class Desc:</b>	Other inorganic acid wastes
<b>Waste Class:</b>	121 C
<b>Waste Class Desc:</b>	Alkaline slutions - containing heavy metals
<b>Waste Class:</b>	122 C
<b>Waste Class Desc:</b>	Alkaline slutions - containing other metals and non-metals (not cyanide)
<b>Waste Class:</b>	145 I
<b>Waste Class Desc:</b>	Wastes from the use of pigments, coatings and paints
<b>Waste Class:</b>	145 L
<b>Waste Class Desc:</b>	Wastes from the use of pigments, coatings and paints
<b>Waste Class:</b>	146 L
<b>Waste Class Desc:</b>	Other specified inorganic sludges, slurries or solids
<b>Waste Class:</b>	146 R
<b>Waste Class Desc:</b>	Other specified inorganic sludges, slurries or solids
<b>Waste Class:</b>	146 T
<b>Waste Class Desc:</b>	Other specified inorganic sludges, slurries or solids
<b>Waste Class:</b>	148 B
<b>Waste Class Desc:</b>	Misc. wastes and inorganic chemicals
<b>Waste Class:</b>	148 C
<b>Waste Class Desc:</b>	Misc. wastes and inorganic chemicals



<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b>Waste Class:</b> <b>Waste Class Desc:</b>		148 L Misc. wastes and inorganic chemicals			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		212 B Aliphatic solvents and residues			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		212 L Aliphatic solvents and residues			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		213 B Petroleum distillates			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		213 I Petroleum distillates			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		221 I Light fuels			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		221 L Light fuels			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		243 D PCB			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		251 L Waste oils/sludges (petroleum based)			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		252 L Waste crankcase oils and lubricants			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		263 B Misc. waste organic chemicals			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		263 C Misc. waste organic chemicals			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		263 I Misc. waste organic chemicals			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		264 C Photoprocessing wastes			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		264 L Photoprocessing wastes			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		264 T Photoprocessing wastes			
<b>Waste Class:</b> <b>Waste Class Desc:</b>		331 I Waste compressed gases including cylinders			

<b>6</b>	<b>26 of 27</b>	<b>WNW/87.8</b>	<b>60.9 / 0.00</b>	<b>Public Services &amp; Procurement Canada ESD/AFD 120 Parkdale, Ottawa ON K1A 0K9</b>	<b>GEN</b>
<b>Generator No:</b>	ON4690864			<b>PO Box No:</b>	
<b>Status:</b>	Registered			<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Jul 2020			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>					
<b>SIC Description:</b>					

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>			146 T		
<b>Waste Class Desc:</b>			Other specified inorganic sludges, slurries or solids		
<b>Waste Class:</b>			212 L		
<b>Waste Class Desc:</b>			Aliphatic solvents and residues		
<b>Waste Class:</b>			221 L		
<b>Waste Class Desc:</b>			Light fuels		
<b>Waste Class:</b>			213 I		
<b>Waste Class Desc:</b>			Petroleum distillates		
<b>Waste Class:</b>			148 L		
<b>Waste Class Desc:</b>			Misc. wastes and inorganic chemicals		
<b>Waste Class:</b>			112 C		
<b>Waste Class Desc:</b>			Acid solutions - containing heavy metals		
<b>Waste Class:</b>			264 L		
<b>Waste Class Desc:</b>			Photoprocessing wastes		
<b>Waste Class:</b>			264 C		
<b>Waste Class Desc:</b>			Photoprocessing wastes		
<b>Waste Class:</b>			145 L		
<b>Waste Class Desc:</b>			Wastes from the use of pigments, coatings and paints		
<b>Waste Class:</b>			114 C		
<b>Waste Class Desc:</b>			Other inorganic acid wastes		
<b>Waste Class:</b>			121 C		
<b>Waste Class Desc:</b>			Alkaline slutions - containing heavy metals		
<b>Waste Class:</b>			145 I		
<b>Waste Class Desc:</b>			Wastes from the use of pigments, coatings and paints		
<b>Waste Class:</b>			212 B		
<b>Waste Class Desc:</b>			Aliphatic solvents and residues		
<b>Waste Class:</b>			221 I		
<b>Waste Class Desc:</b>			Light fuels		
<b>Waste Class:</b>			252 L		
<b>Waste Class Desc:</b>			Waste crankcase oils and lubricants		
<b>Waste Class:</b>			113 C		
<b>Waste Class Desc:</b>			Acid solutions - containing other metals and non-metals		
<b>Waste Class:</b>			146 R		
<b>Waste Class Desc:</b>			Other specified inorganic sludges, slurries or solids		
<b>Waste Class:</b>			148 B		
<b>Waste Class Desc:</b>			Misc. wastes and inorganic chemicals		
<b>Waste Class:</b>			331 I		
<b>Waste Class Desc:</b>			Waste compressed gases including cylinders		
<b>Waste Class:</b>			263 C		
<b>Waste Class Desc:</b>			Misc. waste organic chemicals		
<b>Waste Class:</b>			251 L		
<b>Waste Class Desc:</b>			Waste oils/sludges (petroleum based)		
<b>Waste Class:</b>			263 I		

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		263 B			
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		243 D			
<b>Waste Class Desc:</b>		PCB			
<b>Waste Class:</b>		122 C			
<b>Waste Class Desc:</b>		Alkaline slutions - containing other metals and non-metals (not cyanide)			
<b>Waste Class:</b>		213 B			
<b>Waste Class Desc:</b>		Petroleum distillates			
<b>Waste Class:</b>		264 T			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		148 C			
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			
<b>Waste Class:</b>		146 L			
<b>Waste Class Desc:</b>		Other specified inorganic sludges, slurries or solids			

**6**      **27 of 27**      **WNW/87.8**      **60.9 / 0.00**      **Public Services & Procurement Canada  
ESD/AFD  
120 Parkdale,  
Ottawa ON K1A 0K9**      **GEN**

<b>Generator No:</b>	ON4690864	<b>PO Box No:</b>	
<b>Status:</b>	Registered	<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Jan 2021	<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>		<b>Co Admin:</b>	
<b>MHSW Facility:</b>		<b>Phone No Admin:</b>	
<b>SIC Code:</b>			
<b>SIC Description:</b>			

**Detail(s)**

<b>Waste Class:</b>	122 C
<b>Waste Class Desc:</b>	Alkaline slutions - containing other metals and non-metals (not cyanide)
<b>Waste Class:</b>	146 R
<b>Waste Class Desc:</b>	Other specified inorganic sludges, slurries or solids
<b>Waste Class:</b>	263 C
<b>Waste Class Desc:</b>	Misc. waste organic chemicals
<b>Waste Class:</b>	331 R
<b>Waste Class Desc:</b>	Waste compressed gases including cylinders
<b>Waste Class:</b>	148 B
<b>Waste Class Desc:</b>	Misc. wastes and inorganic chemicals
<b>Waste Class:</b>	213 B
<b>Waste Class Desc:</b>	Petroleum distillates
<b>Waste Class:</b>	148 C
<b>Waste Class Desc:</b>	Misc. wastes and inorganic chemicals
<b>Waste Class:</b>	331 I
<b>Waste Class Desc:</b>	Waste compressed gases including cylinders
<b>Waste Class:</b>	252 L
<b>Waste Class Desc:</b>	Waste crankcase oils and lubricants

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Waste Class:</b>		121 C			
<b>Waste Class Desc:</b>		Alkaline slutions - containing heavy metals			
<b>Waste Class:</b>		145 L			
<b>Waste Class Desc:</b>		Wastes from the use of pigments, coatings and paints			
<b>Waste Class:</b>		251 L			
<b>Waste Class Desc:</b>		Waste oils/sludges (petroleum based)			
<b>Waste Class:</b>		213 I			
<b>Waste Class Desc:</b>		Petroleum distillates			
<b>Waste Class:</b>		264 T			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		146 L			
<b>Waste Class Desc:</b>		Other specified inorganic sludges, slurries or solids			
<b>Waste Class:</b>		221 L			
<b>Waste Class Desc:</b>		Light fuels			
<b>Waste Class:</b>		264 C			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		212 L			
<b>Waste Class Desc:</b>		Aliphatic solvents and residues			
<b>Waste Class:</b>		113 C			
<b>Waste Class Desc:</b>		Acid solutions - containing other metals and non-metals			
<b>Waste Class:</b>		263 B			
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		145 I			
<b>Waste Class Desc:</b>		Wastes from the use of pigments, coatings and paints			
<b>Waste Class:</b>		148 L			
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			
<b>Waste Class:</b>		264 L			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		114 C			
<b>Waste Class Desc:</b>		Other inorganic acid wastes			
<b>Waste Class:</b>		112 C			
<b>Waste Class Desc:</b>		Acid solutions - containing heavy metals			
<b>Waste Class:</b>		243 D			
<b>Waste Class Desc:</b>		PCB			
<b>Waste Class:</b>		146 T			
<b>Waste Class Desc:</b>		Other specified inorganic sludges, slurries or solids			
<b>Waste Class:</b>		212 B			
<b>Waste Class Desc:</b>		Aliphatic solvents and residues			
<b>Waste Class:</b>		263 I			
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		221 I			
<b>Waste Class Desc:</b>		Light fuels			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>7</u>	1 of 4	SSE/95.0	60.9 / 0.00	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	EHS
<b>Order No:</b>	20200417001			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	22-APR-20			<b>Search Radius (km):</b>	.25
<b>Date Received:</b>	17-APR-20			<b>X:</b>	-75.7325947
<b>Previous Site Name:</b>				<b>Y:</b>	45.4070621
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>					
<u>7</u>	2 of 4	SSE/95.0	60.9 / 0.00	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	EHS
<b>Order No:</b>	20200417001			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	22-APR-20			<b>Search Radius (km):</b>	.25
<b>Date Received:</b>	17-APR-20			<b>X:</b>	-75.7325947
<b>Previous Site Name:</b>				<b>Y:</b>	45.4070621
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>					
<u>7</u>	3 of 4	SSE/95.0	60.9 / 0.00	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	EHS
<b>Order No:</b>	20200417001			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	22-APR-20			<b>Search Radius (km):</b>	.25
<b>Date Received:</b>	17-APR-20			<b>X:</b>	-75.7325947
<b>Previous Site Name:</b>				<b>Y:</b>	45.4070621
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>					
<u>7</u>	4 of 4	SSE/95.0	60.9 / 0.00	159 - 167 Parkdale Avenue Ottawa ON K1Y 1E7	EHS
<b>Order No:</b>	20200417001			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	22-APR-20			<b>Search Radius (km):</b>	.25
<b>Date Received:</b>	17-APR-20			<b>X:</b>	-75.7325947
<b>Previous Site Name:</b>				<b>Y:</b>	45.4070621
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>					
<u>8</u>	1 of 1	E/110.0	60.9 / 0.00	Golder Associates Ltd. 159 Forward Ave. Ottawa ON K1Y 1K9	GEN
<b>Generator No:</b>	ON8253910			<b>PO Box No:</b>	
<b>Status:</b>	Registered			<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Oct 2019			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>					
<b>SIC Description:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Detail(s)</b>					
<b>Waste Class:</b>		146 T			
<b>Waste Class Desc:</b>		Other specified inorganic sludges, slurries or solids			
<a href="#">9</a>	1 of 1	ESE/110.1	60.9 / 0.00	159 Forward Avenue Ottawa ON K1Y 1K9	EHS
<b>Order No:</b>	20190321139		<b>Nearest Intersection:</b>		
<b>Status:</b>	C		<b>Municipality:</b>		
<b>Report Type:</b>	Standard Report		<b>Client Prov/State:</b> ON		
<b>Report Date:</b>	26-MAR-19		<b>Search Radius (km):</b> .25		
<b>Date Received:</b>	21-MAR-19		<b>X:</b> -75.731807		
<b>Previous Site Name:</b>			<b>Y:</b> 45.407451		
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>	City Directory				
<a href="#">10</a>	1 of 1	ENE/111.8	61.9 / 1.00	50 Burnside Ave Ottawa ON	SPL
<b>Ref No:</b>	1051-A7UU8M		<b>Discharger Report:</b>		
<b>Site No:</b>	NA		<b>Material Group:</b>		
<b>Incident Dt:</b>	2016/03/08		<b>Health/Env Conseq:</b>		
<b>Year:</b>			<b>Client Type:</b>		
<b>Incident Cause:</b>			<b>Sector Type:</b> Miscellaneous Communal		
<b>Incident Event:</b>	Leak/Break		<b>Agency Involved:</b>		
<b>Contaminant Code:</b>	13		<b>Nearest Watercourse:</b>		
<b>Contaminant Name:</b>	FUEL (N.O.S.)		<b>Site Address:</b> 50 Burnside Ave		
<b>Contaminant Limit 1:</b>			<b>Site District Office:</b>		
<b>Contam Limit Freq 1:</b>			<b>Site Postal Code:</b>		
<b>Contaminant UN No 1:</b>			<b>Site Region:</b>		
<b>Environment Impact:</b>			<b>Site Municipality:</b> Ottawa		
<b>Nature of Impact:</b>			<b>Site Lot:</b>		
<b>Receiving Medium:</b>			<b>Site Conc:</b>		
<b>Receiving Env:</b>	Surface Water		<b>Northing:</b>		
<b>MOE Response:</b>	No		<b>Easting:</b>		
<b>Dt MOE Arvl on Scn:</b>			<b>Site Geo Ref Accu:</b>		
<b>MOE Reported Dt:</b>	2016/03/08		<b>Site Map Datum:</b>		
<b>Dt Document Closed:</b>			<b>SAC Action Class:</b> Land Spills		
<b>Incident Reason:</b>	Operator/Human Error		<b>Source Type:</b>		
<b>Site Name:</b>	spill<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Ottawa small fuel spill from a car				
<b>Contaminant Qty:</b>	1 L				
<a href="#">11</a>	1 of 1	NNW/118.8	60.9 / 0.00	Ottawa Ottawa ON	EHS
<b>Order No:</b>	20191015030		<b>Nearest Intersection:</b>		
<b>Status:</b>	C		<b>Municipality:</b>		
<b>Report Type:</b>	Standard Report		<b>Client Prov/State:</b> ON		
<b>Report Date:</b>	17-OCT-19		<b>Search Radius (km):</b> .25		
<b>Date Received:</b>	15-OCT-19		<b>X:</b> -75.733586		
<b>Previous Site Name:</b>			<b>Y:</b> 45.408852		
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">12</a>	1 of 1	NNE/124.3	61.9 / 1.00	City of Ottawa Forward Avenue, Lyndale Avenue and Hinchey Avenue Ottawa ON K1N 5A1	ECA
<b>Approval No:</b> 8821-4WDQDT <b>Approval Date:</b> 2001-05-04 <b>Status:</b> Approved <b>Record Type:</b> ECA <b>Link Source:</b> IDS <b>SWP Area Name:</b> Rideau Valley <b>Approval Type:</b> ECA-Municipal and Private Water Works <b>Project Type:</b> Municipal and Private Water Works <b>Business Name:</b> City of Ottawa <b>Address:</b> Forward Avenue, Lyndale Avenue and Hinchey Avenue <b>Full Address:</b> <b>Full PDF Link:</b>					
<a href="#">13</a>	1 of 1	NNW/127.2	60.9 / 0.02	99-107 Parkdale Avenue (odd numbers only) Ottawa ON	EHS
<b>Order No:</b> 20111121018 <b>Status:</b> C <b>Report Type:</b> Custom Report <b>Report Date:</b> 11/28/2011 <b>Date Received:</b> 11/21/2011 12:28:47 PM <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b>					
<a href="#">14</a>	1 of 1	E/132.0	60.9 / 0.00	PRIVATE RESIDENCE AT RESIDENCE AT 154 HINCHY AVE. FURNACE OIL TANK OTTAWA CITY ON	SPL
<b>Ref No:</b> 174104 <b>Site No:</b> <b>Incident Dt:</b> // <b>Year:</b> <b>Incident Cause:</b> ABOVE-GROUND TANK LEAK <b>Incident Event:</b> <b>Contaminant Code:</b> <b>Contaminant Name:</b> <b>Contaminant Limit 1:</b> <b>Contam Limit Freq 1:</b> <b>Contaminant UN No 1:</b> <b>Environment Impact:</b> CONFIRMED <b>Nature of Impact:</b> Soil contamination <b>Receiving Medium:</b> LAND <b>Receiving Env:</b> <b>MOE Response:</b> <b>Dt MOE Arvl on Scn:</b> <b>MOE Reported Dt:</b> 10/23/1999 <b>Dt Document Closed:</b> <b>Incident Reason:</b> CORROSION <b>Site Name:</b> <b>Site County/District:</b> <b>Site Geo Ref Meth:</b> <b>Incident Summary:</b> RESIDENCE - FURNACE OIL TO EARTHEN BASEMENT IN HOME FROM STORAGE TANK. <b>Contaminant Qty:</b>					
<b>Discharger Report:</b> <b>Material Group:</b> <b>Health/Env Conseq:</b> <b>Client Type:</b> <b>Sector Type:</b> <b>Agency Involved:</b> <b>Nearest Watercourse:</b> <b>Site Address:</b> <b>Site District Office:</b> <b>Site Postal Code:</b> <b>Site Region:</b> <b>Site Municipality:</b> 20101 <b>Site Lot:</b> <b>Site Conc:</b> <b>Northing:</b> <b>Easting:</b> REPORT FAXED TO TSSA <b>Site Geo Ref Accu:</b> <b>Site Map Datum:</b> <b>SAC Action Class:</b> <b>Source Type:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">15</a>	1 of 1	NW/140.9	60.9 / 0.03	101 Parkdale Avenue Ottawa ON K1Y 1E6	EHS
<b>Order No:</b>	20101223007			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	12/30/2010			<b>Search Radius (km):</b>	0.25
<b>Date Received:</b>	12/23/2010 10:53:30 AM			<b>X:</b>	-75.733877
<b>Previous Site Name:</b>				<b>Y:</b>	45.408983
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>	Fire Insur. Maps and/or Site Plans; City Directory				
<a href="#">16</a>	1 of 1	NW/141.8	60.3 / -0.57	99 Parkdale Avenue Ottawa ON K1Y 1E6	EHS
<b>Order No:</b>	20191002099			<b>Nearest Intersection:</b>	
<b>Status:</b>	C			<b>Municipality:</b>	
<b>Report Type:</b>	Standard Report			<b>Client Prov/State:</b>	ON
<b>Report Date:</b>	07-OCT-19			<b>Search Radius (km):</b>	.25
<b>Date Received:</b>	02-OCT-19			<b>X:</b>	-75.733899
<b>Previous Site Name:</b>				<b>Y:</b>	45.408985
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>					
<a href="#">17</a>	1 of 5	WSW/142.7	60.9 / 0.00	170 Tunney's Pasture Lane STATISTICS CANADA LOADING DOCK<UNOFFICIAL> Ottawa ON	SPL
<b>Ref No:</b>	2378-6V5PU8			<b>Discharger Report:</b>	
<b>Site No:</b>				<b>Material Group:</b>	Chemicals
<b>Incident Dt:</b>	11/1/2006			<b>Health/Env Conseq:</b>	
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>	Other Discharges			<b>Sector Type:</b>	Other
<b>Incident Event:</b>				<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	21			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	BATTERY ACID (SULFURIC ACID)			<b>Site Address:</b>	170 TUNNEY'S PASTURE LANE
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	
<b>Environment Impact:</b>	Not Anticipated			<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>	Surface Water Pollution			<b>Site Lot:</b>	
<b>Receiving Medium:</b>	Water			<b>Site Conc:</b>	
<b>Receiving Env:</b>				<b>Northing:</b>	
<b>MOE Response:</b>				<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	11/1/2006			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	
<b>Incident Reason:</b>	Error- Operator error			<b>Source Type:</b>	
<b>Site Name:</b>	170 TUNNEY'S PASTURE LANE				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Statistics Canada: 1 gal battery acid to storm, Cln				
<b>Contaminant Qty:</b>	5 L				
<a href="#">17</a>	2 of 5	WSW/142.7	60.9 / 0.00	170 Tunneys Pasture Driveway Ottawa ON	SPL
<b>Ref No:</b>	4258-A6SKWM			<b>Discharger Report:</b>	
<b>Site No:</b>	NA			<b>Material Group:</b>	
<b>Incident Dt:</b>	2016/02/02			<b>Health/Env Conseq:</b>	



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Unknown / N/A
<b>Incident Event:</b>	Leak/Break			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	15			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	MACHINE OIL			<b>Site Address:</b>	170 Tunneys Pasture Driveway
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>	Land; Source Water Zone			<b>Northing:</b>	
<b>MOE Response:</b>	No			<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	2016/02/03			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	Land Spills
<b>Incident Reason:</b>	Equipment Failure			<b>Source Type:</b>	
<b>Site Name:</b>	John Talon Building<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Brookfield GIS, 1-2L machine oil spill, cleaned.				
<b>Contaminant Qty:</b>	2 other - see incident description				

<a href="#">17</a>	3 of 5	WSW/142.7	60.9 / 0.00	170 Tunney's Pasture Drive Ottawa ON	SPL
<b>Ref No:</b>	4614-AKUHST			<b>Discharger Report:</b>	
<b>Site No:</b>				<b>Material Group:</b>	
<b>Incident Dt:</b>	3/27/2017			<b>Health/Env Conseq:</b>	2 - Minor Environment
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Unknown / N/A
<b>Incident Event:</b>	Leak/Break			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	24			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	PROPYLENE GLYCOL			<b>Site Address:</b>	170 Tunney's Pasture Drive
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>	1142			<b>Site Region:</b>	Eastern
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>	Land			<b>Northing:</b>	5028388
<b>MOE Response:</b>				<b>Easting:</b>	442444
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	3/27/2017			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	
<b>Incident Reason:</b>	Operator/Human Error			<b>Source Type:</b>	Valve/Fitting/Piping
<b>Site Name:</b>	170 Tunney's Pasture Drive Ottawa<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	10-15L Glycol Spill; CB, Cntd, Ottawa				
<b>Contaminant Qty:</b>	15 L				

<a href="#">17</a>	4 of 5	WSW/142.7	60.9 / 0.00	170 Tunneys Pasture Ottawa ON	SPL
<b>Ref No:</b>	1251-AKUJZP			<b>Discharger Report:</b>	
<b>Site No:</b>				<b>Material Group:</b>	
<b>Incident Dt:</b>	3/27/2017			<b>Health/Env Conseq:</b>	2 - Minor Environment
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Miscellaneous Communal
<b>Incident Event:</b>	Collision/Accident			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	24			<b>Nearest Watercourse:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Contaminant Name:</b> PROPYLENE GLYCOL <b>Contaminant Limit 1:</b> <b>Contam Limit Freq 1:</b> <b>Contaminant UN No 1:</b> 1142 <b>Environment Impact:</b> <b>Nature of Impact:</b> <b>Receiving Medium:</b> <b>Receiving Env:</b> Land; Source Water Zone <b>MOE Response:</b> <b>Dt MOE Arvl on Scn:</b> <b>MOE Reported Dt:</b> 3/27/2017 <b>Dt Document Closed:</b> <b>Incident Reason:</b> Unknown / N/A <b>Site Name:</b> Approx. 2 L propylene glycol to CB.<UNOFFICIAL> <b>Site County/District:</b> <b>Site Geo Ref Meth:</b> <b>Incident Summary:</b> City of Ottawa: up to 2L of propylene glycol from truck to CB. <b>Contaminant Qty:</b> 15 L				<b>Site Address:</b> 170 Tunneys Pasture <b>Site District Office:</b> Ottawa <b>Site Postal Code:</b> <b>Site Region:</b> Eastern <b>Site Municipality:</b> Ottawa <b>Site Lot:</b> <b>Site Conc:</b> <b>Northing:</b> 5028327 <b>Easting:</b> 442355 <b>Site Geo Ref Accu:</b> <b>Site Map Datum:</b> <b>SAC Action Class:</b> <b>Source Type:</b> Motor Vehicle	

<a href="#">17</a>	5 of 5	WSW/142.7	60.9 / 0.00	<b>Waste Connections of Canada Inc.</b> <b>170 Tunney's Pasture Dr</b> <b>Ottawa ON</b>	<b>SPL</b>
<b>Ref No:</b> 6415-BEUQ8F <b>Site No:</b> NA <b>Incident Dt:</b> 8/8/2019 <b>Year:</b> <b>Incident Cause:</b> <b>Incident Event:</b> Leak/Break <b>Contaminant Code:</b> 46 <b>Contaminant Name:</b> COOKING GREASE <b>Contaminant Limit 1:</b> <b>Contam Limit Freq 1:</b> <b>Contaminant UN No 1:</b> n/a <b>Environment Impact:</b> <b>Nature of Impact:</b> <b>Receiving Medium:</b> <b>Receiving Env:</b> Land <b>MOE Response:</b> No <b>Dt MOE Arvl on Scn:</b> <b>MOE Reported Dt:</b> 8/8/2019 <b>Dt Document Closed:</b> 9/11/2019 <b>Incident Reason:</b> Unknown / N/A <b>Site Name:</b> Statistics Canada<UNOFFICIAL> <b>Site County/District:</b> <b>Site Geo Ref Meth:</b> <b>Incident Summary:</b> Waste Connections: 10L cooking oil spill <b>Contaminant Qty:</b> 10 L				<b>Discharger Report:</b> <b>Material Group:</b> <b>Health/Env Conseq:</b> 2 - Minor Environment Corporation <b>Client Type:</b> Miscellaneous Communal <b>Sector Type:</b> <b>Agency Involved:</b> <b>Nearest Watercourse:</b> <b>Site Address:</b> 170 Tunney's Pasture Dr <b>Site District Office:</b> Ottawa <b>Site Postal Code:</b> <b>Site Region:</b> Eastern <b>Site Municipality:</b> Ottawa <b>Site Lot:</b> <b>Site Conc:</b> <b>Northing:</b> 5028324.09 <b>Easting:</b> 442350.03 <b>Site Geo Ref Accu:</b> <b>Site Map Datum:</b> <b>SAC Action Class:</b> Land Spills <b>Source Type:</b> Container/Drum/Tote	

<a href="#">18</a>	1 of 1	NNW/143.4	60.9 / 0.03	<b>Les Constructions Brigil Inc.</b> <b>99 Parkdale Avenue Ottawa, ON K1Y1E6 Canada</b> <b>ON</b>	<b>PTTW</b>
<b>EBR Registry No:</b> 019-1562 <b>Ministry Ref No:</b> 4262-BM5RYU <b>Notice Type:</b> Instrument <b>Notice Stage:</b> Proposal <b>Notice Date:</b> <b>Proposal Date:</b> April 6, 2020 <b>Year:</b> 2020 <b>Instrument Type:</b> Permit to take water <b>Off Instrument Name:</b> Permit to Take Water (OWRA s. 34)				<b>Decision Posted:</b> <b>Exception Posted:</b> <b>Section:</b> Section 34 <b>Act 1:</b> Ontario Water Resources Act, R.S.O. 1990 <b>Act 2:</b> Ontario Water Resources Act <b>Site Location Map:</b> 45.40898,-75.73398	

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Posted By:</b> Ministry of the Environment, Conservation and Parks					
<b>Company Name:</b>					
<b>Site Address:</b> 99 Parkdale Avenue Ottawa, ON K1Y1E6 Canada					
<b>Location Other:</b>					
<b>Proponent Name:</b> Les Constructions Brigil Inc.					
<b>Proponent Address:</b> 98 Lois Street Gatineau, QC J8Y 3R7 Canada					
<b>Comment Period:</b> April 6, 2020 - May 6, 2020 (30 days) Closed					
<b>URL:</b> <a href="https://ero.ontario.ca/notice/019-1562">https://ero.ontario.ca/notice/019-1562</a>					
<b>Site Location Details:</b>					

<a href="#">19</a>	1 of 1	ESE/144.1	60.9 / 0.00	City of Ottawa Forward Avenue, Lyndale Avenue and Hinchey Avenue Ottawa ON K1N 5A1	ECA
<b>Approval No:</b> 8746-4WDR47					
<b>Approval Date:</b> 2001-05-04					
<b>Status:</b> Approved					
<b>Record Type:</b> ECA					
<b>Link Source:</b> IDS					
<b>SWP Area Name:</b> Rideau Valley					
<b>Approval Type:</b> ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS					
<b>Project Type:</b> MUNICIPAL AND PRIVATE SEWAGE WORKS					
<b>Business Name:</b> City of Ottawa					
<b>Address:</b> Forward Avenue, Lyndale Avenue and Hinchey Avenue					
<b>Full Address:</b>					
<b>Full PDF Link:</b> <a href="https://www.accessenvironment.ene.gov.on.ca/instruments/7782-4WBQ6E-14.pdf">https://www.accessenvironment.ene.gov.on.ca/instruments/7782-4WBQ6E-14.pdf</a>					

<a href="#">20</a>	1 of 1	NE/152.5	61.9 / 1.00	OTTAWA CITY BURNSIDE AVE./HINCHEY AVE. OTTAWA CITY ON	CA
<b>Certificate #:</b> 3-0468-99-					
<b>Application Year:</b> 99					
<b>Issue Date:</b> 5/17/1999					
<b>Approval Type:</b> Municipal sewage					
<b>Status:</b> Approved					
<b>Application Type:</b>					
<b>Client Name:</b>					
<b>Client Address:</b>					
<b>Client City:</b>					
<b>Client Postal Code:</b>					
<b>Project Description:</b>					
<b>Contaminants:</b>					
<b>Emission Control:</b>					

<a href="#">21</a>	1 of 2	NE/154.7	61.9 / 1.00	DANIEL C BAKER 921-100 HINCHEY AVENUE OTTAWA ON K1Y 4L9	PES
<b>Detail Licence No:</b>				<b>Operator Box:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<p><b>Licence No:</b> <b>Status:</b> <b>Approval Date:</b> <b>Report Source:</b> <b>Licence Type:</b> Operator <b>Licence Type Code:</b> <b>Licence Class:</b> <b>Licence Control:</b> <b>Latitude:</b> <b>Longitude:</b> <b>Lot:</b> <b>Concession:</b> <b>Region:</b> <b>District:</b> <b>County:</b> <b>Trade Name:</b> <b>PDF Link:</b></p> <p><b>Operator Class:</b> <b>Operator No:</b> <b>Operator Type:</b> <b>Oper Area Code:</b> <b>Oper Phone No:</b> <b>Operator Ext:</b> <b>Operator Lot:</b> <b>Oper Concession:</b> <b>Operator Region:</b> <b>Operator District:</b> <b>Operator County:</b> <b>Op Municipality:</b> <b>Post Office Box:</b> <b>MOE District:</b> <b>SWP Area Name:</b></p>					
<a href="#">21</a>	2 of 2	NE/154.7	61.9 / 1.00	<b>DANIEL BAKER</b> 100 HINCHEY AVE; #921 OTTAWA ON K1Y4L9	<b>PES</b>
<p><b>Detail Licence No:</b> <b>Licence No:</b> <b>Status:</b> <b>Approval Date:</b> <b>Report Source:</b> <b>Licence Type:</b> Operator <b>Licence Type Code:</b> <b>Licence Class:</b> <b>Licence Control:</b> <b>Latitude:</b> <b>Longitude:</b> <b>Lot:</b> <b>Concession:</b> <b>Region:</b> <b>District:</b> <b>County:</b> <b>Trade Name:</b> <b>PDF Link:</b></p> <p><b>Operator Box:</b> <b>Operator Class:</b> <b>Operator No:</b> <b>Operator Type:</b> <b>Oper Area Code:</b> <b>Oper Phone No:</b> <b>Operator Ext:</b> <b>Operator Lot:</b> <b>Oper Concession:</b> <b>Operator Region:</b> <b>Operator District:</b> <b>Operator County:</b> <b>Op Municipality:</b> <b>Post Office Box:</b> <b>MOE District:</b> <b>SWP Area Name:</b></p>					
<a href="#">22</a>	1 of 1	W/174.1	60.9 / 0.00	200 Tunneys Pasture Driveway Ottawa ON K1Y4G8	<b>EHS</b>
<p><b>Order No:</b> 20170605059 <b>Status:</b> C <b>Report Type:</b> Custom Report <b>Report Date:</b> 09-JUN-17 <b>Date Received:</b> 05-JUN-17 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b></p> <p><b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .1 <b>X:</b> -75.735326 <b>Y:</b> 45.407822</p>					
<a href="#">23</a>	1 of 3	E/176.9	60.9 / 0.00	161 Hinchey Ave Ottawa ON K1Y 1L5	<b>EHS</b>
<p><b>Order No:</b> 20200618031 <b>Status:</b> C <b>Report Type:</b> RSC Report (Urban) <b>Report Date:</b> 29-JUN-20</p> <p><b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .3</p>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Date Received:</b> 18-JUN-20 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b>					
<a href="#">23</a>	2 of 3	E/176.9	60.9 / 0.00	161 Hinchey Ave Ottawa ON K1Y 1L5	EHS
<b>Order No:</b> 20200618031 <b>Status:</b> C <b>Report Type:</b> RSC Report (Urban) <b>Report Date:</b> 29-JUN-20 <b>Date Received:</b> 18-JUN-20 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b>					
<b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .3 <b>X:</b> -75.7308465 <b>Y:</b> 45.4077394					
<a href="#">23</a>	3 of 3	E/176.9	60.9 / 0.00	161 Hinchey Ave Ottawa ON K1Y 1L5	EHS
<b>Order No:</b> 20200618031 <b>Status:</b> C <b>Report Type:</b> RSC Report (Urban) <b>Report Date:</b> 29-JUN-20 <b>Date Received:</b> 18-JUN-20 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b>					
<b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .3 <b>X:</b> -75.7308465 <b>Y:</b> 45.4077394					
<a href="#">24</a>	1 of 1	E/176.9	60.9 / 0.00	161 Hinchey Ave Ottawa Ontario Ottawa ON K1Y 1L5	EHS
<b>Order No:</b> 20191017137 <b>Status:</b> C <b>Report Type:</b> Standard Report <b>Report Date:</b> 22-OCT-19 <b>Date Received:</b> 17-OCT-19 <b>Previous Site Name:</b> <b>Lot/Building Size:</b> <b>Additional Info Ordered:</b> Fire Insur. Maps and/or Site Plans					
<b>Nearest Intersection:</b> <b>Municipality:</b> <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> .25 <b>X:</b> -75.730846 <b>Y:</b> 45.407739					
<a href="#">25</a>	1 of 3	SE/177.1	60.9 / 0.00	FRANK & SONS PAINTING & DECORATING LTD. 184 FORWARD AVENUE OTTAWA ON K1Y 1L2	GEN
<b>Generator No:</b> ON2361400 <b>Status:</b> <b>Approval Years:</b> 98,99,00,01,02,03,04,06,07,08 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 4275 <b>SIC Description:</b> PAINT. & DECOR. WORK					
<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>					
<b>Detail(s)</b>					
<b>Waste Class:</b> 211 <b>Waste Class Desc:</b> AROMATIC SOLVENTS					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<a href="#">25</a>	2 of 3	SE/177.1	60.9 / 0.00	FRANK & SONS PAINTING & DECORATING LTD. 184 FORWARD AVENUE OTTAWA ON K1Y 1L2	GEN
<b>Generator No:</b>	ON2361400			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2009			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	238320				
<b>SIC Description:</b>	Painting and Wall Covering Contractors				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<a href="#">25</a>	3 of 3	SE/177.1	60.9 / 0.00	FRANK & SONS PAINTING & DECORATING LTD. 184 FORWARD AVENUE OTTAWA ON K1Y 1L2	GEN
<b>Generator No:</b>	ON2361400			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2010			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	238320				
<b>SIC Description:</b>	Painting and Wall Covering Contractors				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<a href="#">26</a>	1 of 1	NW/186.8	59.9 / -1.00	ON	BORE
<b>Borehole ID:</b>	613201			<b>Inclin FLG:</b>	No
<b>OGF ID:</b>	215514504			<b>SP Status:</b>	Initial Entry
<b>Status:</b>				<b>Surv Elev:</b>	No
<b>Type:</b>	Borehole			<b>Piezometer:</b>	No
<b>Use:</b>				<b>Primary Name:</b>	
<b>Completion Date:</b>	NOV-1962			<b>Municipality:</b>	
<b>Static Water Level:</b>				<b>Lot:</b>	
<b>Primary Water Use:</b>				<b>Township:</b>	
<b>Sec. Water Use:</b>				<b>Latitude DD:</b>	45.409026
<b>Total Depth m:</b>	-999			<b>Longitude DD:</b>	-75.734792
<b>Depth Ref:</b>	Ground Surface			<b>UTM Zone:</b>	18
<b>Depth Elev:</b>				<b>Easting:</b>	442501
<b>Drill Method:</b>				<b>Northing:</b>	5028652
<b>Orig Ground Elev m:</b>	60.9			<b>Location Accuracy:</b>	
<b>Elev Reliabil Note:</b>				<b>Accuracy:</b>	Not Applicable
<b>DEM Ground Elev m:</b>	59.7				
<b>Concession:</b>					
<b>Location D:</b>					
<b>Survey D:</b>					
<b>Comments:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b><u>Borehole Geology Stratum</u></b>					
<b>Geology Stratum ID:</b>	218394118			<b>Mat Consistency:</b>	Compact
<b>Top Depth:</b>	2.6			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>				<b>Material Texture:</b>	
<b>Material Color:</b>	Grey			<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>	Bedrock			<b>Geologic Formation:</b>	
<b>Material 2:</b>	Limestone			<b>Geologic Group:</b>	
<b>Material 3:</b>	Shale			<b>Geologic Period:</b>	
<b>Material 4:</b>				<b>Depositional Gen:</b>	
<b>Gsc Material Description:</b>					
<b>Stratum Description:</b>	BEDROCK. ED. CLAY. GREY,STIFF. 00000005 SAND. LOOSE TO COMPACT. UNSPECIFIED. DENSE.				
<b>Geology Stratum ID:</b>	218394116			<b>Mat Consistency:</b>	Loose
<b>Top Depth:</b>	0			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>	1			<b>Material Texture:</b>	
<b>Material Color:</b>				<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>	Sand			<b>Geologic Formation:</b>	
<b>Material 2:</b>				<b>Geologic Group:</b>	
<b>Material 3:</b>				<b>Geologic Period:</b>	
<b>Material 4:</b>				<b>Depositional Gen:</b>	
<b>Gsc Material Description:</b>					
<b>Stratum Description:</b>	SAND. LOOSE.				
<b>Geology Stratum ID:</b>	218394117			<b>Mat Consistency:</b>	Firm
<b>Top Depth:</b>	1			<b>Material Moisture:</b>	
<b>Bottom Depth:</b>	2.6			<b>Material Texture:</b>	
<b>Material Color:</b>				<b>Non Geo Mat Type:</b>	
<b>Material 1:</b>	Sand			<b>Geologic Formation:</b>	
<b>Material 2:</b>	Gravel			<b>Geologic Group:</b>	
<b>Material 3:</b>				<b>Geologic Period:</b>	
<b>Material 4:</b>				<b>Depositional Gen:</b>	
<b>Gsc Material Description:</b>					
<b>Stratum Description:</b>	SAND. FIRM.				
<b><u>Source</u></b>					
<b>Source Type:</b>	Data Survey			<b>Source Appl:</b>	Spatial/Tabular
<b>Source Orig:</b>	Geological Survey of Canada			<b>Source Iden:</b>	1
<b>Source Date:</b>	1956-1972			<b>Scale or Res:</b>	Varies
<b>Confidence:</b>				<b>Horizontal:</b>	NAD27
<b>Observatio:</b>				<b>Verticalda:</b>	Mean Average Sea Level
<b>Source Name:</b>	Urban Geology Automated Information System (UGAIS)				
<b>Source Details:</b>	File: OTTAWA2.txt RecordID: 057090 NTS_Sheet: 31G05G				
<b>Confiden 1:</b>					
<b><u>Source List</u></b>					
<b>Source Identifier:</b>	1			<b>Horizontal Datum:</b>	NAD27
<b>Source Type:</b>	Data Survey			<b>Vertical Datum:</b>	Mean Average Sea Level
<b>Source Date:</b>	1956-1972			<b>Projection Name:</b>	Universal Transverse Mercator
<b>Scale or Resolution:</b>	Varies				
<b>Source Name:</b>	Urban Geology Automated Information System (UGAIS)				
<b>Source Originators:</b>	Geological Survey of Canada				
<b>27</b>	1 of 33	SSW/189.3	60.9 / 0.00	HEALTH AND WELFARE CANADA LAB. CENTRE FOR DISEASE CONT.; HOLLAND AVE. OTTAWA ON K1A 0L2	NPCB
<b>Company Code:</b>	O3162				
<b>Industry:</b>	Public Works Canada				
<b>Site Status:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
---------	-------------------	----------------------------	------------------	------	----

Transaction Date: 5/30/1990  
 Inspection Date:

<a href="#">27</a>	2 of 33	SSW/189.3	60.9 / 0.00	BFI TUNNY'S PASTURE-PUBLIC WORKS STATS. BUILDING LOADING DOCK MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY ON	SPL
--------------------	---------	-----------	-------------	--	-----

Ref No:	48783	Discharger Report:	
Site No:		Material Group:	
Incident Dt:	4/8/1991	Health/Env Conseq:	
Year:		Client Type:	
Incident Cause:	PIPE/HOSE LEAK	Sector Type:	
Incident Event:		Agency Involved:	
Contaminant Code:		Nearest Watercourse:	
Contaminant Name:		Site Address:	
Contaminant Limit 1:		Site District Office:	
Contam Limit Freq 1:		Site Postal Code:	
Contaminant UN No 1:		Site Region:	
Environment Impact:	NOT ANTICIPATED	Site Municipality:	20101
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:	
MOE Reported Dt:	4/8/1991	Site Map Datum:	
Dt Document Closed:		SAC Action Class:	
Incident Reason:	OVERSTRESS/OVERPRESSURE	Source Type:	
Site Name:			
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	BFI-500 L HYDRAULIC FLUID TO LOADING DOCK AREA.		
Contaminant Qty:			

<a href="#">27</a>	3 of 33	SSW/189.3	60.9 / 0.00	PUBLIC WORKS & GOVT. SERVICES CANADA, CS TUNNEY'S PASTURE, BUILDING #4 OTTAWA CITY ON	CA
--------------------	---------	-----------	-------------	--	----

Certificate #:	8-4194-96-
Application Year:	96
Issue Date:	11/26/1996
Approval Type:	Industrial air
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	NEW FUME/VAPOUR RECOVERY SYSTEM
Contaminants:	
Emission Control:	Vapour Condenser

<a href="#">27</a>	4 of 33	SSW/189.3	60.9 / 0.00	CAMECO-CANADIAN MINING&ENERGY CORP C/O 360 ALBERT ST. SUITE 700 R & D TUNNEY'S PASTURE OTTAWA ON K1R 7X7	GEN
--------------------	---------	-----------	-------------	---	-----

Generator No:	ON0008201	PO Box No:	
---------------	-----------	------------	--



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Status:</b> <b>Approval Years:</b> 88 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 2959 <b>SIC Description:</b> OTHER SMELTING, ETC.				<b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		241			
<b>Waste Class Desc:</b>		HALOGENATED SOLVENTS			
<a href="#">27</a>	5 of 33	SSW/189.3	60.9 / 0.00	CAMECO-CANADIAN MINING&ENERGY CORP C/O P.O. BOX 3430 STATION "C" R & D TUNNEY'S PASTURE OTTAWA ON K1R 4J6	GEN
<b>Generator No:</b> ON0008201 <b>Status:</b> <b>Approval Years:</b> 89,90 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 2959 <b>SIC Description:</b> OTHER SMELTING, ETC.				<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		241			
<b>Waste Class Desc:</b>		HALOGENATED SOLVENTS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<a href="#">27</a>	6 of 33	SSW/189.3	60.9 / 0.00	CAMECO-CANADIAN MINING&ENERGY CORP14-102 C/O P.O. BOX 3430 STATION "C" R & D TUNNEY'S PASTURE OTTAWA ON K1R 4J6	GEN
<b>Generator No:</b> ON0008201 <b>Status:</b> <b>Approval Years:</b> 92,93,94,95,96,97 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 2959 <b>SIC Description:</b> OTHER SMELTING, ETC.				<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>Detail(s)</u>					
<b>Waste Class:</b>			148		
<b>Waste Class Desc:</b>			INORGANIC LABORATORY CHEMICALS		
<b>Waste Class:</b>			211		
<b>Waste Class Desc:</b>			AROMATIC SOLVENTS		
<b>Waste Class:</b>			212		
<b>Waste Class Desc:</b>			ALIPHATIC SOLVENTS		
<b>Waste Class:</b>			241		
<b>Waste Class Desc:</b>			HALOGENATED SOLVENTS		
<b>Waste Class:</b>			263		
<b>Waste Class Desc:</b>			ORGANIC LABORATORY CHEMICALS		

<a href="#">27</a>	7 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN. - HEALTH AND WELFARE TUNNEY'S PASTURE C/O 140 PROMENADE DU PORTAGE (P.WORKS) OTTAWA ON K1A 0M3	GEN
<b>Generator No:</b>	ON0095600			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	86,87,88,89			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8693				
<b>SIC Description:</b>	HEALTH CARE RESEARCH				

<u>Detail(s)</u>					
<b>Waste Class:</b>			148		
<b>Waste Class Desc:</b>			INORGANIC LABORATORY CHEMICALS		
<b>Waste Class:</b>			211		
<b>Waste Class Desc:</b>			AROMATIC SOLVENTS		
<b>Waste Class:</b>			212		
<b>Waste Class Desc:</b>			ALIPHATIC SOLVENTS		
<b>Waste Class:</b>			331		
<b>Waste Class Desc:</b>			WASTE COMPRESSED GASES		
<b>Waste Class:</b>			241		
<b>Waste Class Desc:</b>			HALOGENATED SOLVENTS		
<b>Waste Class:</b>			242		
<b>Waste Class Desc:</b>			HALOGENATED PESTICIDES		
<b>Waste Class:</b>			252		
<b>Waste Class Desc:</b>			WASTE OILS & LUBRICANTS		
<b>Waste Class:</b>			263		
<b>Waste Class Desc:</b>			ORGANIC LABORATORY CHEMICALS		
<b>Waste Class:</b>			264		
<b>Waste Class Desc:</b>			PHOTOPROCESSING WASTES		
<b>Waste Class:</b>			312		
<b>Waste Class Desc:</b>			PATHOLOGICAL WASTES		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">27</a>	8 of 33	SSW/189.3	60.9 / 0.00	HEALTH AND WELFARE CANADA TUNNEY'S PASTURE OTTAWA ON K1A 0L2	GEN
<b>Generator No:</b>	ON0095600			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	99,00,01			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8693				
<b>SIC Description:</b>	HEALTH CARE RESEARCH				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		241			
<b>Waste Class Desc:</b>		HALOGENATED SOLVENTS			
<b>Waste Class:</b>		242			
<b>Waste Class Desc:</b>		HALOGENATED PESTICIDES			
<b>Waste Class:</b>		243			
<b>Waste Class Desc:</b>		PCB'S			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>Waste Class:</b>		261			
<b>Waste Class Desc:</b>		PHARMACEUTICALS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		331			
<b>Waste Class Desc:</b>		WASTE COMPRESSED GASES			

<a href="#">27</a>	9 of 33	SSW/189.3	60.9 / 0.00	HEALTH AND WELFARE CANADA HEALTH UNIT #12, RM. 1002, RH COATS BLDG (STATS, CAN.), TUNNEY'S PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0095612			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	92,93,97,98,99,00,01			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8635				
<b>SIC Description:</b>	PUB. HEALTH CLINICS				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<a href="#">27</a>	10 of 33	SSW/189.3	60.9 / 0.00	GVT OF CAN-HEALTH&WELFARE CAN.MED.16-298 SER.BR,HEALTH UNIT#12,RM 1002,RH COATS BLDG,TUNNEY'S PASTURE,C/O 301 ELGIN ST OTTAWA ON K1A 0L3	GEN
<b>Generator No:</b>	ON0095612			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	94,95,96			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8635				
<b>SIC Description:</b>	PUB. HEALTH CLINICS				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<a href="#">27</a>	11 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN. PUBLIC WORKS NATIONAL REASEARCH COUNCIL, BLDG. SRVCS HEALTH PROT. BLDG.7, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	GEN
<b>Generator No:</b>	ON0175805			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	88,89,90			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	0000				
<b>SIC Description:</b>	*** NOT DEFINED ***				
<a href="#">27</a>	12 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN. PUBLIC WORKS 18-245 NATIONAL REASEARCH COUNCIL, BLDG. SRVCS HEALTH PROT. BLDG.7, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	GEN
<b>Generator No:</b>	ON0175805			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	92,93,94			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	0000				
<b>SIC Description:</b>	*** NOT DEFINED ***				
<a href="#">27</a>	13 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	02,03,04,05,06,07,08			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>SIC Code:</b>					
<b>SIC Description:</b>					
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>		ALKALINE WASTES - HEAVY METALS			

<a href="#">27</a>	14 of 33	SSW/189.3	60.9 / 0.00	NATIONAL ARCHIVES OF CANADA STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>		ON0757002		<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>		93,97,98		<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>		8551			
<b>SIC Description:</b>		MUSEUMS/ARCHIVES			

<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		241			
<b>Waste Class Desc:</b>		HALOGENATED SOLVENTS			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			

<a href="#">27</a>	15 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN. - NATIONAL ARCHIVES CANADA STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>		ON0757002		<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>		94		<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>		8551			
<b>SIC Description:</b>		MUSEUMS/ARCHIVES			

**Detail(s)**

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		241			
<b>Waste Class Desc:</b>		HALOGENATED SOLVENTS			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<a href="#">27</a>	16 of 33	SSW/189.3	60.9 / 0.00	NATIONAL ARCHIVES CANADA STATISTICS MAIN BUILDING, ROOM 1306 HOLLAND AVENUE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0757002			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	95,96			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8551				
<b>SIC Description:</b>	MUSEUMS/ARCHIVES				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		241			
<b>Waste Class Desc:</b>		HALOGENATED SOLVENTS			
<b>Waste Class:</b>		252			
<b>Waste Class Desc:</b>		WASTE OILS & LUBRICANTS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<a href="#">27</a>	17 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CANADA-INDUSTRY CANADA STANDARDS BUILDING TUNNEY'S PASTURE, HOLLAND AVE. OTTAWA ON	GEN
<b>Generator No:</b>	ON1993100			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	95,96			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8125				
<b>SIC Description:</b>	REGULATORY SERV.				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<a href="#">27</a>	18 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2009			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	Other Federal Government Public Administration				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES				
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>	PATHOLOGICAL WASTES				
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS				
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES				
<a href="#">27</a>	19 of 33	SSW/189.3	60.9 / 0.00	<b>GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON</b>	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2010			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	Other Federal Government Public Administration				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES				
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES				
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>	PATHOLOGICAL WASTES				
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS				
<a href="#">27</a>	20 of 33	SSW/189.3	60.9 / 0.00	<b>Lexus Mechanical 150 Tunney's Pasture Ottawa ON</b>	GEN
<b>Generator No:</b>	ON7437788			<b>PO Box No:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Status:</b> <b>Approval Years:</b> 2011 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 238220 <b>SIC Description:</b>				<b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<a href="#">27</a>	21 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	GEN
<b>Generator No:</b> ON0684800 <b>Status:</b> <b>Approval Years:</b> 2011 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 911910 <b>SIC Description:</b> Other Federal Government Public Administration				<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>		ALKALINE WASTES - HEAVY METALS			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<a href="#">27</a>	22 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b> ON0684800 <b>Status:</b> <b>Approval Years:</b> 2012 <b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> 911910 <b>SIC Description:</b> Other Federal Government Public Administration				<b>PO Box No:</b> <b>Country:</b> <b>Choice of Contact:</b> <b>Co Admin:</b> <b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>		ALKALINE WASTES - HEAVY METALS			
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<a href="#">27</a>	23 of 33	SSW/189.3	60.9 / 0.00	Statistics Canada 150 Tunney's Pasture Driveway Main Bldg, SC0005 Ottawa ON	GEN
<b>Generator No:</b>	ON5658190			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2013			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>					
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		262			
<b>Waste Class Desc:</b>		DETERGENTS/SOAPS			
<a href="#">27</a>	24 of 33	SSW/189.3	60.9 / 0.00	Health Canada 150 Tunney's Pasture Drwy Ottawa ON	GEN
<b>Generator No:</b>	ON6792658			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2013			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911240				
<b>SIC Description:</b>					
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		261			
<b>Waste Class Desc:</b>		PHARMACEUTICALS			
<a href="#">27</a>	25 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	2013			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>		ALKALINE WASTES - HEAVY METALS			
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			

<a href="#">27</a>	26 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2015			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	911910				

**Detail(s)**

<b>Waste Class:</b>	264
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES
<b>Waste Class:</b>	145
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES
<b>Waste Class:</b>	212
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS
<b>Waste Class:</b>	312
<b>Waste Class Desc:</b>	PATHOLOGICAL WASTES
<b>Waste Class:</b>	263
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS
<b>Waste Class:</b>	121
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS
<b>Waste Class:</b>	213
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES
<b>Waste Class:</b>	148
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">27</a>	27 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2016			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	911910				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	213				
<b>Waste Class Desc:</b>	PETROLEUM DISTILLATES				
<b>Waste Class:</b>	263				
<b>Waste Class Desc:</b>	ORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	121				
<b>Waste Class Desc:</b>	ALKALINE WASTES - HEAVY METALS				
<b>Waste Class:</b>	264				
<b>Waste Class Desc:</b>	PHOTOPROCESSING WASTES				
<b>Waste Class:</b>	148				
<b>Waste Class Desc:</b>	INORGANIC LABORATORY CHEMICALS				
<b>Waste Class:</b>	331				
<b>Waste Class Desc:</b>	WASTE COMPRESSED GASES				
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	145				
<b>Waste Class Desc:</b>	PAINT/PIGMENT/COATING RESIDUES				
<b>Waste Class:</b>	312				
<b>Waste Class Desc:</b>	PATHOLOGICAL WASTES				

<a href="#">27</a>	28 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA 1405 Main Statistics Canada Building TUNNEY'S PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2014			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	911910				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	312				
<b>Waste Class Desc:</b>	PATHOLOGICAL WASTES				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		121			
<b>Waste Class Desc:</b>		ALKALINE WASTES - HEAVY METALS			
<b>Waste Class:</b>		148			
<b>Waste Class Desc:</b>		INORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		264			
<b>Waste Class Desc:</b>		PHOTOPROCESSING WASTES			
<b>Waste Class:</b>		213			
<b>Waste Class Desc:</b>		PETROLEUM DISTILLATES			

<a href="#">27</a>	29 of 33	SSW/189.3	60.9 / 0.00	<b>Statistics Canada</b> 150Tunney's Pasture Driveway Main Bldg, SC0005 Ottawa ON K1A0T6	GEN
<b>Generator No:</b>	ON5658190			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2014			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	Joanne Boisjoli
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	613-951-4447 Ext.
<b>SIC Code:</b>	911910				
<b>SIC Description:</b>	911910				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		312			
<b>Waste Class Desc:</b>		PATHOLOGICAL WASTES			
<b>Waste Class:</b>		262			
<b>Waste Class Desc:</b>		DETERGENTS/SOAPS			

<a href="#">27</a>	30 of 33	SSW/189.3	60.9 / 0.00	<b>GVT. OF CAN-STATISTICS CANADA</b> Administrative Support Services Division 1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>	Registered			<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Dec 2018			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>					
<b>SIC Description:</b>					
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		121 C			
<b>Waste Class Desc:</b>		Alkaline slutions - containing heavy metals			
<b>Waste Class:</b>		145 L			
<b>Waste Class Desc:</b>		Wastes from the use of pigments, coatings and paints			
<b>Waste Class:</b>		148 I			
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			
<b>Waste Class:</b>		148 L			
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		212 I			
<b>Waste Class Desc:</b>		Aliphatic solvents and residues			
<b>Waste Class:</b>		213 I			
<b>Waste Class Desc:</b>		Petroleum distillates			
<b>Waste Class:</b>		263 L			
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		264 C			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		264 L			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		312 P			
<b>Waste Class Desc:</b>		Pathological wastes			
<b>Waste Class:</b>		331 I			
<b>Waste Class Desc:</b>		Waste compressed gases including cylinders			
<b>Waste Class:</b>		331 R			
<b>Waste Class Desc:</b>		Waste compressed gases including cylinders			

<a href="#">27</a>	31 of 33	SSW/189.3	60.9 / 0.00	150 Tunneys Pasture Driveway Ottawa ON	SPL
<b>Ref No:</b>	2886-ANBPAS			<b>Discharger Report:</b>	
<b>Site No:</b>				<b>Material Group:</b>	
<b>Incident Dt:</b>	6/6/2017			<b>Health/Env Conseq:</b>	2 - Minor Environment
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Miscellaneous Industrial
<b>Incident Event:</b>	Dumping			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	24			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	GLYCOL/WATER SOLUTION			<b>Site Address:</b>	150 Tunneys Pasture Driveway
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>	n/a			<b>Site Region:</b>	Eastern
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>	Land			<b>Northing:</b>	
<b>MOE Response:</b>				<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	6/14/2017			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	
<b>Incident Reason:</b>	Operator/Human Error			<b>Source Type:</b>	Structure
<b>Site Name:</b>	BGIS<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	BGIS - 3L of Glycol to ground and cb - Ottawa				
<b>Contaminant Qty:</b>	3 L				

<a href="#">27</a>	32 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division 1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	GEN
<b>Generator No:</b>	ON0684800			<b>PO Box No:</b>	
<b>Status:</b>	Registered			<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Jul 2020			<b>Choice of Contact:</b>	

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Contam. Facility:</b> <b>MHSW Facility:</b> <b>SIC Code:</b> <b>SIC Description:</b>				<b>Co Admin:</b> <b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		263 L			
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		331 R			
<b>Waste Class Desc:</b>		Waste compressed gases including cylinders			
<b>Waste Class:</b>		312 P			
<b>Waste Class Desc:</b>		Pathological wastes			
<b>Waste Class:</b>		264 C			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		145 L			
<b>Waste Class Desc:</b>		Wastes from the use of pigments, coatings and paints			
<b>Waste Class:</b>		212 I			
<b>Waste Class Desc:</b>		Aliphatic solvents and residues			
<b>Waste Class:</b>		331 I			
<b>Waste Class Desc:</b>		Waste compressed gases including cylinders			
<b>Waste Class:</b>		148 L			
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			
<b>Waste Class:</b>		264 L			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		121 C			
<b>Waste Class Desc:</b>		Alkaline slutions - containing heavy metals			
<b>Waste Class:</b>		148 I			
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			
<b>Waste Class:</b>		213 I			
<b>Waste Class Desc:</b>		Petroleum distillates			

<a href="#"><u>27</u></a>	33 of 33	SSW/189.3	60.9 / 0.00	GVT. OF CAN-STATISTICS CANADA Administrative Support Services Division 1405 Main Statistics Canada Building TUNNEYS PASTURE OTTAWA ON K1A 0T6	GEN
---------------------------	----------	-----------	-------------	---	-----

<b>Generator No:</b>	ON0684800	<b>PO Box No:</b>	
<b>Status:</b>	Registered	<b>Country:</b>	Canada
<b>Approval Years:</b>	As of Jan 2021	<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>		<b>Co Admin:</b>	
<b>MHSW Facility:</b>		<b>Phone No Admin:</b>	
<b>SIC Code:</b>			
<b>SIC Description:</b>			

**Detail(s)**

<b>Waste Class:</b>	148 L
<b>Waste Class Desc:</b>	Misc. wastes and inorganic chemicals
<b>Waste Class:</b>	148 I

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Waste Class Desc:</b>		Misc. wastes and inorganic chemicals			
<b>Waste Class:</b>		145 L			
<b>Waste Class Desc:</b>		Wastes from the use of pigments, coatings and paints			
<b>Waste Class:</b>		212 I			
<b>Waste Class Desc:</b>		Aliphatic solvents and residues			
<b>Waste Class:</b>		213 I			
<b>Waste Class Desc:</b>		Petroleum distillates			
<b>Waste Class:</b>		263 L			
<b>Waste Class Desc:</b>		Misc. waste organic chemicals			
<b>Waste Class:</b>		331 R			
<b>Waste Class Desc:</b>		Waste compressed gases including cylinders			
<b>Waste Class:</b>		264 L			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		331 I			
<b>Waste Class Desc:</b>		Waste compressed gases including cylinders			
<b>Waste Class:</b>		121 C			
<b>Waste Class Desc:</b>		Alkaline slutions - containing heavy metals			
<b>Waste Class:</b>		264 C			
<b>Waste Class Desc:</b>		Photoprocessing wastes			
<b>Waste Class:</b>		312 P			
<b>Waste Class Desc:</b>		Pathological wastes			

<b>28</b>	<b>1 of 2</b>	<b>ENE/190.8</b>	<b>60.9 / 0.00</b>	<b>S. 21(1)(f) 58 Carruthers Avenue Ottawa ON K1Y 1N2</b>	<b>SPL</b>
<b>Ref No:</b>	7536-7A9Q2M			<b>Discharger Report:</b>	
<b>Site No:</b>				<b>Material Group:</b>	Oil
<b>Incident Dt:</b>				<b>Health/Env Conseq:</b>	
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>	Tank (Above Ground) Leak			<b>Sector Type:</b>	Other Storage Facility
<b>Incident Event:</b>				<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	13			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	FURNACE OIL			<b>Site Address:</b>	
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	
<b>Environment Impact:</b>	Confirmed			<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>	soil contamination			<b>Site Lot:</b>	
<b>Receiving Medium:</b>	Land			<b>Site Conc:</b>	
<b>Receiving Env:</b>				<b>Northing:</b>	
<b>MOE Response:</b>	No Field Response			<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	12/26/2007			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>	1/4/2008			<b>SAC Action Class:</b>	
<b>Incident Reason:</b>	Corrosion - All forms of internal/external corrosion			<b>Source Type:</b>	
<b>Site Name:</b>	Basement<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	38 Carruthers Ave - spill to bsmt				
<b>Contaminant Qty:</b>	4.5 L				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">28</a>	2 of 2	ENE/190.8	60.9 / 0.00	58 CARRUTHERS AVENUE OTTAWA ON K1Y 1N2	HINC

**External File Num:** FS INC 0712-07805  
**Fuel Occurrence Type:** Leak  
**Date of Occurrence:** 12/12/2007  
**Fuel Type Involved:** Fuel Oil  
**Status Desc:** Completed - No Action Required  
**Job Type Desc:** Incident/Near-Miss Occurrence (FS)  
**Oper. Type Involved:** Private Dwelling  
**Service Interruptions:** No  
**Property Damage:** No  
**Fuel Life Cycle Stage:** Utilization  
**Root Cause:**  
**Reported Details:**  
**Fuel Category:** Liquid Fuel  
**Occurrence Type:** Incident  
**Affiliation:** Member of the General Public  
**County Name:** Ottawa  
**Approx. Quant. Rel:**  
**Nearby body of water:**  
**Enter Drainage Syst.:**  
**Approx. Quant. Unit:**  
**Environmental Impact:**

<a href="#">29</a>	1 of 1	ENE/193.2	60.9 / 0.00	52 CARRUTHERS AVE Ottawa ON	WWIS
--------------------	--------	-----------	-------------	--------------------------------	------

<b>Well ID:</b>	7201623	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	
<b>Primary Water Use:</b>	Monitoring and Test Hole	<b>Date Received:</b>	5/15/2013
<b>Sec. Water Use:</b>		<b>Selected Flag:</b>	Yes
<b>Final Well Status:</b>	Test Hole	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	7241
<b>Casing Material:</b>		<b>Form Version:</b>	7
<b>Audit No:</b>	Z151017	<b>Owner:</b>	
<b>Tag:</b>	A145384	<b>Street Name:</b>	52 CARRUTHERS AVE
<b>Construction Method:</b>		<b>County:</b>	OTTAWA
<b>Elevation (m):</b>		<b>Municipality:</b>	OTTAWA CITY
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	
<b>Well Depth:</b>		<b>Concession:</b>	
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**PDF URL (Map):** [https://d2khazk8e83rdv.cloudfront.net/moe\\_mapping/downloads/2Water/Wells\\_pdfs/720\7201623.pdf](https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/720\7201623.pdf)

#### Bore Hole Information

<b>Bore Hole ID:</b>	1004301252	<b>Elevation:</b>	63.283218
<b>DP2BR:</b>		<b>Elevrc:</b>	
<b>Spatial Status:</b>		<b>Zone:</b>	18
<b>Code OB:</b>		<b>East83:</b>	442809
<b>Code OB Desc:</b>		<b>North83:</b>	5028596
<b>Open Hole:</b>		<b>Org CS:</b>	UTM83
<b>Cluster Kind:</b>		<b>UTMRC:</b>	4
<b>Date Completed:</b>	4/5/2013	<b>UTMRC Desc:</b>	margin of error : 30 m - 100 m
<b>Remarks:</b>		<b>Location Method:</b>	wwr
<b>Elevrc Desc:</b>			



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<i>Location Source Date:</i>					
<i>Improvement Location Source:</i>					
<i>Improvement Location Method:</i>					
<i>Source Revision Comment:</i>					
<i>Supplier Comment:</i>					
<u><i>Overburden and Bedrock</i></u>					
<u><i>Materials Interval</i></u>					
<i>Formation ID:</i>		1004835352			
<i>Layer:</i>		2			
<i>Color:</i>		2			
<i>General Color:</i>		GREY			
<i>Mat1:</i>		15			
<i>Most Common Material:</i>		LIMESTONE			
<i>Mat2:</i>					
<i>Mat2 Desc:</i>					
<i>Mat3:</i>		71			
<i>Mat3 Desc:</i>		FRACTURED			
<i>Formation Top Depth:</i>		.61			
<i>Formation End Depth:</i>		4.88			
<i>Formation End Depth UOM:</i>		m			
<u><i>Overburden and Bedrock</i></u>					
<u><i>Materials Interval</i></u>					
<i>Formation ID:</i>		1004835351			
<i>Layer:</i>		1			
<i>Color:</i>		6			
<i>General Color:</i>		BROWN			
<i>Mat1:</i>		11			
<i>Most Common Material:</i>		GRAVEL			
<i>Mat2:</i>		02			
<i>Mat2 Desc:</i>		TOPSOIL			
<i>Mat3:</i>		85			
<i>Mat3 Desc:</i>		SOFT			
<i>Formation Top Depth:</i>		0			
<i>Formation End Depth:</i>		.61			
<i>Formation End Depth UOM:</i>		m			
<u><i>Annular Space/Abandonment</i></u>					
<u><i>Sealing Record</i></u>					
<i>Plug ID:</i>		1004835362			
<i>Layer:</i>		2			
<i>Plug From:</i>		0.31			
<i>Plug To:</i>		1.52			
<i>Plug Depth UOM:</i>		m			
<u><i>Annular Space/Abandonment</i></u>					
<u><i>Sealing Record</i></u>					
<i>Plug ID:</i>		1004835361			
<i>Layer:</i>		1			
<i>Plug From:</i>		0			
<i>Plug To:</i>		0.31			
<i>Plug Depth UOM:</i>		m			
<u><i>Annular Space/Abandonment</i></u>					
<u><i>Sealing Record</i></u>					
<i>Plug ID:</i>		1004835363			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<i>Layer:</i>		3			
<i>Plug From:</i>		1.52			
<i>Plug To:</i>		4.88			
<i>Plug Depth UOM:</i>		m			
 <b><u>Method of Construction &amp; Well Use</u></b>					
<i>Method Construction ID:</i>		1004835360			
<i>Method Construction Code:</i>		D			
<i>Method Construction:</i>		Direct Push			
<i>Other Method Construction:</i>					
 <b><u>Pipe Information</u></b>					
<i>Pipe ID:</i>		1004835350			
<i>Casing No:</i>		0			
<i>Comment:</i>					
<i>Alt Name:</i>					
 <b><u>Construction Record - Casing</u></b>					
<i>Casing ID:</i>		1004835356			
<i>Layer:</i>		1			
<i>Material:</i>		5			
<i>Open Hole or Material:</i>		PLASTIC			
<i>Depth From:</i>		0			
<i>Depth To:</i>		1.83			
<i>Casing Diameter:</i>		5.2			
<i>Casing Diameter UOM:</i>		cm			
<i>Casing Depth UOM:</i>		m			
 <b><u>Construction Record - Screen</u></b>					
<i>Screen ID:</i>		1004835357			
<i>Layer:</i>		1			
<i>Slot:</i>		10			
<i>Screen Top Depth:</i>		1.83			
<i>Screen End Depth:</i>		4.88			
<i>Screen Material:</i>		5			
<i>Screen Depth UOM:</i>		m			
<i>Screen Diameter UOM:</i>		cm			
<i>Screen Diameter:</i>		6.03			
 <b><u>Water Details</u></b>					
<i>Water ID:</i>		1004835355			
<i>Layer:</i>					
<i>Kind Code:</i>					
<i>Kind:</i>					
<i>Water Found Depth:</i>					
<i>Water Found Depth UOM:</i>		m			
 <b><u>Hole Diameter</u></b>					
<i>Hole ID:</i>		1004835354			
<i>Diameter:</i>		7.62			
<i>Depth From:</i>		1.22			
<i>Depth To:</i>		4.88			
<i>Hole Depth UOM:</i>		m			
<i>Hole Diameter UOM:</i>		cm			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b><u>Hole Diameter</u></b>					
Hole ID:		1004835353			
Diameter:		11.43			
Depth From:		0			
Depth To:		1.22			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			

<a href="#">30</a>	1 of 2	ENE/194.5	60.9 / 0.00	56 Carruthers Avenue Ottawa ON K1Y 1N2	SPL
Ref No:	3252-79V3XQ			Discharger Report:	
Site No:				Material Group:	Oil
Incident Dt:				Health/Env Conseq:	
Year:				Client Type:	
Incident Cause:				Sector Type:	private residence
Incident Event:				Agency Involved:	
Contaminant Code:	13			Nearest Watercourse:	
Contaminant Name:	FURNACE OIL			Site Address:	
Contaminant Limit 1:				Site District Office:	
Contam Limit Freq 1:				Site Postal Code:	
Contaminant UN No 1:				Site Region:	
Environment Impact:	Not Anticipated			Site Municipality:	Ottawa
Nature of Impact:	soil contamination			Site Lot:	
Receiving Medium:	land			Site Conc:	
Receiving Env:				Northing:	5028636
MOE Response:	Referral to others			Easting:	442827
Dt MOE Arvl on Scn:				Site Geo Ref Accu:	
MOE Reported Dt:	12/13/2007			Site Map Datum:	
Dt Document Closed:				SAC Action Class:	
Incident Reason:				Source Type:	
Site Name:	56 Carruthers Avenue<UNOFFICIAL>				
Site County/District:					
Site Geo Ref Meth:					
Incident Summary:	Private Residence-Ukn Qty Furnace Oil to Ground,Tank Leak.				
Contaminant Qty:	5 l				

<a href="#">30</a>	2 of 2	ENE/194.5	60.9 / 0.00	56 CARRUTHERS AVENUE OTTAWA ON K1Y 1N2	HINC
External File Num:	FS INC 0712-07564				
Fuel Occurrence Type:	Leak				
Date of Occurrence:	12/11/2007				
Fuel Type Involved:	Fuel Oil				
Status Desc:	Completed - No Action Required				
Job Type Desc:	Incident/Near-Miss Occurrence (FS)				
Oper. Type Involved:	Private Dwelling				
Service Interruptions:	No				
Property Damage:	No				
Fuel Life Cycle Stage:	Utilization				
Root Cause:					
Reported Details:					
Fuel Category:	Liquid Fuel				
Occurrence Type:	Incident				
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:					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Environmental Impact:</b>					
<a href="#">31</a>	1 of 1	SE/195.3	60.9 / 0.00	192 Forward Ave Ottawa ON K1Y1E8	EHS
<b>Order No:</b>	20141021028		<b>Nearest Intersection:</b>		
<b>Status:</b>	C		<b>Municipality:</b>		
<b>Report Type:</b>	Standard Report		<b>Client Prov/State:</b> ON		
<b>Report Date:</b>	27-OCT-14		<b>Search Radius (km):</b> .25		
<b>Date Received:</b>	21-OCT-14		<b>X:</b> -75.731656		
<b>Previous Site Name:</b>			<b>Y:</b> 45.406406		
<b>Lot/Building Size:</b>					
<b>Additional Info Ordered:</b>	Fire Insur. Maps and/or Site Plans				
<a href="#">32</a>	1 of 1	NW/200.2	59.9 / -1.00	50 COLOMBINE DRIVEWAY Ottawa ON	WWIS
<b>Well ID:</b>	7240369		<b>Data Entry Status:</b>		
<b>Construction Date:</b>			<b>Data Src:</b>		
<b>Primary Water Use:</b>	Monitoring and Test Hole		<b>Date Received:</b> 4/22/2015		
<b>Sec. Water Use:</b>	0		<b>Selected Flag:</b> Yes		
<b>Final Well Status:</b>	Test Hole		<b>Abandonment Rec:</b>		
<b>Water Type:</b>			<b>Contractor:</b> 7241		
<b>Casing Material:</b>			<b>Form Version:</b> 7		
<b>Audit No:</b>	Z207413		<b>Owner:</b>		
<b>Tag:</b>	A178458		<b>Street Name:</b> 50 COLOMBINE DRIVEWAY		
<b>Construction Method:</b>			<b>County:</b> OTTAWA		
<b>Elevation (m):</b>			<b>Municipality:</b> OTTAWA CITY		
<b>Elevation Reliability:</b>			<b>Site Info:</b>		
<b>Depth to Bedrock:</b>			<b>Lot:</b>		
<b>Well Depth:</b>			<b>Concession:</b>		
<b>Overburden/Bedrock:</b>			<b>Concession Name:</b>		
<b>Pump Rate:</b>			<b>Easting NAD83:</b>		
<b>Static Water Level:</b>			<b>Northing NAD83:</b>		
<b>Flowing (Y/N):</b>			<b>Zone:</b>		
<b>Flow Rate:</b>			<b>UTM Reliability:</b>		
<b>Clear/Cloudy:</b>					
<b>PDF URL (Map):</b>					
<b><u>Bore Hole Information</u></b>					
<b>Bore Hole ID:</b>	1005327882		<b>Elevation:</b> 59.154472		
<b>DP2BR:</b>			<b>Elevrc:</b>		
<b>Spatial Status:</b>			<b>Zone:</b> 18		
<b>Code OB:</b>			<b>East83:</b> 442510		
<b>Code OB Desc:</b>			<b>North83:</b> 5028678		
<b>Open Hole:</b>			<b>Org CS:</b> UTM83		
<b>Cluster Kind:</b>			<b>UTMRC:</b> 4		
<b>Date Completed:</b>	3/30/2015		<b>UTMRC Desc:</b> margin of error : 30 m - 100 m		
<b>Remarks:</b>			<b>Location Method:</b> wwr		
<b>Elevrc Desc:</b>					
<b>Location Source Date:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Source Revision Comment:</b>					
<b>Supplier Comment:</b>					
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Formation ID:</b>		1005598989			
<b>Layer:</b>		1			
<b>Color:</b>		6			
<b>General Color:</b>		BROWN			
<b>Mat1:</b>		11			
<b>Most Common Material:</b>		GRAVEL			
<b>Mat2:</b>		28			
<b>Mat2 Desc:</b>		SAND			
<b>Mat3:</b>		85			
<b>Mat3 Desc:</b>		SOFT			
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		1.22			
<b>Formation End Depth UOM:</b>		m			
<b><u>Overburden and Bedrock Materials Interval</u></b>					
<b>Formation ID:</b>		1005598990			
<b>Layer:</b>		2			
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>		15			
<b>Most Common Material:</b>		LIMESTONE			
<b>Mat2:</b>					
<b>Mat2 Desc:</b>					
<b>Mat3:</b>		71			
<b>Mat3 Desc:</b>		FRACTURED			
<b>Formation Top Depth:</b>		1.22			
<b>Formation End Depth:</b>		6.1			
<b>Formation End Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599001			
<b>Layer:</b>		3			
<b>Plug From:</b>		1.5			
<b>Plug To:</b>		6.1			
<b>Plug Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005598999			
<b>Layer:</b>		1			
<b>Plug From:</b>		0			
<b>Plug To:</b>		0.31			
<b>Plug Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599000			
<b>Layer:</b>		2			
<b>Plug From:</b>		0.31			
<b>Plug To:</b>		1.5			
<b>Plug Depth UOM:</b>		m			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		1005598998			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Method Construction Code:</b>		D			
<b>Method Construction:</b>		Direct Push			
<b>Other Method Construction:</b>					
 <b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		1005598988			
<b>Casing No:</b>		0			
<b>Comment:</b>					
<b>Alt Name:</b>					
 <b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		1005598994			
<b>Layer:</b>		1			
<b>Material:</b>		5			
<b>Open Hole or Material:</b>		PLASTIC			
<b>Depth From:</b>		0			
<b>Depth To:</b>		1.5			
<b>Casing Diameter:</b>		5.2			
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
 <b><u>Construction Record - Screen</u></b>					
<b>Screen ID:</b>		1005598995			
<b>Layer:</b>		1			
<b>Slot:</b>		10			
<b>Screen Top Depth:</b>		1.5			
<b>Screen End Depth:</b>		6.1			
<b>Screen Material:</b>		5			
<b>Screen Depth UOM:</b>		m			
<b>Screen Diameter UOM:</b>		cm			
<b>Screen Diameter:</b>		6.03			
 <b><u>Water Details</u></b>					
<b>Water ID:</b>		1005598993			
<b>Layer:</b>					
<b>Kind Code:</b>					
<b>Kind:</b>					
<b>Water Found Depth:</b>					
<b>Water Found Depth UOM:</b>		m			
 <b><u>Hole Diameter</u></b>					
<b>Hole ID:</b>		1005598991			
<b>Diameter:</b>		11.43			
<b>Depth From:</b>		0			
<b>Depth To:</b>		1.5			
<b>Hole Depth UOM:</b>		m			
<b>Hole Diameter UOM:</b>		cm			
 <b><u>Hole Diameter</u></b>					
<b>Hole ID:</b>		1005598992			
<b>Diameter:</b>		7.62			
<b>Depth From:</b>		1.5			
<b>Depth To:</b>		6.1			
<b>Hole Depth UOM:</b>		m			
<b>Hole Diameter UOM:</b>		cm			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">33</a>	1 of 1	NNW/204.1	59.8 / -1.03	CCC384 44 EMMERSON AVE OTTAWA ON K1Y 2L8	GEN
<b>Generator No:</b>	ON9041525			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	05			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	531310				
<b>SIC Description:</b>	Real Estate Property Managers				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<a href="#">34</a>	1 of 1	NW/209.8	59.9 / -1.00	50 COLOMBINE DRIVEWAY Ottawa ON	WWIS
<b>Well ID:</b>	7240370			<b>Data Entry Status:</b>	
<b>Construction Date:</b>				<b>Data Src:</b>	
<b>Primary Water Use:</b>	Monitoring and Test Hole			<b>Date Received:</b>	4/22/2015
<b>Sec. Water Use:</b>	0			<b>Selected Flag:</b>	Yes
<b>Final Well Status:</b>	Test Hole			<b>Abandonment Rec:</b>	
<b>Water Type:</b>				<b>Contractor:</b>	7241
<b>Casing Material:</b>				<b>Form Version:</b>	7
<b>Audit No:</b>	Z207414			<b>Owner:</b>	
<b>Tag:</b>	A178457			<b>Street Name:</b>	50 COLOMBINE DRIVEWAY
<b>Construction Method:</b>				<b>County:</b>	OTTAWA
<b>Elevation (m):</b>				<b>Municipality:</b>	OTTAWA CITY
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	
<b>Well Depth:</b>				<b>Concession:</b>	
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					
<b>PDF URL (Map):</b>					
<b><u>Bore Hole Information</u></b>					
<b>Bore Hole ID:</b>	1005327885			<b>Elevation:</b>	59.462673
<b>DP2BR:</b>				<b>Elevrc:</b>	
<b>Spatial Status:</b>				<b>Zone:</b>	18
<b>Code OB:</b>				<b>East83:</b>	442482
<b>Code OB Desc:</b>				<b>North83:</b>	5028666
<b>Open Hole:</b>				<b>Org CS:</b>	UTM83
<b>Cluster Kind:</b>				<b>UTMRC:</b>	4
<b>Date Completed:</b>	3/30/2015			<b>UTMRC Desc:</b>	margin of error : 30 m - 100 m
<b>Remarks:</b>				<b>Location Method:</b>	wwr
<b>Elevrc Desc:</b>					
<b>Location Source Date:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Source Revision Comment:</b>					
<b>Supplier Comment:</b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b><u>Overburden and Bedrock Materials Interval</u></b>					
<b>Formation ID:</b>		1005599024			
<b>Layer:</b>		2			
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>		15			
<b>Most Common Material:</b>		LIMESTONE			
<b>Mat2:</b>					
<b>Mat2 Desc:</b>					
<b>Mat3:</b>		71			
<b>Mat3 Desc:</b>		FRACTURED			
<b>Formation Top Depth:</b>		.91			
<b>Formation End Depth:</b>		5.79			
<b>Formation End Depth UOM:</b>		m			
<b><u>Overburden and Bedrock Materials Interval</u></b>					
<b>Formation ID:</b>		1005599023			
<b>Layer:</b>		1			
<b>Color:</b>		6			
<b>General Color:</b>		BROWN			
<b>Mat1:</b>		11			
<b>Most Common Material:</b>		GRAVEL			
<b>Mat2:</b>		28			
<b>Mat2 Desc:</b>		SAND			
<b>Mat3:</b>		85			
<b>Mat3 Desc:</b>		SOFT			
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		.91			
<b>Formation End Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599033			
<b>Layer:</b>		1			
<b>Plug From:</b>		0			
<b>Plug To:</b>		0.31			
<b>Plug Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599034			
<b>Layer:</b>		2			
<b>Plug From:</b>		0.31			
<b>Plug To:</b>		1.22			
<b>Plug Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599035			
<b>Layer:</b>		3			
<b>Plug From:</b>		1.22			
<b>Plug To:</b>		5.79			
<b>Plug Depth UOM:</b>		m			
<b><u>Method of Construction &amp; Well</u></b>					



<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b><u>Use</u></b>					
<i>Method Construction ID:</i>		1005599032			
<i>Method Construction Code:</i>		D			
<i>Method Construction:</i>		Direct Push			
<i>Other Method Construction:</i>					
<b><u>Pipe Information</u></b>					
<i>Pipe ID:</i>		1005599022			
<i>Casing No:</i>		0			
<i>Comment:</i>					
<i>Alt Name:</i>					
<b><u>Construction Record - Casing</u></b>					
<i>Casing ID:</i>		1005599028			
<i>Layer:</i>		1			
<i>Material:</i>		5			
<i>Open Hole or Material:</i>		PLASTIC			
<i>Depth From:</i>		0			
<i>Depth To:</i>		1.5			
<i>Casing Diameter:</i>		5.2			
<i>Casing Diameter UOM:</i>		cm			
<i>Casing Depth UOM:</i>		m			
<b><u>Construction Record - Screen</u></b>					
<i>Screen ID:</i>		1005599029			
<i>Layer:</i>		1			
<i>Slot:</i>		10			
<i>Screen Top Depth:</i>		1.5			
<i>Screen End Depth:</i>		5.79			
<i>Screen Material:</i>		5			
<i>Screen Depth UOM:</i>		m			
<i>Screen Diameter UOM:</i>		cm			
<i>Screen Diameter:</i>		6.03			
<b><u>Water Details</u></b>					
<i>Water ID:</i>		1005599027			
<i>Layer:</i>					
<i>Kind Code:</i>					
<i>Kind:</i>					
<i>Water Found Depth:</i>					
<i>Water Found Depth UOM:</i>		m			
<b><u>Hole Diameter</u></b>					
<i>Hole ID:</i>		1005599026			
<i>Diameter:</i>		7.62			
<i>Depth From:</i>		1.5			
<i>Depth To:</i>		5.79			
<i>Hole Depth UOM:</i>		m			
<i>Hole Diameter UOM:</i>		cm			
<b><u>Hole Diameter</u></b>					
<i>Hole ID:</i>		1005599025			
<i>Diameter:</i>		11.43			
<i>Depth From:</i>		0			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Depth To:		1.5			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
<a href="#">35</a>	1 of 2	E/210.4	59.9 / -1.00	JOHANNES POTHUMA 80 CARRUTHERS AVE. OTTAWA ON K1Y 1N2	GEN
Generator No:	ON1024000			PO Box No:	
Status:				Country:	
Approval Years:	88,89,90			Choice of Contact:	
Contam. Facility:				Co Admin:	
MHSW Facility:				Phone No Admin:	
SIC Code:	6542				
SIC Description:	BICYCLE SHOPS				
<b>Detail(s)</b>					
Waste Class:	213				
Waste Class Desc:	PETROLEUM DISTILLATES				
<a href="#">35</a>	2 of 2	E/210.4	59.9 / -1.00	JOHANNES POTHUMA 22-285 80 CARRUTHERS AVE. OTTAWA ON K1Y 1N2	GEN
Generator No:	ON1024000			PO Box No:	
Status:				Country:	
Approval Years:	92,93,94,95,96,97,98			Choice of Contact:	
Contam. Facility:				Co Admin:	
MHSW Facility:				Phone No Admin:	
SIC Code:	6542				
SIC Description:	BICYCLE SHOPS				
<b>Detail(s)</b>					
Waste Class:	213				
Waste Class Desc:	PETROLEUM DISTILLATES				
<a href="#">36</a>	1 of 8	W/214.7	60.9 / 0.00	NATIONAL RESEARCH COUNCIL HEALTH PROTECTION BUILDING 7 HOLLAND AVENUE, TUNNEY'S PASTURE OTTAWA ON K1A 0R6	GEN
Generator No:	ON0195805			PO Box No:	
Status:				Country:	
Approval Years:	98			Choice of Contact:	
Contam. Facility:				Co Admin:	
MHSW Facility:				Phone No Admin:	
SIC Code:	8176				
SIC Description:	RESEARCH ADMIN.				
<b>Detail(s)</b>					
Waste Class:	241				
Waste Class Desc:	HALOGENATED SOLVENTS				
Waste Class:	148				
Waste Class Desc:	INORGANIC LABORATORY CHEMICALS				
Waste Class:	211				
Waste Class Desc:	AROMATIC SOLVENTS				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<a href="#">36</a>	2 of 8	W/214.7	60.9 / 0.00	GVT. OF CAN. - ATOMIC ENERGY CONT. L B, TUNNEY'S PASTURE (HPB BUILDING) C/O P O BOX 1046 OTTAWA ON K1P 5S9	GEN
<b>Generator No:</b>	ON0269000			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	86,87,88,89,90			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8125				
<b>SIC Description:</b>	REGULATORY SERV.				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<a href="#">36</a>	3 of 8	W/214.7	60.9 / 0.00	ATOMIC ENERGY CONTROL BOARD HPB BUILDING (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1P 5S9	GEN
<b>Generator No:</b>	ON0269000			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	92,93,97			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8125				
<b>SIC Description:</b>	REGULATORY SERV.				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">36</a>	4 of 8	W/214.7	60.9 / 0.00	GVT. OF CAN. - ATOMIC ENERGY CONT.18-029 L B, TUNNEY'S PASTURE (HPB BUILDING) C/O P O BOX 1046 OTTAWA ON K1P 5S9	GEN
<b>Generator No:</b>	ON0269000			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	94,95,96			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8125				
<b>SIC Description:</b>	REGULATORY SERV.				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	112				
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS				
<b>Waste Class:</b>	211				
<b>Waste Class Desc:</b>	AROMATIC SOLVENTS				
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	221				
<b>Waste Class Desc:</b>	LIGHT FUELS				
<a href="#">36</a>	5 of 8	W/214.7	60.9 / 0.00	ATOMIC ENERGY CONTROL BOARD HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1A 0L2	GEN
<b>Generator No:</b>	ON0269000			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	98,99,00,01			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	8125				
<b>SIC Description:</b>	REGULATORY SERV.				
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	112				
<b>Waste Class Desc:</b>	ACID WASTE - HEAVY METALS				
<b>Waste Class:</b>	211				
<b>Waste Class Desc:</b>	AROMATIC SOLVENTS				
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>	ALIPHATIC SOLVENTS				
<b>Waste Class:</b>	221				
<b>Waste Class Desc:</b>	LIGHT FUELS				
<a href="#">36</a>	6 of 8	W/214.7	60.9 / 0.00	CANADIAN NUCLEAR SAFETY COMMISSION HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON K1A 0L2	GEN
<b>Generator No:</b>	ON0269000			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	02,03,04,05,06,07,08			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>MHSW Facility:</b> <b>SIC Code:</b> <b>SIC Description:</b>				<b>Phone No Admin:</b>	
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		212			
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		114			
<b>Waste Class Desc:</b>		OTHER INORGANIC ACID WASTES			
<a href="#">36</a>	7 of 8	W/214.7	60.9 / 0.00	CANADIAN NUCLEAR SAFETY COMMISSION HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON	GEN
<b>Generator No:</b>		ON0269000		<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>		2009		<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>		911240			
<b>SIC Description:</b>		Federal Regulatory Services			
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		114			
<b>Waste Class Desc:</b>		OTHER INORGANIC ACID WASTES			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<a href="#">36</a>	8 of 8	W/214.7	60.9 / 0.00	CANADIAN NUCLEAR SAFETY COMMISSION HPB BUILDING 7 (HOLLAND & COLOMBINE) TUNNEY'S PASTURE, ROOM 253 OTTAWA ON	GEN
<b>Generator No:</b>		ON0269000		<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>		2010		<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>		911240			
<b>SIC Description:</b>		Federal Regulatory Services			
<b><u>Detail(s)</u></b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Waste Class:</b>		113			
<b>Waste Class Desc:</b>		ACID WASTE - OTHER METALS			
<b>Waste Class:</b>		263			
<b>Waste Class Desc:</b>		ORGANIC LABORATORY CHEMICALS			
<b>Waste Class:</b>		221			
<b>Waste Class Desc:</b>		LIGHT FUELS			
<b>Waste Class:</b>		211			
<b>Waste Class Desc:</b>		AROMATIC SOLVENTS			
<b>Waste Class:</b>		112			
<b>Waste Class Desc:</b>		ACID WASTE - HEAVY METALS			
<b>Waste Class:</b>		114			
<b>Waste Class Desc:</b>		OTHER INORGANIC ACID WASTES			

[37](#)    1 of 1    **NW/217.8**    **59.9 / -1.00**    **50 COLOMBINE DRIVEWAY**  
Ottawa ON    **WWIS**

<b>Well ID:</b>	7240371	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	
<b>Primary Water Use:</b>	Monitoring and Test Hole	<b>Date Received:</b>	4/22/2015
<b>Sec. Water Use:</b>	0	<b>Selected Flag:</b>	Yes
<b>Final Well Status:</b>	Test Hole	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	7241
<b>Casing Material:</b>		<b>Form Version:</b>	7
<b>Audit No:</b>	Z207415	<b>Owner:</b>	
<b>Tag:</b>	A178460	<b>Street Name:</b>	50 COLOMBINE DRIVEWAY
<b>Construction Method:</b>		<b>County:</b>	OTTAWA
<b>Elevation (m):</b>		<b>Municipality:</b>	OTTAWA CITY
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	
<b>Well Depth:</b>		<b>Concession:</b>	
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**PDF URL (Map):**

**Bore Hole Information**

<b>Bore Hole ID:</b>	1005327888	<b>Elevation:</b>	58.909473
<b>DP2BR:</b>		<b>Elevrc:</b>	
<b>Spatial Status:</b>		<b>Zone:</b>	18
<b>Code OB:</b>		<b>East83:</b>	442502
<b>Code OB Desc:</b>		<b>North83:</b>	5028694
<b>Open Hole:</b>		<b>Org CS:</b>	UTM83
<b>Cluster Kind:</b>		<b>UTMRC:</b>	4
<b>Date Completed:</b>	3/30/2015	<b>UTMRC Desc:</b>	margin of error : 30 m - 100 m
<b>Remarks:</b>		<b>Location Method:</b>	wwr
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>			
<b>Improvement Location Method:</b>			
<b>Source Revision Comment:</b>			
<b>Supplier Comment:</b>			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b><u>Overburden and Bedrock Materials Interval</u></b>					
<b>Formation ID:</b>			1005599048		
<b>Layer:</b>			1		
<b>Color:</b>			6		
<b>General Color:</b>			BROWN		
<b>Mat1:</b>			11		
<b>Most Common Material:</b>			GRAVEL		
<b>Mat2:</b>			28		
<b>Mat2 Desc:</b>			SAND		
<b>Mat3:</b>			85		
<b>Mat3 Desc:</b>			SOFT		
<b>Formation Top Depth:</b>			0		
<b>Formation End Depth:</b>			1.22		
<b>Formation End Depth UOM:</b>			m		
<b><u>Overburden and Bedrock Materials Interval</u></b>					
<b>Formation ID:</b>			1005599049		
<b>Layer:</b>			2		
<b>Color:</b>			2		
<b>General Color:</b>			GREY		
<b>Mat1:</b>			15		
<b>Most Common Material:</b>			LIMESTONE		
<b>Mat2:</b>					
<b>Mat2 Desc:</b>					
<b>Mat3:</b>			71		
<b>Mat3 Desc:</b>			FRACTURED		
<b>Formation Top Depth:</b>			1.22		
<b>Formation End Depth:</b>			4.51		
<b>Formation End Depth UOM:</b>			m		
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>			1005599058		
<b>Layer:</b>			1		
<b>Plug From:</b>			0		
<b>Plug To:</b>			0.31		
<b>Plug Depth UOM:</b>			m		
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>			1005599059		
<b>Layer:</b>			2		
<b>Plug From:</b>			0.31		
<b>Plug To:</b>			1.5		
<b>Plug Depth UOM:</b>			m		
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>			1005599060		
<b>Layer:</b>			3		
<b>Plug From:</b>			1.5		
<b>Plug To:</b>					
<b>Plug Depth UOM:</b>			m		
<b><u>Method of Construction &amp; Well</u></b>					

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b><u>Use</u></b>					
<i>Method Construction ID:</i>		1005599057			
<i>Method Construction Code:</i>		D			
<i>Method Construction:</i>		Direct Push			
<i>Other Method Construction:</i>					
<b><u>Pipe Information</u></b>					
<i>Pipe ID:</i>		1005599047			
<i>Casing No:</i>		0			
<i>Comment:</i>					
<i>Alt Name:</i>					
<b><u>Construction Record - Casing</u></b>					
<i>Casing ID:</i>		1005599053			
<i>Layer:</i>		1			
<i>Material:</i>		5			
<i>Open Hole or Material:</i>		PLASTIC			
<i>Depth From:</i>		0			
<i>Depth To:</i>		1.5			
<i>Casing Diameter:</i>		5.2			
<i>Casing Diameter UOM:</i>		cm			
<i>Casing Depth UOM:</i>		m			
<b><u>Construction Record - Screen</u></b>					
<i>Screen ID:</i>		1005599054			
<i>Layer:</i>		1			
<i>Slot:</i>		10			
<i>Screen Top Depth:</i>		1.5			
<i>Screen End Depth:</i>					
<i>Screen Material:</i>		5			
<i>Screen Depth UOM:</i>		m			
<i>Screen Diameter UOM:</i>		cm			
<i>Screen Diameter:</i>		6.03			
<b><u>Water Details</u></b>					
<i>Water ID:</i>		1005599052			
<i>Layer:</i>					
<i>Kind Code:</i>					
<i>Kind:</i>					
<i>Water Found Depth:</i>					
<i>Water Found Depth UOM:</i>		m			
<b><u>Hole Diameter</u></b>					
<i>Hole ID:</i>		1005599051			
<i>Diameter:</i>		7.62			
<i>Depth From:</i>		2.5			
<i>Depth To:</i>					
<i>Hole Depth UOM:</i>		m			
<i>Hole Diameter UOM:</i>		cm			
<b><u>Hole Diameter</u></b>					
<i>Hole ID:</i>		1005599050			
<i>Diameter:</i>		11.43			
<i>Depth From:</i>		0			



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Depth To:		2.5			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
<a href="#">38</a>	1 of 1	ENE/226.5	59.9 / -1.00	PRIVATE RESIDENCE 63 CARRUTHURS AVENUE FURNACE OIL TANK OTTAWA CITY ON	SPL
Ref No:	132408			Discharger Report:	
Site No:				Material Group:	
Incident Dt:	9/26/1996			Health/Env Conseq:	
Year:				Client Type:	
Incident Cause:	ABOVE-GROUND TANK LEAK			Sector Type:	
Incident Event:				Agency Involved:	
Contaminant Code:				Nearest Watercourse:	
Contaminant Name:				Site Address:	
Contaminant Limit 1:				Site District Office:	
Contam Limit Freq 1:				Site Postal Code:	
Contaminant UN No 1:				Site Region:	
Environment Impact:	CONFIRMED			Site Municipality:	20101
Nature of Impact:	Soil contamination			Site Lot:	
Receiving Medium:	LAND			Site Conc:	
Receiving Env:				Northing:	
MOE Response:				Easting:	WORKS, MCCR
Dt MOE Arvl on Scn:				Site Geo Ref Accu:	
MOE Reported Dt:	9/27/1996			Site Map Datum:	
Dt Document Closed:				SAC Action Class:	
Incident Reason:	CORROSION			Source Type:	
Site Name:					
Site County/District:					
Site Geo Ref Meth:					
Incident Summary:	PRIVATE RESIDENT'S FUEL OIL TANK LEAKS FUEL TO DIRT BASEMENT FLOOR				
Contaminant Qty:					
<a href="#">39</a>	1 of 2	ENE/228.3	59.9 / -1.00	18 Burnside Ave. OTTAWA HOUSING GARAGE<UNOFFICIAL> Ottawa ON K1Y 4V7	SPL
Ref No:	5505-6NMPTR			Discharger Report:	
Site No:				Material Group:	Wastes
Incident Dt:	4/7/2006			Health/Env Conseq:	
Year:				Client Type:	
Incident Cause:	Other Discharges			Sector Type:	Other
Incident Event:				Agency Involved:	
Contaminant Code:	41			Nearest Watercourse:	
Contaminant Name:	DIESEL FUEL AND WATER MIXTURE			Site Address:	18 BURNSIDE AVE.
Contaminant Limit 1:				Site District Office:	Ottawa
Contam Limit Freq 1:				Site Postal Code:	
Contaminant UN No 1:				Site Region:	
Environment Impact:	Possible			Site Municipality:	Ottawa
Nature of Impact:	Soil Contamination; Surface Water Pollution			Site Lot:	
Receiving Medium:	Land & Water			Site Conc:	
Receiving Env:				Northing:	
MOE Response:				Easting:	
Dt MOE Arvl on Scn:				Site Geo Ref Accu:	
MOE Reported Dt:	4/7/2006			Site Map Datum:	
Dt Document Closed:				SAC Action Class:	
Incident Reason:	Other - Reason not otherwise defined			Source Type:	
Site Name:	18 BURNSIDE AVE.				
Site County/District:					
Site Geo Ref Meth:					
Incident Summary:	Ottawa Housing, 18 Burnside: diesel spill into sewer.				
Contaminant Qty:	Not Specific Unknown				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">39</a>	2 of 2	ENE/228.3	59.9 / -1.00	OTTAWA COMMUNITY HOUSING CORP. 18 BURNSIDE AVE., OTTAWA ON K1Y 4V7	GEN
<b>Generator No:</b>	ON7534774			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	
<b>Approval Years:</b>	06			<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>				<b>Co Admin:</b>	
<b>MHSW Facility:</b>				<b>Phone No Admin:</b>	
<b>SIC Code:</b>	531111				
<b>SIC Description:</b>	Lessors of Residential Buildings and Dwellings (ex				
<b>Detail(s)</b>					
<b>Waste Class:</b>	221				
<b>Waste Class Desc:</b>	LIGHT FUELS				
<a href="#">40</a>	1 of 2	ENE/231.6	59.9 / -1.00	In front of 55 Carruthers Street<UNOFFICIAL> Ottawa ON K1Y 1N3	SPL
<b>Ref No:</b>	2625-6HHURD			<b>Discharger Report:</b>	0
<b>Site No:</b>				<b>Material Group:</b>	Oil
<b>Incident Dt:</b>	10/25/2005			<b>Health/Env Conseq:</b>	
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>	Overflow (Tanks Lagoons)			<b>Sector Type:</b>	Other Motor Vehicle
<b>Incident Event:</b>				<b>Agency Involved:</b>	
<b>Contaminant Code:</b>				<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	TRANSMISSION OIL			<b>Site Address:</b>	
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	
<b>Environment Impact:</b>	Not Anticipated			<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>	Water			<b>Site Conc:</b>	
<b>Receiving Env:</b>				<b>Northing:</b>	
<b>MOE Response:</b>				<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	10/25/2005			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	Land Spills
<b>Incident Reason:</b>	Equipment Failure			<b>Source Type:</b>	
<b>Site Name:</b>	In front of 55 Carruthers Street<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Transmission fluid to c/b, cleaned, EGN				
<b>Contaminant Qty:</b>					
<a href="#">40</a>	2 of 2	ENE/231.6	59.9 / -1.00	Unknown<UNOFFICIAL> 55 Carruthers Ave. Ottawa Ottawa ON	SPL
<b>Ref No:</b>	3467-AWPPHU			<b>Discharger Report:</b>	
<b>Site No:</b>	NA			<b>Material Group:</b>	
<b>Incident Dt:</b>	2018/03/09			<b>Health/Env Conseq:</b>	2 - Minor Environment
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Unknown / N/A
<b>Incident Event:</b>	Dumping			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	27			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	CONCRETE			<b>Site Address:</b>	55 Carruthers Ave. Ottawa
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	Ottawa
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Contaminant UN No 1:</b>	n/a			<b>Site Region:</b>	Eastern
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>	Land; Surface Water; Ground Water			<b>Northing:</b>	5028652.98
<b>MOE Response:</b>	No			<b>Easting:</b>	442823.4
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	2018/03/09			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	Watercourse Spills
<b>Incident Reason:</b>	Unknown / N/A			<b>Source Type:</b>	Unknown / N/A
<b>Site Name:</b>	55 Carruthers Ave<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Ottawa: unknown amount of concrete to CB				
<b>Contaminant Qty:</b>	0 other - see incident description				

<a href="#">41</a>	1 of 1	<b>WNW/232.7</b>	<b>59.9 / -1.00</b>	<b>Environmental Health Centre</b>	<b>FCS</b>
				<b>Ottawa ON</b>	
<b>SGC:</b>	3506008				
<b>Site ID:</b>	50064001				
<b>Departmental ID:</b>	LAB-OT-05				
<b>Depart Code:</b>	SHC				
<b>Class Type:</b>	3				
<b>Class:</b>	Low Priority for Action				
<b>Site Name:</b>	Environmental Health Centre				
<b>Site Name (FR):</b>	Centre de santé environnementale				
<b>Site Status:</b>	Closed				
<b>Site Status Desc:</b>	Confirmatory sampling completed. No further action required.				
<b>Site Status (FR):</b>	Fermé				
<b>Description (FR):</b>	Échantillonnage de confirmation terminé. Aucune autre mesure nécessaire.				
<b>Involv Code:</b>					
<b>Census Division:</b>	Ottawa				
<b>Municipality:</b>	Ottawa				
<b>Census Sub Class:</b>	1				
<b>Latitude:</b>	45.409269				
<b>Longitude:</b>	-75.735275				
<b>Location:</b>					
<b>Protected Data:</b>	0				
<b>FED:</b>	075				
<b>Fed Electoral District:</b>	Ottawa Centre				
<b>Fed Electoral District (FR):</b>	Ottawa-Centre				
<b>Metro:</b>					
<b>Nearest Pop. Area:</b>					
<b>Highest Step Cmpltd:</b>	9				
<b>Site Deleted Flag:</b>					
<b>Created:</b>	2005-07-28T11:44:00				
<b>Modified:</b>	2013-07-19T15:54:50.177				
<b>Property No.:</b>	08752				
<b>Est m³ Contmnted:</b>	44.0000				
<b>Est Ha Contmnted:</b>					
<b>Est Tons Contamin:</b>					
<b>Est Population at 1 Km:</b>	6,760				
<b>Est Population at 5 Km:</b>	210,436				
<b>Est Population at 10 Km:</b>	649,599				
<b>Est Population at 25 Km:</b>	1,226,766				
<b>Est Population at 50 Km:</b>	1,442,120				
<b>Reporting Org:</b>					
<b>Reporting Org (FR):</b>					
<b>Reason for Involv:</b>	Federal Real Property				
<b>Reason for Involv (FR):</b>	Biens immobiliers fédéraux				
<b>Liable Third Party:</b>					
<b>Class (FR):</b>	Priorité d'intervention faible				

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b>Action Plan:</b>				Based upon the results of an assessment completed in 2009-10, it has been determined that natural attenuation of contamination is occurring at the site. An ongoing monitoring program is in place to ensure risks to human health and the environment remain neutralized.	
<b>Action Plan (FR):</b>				Sur la base des résultats d'une évaluation effectuée en 2009-10, il a été déterminé que l'atténuation naturelle de la contamination se produit sur le site. Un programme de surveillance continue est en place pour s'assurer que les risques pour la santé humaine et l'environnement restent neutralisés.	
<b>Site Mgmt Strategy:</b>				Other	
<b>Minimap URL:</b>				http://www.tbs-sct.gc.ca/fcsi-rscf/minimap.aspx?fsi=50064001	
<b>Additional Info:</b>					
<b>Additional Info (FR):</b>					
<b><u>Management</u></b>					
<b>Management Code:</b>			9		
<b>Management Type (EN):</b>			Other		
<b>Management Type (FR):</b>			Autre type de gestion		
<b><u>Contamination</u></b>					
<b>Contaminant:</b>				PHCs (petroleum hydrocarbons)	
<b>Contamination (FR):</b>				HCP (hydrocarbures pétroliers)	
<b>Medium Code:</b>			2		
<b>Medium:</b>			Groundwater		
<b>Medium (FR):</b>			Eau souterraine		
<b>Contaminant:</b>				PHCs (petroleum hydrocarbons)	
<b>Contamination (FR):</b>				HCP (hydrocarbures pétroliers)	
<b>Medium Code:</b>			5		
<b>Medium:</b>			Soil		
<b>Medium (FR):</b>			Sol		
<b><u>Annual Data</u></b>					
<b>Fiscal Year:</b>			2005-2006		
<b>Reporting Organization:</b>			SHC		
<b>Reporting Organization (EN):</b>			Health Canada		
<b>Reporting Organization (FR):</b>			Santé Canada		
<b>Class Type:</b>					
<b>Class (EN):</b>					
<b>Class (FR):</b>					
<b>CCME Flag:</b>					
<b>CCME NCS Year:</b>					
<b>Step Name (EN):</b>					
<b>Step Name (FR):</b>					
<b>Highest Step Completed:</b>			07		
<b>Highest Step Completed Desc:</b>					
<b>Planned Compl Date Step7:</b>					
<b>Planned Compl Date Step8:</b>					
<b>Planned Compl Date Step9:</b>					
<b>Created:</b>					
<b>Modified:</b>					
<b>NCSCS Year:</b>					
<b>Closed:</b>			No		
<b>Actual Cubic Metres Rem:</b>			0.0000		
<b>Actual Hectares Rem:</b>			0.0000		
<b>Actual Tons Remediated:</b>			0.0000		
<b>Total Asmt Expenditure:</b>			11000.00		
<b>Total Remediation Expenditure:</b>			11000.00		
<b>Total Care/Maint Expenditur:</b>			0.00		
<b>Total Mntring Expenditure:</b>			0.00		
<b>Ttl Expenditure Reduc Liabil:</b>					
<b>FCSAP Asmt Expenditure:</b>			0.00		
<b>FCSAP Remed Expenditure:</b>			0.00		

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
----------------	--------------------------	--------------------------------	----------------------	-------------	-----------

<b>FCSAP Care/Maint Expenditur:</b>	0.00				
<b>FCSAP Mntring Expenditure:</b>	0.00				

**Annual Data**

<b>Fiscal Year:</b>	2008-2009				
<b>Reporting Organization:</b>	SHC				
<b>Reporting Organization (EN):</b>	Health Canada				
<b>Reporting Organization (FR):</b>	Santé Canada				
<b>Class Type:</b>					
<b>Class (EN):</b>					
<b>Class (FR):</b>					
<b>CCME Flag:</b>					
<b>CCME NCS Year:</b>					
<b>Step Name (EN):</b>					
<b>Step Name (FR):</b>					
<b>Highest Step Completed:</b>	08				
<b>Highest Step Completed Desc:</b>					
<b>Planned Compl Date Step7:</b>					
<b>Planned Compl Date Step8:</b>					
<b>Planned Compl Date Step9:</b>					
<b>Created:</b>					
<b>Modified:</b>					
<b>NCSCS Year:</b>					
<b>Closed:</b>	No				
<b>Actual Cubic Metres Rem:</b>	0.0000				
<b>Actual Hectares Rem:</b>	0.0000				
<b>Actual Tons Remediated:</b>	0.0000				
<b>Total Asmt Expenditure:</b>	0.00				
<b>Total Remediation Expenditure:</b>	0.00				
<b>Total Care/Maint Expenditur:</b>	0.00				
<b>Total Mntring Expenditure:</b>	0.00				
<b>Ttl Expenditure Reduc Liabil:</b>					
<b>FCSAP Asmt Expenditure:</b>	0.00				
<b>FCSAP Remed Expenditure:</b>	0.00				
<b>FCSAP Care/Maint Expenditur:</b>	0.00				
<b>FCSAP Mntring Expenditure:</b>	0.00				

**Annual Data**

<b>Fiscal Year:</b>	2006-2007				
<b>Reporting Organization:</b>	SHC				
<b>Reporting Organization (EN):</b>	Health Canada				
<b>Reporting Organization (FR):</b>	Santé Canada				
<b>Class Type:</b>					
<b>Class (EN):</b>					
<b>Class (FR):</b>					
<b>CCME Flag:</b>					
<b>CCME NCS Year:</b>					
<b>Step Name (EN):</b>					
<b>Step Name (FR):</b>					
<b>Highest Step Completed:</b>	07				
<b>Highest Step Completed Desc:</b>					
<b>Planned Compl Date Step7:</b>					
<b>Planned Compl Date Step8:</b>					
<b>Planned Compl Date Step9:</b>					
<b>Created:</b>					
<b>Modified:</b>					
<b>NCSCS Year:</b>					
<b>Closed:</b>	No				
<b>Actual Cubic Metres Rem:</b>	0.0000				
<b>Actual Hectares Rem:</b>	0.0000				
<b>Actual Tons Remediated:</b>	0.0000				
<b>Total Asmt Expenditure:</b>	24872.00				

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Total Remediation Expenditure:</b>		0.00			
<b>Total Care/Maint Expenditur:</b>		0.00			
<b>Total Mntring Expenditure:</b>		0.00			
<b>Ttl Expenditure Reduc Liabil:</b>					
<b>FCSAP Asmt Expenditure:</b>		0.00			
<b>FCSAP Remed Expenditure:</b>		0.00			
<b>FCSAP Care/Maint Expenditur:</b>		0.00			
<b>FCSAP Mntring Expenditure:</b>		0.00			

**Annual Data**

**Fiscal Year:** 2009-2010  
**Reporting Organization:** SHC  
**Reporting Organization (EN):** Health Canada  
**Reporting Organization (FR):** Santé Canada  
**Class Type:**  
**Class (EN):**  
**Class (FR):**  
**CCME Flag:**  
**CCME NCS Year:**  
**Step Name (EN):**  
**Step Name (FR):**  
**Highest Step Completed:** 09  
**Highest Step Completed Desc:**  
**Planned Compl Date Step7:**  
**Planned Compl Date Step8:**  
**Planned Compl Date Step9:**  
**Created:**  
**Modified:**  
**NCSCS Year:**  
**Closed:** Yes  
**Actual Cubic Metres Rem:** 45.0000  
**Actual Hectares Rem:** 0.0000  
**Actual Tons Remediated:** 0.0000  
**Total Asmt Expenditure:** 24392.00  
**Total Remediation Expenditure:** 0.00  
**Total Care/Maint Expenditur:** 0.00  
**Total Mntring Expenditure:** 0.00  
**Ttl Expenditure Reduc Liabil:**  
**FCSAP Asmt Expenditure:** 0.00  
**FCSAP Remed Expenditure:** 0.00  
**FCSAP Care/Maint Expenditur:** 0.00  
**FCSAP Mntring Expenditure:** 0.00

**Annual Data**

**Fiscal Year:** 2007-2008  
**Reporting Organization:** SHC  
**Reporting Organization (EN):** Health Canada  
**Reporting Organization (FR):** Santé Canada  
**Class Type:**  
**Class (EN):**  
**Class (FR):**  
**CCME Flag:**  
**CCME NCS Year:**  
**Step Name (EN):**  
**Step Name (FR):**  
**Highest Step Completed:** 07  
**Highest Step Completed Desc:**  
**Planned Compl Date Step7:**  
**Planned Compl Date Step8:**  
**Planned Compl Date Step9:**  
**Created:**  
**Modified:**

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>NCSCS Year:</b>					
<b>Closed:</b> No					
<b>Actual Cubic Metres Rem:</b> 0.0000					
<b>Actual Hectares Rem:</b> 0.0000					
<b>Actual Tons Remediated:</b> 0.0000					
<b>Total Asmt Expenditure:</b> 0.00					
<b>Total Remediation Expenditure:</b> 0.00					
<b>Total Care/Maint Expenditur:</b> 0.00					
<b>Total Mntring Expenditure:</b> 0.00					
<b>Ttl Expenditure Reduc Liabil:</b>					
<b>FCSAP Asmt Expenditure:</b> 0.00					
<b>FCSAP Remed Expenditure:</b> 0.00					
<b>FCSAP Care/Maint Expenditur:</b> 0.00					
<b>FCSAP Mntring Expenditure:</b> 0.00					

<a href="#">42</a>	1 of 1	ENE/236.0	59.9 / -1.00	JOHN HOWARD SOCIETY OF OTTAWA 59 CARRUTHERS AVENUE, OTTAWA, ON K1Y 1N3 Ottawa ON	RSC
<b>RSC ID:</b>	223048			<b>Cert Date:</b>	
<b>RA No:</b>				<b>Cert Prop Use No:</b>	
<b>RSC Type:</b>	Phase 1 and 2 RSC			<b>Intended Prop Use:</b>	Residential
<b>Curr Property Use:</b>	Commercial			<b>Qual Person Name:</b>	ADRIAN MENYHART
<b>Ministry District:</b>	Ottawa District Office			<b>Stratified (Y/N):</b>	
<b>Filing Date:</b>	2017/03/14			<b>Audit (Y/N):</b>	
<b>Date Ack:</b>				<b>Entire Leg Prop. (Y/N):</b>	
<b>Date Returned:</b>				<b>Accuracy Estimate:</b>	
<b>Restoration Type:</b>				<b>Telephone:</b>	
<b>Soil Type:</b>				<b>Fax:</b>	
<b>Criteria:</b>				<b>Email:</b>	
<b>CPU Issued Sect 1686:</b>					
<b>Asmt Roll No:</b>					
<b>Prop ID No (PIN):</b>	04096-0254 (LT)				
<b>Property Municipal Address:</b>	59 CARRUTHERS AVENUE, OTTAWA, ON K1Y 1N3, 55 CARRUTHERS AVENUE, OTTAWA, ON K1Y 1N3				
<b>Mailing Address:</b>					
<b>Latitude &amp; Longitude:</b>					
<b>UTM Coordinates:</b>					
<b>Consultant:</b>					
<b>Legal Desc:</b>					
<b>Measurement Method:</b>					
<b>Applicable Standards:</b>					
<b>RSC PDF:</b>	<a href="https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75990&amp;fileName=BROWNFIELDS-E.pdf">https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75990&amp;fileName=BROWNFIELDS-E.pdf</a>				

#### Document(s) Detail

<b>Document Heading:</b>	Supporting Documents
<b>Document Name:</b>	Transfer Complete.pdf
<b>Document Type:</b>	Copy of any deed(s), transfer(s) or other document(s)
<b>Document Link:</b>	<a href="https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75991&amp;fileName=Transfer+Complete.pdf">https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75991&amp;fileName=Transfer+Complete.pdf</a>
<b>Document Heading:</b>	Supporting Documents
<b>Document Name:</b>	Lawyer Letter NOV 25 2016.pdf
<b>Document Type:</b>	Lawyer's letter consisting of a legal description of the property
<b>Document Link:</b>	<a href="https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75986&amp;fileName=Lawyer+Letter+NOV+25+2016.pdf">https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75986&amp;fileName=Lawyer+Letter+NOV+25+2016.pdf</a>
<b>Document Heading:</b>	Supporting Documents
<b>Document Name:</b>	Certificate Status jan 2017.pdf
<b>Document Type:</b>	Certificate of Status
<b>Document Link:</b>	<a href="https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?">https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?</a>

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
				attachmentId=75988&fileName=Certificate+Status+jan+2017.pdf	
<b>Document Heading:</b>				Supporting Documents	
<b>Document Name:</b>				Plan of Survey - January 2017.pdf	
<b>Document Type:</b>				A Current plan of Survey	
<b>Document Link:</b>				https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75981&fileName=Plan+of+Survey+-+January+2017.pdf	
<b>Document Heading:</b>				Supporting Documents	
<b>Document Name:</b>				Table of current and past uses.pdf	
<b>Document Type:</b>				Table of Current and Past Property Use	
<b>Document Link:</b>				https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75987&fileName=Table+of+current+and+past+uses.pdf	
<b>Document Heading:</b>				Supporting Documents	
<b>Document Name:</b>				APEC Table.pdf	
<b>Document Type:</b>				Area(s) of Potential Environmental Concern	
<b>Document Link:</b>				https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=75982&fileName=APEC+Table.pdf	
<b>Document Heading:</b>				Supporting Documents	
<b>Document Name:</b>				PhaseTwo.pdf	
<b>Document Type:</b>				Phase 2 Conceptual Site Model	
<b>Document Link:</b>				https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=78082&fileName=PhaseTwo.pdf	

[43](#)      1 of 1      **ENE/240.4**      **59.9 / -1.00**      **55 CARRUTHERS AVENUE  
OTTAWA ON**      **WWIS**

<b>Well ID:</b>	7264754	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	
<b>Primary Water Use:</b>	Monitoring	<b>Date Received:</b>	6/15/2016
<b>Sec. Water Use:</b>		<b>Selected Flag:</b>	Yes
<b>Final Well Status:</b>	Observation Wells	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	7328
<b>Casing Material:</b>		<b>Form Version:</b>	7
<b>Audit No:</b>	Z227936	<b>Owner:</b>	
<b>Tag:</b>	A153920	<b>Street Name:</b>	55 CARRUTHERS AVENUE
<b>Construction Method:</b>		<b>County:</b>	OTTAWA
<b>Elevation (m):</b>		<b>Municipality:</b>	OTTAWA CITY
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	
<b>Well Depth:</b>		<b>Concession:</b>	
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**PDF URL (Map):** [https://d2khazk8e83rdv.cloudfront.net/moe\\_mapping/downloads/2Water/Wells\\_pdfs/726\7264754.pdf](https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/726\7264754.pdf)

**Bore Hole Information**

<b>Bore Hole ID:</b>	1006052743	<b>Elevation:</b>	62.660133
<b>DP2BR:</b>		<b>Elevrc:</b>	
<b>Spatial Status:</b>		<b>Zone:</b>	18
<b>Code OB:</b>		<b>East83:</b>	442857
<b>Code OB Desc:</b>		<b>North83:</b>	5028603
<b>Open Hole:</b>		<b>Org CS:</b>	UTM83
<b>Cluster Kind:</b>		<b>UTMRC:</b>	4
<b>Date Completed:</b>	5/5/2016	<b>UTMRC Desc:</b>	margin of error : 30 m - 100 m
<b>Remarks:</b>		<b>Location Method:</b>	digit
<b>Elevrc Desc:</b>			



<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Location Source Date:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Source Revision Comment:</b>					
<b>Supplier Comment:</b>					
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>			1006105786		
<b>Layer:</b>			2		
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>			26		
<b>Most Common Material:</b>			ROCK		
<b>Mat2:</b>					
<b>Mat2 Desc:</b>					
<b>Mat3:</b>					
<b>Mat3 Desc:</b>					
<b>Formation Top Depth:</b>			1.52		
<b>Formation End Depth:</b>			9.15		
<b>Formation End Depth UOM:</b>			m		
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>			1006105785		
<b>Layer:</b>			1		
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>			06		
<b>Most Common Material:</b>			SILT		
<b>Mat2:</b>					
<b>Mat2 Desc:</b>					
<b>Mat3:</b>					
<b>Mat3 Desc:</b>					
<b>Formation Top Depth:</b>			0		
<b>Formation End Depth:</b>			1.52		
<b>Formation End Depth UOM:</b>			m		
<b><u>Annular Space/Abandonment</u></b>					
<b><u>Sealing Record</u></b>					
<b>Plug ID:</b>			1006105794		
<b>Layer:</b>			1		
<b>Plug From:</b>			0		
<b>Plug To:</b>			5.18		
<b>Plug Depth UOM:</b>			m		
<b><u>Method of Construction &amp; Well</u></b>					
<b><u>Use</u></b>					
<b>Method Construction ID:</b>			1006105793		
<b>Method Construction Code:</b>			F		
<b>Method Construction:</b>			H.S.A.		
<b>Other Method Construction:</b>			DIAMOND		
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>			1006105784		
<b>Casing No:</b>			0		
<b>Comment:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
---------	-------------------	----------------------------	------------------	------	----

Alt Name:

**Construction Record - Casing**

Casing ID: 1006105790  
 Layer: 1  
 Material: 5  
 Open Hole or Material: PLASTIC  
 Depth From: 0  
 Depth To: 6.1  
 Casing Diameter: 3.18  
 Casing Diameter UOM: cm  
 Casing Depth UOM: m

**Construction Record - Screen**

Screen ID: 1006105791  
 Layer: 1  
 Slot: 10  
 Screen Top Depth: 6.1  
 Screen End Depth: 9.15  
 Screen Material: 5  
 Screen Depth UOM: m  
 Screen Diameter UOM: cm  
 Screen Diameter: 3.89

**Water Details**

Water ID: 1006105789  
 Layer: 1  
 Kind Code:  
 Kind:  
 Water Found Depth: 5.93  
 Water Found Depth UOM: m

**Hole Diameter**

Hole ID: 1006105788  
 Diameter: 7.62  
 Depth From: 1.52  
 Depth To: 9.15  
 Hole Depth UOM: m  
 Hole Diameter UOM: cm

**Hole Diameter**

Hole ID: 1006105787  
 Diameter: 20.3  
 Depth From: 0  
 Depth To: 1.52  
 Hole Depth UOM: m  
 Hole Diameter UOM: cm

<a href="#">44</a>	1 of 3	NW/244.8	59.6 / -1.31	City of Ottawa Emmerson Avenue and Parkdale Avenue Ottawa ON	CA
--------------------	--------	----------	--------------	--	----

Certificate #: 1966-5LGHCQ  
 Application Year: 2003  
 Issue Date: 4/10/2003  
 Approval Type: Municipal and Private Sewage Works

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Status:</b> Approved <b>Application Type:</b> <b>Client Name:</b> <b>Client Address:</b> <b>Client City:</b> <b>Client Postal Code:</b> <b>Project Description:</b> <b>Contaminants:</b> <b>Emission Control:</b>					
<a href="#">44</a>	2 of 3	NW/244.8	59.6 / -1.31	City of Ottawa Emmerson Avenue and Parkdale Ave Ottawa ON K1S 5K2	ECA
<b>Approval No:</b> 1966-5LGHCQ <b>Approval Date:</b> 2003-04-10 <b>Status:</b> Approved <b>Record Type:</b> ECA <b>Link Source:</b> IDS <b>SWP Area Name:</b> <b>Approval Type:</b> ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS <b>Project Type:</b> MUNICIPAL AND PRIVATE SEWAGE WORKS <b>Business Name:</b> City of Ottawa <b>Address:</b> Emmerson Avenue and Parkdale Ave <b>Full Address:</b> <b>Full PDF Link:</b> <a href="https://www.accessenvironment.ene.gov.on.ca/instruments/5211-5KXLKQ-14.pdf">https://www.accessenvironment.ene.gov.on.ca/instruments/5211-5KXLKQ-14.pdf</a>		<b>MOE District:</b> <b>City:</b> <b>Longitude:</b> <b>Latitude:</b> <b>Geometry X:</b> <b>Geometry Y:</b>			
<a href="#">44</a>	3 of 3	NW/244.8	59.6 / -1.31	City of Ottawa Emmerson Avenue and Parkdale Ave Ottawa ON K1S 5K2	ECA
<b>Approval No:</b> 9595-5LGHK5 <b>Approval Date:</b> 2003-04-10 <b>Status:</b> Approved <b>Record Type:</b> ECA <b>Link Source:</b> IDS <b>SWP Area Name:</b> <b>Approval Type:</b> ECA-Municipal and Private Water Works <b>Project Type:</b> Municipal and Private Water Works <b>Business Name:</b> City of Ottawa <b>Address:</b> Emmerson Avenue and Parkdale Ave <b>Full Address:</b> <b>Full PDF Link:</b>		<b>MOE District:</b> <b>City:</b> <b>Longitude:</b> <b>Latitude:</b> <b>Geometry X:</b> <b>Geometry Y:</b>			
<a href="#">45</a>	1 of 1	SE/245.0	60.9 / 0.00	187 Forward Avenue Ottawa ON K1Y 1L2	EHS
<b>Order No:</b> 20120416045 <b>Status:</b> C <b>Report Type:</b> Standard Report <b>Report Date:</b> 4/25/2012 4:24:17 PM <b>Date Received:</b> 4/16/2012 4:22:57 PM <b>Previous Site Name:</b> <b>Lot/Building Size:</b> 3,780sm <b>Additional Info Ordered:</b>		<b>Nearest Intersection:</b> <b>Municipality:</b> Ottawa <b>Client Prov/State:</b> ON <b>Search Radius (km):</b> 0.25 <b>X:</b> -75.731084 <b>Y:</b> 45.406153			
<a href="#">46</a>	1 of 1	NW/245.0	59.9 / -1.00	50 COLOMBINE DRIVEWAY Ottawa ON	WWIS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Well ID:</b>	7240373			<b>Data Entry Status:</b>	
<b>Construction Date:</b>				<b>Data Src:</b>	
<b>Primary Water Use:</b>	Monitoring and Test Hole			<b>Date Received:</b>	4/22/2015
<b>Sec. Water Use:</b>	0			<b>Selected Flag:</b>	Yes
<b>Final Well Status:</b>	Test Hole			<b>Abandonment Rec:</b>	
<b>Water Type:</b>				<b>Contractor:</b>	7241
<b>Casing Material:</b>				<b>Form Version:</b>	7
<b>Audit No:</b>	Z207416			<b>Owner:</b>	
<b>Tag:</b>	A178459			<b>Street Name:</b>	50 COLOMBINE DRIVEWAY
<b>Construction Method:</b>				<b>County:</b>	OTTAWA
<b>Elevation (m):</b>				<b>Municipality:</b>	OTTAWA CITY
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	
<b>Well Depth:</b>				<b>Concession:</b>	
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					

PDF URL (Map):

#### Bore Hole Information

<b>Bore Hole ID:</b>	1005327894	<b>Elevation:</b>	58.765445
<b>DP2BR:</b>		<b>Elevrc:</b>	
<b>Spatial Status:</b>		<b>Zone:</b>	18
<b>Code OB:</b>		<b>East83:</b>	442482
<b>Code OB Desc:</b>		<b>North83:</b>	5028713
<b>Open Hole:</b>		<b>Org CS:</b>	UTM83
<b>Cluster Kind:</b>		<b>UTMRC:</b>	4
<b>Date Completed:</b>	3/30/2015	<b>UTMRC Desc:</b>	margin of error : 30 m - 100 m
<b>Remarks:</b>		<b>Location Method:</b>	wwr
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>			
<b>Improvement Location Method:</b>			
<b>Source Revision Comment:</b>			
<b>Supplier Comment:</b>			

#### Overburden and Bedrock

##### Materials Interval

<b>Formation ID:</b>	1005599131
<b>Layer:</b>	2
<b>Color:</b>	2
<b>General Color:</b>	GREY
<b>Mat1:</b>	15
<b>Most Common Material:</b>	LIMESTONE
<b>Mat2:</b>	
<b>Mat2 Desc:</b>	
<b>Mat3:</b>	71
<b>Mat3 Desc:</b>	FRACTURED
<b>Formation Top Depth:</b>	.91
<b>Formation End Depth:</b>	6.1
<b>Formation End Depth UOM:</b>	m

#### Overburden and Bedrock

##### Materials Interval

<b>Formation ID:</b>	1005599130
<b>Layer:</b>	1

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elev/Diff (m)</b>	<b>Site</b>	<b>DB</b>
<b>Color:</b>		6			
<b>General Color:</b>		BROWN			
<b>Mat1:</b>		11			
<b>Most Common Material:</b>		GRAVEL			
<b>Mat2:</b>		28			
<b>Mat2 Desc:</b>		SAND			
<b>Mat3:</b>		85			
<b>Mat3 Desc:</b>		SOFT			
<b>Formation Top Depth:</b>		0			
<b>Formation End Depth:</b>		.91			
<b>Formation End Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599142			
<b>Layer:</b>		3			
<b>Plug From:</b>		1.22			
<b>Plug To:</b>		6.1			
<b>Plug Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599141			
<b>Layer:</b>		2			
<b>Plug From:</b>		0.31			
<b>Plug To:</b>		1.22			
<b>Plug Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		1005599140			
<b>Layer:</b>		1			
<b>Plug From:</b>		0			
<b>Plug To:</b>		0.31			
<b>Plug Depth UOM:</b>		m			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		1005599139			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		1005599129			
<b>Casing No:</b>		0			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		1005599135			
<b>Layer:</b>		1			
<b>Material:</b>		5			
<b>Open Hole or Material:</b>		PLASTIC			
<b>Depth From:</b>		0			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Depth To:		1.5			
Casing Diameter:		5.2			
Casing Diameter UOM:		cm			
Casing Depth UOM:		m			
<b><u>Construction Record - Screen</u></b>					
Screen ID:		1005599136			
Layer:		1			
Slot:		10			
Screen Top Depth:		1.5			
Screen End Depth:		6.1			
Screen Material:		5			
Screen Depth UOM:		m			
Screen Diameter UOM:		cm			
Screen Diameter:		6.03			
<b><u>Water Details</u></b>					
Water ID:		1005599134			
Layer:					
Kind Code:					
Kind:					
Water Found Depth:					
Water Found Depth UOM:		m			
<b><u>Hole Diameter</u></b>					
Hole ID:		1005599132			
Diameter:		11.43			
Depth From:		0			
Depth To:		1.5			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
<b><u>Hole Diameter</u></b>					
Hole ID:		1005599133			
Diameter:		7.62			
Depth From:		1.5			
Depth To:		6.1			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
<a href="#">47</a>	1 of 1	E/245.4	59.9 / -1.00	71 Carruthers Ave Ottawa ON K1Y1N3	EHS
Order No:		20131210024		<b>Nearest Intersection:</b>	
Status:		C		<b>Municipality:</b>	
Report Type:		Standard Select Report		<b>Client Prov/State:</b> ON	
Report Date:		12-DEC-13		<b>Search Radius (km):</b> .25	
Date Received:		10-DEC-13		<b>X:</b> -75.730032	
Previous Site Name:				<b>Y:</b> 45.408291	
Lot/Building Size:					
Additional Info Ordered:		Fire Insur. Maps and/or Site Plans; Title Searches; Topographic Maps; City Directory			
<a href="#">48</a>	1 of 2	ESE/247.2	60.6 / -0.32	PRIVATE RESIDENCE 185 HINCHEY AVE. FURNACE OIL TANK OTTAWA CITY ON K1Y 1L6	SPL



Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Miscellaneous Industrial
<b>Incident Event:</b>				<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	24			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	GLYCOL/WATER SOLUTION			<b>Site Address:</b>	70 Colombine Driveway
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>				<b>Northing:</b>	5028625
<b>MOE Response:</b>	No			<b>Easting:</b>	442300
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	11/19/2015			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>	11/23/2015			<b>SAC Action Class:</b>	Watercourse Spills
<b>Incident Reason:</b>	Equipment Failure			<b>Source Type:</b>	
<b>Site Name:</b>	70 Colombine Driveway<UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Brookfield GIS: 3L of glycol/water solution to drain				
<b>Contaminant Qty:</b>	3 L				

<a href="#">49</a>	2 of 3	WNW/249.4	60.6 / -0.24	70 Colombine Driveway Ottawa ON K1A 0K9	SPL
<b>Ref No:</b>	5723-A8ZP4K			<b>Discharger Report:</b>	
<b>Site No:</b>	NA			<b>Material Group:</b>	
<b>Incident Dt:</b>	2016/04/14			<b>Health/Env Conseq:</b>	
<b>Year:</b>				<b>Client Type:</b>	
<b>Incident Cause:</b>				<b>Sector Type:</b>	Miscellaneous Industrial
<b>Incident Event:</b>	Leak/Break			<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	15			<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	HYDRAULIC OIL			<b>Site Address:</b>	70 Colombine Driveway
<b>Contaminant Limit 1:</b>				<b>Site District Office:</b>	
<b>Contam Limit Freq 1:</b>				<b>Site Postal Code:</b>	K1A 0K9
<b>Contaminant UN No 1:</b>				<b>Site Region:</b>	
<b>Environment Impact:</b>				<b>Site Municipality:</b>	Ottawa
<b>Nature of Impact:</b>				<b>Site Lot:</b>	
<b>Receiving Medium:</b>				<b>Site Conc:</b>	
<b>Receiving Env:</b>	Land			<b>Northing:</b>	
<b>MOE Response:</b>	No			<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>				<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	2016/04/14			<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>				<b>SAC Action Class:</b>	Land Spills
<b>Incident Reason:</b>	Equipment Failure			<b>Source Type:</b>	
<b>Site Name:</b>	Office Building - Loading Dock <UNOFFICIAL>				
<b>Site County/District:</b>					
<b>Site Geo Ref Meth:</b>					
<b>Incident Summary:</b>	Brookfield: 1 L hydraulic fluid to concrete, cntd & clng				
<b>Contaminant Qty:</b>	1 L				

<a href="#">49</a>	3 of 3	WNW/249.4	60.6 / -0.24	BROOKFIELD GLOBAL INTEGRATED SOLUTIONS 70 COLOMBINE DRIVWAY TUNNEY'S PASTURE OTTAWA ON K1A 0K9	GEN
<b>Generator No:</b>	ON2863521			<b>PO Box No:</b>	
<b>Status:</b>				<b>Country:</b>	Canada
<b>Approval Years:</b>	2016			<b>Choice of Contact:</b>	CO_OFFICIAL
<b>Contam. Facility:</b>	No			<b>Co Admin:</b>	
<b>MHSW Facility:</b>	No			<b>Phone No Admin:</b>	



<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<b>SIC Code:</b>	531310				
<b>SIC Description:</b>		REAL ESTATE PROPERTY MANAGERS			
<b><u>Detail(s)</u></b>					
<b>Waste Class:</b>	212				
<b>Waste Class Desc:</b>		ALIPHATIC SOLVENTS			

<a href="#">50</a>	1 of 1	<i>E/249.9</i>	<i>59.9 / -1.00</i>	<i>The Corporation of the City of Ottawa Carruthers Ave., Hinchey Ave. &amp; Lyndale Ave. Ottawa ON K1N 5A1</i>	<i>ECA</i>
<b>Approval No:</b>	2010-4KNPH8			<b>MOE District:</b>	Ottawa
<b>Approval Date:</b>	2000-05-31			<b>City:</b>	
<b>Status:</b>	Approved			<b>Longitude:</b>	-75.7249
<b>Record Type:</b>	ECA			<b>Latitude:</b>	45.3989
<b>Link Source:</b>	IDS			<b>Geometry X:</b>	
<b>SWP Area Name:</b>	Rideau Valley			<b>Geometry Y:</b>	
<b>Approval Type:</b>	ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS				
<b>Project Type:</b>	MUNICIPAL AND PRIVATE SEWAGE WORKS				
<b>Business Name:</b>	The Corporation of the City of Ottawa				
<b>Address:</b>	Carruthers Ave., Hinchey Ave. & Lyndale Ave.				
<b>Full Address:</b>					
<b>Full PDF Link:</b>	<a href="https://www.accessenvironment.ene.gov.on.ca/instruments/5380-4KEN3T-14.pdf">https://www.accessenvironment.ene.gov.on.ca/instruments/5380-4KEN3T-14.pdf</a>				

# Unplottable Summary

Total: **31** Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA		Carruthers Ave., Hinchey Ave. & Lyndale Ave.	Ottawa ON	
CA		Forward, Lyndale and Hinchey	Ottawa ON	
CA	V. REV. D. SEVER	STONEHURST AVE.	OTTAWA CITY ON	
CA		Carruthers Ave., Hinchey Ave. & Lyndale Ave.	Ottawa ON	
CA	City of Ottawa	From Holland Avenue to Merton St	Ottawa ON	
CA	D.N.D. COMPUTER CENTER/CULLEN DETROIT DI	TUNEY'S PASTURE	OTTAWA CITY ON	
CA	OTTAWA CITY - SCOTT ST. /ARMSTRONG ST.	GARLAND AVE./STONEHURST AVE.	OTTAWA CITY ON	
CA	V. REV. D. SEVER	STONEHURST AVE.	OTTAWA CITY ON	
CA		Forward, Lyndale and Hinchey	Ottawa ON	
CA	City of Ottawa	Parkdale Avenue	Ottawa ON	
ECA	City of Ottawa	From Holland Avenue to Merton St	Ottawa ON	K2G 6J8
ECA	The Corporation of the City of Ottawa	From Holland Avenue to Merton St	Ottawa ON	K1N 5A1
ECA	The Regional Municipality of Ottawa-Carleton	From Holland Avenue to Merton St	Ottawa ON	K2P 2L7
EHS		From Parkdale Ave to McFarlane Ave	Ottawa ON	
GEN	City of Ottawa	Tunney's Pasture Drive	Ottawa ON	
GEN	City of Ottawa	Tunney's Pasture Drive	Ottawa ON	
GEN	City of Ottawa	Tunney's Pasture Drive	Ottawa ON	
GEN	City of Ottawa	Tunney's Pasture Drive	Ottawa ON	

GEN	CANADIAN MUSEUM CONTEMPORARY PHOTOGRAPHY	TUNNEY'S PASTURE PERSONNEL RECORDS CTR. BUILDING 18, GOLDENROD AVENUE	OTTAWA ON	K1N 9N6
GEN	NATIONAL RESEARCH COUNCIL 18-109	PUBLIC WORKS CANADA ENV. SERVICES CFB OTTAWA BUILDINGS U61, U62, U66	OTTAWA ON	
GEN	NATIONAL RESEARCH COUNCIL	BUILDING U-61	OTTAWA ON	K1A 0R6
GEN	City of Ottawa	Tunney's Pasture Drive	Ottawa ON	
NATE	HEALTH AND WELFARE		OTTAWA ON	
NEES	HEALTH AND WELFARE		OTTAWA ON	
PRT	NATIONAL RESEARCH COUNCIL CANADA BUILD M 19	BUILDING M-14	OTTAWA ON	
SPL	PUBLIC WORKS CANADA	TUNNEY'S PASTURE STORAGE TANK	OTTAWA CITY ON	
SPL	SNC-Lavalin Operations & Maintenance Inc.	Tunney's Pasture Drive	Ottawa ON	
SPL	BFI Canada Inc.		Ottawa ON	
SPL	Proshred Iron Mountain<UNOFFICIAL>	Holland Street just north of Scott Street, Ottawa<UNOFFICIAL>	Ottawa ON	
SPL	OLRT Constructors	north of Scott St east of Holland Ave	Ottawa ON	
SPL	BFI Canada Inc.		Ottawa ON	

# Unplottable Report

---

**Site:** Carruthers Ave., Hinchey Ave. & Lyndale Ave. Ottawa ON **Database:** CA

**Certificate #:** 6262-4KNPVR  
**Application Year:** 00  
**Issue Date:** 5/31/00  
**Approval Type:** Municipal & Private water  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name:** Corporation of the Regional Municipality of Ottawa-Carleton  
**Client Address:** 111 Lisgar Street  
**Client City:** Ottawa  
**Client Postal Code:** K2P 2L7  
**Project Description:** Construction of Watermains on Carruthers Ave., Hinchey Ave. & Lyndale Ave., City of Ottawa  
**Contaminants:**  
**Emission Control:**

---

**Site:** Forward, Lyndale and Hinchey Ottawa ON **Database:** CA

**Certificate #:** 8821-4WDQDT  
**Application Year:** 01  
**Issue Date:** 5/4/01  
**Approval Type:** Municipal & Private water  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name:** Corporation of the City of Ottawa  
**Client Address:** 111 Sussex Drive, 7th Floor  
**Client City:** Ottawa  
**Client Postal Code:** K1N 5A1  
**Project Description:** Installation of a Watermain  
**Contaminants:**  
**Emission Control:**

---

**Site:** V. REV. D. SEVER STONEHURST AVE. OTTAWA CITY ON **Database:** CA

**Certificate #:** 3-0702-87-  
**Application Year:** 87  
**Issue Date:** 5/27/1987  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name:**  
**Client Address:**  
**Client City:**  
**Client Postal Code:**  
**Project Description:**  
**Contaminants:**  
**Emission Control:**

---

**Site:** Carruthers Ave., Hinchey Ave. & Lyndale Ave. Ottawa ON **Database:** CA

**Certificate #:** 2010-4KNPH8  
**Application Year:** 00

**Issue Date:** 5/31/00  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name:** Corporation of the City of Ottawa  
**Client Address:** 111 Sussex Drive, 7th Floor  
**Client City:** Ottawa  
**Client Postal Code:** K1N 5A1  
**Project Description:** Construction of Storm & Sanitary Sewers on Carruthers Ave., Hinchey Ave. & Lyndale Ave., City of Ottawa  
**Contaminants:**  
**Emission Control:**

---

**Site:** *City of Ottawa  
From Holland Avenue to Merton St Ottawa ON*

**Database:**  
*CA*

**Certificate #:** 6130-7TLKQC  
**Application Year:** 2009  
**Issue Date:** 7/7/2009  
**Approval Type:** Municipal and Private Sewage Works  
**Status:** Approved  
**Application Type:**  
**Client Name:**  
**Client Address:**  
**Client City:**  
**Client Postal Code:**  
**Project Description:**  
**Contaminants:**  
**Emission Control:**

---

**Site:** *D.N.D. COMPUTER CENTER/CULLEN DETROIT DI  
TUNEY'S PASTURE OTTAWA CITY ON*

**Database:**  
*CA*

**Certificate #:** 8-4052-89-  
**Application Year:** 89  
**Issue Date:** 1/14/1991  
**Approval Type:** Industrial air  
**Status:** Approved in 1991  
**Application Type:**  
**Client Name:**  
**Client Address:**  
**Client City:**  
**Client Postal Code:**  
**Project Description:** STANDBY GAS TURBINE GENERATOR SET  
**Contaminants:** Nitrogen Oxides, Sulphur Dioxide  
**Emission Control:** No Controls

---

**Site:** *OTTAWA CITY - SCOTT ST./ARMSTRONG ST.  
GARLAND AVE./STONEHURST AVE. OTTAWA CITY ON*

**Database:**  
*CA*

**Certificate #:** 3-0648-92-  
**Application Year:** 92  
**Issue Date:** 6/10/1992  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name:**  
**Client Address:**  
**Client City:**  
**Client Postal Code:**  
**Project Description:**  
**Contaminants:**  
**Emission Control:**

---

**Site:** V. REV. D. SEVER  
STONEHURST AVE. OTTAWA CITY ON

**Database:**  
CA

**Certificate #:** 7-0589-87-  
**Application Year:** 87  
**Issue Date:** 5/27/1987  
**Approval Type:** Municipal water  
**Status:** Approved  
**Application Type:**  
**Client Name:**  
**Client Address:**  
**Client City:**  
**Client Postal Code:**  
**Project Description:**  
**Contaminants:**  
**Emission Control:**

---

**Site:** Forward, Lyndale and Hinchey Ottawa ON

**Database:**  
CA

**Certificate #:** 8746-4WDR47  
**Application Year:** 01  
**Issue Date:** 5/4/01  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name:** Corporation of the City of Ottawa  
**Client Address:** 111 Sussex Drive, 7th Floor  
**Client City:** Ottawa  
**Client Postal Code:** K1N 5A1  
**Project Description:** Construction of storm and sanitary sewers  
**Contaminants:**  
**Emission Control:**

---

**Site:** City of Ottawa  
Parkdale Avenue Ottawa ON

**Database:**  
CA

**Certificate #:** 1490-6ENNR6  
**Application Year:** 2005  
**Issue Date:** 7/27/2005  
**Approval Type:** Municipal and Private Sewage Works  
**Status:** Approved  
**Application Type:**  
**Client Name:**  
**Client Address:**  
**Client City:**  
**Client Postal Code:**  
**Project Description:**  
**Contaminants:**  
**Emission Control:**

---

**Site:** City of Ottawa  
From Holland Avenue to Merton St Ottawa ON K2G 6J8

**Database:**  
ECA

**Approval No:** 6130-7TLKQC  
**Approval Date:** 2009-07-07  
**Status:** Approved  
**Record Type:** ECA  
**Link Source:** IDS  
**SWP Area Name:**  
**Approval Type:** ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS  
**Project Type:** MUNICIPAL AND PRIVATE SEWAGE WORKS  
**Business Name:** City of Ottawa  
**Address:** From Holland Avenue to Merton St  
**Full Address:**

**MOE District:**  
**City:**  
**Longitude:**  
**Latitude:**  
**Geometry X:**  
**Geometry Y:**

**Site:** *The Corporation of the City of Ottawa*  
*From Holland Avenue to Merton St Ottawa ON K1N 5A1*

**Database:**  
[ECA](#)

**Approval No:** 7515-4HMRDR  
**Approval Date:** 2000-03-22  
**Status:** Approved  
**Record Type:** ECA  
**Link Source:** IDS  
**SWP Area Name:**  
**Approval Type:** ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS  
**Project Type:** MUNICIPAL AND PRIVATE SEWAGE WORKS  
**Business Name:** The Corporation of the City of Ottawa  
**Address:** From Holland Avenue to Merton St  
**Full Address:**  
**Full PDF Link:** <https://www.accessenvironment.ene.gov.on.ca/instruments/1676-4HGQMS-14.pdf>

**MOE District:**  
**City:**  
**Longitude:**  
**Latitude:**  
**Geometry X:**  
**Geometry Y:**

**Site:** *The Regional Municipality of Ottawa-Carleton*  
*From Holland Avenue to Merton St Ottawa ON K2P 2L7*

**Database:**  
[ECA](#)

**Approval No:** 5431-4HMR4L  
**Approval Date:** 2000-03-22  
**Status:** Approved  
**Record Type:** ECA  
**Link Source:** IDS  
**SWP Area Name:**  
**Approval Type:** ECA-Municipal and Private Water Works  
**Project Type:** Municipal and Private Water Works  
**Business Name:** The Regional Municipality of Ottawa-Carleton  
**Address:** From Holland Avenue to Merton St  
**Full Address:**  
**Full PDF Link:**

**MOE District:**  
**City:**  
**Longitude:**  
**Latitude:**  
**Geometry X:**  
**Geometry Y:**

**Site:** *From Parkdale Ave to McFarlane Ave Ottawa ON*

**Database:**  
[EHS](#)

**Order No:** 20050601023  
**Status:** C  
**Report Type:**  
**Report Date:** 6/7/2005  
**Date Received:** 6/1/2005  
**Previous Site Name:**  
**Lot/Building Size:**  
**Additional Info Ordered:**

**Nearest Intersection:**  
**Municipality:**  
**Client Prov/State:** ON  
**Search Radius (km):** 0.25  
**X:** -75.723143  
**Y:** 1

**Site:** *City of Ottawa*  
*Tunney's Pasture Drive Ottawa ON*

**Database:**  
[GEN](#)

**Generator No:** ON3380084  
**Status:**  
**Approval Years:** 2009  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 913150  
**SIC Description:** Municipal Regulatory Services

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 145  
**Waste Class Desc:** PAINT/PIGMENT/COATING RESIDUES  
**Waste Class:** 148

**Waste Class Desc:** INORGANIC LABORATORY CHEMICALS  
**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS  
**Waste Class:** 221  
**Waste Class Desc:** LIGHT FUELS  
**Waste Class:** 242  
**Waste Class Desc:** HALOGENATED PESTICIDES  
**Waste Class:** 252  
**Waste Class Desc:** WASTE OILS & LUBRICANTS  
**Waste Class:** 261  
**Waste Class Desc:** PHARMACEUTICALS  
**Waste Class:** 263  
**Waste Class Desc:** ORGANIC LABORATORY CHEMICALS  
**Waste Class:** 312  
**Waste Class Desc:** PATHOLOGICAL WASTES  
**Waste Class:** 331  
**Waste Class Desc:** WASTE COMPRESSED GASES

**Site:** City of Ottawa  
 Tunney's Pasture Drive Ottawa ON

**Database:**  
 GEN

<b>Generator No:</b>	ON3380084	<b>PO Box No:</b>	
<b>Status:</b>		<b>Country:</b>	
<b>Approval Years:</b>	2010	<b>Choice of Contact:</b>	
<b>Contam. Facility:</b>		<b>Co Admin:</b>	
<b>MHSW Facility:</b>		<b>Phone No Admin:</b>	
<b>SIC Code:</b>	913150		
<b>SIC Description:</b>	Municipal Regulatory Services		

**Detail(s)**

**Waste Class:** 148  
**Waste Class Desc:** INORGANIC LABORATORY CHEMICALS  
**Waste Class:** 261  
**Waste Class Desc:** PHARMACEUTICALS  
**Waste Class:** 221  
**Waste Class Desc:** LIGHT FUELS  
**Waste Class:** 331  
**Waste Class Desc:** WASTE COMPRESSED GASES  
**Waste Class:** 263  
**Waste Class Desc:** ORGANIC LABORATORY CHEMICALS  
**Waste Class:** 145  
**Waste Class Desc:** PAINT/PIGMENT/COATING RESIDUES  
**Waste Class:** 312  
**Waste Class Desc:** PATHOLOGICAL WASTES  
**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS  
**Waste Class:** 252  
**Waste Class Desc:** WASTE OILS & LUBRICANTS  
**Waste Class:** 242  
**Waste Class Desc:** HALOGENATED PESTICIDES



**Site:** City of Ottawa  
Tunney's Pasture Drive Ottawa ON

**Database:**  
GEN

**Generator No:** ON3380084  
**Status:**  
**Approval Years:** 2011  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 913150  
**SIC Description:** Municipal Regulatory Services

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS

**Waste Class:** 148  
**Waste Class Desc:** INORGANIC LABORATORY CHEMICALS

**Waste Class:** 261  
**Waste Class Desc:** PHARMACEUTICALS

**Waste Class:** 331  
**Waste Class Desc:** WASTE COMPRESSED GASES

**Waste Class:** 312  
**Waste Class Desc:** PATHOLOGICAL WASTES

**Waste Class:** 221  
**Waste Class Desc:** LIGHT FUELS

**Waste Class:** 145  
**Waste Class Desc:** PAINT/PIGMENT/COATING RESIDUES

**Waste Class:** 252  
**Waste Class Desc:** WASTE OILS & LUBRICANTS

**Waste Class:** 263  
**Waste Class Desc:** ORGANIC LABORATORY CHEMICALS

**Waste Class:** 242  
**Waste Class Desc:** HALOGENATED PESTICIDES

**Site:** City of Ottawa  
Tunney's Pasture Drive Ottawa ON

**Database:**  
GEN

**Generator No:** ON3380084  
**Status:**  
**Approval Years:** 2012  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 913150  
**SIC Description:** Municipal Regulatory Services

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 263  
**Waste Class Desc:** ORGANIC LABORATORY CHEMICALS

**Waste Class:** 252  
**Waste Class Desc:** WASTE OILS & LUBRICANTS

**Waste Class:** 331  
**Waste Class Desc:** WASTE COMPRESSED GASES

**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS

**Waste Class:** 312  
**Waste Class Desc:** PATHOLOGICAL WASTES

**Waste Class:** 242  
**Waste Class Desc:** HALOGENATED PESTICIDES

**Waste Class:** 221  
**Waste Class Desc:** LIGHT FUELS

**Waste Class:** 148  
**Waste Class Desc:** INORGANIC LABORATORY CHEMICALS

**Waste Class:** 261  
**Waste Class Desc:** PHARMACEUTICALS

**Waste Class:** 145  
**Waste Class Desc:** PAINT/PIGMENT/COATING RESIDUES

---

**Site:** CANADIAN MUSEUM CONTEMPORARY PHOTOGRAPHY  
TUNNEY'S PASTURE PERSONNEL RECORDS CTR. BUILDING 18, GOLDENROD AVENUE OTTAWA ON K1N 9N6

**Database:**  
GEN

**Generator No:** ON0129416  
**Status:**  
**Approval Years:** 98  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 9931  
**SIC Description:** PHOTOGRAPHERS

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 241  
**Waste Class Desc:** HALOGENATED SOLVENTS

**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS

---

**Site:** NATIONAL RESEARCH COUNCIL 18-109  
PUBLIC WORKS CANADA ENV. SERVICES CFB OTTAWA BUILDINGS U61, U62, U66 OTTAWA ON

**Database:**  
GEN

**Generator No:** ON0195803  
**Status:**  
**Approval Years:** 92,93,94,95,96,97  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 8176  
**SIC Description:** RESEARCH ADMIN.

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 112  
**Waste Class Desc:** ACID WASTE - HEAVY METALS

**Waste Class:** 148  
**Waste Class Desc:** INORGANIC LABORATORY CHEMICALS

**Waste Class:** 211  
**Waste Class Desc:** AROMATIC SOLVENTS

**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS

**Waste Class:** 213  
**Waste Class Desc:** PETROLEUM DISTILLATES

**Waste Class:** 221

**Waste Class Desc:** LIGHT FUELS  
**Waste Class:** 241  
**Waste Class Desc:** HALOGENATED SOLVENTS  
**Waste Class:** 251  
**Waste Class Desc:** OIL SKIMMINGS & SLUDGES  
**Waste Class:** 252  
**Waste Class Desc:** WASTE OILS & LUBRICANTS  
**Waste Class:** 253  
**Waste Class Desc:** EMULSIFIED OILS  
**Waste Class:** 263  
**Waste Class Desc:** ORGANIC LABORATORY CHEMICALS

---

**Site:** NATIONAL RESEARCH COUNCIL  
BUILDING U-61 OTTAWA ON K1A 0R6

**Database:**  
GEN

**Generator No:** ON5272025  
**Status:**  
**Approval Years:** 02,03,04  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:**  
**SIC Description:**

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 221  
**Waste Class Desc:** LIGHT FUELS

---

**Site:** City of Ottawa  
Tunney's Pasture Drive Ottawa ON

**Database:**  
GEN

**Generator No:** ON3380084  
**Status:**  
**Approval Years:** 2013  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 913150  
**SIC Description:**

**PO Box No:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No Admin:**

**Detail(s)**

**Waste Class:** 212  
**Waste Class Desc:** ALIPHATIC SOLVENTS  
**Waste Class:** 148  
**Waste Class Desc:** INORGANIC LABORATORY CHEMICALS  
**Waste Class:** 252  
**Waste Class Desc:** WASTE OILS & LUBRICANTS  
**Waste Class:** 261  
**Waste Class Desc:** PHARMACEUTICALS  
**Waste Class:** 263  
**Waste Class Desc:** ORGANIC LABORATORY CHEMICALS  
**Waste Class:** 331  
**Waste Class Desc:** WASTE COMPRESSED GASES  
**Waste Class:** 112  
**Waste Class Desc:** ACID WASTE - HEAVY METALS

**Waste Class:** 147  
**Waste Class Desc:** CHEMICAL FERTILIZER WASTES  
  
**Waste Class:** 221  
**Waste Class Desc:** LIGHT FUELS  
  
**Waste Class:** 146  
**Waste Class Desc:** OTHER SPECIFIED INORGANICS  
  
**Waste Class:** 242  
**Waste Class Desc:** HALOGENATED PESTICIDES  
  
**Waste Class:** 312  
**Waste Class Desc:** PATHOLOGICAL WASTES  
  
**Waste Class:** 121  
**Waste Class Desc:** ALKALINE WASTES - HEAVY METALS  
  
**Waste Class:** 145  
**Waste Class Desc:** PAINT/PIGMENT/COATING RESIDUES

**Site:** HEALTH AND WELFARE  
 OTTAWA ON

**Database:**  
 NATE

**File No.:** 4462-2  
**Reported By:** Environment Canada  
**Material Reaction:** N  
**Spill Date:** 841012  
**Lead Agency:** Polluter  
**Basin:**  
**Air:** N  
**DOE on Scene:** N  
**Land:** N  
**Fresh Water:** N  
**Ground Water:** N  
**Salt Water:** N  
**Other Environment:** Y  
**Waterbody:**  
**Cause:** Container Leak  
**Reason:** Other  
**Source:** Other Storage Facilities  
**Sector:** Government  
**Ship No.:**  
**Ship Name:**  
**Clean Up By:** other  
**Disposal Method:** unknown  
**Recovery %:** 100.00  
**Act Invoked:** None  
**Enforcement Resp:**  
**Fish Kill:** N  
**Oiled Birds:** N  
**Other Kill:** N  
**Vegetation Damage:** N  
**Property Damage:** N  
**Drinking Water:** N  
**Income Loss:** N  
**Other Consequences:** N  
**No. of Injuries:** 0  
**No. of Evacuations:** 0  
**Fine:**  
**No. of Dead:** 0  
**Cleanup Cost:**  
**Material:** chemical nos  
**Amount (ton):** 0.01  
**Volume (L):** 10.00  
**Concentration:**  
**Phase:**  
**Additional Info:**

**Site:** HEALTH AND WELFARE  
OTTAWA ON

**Database:**  
NEES

**Incident Date:** 10/12/84  
**Contaminant:** chemical nos  
**Amount:** 0.01  
**Units:** Tonnes (Metric)  
**Quantity:**  
**Cause:** Container Leak  
**Source:** Other Storage Facilities  
**Reason:** Other  
**Sector:** Government

**Site:** NATIONAL RESEARCH COUNCIL CANADA BUILD M 19  
BUILDING M-14 OTTAWA ON

**Database:**  
PRT

**Location ID:** 10891  
**Type:** private  
**Expiry Date:**  
**Capacity (L):** 4546.00  
**Licence #:** 0001063384

**Site:** PUBLIC WORKS CANADA  
TUNNEY'S PASTURE STORAGE TANK OTTAWA CITY ON

**Database:**  
SPL

<b>Ref No:</b>	96206	<b>Discharger Report:</b>	
<b>Site No:</b>		<b>Material Group:</b>	
<b>Incident Dt:</b>	2/10/1994	<b>Health/Env Conseq:</b>	
<b>Year:</b>		<b>Client Type:</b>	
<b>Incident Cause:</b>	ABOVE-GROUND TANK LEAK	<b>Sector Type:</b>	
<b>Incident Event:</b>		<b>Agency Involved:</b>	
<b>Contaminant Code:</b>		<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>		<b>Site Address:</b>	
<b>Contaminant Limit 1:</b>		<b>Site District Office:</b>	
<b>Contam Limit Freq 1:</b>		<b>Site Postal Code:</b>	
<b>Contaminant UN No 1:</b>		<b>Site Region:</b>	
<b>Environment Impact:</b>	POSSIBLE	<b>Site Municipality:</b>	20101
<b>Nature of Impact:</b>	Soil contamination	<b>Site Lot:</b>	
<b>Receiving Medium:</b>	LAND	<b>Site Conc:</b>	
<b>Receiving Env:</b>		<b>Northing:</b>	
<b>MOE Response:</b>		<b>Easting:</b>	
<b>Dt MOE Arvl on Scn:</b>		<b>Site Geo Ref Accu:</b>	
<b>MOE Reported Dt:</b>	2/10/1994	<b>Site Map Datum:</b>	
<b>Dt Document Closed:</b>		<b>SAC Action Class:</b>	
<b>Incident Reason:</b>	UNKNOWN	<b>Source Type:</b>	
<b>Site Name:</b>			
<b>Site County/District:</b>			
<b>Site Geo Ref Meth:</b>			
<b>Incident Summary:</b>	OTTAWA PUC: 225 L FUEL OIL TO GROUND FROM STORAGE TANK.		
<b>Contaminant Qty:</b>			

**Site:** SNC-Lavalin Operations & Maintenance Inc.  
Tunney's Pasture Drive Ottawa ON

**Database:**  
SPL

<b>Ref No:</b>	1287-8LAQ34	<b>Discharger Report:</b>	
<b>Site No:</b>		<b>Material Group:</b>	
<b>Incident Dt:</b>	9/1/2011	<b>Health/Env Conseq:</b>	
<b>Year:</b>		<b>Client Type:</b>	
<b>Incident Cause:</b>	Discharge or Emission to Air	<b>Sector Type:</b>	Heat/Power Plant
<b>Incident Event:</b>		<b>Agency Involved:</b>	
<b>Contaminant Code:</b>	38	<b>Nearest Watercourse:</b>	
<b>Contaminant Name:</b>	HALON (CFC)	<b>Site Address:</b>	Tunney's Pasture Drive
<b>Contaminant Limit 1:</b>		<b>Site District Office:</b>	

**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Environment Impact:** Not Anticipated  
**Nature of Impact:** Air Pollution  
**Receiving Medium:**  
**Receiving Env:**  
**MOE Response:**  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 9/1/2011  
**Dt Document Closed:**  
**Incident Reason:** Spill  
**Site Name:** Tunney's Pasture Drive  
**Site County/District:**  
**Site Geo Ref Meth:**  
**Incident Summary:** Tunney's Pasture: CFC leak to atm; chiller unit # 5;on going  
**Contaminant Qty:** 0 other - see incident description

**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:** NA  
**Easting:** NA  
**Site Geo Ref Accu:**  
**Site Map Datum:**  
**SAC Action Class:** Air Spills - Gases and Vapours  
**Source Type:**

**Site:** **BFI Canada Inc.** **Database:**  
**Ottawa ON** **SPL**

**Ref No:** 4858-8RNJ5C  
**Site No:**  
**Incident Dt:** 20-FEB-12  
**Year:**  
**Incident Cause:** Pipe Or Hose Leak  
**Incident Event:**  
**Contaminant Code:** 15  
**Contaminant Name:** HYDRAULIC OIL  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Environment Impact:** Confirmed  
**Nature of Impact:** Other Impact(s)  
**Receiving Medium:** Sewage - Municipal/Private and Commercial  
**Receiving Env:**  
**MOE Response:** No Field Response  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 20-FEB-12  
**Dt Document Closed:**  
**Incident Reason:** Spill  
**Site Name:** Clyde & Carling Ave<UNOFFICIAL>  
**Site County/District:**  
**Site Geo Ref Meth:**  
**Incident Summary:** BFI: 50 L hydraulic oil to street & CB  
**Contaminant Qty:**

**Discharger Report:**  
**Material Group:**  
**Health/Env Conseq:**  
**Client Type:**  
**Sector Type:** Motor Vehicle  
**Agency Involved:**  
**Nearest Watercourse:**  
**Site Address:**  
**Site District Office:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Map Datum:**  
**SAC Action Class:** Land Spills  
**Source Type:**

**Site:** **Proshred Iron Mountain<UNOFFICIAL>** **Database:**  
**Holland Street just north of Scott Street, Ottawa<UNOFFICIAL>** **Ottawa ON** **SPL**

**Ref No:** 5260-6B5Q5X  
**Site No:**  
**Incident Dt:** 4/4/2005  
**Year:**  
**Incident Cause:** Pipe Or Hose Leak  
**Incident Event:**  
**Contaminant Code:**  
**Contaminant Name:** HYDRAULIC OIL  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Environment Impact:** Not Anticipated  
**Nature of Impact:** Surface Water Pollution  
**Receiving Medium:** Water  
**Receiving Env:**  
**MOE Response:**  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 4/4/2005

**Discharger Report:** 0  
**Material Group:** Oil  
**Health/Env Conseq:**  
**Client Type:**  
**Sector Type:** Other Motor Vehicle  
**Agency Involved:**  
**Nearest Watercourse:**  
**Site Address:**  
**Site District Office:** Ottawa  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Map Datum:**

**Dt Document Closed:** **SAC Action Class:** Spill to Land  
**Incident Reason:** Equipment Failure - Malfunction of system components  
**Source Type:**  
**Site Name:** Holland Street just north of Scott Street, Ottawa<UNOFFICIAL>  
**Site County/District:**  
**Site Geo Ref Meth:**  
**Incident Summary:** Proshred: hydraulic oil to road/CB  
**Contaminant Qty:**

---

**Site:** **OLRT Constructors**  
**north of Scott St east of Holland Ave Ottawa ON**

**Database:**  
**SPL**

**Ref No:** 5274-A34GUE  
**Site No:** NA  
**Incident Dt:** 10/7/2015  
**Year:**  
**Incident Cause:**  
**Incident Event:**  
**Contaminant Code:** 27  
**Contaminant Name:** CONCRETE  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Environment Impact:**  
**Nature of Impact:**  
**Receiving Medium:**  
**Receiving Env:**  
**MOE Response:** No  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 10/8/2015  
**Dt Document Closed:**  
**Incident Reason:** Operator/Human Error  
**Site Name:** OLRT<UNOFFICIAL>  
**Site County/District:**  
**Site Geo Ref Meth:**  
**Incident Summary:** OLRT: concrete wash out to soil, cld 4L  
**Contaminant Qty:** 4 L

**Discharger Report:**  
**Material Group:**  
**Health/Env Conseq:**  
**Client Type:**  
**Sector Type:** Miscellaneous Industrial  
**Agency Involved:**  
**Nearest Watercourse:**  
**Site Address:** north of Scott St east of Holland Ave  
**Site District Office:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:** 5028066  
**Easting:** 442532  
**Site Geo Ref Accu:**  
**Site Map Datum:**  
**SAC Action Class:** Land Spills  
**Source Type:**

---

**Site:** **BFI Canada Inc.**  
**Ottawa ON**

**Database:**  
**SPL**

**Ref No:** 2425-99MMAQ  
**Site No:**  
**Incident Dt:** 2013/07/15  
**Year:**  
**Incident Cause:** Leak/Break  
**Incident Event:**  
**Contaminant Code:** 15  
**Contaminant Name:** STEERING FLUID  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Environment Impact:** Confirmed  
**Nature of Impact:** Soil Contamination  
**Receiving Medium:**  
**Receiving Env:**  
**MOE Response:** No Field Response  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 2013/07/15  
**Dt Document Closed:**  
**Incident Reason:** Unknown / N/A  
**Site Name:** Loblaws - 200 Earl Grey Drive<UNOFFICIAL>  
**Site County/District:**  
**Site Geo Ref Meth:**  
**Incident Summary:** BFI: 20 L power steering fluid to pkg lot & grass  
**Contaminant Qty:** 20 L

**Discharger Report:**  
**Material Group:**  
**Health/Env Conseq:**  
**Client Type:**  
**Sector Type:** Truck - Transport/Hauling  
**Agency Involved:**  
**Nearest Watercourse:**  
**Site Address:**  
**Site District Office:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Map Datum:**  
**SAC Action Class:** Land Spills  
**Source Type:**

## 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

[AAGR](#)

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 Natural Resources maintains a database of all active 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 Sep 2020**

### **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-Oct 2018**

### **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](#)

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-Dec 31, 2020**

### **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**



**Certificates of Approval:**

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 2018**

**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: Jul 31, 2020**

**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**

**Chemical Register:**

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-Dec 31, 2020**

**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 -Dec 2020**

**Inventory of Coal Gasification Plants and Coal Tar Sites:**

Provincial COAL

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 2020**

**Certificates of Property Use:**

Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

**Government Publication Date: 1994-Feb 28, 2021**

**Drill Hole Database:**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 - Sep 2020****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: Jul 31, 2020****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-Jan 31, 2021****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-Feb 28, 2021****Environmental Compliance Approval:**Provincial [ECA](#)

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- Jan 31, 2021****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-Jan 31, 2021****Environmental Issues Inventory System:**Federal [EIIS](#)

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 **EMHE**

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: Dec 31, 2016**

**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 / 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, 2019**

**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: Jul 31, 2020**

**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 **FCS**

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-Jan 2021**

**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**

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: Jul 31, 2020**

**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-Jan 31, 2021**

**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 2018**

**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 is 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: Jul 31, 2020**

**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: Feb 28, 2019**

**Canadian Mine Locations:**

Private

[MINE](#)

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-Dec 2020**

**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, 2018**

**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-Dec 31, 2020**

**National Energy Board Wells:**

Federal [NEBP](#)

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 date.

**Government Publication Date: 1920-Feb 2003\***

**National Environmental Emergencies System (NEES):**

Federal

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 2004.

**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

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](http://www.nickles.com).

**Government Publication Date: 1988-Aug 31, 2020**

**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-Jun 2020**

**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 all 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-Feb 28, 2021**

**Canadian Pulp and Paper:**

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

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-Jan 31, 2021**

**Pipeline Incidents:**

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: Oct 31, 2020**

**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 all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

**Government Publication Date: 1994-Feb 28, 2021**

**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: 1986-2016**

**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-Jan 2021**

**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-Dec 31, 2020**

**Scott's Manufacturing Directory:**

Private SCT

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.

**Government Publication Date: 1988-Mar 2020; Jul 2020 - Aug 2020**

**Wastewater Discharger Registration Database:**

Provincial [SRDS](#)

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all 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. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

**Government Publication Date: 1990-Dec 31, 2017**

**Anderson's Storage Tanks:**

Private [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 - Dec 2020**

**Variations for Abandonment of Underground Storage Tanks:**

Provincial [VAR](#)

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: Jul 31, 2020**

**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-Jan 31, 2021**

**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 30th, 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](#)

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: Apr 30, 2020**



# Definitions

**Database Descriptions:** This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

**Detail Report:** 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.

**Distance:** The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

**Direction:** The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

**Elevation:** 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.'

**Unplottables:** 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.

# **APPENDIX 3**

## **QUALIFICATIONS OF ASSESSORS**

**Nick Sullivan, B.Sc.**

**patersongroup**

Geotechnical  
Engineering

Environmental  
Engineering

Hydrogeology

Geological  
Engineering

Materials Testing

Building Science

Archaeological  
Services

## **POSITION**

Environmental Scientist

## **EDUCATION**

McMaster University, B.Sc. 2016  
Earth & Environmental Science

Niagara College, Cert. 2017  
Environmental Management & Assessment

## **EXPERIENCE**

*2018 – Present*

### **Paterson Group Inc.**

Consulting Engineers  
Geotechnical and Environmental Division  
Environmental Scientist

## **SELECT LIST OF PROJECTS**

Phase I & II Environmental Site Assessments  
Contaminated Soil and Groundwater Field Sampling  
Subsurface Investigations of Soil and Rock Stratigraphy  
Supervision of Environmental Remediation Programs  
Designated Substance Surveys

Geotechnical  
Engineering

Environmental  
Engineering

Hydrogeology

Geological  
Engineering

Materials Testing

Building Science

Archaeological  
Services

### POSITION

Associate and Supervisor of the Environmental Division  
Senior Environmental/Geotechnical Engineer

### EDUCATION

1991 - 1994  
Geotechnical / Geological Engineering

### MEMBERSHIPS

Ottawa Geotechnical Group  
Professional Engineers of Ontario

### EXPERIENCE

1991 to Present

#### Paterson Group Inc.

Associate and Senior Environmental/Geotechnical Engineer  
Environmental and Geotechnical Division  
Supervisor of the Environmental Division

### SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island  
Agricultural Supply Facilities - Eastern Ontario  
Laboratory Facility - Edmonton (Alberta)  
Ottawa International Airport - Contaminant Migration Study - Ottawa  
Richmond Road Reconstruction - Ottawa  
Billings Hurdman Interconnect - Ottawa  
Bank Street Reconstruction - Ottawa  
Environmental Review - Various Laboratories across Canada - CFIA  
Dwyer Hill Training Centre - Ottawa  
Nortel Networks Environmental Monitoring - Carling Campus - Ottawa  
Remediation Program - Block D Lands - Kingston  
Investigation of former landfill sites - City of Ottawa  
Record of Site Condition for Railway Lands - North Bay  
Commercial Properties - Guelph and Brampton  
Brownfields Remediation - Alcan Site - Kingston  
Montreal Road Reconstruction - Ottawa  
Appleford Street Residential Development - Ottawa  
Remediation Program - Ottawa Train Yards  
Remediation Program - Bayshore and Heron Gate  
Gladstone Avenue Reconstruction - Ottawa  
Somerset Avenue West Reconstruction - Ottawa

### **E.3 ROADWAY TRAFFIC NOISE ASSESSMENT BY GRADIENT WIND (DECEMBER 10, 2021)**



**ROADWAY TRAFFIC  
NOISE ASSESSMENT**

138 Forward Avenue  
Ottawa, Ontario

Report: 21-359-Traffic Noise



December 10, 2021

**DRAFT**

PREPARED FOR

**Vika Land Development Group Inc.**

2727 Grand Vista Circle  
Ottawa, ON K2J 0W5

PREPARED BY

Caleb Alexander, B.Eng., Junior Environmental Scientist  
Joshua Foster, P.Eng., Principal

## **EXECUTIVE SUMMARY**

This report describes a detailed roadway traffic noise assessment performed for the proposed residential development located at 138 Forward Avenue Ottawa, Ontario in support of a Site Plan Control (SPA) application.

The proposed development consists of a 3-storey residential building located on a block that is bordered by Burnside Avenue to the north, Forward Avenue to the east, Lyndale Avenue to the south, and Parkdale Avenue to the west. The study site is surrounded by low to mid-rise residential/commercial buildings from north to south clockwise. The Jean Talon Building is located to the west of the study site across Parkdale Avenue. The major source of roadway traffic noise is Parkdale Avenue which runs in the north-south direction to the west side of the study site. Figure 1 illustrates the site plan with the surrounding context.

The assessment is based on (i) theoretical noise prediction methods that conform to the Ministry of the Environment, Conservation and Parks (MECP) and City of Ottawa requirements; (ii) noise level criteria as specified by the City of Ottawa's Environmental Noise Control Guidelines (ENCG); (iii) future vehicular traffic volumes based on the City of Ottawa's Official Plan roadway classifications; and (iv) drawings prepared by Architect Susan D. Smith, dated September 2021.

The results of the current analysis indicate that noise levels will range between 43 and 55 dBA during the daytime period (07:00-23:00) and between 35 and 48 dBA during the nighttime period (23:00-07:00). The highest noise level (55 dBA) occurs at the west façade, which is nearest and most exposed to Parkdale Avenue. Upgraded building components will not be required since noise levels predicted due to roadway traffic do not exceed 65 dBA during daytime and 60 dBA during nighttime at any façade.

Since noise levels do not exceed 55 dBA at any Plane of Window (POW) receptor, no warning clauses or other noise mitigation measures will be required. Additionally, noise levels at the OLA receptor in the backyard do not exceed ENCG requirements, therefore no mitigation measures are required.



**TABLE OF CONTENTS**

**1. INTRODUCTION ..... 1**

**2. TERMS OF REFERENCE ..... 1**

**3. OBJECTIVES ..... 2**

**4. METHODOLOGY..... 2**

**4.1 Background.....2**

**4.2 Roadway Traffic Noise.....2**

**4.2.1 Criteria for Roadway Traffic Noise .....2**

**4.2.2 Theoretical Roadway Noise Predictions .....4**

**4.2.3 Roadway Traffic Volumes.....4**

**4.3 Indoor Noise Calculations .....Error! Bookmark not defined.**

**5. ROADWAY TRAFFIC NOISE RESULTS AND DISCUSSION..... 5**

**5.1 Roadway Traffic Noise Levels.....5**

**5.2 Noise Control Measures .....5**

**6. CONCLUSIONS AND RECOMMENDATIONS ..... 6**

**FIGURES**

**APPENDICES**

**Appendix A – STAMSON 5.04 Input and Output Data and Supporting Information**





## 1. INTRODUCTION

Gradient Wind Engineering Inc. (Gradient Wind) was retained by Vika Land Development Group Inc to undertake a detailed roadway traffic noise study for the proposed development located at 138 Forward Avenue in Ottawa, Ontario. This report summarizes the methodology, results, and recommendations related to the assessment of exterior noise levels generated by local roadway traffic.

This assessment is based on theoretical noise calculation methods conforming to the City of Ottawa<sup>1</sup> and the Ministry of the Environment, Conservation and Parks (MECP)<sup>2</sup> guidelines. Noise calculations were based on architectural drawings prepared by Architect Susan D. Smith, dated November 2021, with future traffic volumes corresponding to the City of Ottawa's Official Plan (OP) roadway classifications.

## 2. TERMS OF REFERENCE

The proposed subdivision development consists of a 3-storey apartment building on a rectangular-shaped parcel of land. The basement level comprises of 3 residential units and a bicycle storage area. The ground floor comprises 3 residential units and a shared amenity space serving as a living room. The 2<sup>nd</sup> floor comprises 4 residential units and the 3<sup>rd</sup> floor comprises 3 residential units.

The study site is surrounded by low to mid-rise residential/commercial buildings from north to south clockwise. The Jean Talon Building is located to the west of the study site across Parkdale Avenue. The major source of roadway traffic noise is Parkdale Avenue which runs in the north-south direction to the west of the study site. Figure 1 illustrates the site plan with the surrounding context.

Given the small size of the development, no major pieces of HVAC equipment are anticipated to be located around the building. Only small interall fan coil or heat pumps are expected for this development. Any equipment supplied shall comply with the Ministry of Environment's NPC-116 - Environmental Noise Guidelines for Installation of Residential Air Conditioners.

---

<sup>1</sup> City of Ottawa Environmental Noise Control Guidelines, January 2016

<sup>2</sup> Ontario Ministry of the Environment and Climate Change – Environmental Noise Guidelines, Publication NPC-300, Queens Printer for Ontario, Toronto, 2013



### 3. OBJECTIVES

The principal objectives of this study are to (i) calculate the future noise levels on the study buildings produced by local roadway traffic, and (ii) ensure that interior and exterior noise levels do not exceed the allowable limits specified by the City of Ottawa's Environmental Noise Control Guidelines (ENCG) as outlined in Section 4.2 of this report.

### 4. METHODOLOGY

#### 4.1 Background

Noise can be defined as any obtrusive sound. It is created at a source, transmitted through a medium, such as air, and intercepted by a receiver. Noise may be characterized in terms of the power of the source or the sound pressure level at a specific distance. While the power of a source is characteristic of that particular source, the sound pressure depends on the location of the receiver and the path that the noise takes to reach the receiver. Measurement of noise is based on the decibel unit, dBA, which is a logarithmic ratio referenced to a standard sound pressure level ( $2 \times 10^{-5}$  Pascals). The 'A' suffix refers to a weighting scale, which better represents how the noise is perceived by the human ear. With this scale, a doubling of power results in a 3 dBA increase in measured noise levels and is just perceptible to most people. An increase of 10 dBA is often perceived to be twice as loud.

#### 4.2 Roadway Traffic Noise

##### 4.2.1 Criteria for Roadway Traffic Noise

For vehicular traffic, the equivalent sound energy level,  $L_{eq}$ , provides a measure of the time-varying noise levels, which is well correlated with the annoyance of sound. It is defined as the continuous sound level, which has the same energy as a time-varying noise level over a period of time. For roadways and LRT, the  $L_{eq}$  is commonly calculated on the basis of a 16-hour ( $L_{eq16}$ ) daytime (07:00-23:00) / 8-hour ( $L_{eq8}$ ) nighttime (23:00-07:00) split to assess its impact on residential buildings. The City of Ottawa's Environmental Noise Control Guidelines (ENCG) specifies that the recommended indoor noise limit range (that is relevant to this study) is 45 and 40 dBA for living rooms and sleeping quarters respectively for roadway, as listed in Table 1. Based on Gradient Wind's experience, more comfortable indoor noise levels should be targeted, towards 42 and 37, respectively, to control peak noise and deficiencies in building envelope construction.



**TABLE 1: INDOOR SOUND LEVEL CRITERIA**

Type of Space	Time Period	L <sub>eq</sub> (dBA)
General offices, reception areas, retail stores, etc.	07:00 – 23:00	50
<b>Living/dining/den areas of residences</b> , hospitals, schools, nursing/retirement homes, day-care centres, theatres, places of worship, libraries, individual or semi-private offices, conference rooms, etc.	07:00 – 23:00	45
Sleeping quarters of hotels/motels	23:00 – 07:00	45
<b>Sleeping quarters of residences</b> , hospitals, nursing/retirement homes, etc.	23:00 – 07:00	40

Predicted noise levels at the plane of window (POW) dictate the action required to achieve the recommended sound levels. An open window is considered to provide a 10 dBA reduction in noise, while a standard closed window is capable of providing a minimum 20 dBA noise reduction<sup>3</sup>. A closed window due to a ventilation requirement will bring noise levels down to achieve an acceptable indoor environment<sup>4</sup>. Therefore, where noise levels exceed 55 dBA daytime and 50 dBA nighttime, the ventilation for the building should consider the need for having windows and doors closed, which triggers the need for forced air heating with provision for central air conditioning. Where noise levels exceed 65 dBA daytime and 60 dBA nighttime, air conditioning will be required and building components will require higher levels of sound attenuation<sup>5</sup>.

The sound level criterion for outdoor living areas (OLA) is 55 dBA, which applies during the daytime (07:00 to 23:00). When noise levels exceed 55 dBA but are less than 60 dBA, mitigation is recommended to reduce noise levels where technically and administratively feasible to acceptable levels at or below the criterion. If these measures are not provided, prospective purchasers or tenants should be informed of potential noise problems by a warning clause. If noise levels at OLAs exceed 60 dBA, mitigation must be provided.

<sup>3</sup> Burberry, P.B. (2014). Mitchell’s Environment and Services. Routledge, Page 125

<sup>4</sup> MECP, Environmental Noise Guidelines, NPC 300 – Part C, Section 7.8

<sup>5</sup> MECP, Environmental Noise Guidelines, NPC 300 – Part C, Section 7.1.3



### 4.2.2 Theoretical Roadway Noise Predictions

Noise predictions were performed with the aid of the MOECP computerized noise assessment program, STAMSON 5.04, for road analysis. Appendix A includes the STAMSON 5.04 input and output data. Roadway traffic noise calculations were performed by treating each roadway segment as a separate line source of noise. In addition to the traffic volumes summarized in Table 2, theoretical noise predictions were based on the following parameters:

- Truck traffic on all roadways was taken to comprise 5% heavy trucks and 7% medium trucks, as per ENCG requirements for noise level predictions.
- The day/night split for all streets was taken to be 92%/8%, respectively.
- Ground surfaces were taken to be reflective due to the presence of hard (paved) ground.
- Topography was assumed to be a flat/gentle slope surrounding the study building.
- Four (4) receptor locations were chosen at the façades of the study building as Plane of Window (POW) receptors and one (1) receptor location was chosen as Outdoor Living Area (OLA) receptor (see Figure 2).
- Receptor heights were taken to be 9.5 metres at Level 3 for the centre of the window and 1.5 m for the backyard outdoor living area (OLA) receptor.
- Surrounding buildings were considered as barriers blocking line of sight with surrounding roadway sources where applicable.
- For select sources, where appropriate, the proposed building was considered as a barrier, partially or fully obstructing exposure to the source.
- Receptor distances and exposure angles are illustrated in Figures 3-7.

### 4.2.3 Roadway Traffic Volumes

The ENCG dictates that noise calculations should consider future sound levels based on a roadway's classification at the mature state of development. Therefore, traffic volumes are based on the roadway classifications outlined in the City of Ottawa's Official Plan (OP) and Transportation Master Plan<sup>6</sup> which

---

<sup>6</sup> City of Ottawa Transportation Master Plan, November 2013

provide additional details on future roadway expansions. Average Annual Daily Traffic (AADT) volumes are then based on data in Table B1 of the ENCG for each roadway classification. Table 2 (below) summarizes the AADT values used for each roadway included in this assessment.

**TABLE 2: ROADWAY TRAFFIC DATA**

Segment	Roadway Traffic Data	Speed Limit (km/h)	Traffic Volumes
Parkdale Avenue	2-Lane Urban Arterial (2-UAU)	40	<b>15,000</b>

## 5. ROADWAY TRAFFIC NOISE RESULTS AND DISCUSSION

### 5.1 Roadway Traffic Noise Levels

The results of the roadway traffic noise calculations are summarized in Table 3 below. A complete set of input and output data from all STAMSON 5.04 calculations are available in Appendix A.

**TABLE 3: EXTERIOR NOISE LEVELS DUE TO ROAD TRAFFIC**

Receptor Number	Receptor Height Above Grade (m)	Receptor Location	STAMSON 5.04 Noise Level (dBA)	
			Day	Night
1	9.5	POW – 3 <sup>rd</sup> Floor – East Façade	43	35
2	9.5	POW – 3 <sup>rd</sup> Floor – South Façade	50	42
3	9.5	POW – 3 <sup>rd</sup> Floor – West Façade	55	48
4	9.5	POW – 3 <sup>rd</sup> Floor – North Façade	52	44
5	1.5	OLA – Backyard	55	N/A*

\*OLA noise levels during the nighttime period are not considered as per ENCG.

The results of the current analysis indicate that noise levels will range between 43 and 55 dBA during the daytime period (07:00-23:00) and between 35 and 48 dBA during the nighttime period (23:00-07:00). The highest noise level (55 dBA) occurs at the west façade, which is nearest and most exposed to Parkdale Avenue.

## 5.2 Noise Control Measures

The noise levels predicted due to roadway traffic do not exceed the criteria listed in Section 4.2 for building components. Therefore, upgraded building components will not be required. Since noise levels do not exceed 55 dBA, no noise mitigation measures are required.

## 6. CONCLUSIONS AND RECOMMENDATIONS

The results of the current analysis indicate that noise levels will range between 43 and 55 dBA during the daytime period (07:00-23:00) and between 35 and 48 dBA during the nighttime period (23:00-07:00). The highest noise level (55 dBA) occurs at the west façade, which is nearest and most exposed to Parkdale Avenue. Upgraded building components will not be required since noise levels predicted due to roadway traffic do not exceed 65 dBA during daytime and 60 dBA during nighttime at any façade.

Since noise levels do not exceed 55 dBA at any Plane of Window (POW) receptor, no warning clauses or other noise mitigation measures will be required. Additionally, noise levels at the OLA receptor in the backyard do not exceed ENCG requirements, therefore no mitigation measures are required.

This concludes our traffic noise assessment and report. If you have any questions or wish to discuss our findings, please advise us. In the interim, we thank you for the opportunity to be of service.

Sincerely,

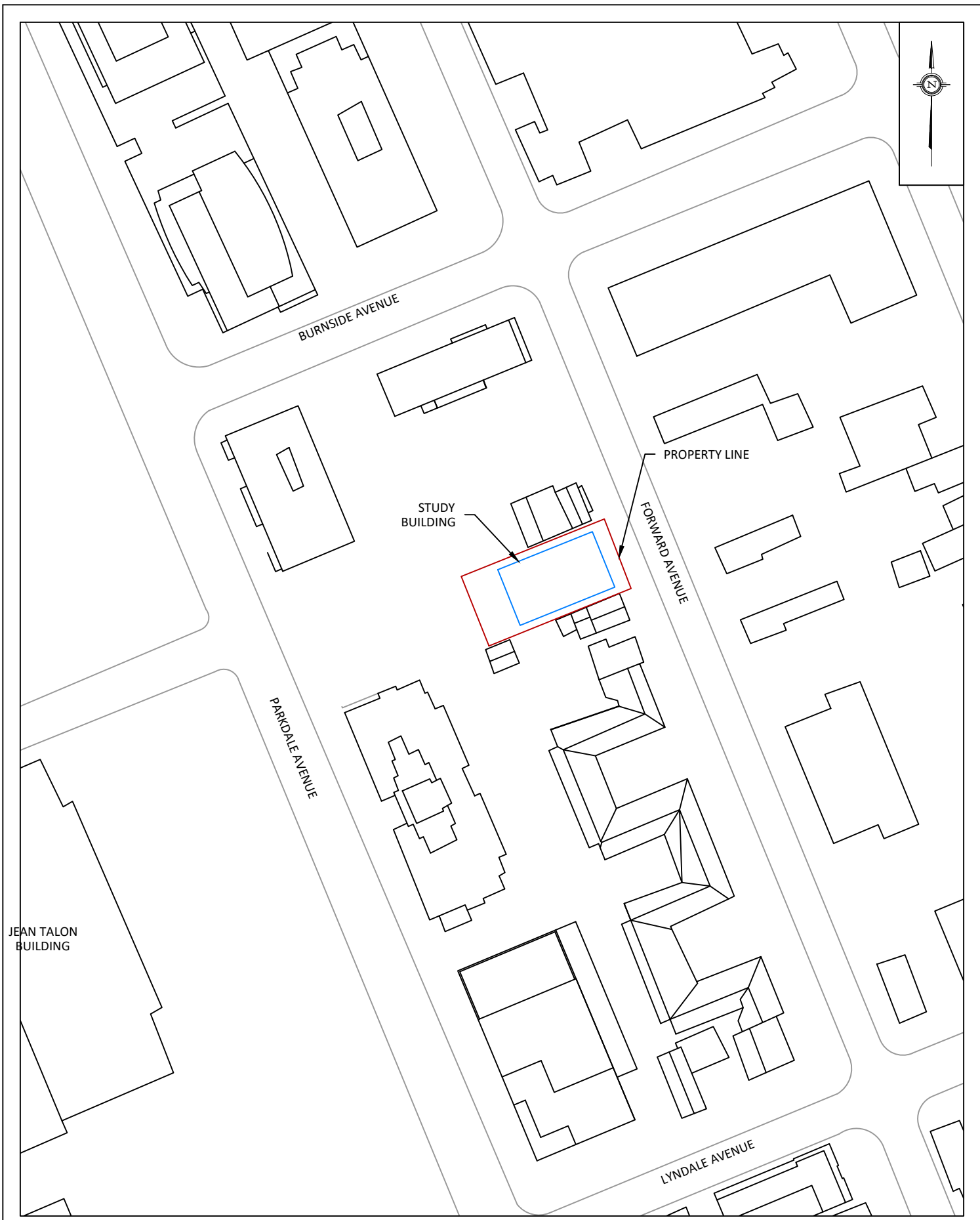
***Gradient Wind Engineering Inc.***

Caleb Alexander, B.Eng.,  
Junior Environmental Scientist

*Gradient Wind File 21-359-Traffic Noise*

Joshua Foster, P.Eng.  
Principal

DRAFT



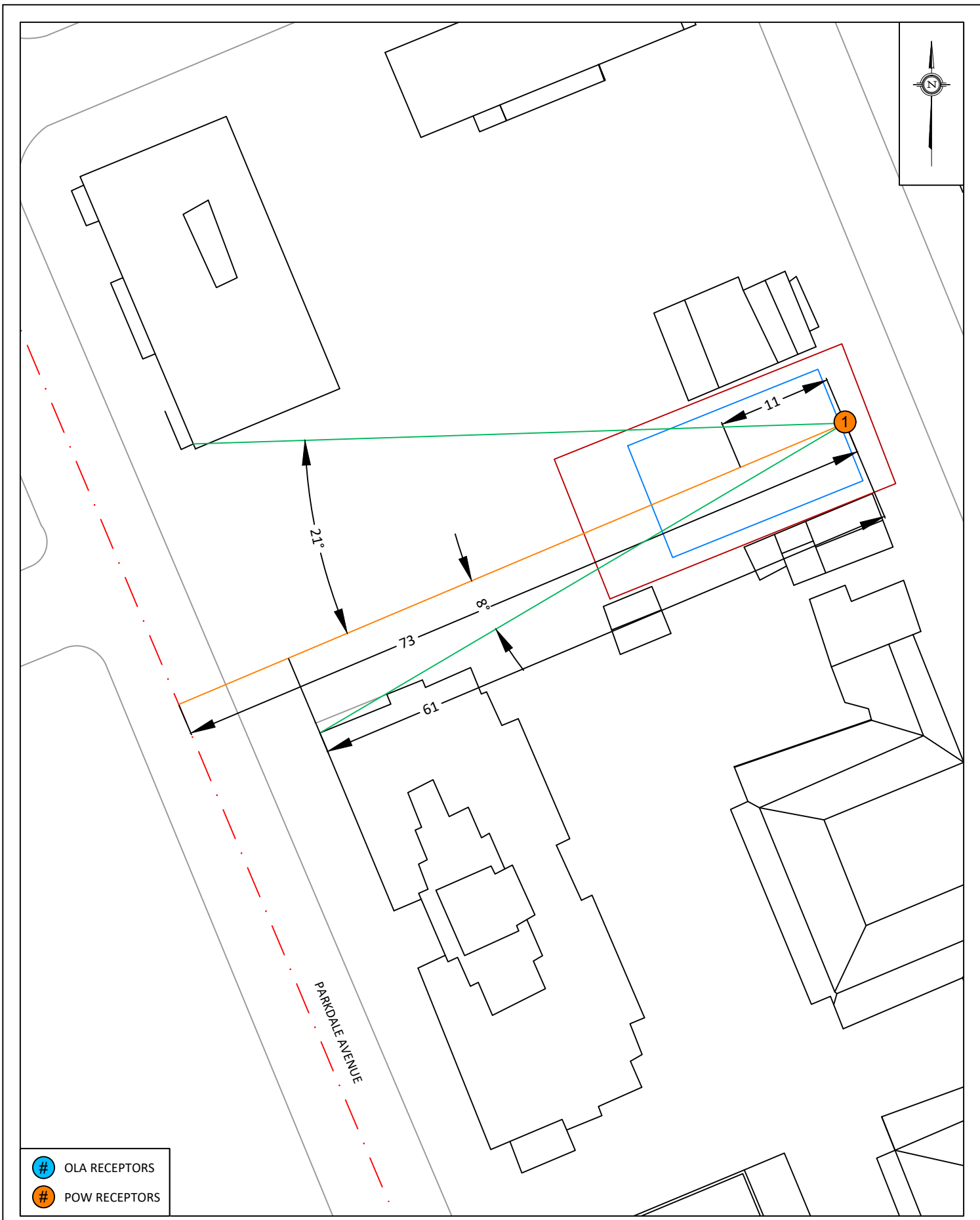
PROJECT	138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT	
SCALE	1:1000 (APPROX.)	DRAWING NO. 21-359- 1
DATE	DECEMBER 10, 2021	DRAWN BY C.A.



- # OLA RECEPTORS
- # POW RECEPTORS

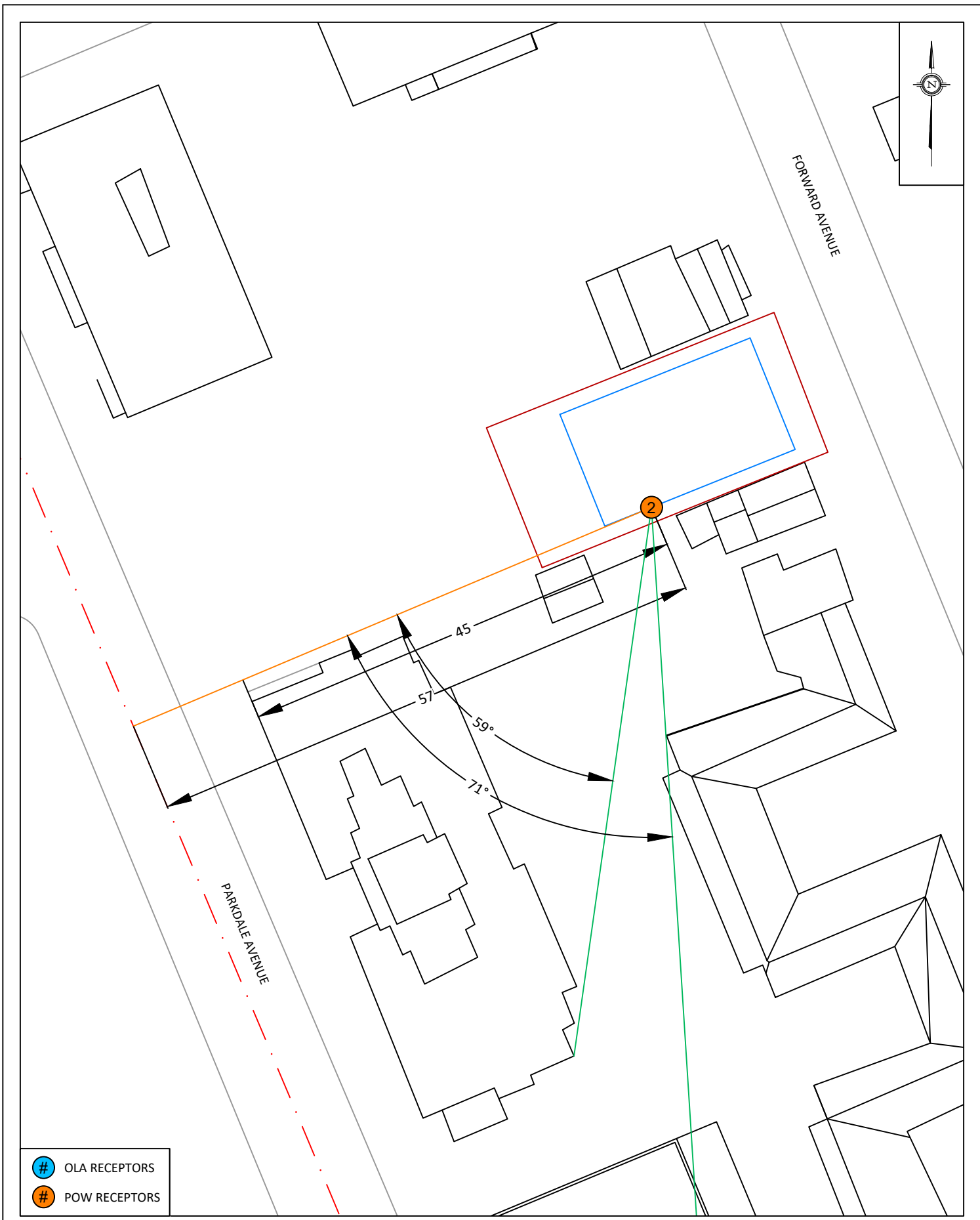
<b>GRADIENTWIND</b> ENGINEERS & SCIENTISTS 127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM	PROJECT	138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT		DESCRIPTION	FIGURE 2: RECEPTOR LOCATIONS
	SCALE	1:500 (APPROX.)	DRAWING NO.	21-359- 1	
	DATE	DECEMBER 10, 2021	DRAWN BY	C.A.	





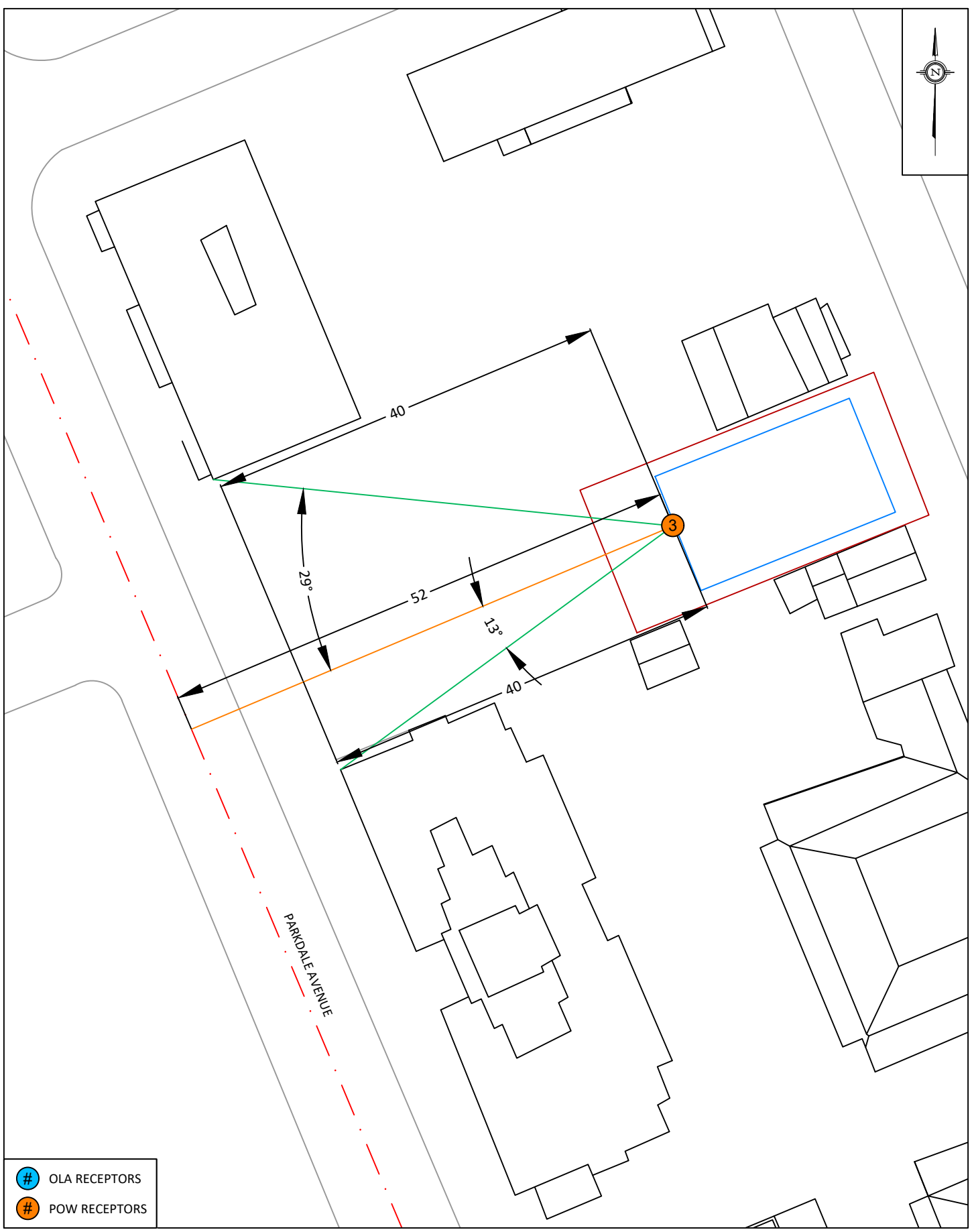
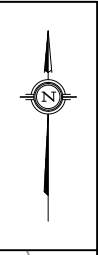
- # OLA RECEPTORS
- # POW RECEPTORS

<p><b>GRADIENTWIND</b> ENGINEERS &amp; SCIENTISTS</p> <p>127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM</p>	PROJECT	138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT	DESCRIPTION
	SCALE	1:500 (APPROX.)	DRAWING NO.
	DATE	DECEMBER 10, 2021	DRAWN BY
			<p>FIGURE 3: STAMSON INPUT DATA FOR RECEPTOR 1</p>



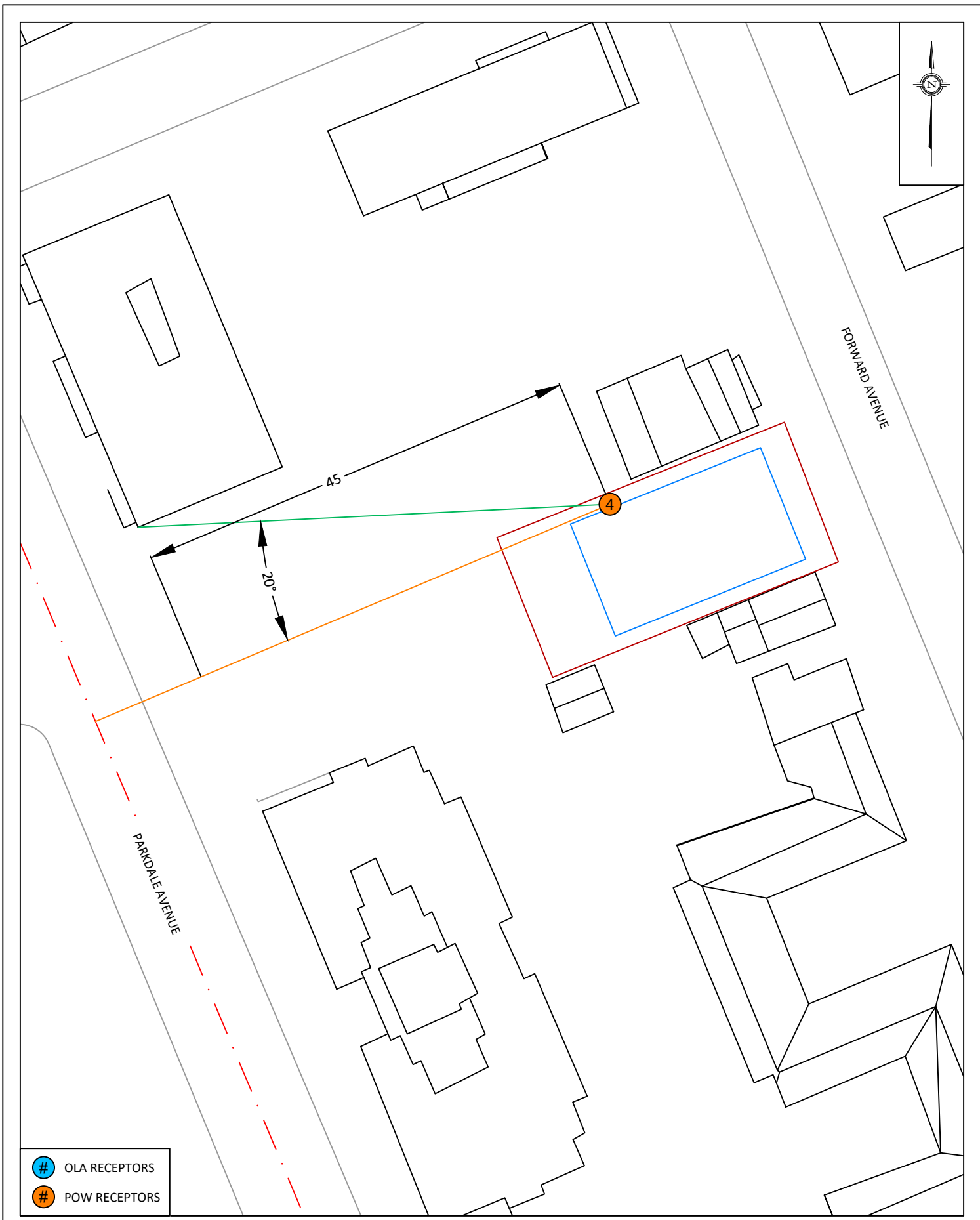
- # OLA RECEPTORS
- # POW RECEPTORS

<b>GRADIENTWIND</b> ENGINEERS & SCIENTISTS 127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM	PROJECT	138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT		DESCRIPTION	FIGURE 4: STAMSON INPUT DATA FOR RECEPTORS 2
	SCALE	1:500 (APPROX.)	DRAWING NO.	21-359-4	
	DATE	DECEMBER 10, 2021	DRAWN BY	C.A.	



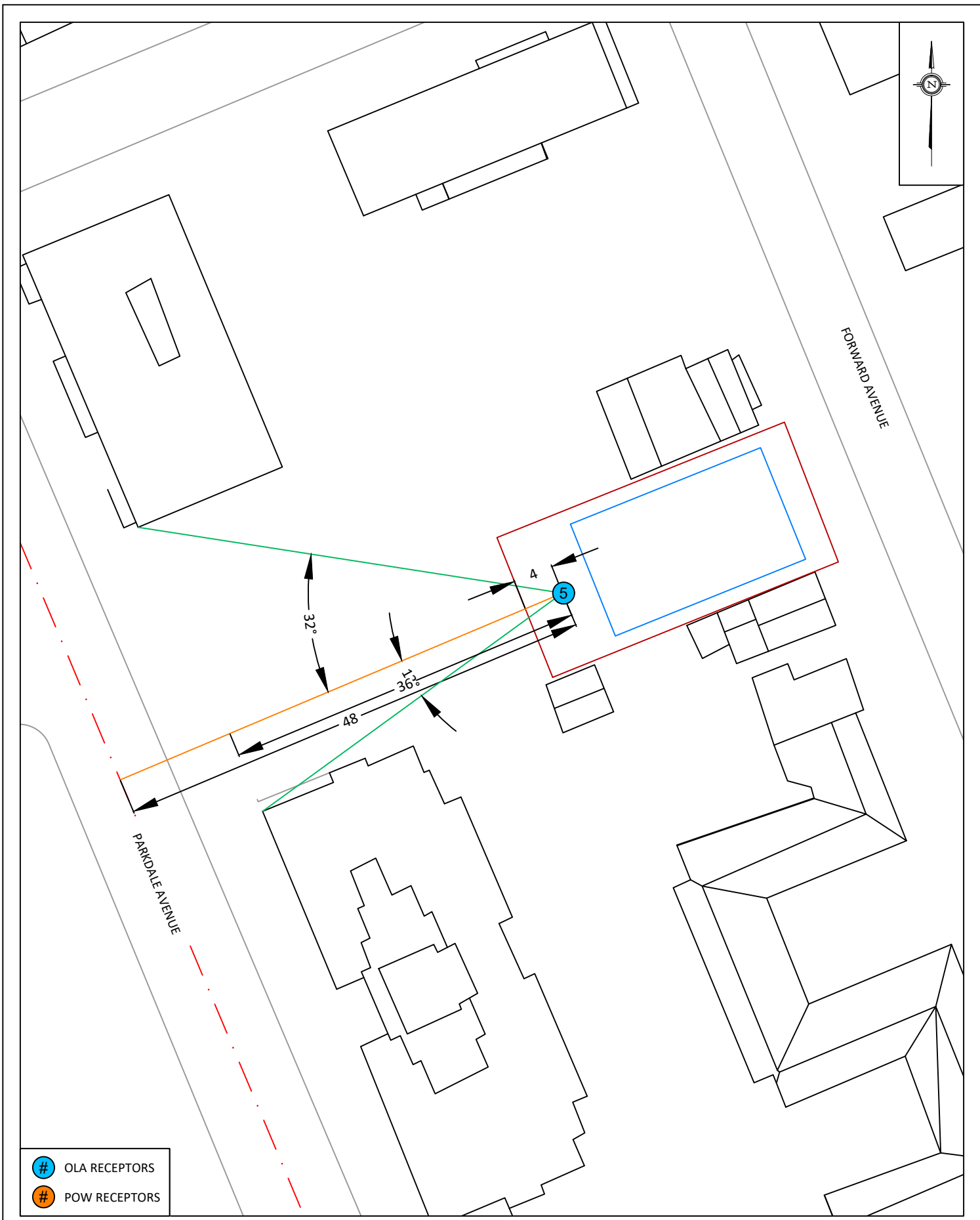
- OLA RECEPTORS
- POW RECEPTORS

<b>GRADIENTWIND</b> ENGINEERS & SCIENTISTS 127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM	PROJECT	138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT		DESCRIPTION	FIGURE 5: STAMSON INPUT DATA FOR RECEPTORS 3
	SCALE	1:500 (APPROX.)	DRAWING NO.	21-359- 5	
	DATE	DECEMBER 10, 2021	DRAWN BY	C.A.	



- # OLA RECEPTORS
- # POW RECEPTORS

<p><b>GRADIENTWIND</b> ENGINEERS &amp; SCIENTISTS</p> <p>127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM</p>	<p>PROJECT 138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT</p>		<p>DESCRIPTION</p> <p style="text-align: center;">FIGURE 6: STAMSON INPUT DATA FOR RECEPTOR 4</p>
	<p>SCALE 1:500 (APPROX.)</p>	<p>DRAWING NO. 21-359- 6</p>	
	<p>DATE DECEMBER 10, 2021</p>	<p>DRAWN BY C.A.</p>	



- # OLA RECEPTORS
- # POW RECEPTORS

<b>GRADIENTWIND</b> ENGINEERS & SCIENTISTS 127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM	PROJECT 138 FORWARD AVENUE, OTTAWA ROADWAY TRAFFIC NOISE ASSESSMENT		DESCRIPTION FIGURE 7: STAMSON INPUT DATA FOR RECEPTOR 5
	SCALE 1:500 (APPROX.)	DRAWING NO. 21-359-7	
	DATE DECEMBER 10, 2021	DRAWN BY C.A.	

# GRADIENTWIND

ENGINEERS & SCIENTISTS



## APPENDIX A

### STAMSON INPUT-OUTPUT DATA

STAMSON 5.0    NORMAL REPORT    Date: 10-12-2021 17:01:44  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r1.te            Time Period: Day/Night 16/8 hours  
Description:

Road data, segment # 1: Parkdale 1 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Parkdale 1 (day/night)

-----  
Angle1 Angle2 : -90.00 deg -8.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 73.00 / 73.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : -8.00 deg  
Barrier height : 18.00 m  
Barrier receiver distance : 61.00 / 61.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Road data, segment # 2: Parkdale 2 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Parkdale 2 (day/night)

-----  
Angle1 Angle2 : -8.00 deg 21.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 73.00 / 73.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -8.00 deg Angle2 : 21.00 deg  
Barrier height : 11.00 m  
Barrier receiver distance : 11.00 / 11.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00



Road data, segment # 3: Parkdale 3 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Parkdale 3 (day/night)

-----  
Angle1 Angle2 : 21.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 73.00 / 73.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : 21.00 deg Angle2 : 90.00 deg  
Barrier height : 15.00 m  
Barrier receiver distance : 61.00 / 61.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Results segment # 1: Parkdale 1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	2.81	2.81

ROAD (0.00 + 37.88 + 0.00) = 37.88 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-8	0.00	66.69	0.00	-6.87	-3.41	0.00	0.00	-18.52	37.88

Segment Leq : 37.88 dBA



Results segment # 2: Parkdale 2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	8.29	8.29

1.50	9.50	8.29	8.29
------	------	------	------

ROAD (0.00 + 38.35 + 0.00) = 38.35 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-8	21	0.00	66.69	0.00	-6.87	-7.93	0.00	0.00	-13.53	38.35

-8	21	0.00	66.69	0.00	-6.87	-7.93	0.00	0.00	-13.53	38.35
----	----	------	-------	------	-------	-------	------	------	--------	-------

Segment Leq : 38.35 dBA

Results segment # 3: Parkdale 3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	2.81	2.81

1.50	9.50	2.81	2.81
------	------	------	------

ROAD (0.00 + 37.96 + 0.00) = 37.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
21	90	0.00	66.69	0.00	-6.87	-4.16	0.00	0.00	-17.69	37.96

21	90	0.00	66.69	0.00	-6.87	-4.16	0.00	0.00	-17.69	37.96
----	----	------	-------	------	-------	-------	------	------	--------	-------

Segment Leq : 37.96 dBA

Total Leq All Segments: 42.84 dBA



Results segment # 1: Parkdale 1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	2.81	2.81

ROAD (0.00 + 30.28 + 0.00) = 30.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-8	0.00	59.09	0.00	-6.87	-3.41	0.00	0.00	-18.52	30.28

Segment Leq : 30.28 dBA

Results segment # 2: Parkdale 2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	8.29	8.29

ROAD (0.00 + 30.75 + 0.00) = 30.75 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-8	21	0.00	59.09	0.00	-6.87	-7.93	0.00	0.00	-13.53	30.75

Segment Leq : 30.75 dBA

Results segment # 3: Parkdale 3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	2.81	2.81

ROAD (0.00 + 30.36 + 0.00) = 30.36 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
21	90	0.00	59.09	0.00	-6.87	-4.16	0.00	0.00	-17.69	30.36

Segment Leq : 30.36 dBA

Total Leq All Segments: 35.24 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 42.84  
(NIGHT): 35.24



STAMSON 5.0    NORMAL REPORT    Date: 10-12-2021 17:02:26  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r2.te            Time Period: Day/Night 16/8 hours  
Description:

Road data, segment # 1: Parkdale3 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Parkdale3 (day/night)

-----  
Angle1 Angle2 : -90.00 deg -71.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 57.00 / 57.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : -71.00 deg  
Barrier height : 21.00 m  
Barrier receiver distance : 45.00 / 45.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Road data, segment # 2: PARKDALE 2 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: PARKDALE 2 (day/night)

-----  
Angle1 Angle2 : -71.00 deg -59.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 57.00 / 57.00 m  
Receiver height : 9.50 / 4.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: PARKDALE 1 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: PARKDALE 1 (day/night)

-----  
Angle1 Angle2 : -59.00 deg 0.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 57.00 / 57.00 m  
Receiver height : 9.50 / 4.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -59.00 deg Angle2 : 0.00 deg  
Barrier height : 15.00 m  
Barrier receiver distance : 45.00 / 45.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00



Results segment # 1: Parkdale3 (day)

-----

Source height = 1.50 m

Barrier height for grazing incidence

-----

Source ! Receiver ! Barrier ! Elevation of  
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

-----+-----+-----+-----

1.50 ! 9.50 ! 3.18 ! 3.18

ROAD (0.00 + 34.68 + 0.00) = 34.68 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-90 -71 0.00 66.69 0.00 -5.80 -9.77 0.00 0.00 -16.44 34.68

-----

Segment Leq : 34.68 dBA

Results segment # 2: PARKDALE 2 (day)

-----

Source height = 1.50 m

ROAD (0.00 + 49.13 + 0.00) = 49.13 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-71 -59 0.00 66.69 0.00 -5.80 -11.76 0.00 0.00 0.00 49.13

-----

Segment Leq : 49.13 dBA



Results segment # 3: PARKDALE 1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.18	3.18

ROAD (0.00 + 36.04 + 0.00) = 36.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-59	0	0.00	66.69	0.00	-5.80	-4.84	0.00	0.00	-20.00	36.04

Segment Leq : 36.04 dBA

Total Leq All Segments: 49.48 dBA

Results segment # 1: Parkdale3 (night)

Source height = 1.50 m

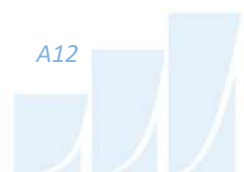
Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.18	3.18

ROAD (0.00 + 27.08 + 0.00) = 27.08 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-71	0.00	59.09	0.00	-5.80	-9.77	0.00	0.00	-16.44	27.08

Segment Leq : 27.08 dBA



Results segment # 2: PARKDALE 2 (night)

Source height = 1.50 m

ROAD (0.00 + 41.53 + 0.00) = 41.53 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-71	-59	0.00	59.09	0.00	-5.80	-11.76	0.00	0.00	0.00	41.53

-----

Segment Leq : 41.53 dBA

Results segment # 3: PARKDALE 1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	4.50	2.13	2.13

-----

ROAD (0.00 + 28.45 + 0.00) = 28.45 dBA

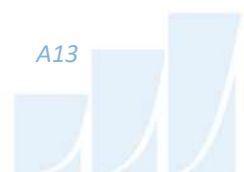
Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-59	0	0.00	59.09	0.00	-5.80	-4.84	0.00	0.00	-20.00	28.45

-----

Segment Leq : 28.45 dBA

Total Leq All Segments: 41.88 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 49.48  
(NIGHT): 41.88



STAMSON 5.0    NORMAL REPORT    Date: 10-12-2021 17:01:12  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r3.te            Time Period: Day/Night 16/8 hours  
Description:

Road data, segment # 1: Parkdale 1 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Parkdale 1 (day/night)

-----  
Angle1 Angle2 : -90.00 deg -13.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 52.00 / 52.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : -13.00 deg  
Barrier height : 21.00 m  
Barrier receiver distance : 40.00 / 40.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Road data, segment # 2: Parkdale 2 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Parkdale 2 (day/night)

-----  
Angle1 Angle2 : -13.00 deg 29.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 52.00 / 52.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Parkdale 3 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Parkdale 3 (day/night)

-----  
Angle1 Angle2 : 29.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 52.00 / 52.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : 29.00 deg Angle2 : 90.00 deg  
Barrier height : 15.00 m  
Barrier receiver distance : 40.00 / 40.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Results segment # 1: Parkdale 1 (day)

-----

Source height = 1.50 m

Barrier height for grazing incidence

-----

Source ! Receiver ! Barrier ! Elevation of  
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

-----+-----+-----+-----

1.50 ! 9.50 ! 3.34 ! 3.34

ROAD (0.00 + 38.77 + 0.00) = 38.77 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-90 -13 0.00 66.69 0.00 -5.40 -3.69 0.00 0.00 -18.83 38.77

-----

Segment Leq : 38.77 dBA

Results segment # 2: Parkdale 2 (day)

-----

Source height = 1.50 m

ROAD (0.00 + 54.97 + 0.00) = 54.97 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-13 29 0.00 66.69 0.00 -5.40 -6.32 0.00 0.00 0.00 54.97

-----

Segment Leq : 54.97 dBA



Results segment # 3: Parkdale 3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.34	3.34

ROAD (0.00 + 39.14 + 0.00) = 39.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
29	90	0.00	66.69	0.00	-5.40	-4.70	0.00	0.00	-17.45	39.14

Segment Leq : 39.14 dBA

Total Leq All Segments: 55.18 dBA

Results segment # 1: Parkdale 1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.34	3.34

ROAD (0.00 + 31.17 + 0.00) = 31.17 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-13	0.00	59.09	0.00	-5.40	-3.69	0.00	0.00	-18.83	31.17

Segment Leq : 31.17 dBA



Results segment # 2: Parkdale 2 (night)

Source height = 1.50 m

ROAD (0.00 + 47.37 + 0.00) = 47.37 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	-------	--------

-13	29	0.00	59.09	0.00	-5.40	-6.32	0.00	0.00	0.00	47.37
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 47.37 dBA

Results segment # 3: Parkdale 3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
-------------------	---------------------	--------------------	------------------------------

1.50	9.50	3.34	3.34
------	------	------	------

ROAD (0.00 + 31.54 + 0.00) = 31.54 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	-------	--------

29	90	0.00	59.09	0.00	-5.40	-4.70	0.00	0.00	-17.45	31.54
----	----	------	-------	------	-------	-------	------	------	--------	-------

Segment Leq : 31.54 dBA

Total Leq All Segments: 47.58 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.18  
(NIGHT): 47.58

STAMSON 5.0    NORMAL REPORT    Date: 10-12-2021 17:07:36  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r4.te            Time Period: Day/Night 16/8 hours  
Description:

Road data, segment # 1: Parkdale 1 (day/night)

-----  
Car traffic volume : 960/1056 veh/TimePeriod  
Medium truck volume : 0/84 veh/TimePeriod  
Heavy truck volume : 0/60 veh/TimePeriod  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Parkdale 1 (day/night)

-----  
Angle1 Angle2 : -90.00 deg -13.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 500.00 / 500.00 m  
Receiver height : 1.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : -13.00 deg  
Barrier height : 500.00 m  
Barrier receiver distance : 40.00 / 40.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Road data, segment # 2: Parkdale 2 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Parkdale 2 (day/night)

-----  
Angle1 Angle2 : 0.00 deg 20.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 52.00 / 52.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Parkdale 3 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Parkdale 3 (day/night)

-----  
Angle1 Angle2 : 20.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 52.00 / 52.00 m  
Receiver height : 9.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : 20.00 deg Angle2 : 90.00 deg  
Barrier height : 15.00 m  
Barrier receiver distance : 40.00 / 40.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Results segment # 1: Parkdale 1 (day)

-----

Source height = 0.50 m

Barrier height for grazing incidence

-----

Source ! Receiver ! Barrier ! Elevation of  
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

-----+-----+-----+-----

0.50 ! 1.50 ! 1.42 ! 1.42

ROAD (0.00 + 8.27 + 0.00) = 8.27 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-90 -13 0.00 47.16 0.00 -15.23 -3.69 0.00 0.00 -19.98 8.27

-----

Segment Leq : 8.27 dBA

Results segment # 2: Parkdale 2 (day)

-----

Source height = 1.50 m

ROAD (0.00 + 51.74 + 0.00) = 51.74 dBA

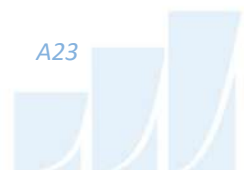
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

0 20 0.00 66.69 0.00 -5.40 -9.54 0.00 0.00 0.00 51.74

-----

Segment Leq : 51.74 dBA



Results segment # 3: Parkdale 3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.34	3.34

ROAD (0.00 + 39.48 + 0.00) = 39.48 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
20	90	0.00	66.69	0.00	-5.40	-4.10	0.00	0.00	-17.70	39.48

Segment Leq : 39.48 dBA

Total Leq All Segments: 51.99 dBA

Results segment # 1: Parkdale 1 (night)

Source height = 1.50 m

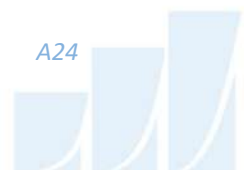
Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	8.86	8.86

ROAD (0.00 + 20.20 + 0.00) = 20.20 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-13	0.00	59.09	0.00	-15.23	-3.69	0.00	0.00	-19.98	20.20

Segment Leq : 20.20 dBA



Results segment # 2: Parkdale 2 (night)

Source height = 1.50 m

ROAD (0.00 + 44.15 + 0.00) = 44.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	20	0.00	59.09	0.00	-5.40	-9.54	0.00	0.00	0.00	44.15

0	20	0.00	59.09	0.00	-5.40	-9.54	0.00	0.00	0.00	44.15
---	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 44.15 dBA

Results segment # 3: Parkdale 3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.34	3.34

1.50	9.50	3.34	3.34
------	------	------	------

ROAD (0.00 + 31.89 + 0.00) = 31.89 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
20	90	0.00	59.09	0.00	-5.40	-4.10	0.00	0.00	-17.70	31.89

20	90	0.00	59.09	0.00	-5.40	-4.10	0.00	0.00	-17.70	31.89
----	----	------	-------	------	-------	-------	------	------	--------	-------

Segment Leq : 31.89 dBA

Total Leq All Segments: 44.42 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 51.99  
(NIGHT): 44.42

STAMSON 5.0    NORMAL REPORT    Date: 10-12-2021 17:09:48  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r5.te                      Time Period: Day/Night 16/8 hours  
Description:

Road data, segment # 1: Parkdale 1 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Parkdale 1 (day/night)

-----  
Angle1 Angle2 : -90.00 deg -13.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 48.00 / 48.00 m  
Receiver height : 1.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : -13.00 deg  
Barrier height : 25.00 m  
Barrier receiver distance : 36.00 / 36.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00



Road data, segment # 2: Parkdale 2 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Parkdale 2 (day/night)

-----  
Angle1 Angle2 : -13.00 deg 32.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 48.00 / 48.00 m  
Receiver height : 1.50 / 9.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Parkdale 3 (day/night)

-----  
Car traffic volume : 12144/1056 veh/TimePeriod \*  
Medium truck volume : 966/84 veh/TimePeriod \*  
Heavy truck volume : 690/60 veh/TimePeriod \*  
Posted speed limit : 40 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 15000  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Parkdale 3 (day/night)

-----  
Angle1 Angle2 : 32.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 2 (Reflective ground surface)  
Receiver source distance : 48.00 / 48.00 m  
Receiver height : 1.50 / 9.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : 32.00 deg Angle2 : 90.00 deg  
Barrier height : 20.00 m  
Barrier receiver distance : 36.00 / 36.00 m  
Source elevation : 0.00 m  
Receiver elevation : 0.00 m  
Barrier elevation : 0.00 m  
Reference angle : 0.00

Results segment # 1: Parkdale 1 (day)

-----

Source height = 1.50 m

Barrier height for grazing incidence

-----

Source ! Receiver ! Barrier ! Elevation of  
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

-----+-----+-----+-----

1.50 ! 1.50 ! 1.50 ! 1.50

ROAD (0.00 + 38.64 + 0.00) = 38.64 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-90 -13 0.00 66.69 0.00 -5.05 -3.69 0.00 0.00 -19.31 38.64

-----

Segment Leq : 38.64 dBA

Results segment # 2: Parkdale 2 (day)

-----

Source height = 1.50 m

ROAD (0.00 + 55.61 + 0.00) = 55.61 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-----

-13 32 0.00 66.69 0.00 -5.05 -6.02 0.00 0.00 0.00 55.61

-----

Segment Leq : 55.61 dBA



Results segment # 3: Parkdale 3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	1.50

ROAD (0.00 + 37.98 + 0.00) = 37.98 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
32	90	0.00	66.69	0.00	-5.05	-4.92	0.00	0.00	-18.74	37.98

Segment Leq : 37.98 dBA

Total Leq All Segments: 55.77 dBA

Results segment # 1: Parkdale 1 (night)

Source height = 1.50 m

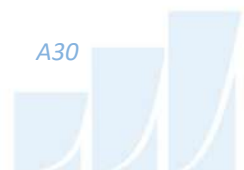
Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	9.50	3.50	3.50

ROAD (0.00 + 31.21 + 0.00) = 31.21 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-13	0.00	59.09	0.00	-5.05	-3.69	0.00	0.00	-19.14	31.21

Segment Leq : 31.21 dBA



Results segment # 2: Parkdale 2 (night)

Source height = 1.50 m

ROAD (0.00 + 48.02 + 0.00) = 48.02 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	-------	--------

-13	32	0.00	59.09	0.00	-5.05	-6.02	0.00	0.00	0.00	48.02
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 48.02 dBA

Results segment # 3: Parkdale 3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
-------------------	---------------------	--------------------	------------------------------

1.50	9.50	3.50	3.50
------	------	------	------

ROAD (0.00 + 30.73 + 0.00) = 30.73 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	-------	--------

32	90	0.00	59.09	0.00	-5.05	-4.92	0.00	0.00	-18.39	30.73
----	----	------	-------	------	-------	-------	------	------	--------	-------

Segment Leq : 30.73 dBA

Total Leq All Segments: 48.19 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.77  
(NIGHT): 48.19

**E.4 SURVEYOR'S REAL PROPERTY REPORT BY ANNIS, O'SULLIVAN,  
VOLLEYBEKK LTD. MARCH 20, 2020.**



**SURVEYOR'S REAL PROPERTY REPORT**  
**PART 1** Plan of  
**LOT 4**  
**EAST PARKDALE AVENUE LOTS**  
**AND**  
**LOTS 3 AND 4**  
**WEST FORWARD AVENUE LOTS**  
**REGISTERED PLAN 35**  
**CITY OF OTTAWA**  
 Surveyed by Annis, O'Sullivan, Vollebek Ltd.  
 Scale 1 : 250

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

**Surveyor's Certificate**  
 I CERTIFY THAT:  
 1. This survey and plan are correct and in accordance with the Surveys Act and the Surveyors Act and the regulations made under them.  
 2. The survey was completed on the 20th day of March, 2020.

Date \_\_\_\_\_  
 T. Hartwick  
 Ontario Land Surveyor

**PART 2**  
 THIS PLAN MUST BE READ IN CONJUNCTION WITH SURVEY REPORT DATED: March 20th, 2020

**Notes & Legend**


Denotes	
□	Survey Monument Planted
■	Survey Monument Found
SIB	Standard Iron Bar
SSIB	Short Standard Iron Bar
IB	Iron Bar
IB#	Round Iron Bar
CP	Concrete Pin
(OU)	Origin Known
(Acc.)	Accepted
(WIT)	Witness
Meas.	Measured
(AOG)	Annis, O'Sullivan, Vollebek Ltd.
(P1)	Registered Plan 35
(P2)	Plan 4R-26272
(P3)	Plan 4R-10393
(P4)	Plan 4R-12058
(P5)	(1692) Plan dated May 24, 2018
(P6)	(1283) Plan dated August 8, 1990
(P7)	(857) Plan dated July 10, 1986
(P8)	Plan 4R-23649
(P9)	(725) Plan June 15, 1984
(P10)	Plan 4R-3382
(P11)	(1236) Plan dated August 26, 1993
(P12)	(990) June 26, 1992
○	Deciduous Tree
○	Shrub
○ FH	Fire Hydrant
○ WV	Water Valve
○ MH	Maintenance Hole (Unidentified)
○ HW	Overhead Wires
□ CB	Catch Basin
□ CB#	Catch Basin Inlet
T.G	Top of Grate
T.S	Top of Spindle
□ GM	Gas Meter
○ B	Bollard
BF	Board Fence
SWC	Concrete Sidewalk
RWC	Concrete Retaining Wall
□ AC	Air Conditioner
○ UP	Utility Pole
○ SL	Street Light
DS	Door Sill
BdP	Building Peak
TF	Top of Foundation
FF	Finish Floor
∅	Diameter
+ 05.00	Location of Elevations
+ 65.00*	Top of Concrete Curb Elevation

Bearings are grid, derived from Specified Control Points 2011-0105 and 2011-134 having a resultant bearing of N23°27'50"W and are referred to the Central Meridian of MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

For comparison purposes, a rotation of 0°00'50" Counter Clockwise was applied to bearings on Plans P3 and P10.

ANNIS, OSULLIVAN, VOLLEBEK LTD. grants to M.Y. Commercial (The Client), their solicitors, mortgagees, and other related parties, permission to use original, signed, sealed copies of the Surveyor's Real Property Report in transactions involving The Client.

ASSOCIATION OF ONTARIO LAND SURVEYORS  
 PLAN SUBMISSION FORM  
 2121784



THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29 (3).

Topographic data was collected under winter conditions. Snow cover and ice preclude determining location and elevation of some topographical data that is otherwise visible.

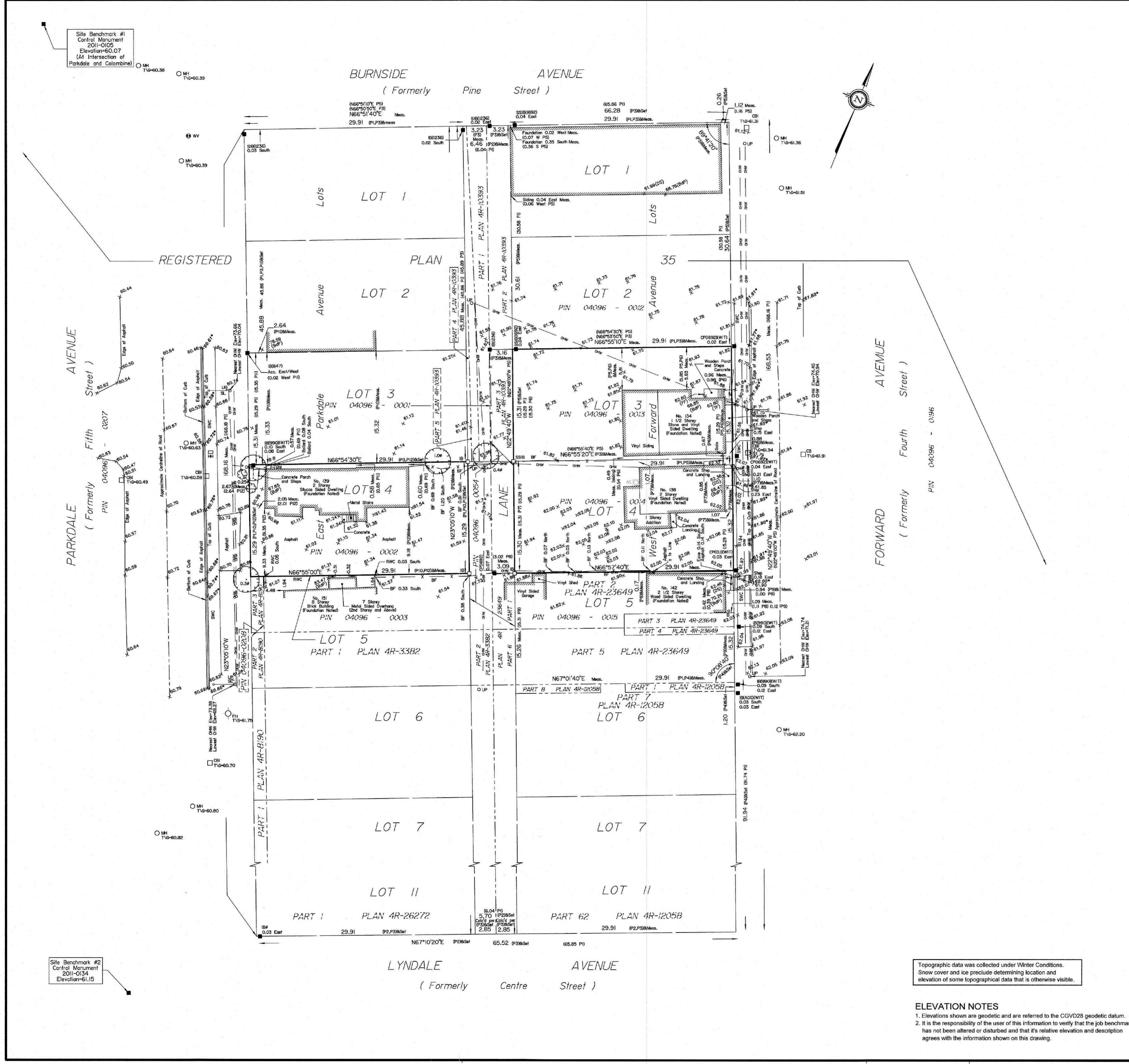
**ELEVATION NOTES**

- Elevations shown are geodetic and are referred to the CGVD28 geodetic datum.
- It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

© Annis, O'Sullivan, Vollebek Ltd. 2020. THIS PLAN IS PROTECTED BY COPYRIGHT

**ANNIS, O'SULLIVAN, VOLLEBEK LTD.**  
 14 Concourse Gate, Suite 500  
 Nepean, Ont. K2E 7S6  
 Phone: (613) 727-0850 / Fax: (613) 727-1079  
 Email: [Annis@annisvollebek.com](mailto:Annis@annisvollebek.com)

Ontario Land Surveyors (Reg. No. 20477-20 My Commercial Lts-4 P195 T F2)



Site Benchmark #1  
 Control Monument  
 2011-0105  
 Elevation=60.07  
 (At Intersection of  
 Parkdale and Colombine)

Site Benchmark #2  
 Control Monument  
 2011-0134  
 Elevation=61.15

Y:\2020\2017-20\_My Commercial\_Lts-4 P195 T F2.dwg

## Appendix F OTHER CORRESPONDENCE

### F.1 FIRST SUBMISSION CIVIL COMMENT RESPONSE LETTER







**Stantec Consulting Ltd.**  
300 - 1331 Clyde Avenue  
Ottawa ON K2C 3G4

April 19, 2022

Project/File: D07-12-21-0178

**Jean-Charles, Planner II, Planning and Growth Management Department**

City of Ottawa

110 Laurier Avenue West

Ottawa, ON, K1P 1J1

Mail code: 01-14613-580-2424x27629

Dear Jean-Charles

**Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue**

The intent of this letter is to provide the civil design responses to the first comment set for the Site Plan Control application for 138 Forward Avenue received from the City of Ottawa February 23, 2022. The comment responses are also addressed in the *Servicing and Stormwater Management Report: 138 Forward Avenue Rev.01* and associated drawings, dated April 20, 2022. Comment responses, report revisions, and plan revisions have been made based on the Site Plan dated March 4, 2022. Please find Stantec responses in **bold** font below.

---

1. Planning

#5 Please describe the proposed rear yard space. What is the purpose of the large hard-surfaced space in the rear yard? Why is this space labeled “P1 and P2” on the Landscape Plan?

**Stantec response: P1 and P2 indicate different types of pavers to provide visual appeal.**

#6 Please replace the riverwashed stone with sod on the south side of the building.

**Stantec response: Noted. Revised in L100 Rev.02**

2. General

None.

3. Urban Design

None.

4. Engineering – general

Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue

#12 On lower right-hand corner of all the plans, include City's Application # of D07-12-21-0237 and Plan # 18652.

**Stantec response: Noted, this has been added to all civil plans as directed.**

#### 5. Engineering – Geotechnical Investigation

None.

#### 6. Engineering - Stormwater Management and Servicing Report

#18 For population for 0-500, please use Table 3-3 of the MOE Design Guidelines for Drinking-Water Systems to determine maximum day and maximum hour factors.

**Stantec response: Revised in domestic water demand calculations, Section 3.2 and Appendix A.1**

#19 The average day, maximum day, peak hour demands, and fire flow submitted for boundary conditions do not match the demands stated in the report. Please revise and resubmit for boundary conditions.

**Stantec response: Revised in report and Appendix. New boundary request submitted and conditions received, see Appendix A.3.**

#20 Provide supporting hydraulic calculations showing the minimum pressure under peak hour demand, maximum pressure under average day demand, and minimum pressure under maximum day + fire demand using boundary conditions provided by the city. The report indicates that the on-site pressures are expected to be within acceptable range and there is no need for a pressure reducing for the building but there are no supporting calculations.

**Stantec response: Revised, additional details provided in Section 3.3.1, calculations provided in Appendix A.4**

#21 Please discuss the adequacy of the water pressure for the upper floors of the building and if booster pumps will be required.

**Stantec response: Revised, additional details provided in Section 3.3.1, calculations provided in Appendix A.4**

#22 Discuss quality control in report (RVCA correspondence is included as appendix but there should be some discussion in the report about it).

**Stantec response: Additional information provided in Section 3 of the report.**

#23 FYI: Formula for intensity is not visible Appendix D.

**Stantec response: Revised, see Appendix D.1**

Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue

#24 Why is the area set to 0 for UNC1 and ROOFB, shouldn't it be 30m<sup>2</sup>?

**Stantec response: Revised. Insufficient decimal places were shown (area in hectares). See Appendix D.1**

#25 Please clarify release rate; summary indicates that uncontrolled area (CB1, CB2, CB3) has an area of 0.044 ha but subdrainage area shows are of 0.02 ha; the breakdown of the release rate is unclear. If necessary, please show three decimal places in calculations.

**Stantec response: Revised SWM approach has removed side yard infrastructure. Additional decimal places have been shown in the calculations. See Appendix D.1.**

#26 When sizing sewers, the %full should be for the 5-year, not the 100-year (sewers should be sized for the 5-year event).

**Stantec response: Revised SWM approach has removed side yard infrastructure. Final storm service lateral sizing from the building to be determined by the mechanical consultant.**

Engineering - Roadway Traffic Noise Assessment

None.

Engineering - Erosion Control Plan and Detail Sheet

#29 Please revise to include construction fence detail as per the legend.

**Stantec response: The construction fence has been removed from the legend, as it is not required at this site. See revised ECDS-1 drawing.**

#30 Include property line in legend.

**Stantec response: Property line has been included in the legend, although it should be noted that it is not visible in the PDF as it is overlapped by the proposed silt fence. See revised ECDS-1 drawing.**

#31 Please provide note for mud matts at construction entrances.

**Stantec response: Given the small size of the site and lack of an access driveway, we do not believe a mud mat is required or feasible for this site.**

#32 Provide a Note: Contractor is responsible to keep the roads free and clean from mud or debris.

**Stantec response: Noted. See note 13 in revised ECDS-1 drawing.**

Engineering - Existing Conditions and Removals Plan

#33 Please show approximate location of existing services.

**Stantec response: Revised, see EX-1 drawing.**

#34 Include property line in legend.

**Stantec response: Revised, see EX-1 drawing.**

Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue

#35 Include existing fence in legend.

**Stantec response: Revised, see EX-1 drawing.**

#36 Include existing building in legend.

**Stantec response: Revised, see EX-1 drawing.**

# 37 Provide name of owner, full address, telephone number, and postal code.

**Stantec response: Revised. Name of Owner, full address and postal code included. Owner telephone number has been excluded per Stantec's drawing standard. See EX-1 drawing.**

Engineering – Grading Plan

#38 Hatching in legend does not appear to match drawing. Please provide all material hatching in legend.

**Stantec response: Revised, see GP-1 drawing.**

#39 Show detail (or City of Ottawa Standard Detail Drawing / OPSD reference) for curb retaining wall on north side of property.

**Stantec response: Revised, detail SC1.1 added to ECDS-1 drawing and detail references added to GP-1 drawing.**

#40 Please include property line in legend.

**Stantec response: Revised, see GP-1 drawing.**

#41 Please include existing building and new building linework in legend.

**Stantec response: Revised, see GP-1 drawing.**

#42 Grades at property line / limits of work must match existing. Please revise and add more proposed grades along property line.

**Stantec response: Revised, see GP-1 drawing.**

#43 Provide survey benchmark information (from survey plan).

**Stantec response: Revised, two site benchmarks added. See GP-1 drawing.**

#44 Provide name of owner, full address, telephone number, and postal code.

**Stantec response: Revised. Name of Owner, full address and postal code included. Owner telephone number has been excluded per Stantec's drawing standard. See GP-1 drawing.**

Engineering – Site Servicing Plan

#45 Please include hatching for material types in the legend.

**Stantec response: Revised, see SSP-1 drawing.**

Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue

#46 Show direction of sewers in ROW.

**Stantec response: Revised, see SSP-1 drawing.**

#47 CB "T" to reference a city standard detail drawing and show in legend.

**Stantec response: Revised SWM approach has removed side yard infrastructure. No additional details required.**

#48 Provide OPSD and City of Ottawa reference for frame and cover of all structures.

**Stantec response: Revised SWM approach has removed side yard infrastructure. No proposed structures. See SSP-1 drawing.**

#49 Please replace CB-1 with a CBMH.

**Stantec response: Revised SWM approach has removed side yard infrastructure. No proposed structures. See SSP-1 drawing.**

#50 There is concern with the west roof drain outlet at 600mm above grade discharging into the side yard and stormwater spilling onto neighboring properties. Consider only having one roof drain outlet (east) at 300mm above grade.

**Stantec response: Revised, see SSP-1 drawing and SD-1 drawing.**

#51 Please note, floor drains and any other water sources shall not be connected to the sump pit. Please confirm / clarify that the floor drains will not be connected to the sump pit.

**Stantec response: Floor drain/area drain notes have been revised. See SSP-1 drawing and SD-1 drawing.**

#52 Show approximate location of existing building services.

**Stantec response: Revised, see SSP-1 drawing.**

#53 Sewers require 2m of cover, otherwise insulation is required. Please revise.

**Stantec response: Revised. Additional insulation provided on service laterals, see SSP-1 drawing.**

#54 Provide insulation note indicating thickness, width, and reference to city of Ottawa standard detail or OPSD drawing if applicable.

**Stantec response: Revised. Insulation notes and reference to standard drawing W22 has been provided.**

#55 Please include property line in legend.

**Stantec response: Revised, see SSP-1 drawing.**

#56 Please include existing building and new building linework in legend.

**Stantec response: Revised, see SSP-1 drawing.**

#57 Please provide clearance distance between crossings in the sewer and watermain crossing table.

Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue

**Stantec response: Revised. A crossing table has been provided. See SSP-1 drawing.**

#58 A minimum of 0.5 vertical clearance is required between watermain(s) and all utilities and sewers. In locations where this is not achievable, must follow procedure F-6-1 Sec 5.2 of the Ontario Drinking Water Resource Act.

**Stantec response: Revised. Minimum vertical clearance of 0.5m was not achievable. Ontario F-6-1 Procedures to Govern Separation of Sewers and Watermains, Part 4 – Parallel Installations have been followed accordingly. See SSP-1 drawing.**

#59 Provide name of owner, full address, telephone number, and postal code.

**Stantec response: Revised. Name of Owner, full address and postal code included. Owner telephone number has been excluded per Stantec's drawing standard. See SSP-1 drawing.**

Engineering – Storm Drainage Plan

#60 Please show ponding areas for the roof with the volume for each area (5-yr and 100-yr).

**Stantec response: Revised, see SD-1 drawing.**

#61 Provide name of owner, full address, telephone number, and postal code.

**Stantec response: Revised. Name of Owner, full address and postal code included. Owner telephone number has been excluded per Stantec's drawing standard. See SD-1 drawing.**

Transportation

None.

Waste Management

#71 Please provide a curb depression for the width of the walkway.

**Stantec response: Revised, see GP-1 and SSP-1 drawing. Depressed curb could not be provided at north walkway, as it is too close to the existing curb inlet catch basin. Depressed curb proposed in-line with central walkway to main entrance instead.**

**Reference: Civil Design 1st Review Comment Response – Site Plan Control Application – 138 Forward Avenue**

## **Conclusions**

This concludes the civil design responses to the first submission comments. This response letter will be integrated into the *Servicing and Stormwater Management Report: 138 Forward Avenue Rev.01* in Appendix F.1. If you have any additional questions or concerns, we encourage you to reach out to the undersigned.

Sincerely,

**STANTEC CONSULTING LTD.**

A handwritten signature in black ink that reads "Alyssa Gladish". The signature is written in a cursive, flowing style.

**Alyssa Gladish** E.I.T.  
Project Manager  
Phone: (780) 917-8567  
Mobile: (587) 721-1241  
alyssa.gladish@stantec.com

## Appendix G DRAWINGS

