PATERSON GROUP

Phase I – Environmental Site Assessment

Part of 2500 Palladium Drive, #1200

Ottawa, Ontario

Prepared for Full Speed Builders

Report: PE6102-1
July 17, 2023

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Full Speed Builders to conduct a Phase I – Environmental Site Assessment (Phase I ESA) for part of 2500 Palladium Drive, #1200, in the City of Ottawa, Ontario. The objective of this Phase I ESA was to research the past and current use of the site (Phase I Property) and 250 m study area (Phase I Study Area) and to identify any environmental concerns with the potential to have impacted the subject property.

According to the historical research, the Phase I Property was originally utilized as agricultural land until developed with an automotive dealership, maintenance garage, and associated vehicle parking lot in 2006. Since that time, the use of the Phase I Property has not changed significantly. Meanwhile, the surrounding lands within the Phase I Study Area were similarly developed with other automotive dealerships around the same time, though due to their separation distances, as well as their down-gradient or cross-gradient orientation with respect to the anticipated groundwater flow to the northeast, these activities are not considered to pose an environmental concern to the Phase I Property.

Presently, the Phase I Property remains occupied by the aforementioned dealership and garage building, as well as the associated parking lot, while the surrounding lands largely consist of automotive dealerships to the north and west, and vacant land to the east and south.

Based on the findings of the historical research, as well as observations made during the site inspection, a number of potentially contaminating activities (PCAs) resulting in areas of potential environmental concern (APECs) were identified on the Phase I Property. These APECs include:

- Three aboveground oil and transmission fluid storage tanks, located in the northern portion of the Phase I Property (APEC #1).
- An underground oil/water separator, located in the northern portion of the Phase I Property (APEC #2).
- The use of road salt for de-icing purposes during winter conditions throughout the asphalt-covered parking lot occupying the majority of the Phase I Property (APEC #3).
- An active vehicle maintenance garage adjacent to the north of the Phase I Property (APEC #4).

Recommendations

Based on the findings of this assessment, it is our opinion that **a Phase II – Environmental Site Assessment will be required for the Phase I Property.**

1.0 INTRODUCTION

At the request of Full Speed Builders, Paterson Group (Paterson) conducted a Phase I – Environmental Site Assessment (Phase I ESA) for part of 2500 Palladium Drive, #1200, in the City of Ottawa, Ontario, (Phase I Property). The objective of this Phase I ESA has been to research the past and current use of the Phase I Property, as well as the neighbouring properties within a 250 m study area (Phase I Study Area), to identify any potentially contaminating activities (PCAs) that would result in areas of potential environmental concern (APECs) on the Phase I Property.

Paterson was engaged to conduct this Phase I ESA by Mr. Daniel Fox of Full Speed Builders, who's office can be reached by telephone at 613-466-0400.

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

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

2.0 PHASE I PROPERTY INFORMATION

Address:	Part of 2500 Palladium Drive, #1200, Ottawa, Ontario.
Location:	The Phase I Property is situated on the west side of Palladium Drive, approximately 325 m southwest of Huntmar Drive, in the City of Ottawa, Ontario. Refer to Figure 1 – Key Plan, for the site location context.
Latitude and Longitude:	45° 17’ 32" N, 75° 55’ 50" W.

Site Description:

Configuration:	Irregular.
Area:	0.30 hectares (approximately).
Zoning:	GM – General Mixed-Use Zone.
Current Use:	The Phase I Property is partially occupied by an automotive dealership and service garage as well as a vehicular parking lot.
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 ESA is described as follows:

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

4.0 RECORDS REVIEW

4.1 General

Phase I ESA Study Area Determination

A radius of approximately 250 m was deemed appropriate for defining the study area for this assignment, herein referred to as the Phase I Study Area. Properties located outside of the Phase I Study Area are not considered to have had the potential to impact the Phase I Property, based on their significant separation distances.

First Developed Use Determination

Based on a review of available historical information, the Phase I Property was first developed in 2006 with an automotive dealership and service garage as well as an associated vehicle parking lot.

Fire Insurance Plans

Fire insurance plans (FIPs) are not available for the general vicinity of the Phase I Property.

City of Ottawa Street Directories

City of Ottawa street directories were reviewed in approximate ten year intervals between 1993 and 2010 for the general area of the Phase I Property as part of this assessment.

According to the directories, the Phase I Property, as well as the neighbouring lands to the north, were first listed as automotive dealerships beginning sometime in the mid-2000's.

Plan of Survey

A survey plan of the Phase I Property was not provided for review as part of this assessment.

Chain of Title

A chain of title was not requested as part of this assessment, since it is our opinion no new information would be ascertained.

4.2 Environmental Source Information

National Pollutant Release Inventory

A search of the National Pollutant Release Inventory (NPRI) database was conducted as part of this assessment. This federally managed database provides various reports and tracking information relating to the release of solid, liquid, or gaseous pollutants from industrial facilities into the natural environment.

A search of this database did not identify any pollutant release records listed for the Phase I Property, or any properties situated within the Phase I Study Area.

Ontario PCB Waste Storage Site Inventory

The Ontario Ministry of Environment, Conservation and Parks document entitled, *"Ontario Inventory of PCB Storage Sites, April 1995"* was reviewed as part of this assessment. This document identifies all recorded active and closed PCB waste storage sites situated in the Province of Ontario.

A review of this document did not identify any former PCB waste storage sites situated 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.

A review of this document did not identify any former waste disposal sites situated on the Phase I Property or within the Phase I Study Area.

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 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.

The response from the MECP indicated that no relevant records were identified pertaining to the Phase I Property.

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.

The response from the MECP indicated that no relevant records were identified pertaining to the Phase I Property.

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 any of the neighbouring properties.

The response from the MECP indicated that no relevant records were identified pertaining to the Phase I Property.

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.

The response from the MECP indicated that no relevant records were identified pertaining to the Phase I Property.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry was conducted as part of this assessment. This database contains publicly available information on Records of Site Condition (RSCs) filed in the Province of Ontario between 2004 and 2022.

A review of the registry did not identify any RSCs filed for the Phase I Property, or for any properties situated within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA Fuels Safety Branch in Toronto was contacted electronically on May 18, 2023, as part of this assessment, to inquire about current and former fuel storage tanks, spills, and historical incidents for the Phase I Property as well as the neighbouring properties within the Phase I Study Area.

The response from the TSSA indicated that no records were identified associated with the Phase I Property.

Several records were returned which identified an active retail fuel outlet located at 225 Huntmar Drive, approximately 250 m northeast of the Phase I Property. Based on its significant separation distance, this retail fuel outlet is not considered to pose an environmental concern to the Phase I Property.

A copy of the correspondence with the TSSA is included in Appendix 2.

OMNRF Areas of Natural and Scientific Interest (ANSI)

A search for ANSI sites situated within the Phase I Study Area was conducted electronically via the Ontario Ministry of Natural Resources and Forestry (OMNRF) website as part of this assessment.

A review of the available mapping information did not identify any ANSI sites situated 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 to request information from the City's Historical Land Use Inventory (HLUI) database for 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 of Ottawa had not been received by our firm prior to the issuance of this report, however, 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 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. This document identifies the details and locations of all recorded closed landfill sites situated in the City of Ottawa.

A review of this document did not identify any or closed landfill sites situated 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 May 18, 2023, was acquired and reviewed as part of this assessment. This report provides a compilation of various provincial and federal environmental related records pertaining to any properties situated within the Phase I Study Area.

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 43 records associated with the properties situated within the Phase I Study Area.

The majority of the off-site records identified pertain to various environmental compliance approvals granted for other automotive dealerships present on the neighbouring lands to the north and west. A number of other records pertain to an active retail fuel outlet present at 225 Huntmar Drive, approximately 250 m northeast of the Phase I Property.

Based on their separation distances, and/or their down-gradient or cross-gradient orientations with respect to the anticipated groundwater flow to the northeast, none of the off-site records are considered to pose an environmental concern to the Phase I Property.

Previous Engineering Reports

The following report was reviewed prior to the completion of this assessment:

- ❑ *"Phase I Environmental Site Assessment, Palladium Auto Park Development, Lot 1, Ottawa (Kanata), Ontario",* prepared by Golder Associates Ltd., dated May 2006.

In 2006, a Phase I ESA was carried out prior to the development of the Phase I Property with the existing automotive dealership. According to the historical research reviewed as part of the assessment, the property had never been formally developed and had historically existed as agricultural land. At the time of the site inspection, the land was vacant and no potential environmental concerns were identified regarding its use. The report concluded that no further investigative work would be required.

4.3 Physical Setting Sources

Historical aerial photographs of the Phase I Study Area were obtained from the National Air Photo Library and reviewed in approximate ten year intervals, beginning with the earliest available photograph. Based on a review of these photographs, the following observations have been made:

1959 — The Phase I Property, as well as the surrounding lands, appear to be vacant and used for agricultural purposes at this time.

1976 — No significant changes are apparent with respect to the Phase I Property or the surrounding lands since the time of the previous aerial photograph.

1991 — No significant changes are apparent with respect to the Phase I Property or the surrounding lands since the time of the previous aerial photograph.

2002 — No significant changes are apparent with respect to the Phase I Property or the surrounding lands since the time of the previous aerial photograph. Palladium Drive can be seen in this photograph.

2011 — The Phase I Property appears to be occupied by the existing automotive dealership building and associated parking lot at this time. Additional automotive dealerships can be seen to the north.

2021 — No significant changes are apparent with respect to the Phase I Property or the surrounding lands since the time of the previous aerial photograph. The Phase I Property and the surrounding lands appear as they exist today.

Copies of the aerial photographs selected for review are included in Appendix 1.

Geological Maps

Geological mapping information for the Phase I Property was obtained from The Geological Survey of Canada – Urban Geology of the National Capital Area and reviewed as part of this assessment.

Based on the available mapping information, the bedrock beneath the Phase I Property generally consists of interbedded limestone and shale of the Verulam Formation. The surficial geology consists largely of offshore marine sediments (clay and silt), with an overburden ranging from approximately 10 m to 15 m in thickness.

Topographic Maps

A topographic map of the Phase I Property was obtained from the Natural Resources Canada – The Atlas of Canada website and reviewed as part of this assessment.

The topographic map indicates that the general elevation of the Phase I Property is approximately 100 m above sea level, while the regional topography within the greater area is depicted as sloping downwards to the northeast, in the general direction of the Carp River.

An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

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 Carp River, located approximately 1.2 km to the northeast.

Physiographic Maps

A physiographic map was obtained from the Natural Resources Canada – The Atlas of Canada website and reviewed as a part of this assessment. According to the publication and available 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.

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 one well record within the Phase I Study Area. This record pertains to a well abandonment completed for a well installation in 1997. Based on the availability of municipal services, no viable drinking water wells are anticipated to be present within the Phase I Study Area.

The aforementioned well records have been included in Appendix 2.

5.0 INTERVIEWS

Property Owner Representative

Mr. Kyle McColl, an automotive service manager with Capital Dodge, was available at the time of the site inspection to respond to questioning about the environmental history of the Phase I Property.

Mr. McColl stated that the automotive dealership building was constructed in 2006, in conjunction with the other automotive dealerships in the surrounding area. Prior to this, the Phase I Property and the surrounding lands were vacant and used for agricultural purposes.

Mr. McColl provided Paterson personnel with a guided tour of the dealership building, the maintenance garage area, as well as the vehicle inventory parking lot. During the tour, Mr. McColl provided a detailed explanation of the daily operations carried out within the maintenance garage, including the locations of all vehicle maintenance bays, motor oil storage tanks, oil/water separators, vehicle wash bays, as well as the vehicle parts and equipment storage areas.

Mr. McColl stated that to his knowledge, there have been no reported incidents of any fuel and/or oil spillages, storage tank malfunctions, or any other situations with cause for environmental concern on the Phase I Property.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

A site inspection was conducted for the Phase I Property on May 9, 2023, between 10:00 AM and 11:00 AM. Weather conditions were overcast, with a temperature of approximately 15 °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 Specific Observations at the Phase I Property

Site Description

The Phase I Property is predominantly paved with an asphaltic concrete parking lot, used for vehicle inventory storage for the associated dealership on the property. Part of the Phase I Property also consists of a portion of the dealership building including the associated maintenance garage.

The site topography is relatively flat, while the regional topography appears to slope down towards the northeast, in the general direction the Carp River. The Phase I Property is considered to be at grade with respect to the adjacent streets and surrounding properties.

Water drainage on the Phase I Property occurs primarily via surface run-off towards catch basins present within the vehicle parking lot.

No ponded water, stressed vegetation, surficial staining, or any other indications of potential sub-surface 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 PE6102-1 – Site Plan, in the Figures section of this report.

Buildings and Structures

At the time of the site inspection, part of the northern portion of the Phase I Property was occupied by an automotive dealership and maintenance garage. Built in 2006, the building is constructed with a poured slab-on-grade concrete foundation and is finished on the exterior with glass and metal cladding in addition to a flat tar-and-gravel style roof. The building is currently heated via natural gas-fired equipment, located on the roof.

Potential Environmental Concerns

❑ **Fuels and Chemical Storage**

At the time of the site inspection, no chemical storage areas, above ground fuel storage tanks (ASTs), or evidence indicating the presence of any underground fuel storage tanks (USTs) were observed on the exterior of the Phase I Property.

An exterior aboveground waste oil storage tank was observed outside of the Phase I Property, situated on the eastern side of the adjacent automotive dealership building. The waste oil tank was observed to be in good condition at the time of the assessment, with no signs of any leaks, corrosion, or oil staining either on the tank or the underlying concrete pad. The presence of this waste oil tank is not considered to pose an environmental concern to the Phase I Property.

❑ **Hazardous Materials and Unidentified Substances**

At the time of the site inspection, no hazardous materials, unidentified substances, spills, surficial staining, abnormal odours, stressed vegetation, or any other indications of potential sub-surface contamination were observed on the exterior of the Phase I Property.

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

At the time of the site inspection, no electrical transformers or any other potential sources of PCBs or transformer oil were identified on the exterior of the Phase I Property.

- **Waste Management**

  At the time of the site inspection, no waste materials were observed to be stored on the Phase I Property. Waste materials from the automotive dealership and maintenance garage are stored on the north side of the building and are collected by a licensed contractor 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 automotive dealership and maintenance garage building is as follows:

- The floors consist of poured concrete, ceramic tiles, vinyl floor tiles, and carpet;
- The walls consist of drywall, concrete block, and metal;
- The ceilings consist of suspended ceiling tiles and steel decking;
- 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, no potential asbestos containing building materials are suspected to be present within the structure.

- **Lead-Based Paints**

  Based on the age of the subject building, no lead-based paints are suspected to be present within the structure.

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

  Based on the age of the subject building, no potential sources of PCBs are suspected to be present within the structure.

- **Urea Formaldehyde Foam Insulation (UFFI)**

  Based on the age of the subject building, UFFI is not suspected to be present within the structure.

Other Potential Environmental Concerns

❑ Interior Fuel and Chemical Storage

At the time of the site inspection, three above ground fuel storage tanks were observed within the southern portion of the maintenance garage, adjacent to the exterior wall of the building. Two of the tanks were noted to be used for storing fresh motor oil, while the third tank was noted to be used for storing automatic transmission fluid. All oil products are pumped from the tanks via fuel lines to each of the vehicle maintenance bays within the garage. These fuel tanks are considered to represent an APEC on the Phase I Property.

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

❑ Ozone Depleting Substances (ODSs)

Potential sources of ODSs observed inside the automotive dealership building include refrigerators, fire extinguishers, and the rooftop HVAC unit. 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 were observed in the subject building at the time of the site inspection.

Several floor drains were observed within the rear maintenance garage portion of the dealership building. These floor drains flow into an underground oil/water separator located on the south side of the maintenance garage, before draining into the City of Ottawa sanitary sewer system. According to the automotive technicians, a licensed contractor performs routine inspections and draining of the separator on a regular basis. The presence of the oil/water separator is considered to represent an APEC on the Phase I Property.

General wastewater from the subject building (wash water and sewage) is discharged into the City of Ottawa sanitary sewer system, whereas roof drainage is discharged via surface run-off towards catch basins located in the exterior parking lot or on the adjacent streets, which drain into the City of Ottawa storm water sewer system.

Neighbouring Properties

At the time of the site inspection, a survey of the neighbouring properties was conducted from publicly accessible roadways.

Land use adjacent to the Phase I Property was observed as follows:

North: An automotive dealership and maintenance garage (Capital Dodge), followed by an unnamed roadway and another automotive dealership and maintenance garage (Myers Chevrolet).

East: Palladium Drive, followed by vacant land.

South: Palladium Drive, followed by vacant land.

West: An unnamed roadway, followed by an automotive dealership and maintenance garage (Myers Nissan).

Due to its close proximity, the adjacent automotive dealership and maintenance garage to the north is considered to represent an APEC on the Phase I Property.

Based on their separation distances, the other automotive dealerships and maintenance garages to the north and west are not considered to pose an environmental concern to the Phase I Property.

The neighbouring land use within the Phase I Study Area is depicted on Drawing PE6102-2 – Surrounding Land Use Plan, in the Figures section of this report.

6.3 Enhanced Investigation Area

Site Description

Due to the presence of the adjacent automotive dealership and maintenance garage, part of which lies within the site boundaries, the Phase I Property is considered to be an Enhanced Investigation Property, as defined under O. Reg. 153/04. As such, the following items were also investigated as part of this assessment.

On-Site Operations

Part of the northern portion of the Phase I Property is currently occupied by an active automotive dealership and maintenance garage, which was first constructed in 2006. Based on our observations made during the site inspection, as well as conversations with staff members, the maintenance garage contains 17 vehicle bays used for basic automotive repair services such as engine, transmission, suspension, undercarriage, exhaust, and brake repairs; oil and tire changes; battery and filter replacements; as well as engine and transmission fluid flushes.

Hazardous Materials Used or Stored

At the time of the site inspection, three above ground storage tanks were observed within the southern portion of the maintenance garage, adjacent to the exterior wall of the building. Two of the tanks were noted to be used for storing fresh motor oil (up to 2,000 L of 5W-20 oil in one tank and up to 1,000 L of 0W-20 motor oil in the other), while the third tank was noted to be used for storing up to 1,000 L of automatic transmission fluid. All oil products are pumped from the tanks via fuel lines to each of the vehicle maintenance bays within the garage. An exterior aboveground storage tank was also identified on the east side of the building, with a capacity for up to 4,550 L of waste oil.

Also observed throughout the maintenance garage were multiple low-volume containers of various motor oils, windshield washer fluid, engine coolant, brake fluid, greases, soaps, and lubricants. All products were noted to be stored properly on shelves and workbenches in their original containers.

By-Products and Waste

As previously stated, all waste oils generated via vehicle maintenance operations are stored in an exterior above ground storage tank situated on the east side of the building. According to the manufacturer's plaque on the exterior shell, the tank was recently manufactured in September 2020 and is vacuum sealed with 2.5 mm thick double walls. A pressure gauge on the exterior of the tank displayed a negative pressure, indicating that the vacuum seal was intact and performing nominally. The tank was further noted to be in good condition at the time of the site inspection, with no signs of any leaks, corrosion, or staining on the exterior shell or underlying concrete pad.

According to staff members, all used oil is collected on a regular basis by a licensed contractor on an as needed basis. All low-volume containers of motor oil, greases, lubricants, fluids, and used oil filters were observed to be stored in plastic bins, lined with an inner plastic bag, situated on the north side of the dealership building.

Manufactured Products

Based on a review of available historical information, as well as observations made during the site inspection, no products are currently being manufactured on the Phase I Property.

Raw Materials Handling and Storage

Based on a review of available historical information, as well as observations made during the site inspection, no raw materials are suspected to have ever been handled or stored on the Phase I Property.

Drums, Totes, and Bins

Aside from the aforementioned motor oil, transmission fluid, and waste oil storage tanks, no other drums, totes, or bins are currently stored within the vehicle maintenance garage.

Oil/Water Separators

All floor drains observed within the maintenance garage reportedly flow into an underground oil/water separator located on the south side of the building, According to staff members, a licensed contractor performs routine inspections and cleaning of the separator on a regular basis.

Spill Events

According to conversations with staff members, no spill events have ever occurred or been reported within the maintenance garage. In the event of any spill events, spill kits are readily available for staff members to use for cleanups.

Vehicle and Equipment Maintenance Areas

The maintenance garage within the rear half of the dealership building contains 17 vehicle bays, each equipped with an aboveground hydraulic hoist, except for one at the far northern end of the building which contains an underground hydraulic hoist.

At the time of the site inspection, these maintenance bays were observed to be used for basic automotive repair operations, as detailed above.

Liquid Discharge Points

Several strip drains were observed within the maintenance garage portion of the dealership building, which reportedly flow towards an oil/water separator situated on the south side of the building before draining into the City of Ottawa sanitary sewer system.

Additionally, several storm water catch basins were also observed within the exterior vehicle parking lot, which collect surface run-off from rain events and drain into the City of Ottawa storm water sewer system.

Hydraulic Lift Equipment

One of the vehicle maintenance bays, situated on the northern end of the maintenance garage, contains an in-ground hydraulic hoist mechanism, while the remaining maintenance bays are outfitted with aboveground hydraulic hoists. According to conversations with staff members, no hydraulic fluid leaks or malfunctions have ever been reported.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

Based on a review of available historical information, the land use history of the Phase I Property is summarized below in Table 1.

Table 1
Land Use History – Part of 2500 Palladium Drive, #1200, Ottawa, Ontario

Time Period	Land Use	Description	Observations
Prior to 1959	Unknown	Unknown	No historical information available prior to this time period.
1959-2006	Agricultural or Other Use	Agricultural Land	Aerial photographs from 1950's to the mid-2000's depict the Phase I Property as agricultural land during this time period.
2006-Present	Commercial Use	Automotive Dealership and Maintenance Garage	Aerial photographs from the 2010's to the present day, as well as previous engineering reports, site inspection, and personal interviews, confirm the presence of an automotive dealership and associated vehicle parking lot occupying the subject property.

Potentially Contaminating Activities (PCAs)

Based on the findings of the Phase I ESA, four potentially contaminating activities (PCAs), resulting in areas of potential environmental concern (APECs), were identified on the Phase I Property.

As per Table 2 – Column A of O. Reg. 153/04, as amended, the PCAs resulting in APECs on the Phase I Property are described as follows:

- ❒ Item 28: Gasoline and Associated Products Storage in Fixed Tanks; associated with the presence of three aboveground oil and transmission fluid storage tanks, located in the northern portion of the Phase I Property (APEC #1).

- ❒ Item N/A: Oil/Water Separator; associated with the presence of an underground oil/water separator, located in the northern portion of the Phase I Property (APEC #2).

- ❒ Item N/A: Application of Road Salt for De-icing Purposes During Snow and Ice Conditions; associated with the use of road salt throughout the asphalt-covered parking lot occupying the majority of the Phase I Property (APEC #3).

- ❒ Item 52: Storage, Maintenance, Fuelling and Repair of Equipment, Vehicles, and Material Used to Maintain Transportation Systems; associated with the presence of an active vehicle maintenance garage adjacent to the north of the Phase I Property (APEC #4).

Other off-site PCAs were identified within the Phase I Study Area, however, based on their separation distances, as well as their down-gradient orientation with respect to the anticipated groundwater flow to the northeast, these activities are not considered to pose an environmental concern to the Phase I Property.

Areas of Potential Environmental Concern (APECs)

The areas of potential environmental concern identified in this Phase I ESA are summarized below in Table 2:

Table 2
Areas of Potential Environmental Concern

Area of Potential Environmental Concern	Location of APEC on Phase I Property	Potentially Contaminating Activity (Table 2 – O. Reg. 153/04)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC #1 Aboveground Oil/Fluid Storage Tanks	Northern Portion of Phase I Property	*"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"*	On-Site	BTEX PHCs (F_1-F_4)	Soil and/or Groundwater
APEC #2 Oil/Water Separator	Northern Portion of Phase I Property	*"Item N/A: Oil/Water Separator"*	On-Site	BTEX PHCs (F_1-F_4)	Soil and/or Groundwater
APEC #3 Application of Road Salt	Central and Southern Portions of Phase I Property	*"Item N/A: Application of Road Salt for De-Icing Purposes During Snow and Ice Conditions"*	On-Site	EC SAR	Soil
APEC #4 Automotive Service Garage	Northern Portion of Phase I Property	*"Item 52: Storage, Maintenance, Fuelling and Repair of Equipment, Vehicles, and Material Used to Maintain Transportation Systems"*	On-Site & Off-Site	VOCs PHCs (F_1-F_4)	Soil and/or Groundwater

Contaminants of Potential Concern (CPCs)

The contaminants of potential concern (CPCs) associated with the aforementioned APECs are considered to be:

- ❒ Volatile Organic Compounds (VOCs);
- ❒ Benzene, Ethylbenzene, Toluene, and Xylenes (BTEX);
- ❒ Petroleum Hydrocarbons, fractions 1 – 4 (PHCs F_1-F_4);
- ❒ Electrical Conductivity (EC);
- ❒ Sodium Adsorption Ratio (SAR).

These CPCs have the potential to be present in the soil matrix and/or the groundwater situated beneath the Phase I Property.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on the available mapping information, the bedrock beneath the Phase I Property generally consists of interbedded limestone and shale of the Verulam Formation. The surficial geology consists largely of offshore marine sediments (clay and silt), with an overburden ranging from approximately 10 m to 15 m in thickness.

Groundwater is anticipated to be encountered within the overburden and flow in a northeasterly direction towards the Carp River.

Water Bodies and Areas of Natural and Scientific Interest

No water bodies or areas of natural and scientific interest are present on the Phase I Property or within the Phase I Study Area.

The nearest named water body with respect to the Phase I Property is the Carp River, located approximately 1.2 km to the northeast.

Drinking Water Wells

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

Existing Buildings and Structures

The northern portion of the Phase I Property is partially occupied by an automotive dealership and maintenance garage building.

Current and Future Property Use

The Phase I Property is partially occupied by an automotive dealership and maintenance garage building in the northern portion, while the remainder consists largely of an asphalt-covered vehicular parking lot.

It is our understanding that the Phase I Property is to be developed with an addition to the existing dealership building. Due to the continuing use of the property for commercial purposes, a record of site condition (RSC) will not be required to be filed with the MECP.

Neighbouring Land Use

The surrounding lands within the Phase I Study Area consist largely of commercial properties or vacant land. Current land use is depicted on Drawing PE6102-2 – 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 the Phase I ESA report, four potentially contaminating activities (PCAs), resulting in areas of potential environmental concern (APECs), were identified on the Phase I Property. These APECs include:

- ❒ Three aboveground oil and transmission fluid storage tanks, located in the northern portion of the Phase I Property (APEC #1).
- ❒ An underground oil/water separator, located in the northern portion of the Phase I Property (APEC #2).
- ❒ The use of road salt for de-icing purposes during winter conditions throughout the asphalt-covered parking lot occupying the majority of the Phase I Property (APEC #3).
- ❒ An active vehicle maintenance garage adjacent to the north of the Phase I Property (APEC #4).

Other 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, or their inferred down-gradient or cross-gradient orientation with respect to the known groundwater flow to the northeast.

Contaminants of Potential Concern

The contaminants of potential concern (CPCs) associated with the aforementioned APECs are considered to be:

- ❒ Volatile Organic Compounds (VOCs);
- ❒ Benzene, Ethylbenzene, Toluene, and Xylenes (BTEX);
- ❒ Petroleum Hydrocarbons, fractions 1 – 4 (PHCs F_1-F_4);
- ❒ Electrical Conductivity (EC);
- ❒ Sodium Adsorption Ratio (SAR).

These CPCs have the potential to be present in the soil matrix and/or the groundwater situated beneath 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 PCAs and APECs associated with the Phase I Property.

The presence 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

8.1 Assessment

Paterson Group was retained by Full Speed Builders to conduct a Phase I – Environmental Site Assessment (Phase I ESA) for part of 2500 Palladium Drive, #1200, in the City of Ottawa, Ontario. The objective of this Phase I ESA was to research the past and current use of the site (Phase I Property) and 250 m study area (Phase I Study Area) and to identify any environmental concerns with the potential to have impacted the subject property.

According to the historical research, the Phase I Property was originally utilized as agricultural land until developed with an automotive dealership, maintenance garage, and associated vehicle parking lot in 2006. Since that time, the use of the Phase I Property has not changed significantly. Meanwhile, the surrounding lands within the Phase I Study Area were similarly developed with other automotive dealerships around the same time, though due to their separation distances, as well as their down-gradient or cross-gradient orientation with respect to the anticipated groundwater flow to the northeast, these activities are not considered to pose an environmental concern to the Phase I Property.

Presently, the Phase I Property remains occupied by the aforementioned dealership and garage building, as well as the associated parking lot, while the surrounding lands largely consist of automotive dealerships to the north and west, and vacant land to the east and south.

Based on the findings of the historical research, as well as observations made during the site inspection, a number of potentially contaminating activities (PCAs) resulting in areas of potential environmental concern (APECs) were identified on the Phase I Property. These APECs include:

- ❒ Three aboveground oil and transmission fluid storage tanks, located in the northern portion of the Phase I Property (APEC #1).
- ❒ An underground oil/water separator, located in the northern portion of the Phase I Property (APEC #2).
- ❒ The use of road salt for de-icing purposes during winter conditions throughout the asphalt-covered parking lot occupying the majority of the Phase I Property (APEC #3).

- ❒ An active vehicle maintenance garage adjacent to the north of the Phase I Property (APEC #4).

8.2 Recommendations

Based on the findings of this assessment, it is our opinion that **a Phase II – Environmental Site Assessment will be required for the Phase I Property.**

9.0 STATEMENT OF LIMITATIONS

This Phase I – Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04, as amended, and meets the requirements of CSA Z768-01 (reaffirmed 2022). The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical, and regulatory information 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 Full Speed Builders. Permission and notification from Full Speed Builders 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 D'Arcy, P.Eng., QP_{ESA}

Report Distribution:

- ❑ Full Speed Builders
- ❑ 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.
- ❒ MECP: Ontario PCB Waste Storage Site Inventory, 1995.
- ❒ 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.F., 1984: 'The Physiography of Southern Ontario, Third Edition', Ontario Geological Survey Special Volume 2.

Municipal Records

- ❒ City of Ottawa: GeoOttawa
- ❒ City of Ottawa: Historical Land Use Inventory Database
- ❒ City of Ottawa: document entitled, "Old Landfill Management Strategy, Phase I – Identification of Sites", prepared by Golder Associates, 2004.

Local Information Sources

- ❒ Personal Interviews.
- ❒ Previous Engineering Reports.

Public Information Sources

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

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE6102-1 – SITE PLAN

DRAWING PE6102-2 – SURROUNDING LAND USE PLAN

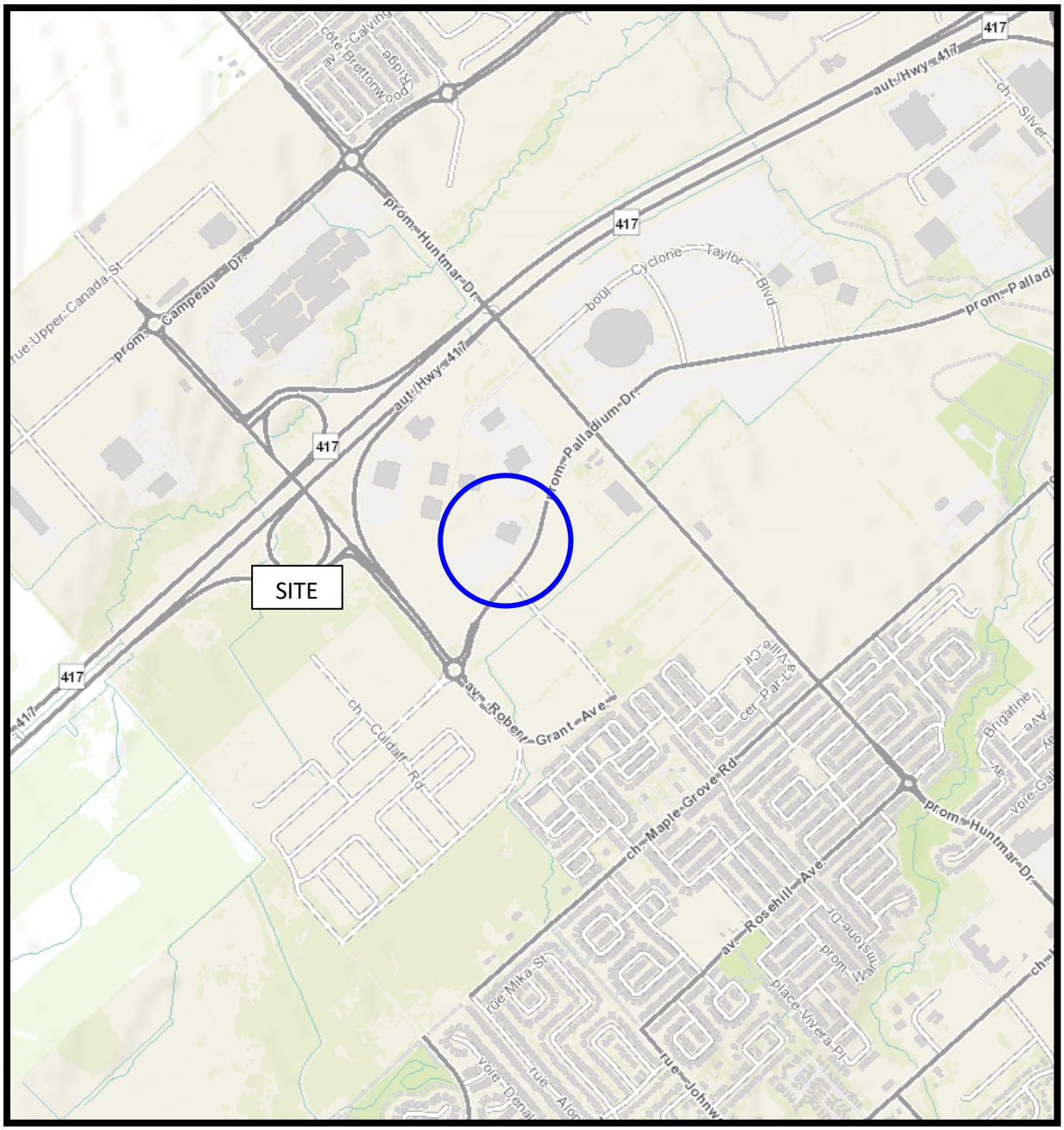


FIGURE 1

KEY PLAN

PATERSON GROUP

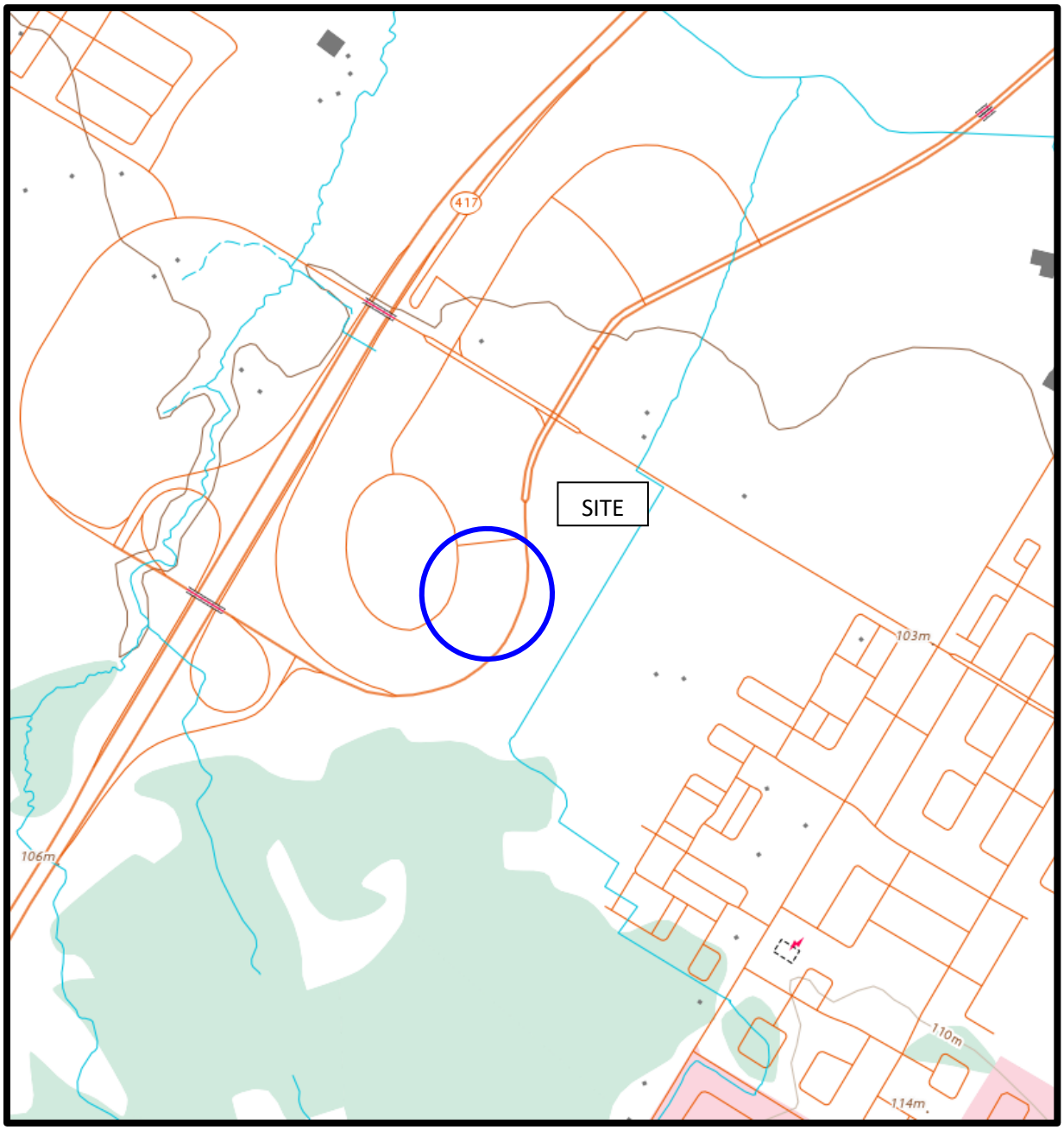
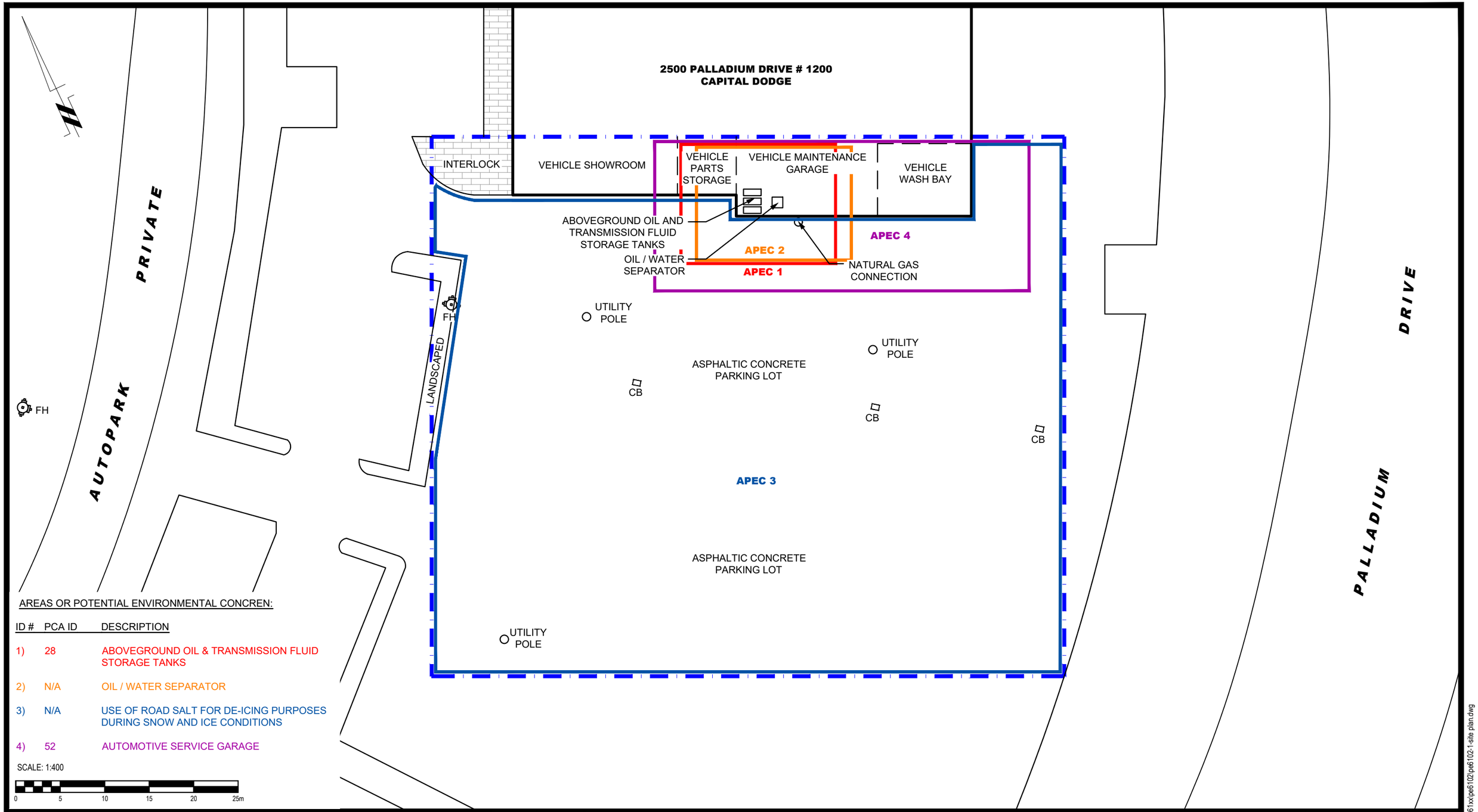


FIGURE 2

TOPOGRAPHIC MAP



AREAS OR POTENTIAL ENVIRONMENTAL CONCREN:

ID #	PCA ID	DESCRIPTION
1)	28	ABOVEGROUND OIL & TRANSMISSION FLUID STORAGE TANKS
2)	N/A	OIL / WATER SEPARATOR
3)	N/A	USE OF ROAD SALT FOR DE-ICING PURPOSES DURING SNOW AND ICE CONDITIONS
4)	52	AUTOMOTIVE SERVICE GARAGE

SCALE: 1:400

0 5 10 15 20 25m

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

FULL SPEED BUILDERS

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
PART OF 2500 PALLADIUM DRIVE - # 1200

OTTAWA, ONTARIO

Title:

SITE PLAN

Scale: 1:400	Date: 07/2023
Drawn by: YA	Report No.: PE6102-1
Checked by: NS	Dwg. No.: PE6102-1
Approved by: MSD	Revision No.:

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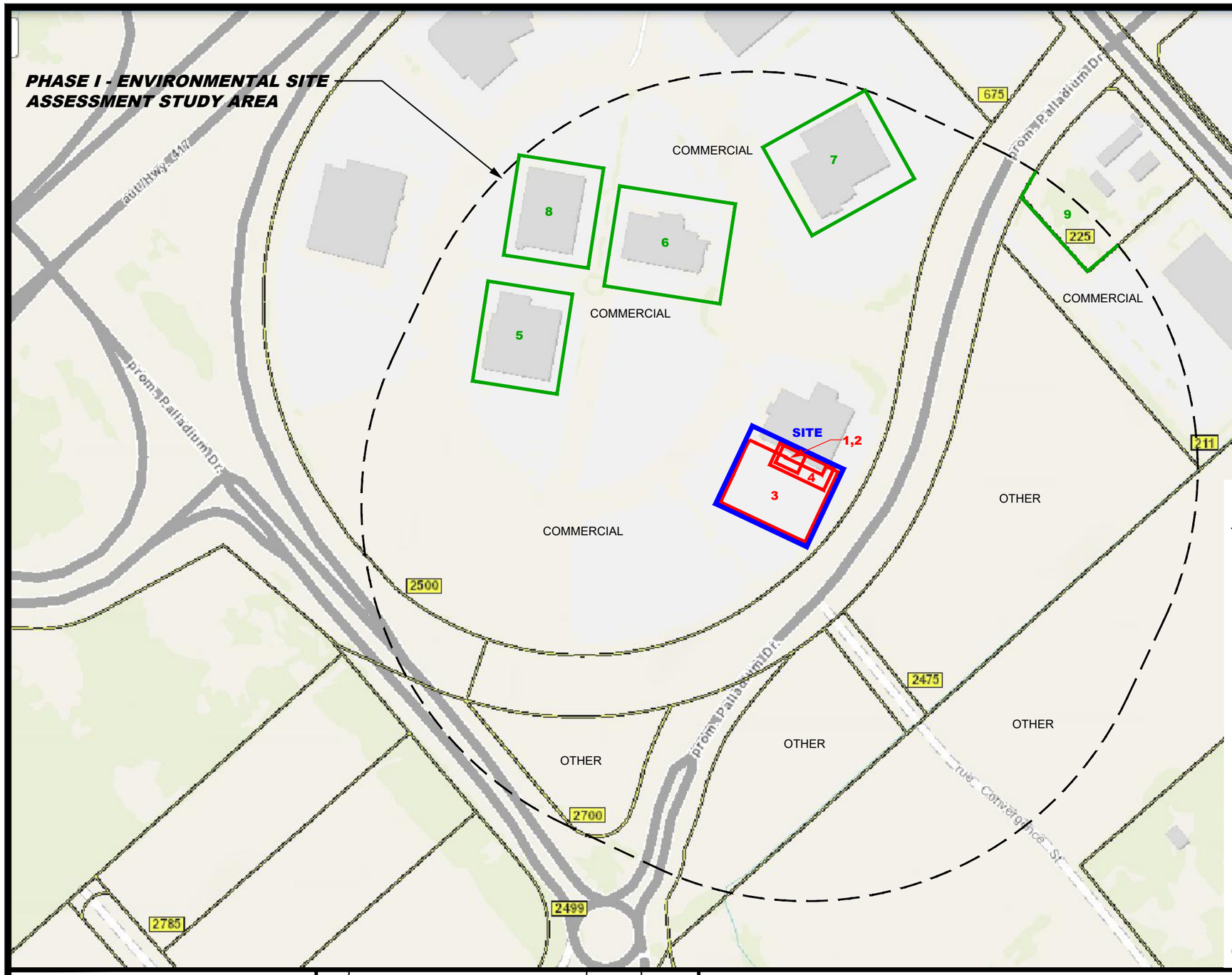
11x17



POTENTIALLY CONTAMINATING ACTIVITIES:

ID #	PCA ID	ADDRESS	DESCRIPTION
1)	28	ON-SITE	ABOVEGROUND OIL & TRANSMISSION FLUID STORAGE TANKS
2)	N/A	ON-SITE	OIL / WATER SEPARATOR
3)	N/A	ON-SITE	USE OF ROAD SALT FOR DE-ICING PURPOSES DURING SNOW AND ICE CONDITIONS
4)	52	ON-SITE	AUTOMOTIVE SERVICE GARAGE
5)	52	2500 PALLADIUM DR. #901	AUTOMOTIVE DEALERSHIP AND SERVICE GARAGE
6)	52	2500 PALLADIUM DR. #301	AUTOMOTIVE DEALERSHIP AND SERVICE GARAGE
7)	52	2500 PALLADIUM DR. #200	AUTOMOTIVE DEALERSHIP AND SERVICE GARAGE
8)	52	2500 PALLADIUM DR. #501	AUTOMOTIVE DEALERSHIP AND SERVICE GARAGE
9)	28	225 HUNTMAR DR.	RETAIL FUEL OUTLET

SCALE: 1:3000

0 25 50 75 100 125 150 200m

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

FULL SPEED BUILDERS

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
PART OF 2500 PALLADIUM DRIVE - # 1200

OTTAWA, ONTARIO

Title:

SURROUNDING LAND USE PLAN

Scale: 1:3000	Date: 07/2023
Drawn by: YA	Report No.: PE6102-1
Checked by: NS	Dwg. No.: PE6102-2
Approved by: MSD	Revision No.:

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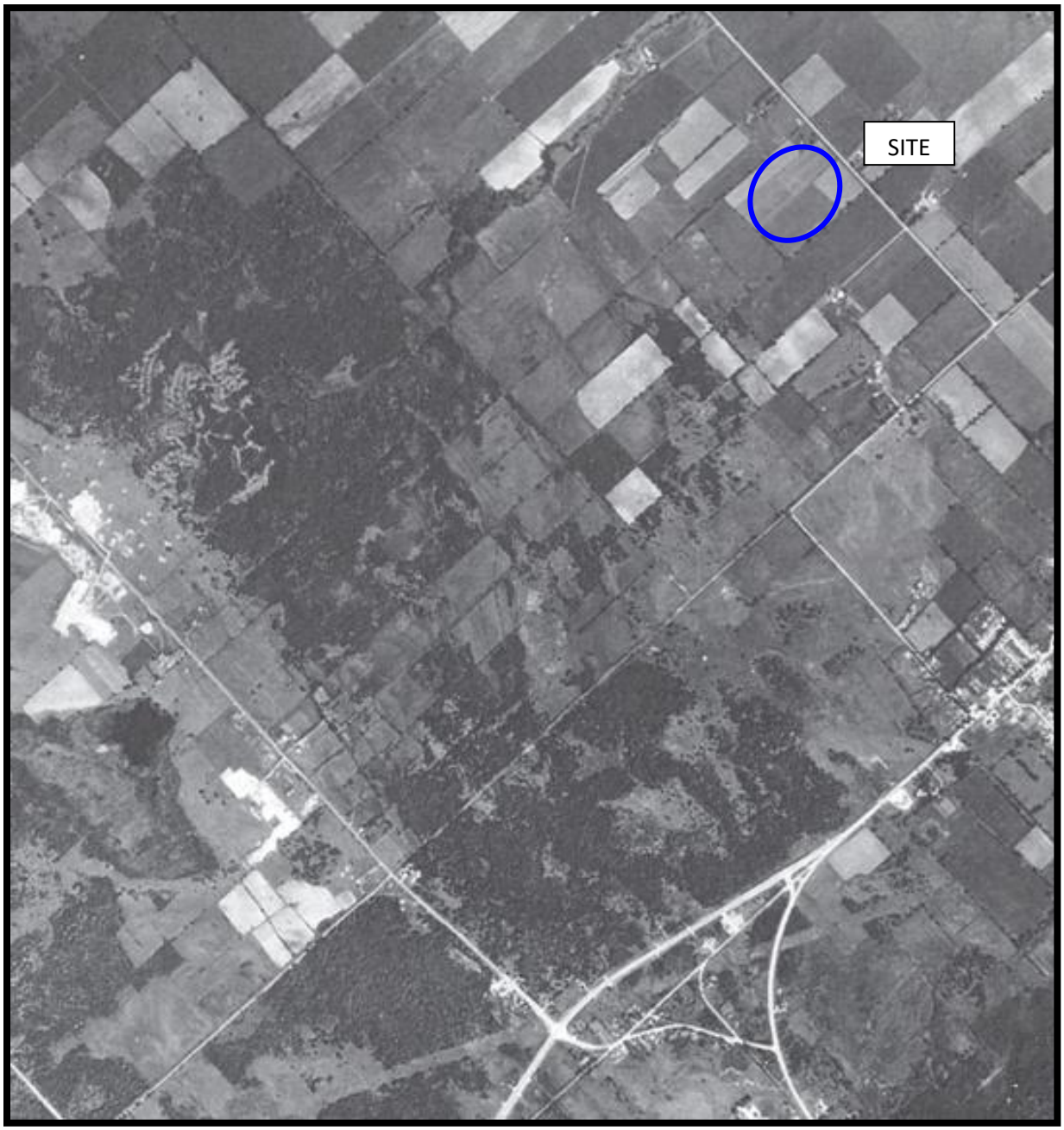
11x17

APPENDIX 1

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

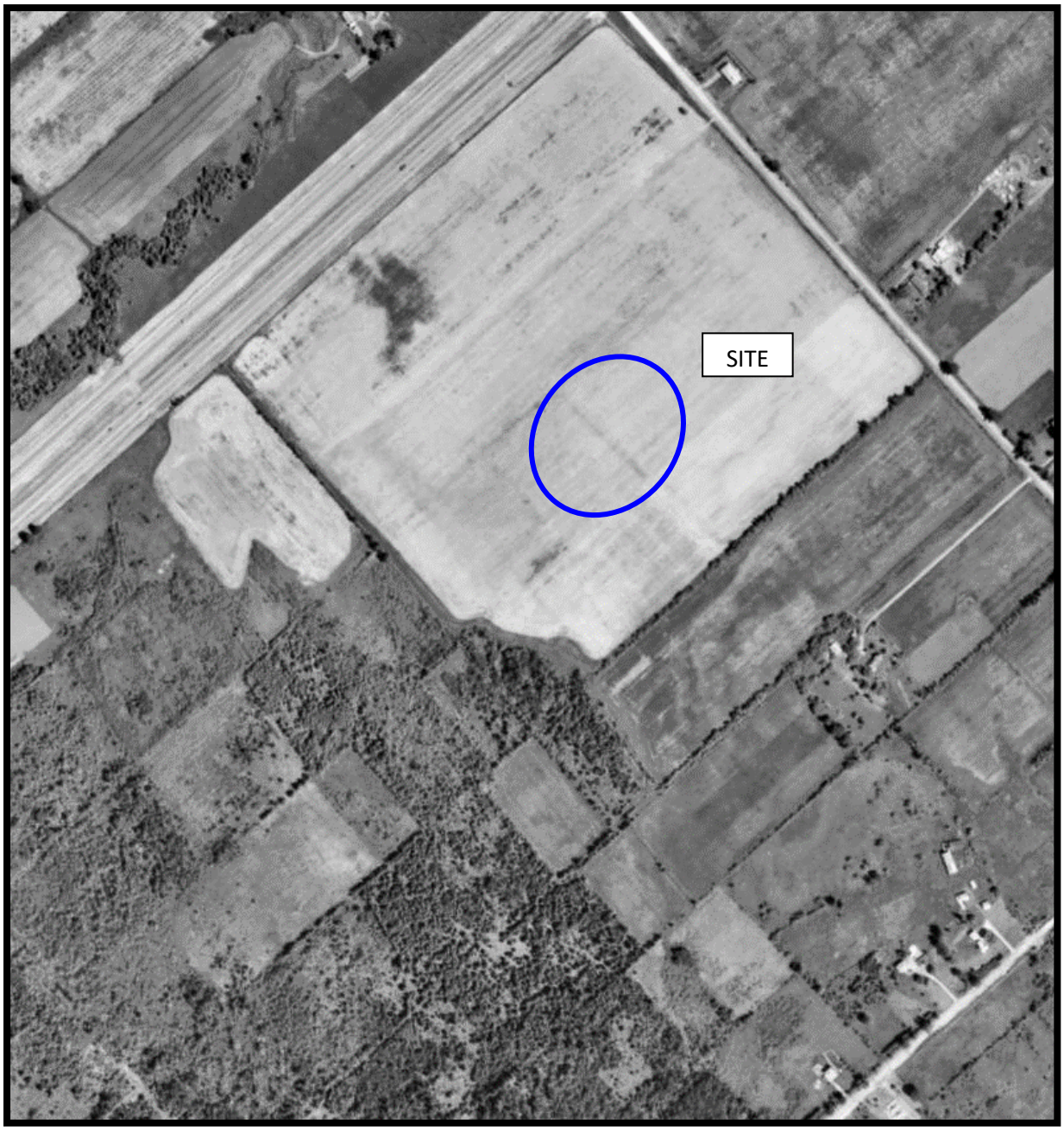


AERIAL PHOTOGRAPH
1959

PATERSON GROUP

AERIAL PHOTOGRAPH
1976

PATERSON GROUP

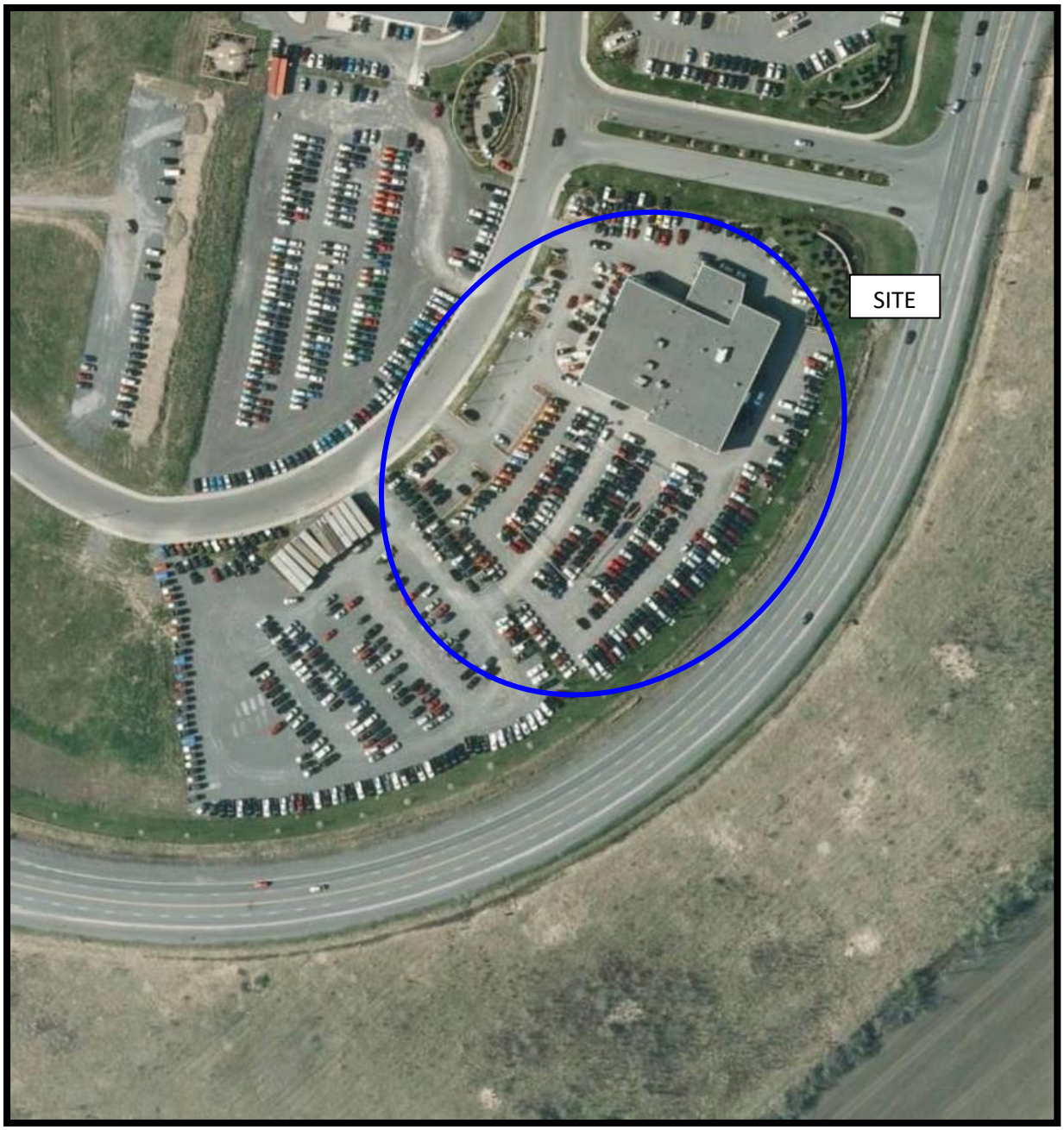


AERIAL PHOTOGRAPH
1991

PATERSON GROUP

AERIAL PHOTOGRAPH
2002

PATERSON GROUP



AERIAL PHOTOGRAPH
2011

PATERSON GROUP

AERIAL PHOTOGRAPH
2021

PATERSON GROUP

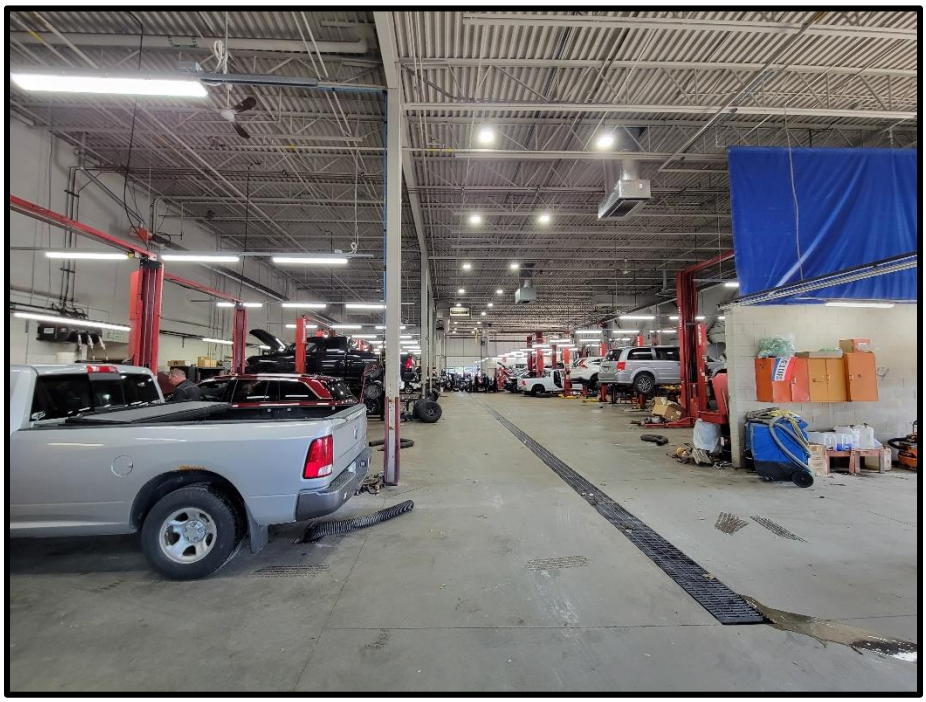
Site Photographs

Photograph 1: View of the northern portion of the Phase I Property, facing south.

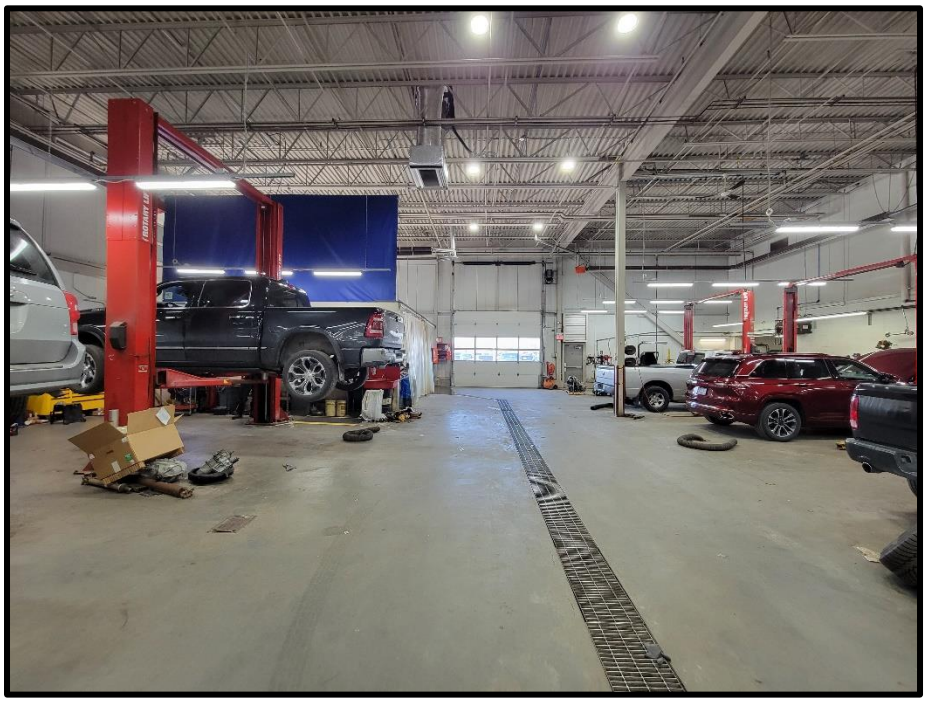
Photograph 2: View of the western portion of the Phase I Property, facing east.

Photograph 3: View of the southern portion of the Phase I Property, facing north.

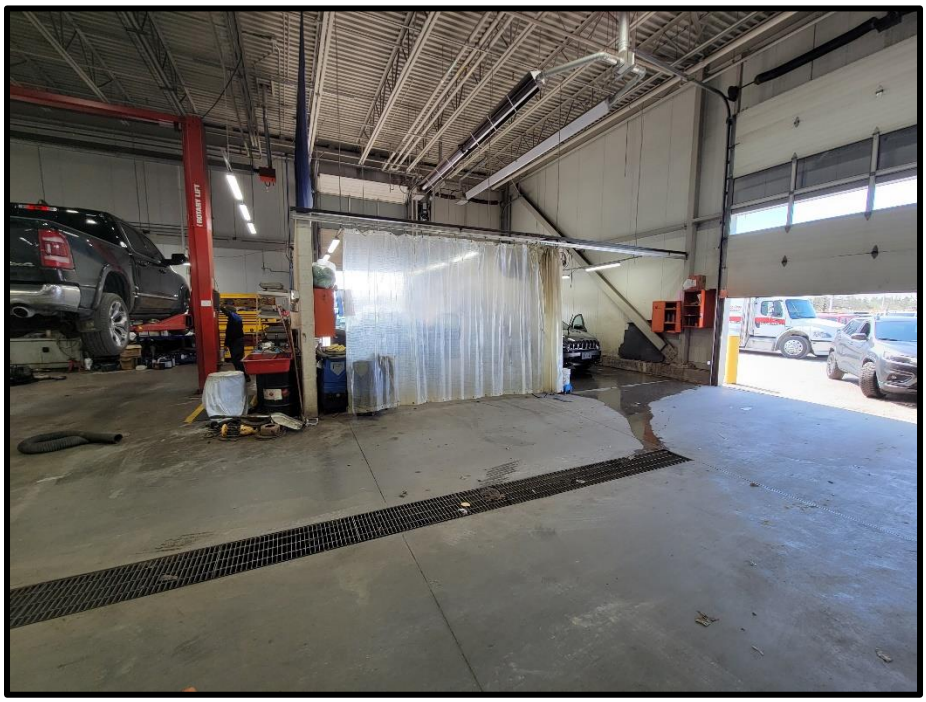
Photograph 4: View of the eastern portion of the Phase I Property, facing west.



Photograph 5: View of the interior of the vehicle maintenance garage, facing away from the Phase I Property.

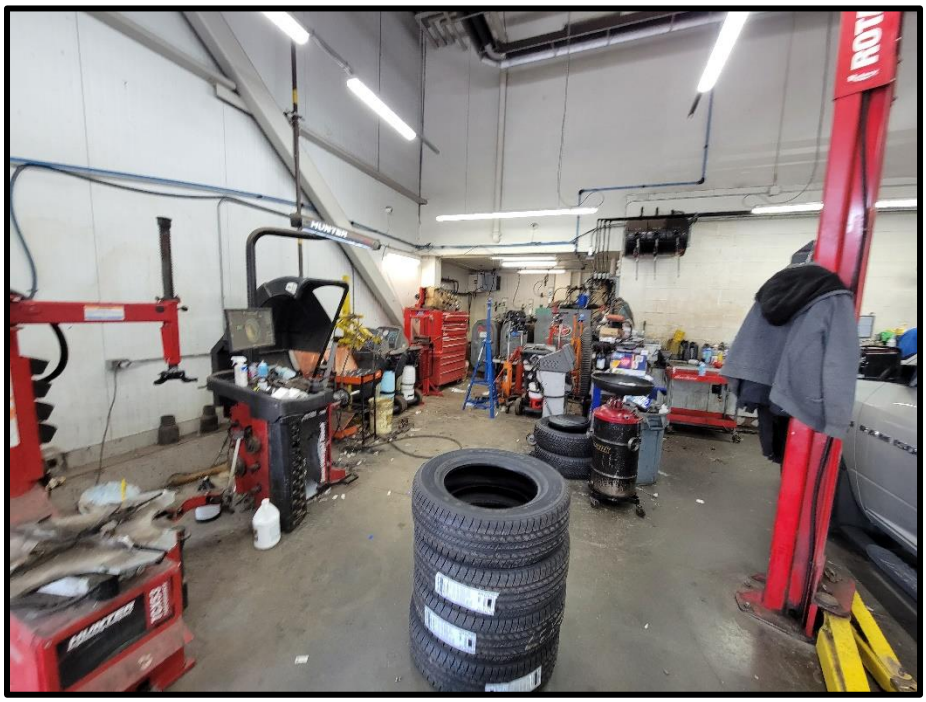


Photograph 6: View of the interior of the vehicle maintenance garage, facing towards the Phase I Property.



Photograph 7: View of the interior of the vehicle wash bays, facing towards the Phase I Property.

Photograph 8: View of three aboveground oil and transmission fluid storage tanks, and an oil/water separator (bottom right), located inside the vehicle maintenance garage in the northern portion of the Phase I Property.



Photograph 9: Alternate view of the oil and storage tank location within the vehicle maintenance garage.

APPENDIX 2

MECP FREEDOM OF INFORMATION SEARCH RESULTS

MECP WATER WELL RECORDS

TSSA CORRESPONDENCE

CITY OF OTTAWA HLUI SEARCH REQUEST

ERIS DATBASE REPORT

Ministry of the Environment, Conservation and Parks

Access and Privacy Office

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

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

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

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

Ontario

July 11, 2023

Nick Sullivan
Paterson Group
9 Auriga Drive
Ottawa, Alberta PE6 084
nsullivan@patersongroup.ca

Dear Nick Sullivan:

RE: MECP FOI A-2023-03192, Your Reference #: PE6102 – Record Release Letter

This letter is further to your request made pursuant to the Freedom of Information and Protection of Privacy Act (the Act) relating to 2500 Palladium Drive, #1200, Kanata.

Attached is a copy of the records.

If you have any questions, please contact Nicole Pitton at 1-807-933-0928 or Nicole.Pitton@ontario.ca.

Yours truly,

Nicole for

Ryan Gunn
Manager (A), Access and Privacy Office

Attachment

Ontario

Ministry of the Environment and Climate Change
Ministère de l'Environnement et de l'Action en matière de changement climatique

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 7040-AP7M89
Issue Date: July 26, 2017

Zena Investment Corporation
1200 Baseline Rd
Ottawa, Ontario
K2J 6H8

Site Location: 2500 Palladium Drive, Unit 10
2500 Palladium Dr
Ottawa City,
K2V 1E2

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

establishment of stormwater management Works, serving a catchment area of 1.07 ha, located at 2500 Palladium Drive, Unit 10, in Ottawa, Ontario, for the collection, treatment and disposal of stormwater run-off, and erosion protection, and attenuating post-development peak flows to the target peak flows for all storm events up to and including 100-year storm event, consisting of the following:

roof top stormwater conveyance system: stormwater flows from the roof top to the infiltration gallery via a conveyance system,

an infiltration gallery: one (1) infiltration gallery for infiltration of rooftop stormwater, with a size of 40 m2 by 2.6 m deep, for a total volume of 104 m3 and a storage volume 41.6 m3, where the filter is surrounded by geotextile, a 250 mm diameter perforated pipe is surrounded by a filter sock, surrounded by clear stone with a sand filter layer on top, and a granular base, all contained under asphalt, discharging via an outlet structure to an onsite stormwater sewer to the municipal stormwater sewer;

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

all in accordance with the submitted supporting documents listed in Schedule "A" forming part of this Approval.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "*Approval* " means this entire document and any schedules attached to it, and the application;

2. "*Director* " means a person appointed by the Minister pursuant to section 5 of the *EPA* for the purposes of Part II.1 of the *EPA;*

3. "*District Manager* " means the *District Manager* of the appropriate local District Office of the *Ministry,* where the *Works* are geographically located;

4. "*EPA* " means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

5. "*Ministry* " means the ministry of the government of Ontario responsible for the *EPA* and *OWRA* and includes all officials, employees or other persons acting on its behalf;

6. "*Owner* " means Zena Investment Corporation, and includes its successors and assignees;

7. "*OWRA* " means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

8. "*Works* " means the sewage works described in the *Owner's* application, and this *Approval.*

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITIONS

1. The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Approval* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

2. Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Approval,* and the application for approval of the *Works.*

3. Where there is a conflict between a provision of any document in the schedule referred to in this *Approval* and the conditions of this *Approval,* the conditions in this *Approval* shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

4. Where there is a conflict between the documents listed in Schedule 'A' and the application, the application shall take precedence unless it is clear that the purpose of the document was to

amend the application.

5. The conditions of this *Approval* are severable. If any condition of this *Approval,* or the application of any requirement of this *Approval* to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this *Approval* shall not be affected thereby.

2. EXPIRY OF APPROVAL

1. This *Approval* will cease to apply to those parts of the *Work* which have not been constructed within five (5) years of the date of this *Approval.*

2. In the event that completion and commissioning of any portion of the *Works* is anticipated to be delayed beyond the specified expiry period, the *Owner* shall submit an application of extension to the expiry period, at least twelve (12) months prior to the end of the period. The application for extension shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of *Approval* of the *Works* are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

3. CHANGE OF OWNER

1. The *Owner* shall notify the *District Manager* and the *Director,* in writing, of any of the following changes within thirty (30) days of the change occurring:

   a. change of *Owner;*

   b. change of address of the *Owner;*

   c. change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager;* or

   d. change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager.*

2. In the event of any change in ownership of the *Works,* other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Approval,* and a copy of such notice shall be forwarded to the *District Manager* and the *Director.*

3. The *Owner* shall ensure that all communications made pursuant to this condition refer to the number at the top of this *Approval.*

4. OPERATION AND MAINTENANCE

1. If applicable, any proposed storm sewers or other stormwater conveyance in this *Approval* can be constructed but not operated until the proposed stormwater management facilities in this *Approval* or any other *Approval* that are designed to service the storm sewers or other stormwater conveyance are in operation.

2. The *Owner* shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the *Works* do not constitute a safety or health hazard to the general public.

3. The *Owner* shall inspect and ensure that the design minimum liquid retention volume is maintained in the *Works* at all times, except when maintenance is required.

4. The *Owner* shall undertake an inspection of the condition of the *Works,* at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the *Works* to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the *Works,* as applicable. The *Owner* shall also regularly inspect and clean out the inlet to and outlet from the *Works* to ensure that these are not obstructed.

5. The *Owner* shall design, construct and operate the *Works* with the objective that the effluent from the *Works* is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discoloration on the receiving waters.

6. The *Owner* shall ensure the immediate clean-out of the *Works* after a fuel or oil spill capture.

7. The *Owner* shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:

   a. loss of fuel or oil to the *Works;* or

   b. a spill within the meaning of Part X of the *EPA.*

8. The *Owner* shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the *Owner's* administration office for inspection by the *Ministry.* The logbook shall include the following:

   a. the name of the *Works;*

   b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the *Works;* and

   c. the date of each spill within the catchment area, including follow-up actions and remedial

measures undertaken.

9. The *Owner* shall prepare an operations manual prior to the commencement of operation of the *Works* that includes, but is not necessarily limited to, the following information:

   a. operating and maintenance procedures for routine operation of the *Works;*

   b. inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary;

   c. repair and maintenance programs, including the frequency of repair and maintenance for the *Works;*

   d. contingency plans and procedures for dealing with potential spills and any other abnormal situations and for notifying the *District Manager;* and

   e. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.

10. The *Owner* shall maintain the operations manual current and retain a copy at the location of the *Works* for the operational life of the *Works.* Upon request, the *Owner* shall make the manual available to *Ministry* staff.

5. TEMPORARY EROSION AND SEDIMENT CONTROL

1. The *Owner* shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every two (2) weeks and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.

2. The *Owner* shall maintain records of inspections and maintenance which shall be made available for inspection by the *Ministry,* upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures. if any, undertaken to maintain the temporary sediment and erosion control measures.

6. REPORTING

1. One (1) week prior to the start-up of the operation of the *Works,* the *Owner* shall notify the *District Manager* (in writing) of the pending start-up date.

2. The *Owner* shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.

3. The *Owner* shall prepare and submit a performance report to the *District Manager* on an annual

basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the *Works* and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

a. a description of any operating problems encountered and corrective actions taken;

b. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works,* including an estimate of the quantity of any materials removed from the *Works;*

c. a summary of any complaints received during the reporting period and any steps taken to address the complaints;

d. a summary of all spill or abnormal discharge events; and

e. any other information the *District Manager* requires from time to time.

7. SPILL CONTINGENCY PLAN

1. Within six (6) months from the issuance of this *Approval,* the *Owner* shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the *Works.* The *Owner* shall, upon request, make this plan available to *Ministry* staff. This plan shall include as a minimum:

   a. the name, job title and location (address) of the *Owner,* person in charge, management or person(s) in control of the facility;

   b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;

   c. a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);

   d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;

   e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and MOE Spills Action Centre 1-800-268-6060;

   f. Materials Safety Data Sheets (MSDS) for each hazardous material which may be transported or stored within the area serviced by the *Works;*

g. the means (internal corporate procedures) by which the spill contingency plan is activated;

h. a description of the spill response training provided to employees assigned to work in the area serviced by the *Works,* the date(s) on which the training was provided and by whom;

i. an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and

j. the date on which the contingency plan was prepared and subsequently, amended.

2. The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.

3. The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

Schedule A

1. Application for Environmental Compliance Approval, dated January 11, 2017 and received on February 22, 2017, submitted by City of Ottawa;

2. Myers Nissan – Proposed Dealership – 2500 Palladium Drive, Unit 12, City of Ottawa, Site Servicing and Stormwater Management Report, dated November 28, 2016, prepared by McIntosh Perry; and

3. Project No OCP-16-003, Engineering Drawings C101 to C103, dated January 30, 2017, prepared by McIntosh Perry

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the *Approval* and the practice that the *Approval* is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to approved *Works* and to ensure that subsequent owners of the *Works* are made aware of the *Approval* and continue to operate the *Works* in compliance with it.

4. Condition 4 is included as regular inspection and necessary removal of sediment and excessive decaying vegetation from the *Works* are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the *Works.* The Condition also ensures that adequate storage is maintained in the *Works* at all times as required by the design. Furthermore, this Condition is included to ensure that the *Works* are operated and maintained to function as designed.

5. Condition 5 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.

6. Condition 6 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Approval,* so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

7. Condition 7 is included to ensure that the *Owner* will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment and
Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 26th day of July, 2017

C. Labarge

Christina Labarge, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

HW/
c: District Manager, MOECC Ottawa
Curtis Melanson, McIntosh Perry

Ontario

Ministry of the Environment and Climate Change
Ministère de l'Environnement et de l'Action en matière de changement climatique

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0685-ALTRRP
Issue Date: June 2, 2017

Tony Graham Motors Limited
1855 Merivale Road
Ottawa, Ontario
K2G 1E3

Site Location: Palladium Auto Park
2500 Palladium Drive
City of Ottawa,

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

an amendment to the stormwater management Works for the existing 1.6 hectares of Kanata Toyota dealership Industrial site, located at 2500 Palladium Drive, within the Carp River watershed, in the City of Ottawa, for the collection and disposal of stormwater run-off from the site, to include proposed approximately 775 square metres of building expansion, consisting of new service drive through, a tire and bulk storage, an automated car wash and a new front entrance, discharging to an existing stormwater management pond, attenuating post-development peak flows to the targeted peak flows of 84 L/s established in the Stormwater Management Report for the Tony Graham Kanata Toyota Palladium Auto Park, dated March, 2004, prepared by David McManus Engineering Limited, for all storm events up to and including the 100-year storm event, consisting of the following:

Proposed Works:

inlet control device: installation of one (1) inlet control device in catchbasin (CBMH3) located in the south-west of the site, north of Auto Park Private, allowing a maximum discharge of 48 L/s, discharging to an existing 1200 mm diameter storm sewer located on Auto Park Private and ultimately to the srormwater management pond located on the east of the site (ECA# 6496-5QVL2U);

inlet control device: installation of one (1) inlet control device in catchbasin (CBMH7) located in the south-east of the site, north of Auto Park Private, allowing a maximum discharge of 25.5 L/s, discharging to an existing 1200 mm diameter storm sewer located on Auto Park Private and ultimately to the srormwater management pond located on the east of the site (ECA# 6496-5QVL2U);

Previous Works:

- stormwater management for the above mentioned site includes catchbasins and run-off quantity controls through ten (10) surface ponding areas in the parking lot with a ponding depth of 0.30 meters, and a storage volume of 816 cubic meters;

- oversized storm sewer pipes around the site providing a retention of up to 5 year return storms;

- two (2) final storm outlet structures namely storm manhole MH # 201 and catchbasin CB #7, fitted with inlet control devices model IPEX "C" providing a stormwater discharge under maximum head of 1.8 meters of 42 l/s each; and,

- site erosion controls during construction period with methods such as siltation fences, and silt traps installed in catchbasins;

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

all in accordance with the submitted supporting documents listed in Schedule"A" forming part of this Approval.

For the purpose of this environmental compliance approval, the following definitions apply:

"Approval" means this entire document and any schedules attached to it, and the application;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Owner" means Tony Graham Motors Limited, and includes its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Previous Works" means those portions of the sewage Works previously approved under an Approval;

"Works" means the sewage works described in the Owner's application, and this Approval.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and

conditions outlined below:

TERMS AND CONDITIONS

GENERAL CONDITIONS

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in Schedule 'A' and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. EXPIRY OF APPROVAL

(1) This Approval will cease to apply to those parts of the Work which have not been constructed within five (5) years of the date of this Approval.

(2) In the event that completion and commissioning of any portion of the Works is anticipated to be delayed beyond the specified expiry period, the Owner shall submit an application of extension to the expiry period, at least twelve (12) months prior to the end of the period. The application for extension shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

3. CHANGE OF OWNER

(1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of Owner;

(b) change of address of the Owner;

(c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager; or

(d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager.

(2) In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

(3) The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this Approval.

4. OPERATION AND MAINTENANCE

(1) If applicable, any proposed storm sewers or other stormwater conveyance in this Approval can be constructed but not operated until the proposed stormwater management facilities in this Approval or any other Approval that are designed to service the storm sewers or other stormwater conveyance are in operation.

(2) The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety or health hazard to the general public.

(3) The Owner shall inspect and ensure that the design minimum liquid retention volume is maintained in the Works at all times, except when maintenance is required.

(4) The Owner shall undertake an inspection of the condition of the Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.

(5) The Owner shall design, construct and operate the Works with the objective that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discoloration on the receiving waters.

(6) The Owner shall ensure the immediate clean-out of the Works after a fuel or oil spill capture.

(7) The Owner shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:

(a) loss of fuel or oil to the Works; or

(b) a spill within the meaning of Part X of the EPA.

(8) The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the Owner's administration office for inspection by the Ministry. The logbook shall include the following:

(a) the name of the Works;

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the Works; and

(c) the date of each spill within the catchment area, including follow-up actions and remedial measures undertaken.

(9) The Owner shall prepare an operations manual prior to the commencement of operation of the Works that includes, but is not necessarily limited to, the following information:

(a) operating and maintenance procedures for routine operation of the Works;

(b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;

(c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;

(d) contingency plans and procedures for dealing with potential spills and any other abnormal situations and for notifying the District Manager; and

(e) procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.

(8) The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

5. TEMPORARY EROSION AND SEDIMENT CONTROL

(1) The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every two (2) weeks and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.

(2) The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures. if any, undertaken to maintain the temporary sediment and erosion control measures.

6. REPORTING

(1) One (1) week prior to the start-up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.

(2) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

(3) The Owner shall prepare and submit a performance report to the District Manager on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

(b) a description of any operating problems encountered and corrective actions taken;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works, including an estimate of the quantity of any materials removed from the Works;

(e) a summary of any complaints received during the reporting period and any steps taken to address the complaints;

(f) a summary of all spill or abnormal discharge events; and

(g) any other information the District Manager requires from time to time.

7. SPILL CONTINGENCY PLAN

(1) Within six (6) months from the issuance of this Approval, the Owner shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. The Owner shall, upon request, make this plan available to Ministry staff. This plan shall include as a minimum:

(a) the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;

(b) the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;

(c) a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);

(d) steps to be taken to report, contain, clean up and dispose of contaminants following a spill;

(e) a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and MOE Spills Action Centre 1-800-268-6060;

(f) Materials Safety Data Sheets (MSDS) for each hazardous material which may be transported or stored within the area serviced by the Works;

(g) the means (internal corporate procedures) by which the spill contingency plan is activated;

(h) a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;

(i) an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and

(j) the date on which the contingency plan was prepared and subsequently, amended.

(2) The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.

(3) The spill contingency plan shall be amended from time to time as required by changes in the

operation of the facility.

Schedule "A"

1. Application for Environmental Compliance Approval, dated June 14, 2016, received on August 4, 2016, submitted by Robinson Land Development;

2. Servicing & Stormwater Management Report for Tony Graham Kanata Toyota Expansion, 600-2500 Palladium Drive, dated May, 2016, prepared by Robinson Land Development;

3. E-mail from Sean Czaharynksi of Robinson Land Development to the Ministry, dated May 9, 2017;
4. E-mail from Sean Czaharynksi of Robinson Land Development to the Ministry, dated May 12, 2017;

5. E-mail from Sean Czaharynksi of Robinson Land Development to the Ministry, dated May 17, 2017;

6. E-mail from Sean Czaharynksi of Robinson Land Development to the Ministry, dated May 24, 2017; and

7. E-mail from Sean Czaharynksi of Robinson Land Development to the Ministry, dated June 2, 2017.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.

4. Condition 4 is included as regular inspection and necessary removal of sediment and excessive decaying vegetation from the Works are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the Works. The Condition also ensures that adequate storage is maintained in the Works at all times as required by the design. Furthermore, this Condition is included to ensure that the Works are operated and maintained to function as designed.

5. Condition 5 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.

6. Condition 6 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

7. Condition 7 is included to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 1419-6ZBP57 issued on April 4, 2007.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of Part II.1
of the Environmental Protection Act
Ministry of the Environment and Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 2nd day of June, 2017

Gregory Zimmer, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

TN/
c: District Manager, MOECC Ottawa Office
Sean Czaharynski, Robinson Land Development

Ontario

Ministry of the Environment
Ministère de l'Environnement

ENVIRONMENTAL COMPLIANCE APPROVAL
NUMBER 6046-96MLQ8
Issue Date: April 30, 2013

Zena Investment Corporation
2500 Palladium Drive
Ottawa, Ontario
K2V 1E2

Site Location: Palladium Auto Park
2500 Palladium Drive,
City of Ottawa

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

stormwater management works, designed to service 1.08 hectare area of a car dealership, located 2500 Palladium Drive, Unit 10 in the City of Ottawa, comprising;

- ***onsite stormwater storage*** approximately 625.2 cubic metres under 100 year design storm event within parking lot and structures/pipes, located on the site by controlling the post-development flow rate to 72.6 Litres per second using a 250 VHV-2 Hydrovex inlet control device located at CBMH 1, discharging to existing sewers on Ring Road;

all in accordance with the application dated September 4, 2012 and received on October 15, 2012, and all supporting documentation and information including a Site Servicing Report, final plans and specifications prepared by McIntosh Perry Consulting Engineers Ltd.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "*Approval* " means this Environmental Compliance *Approval* and any Schedules to it, including the application and supporting documentation;

2. *"Director"* means any Ministry employee appointed by the Minister pursuant to section 5 of the Part II.1 of the Environmental Protection Act;

3. *"District Manager"* means the District Manager of the Ottawa District Office of the Ministry;

4. *"Ministry"* means the Ontario Ministry of the Environment;

5. *"Owner"* means Zena Investment Corporation, and includes its successors and assignees;

6. *"Works"* means the sewage works described in the *Owner's* application, this *Approval* and in the supporting documentation referred to herein, to the extent approved by this *Approval.*

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1.1 The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Approval* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

1.2 Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Approval* , the application for approval of the *Works* and the submitted supporting documents and plans and specifications as listed in this *Approval* .

1.3 Where there is a conflict between a provision of any submitted document referred to in this *Approval* and the Conditions of this *Approval* , the Conditions in this *Approval* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

1.4 Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

1.5 The requirements of this *Approval* are severable. If any requirement of this *Approval* , or the application of any requirement of this *Approval* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this *Approval* shall not be affected thereby.

2. EXPIRY OF APPROVAL

This *Approval* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the date of this *Approval.*

3. CHANGE OF OWNER

The *Owner* shall notify the *District Manager* and the *Director,* in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of *Owner;*

(b) change of address of the *Owner;*

(c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager;* and,

(d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager.*

4. OPERATION AND MAINTENANCE

4.1 The *Owner* shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the stormwater *Works* do not constitute a safety or health hazard to the general public.

4.2 The *Owner* shall ensure that the design storage volumes are maintained at all times.

4.3 The *Owner* shall undertake an inspection of the condition of the stormwater management *Works,* at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the above noted stormwater management *Works* to prevent the excessive build-up of sediment, debris and/or decaying vegetation to avoid reduction of capacity of the stormwater management *Works.* The *Owner* shall also regularly inspect and clean out the inlet to and outlet from the *Works* to ensure that these are not obstructed.

4.4 The *Owner* shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall make the logbook available for inspection by the Ministry upon request. The logbook shall include, but not necessarily be limited to, the following information:

(a) the name of the *Works;* and

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed.

5. RECORD KEEPING

The *Owner* shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this *Approval.*

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which *Approval* was granted. This Condition is also included to emphasize the precedence of Conditions in the *Approval* and the practice that the *Approval* is based on the most current document, if several conflicting documents are submitted for review. The Condition also advises the *Owners* their responsibility to notify any person they authorized to carry out work pursuant to this *Approval* the existence of this *Approval.*

2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to approved *Works* and to ensure that subsequent *owners* of the *Works* are made aware of the *Approval* and continue to operate the *Works* in compliance with it.

4. Condition 4 is included as regular inspection and necessary removal of sediment and excessive decaying vegetation from this approved stormwater management *Works* are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the *Works* . It is also required to ensure that adequate storage is maintained in the stormwater management Works at all times as required by the design, and to prevent stormwater impounded in the *Works* from becoming stagnant. Furthermore, Conditions 4 is included to ensure that the stormwater management *Works* are operated and maintained to function as designed.

5. Condition 5 is included to require that all records are retained for a sufficient time period to adequately evaluate the long-term operation and maintenance of the *Works.*

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*

The Director appointed for the purposes of

Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

Part II.1 of the Environmental Protection Act
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 314-3717 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 30th day of April, 2013

Sherif Hegazy, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

KH/
c: District Manager, MOE Ottawa District.
Kelly Paradis-Goddard, P.Eng., McIntosh Perry Consulting Engineers Ltd.

Ontario

Ministry of the Environment
Ministère de l'Environnement

CERTIFICATE OF APPROVAL
AIR
NUMBER 4174-7UPJJF
Issue Date: August 7, 2009

Kanata Motors Corporation
2500 Palladium Drive, Unit No. 800
Ottawa, Ontario
K2V 1E2

Site Location: Kanata Honda Powerhouse
2500 Palladium Drive
Ottawa, Ontario

You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:

- nine (9) heating, ventilation and air conditioning units, and ten (10) unit heaters, all natural gas fired, having a maximum combined thermal input of 2.25 Gigajoules per hour; and,

- one (1) standby diesel generator set, having a rating of 350 kilowatts, to provide power for the facility during emergency situations;

all in accordance with the Application for Approval (Air & Noise) dated June 15, 2009 and signed by Dave Mackenzie, (General Manager), Kanata Motors Corporation, and all supporting information associated with the application provided by Steven Challoner, P.Eng., Environmental Consultant, dated July 2, 2009.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

(1) "Act" means the *Environmental Protection Act;*

(2) "Certificate" means this Certificate of Approval issued in accordance with Section 9 of the Act;

(3) "Equipment" means the natural gas combustion equipment described in the Owner's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate;

(4) "Generator Set" means the diesel generator set described in the Owner's application, this Certificate and

in the supporting documentation submitted with the application, to the extent approved by this Certificate;

(5) "Manual" means a document or a set of documents that provide written instructions to staff of the Owner;

(6) "Ministry" means the Ontario Ministry of the Environment;

(7) "Owner" means Kanata Motors Corporation, and includes its successors and assignees;

(8) "Publication NPC-205" means Ministry Publication NPC-205, Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban), October, 1995; and

(9) "Publication NPC-232" means Ministry Publication NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October, 1995.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

GENERAL

1. Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the Equipment and the Generator Set in accordance with the description given in this Certificate, application for approval of the Equipment and the Generator Set and the submitted supporting documents and plans and specifications as listed in this Certificate.

2. Where there is a conflict between a provision of any submitted document referred to in this Certificate and the Conditions of this Certificate, the Conditions in this Certificate shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

PERFORMANCE

3. The Owner shall ensure that the noise emissions from the Equipment comply with the limits set out in Publication NPC-205 or NPC-232, as applicable.

OPERATION AND MAINTENANCE

4. The Owner shall restrict the periodic testing of the Generator Set to the daytime hours from 7:00 am to 7:00 pm.

5. The Owner shall ensure that the Equipment and the Generator Set is properly operated and maintained at all times. The Owner shall:

   (1) prepare, not later than three (3) months after the date of this Certificate or the date of

commissioning of the Equipment and the Generator Set, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment and the Generator Set, including:

(a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment and the Generator Set suppliers;

(b) emergency procedures;

(c) procedures for any record keeping activities relating to operation and maintenance of the Equipment and the Generator Set;

(d) all appropriate measures to minimize noise and odorous emissions from all potential sources;

(2) implement the recommendations of the Manual; and

(3) retain, for a minimum of two (2) years from the date of their creation, all records on the maintenance, repair and inspection of the Equipment and the Generator Set, and make these records available for review by staff of the Ministry upon request.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition Nos. 1 and 2 are imposed to ensure that the Equipment and the Generator Set is built and operated in the manner in which it was described for review and upon which approval was granted. These conditions are also included to emphasize the precedence of Conditions in the Certificate and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition No. 3 is included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Generator Set.

3. Condition No. 4 is included to ensure that the proposed operation, excluding emergency situations, is not extended beyond specific daytime hours to prevent an adverse effect resulting from the operation of the Generator Set.

4. Condition No. 5 is included to emphasize that the Equipment and the Generator Set must be maintained and operated according to a procedure that will result in compliance with the Act, the regulations and this Certificate. In addition the Owner is required to keep records and provide information to staff of the Ministry so that compliance with the Act, the regulations and this Certificate can be verified.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5

AND

The Director
Section 9, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted works are approved under Section 9 of the Environmental Protection Act.

DATED AT TORONTO this 7th day of August, 2009

Zafar Bhatti

Zafar Bhatti, P.Eng.
Director
Section 9, *Environmental Protection Act*

UI/
c: District Manager, MOE Ottawa District Office, and
Steven Challoner, P.Eng., Environmental Consultant

Ontario

Ministry of the Environment **Ministère de l'Environnement**

AMENDED CERTIFICATE OF APPROVAL
INDUSTRIAL SEWAGE WORKS
NUMBER 1419-6ZBP57
Issue Date: April 4, 2007

Tony Graham Kanata Limited
1855 Merivale Rd
Nepean, Ontario
K2G 1E3

Site Location: Palladium Auto Park
600-2500 Palladium Dr
City of Ottawa

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

stormwater management works to service 1.22 hectares of land, including an automobile dealership facility situated at the above mentioned site location and consisting of the following:

- stormwater management for the above mentioned site includes catchbasins and run-off quantity controls through ten (10) surface ponding areas in the parking lot with a ponding depth of 0.30 meters, and a storage volume of 816 cubic meters;
- oversized storm sewer pipes around the site providing a retention of up to 5 year return storms;
- two (2) final storm outlet structures namely storm manhole MH # 201 and catchbasin CB #7, fitted with inlet control devices model IPEX "C" providing a stormwater discharge under maximum head of 1.8 meters of 42 l/s each;
- site erosion controls during construction period with methods such as siltation fences, and silt traps installed in catchbasins; and,
- all other controls, storm sewer piping, and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with the following documents:

1. Application for Approval of Industrial Sewage Works dated July 15, 2004, received on July 27, 2004 and the associated documents submitted by the Controller, Tony Graham Kanata Limited, Ottawa, Ontario.

2. Application for Approval of Industrial Sewage Works dated November 11, 2006 and signed by Ben George, General Manager of Tony Graham Kanata Limited and all supporting information.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"*Act* " means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"*Certificate* " means this entire certificate of approval document, issued in accordance with Section 53 of the *Ontario Water Resources Act* , and includes any schedules;

"*Director* " means any Ministry employee appointed by the Minister pursuant to section 5 of the *Ontario Water Resources Act* ;

"*District Manager* " means the District Manager of the Ottawa District Office of the *Ministry* ;

"*Ministry* " means the Ontario Ministry of the Environment;

"*Owner* " means Tony Graham Kanata Limited and includes its successors and assignees; and,

"*Works* " means the sewage works described in the *Owner's* application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* .

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate* , the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate* .

(2) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate* , the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(3) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the date of this *Certificate* .

3. CHANGE OF OWNER

The *Owner* shall notify the *District Manager* and the *Director* , in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of *Owner* ;

(b) change of address of the *Owner* ;

(c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager* ; and

(d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager* .

4. OPERATION AND MAINTENANCE.

(1) The *Owner* shall inspect the *Works* at least once a year and, if necessary, clean and maintain the *Works* to prevent the excessive build-up of sediments, oil/grit, and/or vegetation.

(2) The *Owner* shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at 600-2500 Palladium Dr., City of Ottawa,
for inspection by the *Ministry* . The logbook shall include the following:

(a) the name of the *Works* ;

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and

(c) the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

5. RECORD KEEPING

The *Owner* shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this *Certificate* .

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that the *Works* are constructed in a timely manner so that standards applicable at the time of Approval of the *Works* are still applicable at the time of construction, to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the works are made aware of the certificate and continue to operate the works in compliance with it.

4. Condition 4 is included to require that the *Works* be properly operated and maintained such that the environment is protected.

5. Condition 5 is included to require that all records are retained for a sufficient time period to adequately evaluate the long-term operation and maintenance of the *Works* .

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 6935-63SJJQ issued on August 24, 2004.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act , R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A

Toronto, Ontario
M4P 1E4

Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the**
Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 4th day of April, 2007

Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

KD/
c: District Manager, MOE Ottawa.
Sean Czaharynski, David McManus Engineering Ltd.

Ontario

Ministry of the Environment **Ministère de l'Environnement**

CERTIFICATE OF APPROVAL
INDUSTRIAL SEWAGE WORKS
NUMBER 6935-63SJJQ

Tony Graham Kanata Limited
1855 Merivale Road
Ottawa, Ontario
K2G 1E3

Site Location: Palladium Auto Park
Ring Road, Lot 6
Kanata, Ontario

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

stormwater management works to service 1.22 hectares of land, including an automobile dealership facility situated at the above mentioned site location and consisting of the following:

- stormwater management for the above mentioned site includes catchbasins and run-off quantity controls through eight (8) surface ponding areas in the parking lot with a ponding depth of 0.27 meters, and a storage volume of 539 cubic meters;
- oversized storm sewer pipes around the site providing a retention of upto 5 year return storms;
- two (2) final storm outlet structures namely storm manhole MH # 201 and catchbasin CB #7, fitted with inlet control devices model IPEX "C" providing a stormwater discharge under maximum head of 1.8 meters of 42 l/s each;
- site erosion controls during construction period with methods such as siltation fences, and silt traps installed in catchbasins; and,
- all other controls, storm sewer piping, and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with the Application for Approval of Industrial Sewage Works dated July 15, 2004, received on July 27, 2004 and the associated documents submitted by the Controller, Tony Graham Kanata Limited, Ottawa, Ontario.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"*Act* " means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"*Certificate* " means this entire certificate of approval document, issued in accordance with Section 53 of the *Ontario Water Resources Act* , and includes any schedules;

"*Director* " means any Ministry employee appointed by the Minister pursuant to section 5 of the *Ontario Water Resources Act* ;

"*District Manager* " means the District Manager of the Ottawa District Office of the *Ministry* ;

"*Ministry* " means the Ontario Ministry of the Environment;

"*Owner* " means Tony Graham Kanata Limited and includes its successors and assignees; and,

"*Works* " means the sewage works described in the *Owner's* application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* .

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. **GENERAL CONDITION**

(1) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate* , the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate* .

(2) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate* , the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(3) The *Owner* shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the *Works* do not constitute a safety or health hazard to the general public.

2. **OPERATION AND MAINTENANCE**

(1) The *Owner* shall undertake an inspection of the condition of the *Works* , at least twice a year, and undertake any necessary cleaning and maintenance to prevent the excessive build-up and potential overflow of sediment or debris and/or decaying vegetation into the receiving watercourse.

(2) The *Owner* shall conduct inspections of all specific sediment and erosion control measures and check point locations outlined in the application for approval, once every

two weeks during construction and once every month post-construction, and after each significant storm event.

(3) The *Owner* shall ensure that upon completion of the construction of the *Works* , the sediment and erosion control measures shall be removed from the site within one (1) year from the date of completion of the construction of the *Works* .

(4) The *Owner* shall maintain a log book which shall be made available for review by the *Ministry* , and the local area Conservation Authority, upon request. The log shall include the name of the inspector, date of inspection as per subsections 2 (1) and 2 (2), cleaning and maintenance measures for the *Works* and the remedial measures undertaken to maintain the sediment and erosion control measures, if any. The log book shall be used until such time that it is no more required by the *District Manager* .

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted.

2. Condition 2 is imposed to ensure that the *Works* are operated and maintained properly and that any build-up of sediment and/or decaying vegetation does not impair the performance of these systems and have a potential to overflow into the receiving watercourse. The site sediment and erosion control measures are removed upon completion of construction activities.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act , R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment

P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 24th day of August, 2004

Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

MM/
c: District Manager, MOE Ottawa
Sean Czaharynski, P.Eng., David McManus Engineering Ltd.

Ontario

Ministry of the Environment **Ministère de l'Environnement**

CERTIFICATE OF APPROVAL
INDUSTRIAL SEWAGE WORKS
NUMBER 6496-5QVL2U

Palladium Auto Park Ltd.
1666 Carling Avenue
Ottawa, Ontario
K2A 1C5

Site Location: 2500 Palladium Drive
Ottawa City,

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

a stormwater management facility to serve an automobile sales and service centre with a drainage area of approximately 24.7 hectares at the above location, consisting of the following:

- one (1) stormwater collection system consisting of thirty-eight (38) interconnected catchbasins, with thirty-seven (37) catchbasins being equipped with Type "C" ICD (Inlet Control Device), each having a release rate of 42 litres/second and one (1) catchbasin equipped with Type "D" ICD, having a release rate of 95 litres/second, creating a total surface storage volume of over 10,150 cubic metres at the catchbasins with the discharge of stormwater into a sedimentation forebay located northeast part of the site;

- one (1) sediment forebay separated from the wet pond by means of a gabion berm set slightly below the permanent pool elevation of 98.60 metre of the stormwater management pond for settling of coarse solids;

- one (1) stormwater management pond, with three (3) gabions set at an elevation of 98.40 metre for efficient settling of suspended solids, with a total volumetric capacity of 15,216 cubic metres which includes a permanent pool volume of 5,958 cubic metres (between elevation 97.60 metre to 98.60 metre) and an extended detention volume of 5,078 cubic metres (between elevation 98.60 metre to 99.30 metre);

- one (1) outlet control structure to provide quality and quantity control of the stormwater from the stormwater management pond with discharge into the existing 1560 mm diameter culvert via a 1550 mm diameter manhole and a headwall, consisting of the following:

    - one (1) ditch inlet catchbasin (1200 mm x 600 mm) with a 178 mm diameter orifice at the end of a 200 mm reverse sloped pipe to provide a detention of time of over 48 hours for the extended

detention volume for quality control;

- one (1) 3 metre long, 375 mm diameter pipe section at the outlet of ditch inlet catchbasin to restrict the flow from the pond to below the pre-development flow rates for all storm events including and up to the 100-year storm for quantity control;

- one (1) emergency spillway set a base elevation of 100.30 metre with rip-rap protection located near the outlet of the stormwater management pond; and

- all other appurtenances essential for proper operation of the aforementioned sewage works;

all in accordance with the Application for Approval of Industrial Sewage Works dated July 3, 2003, and the associated documents submitted by the Secretary-Treasurer, Palladium Auto Park Ltd, Ottawa, Ontario.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"Certificate" means this entire certificate of approval document, issued in accordance with Section 53 of the *Ontario Water Resources Act* , and includes any schedules;

"Director" means any Ministry employee appointed by the Minister pursuant to section 5 of the *Ontario Water Resources Act* ;

"District Manager" means the District Manager of the Ottawa District Office of the Ministry;

"Ministry" means the Ontario Ministry of the Environment;

"Owner" means Palladium Auto Park Ltd., and includes its successors and assignees; and

"works" means the sewage works described in the Owner's application, this certificate and in the supporting documentation referred to herein, to the extent approved by this certificate.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the works in accordance with the description given in this Certificate, the application for approval of the works and the submitted supporting documents and plans and specifications.

2. OPERATION AND MAINTENANCE

(1) The Owner shall undertake an inspection of the condition of the stormwater management facility, at least four (4) times a year, and undertake any necessary cleaning and maintenance to prevent the excessive build-up of sediment and/or decaying vegetation.

(2) The owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken and shall keep the logbook at the site for inspection by the Ministry.

(3) The Owner shall prepare an operations manual prior to the commencement of operation of the sewage works, that includes, but not necessarily limited to, the following information:

(a) operating procedures for routine operation of the works;

(b) inspection programs, including frequency of inspection, for the works and the methods or tests employed to detect when maintenance is necessary;

(c) repair and maintenance programs, including the frequency of repair and maintenance for the works;

(d) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and

(e) complaint procedures for receiving and responding to public complaints.

(4) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

3. EFFLUENT MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the sewage works, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this certificate are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the following sampling point, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 1 - Effluent Monitoring - Outlet Manhole	
Frequency	At least six (6) times per year with five (5) times during rainfall events with sampling dates of at least seven (7) days apart.
Sample Type	Grab
Parameters	Total suspended Solids, pH and Oil and Grease

(3) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition) as amended from time to time by more recently published editions; and,

(4) The measurement frequencies specified in subsection (2) in respect of any parameter are minimum requirements which may, after two (2) years of monitoring in accordance with this Condition, be modified by the District Manager in writing from time to time.

(5) The Owner shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this certificate.

The reasons for the imposition of these terms and conditions are as follows:

Condition 1 is imposed to ensure that the works are built and operated in the manner in which they were described for review and upon which approval was granted.

Condition 2 is included to ensure that any build-up of sediment and/or decaying vegetation does not impair the performance of the stormwater management facility and also to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry.

Condition 3 is included to require the owner to demonstrate on a continual basis that the quality of the effluent from the approved works does not cause any impairment to the receiving watercourse.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act , R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 11th day of September, 2003

Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

AC/

c: District Manager, MOE Ottawa
Guy Forget, P. Eng. & Austin Reid, P. Eng., J.L. Richards & Associates Limited

Ontario

Ministry of the Environment **Ministère de l'Environnement**

CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS
NUMBER 4120-5PXPAC

Palladium Auto Park Ltd.
1666 Carling Avenue
Ottawa, Ontario
K2A 1C5

Site Location: 2500 Palladium Drive
Ottawa City

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

sanitary sewers to be constructed in the City of Ottawa on Cyclone Taylor Boulevard, all in accordance with the application from Palladium Auto Park Ltd., dated July 3, 2003, including final plans and specifications prepared by J.L. Richards & Associates Ltd.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act , R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* **Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 31st day of July, 2003

A. Ahmed

Aziz Ahmed, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

CM/
c: District Manager, MOE Ottawa
P. Page, Director, Secretariat Services, City of Ottawa
Rob Phillips, Development Services Department, City of Ottawa
Austin D. Reid, P.Eng., J.L. Richards & Associates Limited

Ontario

Ministry of the Environment **Ministère de l'Environnement**

CERTIFICATE OF APPROVAL
MUNICIPAL DRINKING WATER SYSTEMS
NUMBER 6396-5PXPCK

Palladium Auto Park Ltd.
1666 Carling Avenue
Ottawa, Ontario
K2A 1C5

Site Location: 2500 Palladium Drive
Ottawa City

Pursuant to the Safe Drinking Water Act, 2002, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, this approval is issued under Part V of the Safe Drinking Water Act, 2002, S.O. 2002, c.32 to:

watermains to be constructed in the City of Ottawa on Palladium Drive, all in accordance with the application from Palladium Auto Park Ltd., dated July 3, 2003, including final plans and specifications prepared by J.L. Richards & Associates Ltd.

All or part of this approval may be reviewable with the provisions of Part X of the SDWA. In accordance with Section 129(1) of the Safe Drinking Water Act, Chapter 32 Statutes of Ontario, 2002, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 129(2) sets out a procedure upon which the 15 days may be extended by the Tribunal. Section 129(3) of the Safe Drinking Water Act, Chapter 32 Statutes of Ontario, 2002, provides that the Notice requiring the hearing shall state:

1. The aspect of the decision, including the portion of the permit, licence, approval, order or notice of administrative penalty in respect of which the hearing is required; and
2. The grounds for review to be relied on by the person at the hearing.

Except with leave of the Tribunal, a person requiring a hearing in relation to a reviewable decision is not entitled to,
(a) a review of an aspect of the decision other than that stated in the notice requiring the hearing; or
(b) a review of the decision other than on the grounds stated in the notice

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Part V, *Safe Drinking Water Act*
Ministry of Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted water works are approved under Part V of the Safe Drinking Water Act

DATED AT TORONTO this 31st day of July, 2003

A. Ahmed

Aziz Ahmed, P.Eng.
Director
Part V *of the Safe Drinking Water Act, 2002*

CM/
c: District Manager, MOE Ottawa
P. Page, Director, Secretariat Services, City of Ottawa
Rob Phillips, Development Services Department, City of Ottawa
Austin Reid, P.Eng., J.L. Richards & Associates Limited

CAPITAL TWO INVESTMENTS LIMITED

1554 Carling Avenue, Ottawa, ON, K1Z 7M4

July 25, 2006

The Ministry of Environment
Director, Environmental Assessment and Approvals Branch
2 St. Clair Avenue West, Floor 12A
Toronto, ON
M4V 1L5

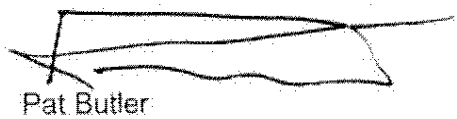
To whom it may concern:

Re: 2500 Palladium Drive, Unit 1200
Capital Dodge Chrysler

On behalf of the Board of Directors of Capital Two Investments Ltd. the undersigned grants permission for the construction and installation of a car dealership at the location specified in the attached site plan.

Yours truly,

CAPITAL TWO INVESTMENTS LIMITED



Pat Butler
Director

Pages 50 to / à 58

are withheld pursuant to section

sont retenues en vertu de l'article

22

of the Freedom of Information and Protection of Privacy Act

de la Freedom of Information and Protection of Privacy Act

Goulet, Charles (ENE)

From: Donyina, Kwasi (ENE)
Sent: November 16, 2006 9:10 AM
To: Goulet, Charles (ENE); 'novainfo@novatech-eng.com'
Subject: DRAFT CERTIFICATE, MOE REF. #9326-6SKP7W

Hello Charles and Ron:

Please find attached a draft certificate for comment and sign off on or before November 23, 2006.

Thanks.

Kwasi Donyina, P.Eng.
Senior Engineer

Ministry of the Environment **Ministère de l'Environnement**

CERTIFICATE OF APPROVAL
INDUSTRIAL SEWAGE WORKS

Ontario

Capital Two Investments Limited
1 Laser Street
Ottawa, Ontario
K2E 7V1

Site Location: 2500 Palladium Drive
Part of Front Half Lot 2, Concession 1, Huntley Township
City of Ottawa

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

the establishment of stormwater management Works for the collection, transmission, treatment and disposal of stormwater run-off from a catchment area of 1.5 hectares, to ~~provide enhanced water quality protection discharging~~ to municipal sewer, and to attenuate post-development peak flows to pre-development levels for all storm events up to and including the 100-year return storm, consisting of the following:

Stormwater Management System

a stormwater management system relying on rooftop and parking lot storage as follows:

- installation of 6 roof drains to control flow from the roof to a maximum allowable flowrate of 7.2 litres per second for the 100-year return storm;

- one (1) 143 millimetre diametre plug type orifice installed within the outlet pipe of STM MH #1 to control the release rate to 68.8 litres per second for the 100-year return storm;

- installation of hydrokex model 75 SVHV-1 or equivalent within CBMH #4 to control the release rate for the 100-year return storm to 4.7 litres per second;

- the total site control for the 100-year return storm being the maximum allowable flow for the site of 84.0 litres per second with the site discharging to an existing stormwater management pond located at the Palladium Auto Park;

- storm sewer network

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned *Works*;

all in accordance with the Application for Approval of Industrial Sewage Works submitted by Pat Butler, received on August 11, 2006 and all supporting information.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"*Certificate*" means this entire certificate of approval document, issued in accordance with Section 53 of the Ontario Water Resources Act, and includes any schedules;

"*Director*" means any *Ministry* employee appointed by the Minister pursuant to section 5 of the Ontario Water Resources Act;

"*District Manager*" means the District Manager of the Ottawa District Office of the *Ministry*;

"*Ministry*" means the Ontario Ministry of the Environment;

"*Owner*" means Capital Two Investments Limited and includes its successors and assignees;

"*Works*" means the sewage works described in the *Owner*'s application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate*.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate*, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate*.

(2) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate*, the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(3) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the date of this *Certificate*.

3. CHANGE OF OWNER

The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of *Owner*;

(b) change of address of the *Owner*;

(c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager*; and

(d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager*.

4. OPERATION AND MAINTENANCE

(1) The *Owner* shall inspect the *Works* at least once a year and, if necessary, clean and maintain the *Works* to prevent the excessive buildup of sediments and/or vegetation.

(3) The *Owner* shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at 2500 Palladium Drive, Ottawa, for inspection by the *Ministry*. The logbook shall include the following:

(a) the name of the *Works*;

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and

(c) the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

5. RECORD KEEPING

The *Owner* shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this *Certificate*.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that the *Works* are constructed in a timely manner so that standards applicable at the time of Approval of the *Works* are still applicable at the time of

construction, to ensure the ongoing protection of the environment

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the works are made aware of the certificate and continue to operate the works in compliance with it.

4. Condition 4 is included to require that the *Works* be properly operated and maintained such that the environment is protected.

5. Condition 5 is included to require that all records are retained for a sufficient time period to adequately evaluate the long-term operation and maintenance of the *Works*.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this.....

Signature
....., P.Eng.
Director
Section .....

KD/
c: District Manager, MOE Ottawa.
R.S. Cebryk, Novatech Engineering Consultants Ltd.

Ontario Ministry of the Environment

Application for Approval of Industrial Sewage Works

Ca formulaire est disponible en francais

For Office Use Only			
Reference Number	Payment Received $	Date *(y/m/d)*	Initials

General Information and Instructions

General:

Information requested by this form is collected under the authority of the *Ontario Water Resources Act*, R.S.O. 1990 (OWRA) and *the Environmental Bill of Rights*, c.28, Statutes of Ontario, 1993 (EBR) and will be used to evaluate applications for approval of industrial sewage works under Section 53 OWRA.

Instructions:

1. When completing this form, please refer to the "Guide For Applying for Approval of Industrial Sewage Works, Section 53, OWRA" (referred to as the Guide) and "Guide – Application Cost for Sewage Works s. 53, OWRA". Questions regarding completion and submission of the application should be directed to the Environmental Assessment & Approvals Branch, 2 St. Clair Avenue West, Floor 12A, Toronto, Ontario, M4V 1L5, telephone No. 1-800-461-6290, or (416)314-8001, or to your local District Office of the Ministry of Environment.

2. This form must be completed with respect to all the requirements of the Guide in order for it to be considered as an application for approval. INCOMPLETE APPLICATIONS WILL BE RETURNED TO THE APPLICANT.

3. A complete application for approval consists of;
   (1) a completed and signed application form; including the attached – "Cost for OWRA S. 53 Applications – Supplement to Application for Approval"
   (2) all supporting information as requested by this form and by the Guide; and
   (3) a certified cheque or money order, in Canadian funds, made payable to the *Minister of Finance* for the applicable application fee.
   The Ministry may require additional information during the technical review of any application accepted as complete.

4. The original application, along with the supporting information and the application fee, must be sent to:
   The Ministry of Environment
   Director, Environmental Assessment and Approvals Branch,
   2 St. Clair Avenue West, Floor 12A, Toronto, Ontario, M4V 1L5
   A copy of the application and the supporting information must be sent to the local Ministry District Office which has jurisdiction over the area where the works are located.

5. Information contained in this application is not considered confidential and will be made available to the public upon request. Information submitted as supporting information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry may make the information available to the public without further notice to you.

6. If the Client submits with the application a copy of their Master Business Licence (MBL) obtained from the Ministry of Consumer and Commercial Relations, the **shaded sections within this form do not need to be completed**. For additional information on the MBL please refer to the "Guide".

1. Client Information

Client Name *(legal name of individual or organization as evidenced by legal documents)*	Business Identification Number
Capital Two Investments Limited	

Business Name *(the name under which the entity is operating or trading if different from the Client Name – also referred to as trade name)*

Capital Two Investments Limited

Client Type:		Activity Classification Code/Standard Industrial Classification Code *(if unknown please complete Business Activity Description)*
☒ Corporation	☐ Federal Government	
☐ Individual	☐ Municipal Government	
☐ Partnership	☐ Provincial Government	
☐ Sole Proprietor	☐ Other *(describe)*	

Business Activity Description *(a narrative description of the business endeavour, this may include products sold, services provided or machinery/equipment used, etc.)*

Car Dealership

Is the client a MISA Discharger? ☐ Yes ☒ No	If Yes, name the industrial sector:

2. Client Physical Address – *Complete A, C and D or B, C and D*

A. Civic Address – Street information *(applies to an address that has civic numbering and street information – includes street number, name, type and direction)*: 1 Laser Street

Unit Identifier (identifies type of unit, such as suite & number):

B. Survey Address *(used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory)*

Lot and Conc.: used to indicate location within a subdivided township and consists of lot number and a concession number.	Lot	Conc.	Part and Reference: used to indicate location within an unsubdivided township or unsurveyed terriory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan.	Part	Reference Plan

C. Municipality/Unorganized Township	County/District	Province/State	Country	Postal Code
Ottawa		ON	Canada	K2E 7V1

D. Telephone Number (including area code & extension)	Fax Number (including area code)	E-mail Address
613-226-8300	613-226-7778	lnorton@storm.ca

3. Client Mailing Address – *Complete A and C or B and C*

A. Civic Address – Street Information *includes street number, name, type and direction)* ☒ Same as Client Physical Address

Unit Identifier (identifies type of unit, such as suite & number):

B. Delivery Destination ☐ Rural Route ☐ Suburban Service ☐ Mobile Route ☐ General Delivery

Delivery Identifier *(a number identifying a Rural Route, Suburban Service or Mobile Route delivery mode)*:

C. Municipality	Postal Station	Province/State	Country	Postal Code

4. Site Information – *(location where activity/works applied for is to take place)*

Site Name	MOE District Office	Legal Description *(attach copy of a legal survey)*
Capital Dodge Chrysler	Ottawa	Refer to attached plan

A. Site Address – Street Information *(applies to an address that has civic numbering and street information – includes street number, name, type and direction)* ☐ Same as Client Physical Address

2500 Palladium Drive, Unit 1200

Unit Identifier (identifies type of unit, such as suite & number):

B. Survey Address *(used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory)* NOTE: *Do not complete "B" if you completed "A".*

Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number.	Lot	Conc.	Part and Reference: used to indicate location within an unsubdivided township or unsurveyed terriory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan.	Part	Reference

Non Address Information *(includes any additional information to clarify clients' physical location)*:

Geo Reference

Map Datum	Zone	Accuracy Estimate	Geo Referencing Method	UTM Easting	UTM Northing

Municipality/Unorganized Township	County/District	Postal Code
Ottawa		K2V 1E2

Adjacent Land Use

☐ Industrial ☒ Commercial ☐ Recreational

☐ Residential ☐ Agricultural ☐ Other *(specify)*:

Is the Site located in an area of development control as defined by the Niagara Escarpment Planning & Development Act (NEPDA)?

☐ Yes (if Yes, attach copy of NEPDA permit for the proposed activity/work) ☒ No

Is the Client the operating authority? ☒ Yes ☐ No

If No, attach the operating authority name, address and phone number.

Is the Client the owner of the land (site)? ☒ Yes ☐ No

If No, attach the owner's name, address and consent for the installation and operating of the facilities.

Is the Site located on the Oak Ridges Moraine Conservation Area as defined by the Oak Ridges Moraine Conservation Plan (ORMCP, a regulation made under the Oak Ridges Moraine Conservation Act (ORMCA)?

☐ Yes **(If yes please attach proof of Municipal planning approval for the proposed activity/work)**

☒ No

5. Project Technical Information Contact - *Complete A, B, D and E or A, C, D, and E*

A. Name	Company	☐ Same as Client Name
R. S. Cebryk	Novatech Engineering Consultants Ltd.	

Contact Address

B. Civic Address – Street information *includes street number, name, type and direction)* ☐ Same as Client Mailing Address	Unit Identifier (identifies type of unit, such as suite & number)
240 Michael Cowpland Drive	Suite 200

C. Delivery Destination ☐ Rural Route ☐ Suburban Service ☐ Mobile Route ☐ General Delivery — Delivery Identifier *(a number identifying a Rural Route, Suburban Service or Mobile Route delivery mode)*

D. Municipality	Postal Station	Province/State	Country	Postal Code
Ottawa		Ontario	Canada	K2M 1P6

E. Telephone Number *(including area code & extension)*	Fax Number *(including area code)*	E-mail Address
(613) 254-9643	(613) 254-5867	novainfo@novatech-eng.com

6. Project Information

Type of Application:	Current Certificate of Approval Number	Date of Issue *(yy/m/d)*
☒ New Certificate of Approval ☐ Amendment to current Certificate of Approval		

Project Description Summary *(if EBR is applicable, this summary will be used in the EBR posting notice)*

Construction of a new Capital Dodge Chrysler car dealership within the 14-lot Palladium Auto Park. The works also include some landscaping, vehicle display areas and a large paved parking area. Stormwater runoff will be stored and controlled on-site (i.e. rooftop & surface storage) prior to being directed to the existing stormwater management (SWM) pond located near the NE corner of the 14-lot Palladium Auto Park. The SWM pond will provide water quality control.

Project Name *(Project identifier to be used as a reference in correspondence)*	Receiver of Effluent Discharge	Watershed Name
Capital Dodge Chrysler	Feedmill Creek	Carp River

Project Schedule

Estimated date for start of construction/installation	Estimated date for start of operation
August 2006	February 2007

7. Other Approvals / Permits

List all other environmental approvals/permits applied for related to this project or received in relation to this project under the *Environmental Protection Act* (discharges to air, water management, etc.) and the *Ontario Water Resources Act* (water works).

8. Public Consultation/Notification

Specify all public consultation/notification *(such as public hearings, notification of First Nations, etc.)* related to the project that has been completed or is in the process of being completed.

City of Ottawa Site Plan process pursuant to the planning act

9. Environmental Bill of Rights Requirements

Is this a proposal for a Prescribed Instrument under EBR?	If "Yes," is it excepted from public participation?	If it is excepted from public participation provide reason:	
☐ Yes ☒ No	☐ Yes ☐ No	☐ Equivalent Public Participation	☐ Environmentally Insignificant Amendment or Revocation
		☐ Emergency	☐ EAA or Tribunal Decision

Documentation in support of the above noted exception must be provided (refer to "Guide")

10. Supporting Information Checklist – *This is a list of all supporting information to this application and is subject to the FOIPPA and EBR*

Supporting information	Attached	Reference	Can be disclosed
General			
Pre-application consultation record	☐ Yes ☒ No		☐ Yes ☐ No
Proof of Legal Name of Client	☒ Yes ☐ No	Article of Incorporation	☒ Yes ☐ No
Copy of NEPDA Permit	☐ Yes ☒ No		☐ Yes ☐ No
Name, Address and Phone Number of the Operating Authority	☒ Yes ☐ No	Refer to Sections 1 & 2 of the application form	☐ Yes ☐ No
Name, Address and consent of land/site owner for the installation/construction and operation of the works facility	☒ Yes ☐ No	Refer to the attached letter (June 22, 2006)	☒ Yes ☐ No
Documentation in support of EBR Public Participation Exception	☐ Yes ☒ No		☐ Yes ☐ No
Proof of Public Consultation/Notification	☐ Yes ☒ No		☐ Yes ☐ No
Financial Assurance	☐ Yes ☒ No		☐ Yes ☐ No
Technical			
Description of the industrial Processes (sources of sewage)	☒ Yes ☐ No	Refer to SWM Report	☒ Yes ☐ No
Sewage Quantity and Quality Characteristics	☐ Yes ☒ No		☐ Yes ☐ No
Detailed Description of the Proposed Works	☒ Yes ☐ No	Refer to SWM Report	☒ Yes ☐ No
Design Brief/Report	☒ Yes ☐ No	Refer to SWM Report	☒ Yes ☐ No
Hydraulic and Process Calculations	☒ Yes ☐ No	Refer to SWM Report	☒ Yes ☐ No
Process Sludge Handling Program	☐ Yes ☒ No		☐ Yes ☐ No
Process/Effluent Monitoring Program	☐ Yes ☒ No		☐ Yes ☐ No
Site Plan	☒ Yes ☐ No	Refer to SWM Report	☒ Yes ☐ No
Engineering Drawings and Specifications	☒ Yes ☐ No	Refer to SWM Report	☒ Yes ☐ No
Environmental Impact Analysis (surface water)	☐ Yes ☒ No		☐ Yes ☐ No
Environmental Impact Analysis (ground water)	☐ Yes ☒ No		☐ Yes ☐ No
Environmental Impact Analysis (odour and noise)	☐ Yes ☒ No		☐ Yes ☐ No
Final Effluent Criteria Accepted by Regional Office of the Ministry	☐ Yes ☒ No		☐ Yes ☐ No
Site and Soil Assessment Report	☐ Yes ☒ No		☐ Yes ☐ No
Stormwater Management Report	☒ Yes ☐ No	Stormwater Management (SWM) Report	☒ Yes ☐ No
Other Attached Information	☐ Yes ☒ No		☐ Yes ☐ No

11. Payment Information

Amount Enclosed: $2,200 *Please attach completed "Costs for EPA s.53 Applications – Supplement to Application for Approval" (PIBS 4107)*

Method of Payment

☒ Certified Cheque ☐ Money Order ☐ VISA ☐ MasterCard ☐ American Express

*Credit Card Information (if paying by VISA, MasterCard or American Express)**

Name on Card *(please print)*	Credit Card Number	Expiry Date (m/y)

Cardholder Signature	Date (y/m/d)

**NOTE: credit card accepted for payments UNDER $10,000.00 only*

12. Statement of Client

I, the undersigned hereby declare that, to the best of my knowledge, the information contained herein and the information submitted in support of this application is complete and accurate in every way and that the Project Technical Information Contact identified in section 5 of this form is authorized to act on my behalf for the purpose of obtaining approval under Section 53 of the OWRA for the sewage works identified herein.

Name *(please print)* PAT BUTLER	Title PRESIDENT / DIRECTOR
Signature	Date *(y/m/d)* JULY 24/06

File Number: **D07-12-06-0115**

Date: **July 27,2006**

Director,
Environmental Assessment and
Approvals Branch
Ministry of the Environment
2 St. Clair Avenue West
Floor 12A
Toronto, Ontario
M4V 1L5

Dear Sir/Madam

Re: Direct Submission
2500-1200 Palladium Dr - Capital Dodge Chrysler
Capital Two Investments Ltd.
City of Ottawa
Approval of Industrial Sewage Works

Enclosed for your review are the following;

1. Ministry of the Environment Applications,
2. Legal Plan
3. Drawing - Stormwater Management Plan – Dwg 106034-SWM - Rev. 2 July 13, 2006
4. Drawing - General Plan of Services – Dwg 106034-GP - Rev. 4 July 13, 2006
5. Drawing - Grading Plan – Dwg 106034-GR - Rev. 4 July 13, 2006
6. Stormwater Management Report – May 4, 2006
7. Business Provincial Business Number,
8. Processing Fee ($2,200.00)

Shaping our future together
Ensemble, formons notre avenir

City of Ottawa
Planning and Growth Management Department
110 Laurier Avenue West
Ottawa, ON. K1P 1J1
Tel: (613) 580-2424
Fax: (613) 560-6006
www.ottawa.ca

Ville d'Ottawa
Service de l'urbanisme et de la gestion de la croissance
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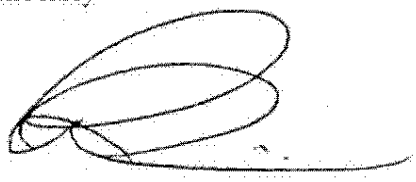
Tél: (613) 580-2424
Téléc: (613) 560-6006
www.ottawa.ca

For further information, please contact Nathan Fudge at extension 14822 or the undersigned at extension 27604.

Sincerely



R.L. Phillips, C.E.T.
Program Manager, Infrastructure Approvals
Infrastructure Approvals Division
Planning & Growth Management Department
Planning and Infrastructure Approvals Branch

Attach.

cc: District Manager, MOE Ottawa District Office - Package
Linda Carkner, Program Manager, Utility Development Coordinator, IMD (MC 26-61) - Letter
Nathan Fudge, Infrastructure Approvals Officer, IAD (MC 01-14)

PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
STORMWATER MANAGEMENT REPORT

Prepared for:

CAPITAL TWO INVESTMENTS LIMITED

Prepared by:

NOVATECH ENGINEERING CONSULTANTS LTD.
Suite 200, 240 Michael Cowpland Drive
Kanata, Ontario
K2M 1P6

May 4, 2006

Ref: R-2006-070
Novatech File No: 106034-1

NOVATECH
ENGINEERING
CONSULTANTS LTD

May 4, 2006

Capital Two Investments Limited
1 Laser Street
Ottawa, Ontario
K2E 7V1

Attention: Mr. Jim Durrell

Dear Sir:

Re: Palladium Auto Park
Capital Dodge Chrysler
Stormwater Management Report
Our File No.: 106034-1

Please find enclosed a copy of the Stormwater Management (SWM) Report for the above noted project. This study addresses the mitigation of stormwater related impacts due to the development of the proposed site. This report is hereby submitted for your review and approval. If you require any additional information, please do not hesitate to contact the undersigned.

Yours truly,

NOVATECH ENGINEERING CONSULTANTS LTD.

François Thauvette, P. Eng.
Project Engineer

FT/ft

cc: Rob Phillips (City of Ottawa) – 4 copies
Ken Hoppner (Morley Hoppner Group) – 1 copy
Dave Mungall (Pye & Richards Architects) – 1 copy
Rob Lefebvre (GWAL) – 1 copy

M:\2006\106034\DATA\REPORTS\SWM.DOC

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ATTACHED PLANS:

1.0 INTRODUCTION

The development of the site is being proposed by Capital Two Investments Limited and will consist of a new Dodge Chrysler car dealership. The site is located within the 14-lot Palladium Auto Park in the City of Ottawa (formerly Kanata). The site is bordered by the main entrance to the 14-lot development to the northeast, Palladium Drive to the southeast, the existing Ring Road to the northwest and a vacant lot to be developed to the southwest. Refer to the key plan shown on the attached plans.

The proposed car dealership will be serviced by connecting to the existing sanitary, storm and water stubs previously constructed, up to the property line, as part of the Palladium Auto Park servicing. A new fire hydrant will also be constructed on site to provide fire protection for the proposed building. Stormwater will be stored and controlled on-site prior to being directed to the existing stormwater management (SWM) pond located near the northeast corner of the 14-lot development. The existing SWM pond will provide water quality control.

In order to compare the post-development flow to the allowable flow, the assessment was limited to a 1.50-hectare area (i.e. lot to be developed + a portion of the existing landscaped entrance feature area draining onto the site).

2.0 STUDY OBJECTIVES

The approach for the stormwater management design is not to exceed the allowable runoff for the site, as specified by the previously approved Palladium Auto Park Stormwater Management Report (JLR 15941-04) prepared by J. L. Richards & Associates Limited, dated April 2003.

On-site stormwater quantity control, including rooftop and parking lot surface detention will be required and will be achieved by the use of controlled flow roof drains and inlet control devices (ICD) at the outlet manholes. All post-development runoff in excess of the allowable will be stored and controlled on site, for a return period of 1:5 years up to and including the 1:100 year design event.

3.0 PRE-DEVELOPMENT CONDITIONS

3.1 THE SITE

The site currently consists of an undeveloped grass field. A small berm is located within the eastern portion of the site. The main entrance to the Palladium Auto Park as well as the existing Ring Road including concrete sidewalks, street lights, utilities, sewers and the watermain have all been constructed as part of the Palladium Auto Park development. Some landscaping features, such as trees, sod and the main entrance

sign have also been constructed along the property lines. Refer to Figure 1: Existing Conditions Plan for details.

3.2 EXISTING DRAINAGE

The majority of the stormwater runoff generally sheet drains in a northerly direction towards the existing main entrance to the Palladium Auto Park, where it enters the existing storm sewer via roadway catchbasins. A small portion of the runoff from the site drains east towards the existing drainage ditch that runs along Palladium Drive. Stormwater from this drainage ditch is also being directed to the existing SWM pond located near the northeast corner of the 14-lot development.

3.3 ALLOWABLE RELEASE RATE

As mentioned previously, the approach is to undertake a stormwater management design, which will not exceed the allowable runoff for the site, as specified by the previously approved Palladium Auto Park Stormwater Management Report (JLR 15941-04) prepared by J. L. Richards & Associates Limited, dated April 2003. The maximum allowable release rate for the site is 84 L/s (2 x 42 L/s). Refer to the JLR SWM Report.

4.0 POST-DEVELOPMENT CONDITIONS

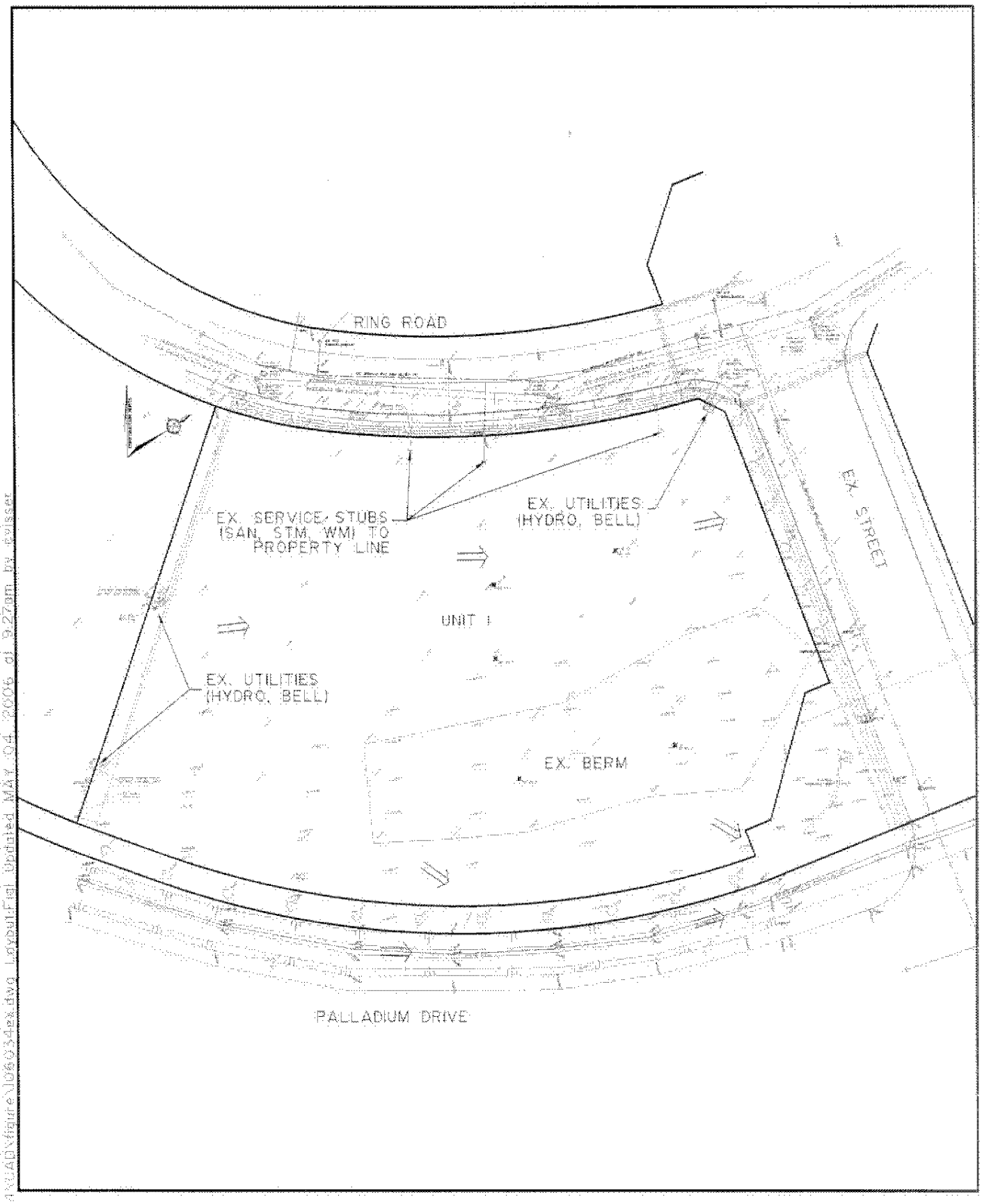
4.1 DEVELOPMENT PROPOSAL

Due to the extent of hard surfaced areas and limited allowable release rate from the site, all post-development runoff in excess of the allowable quantity will be stored and controlled on site, prior to being directed to the existing SWM pond. This will be required for the 1:5 year design event up to and including the 1:100 year design event.

On-site stormwater quantity control, including rooftop and parking lot detention will be achieved by the use of controlled flow roof drains and inlet control devices (ICD) at the outlet manholes.

4.2 POST-DEVELOPMENT FLOW

The post-development flow from the site includes direct runoff from the landscaped areas adjacent to the property lines, controlled flow from the building roof and from the paved parking lot areas. Refer to the attached plans (106034-SWM, 106034-GP and 106034-GR) for details.



NOVATECH
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CONSULTANTS LTD.
ENGINEERS & PLANNERS
Suite 200, 240 Michael Cowpland Drive
Kanata, Ontario, Canada
K2M 1P6
Telephone
Fax
Email

CAPTIAL DOGE CHRYSLER
PALLADIUM DRIVE

EXISTING CONDITIONS PLAN

106034 NOT TO SCALE FIGURE 1

4.2.1 AREA A-1: DIRECT RUNOFF

The direct runoff from the site, was calculated using the Rational Method to be 2.0 L/s for the 1:5 year design event and 3.3 L/s for the 1:100 year design event (refer to Appendix A for detailed calculations and 106034-SWM for drainage areas).

4.2.2 AREAS A-2, A-3 & A-4

Consequently, the allowable flow remaining for Areas A-2, A-3 and A-4 is the allowable release rate for the entire site less the uncontrolled direct runoff. The following table indicates the allowable release rate for the entire site, the direct runoff from Area A-1, as well as the allowable release rate for the remainder of the site for both the 1:5 year and 1:100 year design events.

Design Event	Pre-Development	Post-Development	
	Allowable Release Rate for the Site (L/s)	Direct Runoff Area A-1 (L/s)	Maximum Allowable Flow for Areas A-2, A-3 & A-4 (L/s)
1:5 yr	84.0	2.0	82.0
1:100 yr	84.0	3.3	80.7

A portion of the maximum allowable flow for Areas A-2, A-3 and A-4 will be allotted to each drainage area based on relative size of the area, storage available and relative ponding depth. The controlled flow for these drainage areas is described in the following sections of the report.

4.2.3 AREA A-2: BUILDING ROOF

The post-development flow from Area A-2, was calculated using the Rational Method to be 42.2 L/s for the 1:5 year design event and 72.1 L/s for the 1:100 year design event, which exceeds the maximum allowable flow for this area (refer to Appendix A for detailed calculations and 106034-SWM for drainage areas). Flow from the building roof will be controlled by a total of 6 roof drains to a maximum of 7.2 Ls (or 1.2 L/s per drain).

The Modified Rational Method was used to determine the storage volume required for the various rooftop drainage areas. Based on a controlled flow of 1.2 L/s per drain, the ponding depth on the roof above the drains will range from approximately 0.11m to 0.12m for the 1:5 year design event and from 0.13m to 0.15m for the 1:100 year design event (Refer to the Appendix B and to the Roof Drain Table shown on 106034-GP for details).

4.2.4 AREA A-3: PAVED PARKING LOT + LANDSCAPED AREAS

The post-development flow from Area A-3, which will sheet drain towards the various CBs and CBMHs, was calculated using the Rational Method to be 137.9 L/s for the 1:5 year design event and 235.4 L/s for the 1:100 year design event, which exceeds the maximum allowable flow for this area (refer to Appendix A for detailed calculations and 106034-SWM for drainage areas).

The Modified Rational Method was used to determine the storage volume required for this area. Since the storage requirement for the 1:100 year design event is greater than the storage requirement for the 1:5 year design event and the allowable flow for the 1:100 year design event is less than the allowable flow for the 1:5 year design event, it was used to size the plug type orifice control located in the outlet pipe of STM MH 1. Based on a release rate of 68.8 L/s, the required storage volume for the 1:100 year design event was calculated to be approximately 202 m^3 (refer to Appendix B for detailed calculations). The paved parking area around the various CBs and CBMHs, including the structures themselves, provide a volume of approximately 398 m^3 up to an elevation of 102.80m. The required storage volume for the 1:100 year design event will be stored within the structures and on the surface of the parking lot, resulting in a water elevation of 102.74m. The required storage volume for the 1:5 year design event, approximately 86 m^3, will be stored within the structures and on the surface of the parking lot, resulting in a water elevation of 102.68m. Refer to Appendix B for detailed calculations.

Required storage volumes, maximum storage provided, ponding elevations and controlled design flows are shown in the following table.

Design Event	Storage Volume (m^3)		Ponding Elevation (m)	Controlled Design Flow (L/s)
	Required (m^3)	Max Provided (m^3)		
1:5 year	86	398	102.68	67.9
1:100 year	202	398	102.74	68.8

A 143mm diameter plug type orifice will be installed in the outlet pipe of STM MH 1 to control the release rate to 68.8 L/s for the 1:100 year design event, with a design head of 2.43m. The same orifice will also control the 1:5 year flow, releasing it at 67.9 L/s, with a design head of 2.37m (refer to Appendix A for orifice control sample calculations).

4.2.5 AREA A-4: PAVED PARKING LOT + LANDSCAPED AREAS

The post-development flow from Area A-4, which will sheet drain towards the CB and various CBMHs, was calculated using the Rational Method to be 57.2 L/s for the 1:5 year design event and 97.6 L/s for the 1:100 year design event, which exceeds the maximum allowable flow for this area (refer to Appendix A for detailed calculations and 106034-SWM for drainage areas).

The Modified Rational Method was used to determine the storage volume required for this area. Based on a release rate of 4.7 L/s, the required storage volume for the 1:100 year design event was calculated to be approximately 149 m^3, (refer to Appendix B for detailed calculations). The paved parking area around the CB and the various CBMHs, including the structures themselves, provide a volume of approximately 208 m^3 up to an elevation of 102.75m. The required storage volume for the 1:100 year design event will be stored within the structures and on the surface of the parking lot, resulting in a water elevation of 102.71m. The required storage volume for the 1:5 year design event, approximately 80 m^3, will be stored within the structures and on the surface of the parking lot, resulting in a water elevation of 102.66m. Refer to Appendix B for detailed calculations.

Required storage volumes, maximum storage provided, ponding elevations and controlled design flows are shown in the following table.

Design Event	Storage Volume (m^3)		Ponding Elevation (m)	Controlled Design Flow (L/s)
	Required (m^3)	Max Provided (m^3)		
1:5 year	80	208	102.66	4.7
1:100 year	149	208	102.71	4.7

A Hydrovex model 75 SVHV-1 will be installed in the outlet pipe of CBMH 4 to control the release rate to 4.7 L/s for the 1:100 year design event, with a design head of 2.36m. The same Hydrovex will also control the 1:5 year flow, releasing it at 4.7 L/s, with a design head of 2.31m (refer to Appendix C for information on the Hydrovex).

4.2.6 AREA A-4: PROPOSED FLOW

The following table indicates the allowable release rate for the entire site, the direct runoff from Area A-1 and the controlled design flow from Areas A-2, A-3 and A-4 as well as the total flow from the site for both the 1:5 year and 1:100 year design events.

Design Event	Pre-Development	Post-Development				
	Allowable Release Rate for the Site (L/s)	Direct Runoff A-1:(L/s)	Area A-2:(L/s)	Area A-3:(L/s)	Area A-4:(L/s)	Total Site Flow (L/s)
1:5 yr	84.0	2.0	7.2	67.9	4.7	81.8
1:100 yr	84.0	3.3	7.2	68.8	4.7	84.0

4.3 MAJOR OVERLAND FLOW ROUTE

In the case of a major rainfall event exceeding the design events provided for, the stormwater located within the paved areas in the northern portion of the site will pond to a maximum depth of 0.3m before overflowing into lower downstream drainage areas

and eventually spilling through the main entrance onto the Ring Road. The stormwater located within the paved areas in the southern portion of the site will pond to a maximum depth of 0.3m before overflowing into lower downstream drainage areas and eventually spilling through the curb cut near the garbage enclosure and spill into the existing drainage ditch that runs along Palladium Drive. The major system is shown on Drawing 106034-SWM.

5.0 EROSION AND SEDIMENT CONTROL MEASURES

Temporary erosion and sediment control measures will be implemented during construction in accordance with the "Guidelines on Erosion and Sediment Control for Urban Construction Sites", (Government of Ontario, May 1987). These measures include:

- Placement of filter fabric under all catchbasins and maintenance hatches
- Silt fences around the area under construction placed as per OPSS 577 and OPSD 219.110

The proposed erosion and sediment control measures will be implemented prior to construction and will remain in place during all phases of construction. Regular inspection and maintenance of the erosion control measures will be under taken.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions are as follows:

- On-site stormwater quantity control is required and will be achieved by a combination of rooftop storage and paved parking lot surface detention. The existing SWM detention pond located near the northeast corner of the 14-lot Palladium Auto Park will provide quality control for the site runoff.
- Water quantity control on the building roof (Area A-2) will be achieved by the use of controlled flow roof drains. A total of 6 drains will control the flow from the roof to a maximum of 1.2 L/s per drain (or 7.2 L/s).
- Water quantity control for the paved parking lot (Area A-3) will be achieved by the use of a 143mm diameter plug type orifice installed within the outlet pipe of STM MH 1 to control the release rate for the 1:100 year design event to 68.8 L/s, with a head of water of 2.43m. The same plug type orifice will also control the 1:5 year design event, releasing it to 67.9 L/s, with a head of water of 2.37m. Stormwater within this area will pond to an elevation of 102.68m for the 1:5 year design event and to 102.74m for the 1:100 year design event.

- Water quantity control within the paved parking lot (Area A-4) will be achieved by the use of a Hydrovex model 75 SVHV-1 installed within the outlet pipe of CBMH 4 to control the release rate for the 1:100 year design event to 4.7 L/s, with a head of water of 2.36m. The same Hydrovex will also control the 1:5 year design event, releasing it to 4.7 L/s, with a head of water of 2.31m. Stormwater within this area will pond to an elevation of 102.66m for the 1:5 year design event and to 102.71m for the 1:100 year design event.

- The total post-development flow from the site (Areas A-1, A-2, A-3 and A-4) will be controlled to the maximum allowable 84.0 L/s for the 1:100 year design event and slightly over-controlled to 81.8 L/s for the 1:5 year design event.

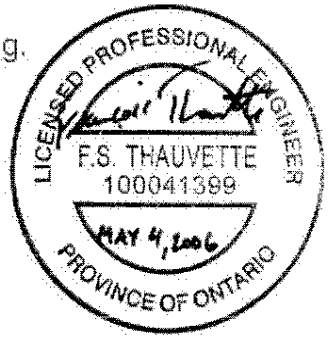
- Temporary erosion and sediment control measures will be implemented during construction.

It is recommended that the proposed stormwater management system be approved for implementation.

NOVATECH ENGINEERING CONSULTANTS LTD.

Prepared by:

F. Thauvette, P. Eng.



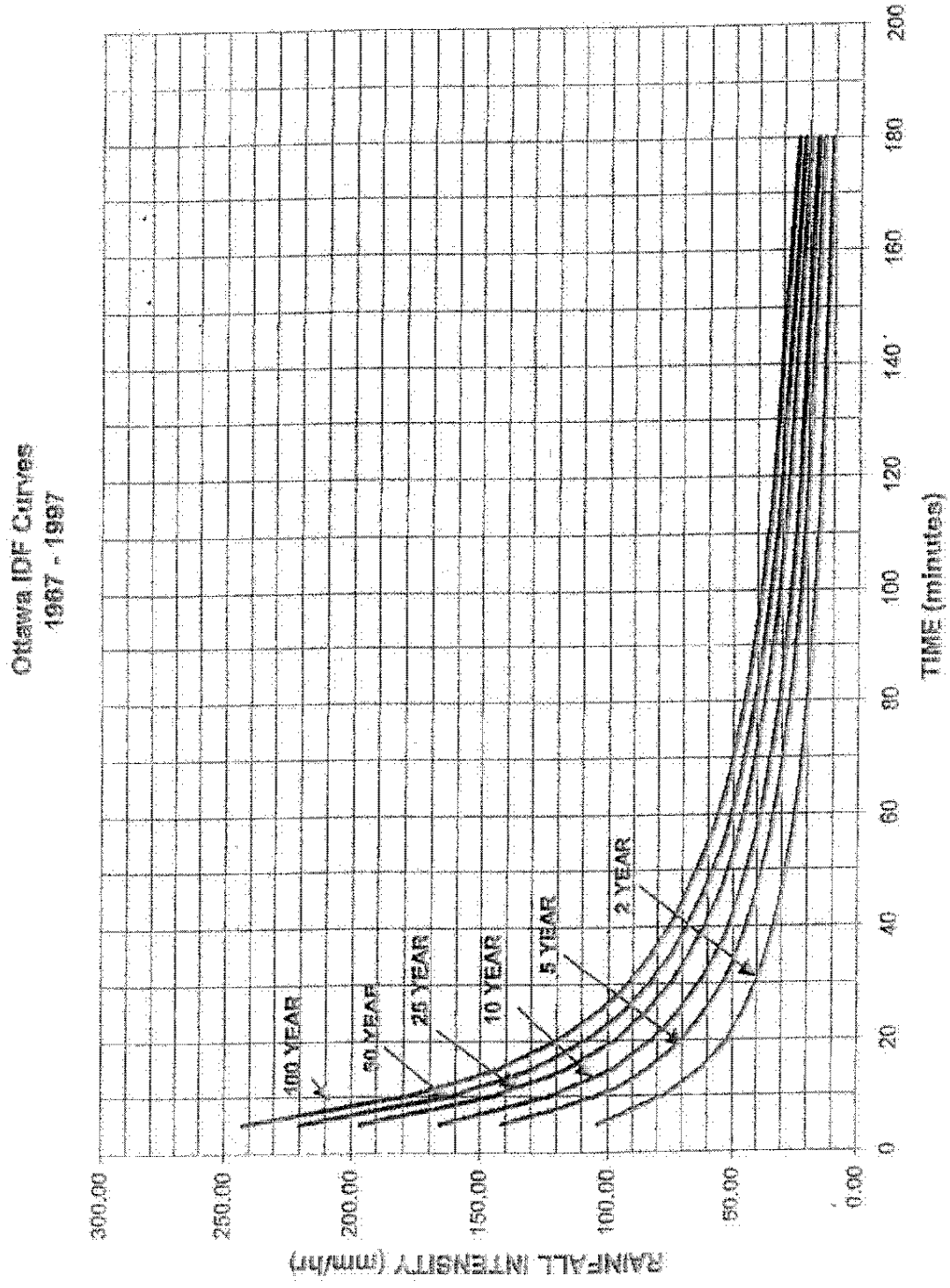
Reviewed by:

R.S. Cebryk, P. Eng.

APPENDIX A

IDF CURVES, RATIONAL METHOD, RUNOFF, ORIFICE CALCULATIONS

APPENDIX 5-A OTTAWA INTENSITY DURATION FREQUENCY (IDF) CURVE



IDF curve equations (Intensity in mm/hr)

100 year Intensity	$= 1735.688 / (\text{Time in min} + 6.014)^{0.820}$
50 year Intensity	$= 1569.580 / (\text{Time in min} + 6.014)^{0.820}$
25 year Intensity	$= 1402.884 / (\text{Time in min} + 6.018)^{0.819}$
10 year Intensity	$= 1174.184 / (\text{Time in min} + 6.014)^{0.816}$
5 year Intensity	$= 998.071 / (\text{Time in min} + 6.053)^{0.814}$
2 year Intensity	$= 732.951 / (\text{Time in min} + 6.199)^{0.810}$

The IDF curves based on the above equations can be found in Appendix 5-A.

5.4.3 Design Storms

Computer modeling requires the input of a design storm. The design storm is then used to generate a runoff hydrograph to determine how an area will respond and perform. Numerous types of design storms can be used ranging from historical storms to IDF curve-derived storms. This section briefly discusses the various types of design storms.

5.4.3.1 Application to Hydrologic Models

The design storms presented herein are meant to be used in hydrologic models to simulate runoff from events of various return frequencies. When choosing a design storm, the designer should perform a sensitivity analysis using various storms and use the one that is most conservative.

As noted below, the Chicago distribution is one of the most used storms for urban runoff applications. When dealing with rural areas, the SCS Type II storm is preferred. The AES storm can also be used for urban applications; however, care must be taken when choosing the type of distribution. As a rule of thumb, the 30% distribution should be used unless historical data proves otherwise.

When using a design storm, the designer must be careful in choosing the right storm time step. The storm's duration should be greater than twice the basin's time of concentration. A time step that is too small may overestimate peak flows. Should it be required to maintain a storm time step less than 10 minutes, consideration should be given to averaging the peak intensities to a 10-minute or greater average.

Some historical storms are also presented below and are to be used as a check of how various systems function during extreme events. It is not the intent of these guidelines to require that these storms be used for design purposes.

5.4.3.2 Chicago Design Storm

The Chicago storm distribution was developed by C.J. Keifer and H. Chu and is based on 25 years of rainfall record in the city of Chicago. This storm distribution, which is derived with IDF curves, is generally applied to urban basins where peak runoff rates are largely influenced by peak rainfall intensities.

RATIONAL METHOD

The Rational Method was used to determine both the allowable runoff as well as the post-development runoff for the proposed site. The equation is as follows:

$Q=2.78\ CIA$

Where:
Q is the runoff in L/s
C is the weighted runoff coefficient*
I is the rainfall intensity in mm/hr**
A is the area in hectares

*The weighted runoff coefficient is determined for each of the catchment areas as follows:

$$C = \frac{(A_{perv} \times C_{perv}) + (A_{imp} \times C_{imp})}{A_{tot}}$$

Where:
A_{perv} is the pervious area in hectares
C_{perv} is the pervious area runoff coefficient (C_{perv}=0.20)
A_{imp} is the impervious area in hectares
C_{imp} is the impervious area runoff coefficient (C_{imp}=0.90)
A_{tot} is the catchment area (A_{perv} + A_{imp}) in hectares

** The rainfall intensity is taken from the City of Ottawa IDF Curves with a time of concentration of 20 min (refer to attached IDF Curves) as per the previous JLR SWM Report.

POST-DEVELOPMENT FLOW

AREA A-1: DIRECT RUNOFF

Drainage Area (A) = 0.05 ha
Impervious Area = 0.05 ha
Pervious Area = NA
Runoff Coefficient (C) = 0.20
Intensity (I_5) = 70.3 mm/hr
Intensity (I_{100}) = 120.0 mm/hr

Q_5= 2.78 CIA
Q_5= 2.78 x 0.20 x 70.3 x 0.07
Q_5= 2.0 L/s

Q_{100}= 2.78 CIA
Q_{100}= 2.78 x 0.20 x 120.0 x 0.05
Q_{100}= 3.3 L/s

AREA A-2: BUILDING ROOF

Drainage Area (A) = 0.24 ha
Impervious Area = 0.24 ha
Pervious Area = NA
Runoff Coefficient (C) = 0.90
Intensity (I_5) = 70.3 mm/hr
Intensity (I_{100}) = 120.0 mm/hr

Q_5= 2.78 CIA
Q_5= 2.78 x 0.90 x 70.3 x 0.24
Q_5= 42.2 L/s

Q_{100}= 2.78 CIA
Q_{100}= 2.78 x 0.90 x 120.0 x 0.24
Q_{100}= 72.1 L/s

Flow from the building roof will be controlled by a total of 6 roof drains to a maximum of 1.2 L/s per drain. The total flow from the building roof will therefore be 7.2 L/s (6 x 1.2 L/s).

AREA A-3: PAVED PARKING LOT + LANDSCAPED AREAS

Drainage Area (A) = 0.83 ha
Impervious Area = 0.77 ha
Pervious Area = 0.06 ha
Runoff Coefficient (C) = 0.85
Intensity (I_5) = 70.3 mm/hr
Intensity (I_{100}) = 120.0 mm/hr

Q_5= 2.78 CIA
Q_5= 2.78 x 0.85 x 70.3 x 0.83
Q_5= 137.9 L/s

Q_{100}= 2.78 CIA
Q_{100}= 2.78 x 0.85 x 120.0 x 0.83
Q_{100}= 235.4 L/s

AREA A-4: PAVED PARKING LOT + LANDSCAPED AREAS

Drainage Area (A) = 0.38 ha
Impervious Area = 0.31 ha
Pervious Area = 0.07 ha
Runoff Coefficient (C) = 0.77
Intensity (I_5) = 70.3 mm/hr
Intensity (I_{100}) = 120.0 mm/hr

Q_5= 2.78 CIA
Q_5= 2.78 x 0.77 x 70.3 x 0.38
Q_5= 57.2 L/s

Q_{100}= 2.78 CIA
Q_{100}= 2.78 x 0.77 x 120.0 x 0.38
Q_{100}= 97.6 L/s

ORIFICE CONTROLS

The following equation is used to size the orifice, given a specified release rate and design head.

$Q = 0.62 \times A \times (2gh)^{1/2}$

Where:
Q is the release rate in m^3/s
A is the orifice area in m^2
g is the acceleration due to gravity, 9.81 m/s^2
h is the head of water in m
d is the diameter of the orifice in m

AREA A-3: PAVED PARKING LOT + LANDSCAPED AREAS

A 143mm diameter orifice will be installed in the outlet pipe of STM MH 1 to control the release rate to 68.8 L/s for the 1:100 year design event. The head is calculated from the water elevation to the centreline of the orifice and was calculated to be 2.43m (2.50m – 0.07m). Refer to Appendix B for Stage Storage Curves.

$Q = 0.62 \times A \times (2gh)^{1/2}$
$0.0688 = 0.62 \times A \times (2 \times 9.81 \times 2.43)^{1/2}$
$A = 0.01607$
$A = 3.14 \times d^2/4$
$d = 0.14304$, therefore use a 143mm orifice

The area of the 143mm diameter orifice = $0.01606m^2$
The release rate for the 1:100 year design event was calculated using a 143mm diameter orifice to be 68.8 L/s. Iterative calculations were done to determine the release rate for the 1:5 year design events. The same 143mm diameter orifice will release the 1:5 year design event at the rate of 67.9 L/s with a design head of 2.37m (2.44m – 0.07m).

$Q_5 = 0.62 \times A \times (2gh)^{1/2}$
$Q_5 = 0.62 \times 0.01606 \times (2 \times 9.81 \times 2.37)^{1/2}$
$Q_5 = 0.067.9$ or 67.9 L/s

APPENDIX B

SWM CALCULATIONS

PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2: ROOF DRAIN 1

OTTAWA IDF CURVE

Area =	0.050	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	10.54	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	17.66	16.46	4.94
10	104.19	13.03	11.83	7.10
15	83.56	10.45	9.25	8.33
20	70.25	8.79	7.59	9.11
25	60.90	7.62	6.42	9.63
30	53.93	6.75	5.55	9.98
35	48.52	6.07	4.87	10.23
40	44.18	5.53	4.33	10.39
45	40.63	5.08	3.88	10.48
50	37.65	4.71	3.51	10.53
55	35.12	4.39	3.19	10.54
60	32.94	4.12	2.92	10.52
65	31.04	3.88	2.68	10.47

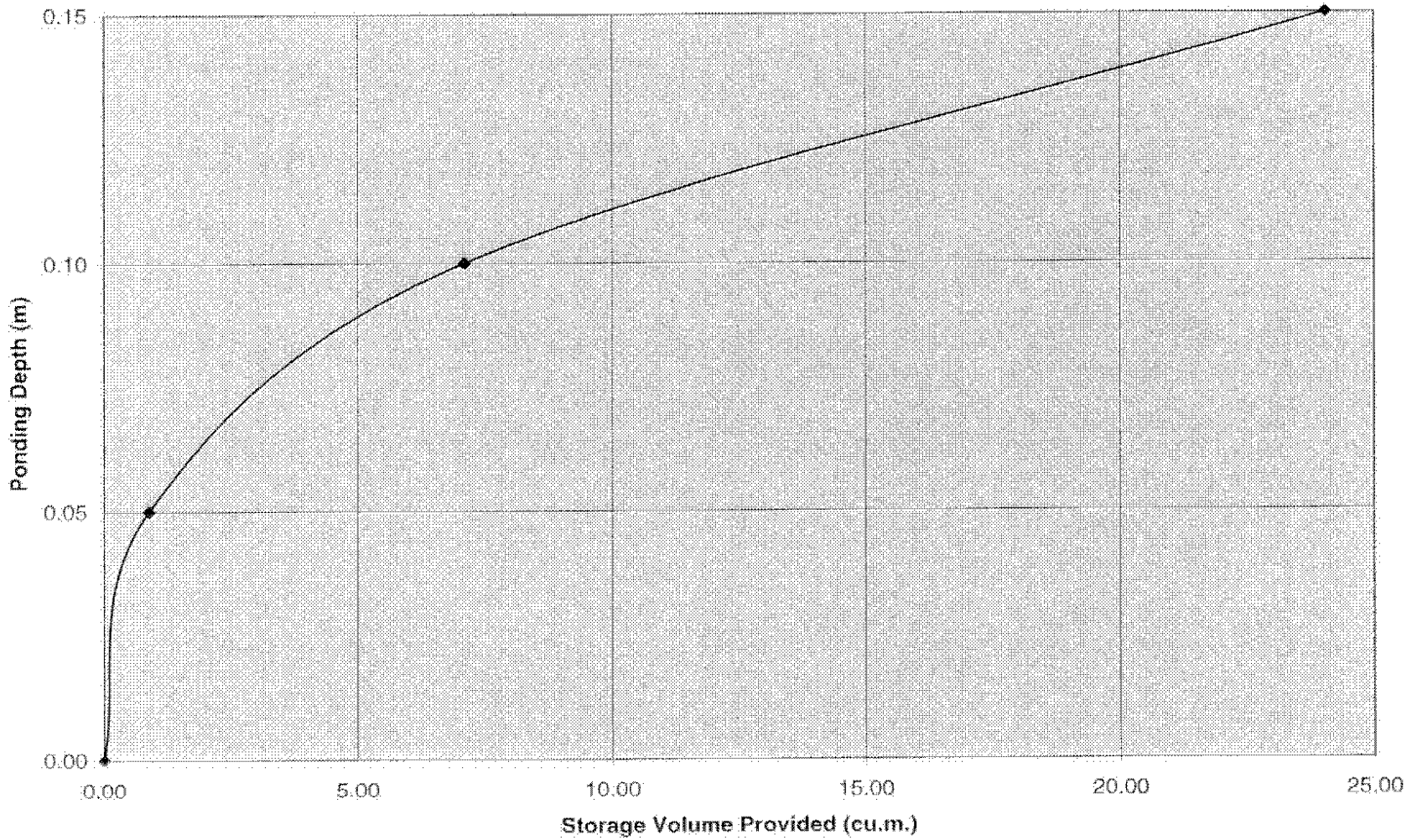
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2: ROOF DRAIN 1

OTTAWA IDF CURVE

Area =	0.050	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	21.01	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	30.36	29.16	8.75
10	178.56	22.34	21.14	12.68
15	142.89	17.88	16.68	15.01
20	119.95	15.01	13.81	16.57
25	103.85	12.99	11.79	17.69
30	91.87	11.49	10.29	18.53
35	82.58	10.33	9.13	19.17
40	75.15	9.40	8.20	19.68
45	69.05	8.64	7.44	20.08
50	63.95	8.00	6.80	20.40
55	59.62	7.46	6.26	20.65
60	55.89	6.99	5.79	20.85
65	52.65	6.59	5.39	21.01

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-2: RD 1 Stage Storage Curve - Roof Top Storage



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PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2: ROOF DRAIN 2

OTTAWA IDF CURVE

Area =	0.047	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	9.68	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	16.60	15.40	4.62
10	104.19	12.25	11.05	6.63
15	83.56	9.83	8.63	7.76
20	70.25	8.26	7.06	8.47
25	60.90	7.16	5.96	8.94
30	53.93	6.34	5.14	9.25
35	48.52	5.71	4.51	9.46
40	44.18	5.20	4.00	9.59
45	40.63	4.78	3.58	9.66
50	37.65	4.43	3.23	9.68
55	35.12	4.13	2.93	9.67
60	32.94	3.87	2.67	9.63
65	31.04	3.65	2.45	9.56

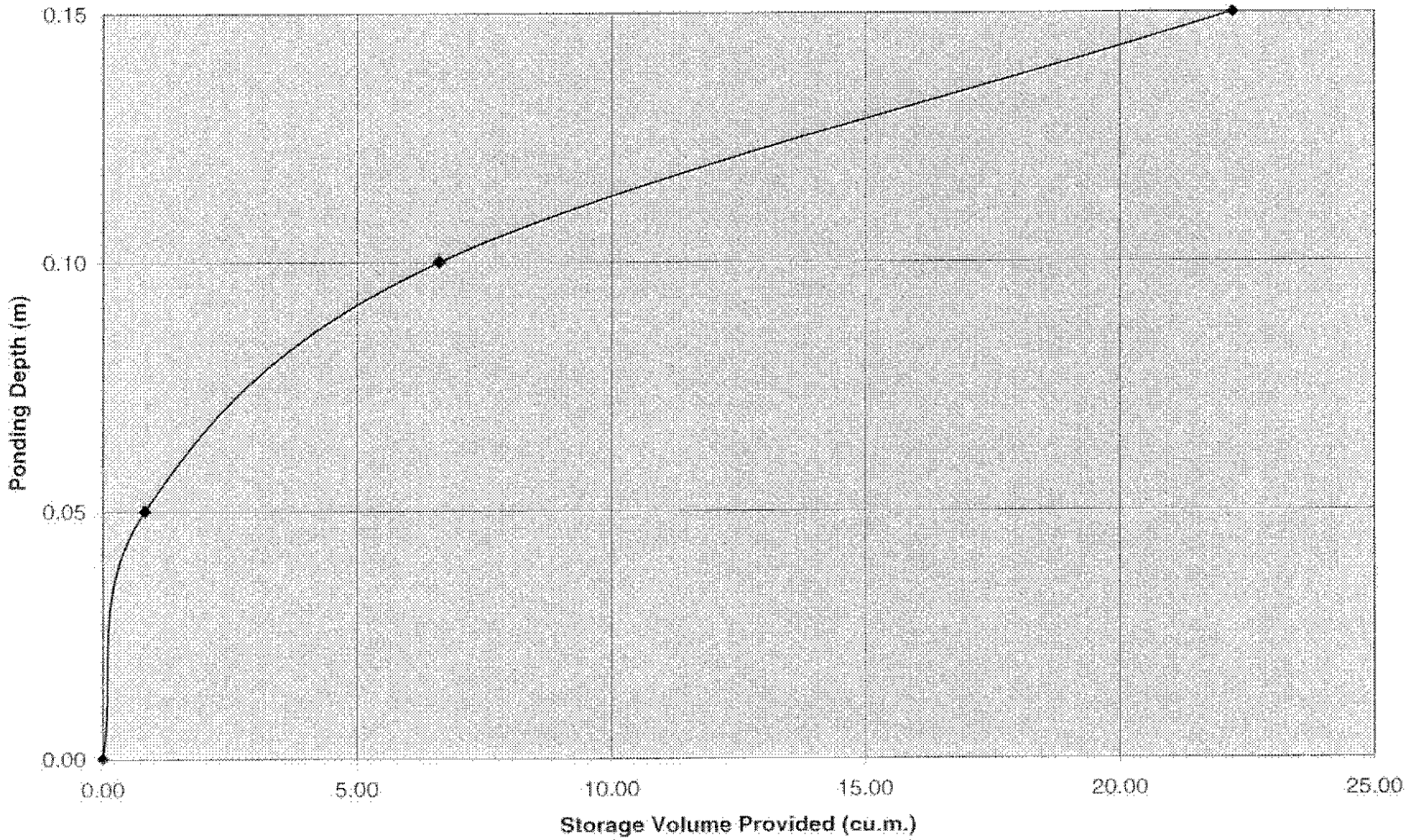
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2: ROOF DRAIN 2

OTTAWA IDF CURVE

Area =	0.047	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	19.46	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	28.54	27.34	8.20
10	178.56	21.00	19.80	11.88
15	142.89	16.80	15.60	14.04
20	119.95	14.11	12.91	15.49
25	103.85	12.21	11.01	16.52
30	91.87	10.80	9.60	17.29
35	82.58	9.71	8.51	17.87
40	75.15	8.84	7.64	18.33
45	69.05	8.12	6.92	18.68
50	63.95	7.52	6.32	18.96
55	59.62	7.01	5.81	19.18
60	55.89	6.57	5.37	19.34
65	52.65	6.19	4.99	19.46

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-2: RD 2 Stage Storage Curve - Roof Top Storage



PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2: ROOF DRAIN 3

OTTAWA IDF CURVE

Area =	0.044	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	8.84	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	15.54	14.34	4.30
10	104.19	11.47	10.27	6.16
15	83.56	9.20	8.00	7.20
20	70.25	7.73	6.53	7.84
25	60.90	6.70	5.50	8.26
30	53.93	5.94	4.74	8.53
35	48.52	5.34	4.14	8.70
40	44.18	4.86	3.66	8.79
45	40.63	4.47	3.27	8.84
50	37.65	4.15	2.95	8.84
55	35.12	3.87	2.67	8.80
60	32.94	3.63	2.43	8.74
65	31.04	3.42	2.22	8.65

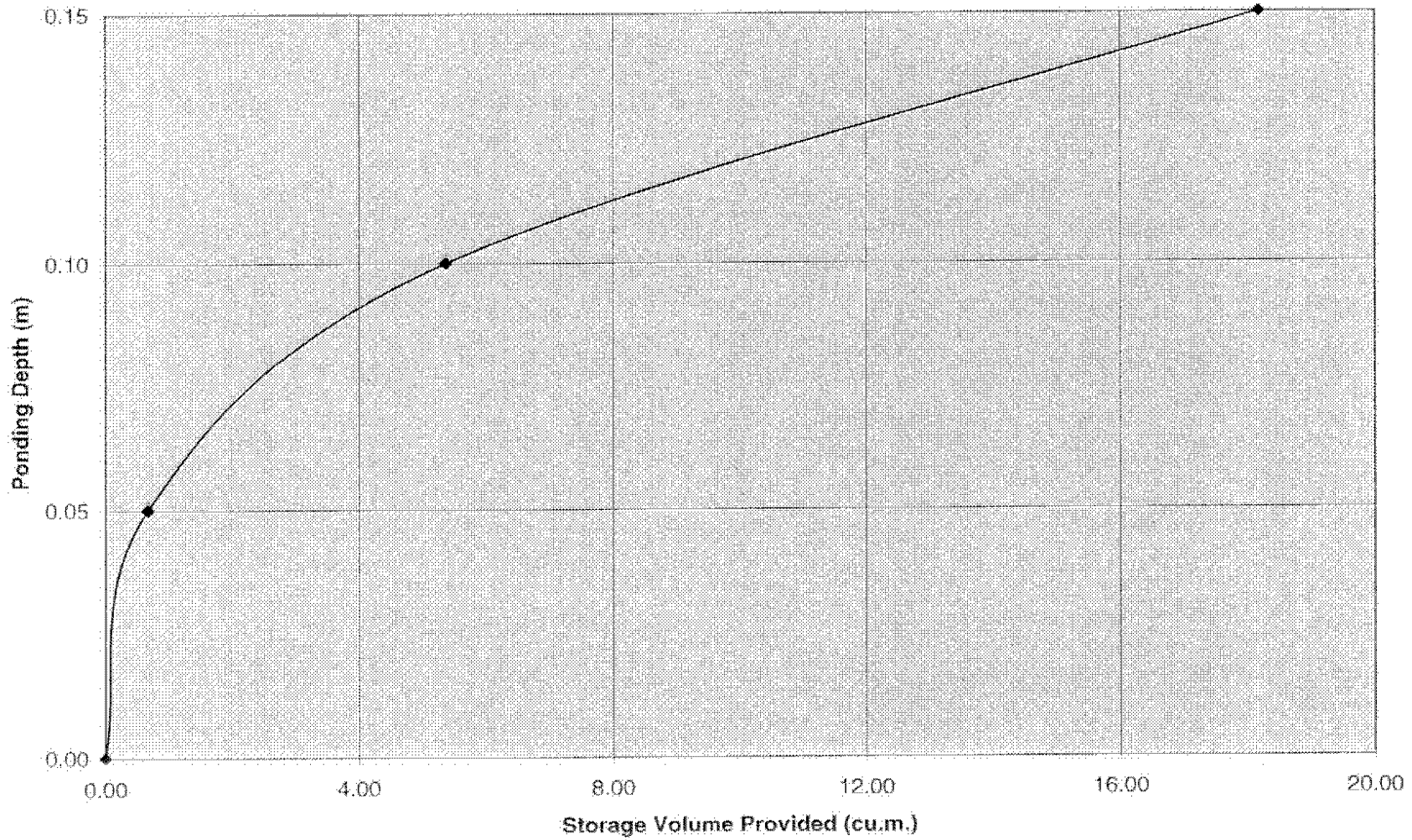
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2: ROOF DRAIN 3

OTTAWA IDF CURVE

Area =	0.044	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	17.92	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	26.72	25.52	7.66
10	178.56	19.66	18.46	11.07
15	142.89	15.73	14.53	13.08
20	119.95	13.21	12.01	14.41
25	103.85	11.43	10.23	15.35
30	91.87	10.11	8.91	16.04
35	82.56	9.09	7.89	16.57
40	75.15	8.27	7.07	16.97
45	69.05	7.60	6.40	17.28
50	63.95	7.04	5.84	17.52
55	59.62	6.56	5.36	17.70
60	55.89	6.15	4.95	17.83
65	52.65	5.80	4.60	17.92

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-2: RD 3 Stage Storage Curve - Roof Top Storage



PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2: ROOF DRAIN 4

OTTAWA IDF CURVE

Area =	0.038	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	7.20	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	13.42	12.22	3.67
10	104.19	9.91	8.71	5.22
15	83.56	7.94	6.74	6.07
20	70.25	6.68	5.48	6.58
25	60.90	5.79	4.59	6.88
30	53.93	5.13	3.93	7.07
35	48.52	4.61	3.41	7.17
40	44.18	4.20	3.00	7.20
45	40.63	3.86	2.66	7.19
50	37.65	3.58	2.38	7.14
55	35.12	3.34	2.14	7.06
60	32.94	3.13	1.93	6.96
65	31.04	2.95	1.75	6.83

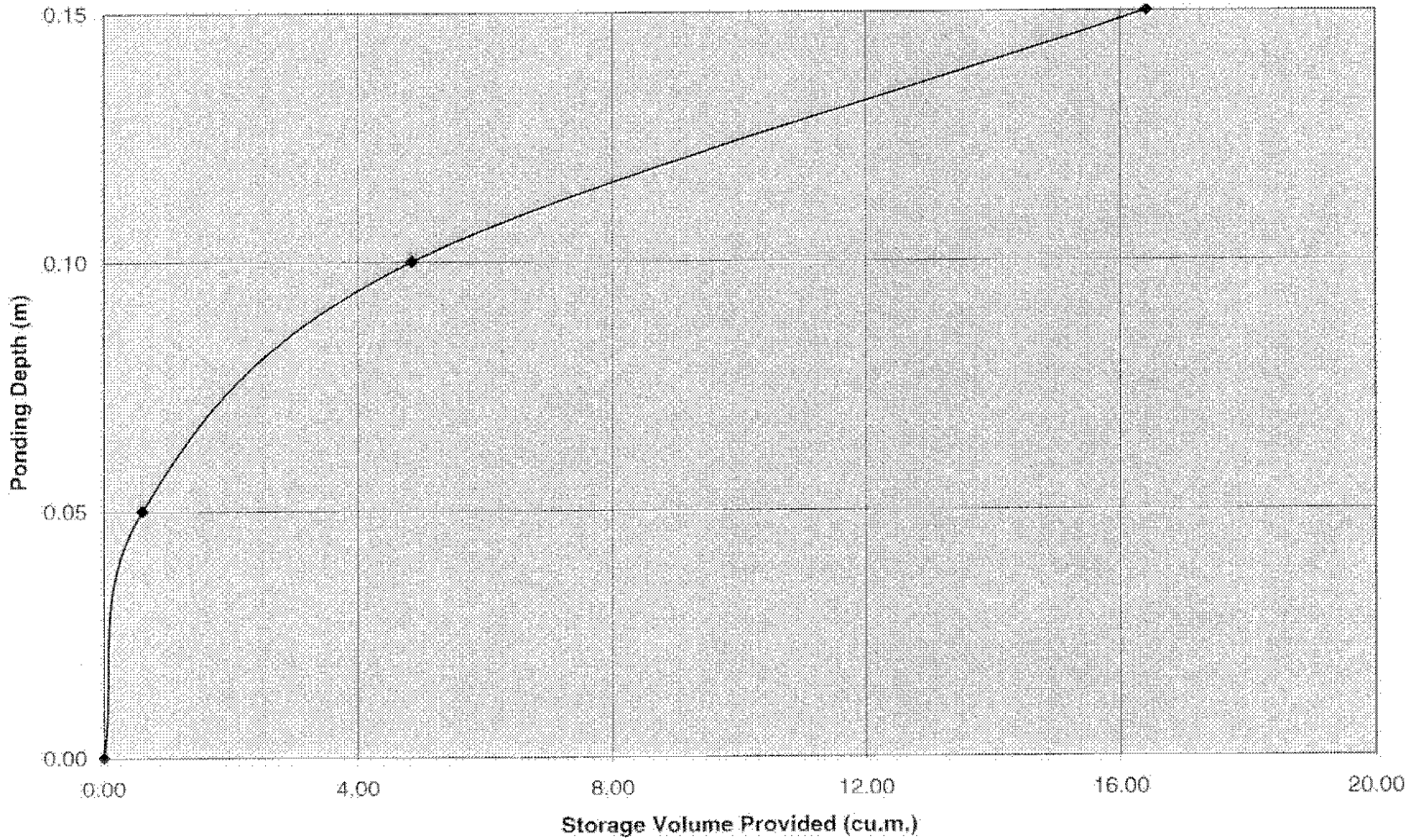
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2: ROOF DRAIN 4

OTTAWA IDF CURVE

Area =	0.038	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	14.84	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	23.08	21.88	6.56
10	178.56	16.98	15.78	9.47
15	142.89	13.59	12.39	11.15
20	119.95	11.40	10.20	12.25
25	103.85	9.87	8.67	13.01
30	91.87	8.73	7.53	13.56
35	82.58	7.85	6.65	13.97
40	75.15	7.14	5.94	14.27
45	69.05	6.57	5.37	14.49
50	63.95	6.08	4.88	14.64
55	59.62	5.67	4.47	14.75
60	55.89	5.31	4.11	14.81
65	52.65	5.01	3.81	14.84

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-2: RD 4 Stage Storage Curve - Roof Top Storage



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PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2: ROOF DRAIN 5

OTTAWA IDF CURVE

Area =	0.032	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	5.64	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	11.30	10.10	3.03
10	104.19	8.34	7.14	4.29
15	83.56	6.69	5.49	4.94
20	70.25	5.62	4.42	5.31
25	60.90	4.88	3.68	5.51
30	53.93	4.32	3.12	5.61
35	48.52	3.88	2.68	5.64
40	44.18	3.54	2.34	5.61
45	40.63	3.25	2.05	5.54
50	37.65	3.01	1.81	5.44
55	35.12	2.81	1.61	5.32
60	32.94	2.64	1.44	5.18
65	31.04	2.49	1.29	5.01

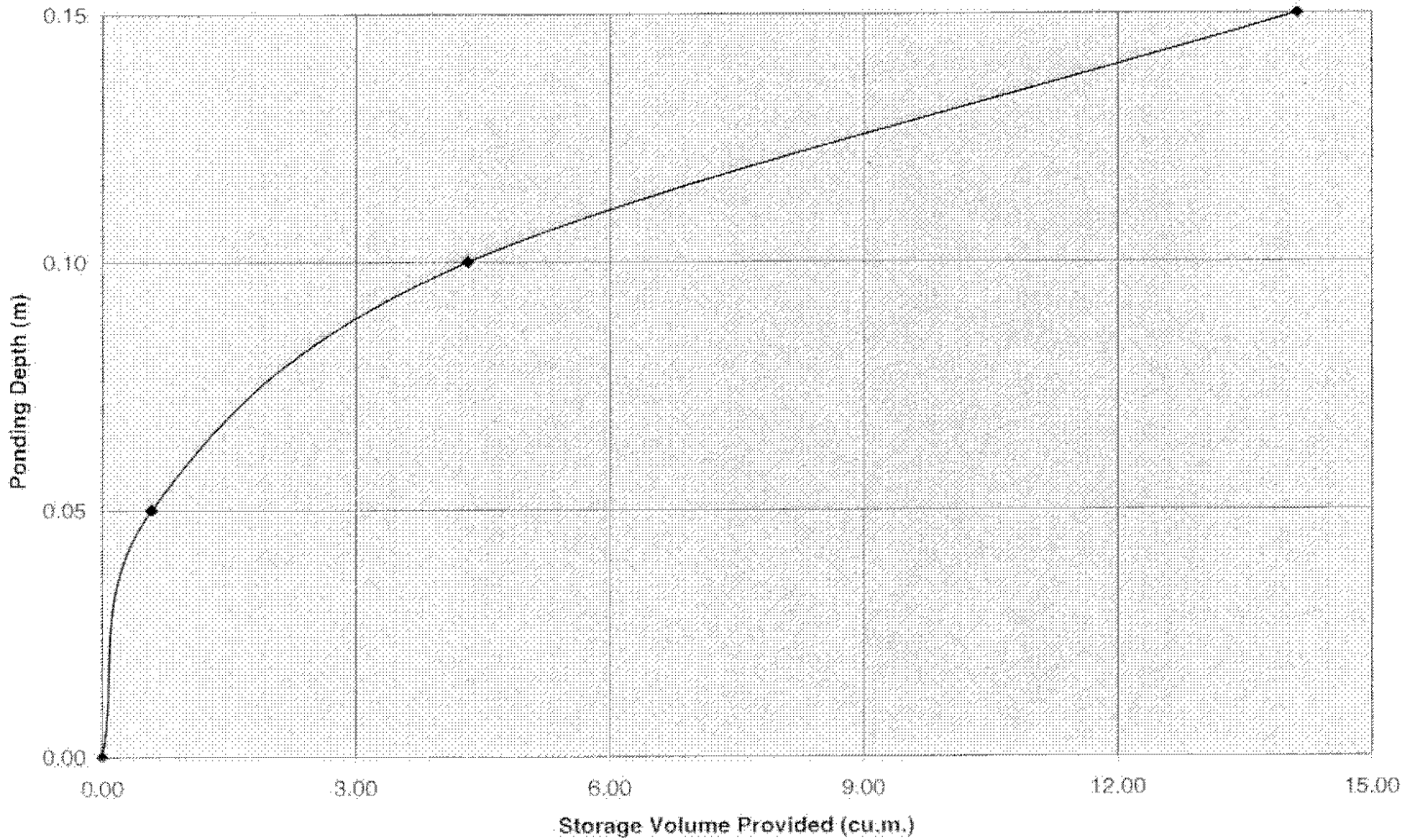
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2: ROOF DRAIN 5

OTTAWA IDF CURVE

Area =	0.032	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	11.79	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	19.43	18.23	5.47
10	178.56	14.30	13.10	7.86
15	142.89	11.44	10.24	9.22
20	119.95	9.60	8.40	10.08
25	103.85	8.31	7.11	10.67
30	91.87	7.36	6.16	11.08
35	82.58	6.61	5.41	11.36
40	75.15	6.02	4.82	11.56
45	69.05	5.53	4.33	11.69
50	63.95	5.12	3.92	11.76
55	59.62	4.77	3.57	11.79
60	55.89	4.48	3.28	11.79
65	52.65	4.22	3.02	11.76

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-2: RD 5 Stage Storage Curve - Roof Top Storage



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PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2: ROOF DRAIN 6

OTTAWA IDF CURVE

Area =	0.025	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	3.91	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	8.83	7.63	2.29
10	104.19	6.52	5.32	3.19
15	83.56	5.23	4.03	3.62
20	70.25	4.39	3.19	3.83
25	60.90	3.81	2.61	3.91
30	53.93	3.37	2.17	3.91
35	48.52	3.03	1.83	3.85
40	44.18	2.76	1.56	3.75
45	40.63	2.54	1.34	3.62
50	37.65	2.36	1.16	3.47
55	35.12	2.20	1.00	3.29
60	32.94	2.06	0.86	3.10
65	31.04	1.94	0.74	2.89

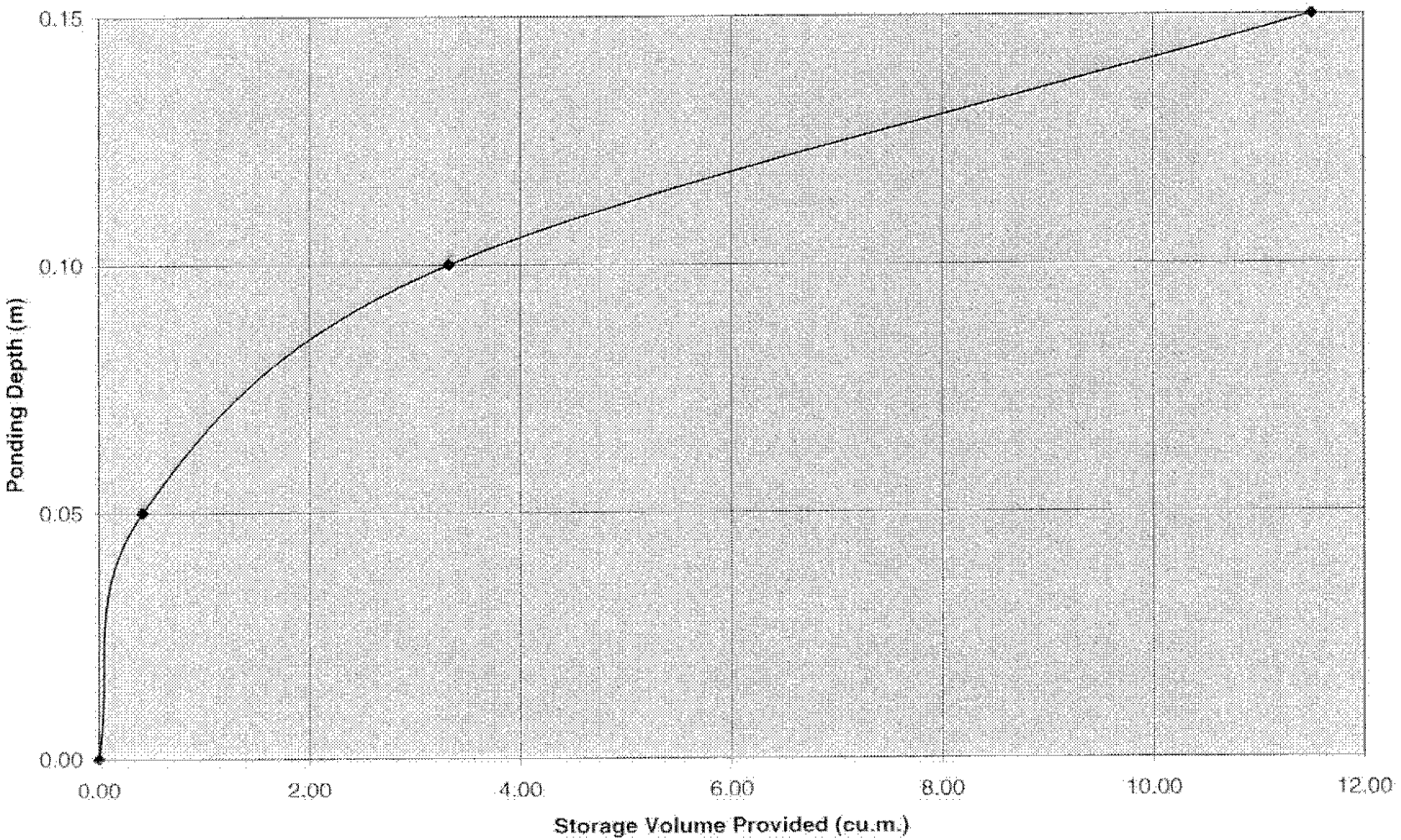
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2: ROOF DRAIN 6

OTTAWA IDF CURVE

Area =	0.025	ha	Qallow =	1.20	L/s
C =	0.90		Vol(max) =	8.42	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	15.18	13.98	4.19
10	178.56	11.17	9.97	5.98
15	142.89	8.94	7.74	6.96
20	119.95	7.50	6.30	7.56
25	103.85	6.50	5.30	7.94
30	91.87	5.75	4.55	8.18
35	82.58	5.17	3.97	8.33
40	75.15	4.70	3.50	8.40
45	69.05	4.32	3.12	8.42
50	63.95	4.00	2.80	8.40
55	59.62	3.73	2.53	8.35
60	55.89	3.50	2.30	8.27
65	52.65	3.29	2.09	8.16

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-2: RD 6 Stage Storage Curve - Roof Top Storage



PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA 3: PAVED PARKING LOT + LANDSCAPED AREAS

OTTAWA IDF CURVE

Area =	0.83	ha	Qallow =	67.90	L/s
C =	0.85		Vol(max) =	86.38	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	276.89	208.99	62.70
10	104.19	204.35	136.45	81.87
15	83.56	163.88	95.98	86.38
20	70.25	137.78	69.88	83.86
25	60.90	119.43	51.53	77.30
30	53.93	105.77	37.87	68.16
35	48.52	95.16	27.26	57.24
40	44.18	86.66	18.76	45.02
45	40.63	79.68	11.78	31.82
50	37.65	73.85	5.95	17.85
55	35.12	68.89	0.99	3.26
60	32.94	64.61	-3.29	-11.84
65	31.04	60.89	-7.01	-27.36

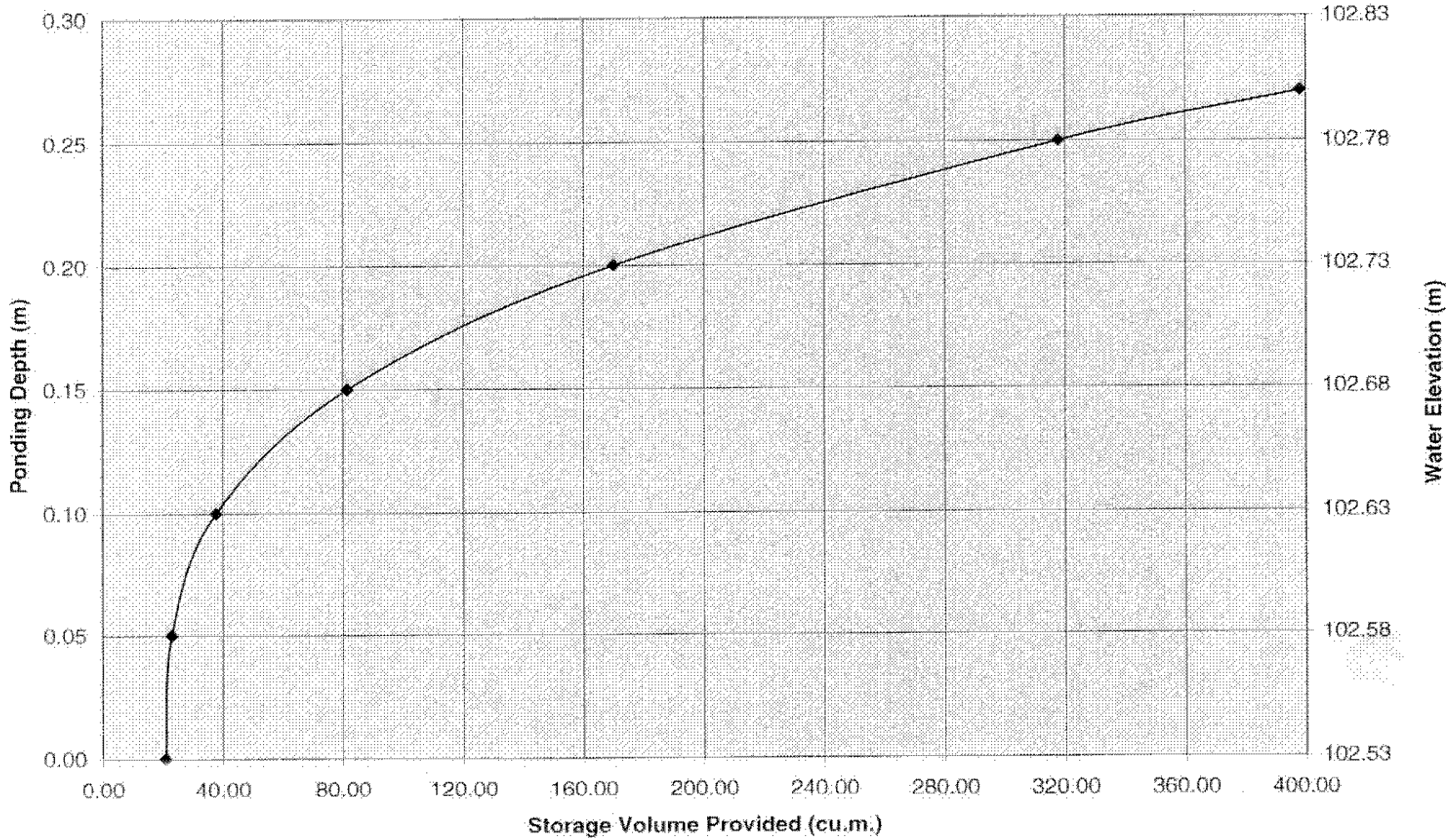
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA 3: PAVED PARKING LOT + LANDSCAPED AREAS

OTTAWA IDF CURVE

Area =	0.83	ha	Qallow =	68.80	L/s
C =	0.85		Vol(max) =	202.31	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	476.01	407.21	122.16
10	178.56	350.21	281.41	168.84
15	142.89	280.26	211.46	190.31
20	119.95	235.26	166.46	199.75
25	103.85	203.67	134.87	202.31
30	91.87	180.18	111.38	200.48
35	82.58	161.96	93.16	195.64
40	75.15	147.38	78.58	188.60
45	69.05	135.43	66.63	179.90
50	63.95	125.43	56.63	169.90
55	59.62	116.94	48.14	158.86
60	55.89	109.63	40.83	146.97
65	52.65	103.26	34.46	134.37

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-3: Stage Storage Curve - Surface Storage



PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA 4: PAVED PARKING LOT + LANDSCAPED AREAS

OTTAWA IDF CURVE

Area =	0.38	ha	Qallow =	4.70	L/s
C =	0.77		Vol(max) =	80.15	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	141.18	114.84	110.14	33.04
10	104.19	84.75	80.05	48.03
15	83.56	67.97	63.27	56.94
20	70.25	57.14	52.44	62.93
25	60.90	49.53	44.83	67.25
30	53.93	43.87	39.17	70.50
35	48.52	39.47	34.77	73.01
40	44.18	35.94	31.24	74.98
45	40.63	33.05	28.35	76.54
50	37.65	30.63	25.93	77.78
55	35.12	28.57	23.87	78.77
60	32.94	26.80	22.10	79.55
65	31.04	25.25	20.55	80.15

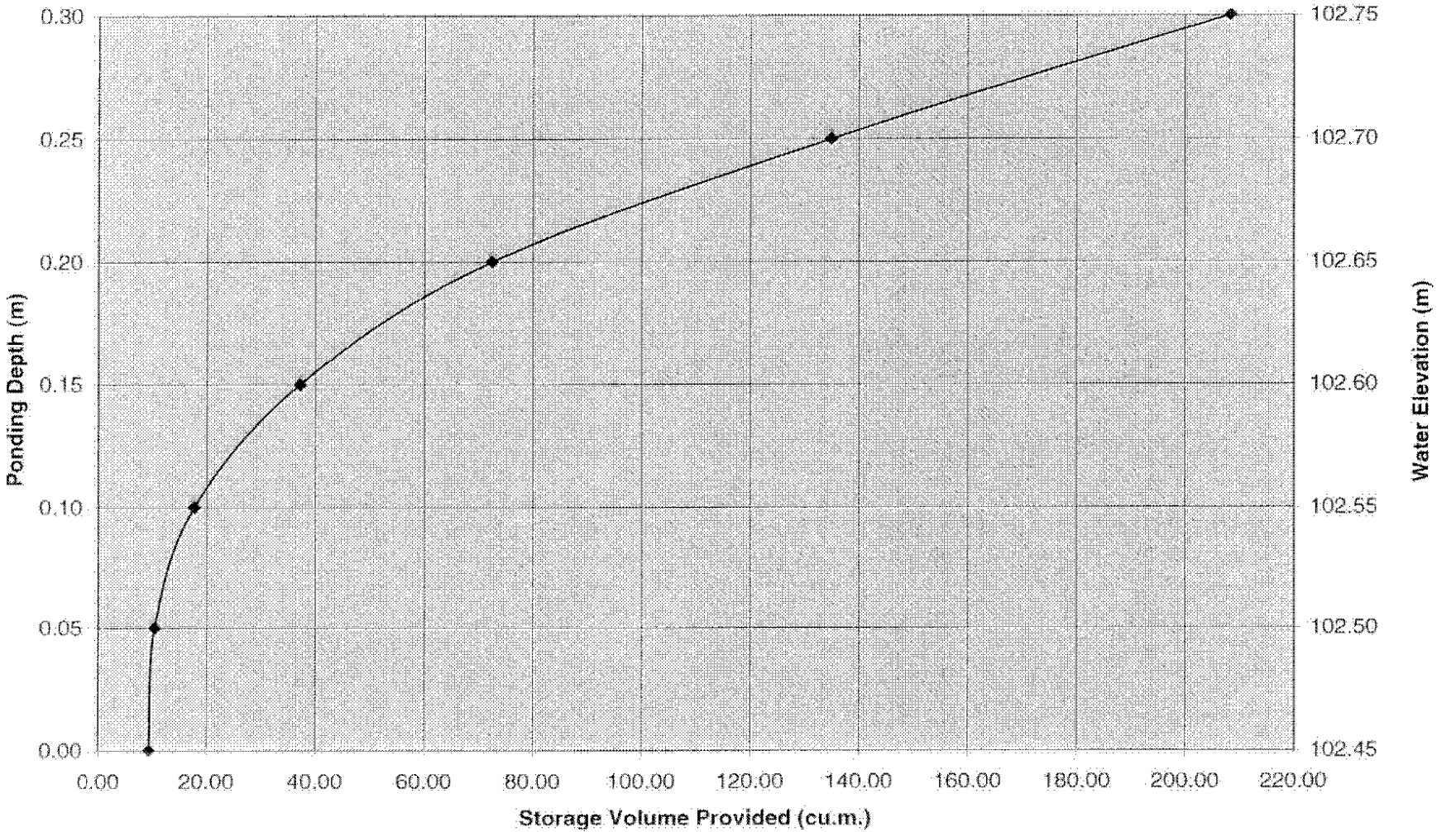
PALLADIUM AUTO PARK
CAPITAL DODGE CHRYSLER
PROJECT NO.106034-1
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA 4: PAVED PARKING LOT + LANDSCAPED AREAS

OTTAWA IDF CURVE

Area =	0.38	ha	Qallow =	4.70	L/s
C =	0.77		Vol(max) =	148.68	m3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m3)
5	242.70	197.42	192.72	57.82
10	178.56	145.24	140.54	84.33
15	142.89	116.23	111.53	100.38
20	119.95	97.57	92.87	111.45
25	103.85	84.47	79.77	119.66
30	91.87	74.73	70.03	126.05
35	82.58	67.17	62.47	131.19
40	75.15	61.13	56.43	135.42
45	69.05	56.17	51.47	138.96
50	63.95	52.02	47.32	141.97
55	59.62	48.50	43.80	144.54
60	55.89	45.47	40.77	146.76
65	52.65	42.82	38.12	148.68

PALLADIUM AUTO PARK
Capital Dodge Chrysler
Area A-4: Stage Storage Curve - Surface Storage

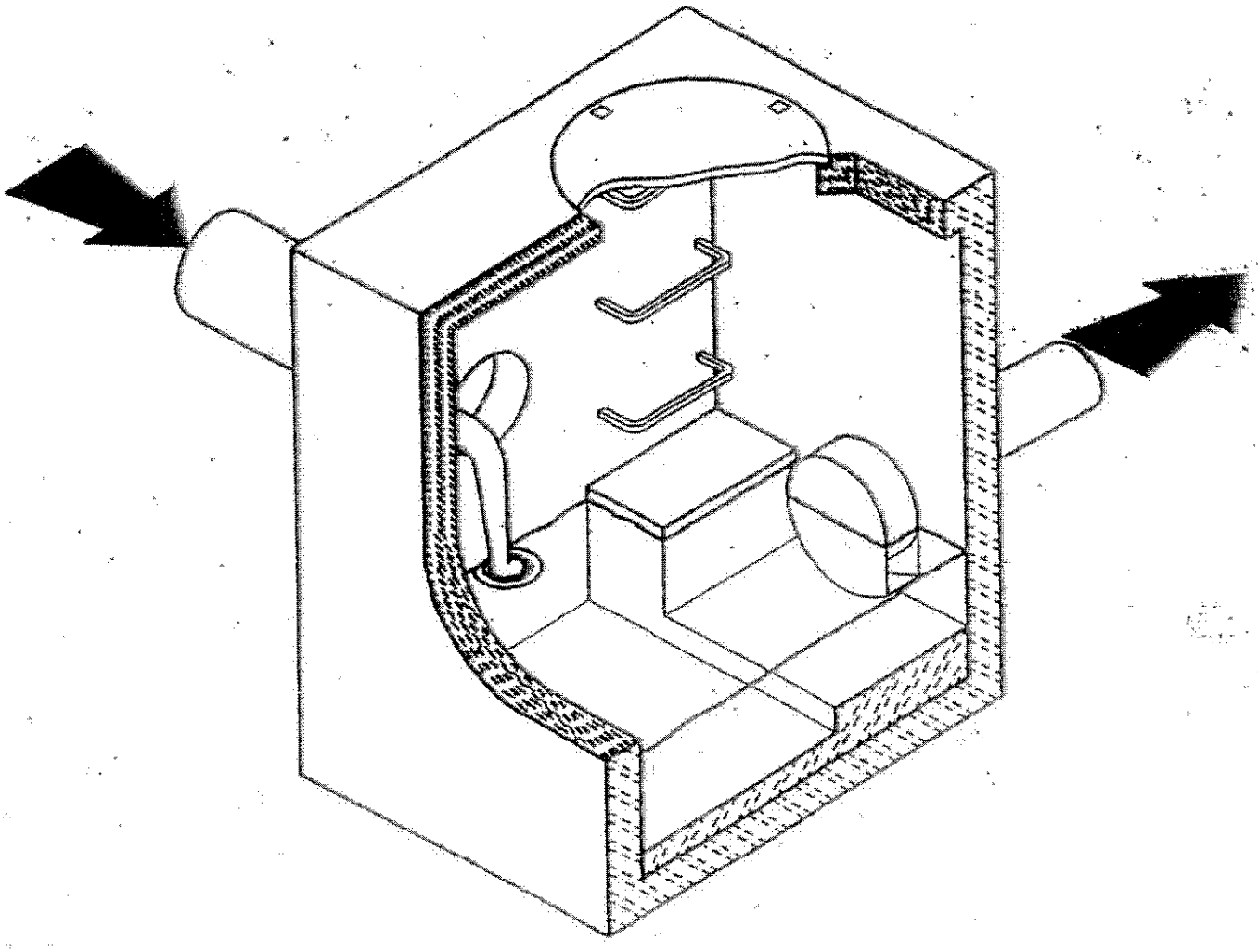


APPENDIX C

JOHN MEUNIER – HYDROVEX INFORMATION

CSO/STORMWATER MANAGEMENT

®Hydrovex® VHV / SVHV
Vertical Vortex Flow Regulator



JOHN MEUNIER

HYDROVEX® VHV / SVHV VERTICAL VORTEX FLOW REGULATOR

INTRODUCTION

One of the major problems of urban wet weather flow management is the runoff generated after a heavy rainfall. During a storm, uncontrolled flows may overload the drainage system and cause flooding. Due to increased velocities sewer pipe wear is increased dramatically and results in network deterioration. In a combined sewer system, the wastewater treatment plant may also experience significant increases in flows during storms, thereby losing its treatment efficiency.

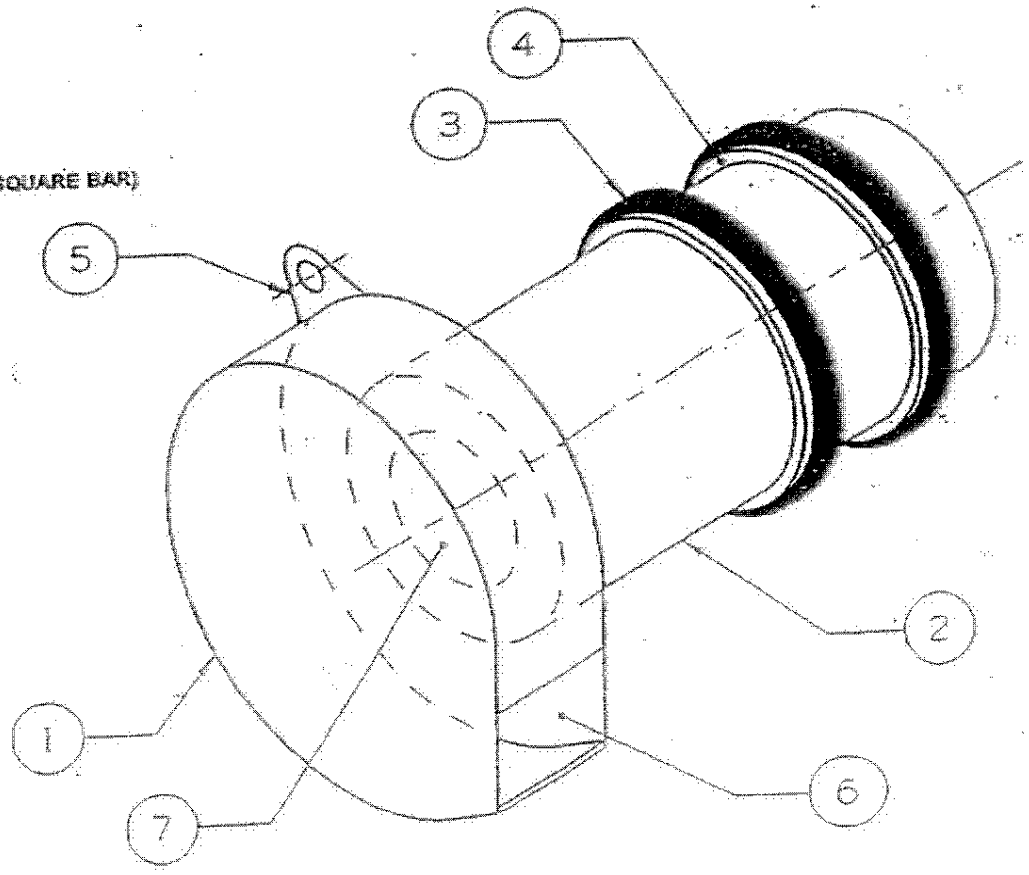
A simple means of controlling excessive water runoff is by controlling excessive flows at their origin (manholes). *JOHN MEUNIER INC.* manufactures the HYDROVEX® VHV / SVHV line of vortex flow regulators to control stormwater flows in sewer networks as well as manholes.

The vortex flow regulator design is based on the fluid mechanics principle of the forced vortex. This grants flow regulation without any moving parts, thus reducing maintenance. The operation of the regulator, depending on the upstream head and discharge, switches between orifice flow (gravity flow) and vortex flow. Although the concept is quite simple, over 12 years of research have been carried out in order to get a high performance.

The HYDROVEX® VHV Vertical Vortex Flow Regulator (refer to **Figure 1**) is manufactured entirely of stainless steel, and consists of a hollow body (1) (in which flow control takes place) and an outlet orifice (7). Two rubber "O" rings (3) seal and retain the unit inside the outlet pipe. Two stainless steel retaining rings (4) are welded on the outlet sleeve to ensure that there is no shifting of the "O" rings during installation and use.

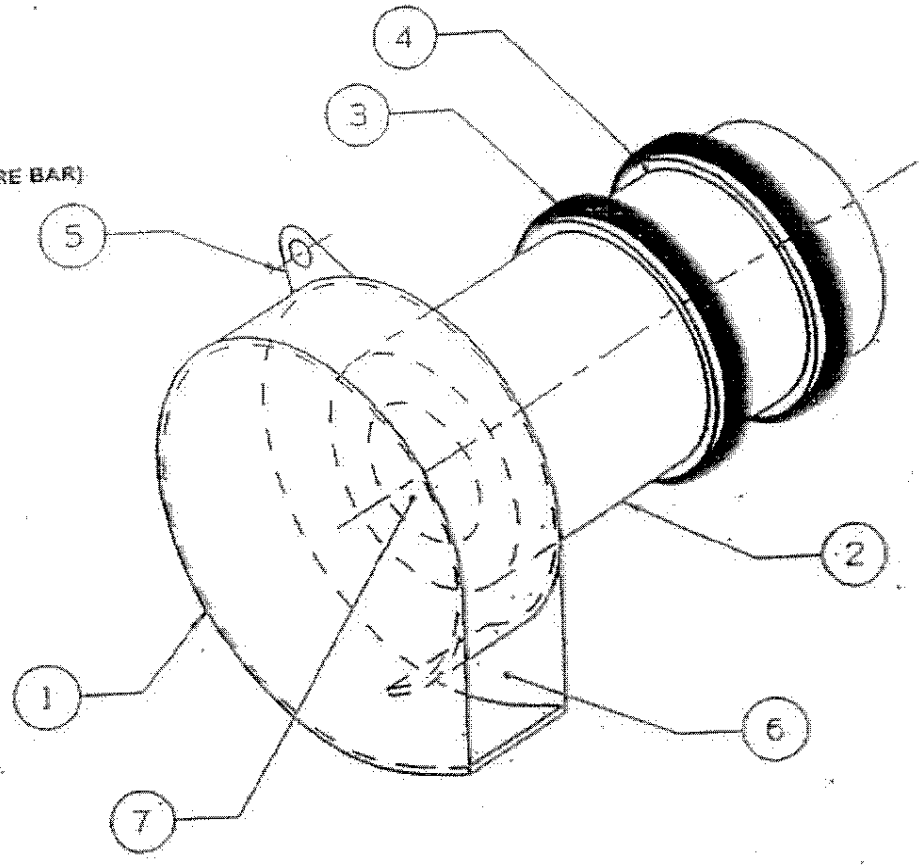
HYDROVEX® VHV VERTICAL VORTEX FLOW REGULATOR
FIGURE 1 - VHV

1. BODY
2. SLEEVE
3. O-RING
4. RETAINING RINGS (SQUARE BAR)
5. ANCHOR PLATE
6. INLET
7. OUTLET ORIFICE



HYDROVEX® SVHV SPECIAL VERTICAL VORTEX FLOW REGULATOR
FIGURE 1 – SVHV

1. BODY
2. SLEEVE
3. O-RING
4. RETAINING RINGS (SQUARE BAR)
5. ANCHOR PLATE
6. INLET
7. OUTLET ORIFICE



ADVANTAGES OF THE HYDROVEX FLOW REGULATORS

- The HYDROVEX® VHV / SVHV line of flow regulators are manufactured entirely of stainless steel, making them durable and corrosion resistant.
- Having no moving parts, they require minimal maintenance.
- The geometry of the HYDROVEX® VHV / SVHV flow regulators allows a control equal to an orifice plate having a cross section area 4 to 6 times smaller. This decreases the chance of blockage of the regulator due to sediments and debris found in stormwater flows.
- Installation of the HYDROVEX® VHV / SVHV flow regulators is quick and straightforward and is performed after all civil works are completed.
- Installation requires no special tools or equipment and may be carried out by any contractor.
- Installation may be carried out in existing structures.

HYDROVEX SELECTION CRITERIA VHV OR SVHV

Figure 2 is a graphical representation of the head vs. discharge range for various VHV or SVHV regulators. This curve is a function of the maximum upstream static water pressure (head) and the discharge. As may be seen from the two curves, the SVHV models have larger cross-sectional flow areas than the VHV's for a given discharge and head.

Model selection is performed by determining the maximum design flow at the manhole outlet and the maximum design head at the inside of the manhole outlet pipe. Each regulator is applicable for operation within a range of head and discharge values, as illustrated by the graph. Using this information one can refer to Figure 2 and determine which model is applicable. All selection should be verified by *JOHN MEUNIER INC.* personnel prior fabrication.

®Hydrovex® VHV

Vertical Vortex Flow Regulator

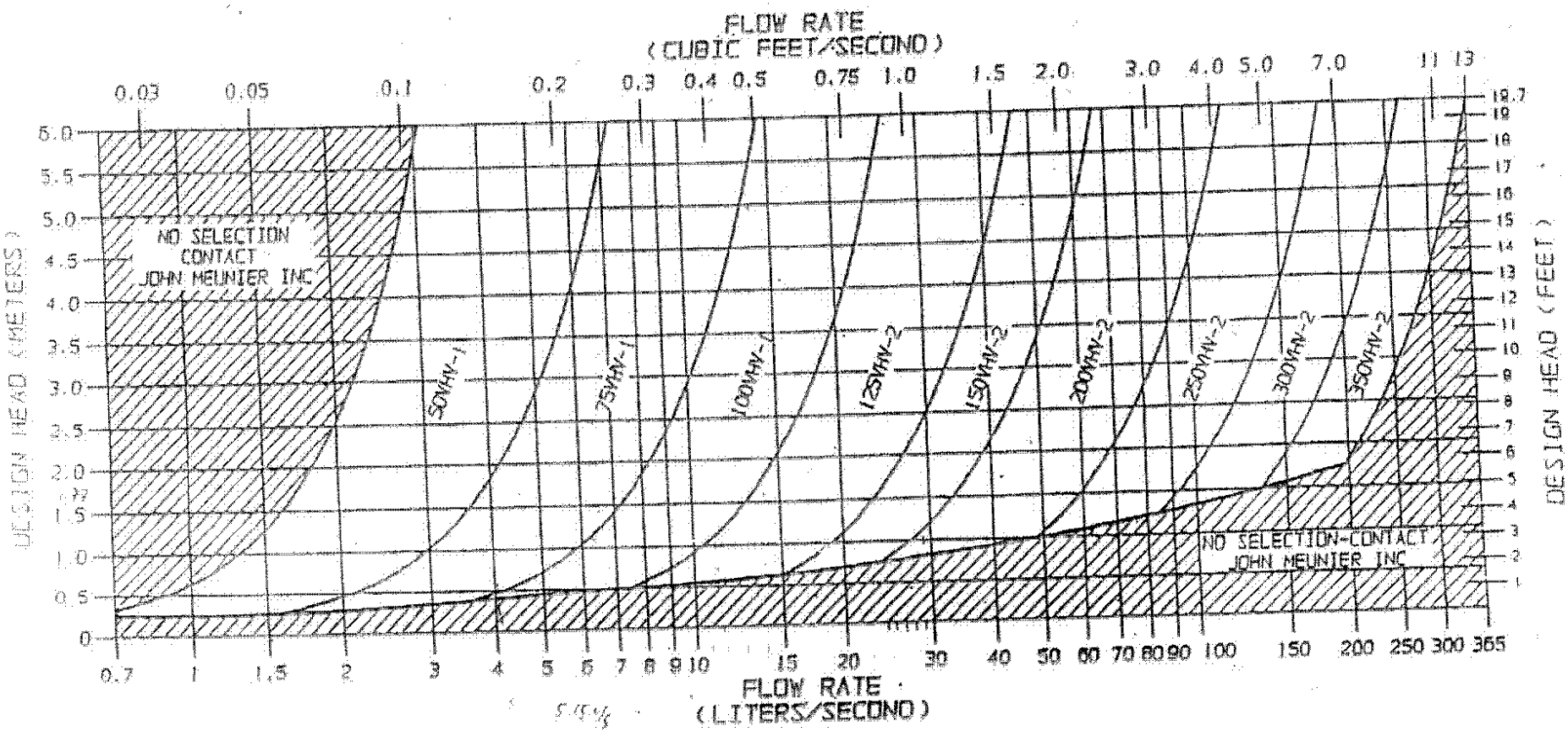


FIGURE 2 - VHV

JOHN MEUNIER

®Hydrovex® SVHV

Vertical Vortex Flow Regulator

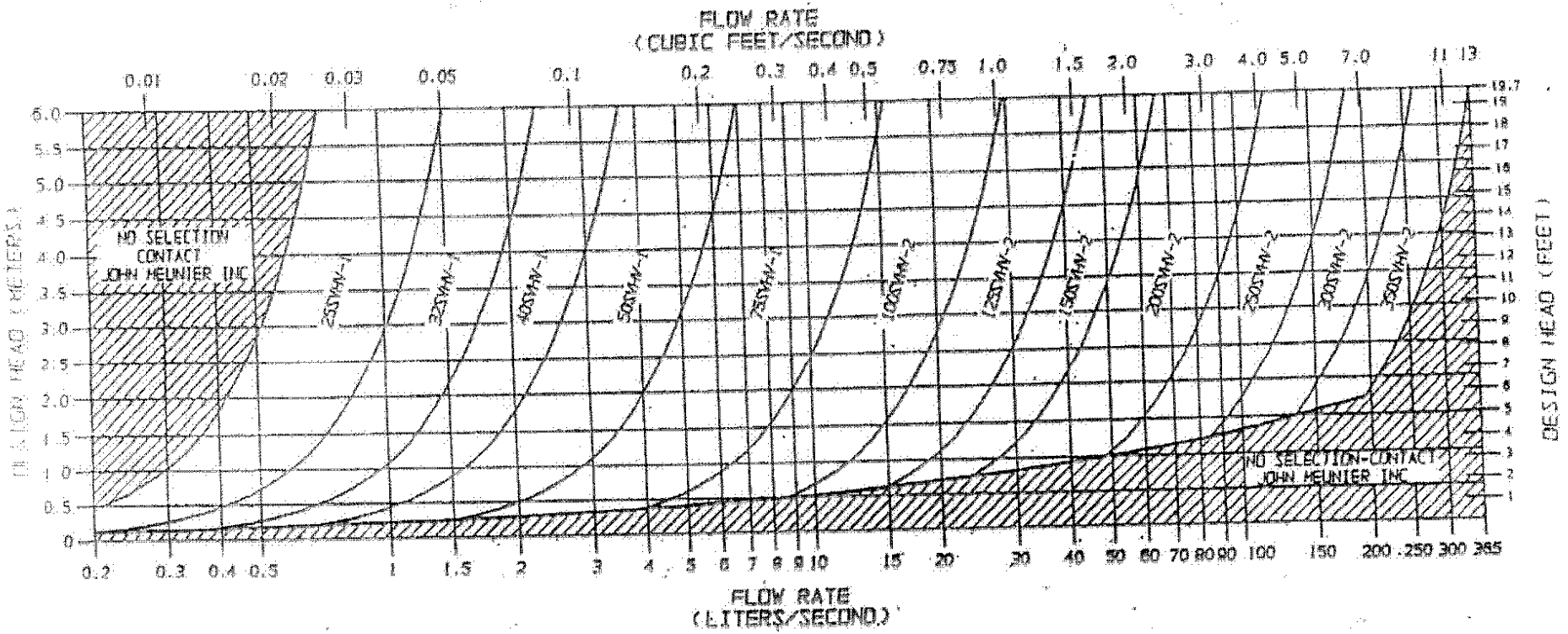
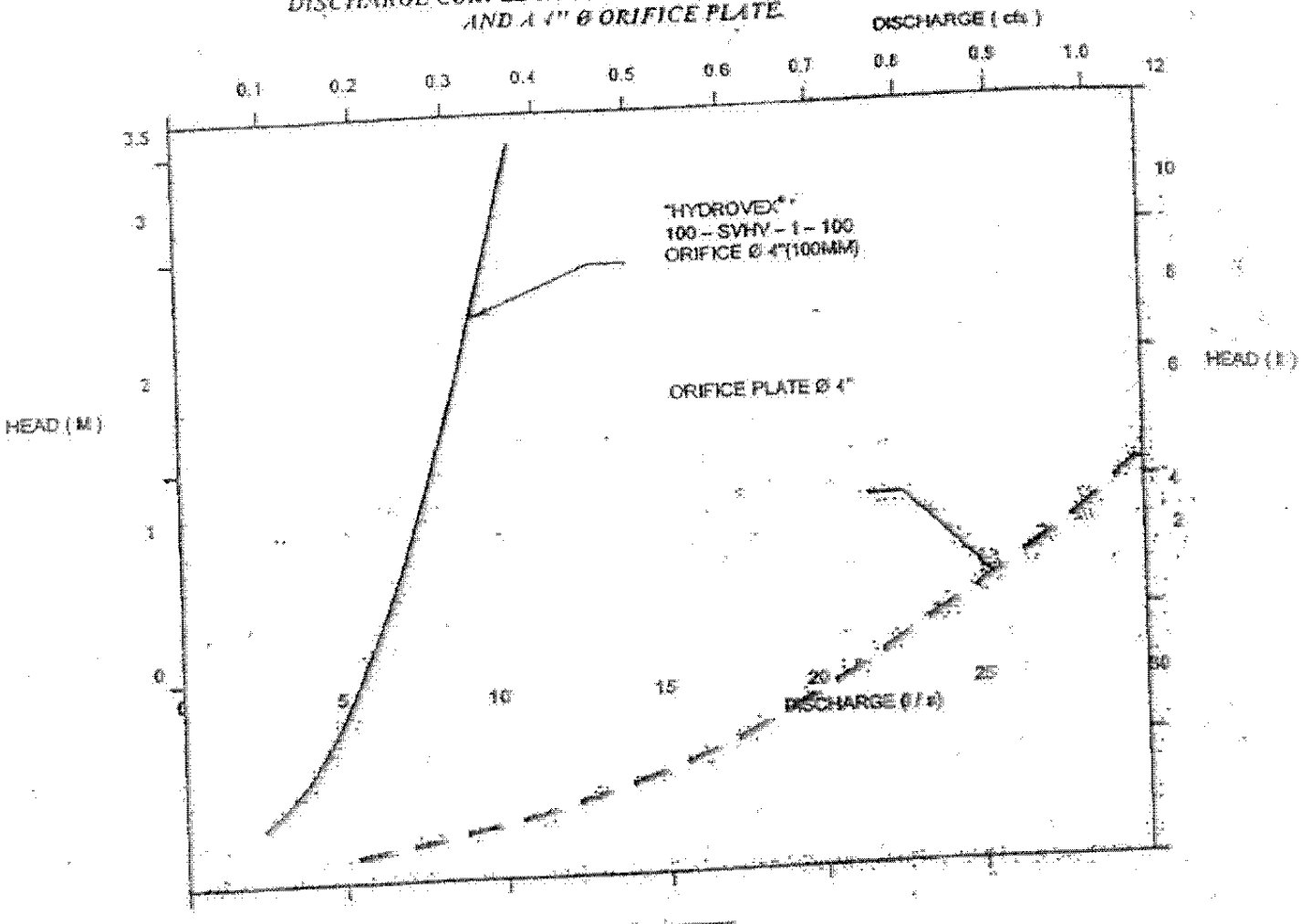


FIGURE 2 - SVHV

JOHN MEUNIER

000110

FIGURE 3
DISCHARGE CURVES FOR A HYDROVEX® 100 SVHV-1-100
AND A 4" Ø ORIFICE PLATE



DIMENSIONING OF MANHOLES

Most HYDROVEX® models may be installed in a standard 36-inch diameter manhole. All models may also be installed in a rectangular manhole with a minimum dimension of 36 inches (24 inch diameter or rectangular manhole may be used for smaller models).

NOTE that in the case of a square manhole, the outlet flow pipe must be centered on the wall to ensure enough clearance for the unit. A minimum clearance "H" should be established between the floor of the manhole and the invert of the outlet pipe to install the regulator. Figure 4 gives the various dimensions required for a given regulator.

HOW TO SPECIFY THE TYPE OF HYDROVEX® REGULATOR

In order to specify a HYDROVEX® regulator, the following parameters must be defined:

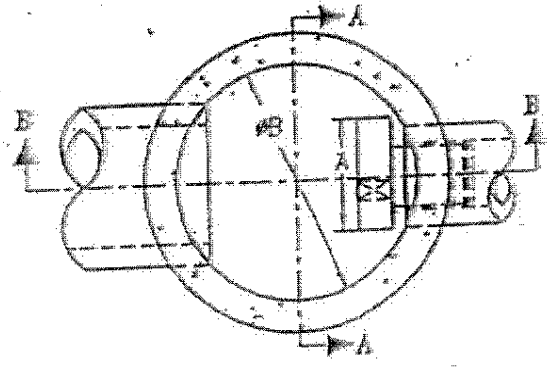
- The model number (ex.: 100-VHV-1)
- The diameter and type of the outlet pipe (ex.: 6" dia. SDR 35 or 8" dia. RCP)
- The desired discharge (ex.: 50 l/s or 1.76 CFS)
- The upstream head (ex: 2 m or 6.56 ft.)
- The manhole diameter (ex: 36" dia.)
- The minimum clearance "H" (ex.: 10 inches)
- The material type (ex.: 304 s/s, 11 Ga. standard)

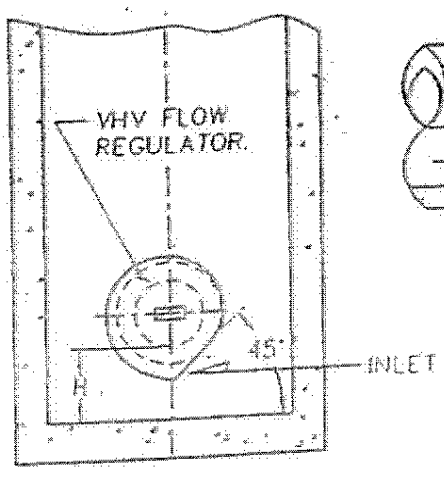
NOTE: Upstream head is defined as the difference in elevation between the maximum upstream water level and the invert of the outlet pipe where the HYDROVEX® flow regulator is to be installed.

FLOW REGULATOR TYPICAL INSTALLATION
FIGURE 4 (VHV)

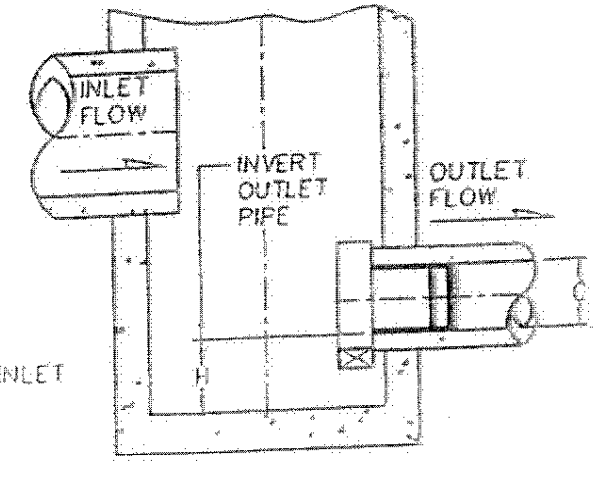
Model Number	Regulator Dia. A (inches)	Manhole Dia. B (inches)	Min. Outlet Pipe C (inches)	Min. Clearance H (inches)
50VHV-1	8"	24"	6"	5"
75VHV-1	11"	24"	6"	6"
100VHV-1	14"	36"	6"	8"
125VHV-2	13"	36"	8"	8"
150VHV-2	16"	36"	8"	9"
200VHV-2	21"	48"	10"	12"
250VHV-2	26"	48"	12"	14"
300VHV-2	31"	64"	15"	16"
350VHV-2	36"	72"	15"	20"

Note: ***Minimum clearance "H" relates to the diameter indicated in the chart. If the outlet diameter decreases, the "H" clearance will also decrease.***





SECTION A-A

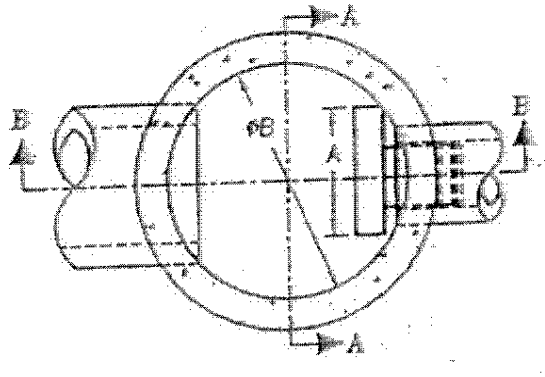


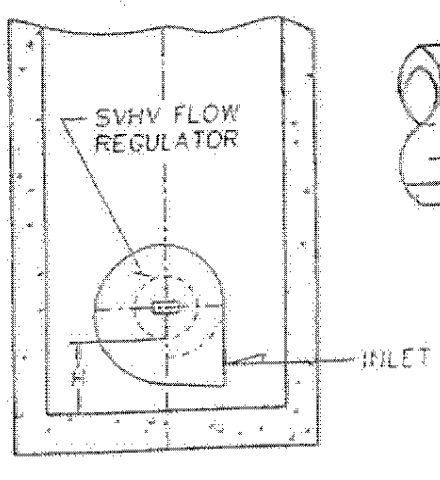
SECTION B-B

FLOW REGULATOR TYPICAL INSTALLATION
FIGURE 4 (SVHV)

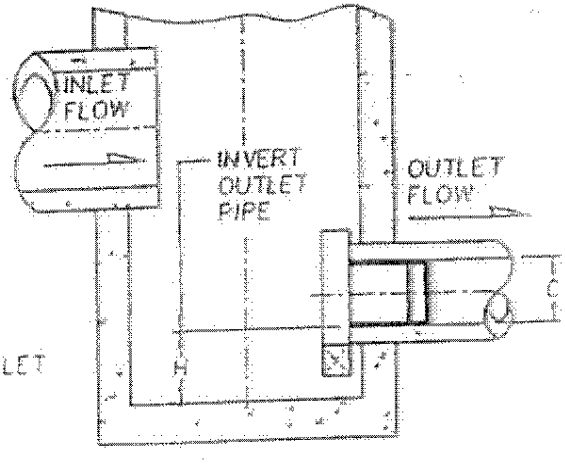
Model Number	Regulator Dia. A (inches)	Manhole Dia. B (inches)	Min. Outlet Pipe C (inches)	Min. Clearance H (inches)
25 SVHV-1	6"	24"	6"	6"
32 SVHV-1	7"	24"	6"	6"
40 SVHV-1	9"	24"	6"	6"
50 SVHV-1	11"	24"	6"	6"
75 SVHV-1	17"	36"	6"	11"
100 SVHV-2	14"	36"	8"	10"
125 SVHV-2	17"	36"	8"	12"
150 SVHV-2	22"	36"	10"	14"
200 SVHV-2	27"	36"	12"	18"
250 SVHV-2	34"	42"	15"	22"
300 SVHV-2	41"	48"	15"	26"
350 SVHV-2	47"	64"	15"	28"

Note: Minimum clearance "H" relates to the diameter indicated in the chart. If the outlet diameter decreases, the "H" clearance will also decrease.





SECTION A-A



SECTION B-B

INSTALLATION

The installation of a HYDROVEX® regulator may be undertaken once the manhole and piping is in place. Installation consists of simply fitting the regulator into the outlet pipe of the manhole. *JOHN MEUNIER INC.* recommends the use of a lubricant on the outlet pipe, in order to facilitate the insertion and orientation of the flow controller.

MAINTENANCE

HYDROVEX® regulators are manufactured in such a way as to be maintenance free; however, periodic inspection (every 3-6 months) is suggested in order to ensure that neither the inlet nor the outlet has become blocked with debris. The manhole should undergo periodically, particularly after major storms, inspection and cleaning as established by the municipality.

GUARANTEE

The HYDROVEX® line of regulators are guaranteed against both design and manufacturing defects for a period of 5 years. Should a uni be defective, *JOHN MEUNIER INC.* is solely responsible for either modification or replacement of the unit, at their discretion.

JOHN MEUNIER / USFilter
4105 Sartelon Street
St-Laurent (Quebec)
H4S 2B3
ISO 9001
Tel. : 514-334-7230 http://www.johnmeunier.com/
Fax. : 514-334-5070 mailto:sales@johnmeunier.com
VIVENDI water

Ontario

Ministry of the Environment, Conservation and Parks
Ministère de l'Environnement, de la Protection de la nature et des Parcs

Application for Certificate of Approval for Industrial Sewage Works

Approved

APPLICATION SUMMARY

Work Unit: Water & Wastewater Unit

Status	Approved	**Assigned**	
IDS Reference #	9326-6SKP7W	**File #**	0194
C of A #	3546-6VJSN7		
Application Type	New Certificate of Approval		
Client Name	Capital Two Investments Limited	**Client #**	8823-6SKP8A
Client Aliases			
Site Name	2500 Palladium Drive	**Site #**	4519-5PWL4V
NAICS Code	-		
Project Name	Stormwater Management Facility servicing Capital Dodge Chrysler		
Technical Reviewer	Kwasi Donyina		
Assigned	2006/08/15		
Last Action	Approved	**By**	Mohamed Dhalla

Document Links and Comments:	Insert Comments Here
Attachment Names:	

Information Requests	Please click button--->
Supplementary Reviews	Please click button--->
Age	102 days

ENGINEERING ASSESSMENT

Reference No.:	9326-6SKP7W
Company Name:	Capital Two Investments Limited
Reviewer:	Kwasi Donyina

Technical Evaluation

The Owner has applied for a stormwater management system relying on rooftop and parking lot storage as follows:

- installation of 6 roof drains to control flow from the roof to a maximum allowable flowrate of 7.2 litres per second for the 100-year return storm;

- one (1) 143 millimetre diametre plug type orifice installed within the outlet pipe of STM MH #1 to control the release rate to 68.8 litres per second for the 100-year return storm;

- installation of hydrovex model 75 SVHV-1 or equivalent within CBMH #4 to control the release rate for the 100-year return storm to 4.7 litres per second;

- the total site control for the 100-year return storm being the maximum allowable flow for the site of 84.0 litres per second with the site discharging to an existing stormwater management pond located at the Palladium Auto Park.

The works have been designed to provide enhanced water quality protection and to attenuate post-development peak flows to pre-development levels for all storm events up to and including the 100-year return storm as required by the Ministry and the City of Ottawa.

The Ottawa District Office has no concerns with the issuance of a C of A.

Recommendations

The proposed works are recommended for approval.

Document Links and Comments:	Insert Comments Here
Attachment Names:	

Ontario

Ministry of the Environment **Ministère de l'Environnement**

CERTIFICATE OF APPROVAL
INDUSTRIAL SEWAGE WORKS
NUMBER 3546-6VJSN7
Issue Date: November 21, 2006

Capital Two Investments Limited
1 Laser Street
Ottawa, Ontario
K2E 7V1

Site Location: 2500 Palladium Drive
Part of Front Half Lot 2, Concession 1, Huntley Township
City of Ottawa

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

the establishment of stormwater management Works for the collection, transmission, treatment and disposal of stormwater run-off from a catchment area of 1.5 hectares, to provide enhanced water quality protection discharging to municipal sewer, and to attenuate post-development peak flows to pre-development levels for all storm events up to and including the 100-year return storm, consisting of the following:

Stormwater Management System

a stormwater management system relying on rooftop and parking lot storage as follows:

- installation of 6 roof drains to control flow from the roof to a maximum allowable flowrate of 7.2 litres per second for the 100-year return storm;

- one (1) 143 millimetre diametre plug type orifice installed within the outlet pipe of STM MH #1 to control the release rate to 68.8 litres per second for the 100-year return storm;

- installation of hydrovex model 75 SVHV-1 or equivalent within CBMH #4 to control the release rate for the 100-year return storm to 4.7 litres per second;

- the total site control for the 100-year return storm being the maximum allowable flow for the site of 84.0 litres per second with the site discharging to an existing stormwater management pond located at the Palladium Auto Park;

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned *Works* ;

all in accordance with the Application for Approval of Industrial Sewage Works submitted by Pat Butler, received on August 11, 2006 and all supporting information.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"*Certificate* " means this entire certificate of approval document, issued in accordance with Section 53 of the Ontario Water Resources Act, and includes any schedules;

"*Director* " means any *Ministry* employee appointed by the Minister pursuant to section 5 of the Ontario Water Resources Act;

"*District Manager* " means the District Manager of the Ottawa District Office of the *Ministry* ;

"*Ministry* " means the Ontario Ministry of the Environment;

"*Owner* " means Capital Two Investments Limited and includes its successors and assignees;

"*Works* " means the sewage works described in the *Owner* 's application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* .

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate* , the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate* .

(2) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate* , the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(3) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the date of this *Certificate* .

3. CHANGE OF OWNER

The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of *Owner*;

(b) change of address of the *Owner*;

(c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager*; and

(d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager*.

4. OPERATION AND MAINTENANCE.

(1) The *Owner* shall inspect the *Works* at least once a year and, if necessary, clean and maintain the *Works* to prevent the excessive buildup of sediments and/or vegetation.

(3) The *Owner* shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at 2500 Palladium Drive, Ottawa, for inspection by the *Ministry*. The logbook shall include the following:

(a) the name of the *Works*;

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and

(c) the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

5. RECORD KEEPING

The *Owner* shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this *Certificate*.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were

described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that the *Works* are constructed in a timely manner so that standards applicable at the time of Approval of the *Works* are still applicable at the time of construction, to ensure the ongoing protection of the environment

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the works are made aware of the certificate and continue to operate the works in compliance with it.

4. Condition 4 is included to require that the *Works* be properly operated and maintained such that the environment is protected.

5. Condition 5 is included to require that all records are retained for a sufficient time period to adequately evaluate the long-term operation and maintenance of the *Works* .

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act , R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

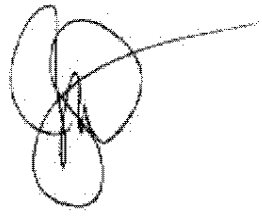
AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 21st day of November, 2006



Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

KD/

c: District Manager, MOE Ottawa.
R.S. Cebryk, Novatech Engineering Consultants Ltd.

Ontario

Ministry of the Environment

SUPPLEMENTARY REVIEW

Project Details

Proponent Name: Capital Two Investments Limited	**Stage:** Supplementary Review Reassigned
Site Information: 2500 Palladium Drive Part of Front Half Lot 2, Concession 1, Huntley Township Ottawa City,	**Application Type:** Industrial Sewage Works
Project Desc: This application is for the approval to construct a Stormwater Management Facility to serve the Capital Dodge Chrysler.	**CofA Application Reference Number:** 9326-6SKP7W
Task Link:	**Reference Number:** 0454-6SPGPH

Supplementary Review Details

Reviewer Name: Charles Goulet	**Review Due Date:** 2006/08/31
Review Assigned Date: 2006/08/16	**Review Completion Date:** 2006/11/24

Request Details:
Supplementary review created for District/Area Office comments

Input from the District on this application within two (2) weeks from the date of the acknowledgement letter is requested. If you require more time to comment, please inform us how long you will need. If there is no response within the two (2) weeks, we will assume that there is no regional/district concern.

Supplementary Review

Type of Supplementary Review: District/Area Office Review	**BF Supplementary Review Date:**
Supplementary Review Status: Completed	

Supplementary Reviewer Comments

Requestor Comments

Attachments

Document Links and Comments:	Insert Comments Here
Attachment Names:	

Ministry of the Environment
Environmental Assessment and
Approvals Branch
Floor 12A
2 St Clair Ave W
Toronto ON M4V 1L5
Fax: (416)314-8452
Telephone: (416) 314-7902

Ministère de l'Environnement
Direction des évaluations et des
autorisations environnementales
Étage 12A
2 av St Clair O
Toronto ON M4V 1L5
Télécopieur : (416)314-8452
Téléphone : (416) 314-7902

Ontario

August 15, 2006

Pat Butler
Capital Two Investments Limited
1 Laser Street
Ottawa, Ontario
K2E 7V1

Dear Sir/Madam:

Re: Application for Approval of Industrial Sewage Works
Stormwater Management Facility servicing Capital Dodge Chrysler
Ottawa City
MOE Reference Number 9326-6SKP7W

We acknowledge receipt of your application for approval dated July 24, 2006 and received on August 11, 2006, and an application fee in the amount of $2200.00 for the following:

Approval Type:	Industrial Sewage Works
Project Description:	This application is for the approval to construct a Stormwater Management Facility to serve the Capital Dodge Chrysler.
Site Location:	2500 Palladium Drive Part of Front Half Lot 2, Concession 1, Huntley Township Ottawa City,

The Ministry's reference number for your application is 9326-6SKP7W. Please quote this number in any correspondence or enquiries regarding this application.

Please note that your submission has only been screened with respect to the presence of the supporting documentation normally required for this type of application, and did not include any technical analysis of the documentation, and therefore you may still be requested to provide some additional information during our detailed technical review of the application. In such a case, the Reviewer will contact you and/or your identified Project Technical Information Contact at this time.

Also, please note that a duplicate copy of the application and all supporting information should have been sent to the local District Office of the Ministry. If this has not been done, please do so as soon as possible.

Should you have any questions related to your application, please contact me at the above phone number.

Sincerely,

Adam Gunn
Application Processor

c: District Manager, MOE Ottawa
R.S. Cebryk, Novatech Engineering Consultants Ltd. Fax: 613-254-5867

Pages 127 to / à 130

are withheld pursuant to section

sont retenues en vertu de l'article

17

of the Freedom of Information and Protection of Privacy Act

de la Freedom of Information and Protection of Privacy Act

Ministry of Environment and Energy
Ontario

The Ontario Water Resources Act
WATER WELL RECORD

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

11

1529723

Municipality 15005 Con. CON 02

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
Ottawa Carleton	West Carleton - Huntley	2	2

Owner's surname / First name: Palladium Auto Park

Address: c/o Golders Ass. 1796 Courtwood Cres.

Date completed: 28 day 11 month 97 year

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

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth – feet From	Depth – feet To
	See log # 183345				
	Dated 25/9/97				

31

32

41 WATER RECORD

Water found at – feet	Kind of water			
10-13	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas		
15-18	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas		
20-23	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas		
25-28	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas		
30-33	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas		

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth – feet From	Depth – feet To
10-11	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			13-16
17-18	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			20-23
24-25	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			27-30

SCREEN

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

61 PLUGGING & SEALING RECORD

☐ Annular space ☒ Abandonment

Depth set at – feet From	Depth set at – feet To	Material and type (Cement grout, bentonite, etc.)
10-13 200	14-17 0	Cement Grout & Hole Plug
18-21	22-25	
26-29	30-33 80	

71 PUMPING TEST

Pumping test method 10: 1 ☐ Pump 2 ☐ Bailer

Pumping rate 11-14 GPM

Duration of pumping 15-16 Hours 17-18 Mins

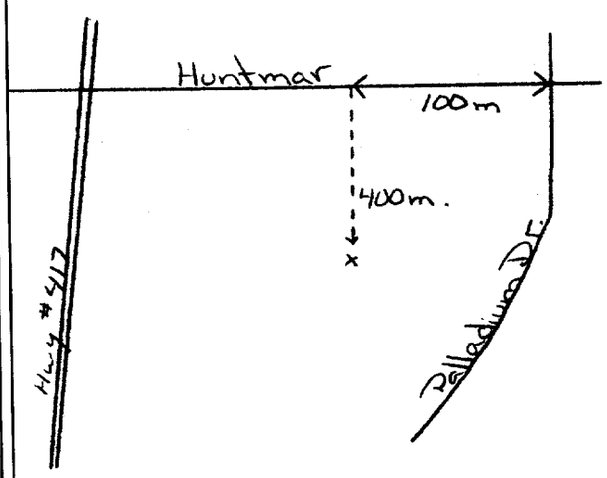
25 Water levels during 1 ☐ Pumping 2 ☐ Recovery

Static level 19-21 feet	Water level end of pumping 22-24 feet	15 minutes 26-28 feet	30 minutes 29-31 feet	45 minutes 32-34 feet	60 minutes 35-37 feet
If flowing give rate 38-41 GPM		Pump intake set at feet		Water at end of test 42: ☐ Clear ☐ Cloudy	
Recommended pump type: ☐ Shallow ☐ Deep		Recommended pump setting 43-45 feet		Recommended pump rate 46-49 GPM	

50-53

LOCATION OF WELL

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



182754

FINAL STATUS OF WELL 54

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

WATER USE 55-56

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

METHOD OF CONSTRUCTION 57

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

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558
Address: P.O. Box 490 Stittsville, Ontario K2S 1A6	
Name of Well Technician: W. Kavanagh/S.Miller	Well Technician's Licence No.: T0095/T0097
Signature of Technician/Contractor	Submission date: day 28 mo 11 yr 97

MINISTRY USE ONLY

Data source 58	Comments 59-62: 1558	Date received 63-68: DEC 22 1997	80
Date of inspection	Inspector		
Remarks			

0506 (07/94) Front Form 9

2 - MINISTRY OF ENVIRONMENT & ENERGY COPY

Nick Sullivan

From: Public Information Services <publicinformationservices@tssa.org>
Sent: May 19, 2023 7:42 AM
To: Nick Sullivan
Subject: RE: Records Search Request (PE6102)

Hello,

RECORD FOUND IN CURRENT DATABASE

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

- We confirm that there are records in our database of any **fuel storage tanks** at the subject address(es).

Inventory Number	Address	City	Province	Postal Code	Status	Asset Type / Inventory Item
64499869	225 HUNTMAR DR	OTTAWA	ON	K2S 1B9	Active	FS GASOLINE STATION - SELF SERVE
64499870	225 HUNTMAR DR	OTTAWA	ON	K2S 1B9	Active	FS LIQUID FUEL TANK
64499871	225 HUNTMAR DR	OTTAWA	ON	K2S 1B9	Active	FS LIQUID FUEL TANK
64499872	225 HUNTMAR DR	OTTAWA	ON	K2S 1B9	Active	FS LIQUID FUEL TANK
64499873	225 HUNTMAR DR	OTTAWA	ON	K2S 1B9	Active	FS LIQUID FUEL TANK
64665073	225 HUNTMAR DR	OTTAWA	ON	K2S 1B9	Active	FS CYLINDER EXCHANGE

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

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

Accessing the Service Prepayment Portal:

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

6. Upload your completed application; and
7. Upload supporting documents (if required) and click continue.

Once all steps have been successfully completed, you will receive your receipt via email.
Questions? Please contact TSSA's Public Information Release team at publicinformationservices@tssa.org.
Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Kind regards,

Kimberly Gage | Public Information Agent
Legal
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1 416-734-3348 | Fax: +1 416-734-3568 | E-Mail: kgage@tssa.org
www.tssa.org

From: Nick Sullivan <NSullivan@patersongroup.ca>
Sent: Thursday, May 18, 2023 3:02 PM
To: Public Information Services

Winner of 2022 5-Star Safety Cultures Award

<publicinformationservices@tssa.org>
Subject: Records Search Request (PE6102)

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:

Palladium Drive: 2500;
Huntmar Drive: 225, 211;
Autopark Private: 675.

Thank you,

Nick Sullivan, B.Sc.
Junior Environmental Technical Specialist
TEL: (613) 226-7381 ext. 208
DIRECT: (613) 913-3608
9 AURIGA DRIVE
OTTAWA, ON, K2E 7T9
nsullivan@patersongroup.ca

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:** *2500 Palladum Drive, #1200, Ottawa, Ontario. (See attached map for site location)*

** Mandatory Field*

Applicant/Agent Information:

Name:	*Paterson Group Inc.*		
Mailing Address:	*9 Auriga Drive, Ottawa, ON, K2E 7T9*		
Telephone:	*613-226-7381*	Email Address:	*nsullivan@patersongroup.ca*

Registered Property Owner Information: ☐ Same as above

Name:			
Mailing Address:			
Telephone:		Email Address:	

Site Details

Legal Description and PIN:	
What is the land currently used for?	*Automotive Dealership (Capital Dodge)*

Lot frontage: _____ m Lot depth: _____ m Lot area: _____ m²

OR Lot area: (irregular lot) 28,750 m²

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.

$136.00

Planning Fee ~~$102.00~~

Submittal Requirements

The following are required to be submitted with this application:

1. **Consent to Disclose Information:** Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, **the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner.** This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.

2. **Disclaimer:** Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, 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: 

Dated (dd/mm/yyyy): 23/05/2023

Per: Nick Sullivan

(Please print name)

Title: Environmental Specialist

Company: Paterson Group Inc.

PATERSON GROUP

May 17, 2023
File: PE6102-HLUI

City of Ottawa
110 Laurier Avenue W
Ottawa, Ontario
K1P 1J1

Consulting Engineers
9 Auriga Drive
Ottawa, Ontario
K2E 7T9
Tel: (613) 226-7381

Geotechnical Engineering
Environmental Engineering
Hydrogeology
Materials Testing
Building Science
Rural Development Design
Retaining Wall Design
Noise and Vibration Studies

patersongroup.ca

Subject: **Authorization Letter: HLUI Search**
Phase I – Environmental Site Assessment
2500 Palladium Drive, #1200
Ottawa, Ontario

Dear Sir/Madame

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: Full Speed Builders

Name of Representative: Daniel Fox

Signature: Daniel Fox

Date: May 18, 2023

Site Location: Part of 2500 Palladium Drive, #1200
(Capital Dodge Auto Dealership)

DATABASE REPORT

Project Property:	*Phase I ESA* *2500 Palladium Drive* *Kanata ON K2V 1E2*
Project No:	*PO# 57522*
Report Type:	*Standard Report*
Order No:	*23051700637*
Requested by:	*Paterson Group Inc.*
Date Completed:	*May 18, 2023*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:	*Phase I ESA* *2500 Palladium Drive Kanata ON K2V 1E2*
Project No:	*PO# 57522*

Coordinates:

Latitude:	*45.2921934*
Longitude:	*-75.9307591*
UTM Northing:	*5,015,831.55*
UTM Easting:	*427,015.78*
UTM Zone:	*18T*

Elevation: *337 FT*
102.57 M

Order Information:

Order No:	*23051700637*
Date Requested:	*May 17, 2023*
Requested by:	*Paterson Group Inc.*
Report Type:	*Standard Report*

Historical/Products:

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AST	Aboveground Storage Tanks	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	2	2
CA	Certificates of Approval	Y	4	1	5
CDRY	Dry Cleaning Facilities	Y	0	0	0
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Manufacturers and Distributors	Y	0	0	0
CHM	Chemical Register	Y	0	0	0
CNG	Compressed Natural Gas Stations	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
DTNK	Delisted Fuel Tanks	Y	0	1	1
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Y	0	0	0
ECA	Environmental Compliance Approval	Y	8	4	12
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	2	2	4
EIIS	Environmental Issues Inventory System	Y	0	0	0
EMHE	Emergency Management Historical Event	Y	0	0	0
EPAR	Environmental Penalty Annual Report	Y	0	0	0
EXP	List of Expired Fuels Safety Facilities	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Y	0	0	0
FST	Fuel Storage Tank	Y	0	4	4
FSTH	Fuel Storage Tank - Historic	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	10	10
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	2	0	2
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0

Database	Name	Searched	Project Property	Within 0.25 km	Total
INC	Fuel Oil Spills and Leaks	Y	0	0	0
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	1	0	1
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	2	2
	Total:		17	26	43

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	CA	Tony Graham Kanata Limited	600-2500 Palladium Dr Ottawa ON	-/0.0	0.00	20
1	CA	Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON	-/0.0	0.00	20
1	CA	Kanata Motors Corporation	2500 Palladium Dr Kanata Ottawa ON	-/0.0	0.00	20
1	CA	Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON	-/0.0	0.00	21
1	HINC		2500 PALLADIUM DRIVE KANATA ON	-/0.0	0.00	21
1	HINC		2500 PALLADIUM DRIVE RICHMOND ON	-/0.0	0.00	21
1	EHS		2500 Palladium Drive Unit 1200 Kanata ON	-/0.0	0.00	22
1	SPL		#200 - 2500 Palladium Drive Ottawa ON	-/0.0	0.00	22
1	ECA	Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON K2A 1C5	-/0.0	0.00	23

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	ECA	Zena Investment Corporation	2500 Palladium Dr Ottawa ON K2V 1E2	-/0.0	0.00	23
1	ECA	Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON K2A 1C5	-/0.0	0.00	23
1	ECA	Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON K2A 1C5	-/0.0	0.00	24
1	ECA	Kanata Motors Corporation	2500 Palladium Dr Kanata Ottawa ON K2V 1E2	-/0.0	0.00	24
1	ECA	Tony Graham Kanata Limited	600-2500 Palladium Dr Ottawa ON K2G 1E3	-/0.0	0.00	24
1	ECA	Tony Graham Motors Limited	2500 Palladium Dr Ottawa ON K2G 1E3	-/0.0	0.00	24
1	ECA	Zena Investment Corporation	2500 Palladium Dr Ottawa ON K2J 6H8	-/0.0	0.00	25
3	EHS		2500 Palladium Ottawa ON	WNW/198.0	-0.69	25

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
2	WWIS		lot 2 con 2 ON **Well ID:** 1529723	WNW/184.2	-0.69	25
4	ECA	Kanata Motors Corporation	Ottawa ON K1S 2E7	NNW/216.8	-1.62	27
4	ECA	Tony Graham Kanata Limited	Ring Road, Lot 6 Ottawa ON K2G 1E3	NNW/216.8	-1.62	27
5	EHS		Palladium Dr Kanata ON	WNW/223.1	-0.69	27
6	WWIS		CARP AIRPORT lot 2 con 1 CARP ON **Well ID:** 1535122	NNW/243.4	-1.69	27
7	BORE		ON	WSW/243.5	0.61	29
8	CA	Ultramar Ltd.	225 Huntmar Dr Ottawa ON K2S 1B9	NE/243.5	-0.69	30
8	FST	PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE/243.5	-0.69	30
8	FST	PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE/243.5	-0.69	30
8	FST	PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE/243.5	-0.69	31
8	FST	PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE/243.5	-0.69	31
8	EHS		225 Huntmar Dr Ottawa ON K2S1B9	NE/243.5	-0.69	32

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
8	ECA	Ultramar Ltd.	225 Huntmar Dr Ottawa ON H3A 3L3	NE/243.5	-0.69	32
8	GEN	Parkland Fuel Corporation	225 Huntmar Rd Kanata ON K2S1B9	NE/243.5	-0.69	32
8	GEN	Parkland Fuel Corporation	225 Huntmar Rd Kanata ON K2S1B9	NE/243.5	-0.69	33
8	ECA	Enterprise Rent-A-Car Canada Company/La Compagnie De Location D'Autos	Enterprise Canada 225 Huntmar Dr Ottawa ON K1G 3W3	NE/243.5	-0.69	33
8	DTNK		225 HUNTMAR DR OTTAWA ON K2S 1B9	NE/243.5	-0.69	33
8	GEN	Parkland Fuel Corporation	225 Huntmar Rd Kanata ON K2S1B9	NE/243.5	-0.69	34
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON	ENE/243.7	-0.69	34
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE/243.7	-0.69	35
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE/243.7	-0.69	35
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE/243.7	-0.69	35
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE/243.7	-0.69	36
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE/243.7	-0.69	36
9	GEN	CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE/243.7	-0.69	37

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
10	BORE		ON	NE/249.1	-1.39	37

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.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
	ON	WSW	243.50	7

Lower Elevation	Address	Direction	Distance (m)	Map Key
	ON	NE	249.08	10

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 5 CA site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON	-	0.00	1
Tony Graham Kanata Limited	600-2500 Palladium Dr Ottawa ON	-	0.00	1
Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON	-	0.00	1
Kanata Motors Corporation	2500 Palladium Dr Kanata Ottawa ON	-	0.00	1

Lower Elevation	Address	Direction	Distance (m)	Map Key

Ultramar Ltd.	225 Huntmar Dr Ottawa ON K2S 1B9	NE	243.50	8

DTNK - Delisted Fuel Tanks

A search of the DTNK database, dated Feb 28, 2022 has found that there are 1 DTNK site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	Address	Direction	Distance (m)	Map Key
	225 HUNTMAR DR OTTAWA ON K2S 1B9	NE	243.50	8

ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011- Mar 31, 2023 has found that there are 12 ECA site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
Zena Investment Corporation	2500 Palladium Dr Ottawa ON K2J 6H8	-	0.00	1
Tony Graham Motors Limited	2500 Palladium Dr Ottawa ON K2G 1E3	-	0.00	1
Kanata Motors Corporation	2500 Palladium Dr Kanata Ottawa ON K2V 1E2	-	0.00	1
Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON K2A 1C5	-	0.00	1
Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON K2A 1C5	-	0.00	1
Zena Investment Corporation	2500 Palladium Dr Ottawa ON K2V 1E2	-	0.00	1
Palladium Auto Park Ltd.	2500 Palladium Drive Ottawa ON K2A 1C5	-	0.00	1

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
Tony Graham Kanata Limited	600-2500 Palladium Dr Ottawa ON K2G 1E3	-	0.00	1

Lower Elevation	Address	Direction	Distance (m)	Map Key
Tony Graham Kanata Limited	Ring Road, Lot 6 Ottawa ON K2G 1E3	NNW	216.77	4
Kanata Motors Corporation	Ottawa ON K1S 2E7	NNW	216.77	4
Ultramar Ltd.	225 Huntmar Dr Ottawa ON H3A 3L3	NE	243.50	8
Enterprise Rent-A-Car Canada Company/La Compagnie De Location D'Autos	Enterprise Canada 225 Huntmar Dr Ottawa ON K1G 3W3	NE	243.50	8

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Dec 31, 2022 has found that there are 4 EHS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
	2500 Palladium Drive Unit 1200 Kanata ON	-	0.00	1

Lower Elevation	Address	Direction	Distance (m)	Map Key
	2500 Palladium Ottawa ON	WNW	197.95	3
	Palladium Dr Kanata ON	WNW	223.09	5
	225 Huntmar Dr Ottawa ON K2S1B9	NE	243.50	8

FST - Fuel Storage Tank

A search of the FST database, dated Feb 28, 2022 has found that there are 4 FST site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	Address	Direction	Distance (m)	Map Key
PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE	243.50	8
PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE	243.50	8
PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE	243.50	8
PARKLAND CORPORATION	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	NE	243.50	8

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Oct 31, 2022 has found that there are 10 GEN site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	Address	Direction	Distance (m)	Map Key
Parkland Fuel Corporation	225 Huntmar Rd Kanata ON K2S1B9	NE	243.50	8
Parkland Fuel Corporation	225 Huntmar Rd Kanata ON K2S1B9	NE	243.50	8
Parkland Fuel Corporation	225 Huntmar Rd Kanata ON K2S1B9	NE	243.50	8
CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE	243.65	9
CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE	243.65	9

CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE	243.65	9
CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE	243.65	9
CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE	243.65	9
CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON	ENE	243.65	9
CITY OF OTTAWA POLICE SERVICES	211 HUNTMAR DRIVE KANATA ON K2V 1A5	ENE	243.65	9

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.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
	2500 PALLADIUM DRIVE KANATA ON	-	0.00	1
	2500 PALLADIUM DRIVE RICHMOND ON	-	0.00	1

SPL - Ontario Spills

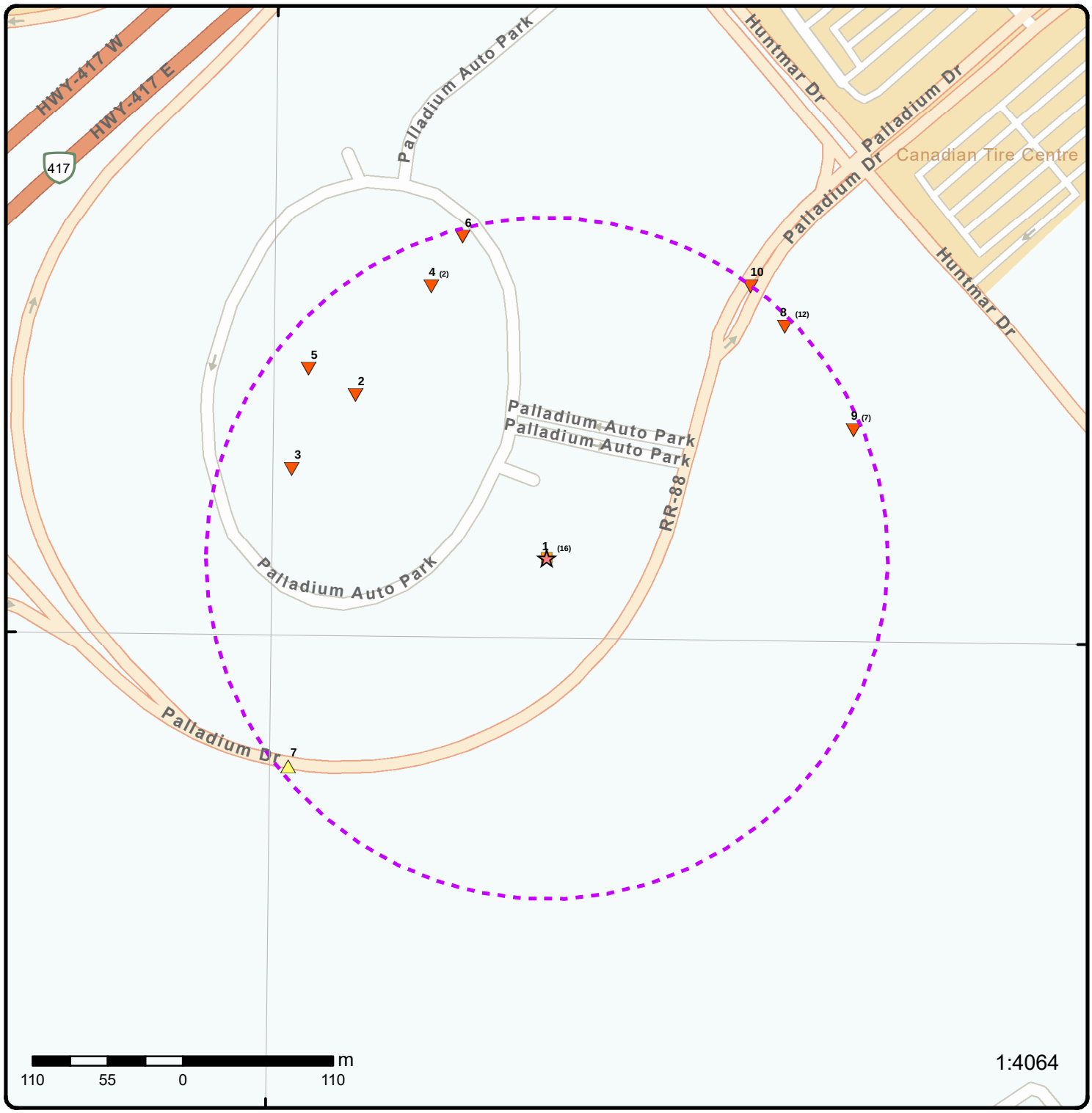
A search of the SPL database, dated 1988-Oct 2021 has found that there are 1 SPL site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
	#200 - 2500 Palladium Drive Ottawa ON	-	0.00	1

WWIS - Water Well Information System

A search of the WWIS database, dated Jun 30 2022 has found that there are 2 WWIS site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	Address	Direction	Distance (m)	Map Key
	lot 2 con 2 ON ***Well ID:*** 1529723	WNW	184.17	2
	CARP AIRPORT lot 2 con 1 CARP ON ***Well ID:*** 1535122	NNW	243.43	6

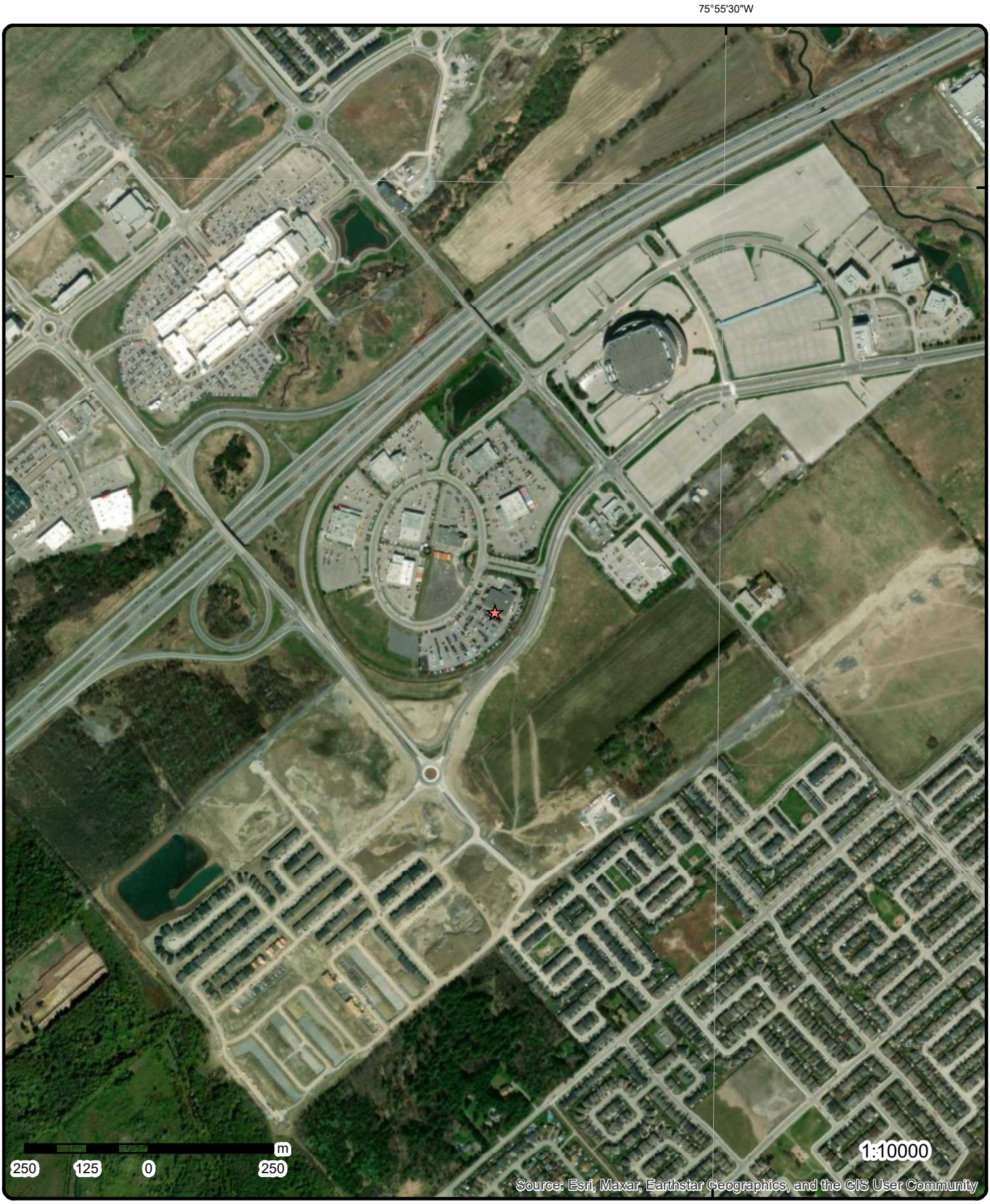


Map: 0.25 Kilometer Radius

Order Number: 23051700637

Address: 2500 Palladium Drive, Kanata, ON

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major Arterial; Minor Arterial
- Local Road
- Service Road; Traffic Circle; Ramp
- Rail
- Beach
- Airport
- Industrial Area
- Military Base
- Aircraft Roads
- Native Reservation
- Hospital
- Shopping & Sports Area
- University/College
- Cemetery; Golf Course
- Parkt (National)
- Park (City/County)

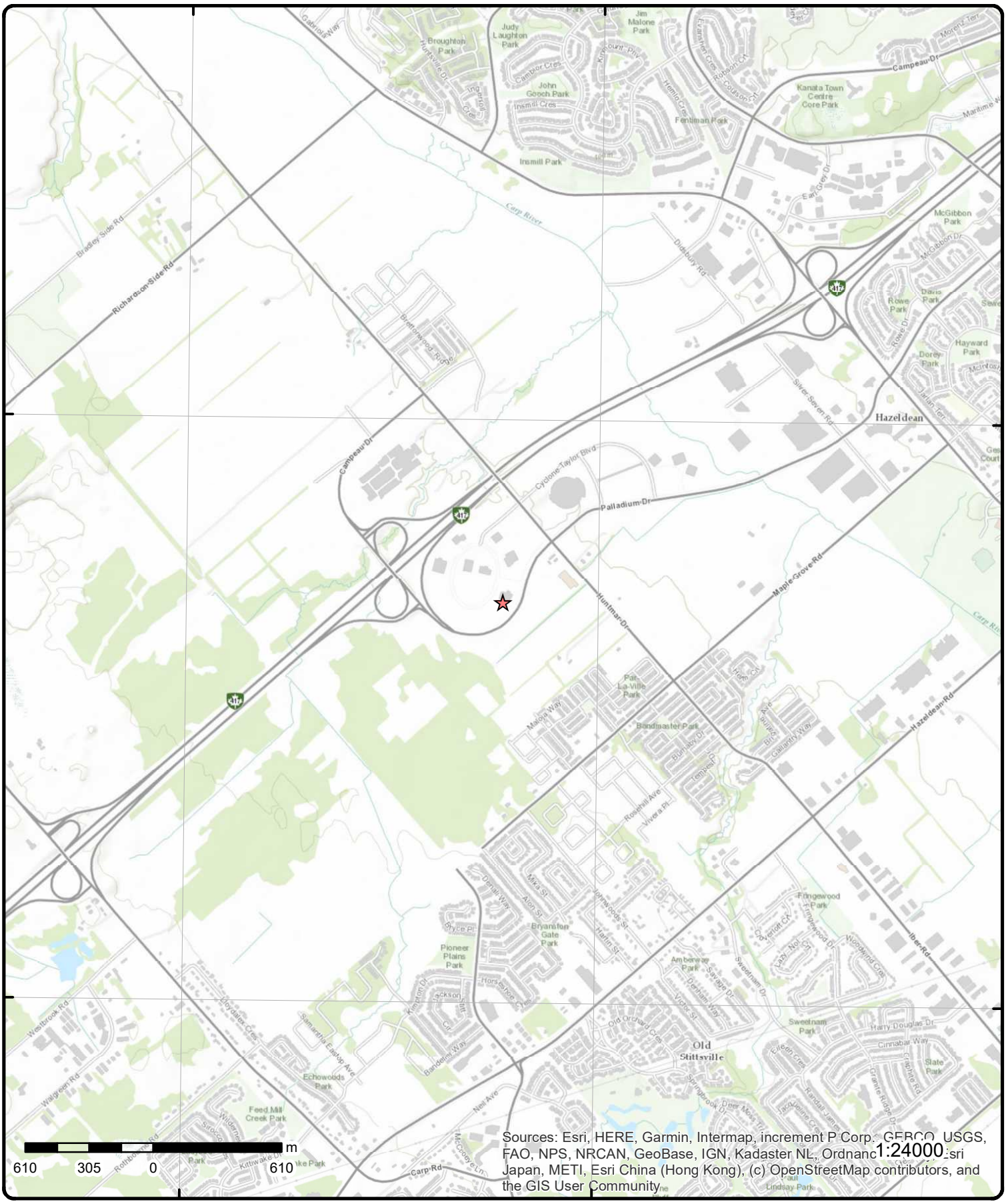


Aerial **Year: 2022**

Order Number: 23051700637

Address: 2500 Palladium Drive, Kanata, ON

Source: ESRI World Imagery



Topographic Map

Address: 2500 Palladium Drive, ON

Source: ESRI World Topographic Map

Order Number: 23051700637

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 16	-/0.0	102.6 / 0.00	Tony Graham Kanata Limited 600-2500 Palladium Dr Ottawa ON	CA

Certificate #:	1419-6ZBP57
Application Year:	2007
Issue Date:	4/4/2007
Approval Type:	Industrial Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	2 of 16	-/0.0	102.6 / 0.00	Palladium Auto Park Ltd. 2500 Palladium Drive Ottawa ON	CA

Certificate #:	4120-5PXPAC
Application Year:	2003
Issue Date:	7/31/2003
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:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	3 of 16	-/0.0	102.6 / 0.00	Kanata Motors Corporation 2500 Palladium Dr Kanata Ottawa ON	CA

Certificate #:	4174-7UPJJF
Application Year:	2009
Issue Date:	8/7/2009
Approval Type:	Air
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Emission Control:					

1	4 of 16	-/0.0	102.6 / 0.00	**Palladium Auto Park Ltd.** **2500 Palladium Drive** **Ottawa ON**	CA

Certificate #: 6496-5QVL2U
Application Year: 2003
Issue Date: 9/11/2003
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

1	5 of 16	-/0.0	102.6 / 0.00	**2500 PALLADIUM DRIVE** **KANATA ON**	HINC

External File Num: FS INC 0611-04178
Fuel Occurrence Type: Pipeline Strike
Date of Occurrence: 11/10/2006
Fuel Type Involved: Natural Gas
Status Desc: Completed - Causal Analysis(End)
Job Type Desc: Incident/Near-Miss Occurrence (FS)
Oper. Type Involved: Commercial (e.g. restaurant, business unit, etc)
Service Interruptions: No
Property Damage: No
Fuel Life Cycle Stage: Utilization
Root Cause: Root Cause: Equipment/Material/Component:No Procedures:Yes Maintenance:No Design:No Training:No Management:No Human Factors:No
Reported Details:
Fuel Category: Gaseous 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:
Environmental Impact:

1	6 of 16	-/0.0	102.6 / 0.00	**2500 PALLADIUM DRIVE** **RICHMOND ON**	HINC

External File Num: FS INC 0705-02213
Fuel Occurrence Type: Pipeline Strike
Date of Occurrence: 4/19/2007
Fuel Type Involved: Natural Gas
Status Desc: Completed - Causal Analysis(End)
Job Type Desc: Incident/Near-Miss Occurrence (FS)
Oper. Type Involved: Construction Site (pipeline strike)
Service Interruptions: Yes
Property Damage: No
Fuel Life Cycle Stage: Transmission, Distribution and Transportation
Root Cause: Root Cause: Equipment/Material/Component:No Procedures:Yes Maintenance:No Design:No Training:

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

Yes Management:No Human Factors:No

Reported Details:
Fuel Category: Gaseous 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:
Environmental Impact:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	7 of 16	-/0.0	102.6 / 0.00	2500 Palladium Drive Unit 1200 Kanata ON	EHS

Order No: 20120626032
Status: C
Report Type: Custom Report
Report Date: 04-JUL-12
Date Received: 26-JUN-12
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Nearest Intersection:
Municipality:
Client Prov/State: ON
Search Radius (km): .25
X: -75.930614
Y: 45.292281

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	8 of 16	-/0.0	102.6 / 0.00	#200 - 2500 Palladium Drive Ottawa ON	SPL

Ref No: 0243-A8YJER
Site No: NA
Incident Dt: 2016/04/13
Year:
Incident Cause:
Incident Event: Leak/Break
Environment Impact:
Nature of Impact:
MOE Response: No
Dt MOE Arvl on Scn:
MOE Reported Dt: 2016/04/13
Dt Document Closed:
Municipality No:
System Facility Address:
Client Type:
Call Report Location Geodata:
Contaminant Code: 15
Contaminant Name: MOTOR OIL
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Receiving Medium:
Receiving Environment: Land
Incident Reason: Equipment Failure
Incident Summary: Chevrolet Kanata 10 - 20 L of motor oil to grnd
Site Region:
Site Municipality: Ottawa
Activity Preceding Spill:
Property 2nd Watershed:
Property Tertiary Watershed:
Sector Type: Miscellaneous Industrial
SAC Action Class: Land Spills
Source Type:
Site County/District:
Site Geo Ref Meth:

Contaminant Qty: 20 L
Nature of Damage:
Discharger Report:
Material Group:
Health/Env Conseq:
Agency Involved:
Site Lot:
Site Conc:
Site Geo Ref Accu:
Site Map Datum:
Northing:
Easting:

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

Site District Office:
Nearest Watercourse:
Site Name: Myers Chevrolet Kanata<UNOFFICIAL>
Site Address: #200 - 2500 Palladium Drive
Client Name:

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1 | **9 of 16** | **-/0.0** | **102.6 / 0.00** | **Palladium Auto Park Ltd.**
2500 Palladium Drive
Ottawa ON K2A 1C5 | **ECA**

Approval No: 6496-5QVL2U
Approval Date: 2003-09-11
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Mississippi Valley
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Palladium Auto Park Ltd.
Address: 2500 Palladium Drive
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0978-5PWL7N-14.pdf
PDF Site Location:

MOE District: Ottawa
City:
Longitude: -75.9347
Latitude: 45.291
Geometry X:
Geometry Y:

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1 | **10 of 16** | **-/0.0** | **102.6 / 0.00** | **Zena Investment Corporation**
2500 Palladium Dr
Ottawa ON K2V 1E2 | **ECA**

Approval No: 6046-96MLQ8
Approval Date: 2013-04-30
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Zena Investment Corporation
Address: 2500 Palladium Dr
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/8606-8Z4MYF-14.pdf
PDF Site Location:

MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

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1 | **11 of 16** | **-/0.0** | **102.6 / 0.00** | **Palladium Auto Park Ltd.**
2500 Palladium Drive
Ottawa ON K2A 1C5 | **ECA**

Approval No: 6396-5PXPCK
Approval Date: 2003-07-31
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name: Mississippi Valley
Approval Type: ECA-Municipal Drinking Water Systems
Project Type: Municipal Drinking Water Systems
Business Name: Palladium Auto Park Ltd.
Address: 2500 Palladium Drive
Full Address:
Full PDF Link:
PDF Site Location:

MOE District: Ottawa
City:
Longitude: -75.9347
Latitude: 45.291000000000004
Geometry X:
Geometry Y:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	12 of 16	-/0.0	102.6 / 0.00	**Palladium Auto Park Ltd.** **2500 Palladium Drive** **Ottawa ON K2A 1C5**	ECA

Approval No:	4120-5PXPAC	**MOE District:**	Ottawa
Approval Date:	2003-07-31	**City:**	
Status:	Approved	**Longitude:**	-75.9347
Record Type:	ECA	**Latitude:**	45.291
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Mississippi Valley	**Geometry Y:**	

Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Business Name: Palladium Auto Park Ltd.
Address: 2500 Palladium Drive
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/1450-5PWL3Q-14.pdf
PDF Site Location:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	13 of 16	-/0.0	102.6 / 0.00	**Kanata Motors Corporation** **2500 Palladium Dr Kanata** **Ottawa ON K2V 1E2**	ECA

Approval No:	4174-7UPJJF	**MOE District:**	Ottawa
Approval Date:	2009-08-07	**City:**	
Status:	Approved	**Longitude:**	-75.93187
Record Type:	ECA	**Latitude:**	45.29398
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Mississippi Valley	**Geometry Y:**	

Approval Type: ECA-AIR
Project Type: AIR
Business Name: Kanata Motors Corporation
Address: 2500 Palladium Dr Kanata
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0866-7TQPXD-14.pdf
PDF Site Location:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	14 of 16	-/0.0	102.6 / 0.00	**Tony Graham Kanata Limited** **600-2500 Palladium Dr** **Ottawa ON K2G 1E3**	ECA

Approval No:	1419-6ZBP57	**MOE District:**	Ottawa
Approval Date:	2007-04-04	**City:**	
Status:	Revoked and/or Replaced	**Longitude:**	-75.93187
Record Type:	ECA	**Latitude:**	45.29398
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Mississippi Valley	**Geometry Y:**	

Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Tony Graham Kanata Limited
Address: 600-2500 Palladium Dr
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/0790-6VYNF9-14.pdf
PDF Site Location:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	15 of 16	-/0.0	102.6 / 0.00	**Tony Graham Motors Limited** **2500 Palladium Dr** **Ottawa ON K2G 1E3**	ECA

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

Approval No:	0685-ALTRRP	**MOE District:**	Ottawa
Approval Date:	2017-06-02	**City:**	
Status:	Approved	**Longitude:**	-75.93187
Record Type:	ECA	**Latitude:**	45.29398
Link Source:	IDS	**Geometry X:**	
SWP Area Name:	Mississippi Valley	**Geometry Y:**	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Tony Graham Motors Limited		
Address:	2500 Palladium Dr		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/5415-ACHQQT-14.pdf		
PDF Site Location:			

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1 | ***16 of 16*** | ***-/0.0*** | ***102.6 / 0.00*** | ***Zena Investment Corporation
2500 Palladium Dr
Ottawa ON K2J 6H8*** | ***ECA***

Approval No:	7040-AP7M89	**MOE District:**	
Approval Date:	2017-07-26	**City:**	
Status:	Approved	**Longitude:**	
Record Type:	ECA	**Latitude:**	
Link Source:	IDS	**Geometry X:**	
SWP Area Name:		**Geometry Y:**	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Zena Investment Corporation		
Address:	2500 Palladium Dr		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/3182-AJYJ4V-14.pdf		
PDF Site Location:			

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3 | ***1 of 1*** | ***WNW/198.0*** | ***101.9 / -0.69*** | ***2500 Palladium
Ottawa ON*** | ***EHS***

Order No:	20160225096	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Custom Report	**Client Prov/State:**	ON
Report Date:	03-MAR-16	**Search Radius (km):**	.25
Date Received:	25-FEB-16	**X:**	-75.93315
Previous Site Name:		**Y:**	45.292765
Lot/Building Size:			
Additional Info Ordered:			

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2 | ***1 of 1*** | ***WNW/184.2*** | ***101.9 / -0.69*** | ***lot 2 con 2
ON*** | ***WWIS***

Well ID:	1529723	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:	Not Used	**Data Entry Status:**	
Use 2nd:		**Data Src:**	1
Final Well Status:	Abandoned-Supply	**Date Received:**	22-Dec-1997 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	182754	**Contractor:**	1558
Tag:		**Form Version:**	1
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	OTTAWA-CARLETON
Elevatn Reliabilty:		**Lot:**	002
Depth to Bedrock:		**Concession:**	02

Well Depth:		**Concession Name:**	CON
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	HUNTLEY TOWNSHIP		
Site Info:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/152\1529723.pdf

Additional Detail(s) (Map)

Well Completed Date:	1997/11/28
Year Completed:	1997
Depth (m):	
Latitude:	45.2932539352157
Longitude:	-75.9325642124719
Path:	152\1529723.pdf

Bore Hole Information

Bore Hole ID:	10051258	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:		**East83:**	426875.60
Code OB Desc:		**North83:**	5015951.00
Open Hole:		**Org CS:**	
Cluster Kind:		**UTMRC:**	5
Date Completed:	28-Nov-1997 00:00:00	**UTMRC Desc:**	margin of error : 100 m - 300 m
Remarks:		**Location Method:**	gis
Loc Method Desc:	from gis		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	933114787
Layer:	1
Plug From:	200.0
Plug To:	0.0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961529723
Method Construction Code:	0
Method Construction:	Not Known
Other Method Construction:	

Pipe Information

Pipe ID:	10599828
Casing No:	1
Comment:	
Alt Name:	

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

Links

Bore Hole ID:	10051258	***Tag No:***	
Depth M:		***Contractor:***	1558
Year Completed:	1997	***Path:***	152\1529723.pdf
Well Completed Dt:	1997/11/28	***Latitude:***	45.2932539352157
Audit No:	182754	***Longitude:***	-75.9325642124719

4 ***1 of 2*** ***NNW/216.8*** ***100.9 / -1.62*** ***Kanata Motors Corporation*** ***ECA***

Ottawa ON K1S 2E7

Approval No:	2956-7AUQFS	***MOE District:***	Ottawa
Approval Date:	2008-01-25	***City:***	
Status:	Approved	***Longitude:***	-75.93187
Record Type:	ECA	***Latitude:***	45.29398
Link Source:	IDS	***Geometry X:***	
SWP Area Name:	Mississippi Valley	***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Kanata Motors Corporation		
Address:			
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/8236-777M4W-14.pdf		
PDF Site Location:			

4 ***2 of 2*** ***NNW/216.8*** ***100.9 / -1.62*** ***Tony Graham Kanata Limited*** ***ECA***

Ring Road, Lot 6

Ottawa ON K2G 1E3

Approval No:	6935-63SJJQ	***MOE District:***	Ottawa
Approval Date:	2004-08-24	***City:***	
Status:	Revoked and/or Replaced	***Longitude:***	-75.93187
Record Type:	ECA	***Latitude:***	45.29398
Link Source:	IDS	***Geometry X:***	
SWP Area Name:	Mississippi Valley	***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Tony Graham Kanata Limited		
Address:	Ring Road, Lot 6		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/0791-63BQJ4-14.pdf		
PDF Site Location:			

5 ***1 of 1*** ***WNW/223.1*** ***101.9 / -0.69*** ***Palladium Dr*** ***EHS***

Kanata ON

Order No:	20120222027	***Nearest Intersection:***	
Status:	C	***Municipality:***	Huntley
Report Type:	Standard Report	***Client Prov/State:***	ON
Report Date:	2/28/2012 2:19:31 PM	***Search Radius (km):***	0.25
Date Received:	2/22/2012 2:16:45 PM	***X:***	-75.933006
Previous Site Name:	Vacant	***Y:***	45.293425
Lot/Building Size:			
Additional Info Ordered:	Fire Insur. Maps and/or Site Plans; City Directory		

6 ***1 of 1*** ***NNW/243.4*** ***100.9 / -1.69*** ***CARP AIRPORT lot 2 con 1*** ***WWIS***

CARP ON

Well ID:	1535122	**Flowing (Y/N):**	
Construction Date:		**Flow Rate:**	
Use 1st:		**Data Entry Status:**	
Use 2nd:		**Data Src:**	1
Final Well Status:	Observation Wells	**Date Received:**	14-Oct-2004 00:00:00
Water Type:		**Selected Flag:**	TRUE
Casing Material:		**Abandonment Rec:**	
Audit No:	Z19304	**Contractor:**	1844
Tag:	A011931	**Form Version:**	3
Constructn Method:		**Owner:**	
Elevation (m):		**County:**	OTTAWA-CARLETON
Elevatn Reliabilty:		**Lot:**	002
Depth to Bedrock:		**Concession:**	01
Well Depth:		**Concession Name:**	CON
Overburden/Bedrock:		**Easting NAD83:**	
Pump Rate:		**Northing NAD83:**	
Static Water Level:		**Zone:**	
Clear/Cloudy:		**UTM Reliability:**	
Municipality:	HUNTLEY TOWNSHIP		
Site Info:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2004/09/07
Year Completed:	2004
Depth (m):	
Latitude:	45.2943061254432
Longitude:	-75.9315815951292
Path:	

Bore Hole Information

Bore Hole ID:	11172874	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:		**East83:**	426954.00
Code OB Desc:		**North83:**	5016067.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	3
Date Completed:	07-Sep-2004 00:00:00	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	wwr
Loc Method Desc:	on Water Well Record		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Method of Construction & Well Use

Method Construction ID:	961535122
Method Construction Code:	B
Method Construction:	Other Method
Other Method Construction:	

Pipe Information

Pipe ID: 11181393

Casing No: 1
Comment:
Alt Name:

Links

Bore Hole ID:	11172874	**Tag No:**	A011931
Depth M:		**Contractor:**	1844
Year Completed:	2004	**Path:**	
Well Completed Dt:	2004/09/07	**Latitude:**	45.2943061254432
Audit No:	Z19304	**Longitude:**	-75.9315815951292

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7 **1 of 1** **WSW/243.5** **103.2 / 0.61** **ON** **BORE**

Borehole ID:	848689	**Inclin FLG:**	No
OGF ID:	215590309	**SP Status:**	Initial Entry
Status:	Decommissioned	**Surv Elev:**	No
Type:	Borehole	**Piezometer:**	No
Use:	Geotechnical/Geological Investigation	**Primary Name:**	
Completion Date:	06-MAY-1992	**Municipality:**	
Static Water Level:		**Lot:**	LOT 2
Primary Water Use:		**Township:**	HUNTLEY
Sec. Water Use:		**Latitude DD:**	45.290801
Total Depth m:	1.5	**Longitude DD:**	-75.933157
Depth Ref:	Ground Surface	**UTM Zone:**	18
Depth Elev:		**Easting:**	426826
Drill Method:	Power auger	**Northing:**	5015679
Orig Ground Elev m:	103	**Location Accuracy:**	
Elev Reliabil Note:		**Accuracy:**	Within 10 metres
DEM Ground Elev m:	103		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	6561880	**Mat Consistency:**	Firm
Top Depth:	.3	**Material Moisture:**	
Bottom Depth:	1.5	**Material Texture:**	
Material Color:	Brown-Grey	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Silt	**Geologic Group:**	
Material 3:	Sand	**Geologic Period:**	
Material 4:	Organic	**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: FIRM BROWNISH GREY SILTY CLAY TRACE SAND TRACE ORGANICS **Note: Many records provided by the department have a truncated [Stratum Description] field.

Geology Stratum ID:	6561879	**Mat Consistency:**	
Top Depth:	0	**Material Moisture:**	
Bottom Depth:	.3	**Material Texture:**	
Material Color:	Brown	**Non Geo Mat Type:**	
Material 1:	Clay	**Geologic Formation:**	
Material 2:	Silt	**Geologic Group:**	
Material 3:	Sand	**Geologic Period:**	
Material 4:	Organic	**Depositional Gen:**	
Gsc Material Description:			

Stratum Description: 300mm DARK BROWN ORGANIC SANDY SILTY CLAY ROOTMAT **Note: Many records provided by the department have a truncated [Stratum Description] field.

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
8	1 of 12	NE/243.5	101.9 / -0.69	Ultramar Ltd. 225 Huntmar Dr Ottawa ON K2S 1B9	CA

Certificate #: 8060-888QC8
Application Year: 2010
Issue Date: 9/8/2010
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
8	2 of 12	NE/243.5	101.9 / -0.69	PARKLAND CORPORATION 225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	FST

Instance No: 64499870
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 11/12/2010 3:21:28 PM
Install Year: 2010
Years in Service:
Model: NULL
Description:
Capacity: 50000
Tank Material: Fiberglass (FRP)
Corrosion Protect: NULL
Overfill Protect:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 225 HUNTMAR DR OTTAWA K2S 1B9 ON CA

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:
Tanks Single Wall St:
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: PARKLAND CORPORATION
Item: FS LIQUID FUEL TANK

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
8	3 of 12	NE/243.5	101.9 / -0.69	PARKLAND CORPORATION 225 HUNTMAR DR OTTAWA K2S 1B9 ON CA ON	FST

Instance No: 64499871
Status:
Cont Name:
Instance Type: FS Liquid Fuel Tank
Item:
Item Description: FS Liquid Fuel Tank
Tank Type: Double Wall UST
Install Date: 11/12/2010 3:21:28 PM
Install Year: 2010
Years in Service:

Manufacturer:
Serial No:
Ulc Standard:
Quantity:
Unit of Measure:
Fuel Type: Gasoline
Fuel Type2: NULL
Fuel Type3: NULL
Piping Steel:
Piping Galvanized:

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

Model:	NULL	**Tanks Single Wall St:**	
Description:		**Piping Underground:**	
Capacity:	50000	**No Underground:**	
Tank Material:	Fiberglass (FRP)	**Panam Related:**	
Corrosion Protect:	NULL	**Panam Venue:**	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:	FS Gasoline Station - Self Serve		
Facility Location:			
Device Installed Location:	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	PARKLAND CORPORATION
Item:	FS LIQUID FUEL TANK

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8 | ***4 of 12*** | ***NE/243.5*** | ***101.9 / -0.69*** | ***PARKLAND CORPORATION***
225 HUNTMAR DR OTTAWA K2S 1B9 ON CA
ON | ***FST***

Instance No:	64499872	**Manufacturer:**	
Status:		**Serial No:**	
Cont Name:		**Ulc Standard:**	
Instance Type:	FS Liquid Fuel Tank	**Quantity:**	
Item:		**Unit of Measure:**	
Item Description:	FS Liquid Fuel Tank	**Fuel Type:**	Gasoline
Tank Type:	Double Wall UST	**Fuel Type2:**	NULL
Install Date:	11/12/2010 3:21:28 PM	**Fuel Type3:**	NULL
Install Year:	2010	**Piping Steel:**	
Years in Service:		**Piping Galvanized:**	
Model:	NULL	**Tanks Single Wall St:**	
Description:		**Piping Underground:**	
Capacity:	35000	**No Underground:**	
Tank Material:	Fiberglass (FRP)	**Panam Related:**	
Corrosion Protect:	NULL	**Panam Venue:**	
Overfill Protect:			
Facility Type:	FS Liquid Fuel Tank		
Parent Facility Type:	FS Gasoline Station - Self Serve		
Facility Location:			
Device Installed Location:	225 HUNTMAR DR OTTAWA K2S 1B9 ON CA		

Liquid Fuel Tank Details

Overfill Protection:	
Owner Account Name:	PARKLAND CORPORATION
Item:	FS LIQUID FUEL TANK

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8 | ***5 of 12*** | ***NE/243.5*** | ***101.9 / -0.69*** | ***PARKLAND CORPORATION***
225 HUNTMAR DR OTTAWA K2S 1B9 ON CA
ON | ***FST***

Instance No:	64499873	**Manufacturer:**	
Status:		**Serial No:**	
Cont Name:		**Ulc Standard:**	
Instance Type:	FS Liquid Fuel Tank	**Quantity:**	
Item:		**Unit of Measure:**	
Item Description:	FS Liquid Fuel Tank	**Fuel Type:**	Diesel
Tank Type:	Double Wall UST	**Fuel Type2:**	NULL
Install Date:	11/12/2010 3:21:28 PM	**Fuel Type3:**	NULL
Install Year:	2010	**Piping Steel:**	
Years in Service:		**Piping Galvanized:**	
Model:	NULL	**Tanks Single Wall St:**	

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

Description:
Capacity: 25000
Tank Material: Fiberglass (FRP)
Corrosion Protect: NULL
Overfill Protect:
Facility Type: FS Liquid Fuel Tank
Parent Facility Type: FS Gasoline Station - Self Serve
Facility Location:
Device Installed Location: 225 HUNTMAR DR OTTAWA K2S 1B9 ON CA
Piping Underground:
No Underground:
Panam Related:
Panam Venue:

Liquid Fuel Tank Details

Overfill Protection:
Owner Account Name: PARKLAND CORPORATION
Item: FS LIQUID FUEL TANK

8	6 of 12	NE/243.5	101.9 / -0.69	225 Huntmar Dr Ottawa ON K2S1B9	EHS

Order No: 20150928014
Status: C
Report Type: Custom Report
Report Date: 02-OCT-15
Date Received: 28-SEP-15
Previous Site Name:
Lot/Building Size:
Additional Info Ordered: Title Searches; Topographic Maps; City Directory
Nearest Intersection:
Municipality: Kanata
Client Prov/State: ON
Search Radius (km): .25
X: -75.928021
Y: 45.293916

8	7 of 12	NE/243.5	101.9 / -0.69	Ultramar Ltd. 225 Huntmar Dr Ottawa ON H3A 3L3	ECA

Approval No: 8060-888QC8
Approval Date: 2010-09-08
Status: Revoked and/or Replaced
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Ultramar Ltd.
Address: 225 Huntmar Dr
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/2398-86RHWX-14.pdf
PDF Site Location:
MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

8	8 of 12	NE/243.5	101.9 / -0.69	Parkland Fuel Corporation 225 Huntmar Rd Kanata ON K2S1B9	GEN

Generator No: ON2813150
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:

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

MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

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8 | ***9 of 12*** | ***NE/243.5*** | ***101.9 / -0.69*** | ***Parkland Fuel Corporation*** ***225 Huntmar Rd*** ***Kanata ON K2S1B9*** | ***GEN***

Generator No: ON2813150
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

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8 | ***10 of 12*** | ***NE/243.5*** | ***101.9 / -0.69*** | ***Enterprise Rent-A-Car Canada Company/La Compagnie De Location D'Autos*** ***Enterprise Canada 225 Huntmar Dr*** ***Ottawa ON K1G 3W3*** | ***ECA***

Approval No: 3624-B9XPYB
Approval Date: 2019-05-30
Status: Approved
Record Type: ECA
Link Source: IDS
SWP Area Name:
Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS
Business Name: Enterprise Rent-A-Car Canada Company/La Compagnie De Location D'Autos Enterprise Canada
Address: 225 Huntmar Dr
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/4575-B6PR3C-14.pdf
PDF Site Location:

MOE District:
City:
Longitude:
Latitude:
Geometry X:
Geometry Y:

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8 | ***11 of 12*** | ***NE/243.5*** | ***101.9 / -0.69*** | ***225 HUNTMAR DR*** ***OTTAWA ON K2S 1B9*** | ***DTNK***

Delisted Fuel Storage Tank

Instance No: 64499869
Status: Active
Instance Type:
Fuel Type:
Cont Name:
Capacity:

Creation Date:
Overfill Prot Type:
Facility Location:
Piping SW Steel: 0
Piping SW Galvan: 0
Tanks SW Steel: 0

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

Tank Material:		**Piping Underground:**	3
Corrosion Prot:		**No Underground:**	4
Tank Type:		**Max Hazard Rank:**	
Install Year:		**Max Hazard Rank 1:**	
Facility Type:		**Nxt Period Start Dt:**	
Device Installed Loc:		**Program Area 1:**	
Fuel Type 2:		**Program Area 2:**	
Fuel Type 3:		**Nxt Period Strt Dt 2:**	
Item:	FS GASOLINE STATION - SELF SERVE	**Risk Based Periodic:**	
Item Description:		**Vol of Directives:**	
Model:		**Years in Service:**	
Description:		**Created Date:**	
Instance Creation Dt:		**Federal Device:**	
Instance Install Dt:		**Periodic Exempt:**	
Manufacturer:		**Statutory Interval:**	
Serial No:		**Rcomnd Insp Interval:**	
ULC Standard:		**Recommended Toler:**	
Quantity:		**Panam Venue Name:**	
Unit of Measure:		**External Identifier:**	
Parent Fac Type:			
TSSA Base Sched Cycle 1:			
TSSA Base Sched Cycle 2:			
Original Source:	FST		
Record Date:	31-MAY-2021		

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8 | ***12 of 12*** | ***NE/243.5*** | ***101.9 / -0.69*** | ***Parkland Fuel Corporation***
225 Huntmar Rd
Kanata ON K2S1B9 | ***GEN***

Generator No:	ON2813150
SIC Code:	
SIC Description:	
Approval Years:	As of Jan 2021
PO Box No:	
Country:	Canada
Status:	Registered
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

Detail(s)

Waste Class:	251 L
Waste Class Name:	Waste oils/sludges (petroleum based)

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9 | ***1 of 7*** | ***ENE/243.7*** | ***101.9 / -0.69*** | ***CITY OF OTTAWA POLICE SERVICES***
211 HUNTMAR DRIVE
KANATA ON | ***GEN***

Generator No:	ON4421972
SIC Code:	913130
SIC Description:	
Approval Years:	2013
PO Box No:	
Country:	
Status:	
Co Admin:	
Choice of Contact:	
Phone No Admin:	
Contaminated Facility:	
MHSW Facility:	

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

Detail(s)

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

9	2 of 7	ENE/243.7	101.9 / -0.69	CITY OF OTTAWA POLICE SERVICES 211 HUNTMAR DRIVE KANATA ON K2V 1A5	GEN

Generator No: ON4421972
SIC Code: 913130
SIC Description: 913130
Approval Years: 2016
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

9	3 of 7	ENE/243.7	101.9 / -0.69	CITY OF OTTAWA POLICE SERVICES 211 HUNTMAR DRIVE KANATA ON K2V 1A5	GEN

Generator No: ON4421972
SIC Code: 913130
SIC Description: 913130
Approval Years: 2015
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

9	4 of 7	ENE/243.7	101.9 / -0.69	CITY OF OTTAWA POLICE SERVICES 211 HUNTMAR DRIVE	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
				KANATA ON K2V 1A5	

Generator No: ON4421972
SIC Code: 913130
SIC Description: 913130
Approval Years: 2014
PO Box No:
Country: Canada
Status:
Co Admin:
Choice of Contact: CO_OFFICIAL
Phone No Admin:
Contaminated Facility: No
MHSW Facility: No

Detail(s)

Waste Class: 252
Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Name: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	5 of 7	ENE/243.7	101.9 / -0.69	CITY OF OTTAWA POLICE SERVICES 211 HUNTMAR DRIVE KANATA ON K2V 1A5	GEN

Generator No: ON4421972
SIC Code:
SIC Description:
Approval Years: As of Dec 2018
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
9	6 of 7	ENE/243.7	101.9 / -0.69	CITY OF OTTAWA POLICE SERVICES 211 HUNTMAR DRIVE KANATA ON K2V 1A5	GEN

Generator No: ON4421972
SIC Code:
SIC Description:
Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:

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

Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

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9 ***7 of 7*** ***ENE/243.7*** ***101.9 / -0.69*** ***CITY OF OTTAWA POLICE SERVICES*** ***GEN***
211 HUNTMAR DRIVE
KANATA ON K2V 1A5

Generator No: ON4421972
SIC Code:
SIC Description:
Approval Years: As of Nov 2021
PO Box No:
Country: Canada
Status: Registered
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 251 L
Waste Class Name: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Name: Waste crankcase oils and lubricants

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10 ***1 of 1*** ***NE/249.1*** ***101.2 / -1.39*** ***BORE***
ON

Borehole ID:	848688	***Inclin FLG:***	No
OGF ID:	215590308	***SP Status:***	Initial Entry
Status:	Decommissioned	***Surv Elev:***	No
Type:	Borehole	***Piezometer:***	No
Use:	Geotechnical/Geological Investigation	***Primary Name:***	
Completion Date:	06-MAY-1992	***Municipality:***	
Static Water Level:		***Lot:***	LOT 2
Primary Water Use:		***Township:***	HUNTLEY
Sec. Water Use:		***Latitude DD:***	45.294004
Total Depth m:	1.6	***Longitude DD:***	-75.928886
Depth Ref:	Ground Surface	***UTM Zone:***	18
Depth Elev:		***Easting:***	427165
Drill Method:	Power auger	***Northing:***	5016031
Orig Ground Elev m:	101	***Location Accuracy:***	
Elev Reliabil Note:		***Accuracy:***	Within 10 metres
DEM Ground Elev m:	101		
Concession:			
Location D:			
Survey D:			
Comments:			

Borehole Geology Stratum

Geology Stratum ID:	6561878	***Mat Consistency:***	Firm
Top Depth:	.3	***Material Moisture:***	
Bottom Depth:	1.6	***Material Texture:***	
Material Color:	Brown-Grey	***Non Geo Mat Type:***	
Material 1:	Clay	***Geologic Formation:***	
Material 2:	Silt	***Geologic Group:***	
Material 3:	Sand	***Geologic Period:***	
Material 4:		***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	FIRM MOTTLED BROWN AND GREY SILTY CLAY TRACE SAND **Note: Many records provided by the department have a truncated [Stratum Description] field.		

Geology Stratum ID:	6561877	***Mat Consistency:***	
Top Depth:	0	***Material Moisture:***	
Bottom Depth:	.3	***Material Texture:***	
Material Color:	Brown	***Non Geo Mat Type:***	
Material 1:	Clay	***Geologic Formation:***	
Material 2:	Silt	***Geologic Group:***	
Material 3:	Sand	***Geologic Period:***	
Material 4:	Organic	***Depositional Gen:***	
Gsc Material Description:			
Stratum Description:	300mm DARK BROWN ORGANIC SANDY SILTY CLAY ROOTMAT **Note: Many records provided by the department have a truncated [Stratum Description] field.		

Unplottable Summary

Total: 11 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA		Part of Lot 1, Concession 1	Kanata ON	
CA	Kanata Motors Corporation		Ottawa ON	
CA		Part of Lot 1, Concession 1	Kanata ON	
CA		Part of Lot 1, Concession 1	Kanata ON	
CA	BASUTA CORPORATION	PALLADIUM DR.,PT.LOT 1/C-2,SWM	KANATA CITY ON	
CA	PALLADIUM CORPORATION	PT.LOT 2/CON.1,PALLADIUM DR.	KANATA CITY ON	
CA	PALLADIUM CORPORATION	PALLADIUM DR.,PT.LOT 2/CON.2	KANATA CITY ON	
ECA	Ultramar Ltd.	Part 1, Reference Plan 4R-23561	Ottawa ON	H3A 3L3
EHS		North & South of Palladium Dr	West Carleton Twp / Kanata ON	
RST	ULTRAMAR LTÉE	OTTAWA	OTTAWA ON	
WWIS		lot 1	ON	

Unplottable Report

Site:
Part of Lot 1, Concession 1 Kanata ON

Database: CA

Certificate #:	6046-4FFRDH
Application Year:	01
Issue Date:	2/1/01
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	Notice
Client Name:	Nortel Networks Corporation
Client Address:	2 Constellation Crescent
Client City:	Nepean
Client Postal Code:	K2G 5J9
Project Description:	This proposal is for modifications to the existing storm sewer and stormwater management system to accommodate an additional 1.0 hectares parking lot. Runoff from this new area will be attenuated by underground storage. No increase in the site release rate is proposed. Modifications to the wet pond outlet structure are proposed to increase the permanent pond volume.
Contaminants:	
Emission Control:	

Site: ***Kanata Motors Corporation***
Ottawa ON

Database: CA

Certificate #:	2956-7AUQFS
Application Year:	2008
Issue Date:	1/25/2008
Approval Type:	Industrial Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site:
Part of Lot 1, Concession 1 Kanata ON

Database: CA

Certificate #:	6046-4FFRDH
Application Year:	01
Issue Date:	4/9/01
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	Notice
Client Name:	Nortel Networks Optical Components Corporation
Client Address:	500 Palladium Drive
Client City:	Kanata
Client Postal Code:	K2V 1C2
Project Description:	Administrative Name Change
Contaminants:	
Emission Control:	

Site:
Part of Lot 1, Concession 1 Kanata ON

Database: CA

Certificate #: 6046-4FFRDH
Application Year: 00
Issue Date: 1/17/00
Approval Type: Municipal & Private sewage
Status: Amended
Application Type: New Certificate of Approval
Client Name: Nortel Networks Corporation
Client Address: 2 Constellation Crescent
Client City: Nepean
Client Postal Code: K2G 5J9
Project Description: Stormwater Management Facility - Nortel Palladium One
Contaminants:
Emission Control:

Site: ***BASUTA CORPORATION***
PALLADIUM DR.,PT.LOT 1/C-2,SWM KANATA CITY ON

Database: ***CA***

Certificate #: 3-0791-96-
Application Year: 96
Issue Date: 7/26/1996
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***PALLADIUM CORPORATION***
PT.LOT 2/CON.1,PALLADIUM DR. KANATA CITY ON

Database: ***CA***

Certificate #: 3-1307-94-
Application Year: 94
Issue Date: 10/19/1994
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***PALLADIUM CORPORATION***
PALLADIUM DR.,PT.LOT 2/CON.2 KANATA CITY ON

Database: ***CA***

Certificate #: 3-1262-94-
Application Year: 94
Issue Date: 10/13/1994
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Ultramar Ltd.***
Part 1, Reference Plan 4R-23561 Ottawa ON H3A 3L3

Database: ***ECA***

Approval No:	1928-8W2Q6W	***MOE District:***	
Approval Date:	2012-07-10	***City:***	
Status:	Approved	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-INDUSTRIAL SEWAGE WORKS		
Project Type:	INDUSTRIAL SEWAGE WORKS		
Business Name:	Ultramar Ltd.		
Address:	Part 1, Reference Plan 4R-23561		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/2244-8RJQ9S-14.pdf		
PDF Site Location:			

Site:
North & South of Palladium Dr West Carleton Twp / Kanata ON

Database: ***EHS***

Order No:	20010614002	***Nearest Intersection:***	
Status:	C	***Municipality:***	
Report Type:	Custom Report	***Client Prov/State:***	ON
Report Date:	6/18/01	***Search Radius (km):***	4.75
Date Received:	6/14/01	***X:***	-75.926941
Previous Site Name:		***Y:***	45.295955
Lot/Building Size:			
Additional Info Ordered:			

Site: ***ULTRAMAR LTÉE***
OTTAWA OTTAWA ON

Database: ***RST***

Headcode:	924800
Headcode Desc:	Oils-Fuel
Phone:	6137275200
List Name:	
Description:	

Site:
lot 1 ON

Database: ***WWIS***

Well ID:	1518217	***Flowing (Y/N):***	
Construction Date:		***Flow Rate:***	
Use 1st:	Domestic	***Data Entry Status:***	
Use 2nd:	Livestock	***Data Src:***	1
Final Well Status:	Water Supply	***Date Received:***	06-May-1983 00:00:00
Water Type:		***Selected Flag:***	TRUE
Casing Material:		***Abandonment Rec:***	
Audit No:		***Contractor:***	3644
Tag:		***Form Version:***	1
Constructn Method:		***Owner:***	
Elevation (m):		***County:***	OTTAWA-CARLETON
Elevatn Reliabilty:		***Lot:***	001
Depth to Bedrock:		***Concession:***	
Well Depth:		***Concession Name:***	
Overburden/Bedrock:		***Easting NAD83:***	
Pump Rate:		***Northing NAD83:***	
Static Water Level:		***Zone:***	
Clear/Cloudy:		***UTM Reliability:***	
Municipality:	OTTAWA CITY		
Site Info:			

Bore Hole Information

Bore Hole ID:	10040087	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:		***East83:***	
Code OB Desc:		***North83:***	
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	21-Mar-1983 00:00:00	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Loc Method Desc:	Not Applicable i.e. no UTM		
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931037740
Layer:	2
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	13
Mat2 Desc:	BOULDERS
Mat3:	14
Mat3 Desc:	HARDPAN
Formation Top Depth:	15.0
Formation End Depth:	35.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931037741
Layer:	3
Color:	2
General Color:	GREY
Mat1:	13
Most Common Material:	BOULDERS
Mat2:	14
Mat2 Desc:	HARDPAN
Mat3:	
Mat3 Desc:	
Formation Top Depth:	35.0
Formation End Depth:	52.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931037742
Layer:	4
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	52.0

Formation End Depth: 167.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931037739
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Mat2 Desc:
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 15.0
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961518217
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10588657
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930069993
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 167.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930069992
Layer: 1
Material:
Open Hole or Material:
Depth From:
Depth To: 53.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pumping Test Method Desc: BAILER
Pump Test ID: 991518217
Pump Set At:
Static Level: 25.0

Final Level After Pumping: 60.0
Recommended Pump Depth: 90.0
Pumping Rate: 20.0
Flowing Rate:
Recommended Pump Rate: 5.0
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method: 2
Pumping Duration HR: 2
Pumping Duration MIN: 0
Flowing: No

Draw Down & Recovery

Pump Test Detail ID: 934897806
Test Type:
Test Duration: 60
Test Level: 60.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934103534
Test Type:
Test Duration: 15
Test Level: 60.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934378286
Test Type:
Test Duration: 30
Test Level: 60.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934639345
Test Type:
Test Duration: 45
Test Level: 60.0
Test Level UOM: ft

Water Details

Water ID: 933474887
Layer: 3
Kind Code: 5
Kind: Not stated
Water Found Depth: 162.0
Water Found Depth UOM: ft

Water Details

Water ID: 933474885
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 80.0
Water Found Depth UOM: ft

Water Details

Water ID:	933474886
Layer:	2
Kind Code:	5
Kind:	Not stated
Water Found Depth:	148.0
Water Found Depth UOM:	ft

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory: Provincial 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 Northern Development, Mines, Natural Resources and Forestry (ONDMNRF) maintains this database of pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Oct 2022

Abandoned Mine Information System: Provincial AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Mar 2022

Anderson's Waste Disposal Sites: Private ANDR

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

Aboveground Storage Tanks: Provincial AST

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

Automobile Wrecking & Supplies: Private AUWR

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-Feb 28, 2022

Borehole: Provincial BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

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 2021

Commercial Fuel Oil Tanks: Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.
Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Chemical Manufacturers and Distributors: Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

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-Feb 28, 2023

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 -Feb 2023

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-Feb 2023

Certificates of Property Use: Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994 - Mar 31, 2023

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 - Oct 2022

Delisted Fuel Tanks: Provincial DTNK

List of fuel storage tank sites that were once found in - and have since been removed from - the list of fuel storage tanks made available by the regulatory agency under Access to Public Information.

Government Publication Date: Feb 28, 2022

Environmental Activity and Sector Registry: Provincial EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Government Publication Date: Oct 2011- Mar 31, 2023

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 - Mar 31, 2023

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- Mar 31, 2023

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-Dec 31, 2022

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: Apr 30, 2022

Environmental Penalty Annual Report: Provincial EPAR

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2022

List of Expired Fuels Safety Facilities: Provincial EXP

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Federal Convictions: Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal 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-Mar 2023

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: Feb 28, 2022

Fuel Storage Tank - Historic: Provincial FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Oct 31, 2022

Greenhouse Gas Emissions from Large Facilities: Federal GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

Government Publication Date: 2013-Dec 2019

TSSA Historic Incidents: Provincial HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Fuel Oil Spills and Leaks: Provincial INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing in a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Landfill Inventory Management Ontario: Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the Ministry of the Environment, Conservation and Parks compiles new and updated information. Includes small and large landfills currently operating as well as those which are closed and historic. Operators of larger landfills provide landfill information for the previous operating year to the ministry for LIMO including: estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Mar 21, 2022

Canadian Mine Locations: Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Feb 2023

National Analysis of Trends in Emergencies System (NATES): Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2021

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents: Federal NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Jun 30, 2021

National Energy Board Wells: Federal NEBP

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.

Government Publication Date: 1988-Nov 30, 2022

Ontario Oil and Gas Wells: Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Aug 2021

Inventory of PCB Storage Sites: Provincial OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013

Orders: Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994 - Mar 31, 2023

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- Mar 31, 2023

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: Feb 28, 2021

Private and Retail Fuel Storage Tanks: Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994 - Mar 31, 2023

Ontario Regulation 347 Waste Receivers Summary: Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-1990, 1992-2020

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-Mar 2023

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-Feb 28, 2023

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. The Ministry of the Environment, Conservation and Parks cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: 1988-Oct 2021

Wastewater Discharger Registration Database: Provincial SRDS

Facilities that report either municipal treated wastewater effluent or industrial wastewater discharges under the Effluent Monitoring and Effluent Limits (EMEL) and Municipal/Industrial Strategy for Abatement Regulations. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment keeps record of direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation, Mining, Petroleum Refining, Organic Chemicals, Inorganic Chemicals, Pulp & Paper, Metal Casting, Iron & Steel, and Quarries.

Government Publication Date: 1990-Dec 31, 2020

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 - Apr 2020

Variances 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: Feb 28, 2022

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011- Mar 31, 2023

Waste Disposal Sites - MOE 1991 Historical Approval Inventory: Provincial WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Jun 30 2022

Definitions

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

PATERSON GROUP
solution oriented engineering

Nick Sullivan, B.Sc.
Junior Environmental Technical Specialist

Nick joined Paterson Group in September 2018 as part of the Environmental Department. Nick received his Honours Bachelor of Science Degree from McMaster University in 2016, specializing in Earth & Environmental Science. Following graduation, Nick received a post-graduate certificate from Niagara College in 2017, specializing in Environmental Management & Assessment. Since joining Paterson Group in 2018, Nick has worked on numerous residential and commercial development projects, predominantly within the National Capital Region as well as various locations within Southeastern Ontario. His scope of work consists of conducting phase I & II environmental site assessments, field inspections, contaminated soil and groundwater field sampling, supervising the remediation of contaminated sites, as well as performing designated substance surveys and radon gas assessments.

EDUCATION
Honours Bachelor of Science in Earth & Environmental Science, 2016
McMaster University
Hamilton, ON

Post-Graduate Certificate in Environmental Management & Assessment, 2017
Niagara College
Niagara-on-the-Lake, ON

YEARS OF EXPERIENCE
With Paterson: 4

OFFICE LOCATION
9 Auriga Drive, Ottawa, Ontario, K2E 7T9

SELECT LIST OF PROJECTS
- Caivan Communities: The Ridge, Ottawa, ON (Site Remediation Coordinator & Supervisor).
- Residential High-Rise Development: 851 Richmond Road, Ottawa, ON (Site Remediation Coordinator & Supervisor)
- National Capital Business Park: 4055 & 4120 Russell Road, Ottawa, ON (Phase I & II Environmental Site Assessment)
- Residential High-Rise Development: 125 Hickory Street, Ottawa, ON (Phase I & II Environmental Site Assessment)
- Low-Rise Residential Development: 101 Pinhey Street, Ottawa, ON (Site Remediation Coordinator & Supervisor)
- High-Rise Residential Development: 2070 Scott Street, Ottawa, ON (Phase I & II Environmental Site Assessment)
- Mixed-Use Development: 875 Montreal Road, Ottawa, ON (Phase I & II Environmental Site Assessment)
- Kanata West Business Park, Ottawa, ON (Phase I Environmental Site Assessment)

PROFESSIONAL EXPERIENCE

September 2018 to present, **Junior Environmental Technical Specialist, Paterson Group**, Ottawa, Ontario

- Conducting Phase I and Phase II Environmental Site Assessments in accordance with CSA standards and O.Reg. 153/04.
- Responsible for the application of environmental, hydrogeological, and/or geotechnical principles and practices in the identification and delineation of soil and groundwater contamination plumes while ensuring compliance with federal, provincial, and/or municipal legal and regulatory requirements.
- Presenting analytical test results, interpretations, assessments, recommendations and/or conclusions in a final technical report.
- Field experience in the supervision of drilling and excavation contractors, inspection of aboveground and underground fuel storage tanks, soil and rock classification, soil and groundwater field sampling, as well as the collection of hazardous building materials and designated substances.
- Certified as a C-NRPP Radon Measurement Professional, with experience conducting interior radon gas assessments of residential buildings.
- Coordination and on-site supervision of soil and groundwater remediation activities for contaminated sites.
- Liaising with clients, contractors, consultants, and government officials.
- Coordination of contractors and field staff while directly reporting to senior management and client to ensure completion of project on schedule and within budget.

PATERSON GROUP

solution oriented engineering

Mark S. D'Arcy, P.Eng., QP$_{ESA}$
Senior Environmental/Geotechnical Engineer

After receiving his Bachelors of Applied Science from Queen's University in 1991 in Geological Engineering, Mark joined Paterson Group Inc. During the first 10 years of Mark's career, he was heavily involved in all aspects of field work, including drilling boreholes, excavating test pits, conducting phase I site inspections, environmental sampling and analysis and inspection of environmental remediations. During Mark's field experience, he gained invaluable field and office experience, which would prepare Mark to become the Environmental Division Manager. Mark's field experience ranges from Phase I Environmental Site Assessments (ESAs) to on-site soil and groundwater remediations, as well as, environmental/geotechnical borehole investigations. Mark's field experience has provided extensive knowledge of subsurface conditions, contractor relations and project management. These skills would provide Mark with the ability to understand a variety of situations, which has lead Paterson to an extremely successful Environmental Department. Mark became the Environmental Manager in 2006, which consisted of two engineers and two field technicians. Mark has been an integral part in growing the Environmental Division, which now consists of nine engineers and three field technicians. Mark is the Senior Project Manager for a wide variety of environmental projects within the Eastern Ontario area including Phase I ESAs, Phase II ESAs, remediations for filing Records of Site Condition in the Ontario Ministry of the Environment and Climate Change (MOECC) Environmental Site Registry, Brownfield Applications and Landfill Monitoring Programs. As the Senior Project Manager, Mark is responsible for directing project personnel, final report review and overall project success. Mark has proven leadership and ability to manage small to large scale projects within the allotted time and budget.

EDUCATION
B.A.Sc. 1991, Geological Engineering
Queen's University
Kingston, ON

LICENCE / PROFESSIONAL AFFILIATIONS
Professional Engineers of Ontario

Ottawa Geotechnical Group

ESA Qualified Person with MECP

Consulting Engineers of Ontario

YEARS OF EXPERIENCE
With Paterson: 31

OFFICE LOCATION
9 Auriga Drive, Ottawa, Ontario, K2E 7T9

SELECT LIST OF PROJECTS
- 222 Beechwood Avenue, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Environmental Remediation)
- 409 MacKay Street, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- Art's Court Redevelopment, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- Visitor Welcome Centre, Phase II and Phase III, Parliament Hill, Ottawa, Ontario (Senior Project Manager for Environmental Remediation)
- Mattawa Landfill, Mattawa, Ontario (Senior Project Manager, Annual Water Quality Monitoring report)
- Multi-Phase Redevelopment of the Ottawa Train Yards, Ottawa, Ontario (Senior Project Manager)
- Rideau Centre Expansion, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- 26 Stanley Avenue, Ottawa, Ontario, Phase I ESA, Phase II ESA(Senior Project Manager)
- Riverview Development – Kingston, Ontario, Phase I ESA, Phase II ESA, and filing of an RSC in the MOECC Environmental Site Registry (Senior Project Manager)
- Monitoring Landfills for River Valley, Kipling and Lavagine (Senior Project Manager)
- Energy Services Acquisition Program–Modernization Project- Ottawa; Environmental Services (Senior Project Manager)

PROFESSIONAL EXPERIENCE

May 2001 to present, **Manager of Environmental Division, Paterson Group**, Ottawa, Ontario

- Manage all aspects of the environmental division (management of personnel, budgeting, invoicing, scheduling, business development, reporting, marketing, and fieldwork).
- Review day to day operations within the environmental division.
- Design, perform, and lead Phase I, II and Phase III ESAs, Remediation's, Brownfield Applications and Record of Site conditions, fieldwork surveys, excavation, monitoring, laboratory analysis, and interpretation.
- Write, present, and publish reports with methodology and laboratory analysis results, along with recommendations for environmental findings.
- Responsible for ensuring projects meet Ministry of Environment and Climate Change Standards and Guidelines.
- Building and fostering relationships with clients, stakeholders, and Ministry officials.
- Supervise and continuous training of staff in environmental methods (environmental sampling techniques, technical expertise and guidance).
- Applied due diligence in ensuring the health and safety of staff and the public in field locations.

1991 to 2001, **Geotechnical and Environmental Engineer, Paterson Group**, Ottawa, Ontario

- Provide on-site geotechnical and environmental expertise to various clients.
- Oversee geotechnical and environmental investigations for drilling and test pitting on numerous proposed utility installations, residential and commercial developments.
- Problem solving to help advance or maintain project schedules.
- Complete environmental reports with recommendations to meet environmental standards set by MOE and CCME standards.
- Conduct site inspections, bearing medium evaluations, bearing surface inspections, concrete testing and field density testing.
- Liaising with contractors, consultants and government officials.
- Provide cost estimates for geotechnical and environmental field programs and construction costs.
- Review RFI's, submittals, monthly progress reports and other various construction related work.