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**Attention: Ibrahim Dossani**

**Limited Phase I Environmental Site Assessment**

**Project Name**

1720-1750 16<sup>th</sup> Avenue East,  
Owen Sound, Ontario

**Project Number**

LON-24011198-A0

**Prepared by:**

**EXP Services Inc.**

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**Date Submitted**

September 24, 2024

## **Executive Summary**

EXP Services Inc. (EXP) was retained by Le Groupe Sterling to complete a Phase I Environmental Site Assessment (ESA) of the property located at 1720-1750 16<sup>th</sup> Avenue East in the City of Owen Sound, Ontario (Figure 1 – Site Location Plan). The area is, hereinafter referred to as the “Site”. EXP understands that Le Groupe Sterling requires this Phase I ESA for due diligence purposes and that a Record of Site Condition is not required at this time.

The objective of this Phase I ESA was to identify potential sources of environmental concern to the Site. A Phase I ESA is a systematic qualitative process to assess the environmental condition of a Site based on its historical and current uses. The Phase I ESA was completed in general accordance to CSA Standard Z768-01, (R2022). Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third-party reliance are outlined in Section 10 of this report. It is noted that an observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

The Site is located at the northwest corner of the 16<sup>th</sup> Avenue East and the 17<sup>th</sup> Street East intersection at municipal numbers 1720-1750 16<sup>th</sup> Avenue East in the City of Owen Sound, Ontario (Figure 2 – Site Plan). The Site is rectangular in shape and measures approximately 1.6 hectares (4.0 acres) in area with a lot frontage along 16<sup>th</sup> Avenue East of 230 metres. At the time of the investigation, the Site was occupied by two (2) detached buildings connected by a roofed driveway located on the south portion of Site. The buildings were surrounded by asphalt parking/laneway and some grassed landscaping. The north portion of Site was a vacant overgrown grassed lot. The Bread Depot retail outlet and a warehouse space occupied the north building (1750 16<sup>th</sup> Avenue East) and an automotive shop, Absolute Auto, occupied the south building (1720 16<sup>th</sup> Avenue East).

Based on a review of historical aerial photographs, historical maps, and other records review, the Site was vacant/agricultural land use from the 1940s to the late 1970s when the current Site buildings (connected by a roofed driveway) were constructed. The buildings were occupied by a transportation business in the 1980s which maintained its semi-trucks in-house. An automotive garage occupying the south building has operated from the 1990s to the present. The north building occupants have included bakeries, a truck driving school, a taxi service, and stretcher sales. The north portion of the Site has remained vacant with fill piles placed on the Site in the 1990s and 2000s.

The surrounding study area was vacant/agricultural land use in the 1950s with a gravel pit west of the Site, a former railway north adjacent to the Site, and some small suspected orchards south of the Site. By the 1960s some commercial development began along 16<sup>th</sup> Street East and a glass factory was constructed northeast of the Site. Into the 1970s additional commercial development continued along 16<sup>th</sup> Street East and another factory containing an automotive parts manufacturer (Monroe) was observed east adjacent to the Site. A gas station was present 120m south of the Site during this period along with some automotive garages, a concrete producer, a transportation business, and automotive sales along 16<sup>th</sup> Street East. By the 1990s many of the commercial businesses west of the Site were replaced by the Heritage Place shopping mall and into the 2000s much of the surrounding study area was in its current state including multiple gas stations south of the Site. By the 2020s a large portion of the factory northeast of the Site was demolished and left vacant.

Based on the Phase I ESA findings, the potential environmental concerns associated with the Site are summarized in the following table. It is noted that an observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

Areas of Potential Environmental Concern	Media and Potential Contaminants of Concern	Comments
<b>Site</b>		
<p>Former transportation businesses and active automotive garage with hydraulic lifts, an oil/water separator, and a used oil AST.</p> <p>Fill of unknown quality imported to north portion of Site</p> <p>Petroleum impacted soil and ground at the Site</p>	<p>Soil, Groundwater</p> <p>Volatile organic compounds (VOCs),</p> <p>Petroleum Hydrocarbons (PHCs),</p> <p>Metals &amp; Inorganics, &amp; Polycyclic Aromatic Hydrocarbons (PAHs)</p>	<p>The Site was identified as occupied with a former transport business with in-house garage maintenance and continued use as an automotive garage to the present. Additionally fill of unknown quality was imported to the north portion of Site in the 1990s and 2000s</p> <p>Petroleum impacted soil and ground water was identified on the east side of the Site near the current automotive facility and bread depot. An SLRA (Pinchin 2013) completed for the Site indicated there were no human health risks to long-term workers, Site visitors, or to ecological receptors at the site, given the current and continued commercial land use with a concrete slab on grade constructed building. In 2017 a Due Diligence Phase I ESA was completed and which concluded that, given that petroleum impacted ground water does not appear to be migrating off-Site based on the inferred northwesterly ground water flow direction, and no changes in land use are proposed no further environmental work was warranted at the time.</p> <p>As stated in the 2017 Due Diligence Phase I ESA - EXP recommends periodic (e.g. annual) monitoring of groundwater at the Site to verify a stable or decreasing concentration trend of COCs at the site. The sampling may be discontinued when a stable or decreasing concentration trend is evident.</p>
<b>Surrounding Properties</b>		
<p>Various industrial businesses and hazardous waste generators located within Phase I ESA study area.</p>	<p>Soil and Groundwater VOCs &amp; PHCs</p>	<p>The potential for on-Site migration of contaminants from leaking storage tanks, former spills and/or historic disposal practices from these properties exists. These properties appear to be in a downgradient or trans gradient position from the Site, and soils in the Site area are characterized by</p>

Areas of Potential Environmental Concern	Media and Potential Contaminants of Concern	Comments
		permeable silty sand and/or sandy silt tills. Considering the separation distances from Site and the downgradient or trans gradient positions, the potential environmental concern to the Site from these properties is considered to be low.
Multiple active gas stations south of Site	Soil and Groundwater VOCs & PHCs	The potential for on-Site migration of contaminants from leaking underground storage tanks and former spills from these properties exists. These properties appear to be in an upgradient position from the Site, and soils in the Site area are characterized by permeable silty sand and/or sandy silt tills. Considering the separation distances from Site, the up gradient positions, and the permeable soil types the potential environmental concern to the Site from these properties is considered to be moderate.
Two (2) small suspected orchards south of Site	Soil and Groundwater Organochlorine Pesticides & Metals	An orchard operated south and southeast adjacent to Site from the 1950s to the 1960s. Leaks or spills of pesticide products during application and from subsequent rain runoff into the natural environment could have migrated onto the Site and negatively impacted the soil and/or groundwater quality. The soils in the area are permeable sandy silt/silty sand tills and the suspected orchards were in an upgradient position to the Site. These areas were subsequently redeveloped and it is likely that the topsoil was stripped and removed for building construction. The potential environmental concern associated with the suspected orchards is considered to be low.

A Phase II ESA was completed on the property by Pinchin Environmental in 2013 which identified VOC and PHC soil and groundwater exceedances of the applicable Table 7 SCSs. Groundwater exceedances were detected in three (3) of the monitoring wells located north of the Site building (MW01, MW02, & MW04), one (1) monitoring well near the middle canopy of the Site building (BH01), and one (1) monitoring well located south adjacent to the Site building (MW06). Monitoring wells MW04 and BH01 were resampled concurrently with this report. No exceedances of the Table 7 SCSs were

detected in BH01, however a benzene exceedance was detected in MW04. The remaining wells could not be located.

Based on the findings of this Phase I ESA and the current property use, the potential risk to the building occupants would be considered to be low and no further investigation (ie. Phase II ESA) is warranted at this time. In the event of future development of the Site or a change in land use, a Phase II ESA update may be recommended at that time.

## Table of Contents

<b>Executive Summary .....</b>	<b>i</b>
<b>1 Introduction .....</b>	<b>1</b>
1.1 Objective.....	1
1.2 Site Description.....	1
<b>2 Scope of Investigation .....</b>	<b>2</b>
<b>3 Records Review .....</b>	<b>3</b>
3.1 General.....	3
3.2 Aerial Photographs .....	3
3.3 Fire Insurance Plans .....	4
3.4 City Directories .....	4
3.5 Previous Reports .....	5
3.6 Chain of Title .....	6
3.7 Regulatory Requests .....	7
3.7.1 Ministry of the Environment Conservation and Parks .....	7
3.7.2 Technical Standards and Safety Authority.....	7
3.8 Maps.....	7
3.9 Company Records.....	8
3.10 Environmental Source Information.....	8
3.10.1 Waste Disposal Sites .....	8
3.10.1 Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario .....	9
3.10.2 Inventory of Coal Gasification Plant Waste Sites in Ontario.....	9
3.10.3 Ontario Inventory of PCB Storage Sites .....	9
3.10.4 Hazardous Waste Information Network (HWIN) .....	9
3.10.5 Record of Site Condition .....	10
3.11 Utility Company Records .....	10
3.12 Public Health Concerns .....	10
<b>4 Interviews .....</b>	<b>11</b>
<b>5 Site Reconnaissance .....</b>	<b>12</b>
5.1 Site.....	12
5.1.1 Property Use .....	12
5.1.2 Buildings and Structures .....	12
5.1.3 Limitations at the Site .....	12
5.1.4 Chemical Inventory, Storage and Handling .....	13
5.1.5 Storage Tanks and Containers.....	13
5.1.6 Special Attention Substances.....	13
5.1.7 Unidentified Substances.....	15
5.1.8 Drains and Sumps.....	16
5.1.9 Building Heating and Cooling Systems.....	16
5.1.10 Mechanical Equipment.....	16
5.1.11 Air Emissions .....	16
5.1.12 Odour and Noise .....	16
5.1.13 Sewage and Wastewater Disposal.....	16
5.1.14 Liquid Chemical Waste Generation, Storage & Disposal .....	17

5.1.15	Solid Waste Generation, Storage & Disposal .....	17
5.1.16	Topographic, Geologic and Hydrogeologic Conditions .....	17
5.1.17	Water Courses, Ditches and Site Drainage .....	17
5.1.18	Abandoned and Existing Wells.....	17
5.1.19	Fill Material.....	18
5.1.20	Stained Materials .....	18
5.1.21	Stressed Vegetation.....	18
5.1.22	Roads, Parking Facilities and Right of Ways .....	18
5.1.23	Pits and Lagoons .....	18
5.1.24	Other Issues.....	18
5.2	Neighbouring Properties .....	19
<b>6</b>	<b>Conclusions .....</b>	<b>20</b>
<b>7</b>	<b>Recommendations.....</b>	<b>22</b>
<b>8</b>	<b>Qualifications of Assessors .....</b>	<b>23</b>
<b>9</b>	<b>References.....</b>	<b>24</b>
<b>10</b>	<b>Limitations and Use of Report.....</b>	<b>25</b>

### List of Figures

Figure 1: Site Location Plan

Figure 2: Site Plan

Figure 3: Site Layout Plan

### List of Appendices

APPENDIX A: SITE PHOTOGRAPHS

APPENDIX B: AERIAL PHOTOGRAPHS

APPENDIX C: REGULATORY CORRESPONDENCE

APPENDIX D: TOPOGRAPHIC MAPS

# 1 Introduction

EXP Services Inc. (EXP) was retained by Le Groupe Sterling to complete a Phase I Environmental Site Assessment (ESA) of the property located at 1720-1750 16<sup>th</sup> Avenue East in the City of Owen Sound, Ontario (Figure 1 – Site Location Plan). The area is, hereinafter referred to as the “Site”. EXP understands that Le Groupe Sterling requires this Phase I ESA for due diligence purposes and that a Record of Site Condition is not required at this time.

## 1.1 Objective

The objective of this Phase I ESA was to identify potential sources of environmental concern to the Site. A Phase I ESA is a systematic qualitative process to assess the environmental condition of a Site based on its historical and current uses. The Phase I ESA was completed in general accordance to CSA Standard Z768-01, (R2022). Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third-party reliance are outlined in Section 10 of this report. It is noted that an observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

## 1.2 Site Description

The Site is located at the northwest corner of the 16<sup>th</sup> Avenue East and the 17<sup>th</sup> Street East intersection at municipal numbers 1720-1750 16<sup>th</sup> Avenue East in the City of Owen Sound, Ontario (Figure 2 – Site Plan). The Site is rectangular in shape and measures approximately 1.6 hectares (4.0 acres) in area with a lot frontage along 16<sup>th</sup> Avenue East of 230 metres. At the time of the investigation, the Site was occupied by two (2) detached buildings connected by a roofed driveway located on the south portion of Site. The buildings were surrounded by asphalt parking/laneway and some grassed landscaping. The north portion of Site was a vacant overgrown grassed lot. The Bread Depot retail outlet and a warehouse space occupied the north building (1750 16<sup>th</sup> Avenue East) and an automotive shop, Absolute Auto, occupied the south building (1720 16<sup>th</sup> Avenue East).

Site photographs taken during the August 30, 2024 Site visit are attached in Appendix A.



## 2 Scope of Investigation

The scope of work the Phase I ESA consisted of the following activities:

- Reviewing the historical occupancy of the Site through the use of available archived and relevant municipal and business directories, fire insurance plans (FIPs), topographical maps, and aerial photographs;
- Contacting municipal and/or provincial agencies to determine the existence of records of environmental regulatory non-compliance, if any, and reviewing such records where available;
- Reviewing available geological maps, well records and utility maps for the vicinity of the Site;
- Conducting a Site reconnaissance of the Site and Site infrastructure in order to identify the presence of actual and/or potential environmental contaminants or concerns of significance;
- Conducting interviews with designated Site representative(s) as a resource for current and historical Site information, as well as to provide EXP staff with unrestricted access to all areas of the Site and Site buildings;
- Reviewing the current uses of the Site and any land use practices that may have impacted the environmental conditions at the Site;
- From the Site and publicly accessible areas, reviewing the current use of the surrounding properties and any land use practices that may have impacted the environmental condition of the Site; and,
- Preparing a report to document the findings.

In completing the scope of work, EXP did not conduct any intrusive investigations, including sampling, analyses or monitoring of materials. In addition, general environmental management and housekeeping practices were reviewed as part of this assessment insofar as they could impact the environmental condition of the property; however, a detailed review of regulatory compliance issues was beyond the scope of this investigation.

EXP personnel who conducted assessment work for this project included Mr. Derek Diesbourg and Mr. Scott Aziz, P.Eng. An outline of their qualifications is provided in Section 8.

## 3 Records Review

### 3.1 General

The Phase I ESA study area consisted of the Site property and the adjacent and surrounding properties to a search distance considered appropriate by the QP (approximately 250 metres).

Based on a review of historical aerial photographs, historical maps, and other records review, the Site was vacant/agricultural land use from the 1940s to the late 1970s when the current Site buildings (connected by a roofed driveway) were constructed. The buildings were occupied by a transportation business in the 1980s which maintained its semi-trucks in-house. An automotive garage occupying the south building has operated from the 1990s to the present. The north building occupants have included bakeries, a truck driving school, a taxi service, and stretcher sales. The north portion of the Site has remained vacant with fill piles placed on the Site in the 1990s and 2000s.

The surrounding study area was vacant/agricultural land use in the 1950s with a gravel pit west of the Site, a former railway north adjacent to the Site, and some small suspected orchards south of the Site. By the 1960s some commercial development began along 16<sup>th</sup> Street East and a glass factory was constructed northeast of the Site. Into the 1970s additional commercial development continued along 16<sup>th</sup> Street East and another factory containing an automotive parts manufacturer (Monroe) was observed east adjacent to the Site. A gas station was present 120m south of the Site during this period along with some automotive garages, a concrete producer, a transportation business, and automotive sales along 16<sup>th</sup> Street East. By the 1990s many of the commercial businesses west of the Site were replaced by the Heritage Place shopping mall and into the 2000s much of the surrounding study area was in its current state including multiple gas stations south of the Site. By the 2020s a large portion of the factory northeast of the Site was demolished and left vacant.

### 3.2 Aerial Photographs

Aerial photographs for the Site dated 1954, 1966, 1978, 1991, 2005, 2010, and 2023 were obtained from the University of Western Ontario Map Library and the City of Owen Sound online GIS site. The aerial photographs were collected in order to review the development and land use history of the Site and surrounding area. Copies of selected aerial photographs are included in Appendix B.

The development and land use history of the Site and adjacent properties as depicted on the reviewed aerial photographs are summarized below.

Aerial Photograph	Details
1954	<ul style="list-style-type: none"> <li>• The Site and surrounding properties appeared to be vacant/agricultural land use.</li> <li>• Sparse farmsteads were noted south of Site along 16<sup>th</sup> Street East.</li> <li>• Two (2) small suspected orchards were observed along 16<sup>th</sup> Street East.</li> <li>• A gravel pit and/or pond was observed northwest of Site.</li> </ul>
1966	<ul style="list-style-type: none"> <li>• No significant changes were noted on the Site.</li> <li>• A large factory was observed northeast of Site.</li> </ul>

Aerial Photograph	Details
	<ul style="list-style-type: none"> <li>One (1) of the small suspected orchards south of Site was no longer observed.</li> </ul>
1978	<ul style="list-style-type: none"> <li>The Site was observed with the current Site building with surrounding parking lot/laneways on the south portion. The north portion remained vacant.</li> <li>Commercial and/or industrial developments were observed east and west of Site along the newly constructed municipal streets 17<sup>th</sup> Street East and 16<sup>th</sup> Avenue East.</li> </ul>
1991	<ul style="list-style-type: none"> <li>A fill pile was noted on the north portion of Site.</li> <li>The heritage place mall was observed west adjacent to Site replacing the previously observed commercial properties.</li> <li>The transformer station was also observed southeast adjacent to Site.</li> <li>Large amounts of small fill piles were observed north adjacent to Site.</li> </ul>
2005	<ul style="list-style-type: none"> <li>Additional fill piles were observed on the north portion of Site.</li> <li>Commercial development was observed along 16<sup>th</sup> Street East including the addition of two (2) gas stations at the intersection with 16th Avenue East.</li> </ul>
2010	<ul style="list-style-type: none"> <li>Fill Piles were no longer observed on the north portion of Site.</li> <li>A third gas station was observed at the 16<sup>th</sup> Avenue East and 16<sup>th</sup> Street East intersection.</li> <li>A commercial building south adjacent to Site was no longer observed.</li> </ul>
2023	<ul style="list-style-type: none"> <li>No significant changes occurred to the Site or in the surrounding study area.</li> </ul>

### 3.3 Fire Insurance Plans

A search of Canadian Underwriter’s Association Fire Insurance Plans (FIPs) of the general Site area was completed at the J.J. Tallman Regional Collections Library at the University of Western Ontario. Owen Sound Fire Insurance plans dated 1907, 191, 1931, and 1946 were reviewed; however, the reviewed FIPs did not cover the Site or the surrounding study area.

### 3.4 City Directories

Available City of Owen Sound Property Use Directories dated between 1964 and 2006 (latest available directory) were reviewed online at the FamilySearch Digital Library in approximately 5 year intervals in order to identify the historical occupancy of the Site and surrounding properties. Additionally, Google Street View was reviewed to identify the historical occupants of the Site and surrounding properties between 2009 and the present. The table below summarizes the historical occupants of the Site.

Direction from Site	Address	Occupants	Years Listed
SITE	1720 16 <sup>th</sup> Avenue East (prior to 2006 – 12 <sup>th</sup> Avenue East)	Swifty Muffler Ltd	1991 - 2006
		Absalute Automotive	2009 - 2023
		The Bread Depot	2023

Direction from Site	Address	Occupants	Years Listed
	1750 16 <sup>th</sup> Avenue East (prior to 2006 – 12 <sup>th</sup> Avenue East)	U Wana Taxi	2006
		Truck Driver Training	2009
		Upper Canada Stretchers	2006 - 2009
		Vacant	1991, 2000
		Weston Bakeries Limited Ontario	1996
		Taggart Transport Co	1981 - 1985

Direction From Site	Address	Occupants	Years Listed
70m / W	1350 16 <sup>th</sup> Street East (1310 16 <sup>th</sup> Street East)	Balaclava Auto Parts	1985
		Speed Auto Glass	1981
		Goudy Motors	1974
		Thor Ford Sales Ltd	1970
W Adjacent	1350 16 <sup>th</sup> Street East (1328 16 <sup>th</sup> Street East)	Porta-mix Concrete	1974 – 1981
		Drive-in Motors	1974 – 1981
		King Transport Ltd	1974
240m / SW	1535 16 <sup>th</sup> Street East (1317 16 <sup>th</sup> Street East)	Pittsburgh Paints	1985
180m / S	1585 16 <sup>th</sup> Street East	Pioneer Petroleums	2006 - 2024
185m / S	1605 16 <sup>th</sup> Street East	Canadian Tire Gas Bar	2000 - 2024
120m / S	1606 16 <sup>th</sup> Street East (1600 16 <sup>th</sup> Street East)	Bannerman's Short Stop	1974 – 1985
140m / SE	1612 16 <sup>th</sup> Street East	Petro-Canada	2012 – 2024
		Sunoco	2009
175m / SE	1796 16 <sup>th</sup> Street East (1195 17 <sup>th</sup> Street East)	Hilltop Transmission Services Ltd	1991 - 1996
SE Adjacent	1755 17 <sup>th</sup> Street East	Hydro One	2006 - 2024
90m / E	1800 17 <sup>th</sup> Street East (1400 17 <sup>th</sup> Street East)	Tenneco Canada Inc	2000 - 2015
		Monroe Auto Equipment Co of Canada Ltd Div of Tenneco)	1981 - 2000
120m / NE	1875 16 <sup>th</sup> Avenue East (1799 20 <sup>th</sup> Street East) [1299 20 <sup>th</sup> Avenue East]	PPG Canada Inc Performance Glazings	1985 - 2012
		Canadian Liquid Air	1991
		Canadian Pittsburgh Industries Ltd	1970 - 1981

### 3.5 Previous Reports

As part of the Phase I ESA, previous reports completed by Trow Associates Inc. (current EXP) and EXP were reviewed to reveal any notable information pertaining to the Site or the immediate surrounding area. No such reports were completed by Trow Associates and EXP. However, previous

reports completed by the company Pinchin Environmental, received by EXP for a previous Phase I ESA completed on the property, were identified. The notable information is as follows:

- EXP Services Inc. “Groundwater Sampling, 1350 – 16<sup>th</sup> Street East, Owen Sound, Ontario”. EXP Job No. LON-00017644-EN. Prepared for Le Groupe Sterling. December 2019.
  - Four (4) monitoring wells installed by Pinchin Environmental in September 2013 were sampled on the Site for VOCs and PHCs. Exceedances of the applicable Table 7 SCSs were detected in all four (4) monitoring wells sampled. Concentrations of exceedances were trending down in all monitoring well locations with the exception of PHC F2 concentrations increasing in two (2) monitoring wells when compared with the August 28, 2013 sampling event.
- Pinchin Environmental “Phase II Environmental Site Assessment, 1720-1750 16<sup>th</sup> Avenue East, Owen Sound, Ontario”. Pinchin Project No. 83351.002. Prepared for 20 VIC Development & KS Heritage Place Inc. September 2013.
  - Six (6) boreholes were advanced on the property, all of which were equipped with groundwater monitoring wells to depths of 4.1 to 6.1m bgs. The boreholes generally encountered sand and gravel fill overlying silty clay, overlying limestone bedrock.
  - Soil and groundwater samples were submitted for analysis of BTEX and PHCs. Exceedances of the applicable Table 7 SCSs were identified in soil from 1.5 to 2.1m bgs in the area north of the Site building. Groundwater exceedances were identified in three (3) monitoring wells located north of the Site building (MW01, MW02, & MW04), one (1) monitoring well near the middle canopy of the Site building (BH01), and in one (1) monitoring well located south adjacent to the Site building (MW06).
  - Water levels in the monitoring wells ranged between 1.3 and 2.0m bgs indicating a northwest groundwater flow towards Lake Huron.
- Pinchin Environmental “Screening Level Risk Assessment, 1720-1750 16<sup>th</sup> Avenue East, Owen Sound, Ontario”. Pinchin Project No. 83351.003. Prepared for 20 VIC Development & KS Heritage Place Inc. October 2013.
  - The assessment was conducted under the assumption that the property would remain as commercial land use with a slab on grade building.
  - The assessment determined there were no human health risks to workers, visitors, and/or ecological receptors.

### 3.6 Chain of Title

A chain of title review was not completed for the Site at this time, as the Site history was established using historical information available from other sources.

## 3.7 Regulatory Requests

The appropriate regulatory agencies at the provincial and municipal levels were contacted to obtain information regarding environmental permits, past or pending environmental control orders or complaints, outstanding environmental regulatory non-compliance issues and Sewer Use By-Law infractions. EXP did not identify the need to contact any federal agencies.

### 3.7.1 Ministry of the Environment Conservation and Parks

A request for information was submitted to the Ontario Ministry of Environment, Conservation and Parks (MECP) Freedom of Information, Protection of Privacy Office for information in their files regarding the Site that pertain to any Environmental Concerns, Orders and Spills. A copy of the request is included in Appendix C.

A written response from the MECP typically requires several months. If upon receipt of the response from the MECP, any significant environmental issues are identified, EXP will forward their response to the client as an addendum to this report.

### 3.7.2 Technical Standards and Safety Authority

The Technical Standards and Safety Authority (TSSA) is the Provincial regulatory agency responsible for overseeing the storage of fuels in Ontario. As such, the TSSA maintains a database (approximately 1987 to present) of all registered fuel storage tanks in Ontario. TSSA's Public Information Services were contacted via email on September 23, 2024 regarding fuel storage tanks and spills on the Site and on properties of interest in the surrounding study area. No records were identified for the Site.

Fourteen (14) records were identified in the surrounding study area. One (1) record was identified for 1350 16<sup>th</sup> Street East, located west adjacent to Site, for an active cylinder exchange. Seven (7) records were identified for 1605 16<sup>th</sup> Street East, located 190m southeast of Site, indicating an active gas station with three (3) tanks, a cylinder exchange, and a propane tank. The remaining records were for 1612 16<sup>th</sup> Street East, located 140m southeast of Site, indicating an active gas station with four (4) tanks and a cylinder exchange.

## 3.8 Maps

The following maps were reviewed:

- Topographic Maps dated 1945, 1973, 1985, and 1999.
- "Surficial Geology of Southern Ontario" Ontario Geological Survey. Scale 1:5000. Published 2010.
- "Bedrock Geology of Ontario, Southern Sheet," Ontario Geological Survey, Map 2544. Scale 1: 1,000,000, Issued 1991.

The review of these maps indicated the following:

- The review of the topographic maps indicated that the Site is relatively flat with local topography generally sloping to the north towards Lake Huron located 1.4km northwest of Site.

- The historical maps identified the Site as vacant/agricultural land use from the 1940s to the 1980s when the current Site building was first observed. No significant changes had since occurred to the Site.
- The historical maps identified the surrounding study area as largely vacant/agricultural land use with an abandoned railway north of Site in the 1940s. 16<sup>th</sup> Street East was observed south of Site lined with detached buildings and a gravel pit was observed west of Site. By the 1970s a sheet glass plant was observed northeast of Site and the former gravel pit west of Site was identified as a dump. Into the mid 1980s the majority of municipal streets were observed in the surrounding area along with commercial buildings and a large industrial building east adjacent to Site. By the late 1990s the surrounding study area was identified largely in its current state with the Heritage Place Shopping mall identified west adjacent to Site.
- According to the surficial geology Ontario geological survey, the Site is located in an area that generally has sandy silt to silty sand textured till.
- According to the Bedrock Geology of Ontario, Southern Sheet the bedrock in the general area was part of the Middle and Lower Silurian consisting of sandstone, shale, dolostone, & siltstone.

Copies of the reviewed historical topographic maps are included in Appendix D.

### 3.9 Company Records

No company records were reviewed by EXP at the time of this investigation.

### 3.10 Environmental Source Information

Environmental source information includes documents published by the MECP and online databases maintained by the MECP. These documents and databases were reviewed to determine if waste disposal, coal tar, coal gasification, PCB storage sites or sites that generate hazardous wastes were located on or in the immediate vicinity of the Site. The review of the Environmental source information is provided below.

#### 3.10.1 Waste Disposal Sites

The MECP maintains an inventory of all known active and closed waste disposal sites in Ontario. The review of Waste Disposal Site Inventory published by the MECP indicated the following:

- The Site was not identified as a former waste disposal facility, nor were the properties within the surrounding study area.
- No active waste disposal MECP Hazardous Waste sites were identified within a 1 km radius of the Site.

### 3.10.1 Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario

This inventory (Volumes 1 & 2) was published by the MECP in November 1988 to document the industrial facilities in Ontario that produced or used coal tar and other related tars. The information included in this inventory includes: facility type, size, land use, soil condition, site operators/occupants, site description, and potential environmental impacts. A review of these documents revealed the following:

- The Site was not listed in the inventory; and,
- No facilities within 1 km of the Site were listed in the inventory.

### 3.10.2 Inventory of Coal Gasification Plant Waste Sites in Ontario

This inventory (Volumes 1 & 2) was published in April 1987 and provided a preliminary assessment of potential environmental impacts of manufactured gas plant waste site in the Province of Ontario. A review of these documents revealed the following:

- The Site was not listed in the inventory; and,
- No other facilities within 1 km of the Site were listed in the inventory.

### 3.10.3 Ontario Inventory of PCB Storage Sites

The MECP maintains an inventory of all known PCB storage sites in Ontario. The review of the Ontario MECP Inventory of PCB Storage Sites in Ontario (2004) indicated the following:

- The Site was not registered as a PCB storage Site.
- 1799 20<sup>th</sup> Street East, located 125m northeast of Site, was identified as a PCB storage site under the company name PPG Industries Canada Ltd.
- 1749 20<sup>th</sup> Street East, located 125m northeast of Site, was identified as a PCB storage site under the company name RBW Graphics.
- 1355 17<sup>th</sup> Street East, located southeast adjacent to Site, was identified as a PCB storage site under the company name Owen Sound Public Utilities Commission.

### 3.10.4 Hazardous Waste Information Network (HWIN)

The review of the Ontario Regulation 347 Waste Generators Summary identifies companies listed as waste generators and/or receivers. An historical search was conducted through the EXP archived HWIN database, as well an online search of the Resource Productivity & Recovery Authority (RPRA) hazardous waste program registry was conducted on September 23, 2024. Search parameters included names of surrounding businesses, street names and city names and were contained to the Site and surrounding properties within 250 metres. The Site was not listed in the HWIN database. The following HWIN generators were identified in the surrounding study area:



- Tenneco Canada Inc. Monroe (ON0125500), Hydrogen Optimized (ON4631650), & Markland Property Management (ON001067210) located at 1800 17<sup>th</sup> Street East, approximately 95m east of Site, was listed as a generator of sludges & residues containing heavy metals (112), neutralized solutions, sludges & residues containing heavy metals (131), wastes from the use of paints, pigments & coatings (145), miscellaneous waste inorganic chemicals (148), aliphatic solvents (212), petroleum distillates (213), waste crankcase oils & lubricants (252), emulsified oils (253), pathological waste (312), & waste compressed gases (331) from 2010 to 2024.
- Sears Canada Inc. (ON9791819), Cushman & Wakefield Asset Services (ON4699887), and located at 1350 16<sup>th</sup> Street East, west adjacent of Site, was listed as a generator of wastes from the use of paints, pigments & coatings (145), other specified inorganic sludges, slurries or solids (146), & waste crankcase oils & lubricants (252) from 2016 to 2024.
- Hilltop Dentistry (ON5479730) located at 1535 16<sup>th</sup> Street East, approximately 240m southwest of Site, was listed as a generator of pathological waste (312) from 2017 to 2022.
- Delta Elevator Co. Ltd. (ON9383157), PPG Canada Inc. (ON0136903), & 1857060 Ontario Ltd. (ON5379018) located at 1799 20<sup>th</sup> Street East, approximately 125m northeast of Site, was listed as a generator other inorganic acid wastes (114), wastes from the use of paints, pigments & coatings (145), other specified inorganic sludges, slurries or solids (146), miscellaneous waste inorganic chemicals (148), aliphatic solvents (212), petroleum distillates (213), polymeric resins (232), (243), waste oils/sludges (251), waste crankcase oils & lubricants (252), detergents and soaps (262), miscellaneous waste organic chemical (263), pathological wastes (312), & waste compressed gases (331) from 2010 to 2012.
- Suncor (ON001065154) at 1612 16<sup>th</sup> Street East, approximately 140m southeast of Site, was listed as a generator of light fuels (221) in 2024.

### 3.10.5 Record of Site Condition

A Record of Site Condition (RSC) summarizes the environmental conditions of a property as determined by a qualified person (QP) by conducting a Phase I ESA, a Phase II ESA and where necessary, confirmatory sampling and risk assessment. Upon completion of the necessary environmental Site assessments, a RSC for an assessed property can be filed with the MECP and added to the Environmental Brownfields Site Registry database. This online, publicly available database can be searched to identify what properties may have potential environmental concerns.

Based on the search of the MECP's Environmental Brownfields Site Registry database, completed on September 23, 2024, no RSCs were filed for the Site or immediately surrounding properties.

### 3.11 Utility Company Records

No utility company records were reviewed at the time of this Phase I ESA.

### 3.12 Public Health Concerns

No public health concerns were identified at the time of this Phase I ESA.

## 4 Interviews

As part of the Phase I ESA process interviews are to be conducted with the individuals identified to be the most knowledgeable about both the current and historical Site uses. The interviews are conducted in order to obtain information to assist in identifying areas of potential environmental concern and identify details of potentially contaminating activities or potential contaminant pathways, in, on or below the Site.

- Ron Sackett, a representative of Le Groupe Sterling was available during the August 30, 2024 Site visit. Information from the interview was incorporated into this report.

## 5 Site Reconnaissance

Mr. Derek Diesbourg conducted the Site visit on August 30, 2024 in accordance with EXP's internal health and safety protocols and with the Ministry of Labour health and safety regulations. The purpose of the Site visit was to assess the current conditions of the Site.

The general environmental management and housekeeping practices at the Site were reviewed as part of this assessment insofar as they could impact the environmental condition of the property; however, a detailed review of regulatory compliance issues was beyond the scope of EXP's investigation.

The Site and the adjoining properties were observed from the Site and/or publicly accessible areas. Photographs documenting the Site visit are included in Appendix A.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

### 5.1 Site

#### 5.1.1 Property Use

At the time of the Site visit, the Site was occupied by two (2) detached buildings connected by a roofed driveway located on the south portion of Site. The buildings were surrounded by asphalt parking/laneway and some grassed landscaping. The north portion of Site was a vacant overgrown grassed lot. The Bread Depot retail outlet and a warehouse space occupied the north building (1750 16th Avenue East) and an automotive shop, Absalute Auto, occupied the south building (1720 16th Avenue East).

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

#### 5.1.2 Buildings and Structures

Two (2) detached buildings connected by a roofed driveway were present on the south portion of the Site. The south building was a single storey, flat roof, slab on grade construction with red brick exterior walls and large garage doors. The north building was a single storey, flat roof, with an elevated floor (for a former shipping services occupant). The exterior was red brick and concrete block walls with many garage door bays. The interior of the south building garage area was concrete block walls with concrete floors and an exposed steel joist and roof decking. Some wood panelling and drywall interior walls with vinyl plank flooring were present in the small office areas. The interior of the north building was concrete block walls, with concrete floors and an exposed steel joist and roof decking. Some small office areas of the building had drywalled interior walls and drop tile ceilings with vinyl tile floors. The primary lighting source for the building was fluorescent ballast with some LED bulbs also present.

#### 5.1.3 Limitations at the Site

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report. No observations were made above ceilings, behind walls, or in otherwise inaccessible areas.

#### 5.1.4 Chemical Inventory, Storage and Handling

All chemical inventory, storage and handling at the Site was expected to be related to maintenance and repair of automotive vehicles. Chemical inventory would likely include but would not be limited to automotive oils, lubricants, fuels, and coolants.

#### 5.1.5 Storage Tanks and Containers

The presence/absence and condition (if present) of Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) at the Site were assessed during the Site visit. No evidence of USTs (i.e., vent and fill pipes) were noted at the time of the Site visit.

An oil/water separator was observed within the south Site building along the east wall. A used oil AST was present outside the south building near its west face. The used oil AST was emptied on an as needed basis by GFL Environmental. A plastic 230L drum was present inside the automotive garage along the south wall also emptied on an as needed basis by GFL environmental.

#### 5.1.6 Special Attention Substances

##### 5.1.6.1 Polychlorinated Biphenyls (PCBs)

The manufacture of PCBs in North America was prohibited under the Toxic Substances Control Act (1977). Their use as a constituent of new products manufactured in or imported into Canada was prohibited by regulations in 1977 and 1980. As such, sites developed or significantly renovated after 1980 are unlikely to have PCBs-containing equipment on the Site. Potential equipment, which could contain PCBs include fluorescent mercury and sodium vapour light ballasts, oil filled capacitors and transformers. A review of the Site was conducted to evaluate the potential presence of PCBs-containing equipment in use or stored at the Site.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

##### 5.1.6.2 Asbestos-Containing Materials (ACMs)

Asbestos-containing materials (ACMs) are fibrous hydrated silicates, and can be found in building materials as either "unbound" or "bound" asbestos. Friable asbestos refers to materials where the asbestos fibres can be separated from the material with which it is associated. Non-Friable asbestos refers to asbestos, which is associated with a binding agent (such as tar or cement). Friable asbestos is commonly found in boiler and pipe insulation. Non-Friable asbestos is typically found in roofing tars, floor and ceiling tiles, and asbestos-containing cement.

ACMs in the workplace are defined as a Designated Substance under the Ontario Occupational Health and Safety Act (OHSA). Under OHSA, persons in the workplace are required to be notified of the presence of ACMs once they are suspected to be present, and if there is a potential for workers to be exposed. The use of ACMs was discontinued in Canada in the late 1970s/early 1980s, although in some instances asbestos containing materials can still be found in recently constructed buildings.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

#### 5.1.6.3 Ozone Depleting Substances (ODSs)

Chlorofluorocarbons (CFCs) often referred to as Freons, ceased production in Canada in 1993 as a result of their ozone-depleting characteristics. Importation of CFCs into Canada ceased in 1997 and a total ban on their use is proposed for 2030. The use of these materials is still permitted in existing equipment, but equipment must be serviced by a licensed contractor such that CFCs are contained and not released to the environment during servicing or operation. Refrigerant containing equipment can include refrigerators, freezers, air conditioning units, & heat pumps.

Under the management of a licensed contractor, the subject systems do not represent a significant threat to human health or the environment. However, if present, CFCs will require replacement by 2030 and as such consideration should be given to future phase out programs.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

Maintenance of refrigerant containing equipment should be completed in compliance with Ontario Regulation 189/94 by a licensed refrigeration contractor. The equipment should only be repaired, removed, or serviced by an appropriately licensed contractor.

#### 5.1.6.4 Lead

Lead has frequently been used in oil-based paints, roofing materials, cornices, tank linings, electrical conduits and soft solders for tinsplate and plumbing. The use of lead-based paints (LBPs) was phased out circa 1976. Paint that was produced or used between 1976 and 1980 may contain small amounts of lead. Paint that was produced or used prior to 1950 may contain high levels of lead. The main concern regarding lead paint is its potential to become lead dust or chips either through deterioration and/or mechanical means (i.e., sanding, abrasion, etc.). Exposure to lead dust or chips occurs by ingestion or inhalation.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

#### 5.1.6.5 Urea Formaldehyde Foam Insulation (UFFI)

UFFI was formerly sprayed into cavities of walls and above ceilings as an insulating material. UFFI has been discontinued from commercial use since the early 1980s.

No evidence of UFFI was noted during EXP's Site visit.

#### 5.1.6.6 Mercury

Mercury was used in some batteries, light bulbs, old paints, thermostats, old mirrors, etc. Based on an investigation by Consumer and Corporate Affairs Canada, and an assessment of potential health risks by Health and Welfare Canada, in 1991 the decision was made to eliminate the use of mercury compounds in indoor latex paints. The Canadian Paint and Coatings Association (CPCA) supported the withdrawal and all Canadian manufacturers and formulators of the preservative voluntarily agreed to remove "interior uses" from their product labels.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

#### 5.1.6.7 Mould

Mould is found in the natural environment and is required for the breakdown of plant debris such as leaves and wood. Mould spores are found in the air in both the indoor and outdoor environments. In order for mould to grow it requires a food source (i.e. gypsum wallboard, carpets, wallpaper, wood, etc.) and moist conditions. Mould can have an impact on human health depending on the species and concentration of the mould. Health effects can include allergies and mucous membrane irritation.

Currently there are no regulations governing mould; however, there are several guidelines addressing mould assessments and abatement. At the moment, the industry standards include the Canadian Construction Association (CCA) document 82-2004 titled "Mould guidelines for the Canadian construction industry" and the Environmental Abatement Council of Ontario (EACO) guidelines titled "EACO Mould Abatement Guidelines, Edition 2 (2010)".

It is important to note that the Ontario Ministry of Labour (MOL) has governed protecting workers under the Occupational Health and Safety Act, which states that employers are required to take every precaution reasonable to protect their workers. This includes protecting workers from mould within workplace buildings.

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

#### 5.1.6.8 Radon

Radon is a colourless, odourless, radioactive gas that occurs naturally in the environment. It comes from the natural breakdown of uranium in soils and rocks. Exposure to high levels of radon increases the risk of developing lung cancer. This relationship has prompted concern that radon levels in some Canadian buildings may pose a health risk. Radon gas can move through small spaces in the soil and rock and seep into a building through cracks in concrete, sumps, joints and basement drains. Concrete-block walls are particularly porous to radon and radon trapped in water from wells can be released into the air when the water is used.

Due to the potential health concerns associated with radon, Health Canada released a guideline in June 2007 for a maximum acceptable level of radon gas of 200 becquerels per cubic metre (Bq/m<sup>3</sup>). Where radon gas is present and the annual radon concentration exceeds 200 Bq/m<sup>3</sup> in the normal occupancy area, Health Canada recommends taking the necessary actions to reduce radon levels.

Based on the overburden and bedrock materials underlying the Site, it is unlikely that radon gas emissions would be a concern. However, the presence of Radon at the Site can only be determined by actual testing which was beyond the scope-of-work for this assessment.

#### 5.1.6.9 Other Substances

No other special attention substances (such as acrylonitrile or isocyanates) were suspected to be present at the Site at the time of this Phase I ESA.

### 5.1.7 Unidentified Substances

No unidentified substances were present at the Site at the time of this Phase I ESA.

### 5.1.8 Drains and Sumps

Interior floor drains were observed in the automotive garage of the south building. The interior floor drains were observed throughout the garage connected to an oil/water separator located inside the garage along the east wall of the south building.

### 5.1.9 Building Heating and Cooling Systems

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

### 5.1.10 Mechanical Equipment

An observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

### 5.1.11 Air Emissions

Air emissions in Ontario are regulated under the Environmental Protection Act (EPA) and its Regulations (O. Reg. 419/05, O. Reg. 245/11). Owners and operators of activities that may discharge a contaminant into the natural environment must seek approval from the Ministry of the Environment (ministry) to carry out these activities. As of October 31, 2011, amendments to the EPA resulted in a two-path environmental approval process, the Environmental Compliance Approval (ECA) and Environmental Activity and Sector Registry (EASR). The EASR allows businesses to register certain activities with the ministry, rather than apply for approvals. The EASR is for common systems and processes, currently for heating systems, standby power systems and automotive refinishing, to which preset rules of operation can be applied. Unless explicitly exempted, most industrial processes or modification to industrial processes and equipment require an ECA, formerly a Certificate of Approval (Air and Noise). Retroactive approval should be sought for equipment installed and unchanged between 1972 and June 29th, 1988 when the requirement for a Certificate of Approval was added to the EPA. The EPA provides a list of specific equipment and conditions, which are exempt from approval requirements (i.e. fuel burning equipment for comfort heating in a building using natural gas or number 2 fuel oil at a rate of less than 1.5 million kilojoules per hour [BTU/hour]). No significant air emissions were identified during the Site visit. However, EASR registration may be required for combustion equipment, as the heating equipment may exceed a rate of more than 1.5 million kilojoules per hour.

Based on the findings of this investigation, neither an ECA or EASR are expected to be required for air emissions at the Site.

### 5.1.12 Odour and Noise

No chemical or other significant odours were detected during the Site visit. No excessive noise was detected at the Site during the Site visit.

### 5.1.13 Sewage and Wastewater Disposal

The Site is connected to the municipal wastewater system.

#### 5.1.14 Liquid Chemical Waste Generation, Storage & Disposal

Liquid waste was limited to used automotive liquids including used oils and coolants. The used oil was stored in a steel AST outside the automotive garage and the used coolant was stored in a 230L plastic drum inside the garage. The disposal was performed by GFL Environmental upon request.

#### 5.1.15 Solid Waste Generation, Storage & Disposal

Solid waste generated on-Site from the Bread Depot consisted of general office waste, food waste collected in a large bin removed on a regular basis. Solid waste from the garage consisted of scrap metals, used oil filters, and general office waste. Garage scraps from parts and other maintenance/repair needs are recycled at a local recycling facility on an as needed basis. The used oil filters were collected by GFL Environmental on an as needed basis. The large garbage bin was emptied on a regular basis by an approved licensed contractor.

#### 5.1.16 Topographic, Geologic and Hydrogeologic Conditions

The review of the topographic maps indicated that the Site is relatively flat with local topography generally sloping to the north towards Lake Huron located 1.4km northwest of Site.

The general groundwater flow direction is expected to be to the northwest, towards Lake Huron, however, the actual groundwater flow direction can only be determined by long term groundwater elevation investigation in the area. The groundwater flow direction may also be influenced by utility trenches and other subsurface structures and may migrate in the bedding stone of nearby subsurface utility trenches

#### 5.1.17 Water Courses, Ditches and Site Drainage

No current water courses or ditches were noted on-Site. A drainage ditch was observed south adjacent to Site. Site drainage was to the south adjacent drainage ditch, municipal street storm water catch basins, or through ground infiltration within the north gravel lot storage yard.

#### 5.1.18 Abandoned and Existing Wells

Three (3) existing groundwater monitoring wells were observed on the Site during the Site visit. A search of the Ministry of the Environment's Well Records conducted on September 23, 2024 revealed seven (7) records for the Site. All records were for monitoring wells installed between 2008 to 2013 to depths of 4.1 to 6.9m bgs generally encountering brown sand and gravel overlying limestone.

Forty-six (46) records were identified within the Phase I ESA Study area between 1953 and 2023. Four (4) of the records were for drinking water wells installed to depths of 19.8 to 22.3m bgs generally encountering clay overlying limestone with water levels between 2.1 to 6.1m bgs. Twenty-four (24) records had no other information other than the date. The remaining records were for groundwater monitoring wells installed to depths of 2.4 to 9.7m bgs generally encountering sand overlying limestone or shale.



#### **5.1.19 Fill Material**

The Site was generally level with the surrounding properties. Fill piles were observed on the north portion of Site in the 1990s and the 2000s. It is suspected that some fill material was imported for Site grading, building construction and Site servicing on the south portion of Site.

#### **5.1.20 Stained Materials**

Oil staining was observed on the concrete floors of the automotive garage located in the south Site building. Absorbents were observed on the ground in areas of fresh oil spills from maintenance and repair of vehicles.

#### **5.1.21 Stressed Vegetation**

No stressed vegetation was observed during the Site visit.

#### **5.1.22 Roads, Parking Facilities and Right of Ways**

The Site can be accessed via 16<sup>th</sup> Avenue East.

#### **5.1.23 Pits and Lagoons**

No pits or lagoons were observed during the Site visit.

#### **5.1.24 Other Issues**

No other issues were identified during this Phase I ESA.

## 5.2 Neighbouring Properties

The condition of the adjoining and neighbouring properties was observed at the time of EXP's Site visit. The surrounding properties were mainly commercial with some industrial. The following neighbouring properties were observed at the time of EXP's site visit:

North: Vacant lot.

South: Vacant lot.

East: Hydrogen Optimized Green Energy.

West: Heritage Place Shopping Mall.

In general, the adjacent and surrounding properties appeared to be relatively well kept, with no obvious issues of environmental concern noted.

## 6 Conclusions

Based on the Phase I ESA findings, the potential environmental concerns associated with the Site are summarized in the following table. It is noted that an observation of the interior of the building was not within the scope of the Limited Phase I ESA report.

Areas of Potential Environmental Concern	Media and Potential Contaminants of Concern	Comments
<b>Site</b>		
<p>Former transportation businesses and active automotive garage with hydraulic lifts, an oil/water separator, and a used oil AST.</p> <p>Fill of unknown quality imported to north portion of Site</p> <p>Petroleum impacted soil and ground at the Site</p>	<p>Soil, Groundwater</p> <p>Volatile organic compounds (VOCs),</p> <p>Petroleum Hydrocarbons (PHCs),</p> <p>Metals &amp; Inorganics, &amp; Polycyclic Aromatic Hydrocarbons (PAHs)</p>	<p>The Site was identified as occupied with a former transport business with in-house garage maintenance and continued use as an automotive garage to the present. Additionally fill of unknown quality was imported to the north portion of Site in the 1990s and 2000s</p> <p>Petroleum impacted soil and ground water was identified on the east side of the Site near the current automotive facility and bread depot. An SLRA (Pinchin 2013) completed for the Site indicated there were no human health risks to long-term workers, Site visitors, or to ecological receptors at the site, given the current and continued commercial land use with a concrete slab on grade constructed building. In 2017 a Due Diligence Phase I ESA was completed and which concluded that, given that petroleum impacted ground water does not appear to be migrating off-Site based on the inferred northwesterly ground water flow direction, and no changes in land use are proposed no further environmental work was warranted at the time.</p> <p>As stated in the 2017 Due Diligence Phase I ESA - EXP recommends periodic (e.g. annual) monitoring of groundwater at the Site to verify a stable or decreasing concentration trend of COCs at the site. The sampling may be discontinued when a stable or decreasing concentration trend is evident.</p>
<b>Surrounding Properties</b>		
<p>Various industrial businesses and hazardous waste generators located within Phase I ESA study area.</p>	<p>Soil and Groundwater</p> <p>VOCs &amp; PHCs</p>	<p>The potential for on-Site migration of contaminants from leaking storage tanks, former spills and/or historic disposal practices from these properties exists. These properties appear to be in a downgradient or trans gradient position from the Site, and soils in the Site area are characterized by</p>

Areas of Potential Environmental Concern	Media and Potential Contaminants of Concern	Comments
		permeable silty sand and/or sandy silt tills. Considering the separation distances from Site and the downgradient or trans gradient positions, the potential environmental concern to the Site from these properties is considered to be low.
Multiple active gas stations south of Site	Soil and Groundwater VOCs & PHCs	The potential for on-Site migration of contaminants from leaking underground storage tanks and former spills from these properties exists. These properties appear to be in an upgradient position from the Site, and soils in the Site area are characterized by permeable silty sand and/or sandy silt tills. Considering the separation distances from Site, the up gradient positions, and the permeable soil types the potential environmental concern to the Site from these properties is considered to be moderate.
Two (2) small suspected orchards south of Site	Soil and Groundwater Organochlorine Pesticides & Metals	An orchard operated south and southeast adjacent to Site from the 1950s to the 1960s. Leaks or spills of pesticide products during application and from subsequent rain runoff into the natural environment could have migrated onto the Site and negatively impacted the soil and/or groundwater quality. The soils in the area are permeable sandy silt/silty sand tills and the suspected orchards were in an upgradient position to the Site. These areas were subsequently redeveloped and it is likely that the topsoil was stripped and removed for building construction. The potential environmental concern associated with the suspected orchards is considered to be low.

## 7 Recommendations

A Phase II ESA was completed on the property by Pinchin Environmental in 2013 which identified VOC and PHC soil and groundwater exceedances of the applicable Table 7 SCSs. Groundwater exceedances were detected in three (3) of the monitoring wells located north of the Site building (MW01, MW02, & MW04), one (1) monitoring well near the middle canopy of the Site building (BH01), and one (1) monitoring well located south adjacent to the Site building (MW06). Monitoring wells MW04 and BH01 were resampled concurrently with this report. No exceedances of the Table 7 SCSs were detected in BH01, however a benzene exceedance was detected in MW04. The remaining wells could not be located.

Based on the findings of this Phase I ESA and the current property use, the potential risk to the building occupants would be considered to be low and no further investigation (ie. Phase II ESA) is warranted at this time. In the event of future development of the Site or a change in land use, a Phase II ESA update may be recommended at that time.

## **8 Qualifications of Assessors**

The Site visit and records review was conducted by Mr. Derek Diesbourg, who has been trained to conduct Phase I ESAs in accordance with the CSA Standard. Mr. Diesbourg obtained his Environmental Technologist advanced diploma from Fanshawe College in 2016.

The report has been reviewed by Mr. Scott Aziz who obtained his Chemical Engineering degree from the University of Western Ontario, ON in 1989. Mr. Aziz is a highly qualified professional engineer with several years of diverse hands-on experience in environmental site assessment, environmental audits, remediation of contaminated sites, technical specifications, cost estimates, contract documents and project management. Mr. Aziz is a member of the Professional Engineers of Ontario (PEO).

EXP Services Inc. is a full service consulting and engineering firm and provides a full range of environmental services through the Environmental Services Group. EXP's Environmental Services Group has developed a strong working relationship with clients in both the private and public sectors and has developed a positive relationship with the Ontario Ministry of the Environment. Personnel in the numerous branch offices form part of a large network of full-time dedicated environmental professionals in the EXP organization.

## 9 References

1. Canadian Standards Association. November 2001. *Z768-0 (R2013) Phase I Environmental Site Assessment*.
2. *Occupational Health and Safety Act* - Ministry of Labour (MOL).
3. "Bedrock Geology of Ontario, Southern Sheet," Ontario Geological Survey, Map 2544. Scale 1: 1,000,000, Issued 1991.
4. "Surficial Geology of Southern Ontario" Ontario Geological Survey. Scale 1:5000. Published 2010.
5. Inventory of Coal Gasification Plant Waste Sites in Ontario. Ontario Ministry of the Environment, April 1987.
6. Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario. Ontario Ministry of the Environment, November 1988.
7. Waste Disposal Site Inventory. Waste Management Branch Ontario Ministry of the Environment, June 1991.
8. *Ontario Inventory of PCB Storage Sites. Ontario Ministry of the Environment, 1993- 2003-2004.*
9. *Hazardous Waste Information Systems (HWIS, 1986-2005).*
10. Pinchin Environmental "*Phase II Environmental Site Assessment, 1720-1750 16<sup>th</sup> Avenue East, Owen Sound, Ontario*". Pinchin Project No. 83351.002. Prepared for 20 VIC Development & KS Heritage Place Inc. September 2013.
11. Pinchin Environmental "*Screening Level Risk Assessment, 1720-1750 16<sup>th</sup> Avenue East, Owen Sound, Ontario*". Pinchin Project No. 83351.003. Prepared for 20 VIC Development & KS Heritage Place Inc. October 2013.

## 10 Limitations and Use of Report

### BASIS OF REPORT

This report ("Report") is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the site the recommendations of EXP may require re-evaluation. Where special concerns exist, or the Client has special considerations or requirements, these should be disclosed to EXP to allow for additional or special investigations to be undertaken not otherwise within the scope of investigation conducted for the purpose of the Report.

Where applicable, recommended field services are the minimum necessary to ascertain that construction is being carried out in general conformity with building code guidelines, generally accepted practices and EXP's recommendations. Any reduction in the level of services recommended will result in EXP providing qualified opinions regarding the adequacy of the work. EXP can assist design professionals or contractors retained by the Client to review applicable plans, drawings, and specifications as they relate to the Report or to conduct field reviews during construction.

### RELIANCE ON INFORMATION PROVIDED

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by the Client and others. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by the Client. EXP has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to EXP. If new information about the environmental conditions at the Site is found, the information should be provided to EXP so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

### STANDARD OF CARE

The Report has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

### COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by the Client, communications between EXP and the Client, other reports, proposals or documents prepared by EXP for the Client in connection with the site described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.

### USE OF REPORT

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## REPORT FORMAT

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We trust this report satisfies your immediate requirements. If you have any questions regarding the information in this report, please do not hesitate to contact this office.

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Figures



Appendix A:  
Site Photographs



Appendix B:  
Aerial Photographs



Appendix C:  
Regulatory Correspondence



Appendix D:  
Topographic Maps