



Appendix E.2

Park Lawn Lake Shore Transportation Master Plan Limited Phase 1 Site Assessment
(AECOM, April 2021)

City of Toronto

FINAL Limited Phase One Environmental Site Assessment

Park Lawn Lake Shore Transportation Master Plan

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Revision #	Revised By	Date	Issue / Revision Description
1	Jami Cernele	April 05, 2021	Final submission to City of Toronto

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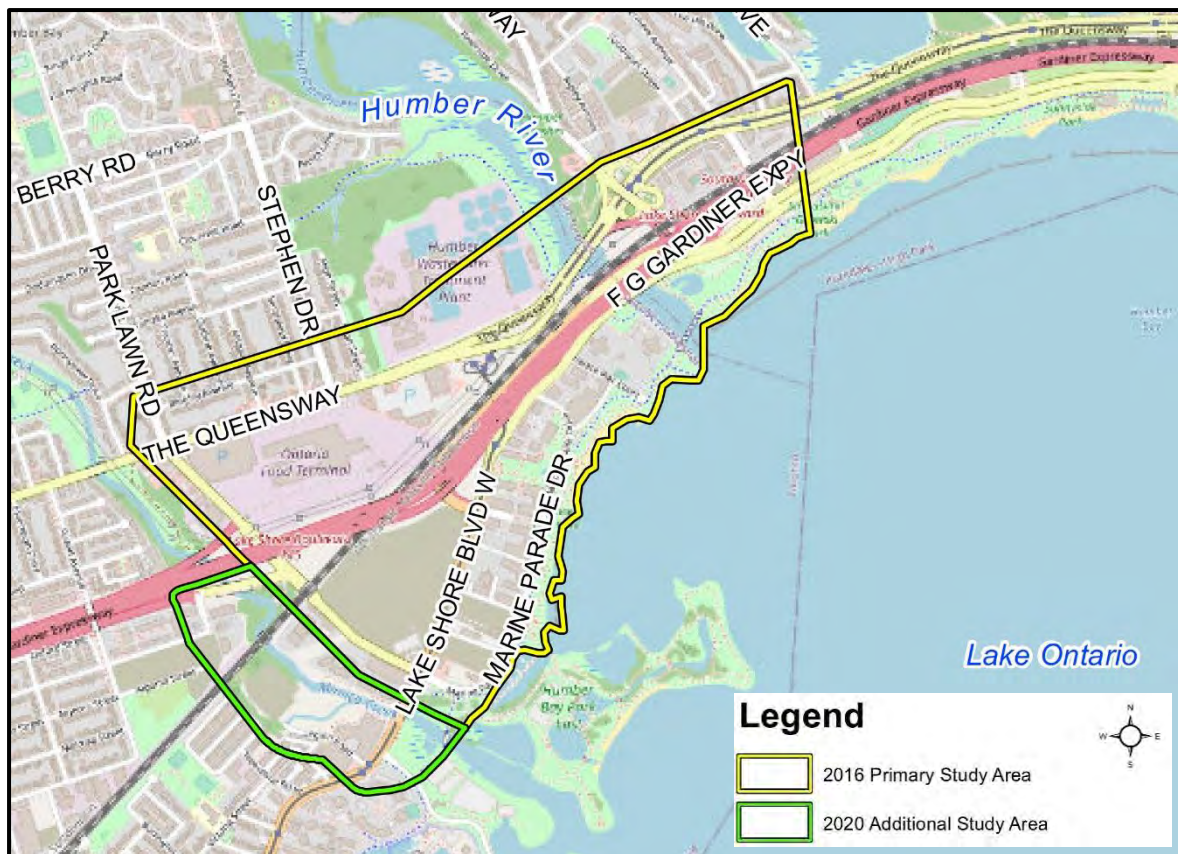
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1. Introduction

In 2013, the City of Toronto initiated a Transportation Master Plan (TMP) to identify necessary transportation improvements and to further develop the Park Lawn / Lake Shore community. As part of that undertaking AECOM completed a preliminary review of the study area at that time (Figure 1) to identify any areas of potential soil and/or groundwater contamination to assist in establishing existing conditions and in evaluating the Alternative Solutions being considered as part of the TMP. The assessment was completed and documented in a Limited Phase I Environmental Site Assessment (2017).

The TMP was originally anticipated to be completed in April 2017, however City Council put the project on hold, pending a final decision of the land use of the former Christie's Bakery site on the northeast corner of the Lake Shore Boulevard West and Park Lawn Road intersection. Following negotiations with the owners of the Christie's site (i.e. First Capital) regarding the development of the subject lands the TMP was able to move forward in 2020. However, as part of the 2020 revisit of the TMP, the Primary Study Area was expanded to the west to include a small area bounded by the F.G. Gardiner Expressway to the north, Lake Shore Boulevard West to the south, Legion Road to the west, and Park Lawn Road to the east referred to as the 2020 Additional Study Area as illustrated in Figure 1.

Figure 1: 2016 Existing Study Area & 2020 Additional Study Area



In 2020 AECOM initiated an assessment of the expanded study area to identify any areas of potential soil and/or groundwater contamination. This was completed using select guidance provided in Canadian Standards Association

(CSA) Standard Z768-01 for Phase I Environmental Site Assessment, reaffirmed in 2016. This report documents the assessment completed for the 2020 Additional Study Area and will supplement the earlier report finalized in 2017.

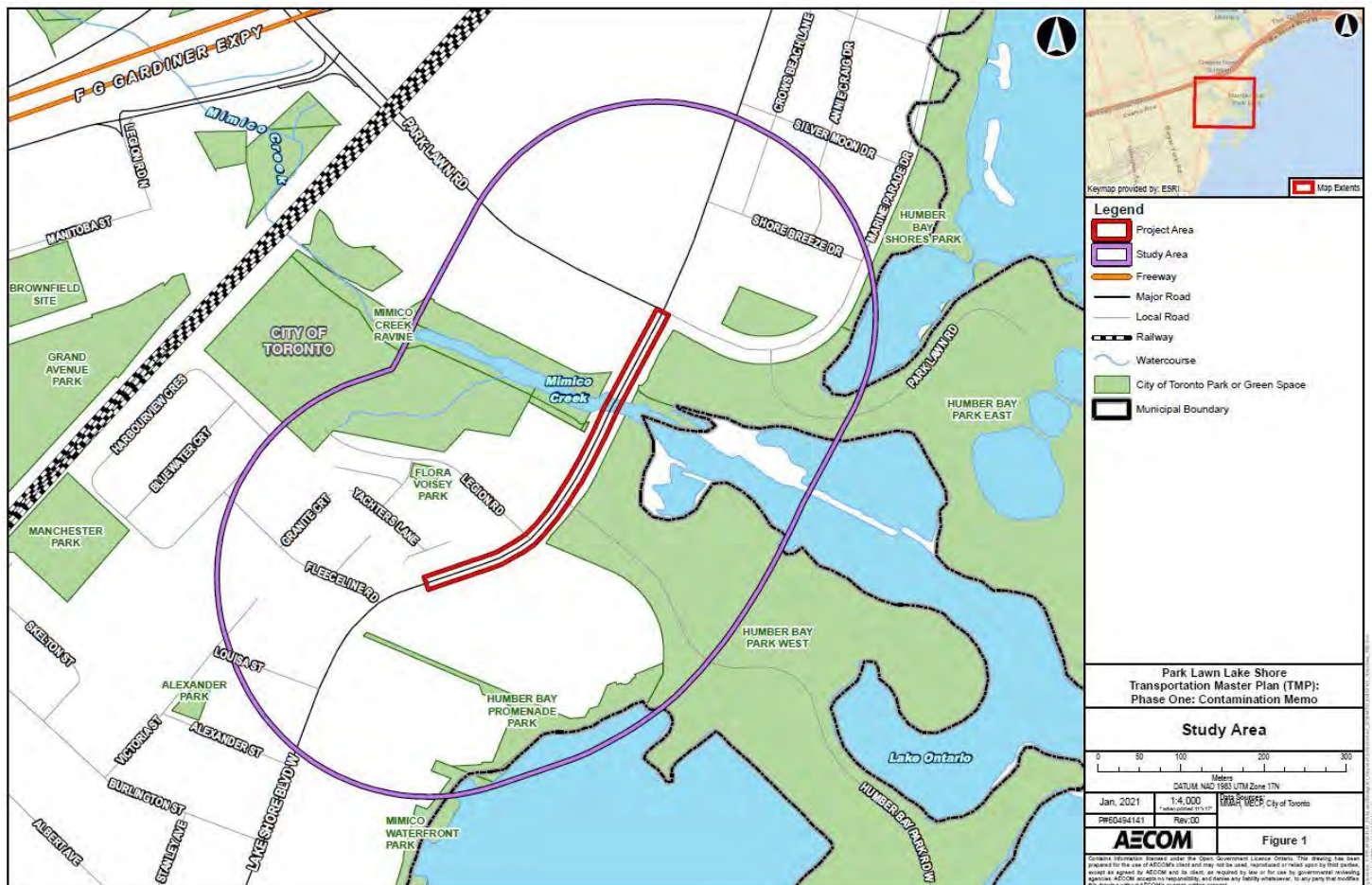
The purpose of the Limited Phase One ESA is to identify, in a preliminary fashion, areas having the potential for soil and/or groundwater contamination and inform the evaluation of Alternative Solutions being considered for the TMP study. The methodology, site description, summary of previous environmental reports, environmental database and historical record review, summary of study area visit, conclusions, recommendations and limitations are provided in the following sections.

2. Description of the Study Area

2.1 Location

For the purposes of the 2020 Limited Ph. I ESA, given that this is a TMP and being completed at a broad level it was determined that this report should focus on the areas within the 2020 Additional Study Area that have the potential to be affected by the alternatives under consideration as part of the TMP process rather than assess the full additional study area. This report therefore focuses on the lands directly adjacent to Lake Shore Boulevard including the proposed area of bridge/roadway expansion along Lakeshore Boulevard West, from Yachters Lane to Park Lawn Road. The study area for this report is generally bounded by Shore Breeze Drive to the northeast, Lake Ontario to the southeast, Canadian National Railway to the northwest and Alexander Street to the southwest as illustrated in Figure 2.

Figure 2: Study Area



2.2 Current Land Use

The study area generally comprises a mix of land uses, including designated open space (natural and recreational), medium to high density residential, industrial and commercial. A large portion of the study area is also occupied by transportation infrastructure, including roadways, multi-use trails and transit (tram) infrastructure. One yellow gas transmission pipeline post was identified on Lake Shore Boulevard West.

2.3 Topography and Drainage

The study area topography is slightly variable; however, it generally slopes downward in a southeasterly direction towards Lake Ontario. According to online mapping available from Natural Resources Canada, ground surface elevations in the study area generally range from 80 m above sea level (asl) to 85 m asl.

It must be noted that the subterranean infrastructure such as utility conduits, ducts, subgrade structures, dewatering systems and buildings influence the local shallow groundwater and have not been assessed as part of this Limited Phase One ESA.

2.4 Geology

The Limited Phase One ESA study area is within the Georgian Bay Formation which comprises Upper Ordovician grey shale, limestone interbeds, dolostone, siltstone (OGS Map 2544, Bedrock). According to the Quaternary Geology of Southern Ontario Map 2556 (OGS, 1984), this area consists of glaciolacustrine deposits of silt, clay and minor sand (basin and quiet water deposition). In addition, the physiographical subsurface conditions in the study area consist of Bevelled Till Plains.

2.5 Contaminant Mobility

Contaminants on or in the soils may move within and beyond the Study Area through a number of different pathways. The soils themselves retain contaminants through adsorption. The movement of contaminants from soil occurs through evaporation and dust generation, intake into plants through their roots, and by flushing or dissolution into water seeping into the soil. Water transport of chemicals may result in contamination of surface water bodies through surface water drainage, and by way of groundwater aquifers. In general, contaminant mobility will be greatest when:

- Overburden deposits consist of sand and gravel, or other permeable deposits;
- Fractured bedrock is located at or near the surface, or is overlain by a thin layer of permeable deposits;
- Distance to surface watercourses is less than 30 m;
- Water table is less than 5 m; and
- Preferential flow pathways (e.g., utility trenches, tree roots, ditches) exist in the soils above the water table.

2.6 Significance of Mobility within the Study Area

As described in Section 2.4, the quaternary geology in the Study Area consists of glaciolacustrine deposits of silt, clay and minor sand (basin and quiet water deposit) on top of shale, limestone, dolostone and siltstone bedrock. Due to the nature of the modern alluvial deposits of silt, clay and sand, heterogeneities may exist in the overburden that will inhibit or allow the lateral / vertical movement of contaminants and time for natural attenuation will vary. Sandy deposits will increase the movement of contamination within the overburden due to higher permeability, compared to other soils with lower permeability.

The aged limestone bedrock of the Upper Ordovician, Simcoe Group, underlies the Study Area. In areas where the overburden is shallow or absent, the potential for contaminants to reach the bedrock aquifer(s) is high. This is particularly true for the areas where sandy soils are present, which may increase the transport of contaminants to the bedrock aquifers. In areas of deeper overburden, the potential for contaminants to reach the bedrock aquifer(s) is low.

3. Records Review

This Limited Phase One ESA included a review of available resources concerning study area history and a one-day windshield survey. The scope of this Limited Phase One ESA is sufficient only to identify potential sources of contamination which are obvious from visual observations made from publicly accessible land and/or from readily available sources of information, as detailed below. Soil, groundwater, surface water and/or chemical testing were not carried out as part of this Limited Phase One ESA. This study is limited to a cursory overview of land uses in the study area and does not constitute a complete assessment of on-site land uses and/or associated activities. Interviews were not conducted as part of this Limited Phase One ESA. A summary of the issues of potential environmental concern identified through the activities carried out as part of this Limited Phase One ESA is provided in **Table 5.1** of this report.

3.1 Database Review

Database records pertaining to the study area were obtained from Environmental Risk Information Services Ltd. (ERIS), an environmental database and information services resource. The following database records, compiled from government and private sources, were selected to provide a broad understanding of historical environmental information for the study area:

- Anderson's Waste Disposal Sites
- Borehole
- Certificates of Approval
- Certificates of Property Use
- Delisted Fuel Tanks
- Environmental Registry
- Environmental Compliance Approval
- Fuel Oil Spills and Leaks
- Fuel Storage Tank
- Fuel Storage Tank – Historic
- National PCB Inventory
- National Pollutant Release Inventory
- Inventory of PCB Storage Sites
- Pesticide Register
- Private and Retail Fuel Storage Tanks
- Ontario Regulation 347 Waste Generators Summary
- Records of Site Condition

- Retail Fuel Storage Tanks
- Scott's Manufacturing Directory
- Ontario Spills

The search included properties located within approximately 250 m of the study area. It should be noted a number of spills (19) and/or releases were reported within the study area between 1988 and 2015; however, the precise location of these incidences is not known. In addition, records of Certificates of Approval, Environmental Bill of Rights, Environmental Compliance Approvals, Waste Generator registries and one Record of Site Condition were noted in undisclosed locations in the study area. Based on the description of these unplottable listings may be within the study area and, based on the nature of the listing, would indicate properties of environmental concern.

A copy of the ERIS Database Report is included in Appendix C of this report. Key information collected from the database records is summarized in **Table 5.1** of this report.

3.2 Historic Land Use

AECOM has undertaken historical reviews of the study area to determine properties and/or buildings with cultural heritage value and areas that have the potential for the recovery of archaeological resources as part a the Cultural Heritage review completed for the Park Lawn Lake Shore TMP. This review was documented in a Stage 1 Archaeological Assessment Report and a Built Heritage Resource and Cultural Heritage Landscape Screening Assessment (CHSA) Report available under separate cover. Based on the findings of these studies, the following is noteworthy for the current Limited Phase One ESA in relation to the former land uses in the area:

- Much of the Lake Ontario shoreline within the limits of the study area is man-made. The original shoreline is generally located just south of Lake Shore Boulevard.
- The study area was historically situated within Etobicoke Township.
- The Mr. Christie Bakery factory, on the northeast side of Park Lawn Road and northwest side of Lake Shore Boulevard West, originally opened in 1947 under Nabisco ownership.

3.3 City Directories

ERIS was retained to conduct a search of the Polk's Toronto-Etobicoke and Ontario Criss-Cross Directory at the Toronto Reference Library for the years 1950, 1955, 1960, 1965, 1970, 1975, 1980, 1985/86, 1991, 1996 and 2000. The search consisted of a review of relevant streets and/or municipal addresses within the study area. It is noted that AECOM did not receive a complete City Directory listing for Ontario Line West from ERIS due to the closure of the library in Ottawa, as a direct result of the COVID-19 pandemic.

Based on the findings of the historical city directory search, the following is noteworthy:

- Legion Road was listed in the directories as all residential in 1965.
- The Metropolitan Toronto Works Department Humber Filter Plant and "metro sewage plant" was listed at an unknown Legion Road address in the city directories reviewed between 1975 and 1991; with pre-existing knowledge of the study area, it is interpreted that these listings existed in the area north of the Legion Road/Lake Shore Boulevard West intersection.
- A 'warehouse' was listed at 2256 Lake Shore Boulevard West (formerly 2 Legion Road) in the city directories reviewed between 1975 and 1980.
- A motel strip existed from 2155 to 2183 Lake Shore Boulevard West from 1965-2000.
- 2189 Lake Shore Boulevard West was listed as a gasoline service station in the city directories reviewed between 1965 and 2000.
- A gasoline service station was listed at 2230 Lake Shore Boulevard West in the city directories in 1970, following which Cavalier Cleaners (dry cleaning operation) were listed at the property between 1996 and 2000.

- A gasoline service station was listed at 2272 Lake Shore Boulevard West in the city directories reviewed between 1970 and 1991.
- Louisa Street and Victoria Street were listed in the directories as all residential since at least 1965.
- 2187 Lake Shore Boulevard West (formerly 2181 Lake Shore Boulevard West) was listed as an Esso auto care center in the city directories reviewed between 1985/86 to 1991.
- 2274 Lake Shore Boulevard West was listed as Marina Cleaners (dry cleaning operation) in the city directory reviewed in 2000.
- 8 Greystone Court was listed as Adelphi Cleaners (dry cleaning operation) in the city directory reviewed in 2000.
- 20-22 Fleeceline Road was listed as Johnson Industrial Plastics, Copper and Brass in the city directories reviewed
- 24 Fleeceline Road was listed as Carlito's warehousing in the city directories reviewed between 1965 and 1980.

A copy of the detailed city directories search is provided in Appendix F of this report.

3.4 Historical Aerial Photograph Review

Historical study area aerial photographs for the years 1960, 1973, 1984, 1999 and 2015 were available for review. A copy of the aerial photographs obtained from Environmental Risk Information Services and reviewed as part of this Limited Phase One ESA are included in **Appendix E** of this report.

Based on the findings of the historical aerial photograph review, the following is noteworthy:

3.4.1 1960 Aerial Photograph

- Lake Shore Boulevard was present immediately northwest of the shore of Lake Ontario.
- A large majority of the shoreline within the study area, including the area east of Lake Shore Boulevard and north of Legion Road remains as Lake Ontario. Lake infilling to extend the shoreline has not begun.
- Louisa Street was present west of Lake Shore Boulevard, and generally appears to be developed as residential as per its present-day configuration.
- Park Lawn Road appears to have been developed as per present-day configuration.
- The present-day highly vegetated green space to the north of Legion Road appears to have been grassed and/or unvegetated.
- Victoria Street appears to have been developed as per present-day configuration.
- Fleeceline Road appears to have been largely undeveloped, except for a large commercial or industrial building in the present-day Granite Court and Greystone Court area.
- The present-day Promenade Apartments buildings east of Lake Shore Boulevard appear to have been developed.
- The area to the east of the Louisa Street/Lake Shore Boulevard intersection appears to have been in the midst of development.
- The area south of the Legion Road/Lake Shore Boulevard intersection appears to be undeveloped and/or consists of disturbed soils.
- The large quadrant north of the Park Lawn Road/Lake Shore Boulevard intersection appears to be occupied by a large industrial building in the north end, and grassed area in the south end.
- Present-day Shore Breeze Drive and adjacent areas appears to have not been developed.
- The property to the west of the Park Lawn Road/Lake Shore Boulevard intersection appears to have been developed as a large commercial or industrial building; however, given the poor quality of the image, their use cannot be interpreted.
- Developments south of Park Lawn Road appear to have begun for commercial use; however, given the poor quality of the image, their use cannot be interpreted.

3.4.2 1973 Aerial Photograph

- The Lake Ontario shoreline, west of the Humber River and south of Lake Shore Boulevard appears to have been developed; however, given the poor quality of the image, property uses cannot be interpreted.
- The land that exists from lake infilling appears to be undeveloped.

3.4.3 1984 Aerial Photograph

- The Lake Ontario shoreline, east of the Humber River and south of Lake Shore Boulevard appears to have been developed with a park and landscaped with trees, grass and manicured lawns.
- The property to the west of the Park Lawn Road/Lake Shore Boulevard intersection appears to have been re-developed as a high-rise residential property, consistent with what exists in present-day configuration.
- The area immediately south of Park Lawn Road appears to have expanded to include some additional buildings. Given the poor quality of the image, their use cannot be interpreted.

3.4.4 1999 Aerial Photograph

- The area south of the Legion Road/Lake Shore Boulevard intersection appears to be developed as various high-rise residential buildings
- Fleeceline Road and off-shoot roadways including Granite Court and Greystone Court appears to have been largely developed as various rows of townhouses. The large commercial building that was present in the 1960-1984 aerial photographs is now gone and replaced with townhouses.

3.4.5 2015 Aerial Photograph

- The present-day vegetated green space to the north of Legion Road appears to have early-stage vegetation growth.
- The large industrial operation that previously existed in the quadrant north of the Park Lawn Road/Lake Shore Boulevard intersection appears to be in the process of demolition. All that remains of this is disturbed soils, a parking lot and remnants of equipment that was on site previously.
- Shore Breeze Drive appears to have been developed as high-rise residential buildings.

3.5 Fire Insurance Plans

Historic Fire Insurance Plans (FIPs) for the years 1890, 1932 and 1952 for the study area and/or portions of the study area were obtained from the City of Toronto Archives. A copy of the FIPs reviewed as part of this Limited Phase One ESA is provided in **Appendix D** of this report. The key findings of the review are described herein.

3.5.1 1890 Fire Insurance Plan

- In 1890, the shores of Lake Ontario were adjacent to Lake Shore Boulevard West.
- It appears that the entire study area was primarily undeveloped except for the development of some scattered small buildings. Due to the poor quality of the fire insurance plan, the exact use cannot be interpreted.

3.5.2 1932 Fire Insurance Plan

- In 1932, Louisa Street and Alexander Street appear to be occupied by residential and/or commercial uses.
- The area south of the Fleeceline Road/Lake Shore Boulevard West intersection was largely undeveloped with a few small buildings which appear to be residential use.
- Victoria Street appears to be all residential.

3.5.3 1952 Fire Insurance Plan

- The area immediately northwest of 2272 Lake Shore Boulevard West was occupied by Stone Straw Corporation of Canada Ltd, a steel beam, column and concrete floor factory and storage operation. A 1,000-gallon fuel oil storage tank existed immediately north of the former factory building (27 Granite Court).
- The area to the immediate west of the Legion Road/Lake Shore Boulevard West intersection was occupied by an assembling, wood working and machine shop.
- The area to the immediate north of the Legion Road/Lake Shore Boulevard West intersection (currently 15 Legion Road and 2240 Lake Shore Boulevard West) was occupied by an auto garage and service station. The building immediately east of the auto garage and service station was occupied by Sinclair Valentine Co. of Canada Ltd. and Bush Roller Co. Ltd., manufacturers of printing inks and printer rollers.
- Historical address 2189 Lake Shore Boulevard West was occupied by a gasoline service station.
- The large area north of the Park Lawn Road/Lake Shore Boulevard West intersection was occupied by the Christie Brown & Co. Ltd. biscuit factory., except for a small area immediately adjacent to the intersection occupied by Bank of Montreal.

3.6 Ontario Ministry of the Environment and Climate Change Brownfields Environmental Site Registry

Under Ontario Regulation 153/04, a Record of Site Condition (RSC) is a legal document prepared by a property owner and Qualified Person that provides a summary of the environmental condition of a property following the completion of a Phase I ESA, Phase II ESA, site remediation or risk assessment. The Brownfields Environmental Site Registry (BESR) database provides information on RSCs that have been filed for properties in Ontario where these activities have been completed and a RSC filed. RSCs for individual properties can be publicly searched on the BESR website. These properties must meet the applicable site condition standard, or a standard specified in a risk assessment for the intended use and are filed once regulatory requirements are met.

A search of the BESR for information on RSCs filed with the MOECC indicated that 16 RSCs were filed for properties within the study area, as summarized in **Table 3.1**.

Table 3.1: Summary of Records of Site Condition

Record of Site Condition (RSC) ID	Company	Address	Details	Areas of potential concern
58112	Empire (Beyond the Sea) Limited	2242 & 2246 Lake Shore Boulevard West	RSC was filed on April 27, 2010 for conversion of land use from industrial to residential. RSC record indicates that Phase 1 and Phase 2 environmental site assessments (ESAs) were conducted at the property to meet Full Depth Generic Conditions Standard, with Non-potable	- The property met the applicable site condition standards.

Record of Site Condition (RSC) ID	Company	Address	Details	Areas of potential concern
			Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use. No risk assessments were required/conducted, and no CPU was issued for the property.	
77722	No company provided	2230 Lake Shore Boulevard West	RSC was filed on April 29, 2010 for conversion of land use from commercial to residential. RSC records indicate that a Phase I ESA was conducted at the property. No risk assessments were required/conducted, and no CPU was issued for the property.	- No environmental testing completed
114557	No company provided	2230 Lake Shore Boulevard West	RSC was filed on June 30, 2011 for conversion of land use from commercial to residential. RSC records indicate that Phase I and Phase 2 ESAs were conducted at the property to meet Background Site Condition Standard, with Potable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property met the applicable site condition standards
84919	1255894 Ontario Limited	2256 Lake Shore Boulevard West	RSC was filed on October 8, 2010 for conversion of land use from commercial to commercial. RSC records indicate that Phase I and Phase II ESAs were conducted at the property to meet Stratified Site Condition Standards, with Non-potable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use with Risk Assessment. A Risk Assessment (RA) was conducted, and a CPU was issued for the property. CPU No. 4358-83SQ3Z.	- The property exceeded applicable site condition standards in soil for Copper, Electrical Conductivity, Lead and Zinc. Risk Assessment Standards developed for these contaminants.
204746	Omni (West Lake) Lands Corporation	2200 Lake Shore Boulevard West	RSC was filed on October 10, 2012 for conversion of land use from commercial to residential. RSC records indicate that Phase I and Phase 2 ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, Medium/Fine Textured Soil, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property exceeded applicable site condition standards for PAHs. Contaminated soil removed from the property.

Record of Site Condition (RSC) ID	Company	Address	Details	Areas of potential concern
208811	Omni (West Lake) Lands Corporation	2200 Lake Shore Boulevard West	RSC was filed on July 17, 2013 for conversion of land use from commercial to residential. RSC records indicate Phase I and Phase 2 ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property exceeded applicable site condition standards in soil for Arsenic, Lead, Molybdenum, Cadmium and Copper. Contaminated soil removed from the property.
216286	Empire Communities	2183 Lake Shore Boulevard West	RSC was filed on March 3, 2015 for conversion of land use from commercial to community. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standard, with Non-potable Ground Water, Coarse Textured Soil, for Community property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property met the applicable site condition standards.
222222	Empire Communities	2183 Lake Shore Boulevard West	RSC was filed on June 23, 2016 for conversion of land use from commercial to residential. RSC records indicate Phase One and Phase Two ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, Coarse Textured Soil, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property exceeded applicable site condition standards in soil for Metals, VOCs, PAHs and PHCs. Contaminated soil removed from the property.
222089	Empire Communities	2183 Lake Shore Boulevard West	RSC was filed on June 9, 2016 for conversion of land use from commercial to residential. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, Coarse Textured Soil, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property exceeded applicable site condition standards in soil for PAHs, PHCs, BTEX, Lead and Electrical Conductivity. Contaminated soil removed from the property.
222343	Phantom Developments Limited	33 Shore Breeze Drive	RSC was filed on August 5, 2016 for conversion of land use from commercial to residential. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards with Non-potable Ground	- The property met the applicable site condition standards.

Record of Site Condition (RSC) ID	Company	Address	Details	Areas of potential concern
			Water, Coarse Textured Soil, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	
223619	Phantom Developments Limited	33 Shore Breeze Drive	RSC was filed on September 6, 2017 for conversion of land use from commercial to community. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, Coarse Textured Soil, for Community property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property exceeded applicable site condition standards in soil for various PAHs. Contaminated soil removed from the property.
Unknown RSC ID	Unknown	21 and 24 Fleeceline Road	ERIS records indicate that an RSC was issued to 21 and 24 Fleeceline Road, Etobicoke in 1997. No information is available pertaining to this RSC.	- Unknown
208813	Omni (West Lake) Lands Corporation	10 Park Lawn Road	RSC was filed on June 28, 2013 for conversion of land use from commercial to residential. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property met the applicable site condition standards.
226197	Monarch Waterview Development Limited	2161, 2163, 2165 Lake Shore Boulevard West	RSC was filed on November 22, 2019 for conversion of land use from commercial to residential. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, Medium and Fine Textured Soil, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property exceeded applicable site condition standards in soil for metals, electrical conductivity and sodium adsorption ratio. Contaminated soil removed from the property.
206566	1772014 Ontario Inc.	36 Parklawn Road	RSC was filed on March 14, 2013 for conversion of land use from industrial to residential. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, Coarse Textured Soil, for Residential property use.	- The property exceeded applicable site condition standards in soil for PHCs, electrical conductivity and sodium adsorption ratio. Contaminated

Record of Site Condition (RSC) ID	Company	Address	Details	Areas of potential concern
			No risk assessments were required/conducted, and no CPU was issued for the property.	soil removed from the property.
223778	Petro J. Developments Limited	42 Park Lawn Road	RSC was filed on October 17, 2017 for conversion of land use from industrial to residential. RSC records indicate Phase I and Phase II ESAs were conducted to meet Full Depth Generic Site Condition Standards, with Non-potable Ground Water, for Residential property use. No risk assessments were required/conducted, and no CPU was issued for the property.	- The property met the applicable site condition standards.

4. Study Area Reconnaissance

A 'windshield survey' was completed by AECOM on December 10, 2020 between the hours of 10:00 AM and 3:00 PM. The weather at the time of the study area reconnaissance was overcast and approximately -3°C. There was no snow cover that could potentially conceal ground features within the study area.

The purpose of the survey was to review existing conditions and identify any visual evidence of potential subsurface contamination from publicly accessible place. At the time of the windshield survey, land uses in the study area primarily consisted of a mix of residential, commercial, green space, and transportation-related infrastructure. No obvious areas of significant staining and/or vegetative die back, which might indicate the presence of subsurface impact, were observed at the time of the windshield survey; however, a number of land uses were noted to have the potential for environmental concern, as summarized in Table 5.1 below.

A photographic record of the survey is provided in **Appendix B** of this report.

5. Key Findings

A summary of the key findings is provided in **Table 5.1** below. This summary should be read in conjunction with **Appendix A1** through **A16**, provided in **Appendix A** of this report.

Table 5.1: Summary of Issues of Potential Environmental Concern

Property Address/Location	Current Use	Observations	Source	Issue of Potential Environmental Concern
3 Greystone Court	Low-density residential	- 15-20 L gasoline spilled to ground and catch basin; 2009	ERIS report, Windshield survey	- Potential for subsurface contamination associated with historical fuel release.
8 Greystone Court	Low-density residential	- This property was listed as Adelphi Cleaners (dry cleaning operation) in 2000.	Windshield survey, City directories	- The presence of a dry-cleaning service, in which operations are associated with potential solvent releases, including chlorinated solvents (i.e.

Property Address/Location	Current Use	Observations	Source	Issue of Potential Environmental Concern
				tetrachloroethylene) and other halogenated volatile organics. These contaminants have potential to migrate in groundwater.
1-17 & 2-24 Greystone Court	Low-density residential	<ul style="list-style-type: none"> - Formerly occupied by Stone Straw Corporation of Canada Ltd, a steel beam, column and concrete floor factory and storage operation from at least 1962. 	Fire Insurance Maps, Windshield survey, Aerial photographs	<ul style="list-style-type: none"> - Anticipated manufacturing and storage of metal and concrete products, in which operations are associated with potential releases to the environment including metals, inorganics, petroleum-based products and volatile organics.
1-27 & 2-28 Granite Court	Low-density residential	<ul style="list-style-type: none"> - Formerly occupied by Stone Straw Corporation of Canada Ltd, a steel beam, column and concrete floor factory and storage operation from at least 1962. - 1,000-gallon fuel oil tank at 27 Granite Court in 1962. 	Fire Insurance Maps, Windshield survey, Aerial photographs	<ul style="list-style-type: none"> - Anticipated manufacturing and storage of metal and concrete products. These operations are associated with potential releases to the environment including metals, inorganics, petroleum-based products and volatile organics. - Potential for subsurface contamination associated with possible on-site fuel releases.
15 Legion Road	High-density Residential	<ul style="list-style-type: none"> - Occupied by an auto garage/service station and manufacturers of printing inks and printer rollers in 1952. 	Fire Insurance Maps, Windshield survey	<ul style="list-style-type: none"> - On-site storage/use of petroleum-based products, including oils, greases, solvents, diesel and gasoline on-site and associated releases - Ink manufacturing operations are associated with potential volatile organic releases to the environment.
20-22 Fleeceline Road (formerly 24 Fleeceline Road)	Johnson's Industrial Plastics	<ul style="list-style-type: none"> - Listed in the Scott's Manufacturing Directory under Johnston Industrial Plastics in 1942; manufacturing of various plastic products and industrial machinery. - Listed in the Waste Generator database from 1997 to 2001 for paint/pigment/coating residue, aliphatic solve and graphic arts waste generation - Listed as Carlito's warehousing from 1965-1980. - One (1) retail storage tank registered to this property (year unknown) 	ERIS report, Windshield survey, City directories	<ul style="list-style-type: none"> - Bulk underground fuel/chemical storage. - Plastic product manufacturing - Anticipated storage/use of registered wastes and associated releases. - Unknown contents stored at Carlito's warehousing.
51-55 Fleeceline Road (formerly 21 Fleeceline Road)	Public walking path	<ul style="list-style-type: none"> - RSC issued for this property in 1997; RSC ID unknown - Listed as a National PCB Storage site in 1996; Askarel PCB and bulk liquid with low-level PCBs (<1000 ppm) 	ERIS report, Windshield survey,	<ul style="list-style-type: none"> - Anticipated storage/use of PCBs and associated releases.

Property Address/Location	Current Use	Observations	Source	Issue of Potential Environmental Concern
		- Listed in the Waste Generator database from 1993 to 2001 for PCB generation		
20 Park Lawn Road	High-density residential, commercial (retail, grocery)	- Listed in the Waste Generator database from 2017 to 2018 for miscellaneous organic waste generation	ERIS report, Windshield survey	- Anticipated storage/use of registered wastes and associated releases.
8 Park Lawn Road (formerly 10 Park Lawn Road)	High-density residential	- RSC issued for the property in 2013; RSC ID 208813 - Listed in the Scott's Manufacturing Directory in 1987 for various food products and basic organic chemical manufacturing; Nabisco Canada and Kraft Canada Inc. - Listed in the Waste Generator database in 2015 for waste oil and lubricant generation; related to contracting work	ERIS report, Windshield survey	- On-site storage/use of petroleum-based products, including oils, greases, solvents, diesel and gasoline on-site and associated releases.
34 Legion Road	Vacant building in a fenced off property. Building signage "Legion M.S"	- Listed in the Waste Generator database from 1990 to 1998 for oil skimming/sludge generation.	ERIS report, Windshield survey	- Anticipated storage/use of registered wastes and associated releases.
35 Legion Road	Green space; treed/vegetated, Bonar Creek runs throughout property. One monitoring well and one steel drum (tipped over) observed from public access point.	- Storage tanks in relation to the Humber Treatment Plant includes two (2) diesel fuel storage tanks installed at the property in 1989 and 1992, one (1) private storage tank (date unknown), one (1) private fuel outlet registered in 2007	ERIS report, Windshield survey	- Bulk underground fuel/chemical storage.
2150 Lake Shore Boulevard West	Property is divided into two sections by fencing. Active parking lot exists to the south of the fencing and a vacant lot/unused parking lot exists to the north of the fencing. A Notice of Property Change posted at site fencing (proposed change to mixed-use including residential, retail, institutional, entertainment, new GO Station, TTC improvements, roadways and public park.	- Listed in Scott's Manufacturing Directory in 1861 for cookie and cracker manufacturing; Christie Brown & Co. - Forty (40) L diesel fuel spill to ground and catch basin; 2002 - Unknown quantity hydraulic oil spill to ground; 2012 - Listed in the Waste Generator database from 1986 to 2019 for aliphatic solvent, organic and inorganic laboratory chemicals, heavy fuels, detergents/soaps, non-halogenated pesticides, PCBs, acid wastes, light fuels, petroleum distillate, halogenated solvent and waste oil/lubricant generation; related to food manufacturing operations. - Listed as a National PCB Storage site in 1990; Askarel/Inerteen PCB - One-fifty (150) L vegetable oil spill to ground and catch basin; 2006 - Nineteen (19) L hydrochloric acid spill to asphalt; 2006	ERIS report, Windshield survey, Fire Insurance Maps, Aerial photographs	- Potential for subsurface contamination associated with historical oil and acid release. - Anticipated storage/use of registered wastes and associated releases.
2175 Lake Shore Boulevard West	Parking lot and active construction site	- One-seventy (170) L diesel fuel spill to gravel/soil; 2015	ERIS report, Windshield survey	- Potential for subsurface contamination associated with historical fuel release.

Property Address/Location	Current Use	Observations	Source	Issue of Potential Environmental Concern
2189 Lake Shore Boulevard West	ESSO Gas Station, Circle K and car wash	<ul style="list-style-type: none"> - Formerly occupied a gas station since at least 1952. - Total of nine (9) gasoline tanks registered to the property between the years 1986, 1996 and 2009 - One (1) diesel fuel tank registered to the property in 2009 - 40 L diesel fuel spill to parking lot; 1995 - Unknown amount of gasoline spilled to ground; 1992 - Listed in the Waste Generator database from 2019 to present for inorganic sludge, slurry and solid generation 	ERIS report, Windshield survey	<ul style="list-style-type: none"> - Current and historical gasoline fuelling station and car wash. - Bulk underground fuel storage. - Potential for subsurface contamination associated with historical fuel release. - Anticipated storage/use of registered wastes and associated releases.
2220 Lake Shore Boulevard West (formerly 30 Park Lawn Road)	High-density residential	<ul style="list-style-type: none"> - Listed in the Anderson's Waste Disposal database in 1947 for an ash and rubbish dump by the ravine, immediately south of 8 Park Lawn Road. - Aerial photographs indicate the development of a large commercial or industrial building in 1960. 	ERIS report, Windshield survey, Aerial photographs	<ul style="list-style-type: none"> - Potential for fill of unknown quality. - Potential former industrial or commercial activities.
2195 Lake Shore Boulevard West (formerly 2225 Lake Shore Boulevard West)	Vegetated/grassed, parking lots, shoreline, marina	<ul style="list-style-type: none"> - Listed in the Waste Generator database from 1990 to 2001 for petroleum distillates generation, and in 2009 for various registered waste classes including paint/pigment/ coating residues, organic and inorganic laboratory chemicals, halogenated pesticides and waste oils/lubricants. - Listed in Andersons Waste Disposal registry for having 2000 cubic yards of ashes and miscellaneous garbage dumped on this property. 	ERIS report, Windshield survey	<ul style="list-style-type: none"> - Anticipated storage/use of registered wastes and associated releases. - Potential for fill of unknown quality.
2240 (formerly 2242-2246?) Lake Shore Avenue West	High-density residential, commercial including Park Lawn Cleaners (dry cleaning operation)	<ul style="list-style-type: none"> - 150 L diesel fuel spill to soil; 2009. - Listed in Scott's Manufacturing Directory in 1970 and 1999 for various plastic products including sporting supplies, textile bags, canvas products, industrial supplies, paints, varnishes, upholstered and wood household furniture and nondurable goods - Listed in the Waste Generator database from 2007 to 2008 for light fuel generation and oil skimming/ sludges. - Former Metro Toronto Works Dept. Humber Filter Plant and "metro sewage plant" from 1975 to 1991. - Occupied by an auto garage/service station and manufacturers of printing inks and printer rollers in 1952. - RSC issued for this property in 2010; RSC ID 58112 	ERIS report, Windshield survey, Fire Insurance Maps	<ul style="list-style-type: none"> - Active drycleaning operation on-site, in which operations are associated with potential solvent releases, including chlorinated solvents (i.e. tetrachloroethylene) and other halogenated volatile organics. These contaminants have potential to migrate in groundwater.
2256 Lake Shore Boulevard West	XYZ Storage Facility (self-storage)	<ul style="list-style-type: none"> - RSC issued for this property in 2010; RSC ID 84919 - CPU issued for this property in 2010; EBR Registry No. 011-0057; Ministry Ref No. 7102-7J4M8T 	ERIS Report, Windshield survey, City Directories	<ul style="list-style-type: none"> - Anticipated storage/use of registered wastes and associated releases. - Unknown contents stored at warehousing facility.

Property Address/Location	Current Use	Observations	Source	Issue of Potential Environmental Concern
		<ul style="list-style-type: none"> - Listed in the Waste Generator database from 2007 to 2008 and 2015 for oil skimming/sludge generation. - A warehouse operated at this property between 1965-2000. 		
2264 Lake Shore Boulevard West	Low-density residential	<ul style="list-style-type: none"> - Listed in the Waste Generator database from 2002 to 2004 for PCB generation. 	ERIS report, Windshield survey	<ul style="list-style-type: none"> - Anticipated storage/use of PCBs associated releases.
2267 Lake Shore Boulevard West	Gated residential area (high and low density)	<ul style="list-style-type: none"> - Formerly a press and print operation, listed in Scott's Manufacturing Directory in 1988 for book publishing. 	ERIS report, Windshield survey,	<ul style="list-style-type: none"> - Former press and print operation, in which operations are associated with potential volatile organic releases to the environment.
2272 Lake Shore Boulevard West (formerly 2276 Lake Shore Boulevard West)	Certified Auto Repair garage, Canada Proof vehicle battery retailer	<ul style="list-style-type: none"> - One (1) retail storage tank; registered in 1995 and three (3) gasoline storage tanks in 1988. - Various former auto service operations from at least 1995-1998 - Listed in the Waste Generator database from 2014 to 2018 for oil skimming/sludge and light fuel generation - 5-7 L oil/ grease spill to catch basin; 2018 - A gasoline service station operated at this property in 1962 and 1970 to 1991. - Formerly occupied by a metal and plastic package manufacturer from at least 1986 to 1998. 	ERIS report, Windshield survey, Fire Insurance Maps, City directories,	<ul style="list-style-type: none"> - Potential for subsurface contamination associated with historical fuel release. - Bulk underground fuel storage. - Anticipated storage/use of registered wastes and associated releases. - Various auto service operations. - Former manufacturer of metal and plastic products, in which operations are associated with potential releases to the environment including metals, inorganics, petroleum-based products and volatile organics.
2275 Lake Shore Boulevard West (formerly 2274 Lake Shore Boulevard West)	High-density residential or office space, commercial on first level of building including Marina Cleaners (dry cleaning operation)	<ul style="list-style-type: none"> - Listed in Scott's Manufacturing Directory (year unknown) for electrical apparatus' and equipment, wiring supplies and construction material manufacturing. - Listed in the Waste Generator database from 2007 to 2008 and 2020 for aliphatic solvent and inert organic waste generation. 	ERIS report, Windshield survey, City directories	<ul style="list-style-type: none"> - Anticipated storage/use of registered wastes and associated releases. - Former manufacturer of metal products, in which operations are associated with potential releases to the environment including metals, inorganics, petroleum-based products and volatile organics.
2287 Lake Shore Boulevard West	High-density residential	<ul style="list-style-type: none"> - Formerly occupied by Almax Canada (dates unknown), a manufacturer of aluminum patios, railings, staircases, etc. 	ERIS report, Windshield survey,	<ul style="list-style-type: none"> - Former manufacturer of aluminum products, in which operations are associated with potential releases to the environment including metals, inorganics, petroleum-based products and volatile organics.
Intersection of Fleeceline Road and Lake Shore Boulevard West	Roadway intersection	<ul style="list-style-type: none"> - Fifty (50) L diesel fuel spill to road; 1996 	ERIS report, Windshield survey	<ul style="list-style-type: none"> - Potential for subsurface contamination associated with historical fuel release.

In addition to the above, the following areas have been identified as having the potential for environmental concern; however, given their broad nature have not been described in **Table 5.1**.

Roadways and Interchanges

The study area is largely occupied by major transportation infrastructure. These areas represent issues of potential environment concern given the potential for subsurface contamination associated with road salt deposition and a number of historical fuel releases previously reported within the study area, summaries of which are documented within Table 5.1.

Fill

Given the detailed history of the study area, it is understood that the existing shoreline of Lake Ontario was filled in as part of the historical creation of recreational waterfront properties. The majority of the area southeast of Lake Shore Boulevard West has been infilled (refer to study area figures provided in Appendix A). The quality of the fill material is not known. In addition, fill material of unknown quality is expected in several portions of the study area, particularly in support of transportation infrastructure development.

6. Conclusions and Recommendations

Based on the findings of the Limited Phase One ESA carried out for the Park Lawn / Lake Shore 2020 Additional Study Area, the primary properties of concern consist of active /or former automotive sales and/or service facilities, manufacturing, gasoline service stations, infilling and an on-site dry cleaning operation. In addition, given the historic heavy industrial activities in the area, the potential for subsurface soil and groundwater impacts within area roadways and associated interchanges, as well as the lands to the south of Lake Shore Road is present.

Should roadway modifications encroach onto properties or areas where the potential for environmental concern has been identified, a Phase One and/or Two Environmental Site Assessment is recommended prior to construction activities to confirm the presence or absence of on-site soil and/or groundwater contamination. Phase II ESAs can be carried out in coordination with geotechnical investigations, where possible.

It should be noted that there have been no investigations conducted within the study area to confirm sources of contamination, groundwater flow directions or the presence or absence of impacts relating to the potential off-site sources of contamination.

7. References

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