



**Phase I Environmental Site Assessment
44 Eccles Street
Ottawa, Ontario**

BDC1141

September 27, 2016

CM3 Environmental Inc.

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1 INTRODUCTION

CM3 Environmental (CM3) was retained by CUSO International (CUSO) to carry out a Phase I Environmental Site Assessment (ESA) and Limited Phase II ESA for the property located at 44 Eccles Street, Ottawa, Ontario (hereafter referred to as “the subject property” or “site”).

The Phase I ESA was performed prior to marketing the property.

2 PHASE I ENVIRONMENTAL SITE ASSESSMENT

2.1 Methodology

CM3 completed the Phase I ESA following the requirements of the Canadian Standards Association (CSA) Standard Z768-01 (R2012) and in general accordance with Ontario Regulation (O. Reg.) 153/04. The above standards ensure that the Phase I ESAs completed will be acceptable to any regulatory agent or prospective future purchaser.

The objective of this Phase I ESA was to identify potential or actual environmental concerns and/or liabilities on the site associated with activities at the site and/or from activities on surrounding properties. The scope of work for this Phase I ESA generally included reconnaissance of the property, interviews with land owners, a historical document review, and a search of the pertinent records from municipal, provincial and federal agencies.

3 ENVIRONMENTAL ASSESSMENT FINDINGS

3.1 Site Location

The subject property is located on the south side of Eccles Street, Ottawa, Ontario, approximately 20 m east of Booth Street. The civic address for the subject property is 44 Eccles Street, Ottawa, Ontario. The site location is provided as **Figure 1** and a site layout is provided as **Figure 2**.

3.2 Site Description

The total area of the subject property is 0.64 acres and has one commercial building that is used as office space. The legal description is PLAN 4908 LOTS 14 AND 15 PT; LOTS 5 AND 6. The north part of the property adjacent to Eccles Street is landscaped with grass and the south part of the property is an asphalt parking lot. There is one entrance to the parking lot on the east side of the building and the exit from the parking lot is on the west side of the building.

The property fronts north onto Eccles Street and is located south of Somerset and east of Booth Street. The property is bordered to the south by an automotive garage on the south east and commercial (medical) buildings with parking lots on the south west. The area to the north across Eccles Street is a combination of residential and commercial buildings. The properties to the immediate west and east of the site are residential properties along Booth Street and LeBreton Street North. **Table 1** identifies the current and past land use of the property.

Table 1: PAST AND CURRENT LAND USES	
Year(s)	44 Eccles
Pre 1936	Residential
1936	Institutional (school)
2006-Present	Office (CUSO)

The property is located in a commercial/residential area of Ottawa, Ontario. The former use of the property as a school is a potential environmental concern primarily due to the likely presence of designated substances such as asbestos and lead. A summary of the current surrounding land use is presented in **Table 2** (below) and on **Figure 2**.

Table 2: ADJACENT LAND USE	
Direction	Land Use
North Adjacent	Eccles Street
North Beyond	commercial and residential developments
South Adjacent	medical offices and automotive garage
South Beyond	commercial and residential properties
East Adjacent	residential properties
East Beyond	LeBreton Street North
West Adjacent	residential properties
West Beyond	Booth Street

The automotive garage to the south east is an off-site Area of Potential Concern (APEC) as it is listed as a potentially contaminating activity (PCA) in O.Reg 153/04 and it is in close proximity to the site (**Figure 3**). Photographs of the site and surrounding area are provided in **Appendix A**.

3.3 Site Operation

The subject property is owned by CUSO International as office space with other commercial tenant office space.

3.4 Site Interviews

An Interview was conducted by CM3 on September 21, 2016 with Ms. Maria Goncalves who is the Accounts Payable Officer with CUSO International.

3.5 History

3.5.1 General

Details of CM3's historical investigation are presented in the following sections.

3.5.2 Aerial Photographs

Aerial photographs dating from 1925 to 2016 were reviewed as part of this assessment. The subject property appears to have been developed prior to 1900 and was used as a residential home with parking up to 1936 when the property was developed as a school. No photographs prior to 1925 were available for review. An air photograph of the property from Google Earth is provided below and a summary of the aerial photos are presented in **Table 3**.



Subject Property (2012)

Table 3: AERIAL PHOTOGRAPHS			
Year	Source	Land Use – Site	Land Use – Adjacent
1925	LGI Copy Service	Residential	Residential/Commercial
1928	City of Ottawa eMAPS	Residential	Residential/Commercial
1958	City of Ottawa eMAPS	School	Residential/Commercial
1965	City of Ottawa eMAPS	School	Residential/Commercial
1976	City of Ottawa eMAPS	School	Residential/Commercial
1991	City of Ottawa eMAPS	School	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)
1999	City of Ottawa eMAPS	School	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)

Table 3: AERIAL PHOTOGRAPHS			
Year	Source	Land Use – Site	Land Use – Adjacent
2002	City of Ottawa eMAPS	School	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)
2005	City of Ottawa eMAPS	School	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)
2007	City of Ottawa eMAPS	Commercial Office Space	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)
2008	City of Ottawa eMAPS	Commercial Office Space	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)
2011	City of Ottawa eMAPS	Commercial Office Space	Residential/Commercial Automotive Service (SE) Auto Body Repair (SW)
2012	Google	Commercial Office Space	Commercial / Residential Automotive Service (SE) Lot development (SW)
2014	City of Ottawa eMAPS	Commercial Office Space	Residential/Commercial Automotive Service (SE) Lot development (SW)
2015	Google	Commercial Office Space	Commercial / Residential Automotive Service (SE) Lot development (SW)
2016	Google	Commercial Office Space	Commercial / Residential

The LGI Copy Service aerial photograph is included in **Appendix B**. Due to copyright laws, the Google aerial and City of Ottawa air photographs are not included.

The off-site automotive service garage to the south east and off-site auto body repair shop to the south west are both listed as potentially contaminating activities in O.Reg 153/04.

3.5.3 City Directory Search

A city directory search was conducted for the subject property and surrounding properties. Information was available for the years 1870 to 2011. The city directory search is included in **Appendix C**.

The subject property was listed in the city directory as Cultural Interpretation Services For Our Community in 2011 and Law Society of Upper Canada in 2005/2006. In 2001/02 the site was listed as Law Society of Upper Canada and Legal Education Centre. In 1995/96 the site was listed as Legal Education Centre and Language Training Centre of Ottawa. In 1990 the site was listed as Legal Education Centre, Canadian Mental Health Association, Rideauwood Institute and

Willis Language School. In 1984 the site listing was vacant. In 1979, 1974, 1969, 1965, 1960, 1955, 1950, 1945 and 1940 the site was listed as Saint Dominique Separate School or Saint Dominique School. In 1935, 1930, 1928, 1919, 1914, 1910, 1905 and 1900 the listing was residential with 1 tenant. In 1894/95 the property was listed as vacant. In 1891, 1885/86, 1880, 1875 and 1870/71 the property was not listed.

The majority of the off-site listings were residential or commercial listings with no potential for contaminating activities for the subject property with the following exceptions:

- **2011 Listing** – 297 Booth Street – Booth Street Auto Service, 347 Booth Street Cousin Edy Garage, Chado's Autobody, Booth Street Body Shop;
- **2005/06 Listing** – 297 Booth Street – Booth Street Auto Service, 347 Booth Street Cousin Edy Garage, Chado's Autobody, Booth Street Body Shop;
- **2001/02 Listing** - 297 Booth Street – Booth Street Auto Service, 770 Somerset – AAA Auto Service;
- **1995/96 Listing** - 297 Booth Street – Ottawa Auto Centre, 346 Booth Street -Booth Street Body Shop, 71 LeBreton Street North – Sheera Car Care, 770 Somerset – Som Auto Centre, 777 Somerset – Advance Printers;
- **1990 Listing** – 297 Booth Street - Ottawa Auto Centre, 347 Booth Street – Booth Street Auto Body, 66 LeBreton Street North – McConnell Automotive, 770 Somerset – Somerset Auto Centre, 777 Somerset – Advance Printers;
- **1984 Listing** - 297 Booth Street - Ottawa Auto Centre, 70 LeBreton Street North - Standard Plating Co., 770 Somerset - Somerset Regent Service Centre;
- **1979 Listing** – 297 Booth Street- Whelan Motors Ltd, 70 LeBreton Street North - Standard Plating Co, 770 Somerset Street - Lorelli Angelo Service Centre;
- **1974 Listing** - 297 Booth Street- Whelan Motors Ltd, 770 Somerset- Somerset Texaco Sta, 787 Somerset – Tri City Printers;
- **1969 Listing** - 297 Booth Street - Whelan Motors Ltd, 770 Somerset- Lavergne Fern Texaco Service Station, 801 Somerset - Spic & Span Cleaners;
- **1965 Listing** - 297 Booth Street - Whelan Motors Ltd, 70 LeBreton Street North - Tyrell Press Ltd Printing, 770 Somerset- Lavergne Fern Texaco Service Station, 789 Somerset - Spic & Span Cleaners;
- **1960 Listing** - 297 Booth Street - Whelan WH & Son Auto Garage, 304 Booth Street - Wing Chong Laundry, 388 Booth Street - Roger's Garage, 52 LeBreton Street North - Rishworth Glazier and Leaded Glass; 770 Somerset- Lavergne Fern Texaco Service Station, 789 Somerset - Spic & Span Cleaners;
- **1955 Listing** - 297 Booth Street - Whelan WH & Son Auto Garage, 304 Booth Street - Wing Chong Laundry, 388 Booth Street – Booth Street Garage;
- **1950 Listing** - 297 Booth Street - Beattie Auto Body & Equipment, Featherston Upholstery, 304 Booth Street - Wing Chong Laundry, 388 Booth Street - Emile's Garage, 770 Somerset - Clements Service Station;
- **1945 Listing** – 304 Booth Street - Hung Thom Laundry, 388 Booth Street - Emile's Garage, 770 Somerset Street - Clements Service Station, Sun Oil Co Ltd, 791 Somerset - Parker's Cleaners & Dyers Ltd; 716 Somerset Street - Parker's Cleaners & Dyers Ltd

- **1940 Listing** - 304 Booth Street - Hung Thom Laundry, 388 Booth Street – Booth Street Service Station, 770 Somerset Street - Clements Service Station, Sun Oil Co Ltd;
- **1935 Listing** – 313 Booth Street - Wing Chow Laundry, 760 Somerset Street - Sun Oil Co Serv Stn, 775 Somerset - Wylie Auto Garage;
- **1930 Listing** - 313 Booth Street - Chinese Laundry, 777 Somerset Street - Chinese Laundry;
- **1924 Listing** - 313 Booth Street - Chinese Laundry, 777 Somerset Street - Chinese Laundry, 789 Somerset Street- Stewart Peter Ltd Paint;
- **1919 Listing** - 313 Booth Street - Chinese Laundry; and
- **1900 Listing** – 37 LeBreton Street North - Lung Kee Laundry.

The presence of off-site automotive service stations, gasoline stations, painters, dry cleaners, upholstery shops, printers and glass glazing listings are all potentially contaminating activities in O.Reg 153/04.

It is CM3's opinion that the properties used for automotive service or repairs located at 297 Booth Street, 347 Booth Street, 770 Somerset and 66 LeBreton Street North are close enough to the subject property to be potential environmental concerns, particularly for solvents. The properties located at 297 Booth Street, 313 Booth Street, 304 Booth Street, 716, 777, 787, 789 and 791 Somerset Street and 37 and 70 LeBreton Street North are also close enough to represent an environmental concern with respect to solvents associated with dry cleaning, paints, printers and upholstery.

3.5.4 Previous Environmental Studies

CM3 was provided one report completed by Paterson Group Consulting Engineers, (Paterson), dated April 27, 2016 and titled "*Environmental Site Remediation Program, 44 Eccles Avenue, Ottawa, Ontario*".

CM3 has reviewed the above report and it mentions a previous Phase I ESA and Phase II ESA were completed on the property by Paterson as part of due diligence for a property transaction. The Phase I ESA indicated that the building at the site had previously been heated with oil but there was no information on where the fuel tank(s) were located. A Phase II ESA was performed by Paterson and the Phase II ESA had reported soil contamination from fuel oil at the south side of the building. Based on the presence of the soil contamination, Paterson completed a soil excavation to remediate the fuel oil contaminated soil. The excavation work showed that the building was founded on bedrock and that a former underground storage tank (UST) was located approximately 5 metres away from the south wall of the building. The Paterson remediation report documents that 693 cubic metres of soil was excavated and 820 metric tonnes of contaminated soil and shallow bedrock was disposed of during the excavation work. Groundwater was encountered in the final excavation and 18,000 litres of fuel contaminated groundwater was removed from the final excavation. Paterson mention in their report that there was an organic layer present in the shallow soil horizon and that the organic layer was interfering with their field screening for contamination. Paterson used the Ontario Ministry of Environment (MOE) March 9, 2004 "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental

Protection Act” to select the remediation standard. The 2004 Table 3 standards were selected as they felt the Table 1 Standards were not applicable given the average depth to bedrock on-site. All of the laboratory soil and groundwater analysis completed by Paterson for the excavation program were in compliance with the selected Table 3 Standard, although there was no standard listed for Petroleum Hydrocarbons (PHCs) in groundwater in 2004. Levels of PHC were detected in most soil samples and in one of the two excavation water samples Paterson had analysed. Paterson had concluded that the results from the soil excavation program had shown that the property was in compliance with the 2004 Table 3 Standards.

After reviewing this report, CM3 is of the opinion that the remediated area is an Area of Potential Environmental Concern (APEC) because the MOE Standards have changed to lower levels in 2011 and there are now standards for PHC in groundwater. It is likely that the residual fuel impacts left in place following the remedial excavation would not meet the current Ontario Ministry of Environment and Climate Change (MOECC) Standards.

3.5.5 Freedom of Information Request

CM3 completed a freedom of information request on the property from the Ontario Ministry of the Environment and Climate Change (MOECC). Records have been ordered but have not been received prior to this report being issued. If additional information becomes available that affects the findings of this Phase I ESA, CM3 will provide an addendum to this report updating the findings. MOECC correspondence is located in **Appendix D**.

3.5.6 Fire Insurance Plans

Fire insurance plans (FIPs) were located for the subject property and surrounding area for 1902, 1912, 1915, 1922, 1956 and 1963. The 1912, 1915 and 1922 FIP shows the subject property as residential. The 1956 FIP shows the property as being occupied by St Dominic School. There is an auto service station immediate off-site to the south east at 66 LeBreton and two gasoline service stations/garages off-site to the north on 297 Booth and 770 Somerset on the 1956 FIP. The fire insurance plans documentation are provided in **Appendix E**. The garages listed on the 1956 FIP are APEC as it is listed as a potentially contaminating activity in O.Reg 153/04

3.5.7 Records Review

ERIS is a private environmental database and information service that provides environmental and historical information from governmental (Federal and Provincial), and private source records. Databases that were searched are listed in the ERIS documents in **Appendix F**.

A search was requested for the site and the surrounding properties within a 0.30 km radius. No records were identified on the subject property and 164 records were identified within a 0.30 km radius as of September 6, 2016. The records are summarized as follows:

Subject Property

- No records.

Surrounding Properties

- Three automobile wrecking & Supplies;
- Fourteen records of boreholes were listed;
- Twenty three Certificates of Approval;
- Four Environmental Activity and Sector Registry;
- One Environmental Compliance Approval;
- Twelve historic ERIS searches have been completed for properties within the search area;
- Eighteen records on the List of TSSA Expired Facilities;
- Twenty two registered waste generation sites under Ontario Regulation 347;
- Six TSSA Historic Incidents;
- Three TSSA Incidents;
- Four TSSA Pipeline Incidents;
- Two Private and Retail Fuel Storage Tanks;
- One Permit to Take Water;
- Four Record of Site Condition;
- One Retail Fuel Storage Tanks;
- Four Pesticide Register;
- Eight Scott's Manufacturing Directory;
- Sixteen spill sites were identified in the Ontario Spills database; and
- Twenty two well records were identified in the Ontario Water Well Information System (WWIS).

The findings of the off-site search identified several items of potential environmental concern related to spills, fuel storage, waste generators and waste disposal. The majority of the above sites are not in close proximity to the subject property and were not considered areas of environmental concern.

Two areas of potential environmental concern (APEC) were noted from the ERIS Report as follows:

- The spill reported at 307 Booth Street is an APEC; and
- The Certificate of Approval, Environmental Registry, Environmental Compliance Approval, and Record of Site Condition for 347 Booth Street is an APEC.

A total of 72 database search items were identified within the search radius but were unplotable sites (i.e. location unknown). The unplotable summary is provided in the ERIS report (**Appendix F**) and included numerous C of A's, convictions, environmental registry and compliance approvals, historic ERIS searches, waste generator and receiver sites, spills, waste disposal sites and wells. No environmental concerns for the subject property were identified with respect to the unplotable sites since the locations of the occurrences are not known.

3.5.8 Chain of Title

A chain of title search was requested from ERIS. The subject property is currently registered to CUSO-VSO. Specific details of the records review is provided in **Appendix G**.

3.6 Physiographic Features

3.6.1 Regional Topography

Topographical maps and observations during the site reconnaissance indicate the topography of the subject property is relatively flat with an elevation of approximately 69 m above sea level (m asl), sloping gently to west. Topographical maps are provided in **Appendix H**.

3.6.2 Regional Geology and Bedrock

The surficial geology of the subject property was interpreted from the Ontario Geological Survey, 2010, Surficial Geology of Southern Ontario (Miscellaneous Releases). The surficial geology at the subject property consists of bedrock with a thin veneer of clay, silt, sand, gravel and diamicton. The Surficial Geology Maps are provided in **Appendix H**.

The bedrock geology of the subject property was interpreted from the Ontario Geological Survey, 2011, Bedrock Geology of Ontario (Miscellaneous Releases). The bedrock at the site consists of limestone, dolomite, sandstone, and locally shale of the Ottawa Group; Simcoe Group; Shadow Lake Formation. The bedrock geology map is provided in **Appendix H**.

Based on the topography of the area, regional shallow groundwater flow is assumed to be west.

3.6.3 Water Bodies and Areas of Natural Significance

The closest water body is the Ottawa River, located approximately 1 km north of the subject property. Two areas of natural significant were noted within 2.0 km of the subject property, as indicated in the Area of Natural and Scientific interest map (**Appendix H**). Neither of the ANSI are in close proximity to the site to be of a concern.

3.7 General Site Observations

CM3 conducted a site visit on September 21, 2016. Weather conditions during the site visit were partially cloudy with an ambient air temperature of approximately 21 °C. A general description of the subject property is provided in Section 2.3.

During the site investigation, all areas of the subject property were accessible and the ground was free of snow and standing water. CM3 did not observe any evidence of spills, leaking containers or stressed vegetation at the subject property. Minor surface staining was observed in the asphalt parking lot.

A large section of asphalt was noted to be cut out and replaced adjacent to the south side of the main building immediately adjacent to the mechanical room of the building, (photograph 6 in **Appendix A**). The location of the cut out suggests a UST may have been present in the area.

It is believed that the three storey building with basement that is present on the subject property was built in 1936. The building was a brick clad, poured concrete foundation office building. The interior finished included vinyl tile and carpet flooring, ceiling tiles and drywall walls. The roof is an aggregate coated flat asphalt roof. CM3 did not observe any floor drains inside the building but there was one drain tile sump in the mechanical room in the basement. The water in the sump appeared to be clear of contaminants.

One small plastic exterior storage building was noted on the property at the rear of the parking lot. The small building was used for bicycle storage. One electrical substation was noted at the south east end of the parking lot as indicated on **Figure 2**.

It is suspected that all of the buried electrical services such as natural gas, sewer and water enter the main building from Eccles Street. The location of the transformer at the rear of the parking lot suggests the electrical service may be from LeBreton Street.

The general site observations did not identify any potentially contaminating activities or areas of potential environmental concern on the site with the exception of the cut out in the asphalt as noted above.

One automotive service facility was noted to be present off-site to the south east as shown on photograph 5 in **Appendix A**.

3.7.1 Storage Tanks

No underground storage tanks were observed on the subject property or any of the immediately adjacent properties.

3.7.2 Polychlorinated Biphenyls (PCBs)

PCB's may be present in equipment such as transformers, capacitors, electromagnets, heat transfer units, and fluorescent lamp ballasts at the site.

The interior of the building is lighted primarily with florescent light fixtures and may contain PCB ballasts given the age of the building. In addition an electrical transformer is located at the south east end of the parking lot (Photograph 5, **Appendix A**). However, no stains or evidence of leaks were noted by CM3 and it is not considered an area of environmental concern.

3.7.3 Dry-Cleaning Operations

Dry cleaning operations were not identified at the subject property or within a 0.3 km radius of the subject property.

3.7.4 Pesticides

CM3 did not observe any pesticides or herbicides at the subject property.

3.8 Designated Substances

Individual designated substance regulations have been developed for eleven chemical contaminants and are enforced by the Ministry of Labour (MOL) under the Occupational Health and Safety Act (OHSA). Special regulations were made to prohibit, regulate, restrict, limit, or control worker exposure to designated substances due to their toxic nature. The designated substances identified in OHSA include: Asbestos, Arsenic, Lead, Ethylene Oxide, Mercury, Silica, Vinyl Chloride, Benzene, Coke Oven Emissions, Acrylonitrile, and Isocyanates.

The building on the subject property has a potential concern with designated substances given its approximate age of construction. CM3 did not conduct any sampling to confirm or refute the presence of suspected designated substances.

3.8.1 Asbestos

In Ontario, any building material containing more than 0.5% asbestos is recognized as an asbestos containing material (ACM).

The building on the subject property has a potential concern with asbestos, given its date of construction. Asbestos may be found in stipple coat, wall plaster, joint compound, and ceiling or floor tiles.

3.8.2 Mercury

Mercury may be commonly found in thermostats, fluorescent lamp tubes and high intensity discharge (HID) light bulbs. Mercury may also be used as a preservative in paints and adhesives.

The thermostat in the commercial building may contain mercury but it would be a minor amount given its size.

3.8.3 Lead

Lead may sometimes be present in paint, solder joints, glazing on ceramic finishes and on copper piping in older buildings.

Copper piping was present in the building and the date of construction of the building suggests the possible presence of lead in paint. Therefore, there is a potential concern with respect to lead.

3.8.4 Ozone Depleting Substances (ODS's)

ODS's can be found in appliances such as refrigerants in heat pumps, refrigerators, freezers and air conditioners.

An air conditioning unit was located on the subject property. Therefore, ODS's may be present on the subject property.

3.8.5 Silica

Crystalline silica has been documented within the building wall plaster, drywall and floor tile. Silica can also be found in cement blocks and acoustic tiles. Silica is a concern if workers are drilling, chipping or otherwise disturbing these building materials. Personal protective equipment should be worn during these activities and all work should be completed following the Ministry of Labour "Guideline – Silica on Construction Projects".

The building construction consists of a concrete foundation and block walls. Therefore, there is a potential concern with respect to silica.

3.9 Other Hazardous Materials

The on-site building is used for the storage of compressed gases. CM3 did not conduct a complete survey to inventory the gases stored on site.

3.9.1 Hazardous Waste

CM3 personnel did not observe any hazardous waste concerns at the subject property.

3.10 Existing Groundwater Issues

CM3 is not aware of and did not observe evidence of adverse groundwater conditions at the subject property with the exception of the work noted by Paterson in 2006 as discussed previously.

3.11 Water Supply

The subject property is supplied water by the City of Ottawa. No water supply wells were identified at the subject property or immediately adjacent properties.

3.12 Waste Water

The subject property is connected to the City of Ottawa municipal waste water sewer.

3.13 Solid (Non-hazardous) Waste

CM3 personnel did not observe any solid waste concerns at the subject property. Solid waste is collected by Waste Management of Carp, Ontario (photograph 8 in **Appendix A**).

3.14 Surface Water or Wetlands

CM3 did not observe any surface water or wetlands on the subject property.

3.15 Air Emissions

CM3 did not observe any sources of negative air emissions at the subject property during the site visit.

3.16 Radon

Radon is a colourless, tasteless radioactive gas with a very short half-life of 3.8 days. The health risk potential of radon is associated with its rate of accumulation within confined areas, particularly confined areas near or in the ground, such as basements, where vapours can readily transfer to indoor air from the ground through foundation cracks or other pathways. Large, adequately ventilated rooms generally present limited risk for radon exposure.

Based on CM3's review of available information, and the site visit, radon is not likely a concern at the subject property. However, radon testing would be required to conclusively rule out radon impacts.

4 CONCLUSIONS AND RECOMMENDATIONS

CM3 Environmental (CM3) was retained by CUSO International to carry out a Phase I ESA for the property located at 44 Eccles Street, Ottawa, Ontario. The Phase I ESA identified seven Areas of Potential Environmental Concern (APEC), located on and off the subject property as shown on **Figure 3**. The areas of environmental concern are as follows:

- APEC 1 – Former UST on-site and remediation to 2004 MOE Standards may not be in compliance with current Ontario Ministry of Environment and Climate Change (MOECC) Standards (**Appendix A**, Photograph 6);
- APEC 2 – Former Auto Body facility (347 Booth) may be a source for solvents and metals;
- APEC 3 – Existing Automotive Garage at 70 LeBreton (**Appendix A**, Photograph 5);
- APEC 4 – Existing and former Automotive Garages at 297 Booth and Laundries at 304 and 313 Booth;
- APEC 5 – Former Gasoline Service Stations at 770 Somerset and Dry Cleaners at 716 Somerset;
- APEC 6 – Various former Laundries at 777, 787, 789 and 791 Somerset; and
- APEC 7 – Former Glazier and Leaded Glass at 52-1/2 LeBreton.

Based on the above, CM3 recommends a Phase II Environmental Assessment be conducted to address the above APECs. The Phase II ESA would involve the testing of soil and groundwater at each APEC for benzene, toluene, ethyl benzene, xylenes, (BTEX), petroleum hydrocarbons in the F1 to F4 range, volatile organic compounds (VOCs) and metals.

In addition to the property concerns, CM3 is also recommending a complete Designated Substance Survey of the main on-site building so that all designated substances can be identified and located.

5 LIMITATIONS

This report has been prepared and the work referred to in this report has been undertaken by CM3 Environmental Inc. for CUSO International. It is intended for the sole and exclusive use of CUSO International, their affiliated companies and partners and their respective insurers, agents, employees and advisors. Any use, reliance on, or decision made by any person other than CUSO International based on this report is the sole responsibility of such other person. CM3 Environmental Inc. and CUSO International make no representation or warranty to any other person with regard to this report and the work referred to in this report, and they accept no duty of care to any other person or any liability or responsibility whatsoever for any losses, expenses, damages, fines, penalties or other harm that may be suffered or incurred by any other person as a result of the use of, reliance on, any decision made or any action taken based on this report or the work referred to in this report.

The investigation undertaken by CM3 Environmental Inc. with respect to this report and any conclusions or recommendations made in this report reflect CM3 Environmental Inc.'s judgement based on the site conditions observed at the time of the site inspection on the date(s) set out in this report and on information available at the time of preparation of this report. This report has been prepared for specific application to this site and it is based, in part, upon visual observation of the site, subsurface investigation at discrete locations and depths, and specific analysis of specific chemical parameters and materials during a specific time interval, all as described in this report. Unless otherwise stated, the findings cannot be extended to previous or future site conditions, portions of the site which were unavailable for direct investigation, subsurface locations which were not investigated directly, or chemical parameters, materials or analysis which were not addressed. Substances other than those addressed by the investigation described in this report may exist within the site, substances addressed by the investigation may exist in areas of the site not investigated and concentrations of substances addressed which are different than those reported may exist in areas other than the location from which samples were taken.

If site conditions or applicable standards change or if any additional information becomes available at a future date, modifications to the findings, conclusions and recommendations in this report may be necessary.

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We trust that the above is satisfactory for your purposes at this time. Please feel free to contact the undersigned if you have any questions.

Yours sincerely,

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