

23 Goderich Street – Huron East



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4/6/2016

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1.0 Introduction

The Municipality of Huron East is located at the eastern most edge of Huron County. It is an amalgamation of three former townships (Grey, McKillop and Tuckersmith) and the Town of Seaforth and Village of Brussels.¹

The project area is located at 23 Goderich Street in the Town of Seaforth and has been identified as a site which needs remediation due to the historical uses associated with the property. Currently the property is vacant with no uses currently taking place or proposed due to the limitations in re-developing the site. The Municipality of Huron East is currently undertaking a review of the property and background material to determine the future steps or works as a consideration for further development.

1.1 Background

23 Goderich Street was historically a Gas Station and Service Centre. It had been a service station since approximately the early 1920's, but since approximately the 1990's had gone unused and inactive². The site is known as a Brownfield site, which in Ontario is generally defined as properties or underutilized places where past practices (specifically commercial or industrial) have occurred and whereby contaminants or chemical pollution has been left behind.³ Specifically in the case of gas stations, hydrocarbons become a major concern or threat as past gas station practices may have allowed for the escape of hydrocarbons or other chemicals into the surrounding environment.

1.2 Municipal Status

Currently the property itself resides under the control of the Municipality for outstanding taxes. Several taxes sales of the property have occurred with no transfer of ownership. The Municipality under the *Municipal Act* has the option to consider or investigate measures to manage the property. These measures may be a Tax Sale, management of the property while not taking ownership, and specifically to remediate any environmental concerns which could impact offsite. Or potentially take ownership of the property and write off the unpaid taxes and sell the subject property or reuse for Municipal purposes. The concern with taking ownership of the subject property is that once done so, the Municipality becomes the responsible authority for undertaking any compliance orders or concerns on the property.

¹ https://en.wikipedia.org/wiki/Huron_East,_Ontario

² Notes and Background Material – Jan Hawley, Economic Development Officer, Huron East

³ <https://www.ontario.ca/page/brownfields-redevelopment>

1.3 Goal

Overall, the goal of the Municipality is to have the property in a condition which can be redeveloped, or transitioned to give the property a use. The property is currently vacant and devoid of any function. Legally and financially, there are considerations which will need to be considered for the subject property and the question of how to proceed will be determined by the Council of Huron East and through the Economic Development Committee.

1.4 List of Acronyms

QP: qualified person

PCA: potentially contaminating activity

APEC: area of potential environmental concern

ESA: environmental site assessment

RSC: record of site control

CIP: Community Improvement Plan

TIEF: Tax-Increment Equivalent Financing

MMAH: Ministry of Municipal Affairs and Housing

BFTIP: Brownfields Financial Incentive Program

TIF: Tax Increment Financing

GMF: Green Municipal Fund

FCSAP: Federal Contaminated Sites Action Plan

2.0 Planning and Building

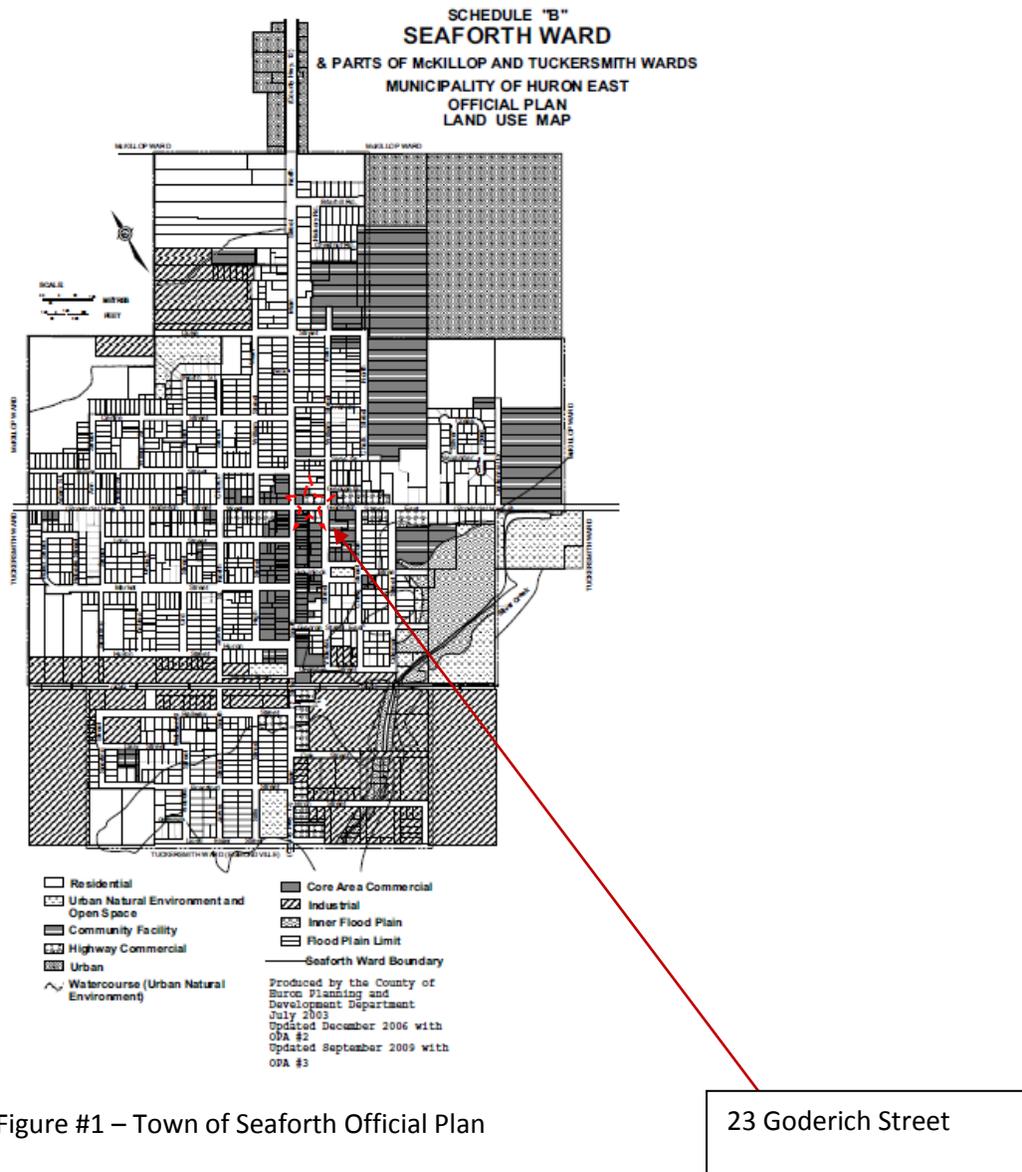
The Official Plan for Huron East was most currently updated and endorsed by Council in August of 2014. The Official Plan provides planning guidance for the Municipality on land uses for areas within a specified area. 23 Goderich Street is located along one of the two main streets of the Town of Seaford. They Highway is known as Highway #8, however, the Municipality of Huron East and specifically, the Town maintains controls of the Hwy located within the urban boundary limits for the Village.

The property at is located in proximity to a number of different zones, and represents a transition area for the community. On the east side is St. James Catholic Church, on the south side is residential development, but is also listed as core area commercial. To the North is an existing UPI Gas station, and

to the west is a commercial development with both Highway Commercial and very close to the Core Area Commercial.

2.1 Official Plan

23 Goderich Street is located within the Highway Commercial designation of the Official Plan which is located in Section 6.3.3.3.4. The Official Plan Policies are very much a high level policy framework and speak to the need for highway commercial and designation to compliment the downtown or core function areas. Primarily the two main restrictions or potential re-use which may contribute to the redevelopment of the site are the need for commercial uses, and the potential for residential use either above the commercial area, or in the back of the building.⁴



⁴ Huron East Official Plan

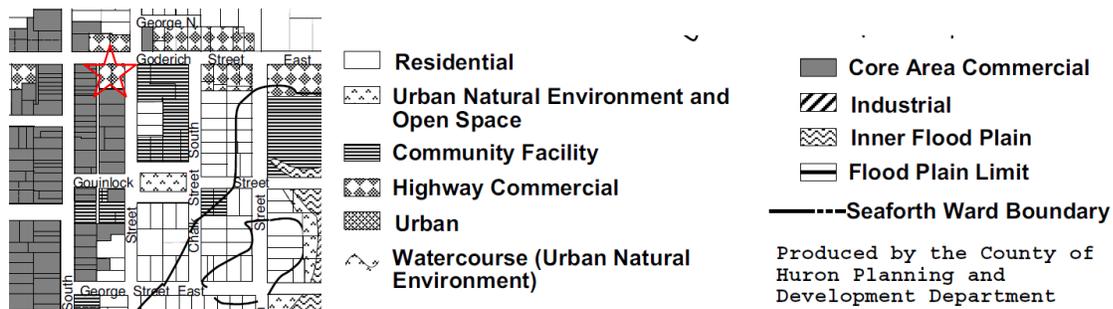


Figure #2 – Seaforth Official Plan: 23 Goderich Land Use Map

2.2 Zoning Bylaw

The Zoning Bylaw is the subsequent document to the Official Plan. For the Municipality, it was consolidated in August of 2015. As noted the property is designated as a Highway Commercial, this is reflected in the zoning bylaw as a C3 designation. The zoning bylaw outlines in detailed the permitted uses, along with associated setbacks and parking allocation. The lot itself is fairly small and therefore all uses noted below may not be able to be accommodated on the subject property. These are as follows:

- agricultural service establishment
- agricultural supply establishment
- ambulance station
- artist, dance, exercise or photographic studio
- assembly hall which is carried on entirely within a wholly enclosed building
- auction sale facility excluding the sale of livestock
- bake shop
- bed and breakfast establishment
- bottle depot
- brewers retail outlet
- bus depot
- building supply and sales establishment
- commercial storage warehouse (rental units)
- convenience store
- dwelling, converted
- dwellings existing on the date of passage of this By-law and their strengthening, repair renovation,
- enlargement or replacement subject to the provisions of the R2 Section
- dwelling units secondary to a commercial use within the rear portion or upper stories of a commercial
- building (ZBLA 85-2009)

- eating establishment, restaurant
- eating establishment, drive-through restaurant
- eating establishment, take-out restaurant
- eating establishment, portable food outlet, in accordance with any municipal By-laws
- farm equipment sales, service and supply establishment
- farm produce sales outlet
- farmers market
- fire hall
- flea market
- food store
- funeral home
- gasoline bar
- greenhouse, commercial
- group home, in a single detached residence
- hardware store
- health club
- home occupation in any permitted dwelling
- hotel
- kennel
- landscaping and garden supply establishment
- laundromat
- liquor store
- miniature golf course
- motel
- mobile home and/or recreational vehicle sales and service establishment
- motor vehicle repair shop
- motor vehicle rust proofing
- motor vehicle body shop
- motor vehicle sales and/or service establishment
- motor vehicle washing establishment
- motorized recreational vehicle sales and service establishment
- parking area, accessory
- parking lot
- place of entertainment
- police facility
- printing establishment
- private club
- propane exchange facility (ZBLA 25-2014)
- public building
- park, public in accordance with the Urban Natural Environment and Open space (OS) Section

- recycling centre, electronic (ZBLA 85-2009)
- research and development facility / laboratory
- sports and recreation facility
- service and repair shop
- sign printing establishment (ZBLA 85-2009)
- tavern
- taxi stand
- tire sales establishment
- veterinarians' clinic
- wholesale or warehouse use accessory to any of the foregoing permitted uses
- Uses accessory to the permitted use⁵

2.3 Zoning Provision

The zoning provisions are listed in the Bylaw provides a minimum standard for which redevelopment may occur to conform to the zoning. Currently the property is approximately 710 square metres⁶; therefore the property does not currently meet the required zoning provisions outlined below for minimum lot size to be 1500 square metres. An amendment to the zoning bylaw or minor variance application may be necessary depending upon a potential future use.

Lot Area (minimum)	1,500 square metres
Lot Frontage (minimum)	30 metres
Lot Depth (minimum)	45 metres
Front Yard Depth (minimum)	7.5 metres from a Municipal Road 10 metres from a County or Provincial Highway
Interior Side Yard Depth (minimum)	3 metres except that where the interior side lot line abuts a Residential Zone, the minimum interior side yard shall be: 7.5 m
Exterior Side Yard (minimum)	7.5 metres from a Municipal Road 10 metres from a County or Provincial Highway
Rear Yard Depth (minimum)	8 metres
Lot Coverage (maximum)	40 %
Landscaped Open Space (minimum)	20 %
Building Height (maximum)	11 metres

Figure #3 – Zoning Provisions⁷

2.4 Source Water Protection

The Source Water Protection plan and implementing policies are an outcome of the Walkerton Water Crisis which occurred in May of 2000. In response, all Municipalities whom had Municipal water services are required to implement a source protection plan. This work involved mapping source areas, and specifically times of travel and then evaluating threats to municipal drinking water.

⁵ Municipality of Huron East Zoning Bylaw

⁶ County of Huron GIS Mapping

⁷ Municipality of Huron East Zoning Bylaw.

The location at 23 Goderich Street is not within a Source Protection Area, and therefore the Source Protection Plan for the Town of Seaforth and policies for Source Protection do not apply to the subject property. A map has been included for reference.

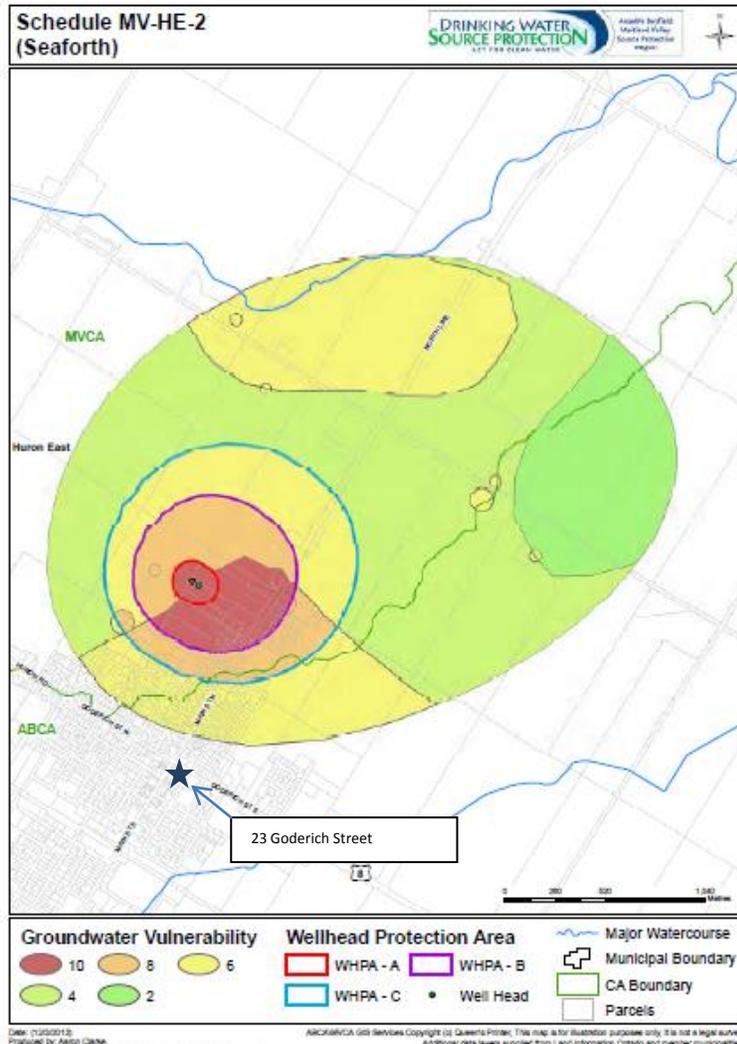


Figure 4 – Village of Seaforth (Maitland Valley) Source Protection Mapping⁸

3.0 Overview of a Phase One Site Assessment

The process being followed for the evaluation of the site through the applicable Brownfield legislation is the Phase One – Record of Site Condition (RSC). As an overview, the Record of Site condition is a document which documents the results of one or more Environmental Site Assessments of a property

⁸ MVCA Source Protection Plan

which have been completed by a qualified professional (QP). (MOECC – Phase One Guidelines). The Act defines and differentiates phase one and phase two as:

“phase one environmental site assessment” means an assessment of property conducted in accordance with the regulations by or under the supervision of a qualified person to determine the likelihood that one or more contaminants have affected any land or water on, in or under the property; and,

“phase two environmental site assessment” means an assessment of property conducted in accordance with the regulations by or under the supervision of a qualified person to determine the location and concentration of one or more contaminants in the land or water on, in or under the property.

3.1 General Objectives

The general objectives of a phase one environmental site assessment are defined under section 24 of Ontario Regulation 153/04 – Record of Site Condition. These conditions are included below.

24. The general objectives of a phase one environmental site assessment are to do the following:

- 1. To develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the phase one property.*
- 2. To determine the need for a phase two environmental site assessment.*
- 3. To provide a basis for carrying out any phase two environmental site assessment required.*
- 4. To provide adequate preliminary information about environmental conditions in the land or water on, in or under the phase one property for the conduct of a risk assessment following completion of a phase two environmental site assessment. O. Reg. 511/09, s. 14.9*

3.2 Phase One Components

The components of phase one are outlined section 25 of Ontario Regulation 153/04. These include:

- A Records Review;
- Interviews;
- Site reconnaissance;
- Evaluation of information from records review, interviews and site reconnaissance and completion of a conceptual site model (CSM) (see figure 5);
- a Phase one ESA report;
- and Delivery of report to the owner of the phase one property.

⁹ <https://www.ontario.ca/laws/regulation/040153#BK36>

Conceptual Site Model (including Site Specific Conditions + Soil Vapour Screening + Risk Management)

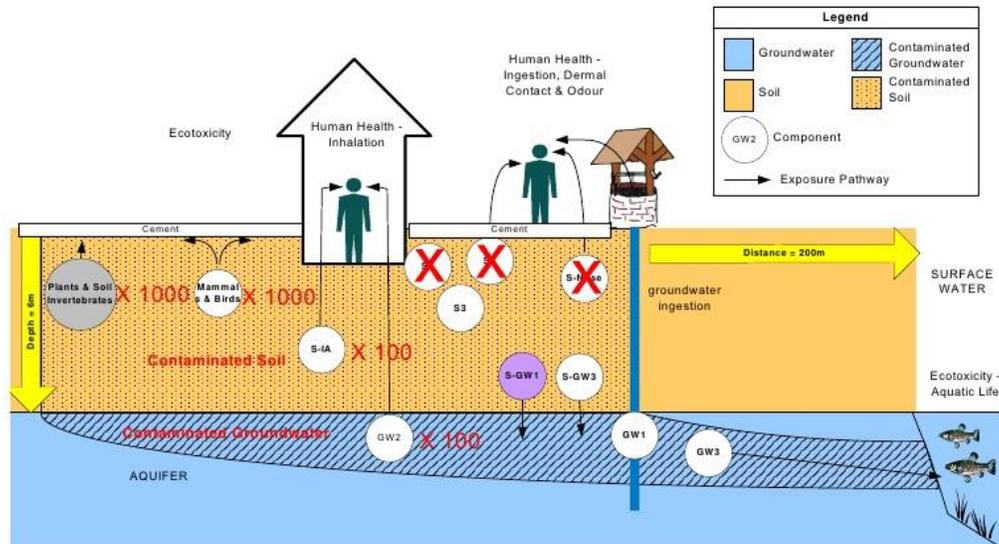


Figure 5 – Conceptual Site Model¹⁰

3.3 Responsibilities and Criteria for Qualified Professionals (QP)

A qualified professional is an individual who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, or is temporary member or limited member of the Association of Professional Geoscientists of Ontario.¹¹ This section also notes that the QP may undertake the works associated with a Phase One report or may supervise the Phase One report. In all cases the QP is responsible for ensuring that the phase one ESA work is completed in compliance with the applicable regulations and section.¹²

3.4 Impediments

The QP is responsible for addressing or documenting any impediments that occur on the site. This may be inaccessibility due to safety concerns or restricted access to a location. The QP is responsible for then undertaking additional measures to evaluate the site and provide relevant information. In addition, the

¹⁰ <http://www.slideshare.net/mohammadchowdhury/brownfields-remediation>

¹¹ Section 5 of Ontario Regulation 153/04

¹² Guide for Completing Phase One Environmental Site Assessment under Ontario Regulation 153/04

QP should document or make note of any access restrictions to the site. This can include signage or verbal or written correspondence.

3.5 Transition of Reports Prepared before October 1st, 2004

This section briefly notes, that while older reports may be relevant for background information, or even potentially legal proceedings. The requirements under Ontario Regulation 153/06 are that work, including interviews and site reconnaissance must have occurred no later than 18 months prior.

3.6 Considerations for Redevelopment

If a brownfield property is being redeveloped for a new use, property owners and redevelopers must meet set requirements for:

- assessing the environmental condition of a property through environmental site assessments
- ensuring that the site meets the applicable site condition standards or standards specified in a risk assessment
- submitting a record of site condition for filing in Ontario's Environmental Site Registry

3.6.1 Records of site condition

A record of site condition summarizes the environmental condition of a property, based on the completion of environmental site assessments.

Each record of site condition:

- is based on the results of one or more environmental site assessments
- is conducted by a qualified person
- may involve the completion of a risk assessment and the development of property specific standards
- a qualified person must certify that the property meets the applicable site condition standard or a standard specified in a risk assessment for the intended use
- is filed to the Environmental Site Registry once regulatory requirements are met

3.6.2 Environmental site assessments

To prepare a record of site condition you will need to hire a qualified person who will undertake one or more environmental site assessments.

3.6.3 Phase one

Phase one environmental site assessments must be completed for all records of site condition and requires the qualified person to:

- identify any potentially contaminating activity in the phase one study area, including the phase one property
- identify areas of potential environmental concern on the phase one property
- determine if a phase two environmental site assessment is needed (for some types of property uses and circumstances, a phase two environmental site assessment is mandatory)

All requirements of *O.Reg. 153/04*, including the requirements of Schedule D, must be met

3.6.4 Phase two

Phase two environmental site assessments require the qualified person to:

- determine the location and concentration of one or more contaminants
- take actions to reduce the concentration of one or more contaminants if a standard has been exceeded and/or complete a risk assessment to develop property specific standards that are safe for the intended use
- confirm that the site meets the applicable site condition standard or a standard specified in a risk assessment

All requirements of *O.Reg. 153/04* including the requirements of Schedule E must be met.

3.6.5 Site condition standards

When a phase two environmental site assessment is required, a qualified person must certify in the record of site condition, among other things, that the concentration of contaminants at the property meet:

- the applicable site conditions standards or
- the standards specified in a risk assessment

There are 2 different approaches you can apply to your property:

1. generic standards (applicable site condition standards)
2. property-specific standards (derived through a risk assessment)

The level of risk is a measurement of the likelihood that the contamination on the property will cause harm to people, animals and plants.

For each contaminant, a concentration level is established by looking at the different

ways these living things can come into contact with a contaminant.

Soil Groundwater and Sediment Standards

<https://www.ontario.ca/document/soil-ground-water-and-sediment-standards-use-under-part-xv1-environmental-protection-act>

3.6.7 Generic standards

The Ministry of the Environment and Climate Change has established standards to use when assessing brownfield properties.

These standards are set based on:

- intended use (e.g., residential, commercial)
- certain physical characteristics of the property (e.g., how close to a water body)

A record of site condition based on these generic standards will confirm that the standards for the intended use are met.

If contaminants are present at concentrations higher than the generic standards, the qualified person may either:

- 1 choose to undertake remedial action at the property to reduce the concentration of contaminants to meet the applicable site condition standard or
- 2 decide that a risk assessment approach is appropriate

3.6.8 Property-specific standards

A property owner can consider developing property-specific standards by preparing a risk assessment. The property-specific approach uses information about the conditions and characteristics of a property when calculating risk.

A risk assessment:

1. scientifically examines the risk posed to human health, plants, wildlife and the natural environment from exposure to a contaminant at the property
2. proposes property-specific standards that offer equal protection for human health and the environment as the Ministry's generic standards
3. may pose engineering or land-use controls to manage risk on the property
4. must be prepared and supervised by a qualified person who meets the requirements of section 6 of the O.Reg. 153/04

3.6.9 Modified generic risk assessment

For less complex projects that meet certain criteria, a qualified person may use a streamlined process as an alternative to meeting generic standards and the traditional risk assessment process.

The modified generic risk assessment:

- can be prepared using an approved model and a standardized report template
- allows for convenient and controlled modification of the ministry's generic

- site condition standards for use in a record of site condition
- can be adjusted to match an applicant's site specific conditions, supported by site specific data
- provides a set of pre-defined risk management measures that can be selected for the site
- is streamlined through co-submission of the risk assessment report and the pre-submission form
- can be used with a traditional risk assessment submission

4.0 Conducting the Phase One ESAs (Ministry of Environment, 2011)

The purpose of the Phase One Environmental Site Assessment is to identify the potential and extent of any contaminants affecting the phase one property (on, in or under the property). If a potentially contaminating activity (PCA) has been identified in phase one of the ESA, a phase two ESA must be completed before the record of site control (RSC) can be submitted for filing. Schedule D of the Ontario Regulation 153/04 has the full detailed objectives and requirements of the Phase One ESA.

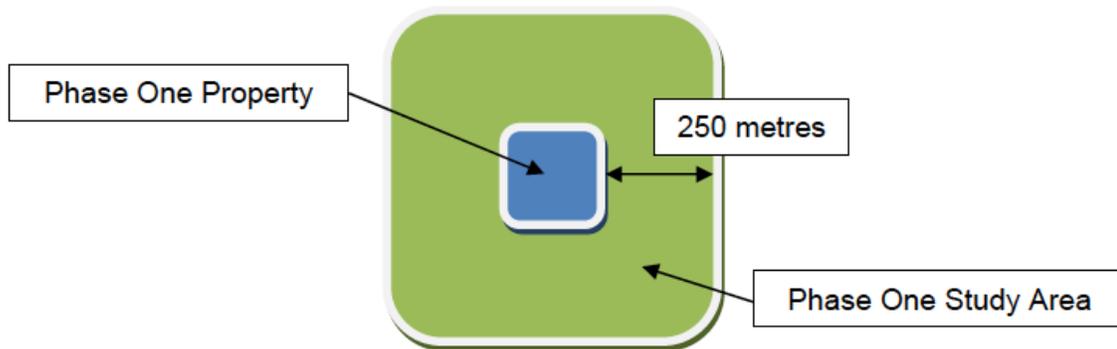
Ministry of Environment. (2011). Guide for Completing Phase One Environmental Site Assessments under Ontario Regulation 153/04. Retrieved from <https://dr6j45jk9xcmk.cloudfront.net/documents/996/3-6-1-phase-one-environmental-site-assessments-en.pdf>

4.1 Records Review

The records review sections outlines the coinciding objectives and their respective requirements in relation to determining if there is an area of potential environmental concern (APEC) within the phase one property. If an APEC does exist, it must be explained including its location and the potential degree to which it is on the phase one property. As a part of the preliminary records review the QP must, before the site reconnaissance, also determine if there are areas beyond the 250 meters boundary of the phase one study area (as seen in Figure 3-1: Phase One Study Area) that have an APEC that could contribute to the phase one property and therefore should be included in the phase one study area. If there such locations they need to be identified and a rationale for the extension of the phase one study area included in the phase one ESA report. It should be noted that the area adjacent to the phase one property also need to be identified as there are requirements for these as well.

A records review was conducted March 2, 2016 for 23 Goderich East and the list of documents reviewed can be found in Appendix H: Records Review Documents.

Figure 3-1: Phase One Study Area



Schedule D Section 2 and 3 of the Ontario Regulation 153/04 has the full detailed objectives and requirements of the records review sections.

The phase one study property is located at 23 Goderich Street East at the southwest corner of the intersection of Victoria Street and Goderich Street East in Seaforth, Ontario. It has the following adjacent properties and uses within 250 metres of the phase one study area and thus will be further included in the phase one study area analysis:

The site is located in a mixed commercial/institutional/residential area with a church located east of the Site and a residence located south of the Site. The ground surface in the vicinity of the Site generally slopes to the east. Silver Creek is located approximately 500m East of the Site and flows in a south-westerly direction.

An automobile repair and service building was located on the southwest area of the Site and three underground storage tanks (USTs) and a concrete gasoline pump island are located north of the former building at the Site. The Site is currently unoccupied and has been abandoned. The automobile repair and service building was in a severely deteriorated condition. The current USTs reportedly replaced previous USTs that were removed from the Site in the early 1990's. It was reported that petroleum hydrocarbon impacts to the soil were detected in the immediate vicinity of the USTs and subsequent remediation of the soil was completed at that time. A more detailed site plan is provided on Appendix B - 23 Goderich Street Site Plan (Environmental Assessment Report, 2013).

It should also be noted that there is a Containment Management Plan, Remediation & Indemnity Agreement that has been entered into with UPI Energy and Suncor Energy and the Municipality regarding offsite contamination from the facilities on 23 and 24 Goderich East, Seaforth into abutting road allowances (Goderich Street and Victoria Street).

The “first developed” use for 23 Goderich Street by the above definition would be a service centre and gas bar. This is due to the fact that the first potential contaminating activity would have occurred during these activities

At this stage the QP must also identify the “the first developed use” date. The first developed use is defined as “the first use of the property after 1875 that resulted in a building or structure OR the first potential contaminating activity, whichever occurs earlier (section 22(1) of the regulation).” This date will then be used as a guide for the remaining investigations.

As detailed in Schedule D subsection 3(2) it should be noted that once a record is obtained from one source it does not need to be obtained from a second source. Also, before conducting the site reconnaissance the QP must identify the phase one study area and information outlined in paragraphs 1-5 of the same subsection 3(2) including reasonably accessible records, fire insurance plans, an up-to-date chronological chain of title, and copies of reports prepared on behalf or by an owner of a property.

The types and sources of information can be found under the various headings in subsection 3(2) including:

- General (paragraphs 1-6)
- Environmental source information (paragraphs 7-8)
- Physical setting sources (paragraphs 9-13)
- Site operating records (paragraphs 14-15)

The records review is a requirement by section 25 of the regulation and should provide the QP with a thorough understanding of the site history, knowledge of the range of contaminations of potential concern (if they exist), and documented facts regarding actual contamination. A summary of the records requirements for a phase one property, properties adjacent to the phase one property, and the phase one study area is presented in Table 3-1.

Table 3-1: Summary of Records Review Requirements

Records	Extent of Records Review		
	Phase One Property	Adjacent Properties	Phase One Study Area
<i>General</i>			
Fire insurance plans	✓		
Chain of title	✓		
Environmental site assessment reports and other reports	✓		
<i>Environmental Source Information</i>			
National Pollutant Release Inventory	✓	✓	✓
PCB information	✓	✓	✓
Certificates of approval, permits to take water, certificates of property use, or similar instruments	✓	✓	
Inventory of coal gasification plants	✓	✓	✓
Records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections	✓	✓	
Waste management records	✓	✓	
Reports submitted to the Ministry	✓	✓	
Retail fuel storage tank information	✓	✓	✓
Notices and instruments including RSCs	✓	✓	✓
Areas of natural significance	✓	✓	✓
Landfill information	✓	✓	✓
<i>Physical Setting Sources</i>			
Aerial photographs	✓	✓	✓
Topographic maps	✓	✓	✓
Physiographic maps	✓	✓	✓
Geological maps	✓	✓	✓
Well records	✓	✓	✓
<i>Site Operating Records (for operating enhanced investigation properties only)</i>			
Regulatory permits and records related to APECs	✓		
Material safety data sheets	✓		
Underground utility drawings	✓		

Records	Extent of Records Review		
	Phase One Property	Adjacent Properties	Phase One Study Area
Inventories of chemical uses and chemical storage areas	✓		
Inventory of above ground and underground storage tanks	✓		
Environmental monitoring data	✓		
Waste management records	✓		
Process, production and maintenance documents related to APECs	✓		
Records of spills and discharges of contaminants	✓		
Emergency response and contingency plans	✓		
Environmental audit reports	✓		
Site plan of facility	✓		

4.2 General Records

Refers to paragraphs 1-6 of subsection 3(2) and heading © of Table 1 of Schedule D of the regulation

The general records requirements are that the QP will ensure that all reasonable inquiries are made:

- To obtain reasonably accessible records to current use and uses and past uses of the phase one property including reference to the Catalogue of Canadian Fire Insurance Plans (1875-1975) and fire insurance plans for all parts of the phase one property. – **The Canadian Fire Insurance Plans may need to be obtained for 23 Goderich Street East.**
- To obtain copies of reports or other documents from the owner or from other QPs who may have done work on the phase one property regarding environmental conditions. - **An Environmental Assessment Report was conducted June, 2013 for the 23 Goderich Site by Jeffrey Environmental Consultants Inc. The report contained documentation of the gasoline pump removal, waste removal, building demolition, hydraulic hoist and interceptor removal, and environmental assessment activities that were completed at the Site between May 13 and 15, 2013. (Environmental Assessment Report, 2013).**
- To prepare a chronological chain of title that is up-to-date and shows the owners' names and dates of ownership of the phase one property, dating back to the first developed use of the phase one property. It is important to note that this requirement is not necessary if a) other information from the records review already satisfies this objective or b) the title search dating back to the first developed use would not provide further information regarding the environmental condition of the phase one property.
- Property Status for 23 Goderich Street East: This site is technically still owned by Clinton Stumpf, and there is a mortgage on the title from Bev Bumstead to Clinton Stumpf. The property has been “abandoned” for at least 6 years. The Municipality has put this property through a couple of unsuccessful tax sales as there is \$76,000 owing against the property in taxes, failed tax sale costs, and property cleanup dating back to 2003. It is understood that after 2 years after an unsuccessful tax sale, the title of the property may be vested to the Municipality and therefore Bumstead would be eliminated from the title.

4.3 Environmental Source Information

Refers to paragraphs 7-8 of subsection 3(2) and heading © of Table 1 of Schedule D of the regulation

This review pertains to certain government and agency records that the QP shall ensure all reasonable inquiries are made to obtain including:

- National Pollutant Release Inventory information maintained by Environment Canada. This can be obtained from Environment Canada website.)
- PCB information maintained by the Ministry It can be obtained from Ministry website for information after July 2011. Historical PCB site information can be located in Ministry's District offices located across the province.
- Various Ministry documents: certificates of approval, permits to take water, certificates of property use or similar instruments related to the environmental condition of the phase one property and any property on, under or adjacent to the phase on property. This information can be obtained from the Ministry's Freedom of Information Office.
- Inventory of coal gasification plants maintained by the Ministry. This information can be obtained from the Ministry's Freedom of Information Office.
- Incidents, orders, offences, spills, discharges of contaminants or inspections where the incident, order, offence, spills, discharges or inspection affect s the phase one property and any property on, under or adjacent to the phase one property. This information can be obtained from the Ministry's Freedom of Information Office.
- Waste Management records, including current and historical waste storage locations and waste generator and waste receiver information maintained by the Ministry with respect to the phase one property and property on, under or adjacent to the phase one property. This information can be obtained from the Ministry's Freedom of Information Office.
- Reports submitted to the Ministry related to the environmental condition of the phase one property and any property on, under or adjacent to the phase one property. These reports include the environmental site assessment and remediation reports. This information can be obtained from the Ministry's Freedom of Information Office.
- Retail fuel storage tanks information maintained by the Technical Standards and Safety Authority (TSSA). This information can be directly obtained from TSSA
- Notices and instruments including records of site condition. This information can be obtained from the Ministry's Environmental Site Registry

- Identification of areas of natural significance maintained by the Ministry of Natural Resources Landfill information maintained by the Ministry District offices located across the province.

Information pertaining to the Environmental Source Information was provided by the Environmental Assessment conducted May 13 and May 15, 2016 by Jeffrey Environmental Consultants Inc. The following is a summary of the findings:

Soil Conditions:

- The laboratory analysis of two samples concluded that there were detected amounts of PHC F1, PHC F2, PHC F3, PHC F4, PHC F4, BTEX and lead above the applicable Ontario Regulation 153 specifications for commercial land use, full depth remediation, coarse textured soil and potable water conditions as specified in the document entitled “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act.

Ground Water Conditions:

- The laboratory analysis of groundwater samples collected concluded that there were detected amounts of PHC F1, PHC F2, PHC F3, PHC F4, PHC F4, BTEX and lead above the applicable Ontario Regulation 153 specifications for commercial land use, full depth remediation, coarse textured soil and potable water conditions as specified in the document entitled “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act.

Based on the above, further environmental assessment activities are required to delineate the extent of the soil and groundwater contamination detected at the site.

As per the Background Report provided by Jan Hawley explained there were two outstanding orders:

- 1) One by the Municipality for the demolition of the building and gas pump removal as per violations for Property Standards
- 2) The second from TSSA for the removal of the gas tanks.

The Environmental Assessment Report also documented the gasoline pump removal, waste removal building demolition, hydraulic hoist and interceptor removal was completed on May 13 and 15, 2013

4.4 Physical Setting Sources

Refers to paragraphs 9-13 of subsection 3(2) and heading © of Table 1 of Schedule D of the regulation

This is a review of various information sources pertaining to the physical characteristics of the phase one property and the phase one study area. The QP shall ensure that all reasonable inquiries are made to obtain:

- A series of aerial photographs of the phase one study area that:
 - Depict the period from the phase one property's first developed use to the time of the phase one ESA;
 - Identify buildings and structures that were present on the phase one property from the same time period as above;
 - Identify PCAs within the phase one study area from the same time period as above such as areas of disturbed soil or fill; and
 - Identify APEVs
- One or more topographic maps (Ontario Base Map series) which depicts the location of the phase one property in relation to water bodies in the phase one study area and which document regional topography; - **Please See Appendix D**
- One or more physiographic maps or similar documents to depict the regional physiography, obtain further information regarding the surficial soil and bedrock in the phase one study; - **Please See Appendix E**
- One or more geological maps or similar document(s) to depict the regional geology in the phase one study area and to obtain information regarding the stratigraphy of the overburden, from the ground surface to the bedrock, including approximate depth to bedrock and type of bedrock – **Please See Appendix F**
- Well records and other relevant data (including discussions with municipalities) for any operating or abandoned wells on the phase one property or within the phase one study area, including wells as defined or described under OWRA, in order to identify the presence of such wells and appropriate use of the records and data pertaining to hydrogeological and geological characteristics of the phase one study area and describe:
 - the location of any such wells;
 - the stratigraphy of the overburden, from ground to surface to bedrock;
 - the approximate depth of bedrock; and
 - the approximate depth to the water table – **Please See Appendix G**
- Well records provide the QP with: a) insight into potability; b) whether there may be any improperly abandoned wells and/or wells no longer in use on the phase one property; and c) general information on geology in the phase one study area

4.5 Site Operating Records

Refers to paragraphs 14 and 15 of subsection 3(2) and heading (d) of the Table 1 of Schedule D of the Regulation

There are additional record review requirements when a phase one property is an enhanced investigation property.

In some cases the additional records must be obtained; in others, all reasonable efforts shall be made to obtain them.

Where the phase one property is an enhanced investigation property that is currently being used (in whole or in part) for an industrial use or one of the specified commercial uses, the QP will ensure that the following site operating records, as applicable and reasonably accessible (excluding accessibility through Freedom of Information requests), are reviewed:

- Regulatory permits and records related to APECs;
- Material safety data sheets;
- Underground utility drawings
- Inventories of chemical usage and chemical storage areas;
- Inventory of above ground storage tanks (ASTs) and underground storage tanks (USTs);
- Environmental monitoring data, including data created in response to an order or request from the Ministry;
- Waste management records, including current and historical waste storage locations and waste generator and waste receiver information maintained by the Ministry;
- Process, production and maintenance documents related to APECs
- Records of spills and records of discharges of contaminants, including records of spills and records of discharges of contaminants, including records of spills and records of contaminants of which notice is required to be given to the Ministry under the Act and records of such spills and discharges required to be kept pursuant to Ontario Regulation 675/98;
- Emergency Response and contingency plans, including spill prevention and contingency plans prepared pursuant to section 91.1 of the Act and the Ontario Regulation 224/07;
- Environmental audit reports; and,
- A site plan of the facility showing areas of production and manufacturing

Where a phase one property can be defined as an enhanced investigation property, but the relevant use(s) no longer exist, all reasonable inquiries shall be made to obtain and review site operating records, as outlined above, for each past use.

4.6 Interviews

The use of interviews will serve to supplement and verify information obtained from the records review. These interviews can also assist in planning the site reconnaissance, or support the information gathered from the site reconnaissance.

4.7 Specific Objectives

- Gather information to determine if an area of potential environmental concern exists; and
- Identify specific details of any potentially contaminating activities or contaminant pathways on, in, or under the property.

4.8 Role of Qualified Personnel (QP)

- It is the responsibility of the QP to:
 - Select individuals to be interviewed;
 - Determine the method and timing of interviews; and
 - Select appropriate topics for each interview.

4.9 Persons to be Interviewed

- The QP should make effort to ensure the following individuals are interviewed:
 - The current owner of the property, where one can be identified;
 - A person with authority or control over the property, when the owner is not an individual;
 - Any individual relevant to meeting the specific and general objectives of the phase one environmental site assessment;
 - Individuals who have reported on the historical usage and remedial work to date; and
 - Any persons who have been involved in the phase one project to date.

4.10 Persons with Specific Knowledge

- The owner of the phase one property must disclose any and all information to the QP about anyone with detailed knowledge of the uses carried on at the property. The QP will then ensure that at least one individual with detailed site knowledge is present at the site reconnaissance.

4.10.1 Conduction of Interviews

- All interviews for the phase one ESA will be conducted as outlined below:
 - The QP will decide on the format and scope of all interviews;
 - The interviews will be conducted by either the QP, or a person selected and supervised by the QP, or occur through a collaborative effort;

- Interview questions should be relevant to specific investigations and observations at the property made during the site reconnaissance, including inquiries regarding former property usages where appropriate;
- All information including the place, method, and date of the interview; name of the interviewee; reason why this individual was identified to be interviewed; and relevant information regarding potentially contaminating activities (PCAs) and areas of potential environmental concerns (APECs) will be identified, noted, and evaluated in written form by the interviewer;
- Information collected through the interviews will be compared to external information sources in order to determine the validity of the information, these comparisons will be documented by the individual conducting the interviews; and
- A summary of each interview, in written format, including the interviewer's notes and assessment of validity, will be prepared.

4.11 Site Reconnaissance

4.11.1 Specific Objectives

- A site reconnaissance is required in a phase one ESA, this component was previously called a site visit. The specific objectives of a site reconnaissance include:
 - Determining if APECs exist, after observing past and current uses, and PCAs in, on, or under the property; and
 - Identifying details of potential pathways of contamination in, on, or under the property as a result of contaminants of potential concern or APECs.

4.11.2 Obligation of Owner

- The owner of the phase one property will provide access of the property to the QP, in order to allow for an investigation of the entire property.

4.11.3 Timing

- In order for the site reconnaissance to occur, a preliminary records review must be completed and include an investigation of the property on one or greater occasions.

4.11.4 General Requirements

- The QP must ensure that they, or an individual supervised by the QP, does the following:
 - Investigate and physically attend the property;
 - From publicly accessible areas, conduct an investigation of all remaining properties within the area;
 - Take the following photographs, to be provided in the phase one ESA report:

- The phase one study area, in order to make note of any PCAs that could be causing or contributing to an APEC, and illustrate any areas of disturbed soils or relevant structures.
- Note the following during the investigations:
 - Date and time of investigation;
 - Weather conditions at the time;
 - Length of time of the investigation;
 - Uses of the property at the current time; and
 - Qualifications & name of the individual conducting the investigation.

4.11.5 Specific Observations

4.11.5.1 Structures

- Where relevant, the QP must ensure that investigations of structures are obtained and documented to provide a general description of the buildings, belowground structures, all above and belowground tanks, and water sources.

4.11.5.2 Underground Utilities

- The QP must ensure that questions and inquiries are made about the approximate location and type of underground service and utility corridors, including water, electrical or gas lines, or sewage, located on the property.

4.11.5.3 Interior of Structures

- Not relevant to the site on 23 Goderich Street, as there are no remaining structures. Refer to Appendix C for photos of the site.

4.11.5.4 Miscellaneous

- The QP must ensure investigations and inquiries are conducted to document and obtain:
 - Locations and details of former and current wells, as described or defined under the Ontario Water Resources Act, and the Oil, Gas and Salt Resources Act;
 - Locations and details of sewage works;
 - Details of ground surface, such as type of ground cover (grass, gravel, soil, or pavement); and
 - Locations and details of former or current railway spurs and lines.

4.11.5.5 Exterior Observations

- The QP must ensure that investigations occur at the property to identify, document, and locate the following:
 - Areas of stained pavement, vegetation, or soil;
 - Stressed vegetation;
 - Areas where debris and fill materials appear to have been graded or placed;
 - PCAs;
 - Water bodies;
 - Areas of natural significance; and
 - Details of any forms of unidentified substances found at the phase one property.

4.11.5.6 Enhanced Investigation Property

- The QP must ensure that investigations are completed for the property having been used as industrial or commercial site, to identify, document, and locate the following:
 - Operations, including manufacturing and processing;
 - Hazardous materials stored or used;
 - By-products and waste;
 - Raw materials storage locations and handling;
 - Location and contents of bins, drums, and totes;
 - Details of water and oil separators (separator location, installation date, source of incoming liquid, and effluent discharge location);
 - All equipment and vehicle maintenance areas;
 - Dates, locations, and details of all spills, materials involved, and volume of materials spilled;
 - Locations and details of liquid discharge points; and
 - Details of hydraulic life equipment.

4.11.5.7 Investigation of Phase One Study Area

- For all parts of the phase one area that are located outside of the property, the QP, or someone instructed by the QP, must perform investigations to locate, identify, and document PCAs, areas of natural significance, and water bodies.

4.11.5.8 Written Description of Investigation

- The QP must ensure that written documentation of all observations and investigations of the phase one property is completed and prepared. The description must include investigation details, and any selected findings that are relevant to the existence of APECs

4.11.5.9 Review and Evaluation of Information

Refers to Section 16 of Schedule D of the Regulation

The Review and Evaluation of Information must be completed by a QP and must be a review, evaluation, and interpretation of the information obtained from the records review, the interviews, the reconnaissance components of the phase one ESA to achieve general and specific objectives of the phase one ESA (see section 16(1)). If the information is insufficient supplemental work must be completed. The drafting of the phase one ESA report will begin in this stage including a table of APECs, a table of current and past uses of the phase one property, each on an approved form (Forms A1 and A2) along with a phase one conceptual site model (as per section 16(2)).

The QP must be able to reach conclusions about certain matters as a part of the review and evaluation, if this cannot occur due to insufficient available information, more information must be obtained. The matters for which a conclusion must be reached and documented are:

- the existence and location of any APECs on, in or under the phase one property;
- the current and past uses of the phase one property;
- the likelihood that one or more contaminants have affected any land or water on, in or under the phase one property; and,
- whether a phase two ESA is required before a RSC is submitted for filing in regards to all or part of the phase one property.

Documentation and rationale must be presented for this conclusion in the phase one ESA report. If the RSC is to be submitted for filing based on the phase one ESA alone, rationale must be provided for why the phase one property is suitable for the proposed property use.

The review and evaluation component of a phase one ESA report must include:

- A description of the current and past uses of the phase one property back to the property's first developed use;
- A list and description of each PCA at the phase one property and each PCA in the phase one study area that may be contributed to an APEC at the phase one property;
- a summary and description of any APECs on, in or under the phase one property;

- a summary, description and rationale for the contaminants of potential concern identified with respect to each APEC on, in or under the phase one property; and,
- a discussion and description of how any uncertainty or absence of information obtained in each of the components of the phase one ESA could affect the conclusion.

In the phase one ESA report, the QP must provide logic and reasoning to be used to evaluate the available information and draw conclusions (as per section 16(4)). Data sources used in the review and evaluation must be documented (as per section 16(5)), including:

- whether the source was from a record, an interview, a site investigation, or a combination of them or another source; and,
- what aspect of each record, interview or observation during a site investigation or a combination of them or other source was relied upon and how it was relied upon

The QP shall consider and document how any uncertainty or absence of information could affect the validity of the conclusion, tables and CSM described above (as per section 16(6)).

4.12 Phase One Conceptual Site Model (CSM)

The requirement for a phase one CSM is intended to assist the QP in depicting the result of the phase one ESA to readers of the phase one ESA report, including the property owner, and the Ministry and to provide a basis for further work, if any is needed. The CSM must consist of one or more figures of the phase one study area that show, determine and/or locate the following information (as per section 16(7) and Table 1 subheading (iv)):

- existing buildings and structures; - **None**
- water bodies located in whole or in part on the phase one study area; - **The nearest one is Silver Creek and is located approximately 500m East of the Site and flows in a south-westerly direction.**
- areas of natural significance located in whole or in part of the phase one study area; - **None**
- roads (including names) within the phase one study area; - **Victoria Street and Goderich Street East**
- areas where any PCA has occurred, and locations of tanks in the phase one study area; - **Unknown**
- APECs; - **Unknown**
- Drinking water wells at the phase one property; and, - **None**
- Uses of properties adjacent to the phase one property - **The site is located in a mixed commercial/institutional/residential area**

with a church located east of the Site and a residence located south of the Site. The ground surface in the vicinity of the Site generally slopes to the east. Silver Creek is located approximately 500m East of the Site and flows in a south-westerly direction. An automobile repair and service building was located on the southwest area of the Site and three underground storage tanks (USTs) and a concrete gasoline pump island are located north of the former building at the Site. The Site is currently unoccupied and has been abandoned. The automobile repair and service building was in a severely deteriorated condition. The current USTs reportedly replaced previous USTs that were removed from the Site in the early 1990's. It was reported that petroleum hydrocarbon impacts to the soil were detected in the immediate vicinity of the USTs and subsequent remediation of the soil was completed at that time. A more detailed site plan is provided on Figure 1 of the Appendix B Figures: 23 Goderich Street Site Plan (Environmental Assessment Report, 2013). It should also be noted that there is a Containment Management Plan, Remediation & Indemnity Agreement that has been entered into with UPI Energy and Suncor Energy and the Municipality regarding offsite contamination from the facilities on 23 and 24 Goderich East, Seaforth into abutting road allowances (Goderich Street and Victoria Street).

The CSM must also consist of a narrative descriptions and assessments of the following:

- Any areas where PCAs on or potentially affecting, the phase one property have occurred;
- Any contaminants of potential concern;
- The potential for underground utilities (if any present) to affect contaminant distribution and transport;
- Available regional or site specific geological and hydrological information; and,
- How any uncertainty or absence of information obtained in each of the components of the phase one ESA could affect the validity of the model.

The phase one CSM must be prepared taking into account any proposed property use or information available at the time of the phase one ESA regarding potential future property use (as per clause 16(8)(b)).

4.13 Soil Brought to the Property

When a QP has determined that a record of site control (RSC), soil that did not originate from the property and has remained at the location for final grading or excavating must be investigated by the QP to ensure that the following requirements have been met:

- Concentration of each contaminant in the soil must be equal or less than the standard for the contaminant noted in the Soil, Ground Water, and Sediment Standards;
- Contaminant concentration in the soil must be known before it is brought to the RSC property, to determine what contaminants are actually in the soil;
- Samples that must be collected and analyzed include:
 - Those that will allow for the concentrations of contaminants in the soil to be recognized;
 - Those following a plan determined by the QP that will allow for the concentrations of contaminants in the soil to be recognized; and
 - Samples must be collected to determine if contaminants are present in the soil as a result of any environmental condition or PCA.
- At least one soil sample for each 160 cubic metres of soil must be analyzed for the first 5,000m³ to be assessed at each location in which soil is brought to the property. Afterwards, at least one sample must be collected and analyzed for each additional 300m³ of soil; and
- Analysis of all samples must be conducted in an accredited laboratory, in accordance with the Analytical Protocol.

<https://dr6j45jk9xcmk.cloudfront.net/documents/996/3-6-1-phase-one-environmental-site-assessments-en.pdf>

4.14 Phase One ESA Report

Refers to section 17-19 of Schedule D of the Regulation

The QP must prepare or supervise the preparation of the Phase One ESA Report

4.14.1 Specific Objectives

As detailed in section 18 of the Regulation, the specific objectives of the phase one report are:

- To document the presence or absence of APECs;
- To provide a record of a phase one ESA of a phase one property that clearly demonstrated in a way that can be assessed, tested and reconstructed, how the phase one ESA was carried out, to document:
 - How the general and specific objectives of a phase one ESA were achieved and how each of the minimum requirements for such objectives were met;
 - Whether further investigation is required in order to submit a RSC for filing;
 - That an adequate basis for any further investigation that

- may be needed; and,
- That there is a basis for any required certifications.

4.14.2 Sections of Report

The phase one ESA report must be divided into the report sections, headings, sub-headings, appendices, references, and figures, and meet the requirements as specified by Table 1 of Schedule D of the Regulation (as per section 19, Schedule D). If additional report sections are added, it is recommended that these be placed in an appendix.

Figures, maps, site plans and cross-sections in the phase one ESA report must contain a scale, north arrows and a title block that includes:

- A descriptive title;
- The address, if any, of the phase one property;
- The name of the QP's firm, company or partnership, if any; and,
- The date the figure, map, site plan or cross-section was created.

4.14.3 References

The phase one ESA report must include a list of all documents or data cited in the report.

4.14.4 Appendices

A current plan of survey of the phase one property that has been prepared, signed and sealed by an Ontario land surveyor or, where the phase one property consists of land that is administered by the Ministry of Natural Resources under the Public Lands Act, a description of the phase one property approved by the Surveyor General, must be provided in an appendix. Additionally a topographic map (Ontario Base Map Series) that includes the phase one study area must also be included in an appendix.

4.14.5 Signatures

Original signatures of the QP who conducted or supervised the phase one ESA must be provided in the phase one ESA report. The QP must also provide a statement confirming that they conducted and/or supervised the phase one ESA and that all findings and conclusions of the phase one ESA are included in the report.

4.14.6 Mandatory Reporting Requirements

In addition to the above requirements, please refer to Table 1 in Schedule D for further details on report sections, headings, sub-headings and minimum requirements.

5.0 Funding Options

Various funding options can be used to redevelop brownfield sites. Selected options specific to the site on 23 Goderich Street include Community Improvement Plans, Brownfields Financial Tax Incentive Program, Building Canada Fund, Tax Increment Financing, Green Municipal Fund, and Federal Contaminated Sites Action Plan. Each funding option will be reviewed below, with links to more information.

5.1 Community Improvement Plans

The Community Improvement Plan (CIP) is a tool that focuses on the rehabilitation, maintenance, redevelopment, or redevelopment of specific areas (Ministry of Municipal Affairs and Housing (MMAH), 2016). Within this document, municipalities are able to make loans or grants within CIP project areas that can assist with costly measures, and establish a Tax-Increment-Equivalent Financing program (TIEF) (MMAH, 2016). CIPs attempt to stimulate investment from the private sector through municipal incentive-based programs (MMAH, 2016). Relevant to the 23 Goderich Street site, is the *brownfields environmental assessment, remediation and redevelopment* incentive-based program, which allows for loans, grants, and property tax assistance (MMAH, 2016).

In order to receive funding for a brownfield project, the municipality of Huron East must create a CIP, which facilitates the external and internal support and understanding for community improvement programs and activities, participation and understanding from the private sector in incentive-based programs, and program marketing, implementation, and monitoring (MMAH, 2016). The Ministry of Municipal Affairs and Housing (MMAH) provides a step-by-step guide regarding the development process and structure of a CIP, and the finished document, after much deliberation with councillors and public, should be submitted to MMHA (MMAH, 2015a).

5.2 Brownfields Financial Tax Incentive Program

The Brownfields Financial Tax Incentive Program (BFTIP) encourages the redevelopment and cleanup of brownfield sites, and is a government of Ontario initiative (MMAH, 2015b). Property owners are provided with property tax assistance through the municipality regarding the environmental rehabilitation of brownfield sites (MMAH, 2015b). In order to receive this tax assistance, the brownfield property must be located within an approved community improvement area which has received a phase two environmental site assessment (MMAH, 2015b).

Municipalities interested in receiving BFTIP must have created a CIP, with the tax assistance property located in a project improvement area (MMAH, 2015b). The municipality must fill out an application form, develop a Proposed Municipal Tax Assistance Bylaw (including property tax assistance details), submit a copy of the CIP and bylaw adopting it, and submit information and documents pertaining to current assessments, and estimates of the tax assistance (MMAH, 2015b). There are eight program requirements of BFTIP, ranging from municipalities applying for tax assistance on behalf of the brownfield property owner to necessary documents to be included in the application (MMAH, 2015b). All specifications of the requirements can be found on the MMAH website (<http://www.mah.gov.on.ca/Page5077.aspx>).

5.3 Building Canada Fund

In 2008, Ontario launched the Building Canada Fund – Communities Component program, which aims to provide small and rural communities across the province with access to funding for infrastructure purposes (MMAH, 2015b). Both provincial and federal governments are contributing to the fund, for an expected combined investment of \$724 million (Infrastructure Canada, 2011). The Building Canada Fund supports projects aimed to deliver a stronger economy, cleaner environment, and strong and prosperous communities (Infrastructure Canada, 2011). Every project that utilizes this funding method must contribute approximately one third of funds, alongside the federal and provincial contribution (Infrastructure Canada, 2011).

5.4 Tax Increment Financing

Tax Increment Financing (TIF) is utilized to subsidize community improvement projects and infrastructure, and is publically financed (Federation of Canadian Municipalities (FCM), 2015). TIF uses future tax gains to subsidize improvements, as they can increase property tax revenues and values (FCM, 2015). Generally, this program funds projects through borrowing against expected and future increases in property tax revenues (FCM, 2015). In order to receive this funding, a municipality must apply for it through their CIP (FCM, 2015). Specific applications of TIF include parks, public transit and spaces, and brownfields (FCM, 2015). Further information on TIF can be found on the Federation of Canadian Municipalities website (<http://www.fcm.ca/home/programs/partners-for-climate-protection/alternative-financing-mechanisms/tax-increment-financing.htm>).

5.5 Green Municipal Fund

The Green Municipal Fund (GMF) was created by the Federation of Canadian Municipalities to stimulate investments into innovative infrastructure projects at the municipal level (FCM, 2016). This fund aims to support partnerships between public and private sectors, and encourages municipal action in sustainable community planning, brownfields redevelopment, and solid waste management (FCM, 2016). In order to receive funding from GMF, municipalities, towns, or cities, must submit plans, feasibility studies, and demonstrated pilot projects (MMAH, 2015b). Further information regarding edibility and application processes

can be found on the Federation of Canadian Municipalities website (<http://www.fcm.ca/home/programs/green-municipal-fund.htm>).

5.6 Federal Contaminated Sites Action Plan

The Federal Contaminated Sites Action Plan (FCSAP) was established in 2005, with \$3.5 billion in funding provided by the Government of Canada (Government of Canada, 2014). This program will span until 2020, while holding the primary objective of reducing human and environmental health risks from known contaminated sites and associated financial liabilities at the federal level (Government of Canada, 2014). In order to receive this funding, the site must be federally identified, and listed in the Federal Contaminated Sites Inventory (Government of Canada, 2014). Currently in Phase II, FCSAP continues to assess and remediate sites, with a focus on remediation those that hold the highest priority (Government of Canada, 2014). Projects that are eligible for FCSAP funding include those surrounding assessment, immediate care and maintenance, or remediation and risk management actions (Government of Canada, 2014). Environment Canada and the Treasury Board Secretariat of Canada administer this program. Further information regarding FCSAP, including guidance for addressing contaminated sites, can be found on the Federal Contaminated Sites Portal (<http://www.federalcontaminatedsites.gc.ca/default.asp?lang=En&n=B15E990A-1>).

6.0 Recommendations/Next Steps

1. Since potential use of 23 Goderich may be more sensitive than the previous use (residential or commercial from industrial), the filing of a record of site condition in the Environmental Site Registry is recommended to reduce potential liability for property owners, municipalities and other groups.
2. Since contaminants are present at concentrations higher than the generic standards as per the first Environmental Assessment conducted, you must either
 - a. choose to undertake remedial action at the property to reduce the concentration of contaminants to meet the applicable site condition standard or
 - b. decide that a risk assessment approach is appropriate
3. Once all the above requirements are completed it is recommended that a record of site condition for be filing in Ontario's Environmental Site Registry¹³
 4. Look into developing a Community Improvement Plan for Huron East in an attempt to receive funding for the remediation and redevelopment of the Brownfield site at 23 Goderich Street.

¹³ Source: <https://www.ontario.ca/page/brownfields-redevelopment>

5. Potential for remedial works as an interim measures until future funding source can be secured
 - a. Grassed/Naturalized area
 - b. Parking Lot
- Consideration for removal of existing tanks and disposal (cost unknown) to address orders from TSSA.
 - o Costs consideration and potential for recapture of funds
 - o Unknown condition of tanks

Appendix A - Forms

FORM A1

Table of Areas of Potential Environmental Concern
(Refer to clause 16(2)(a), Schedule D, O. Reg. 153/04)

Area of Potential Environmental Concern ¹	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity ²	Location of PCA (on-site or off-site)	Contaminants of Potential Concern ³	Media Potentially Impacted (Ground water, soil and/or sediment)

Notes:

- ¹ area of potential environmental concern means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,
- (a) identification of past or present uses on, in or under the phase one property, and
 - (b) identification of potentially contaminating activity.
- ² potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area
- ³ when completing this column, identify all contaminants of potential concern using the Method Groups as identified in the "Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011, as specified below:
- | | | | | |
|-----------------------------|--------|-----------------|-------------------------|-----|
| ABNs | PCBs | Metals | Electrical Conductivity | SAR |
| CPs | PAHs | As, Sb, Se | Cr (VI) | |
| 1,4-Dioxane | THMs | Na | Hg | |
| Dioxins/Furans, PCDDs/PCDFs | VOCs | B-HWS | Methyl Mercury | |
| OCs | BTEX | Cl ⁻ | high pH | |
| PHCs | Ca, Mg | CN ⁻ | low pH | |

* When submitting a record of site condition for filing, a copy of this table must be attached.

FORM A2

Table of Current and Past Uses of the Phase One Property
(Refer to clause 16(2)(b), Schedule D, O. Reg. 153/04)

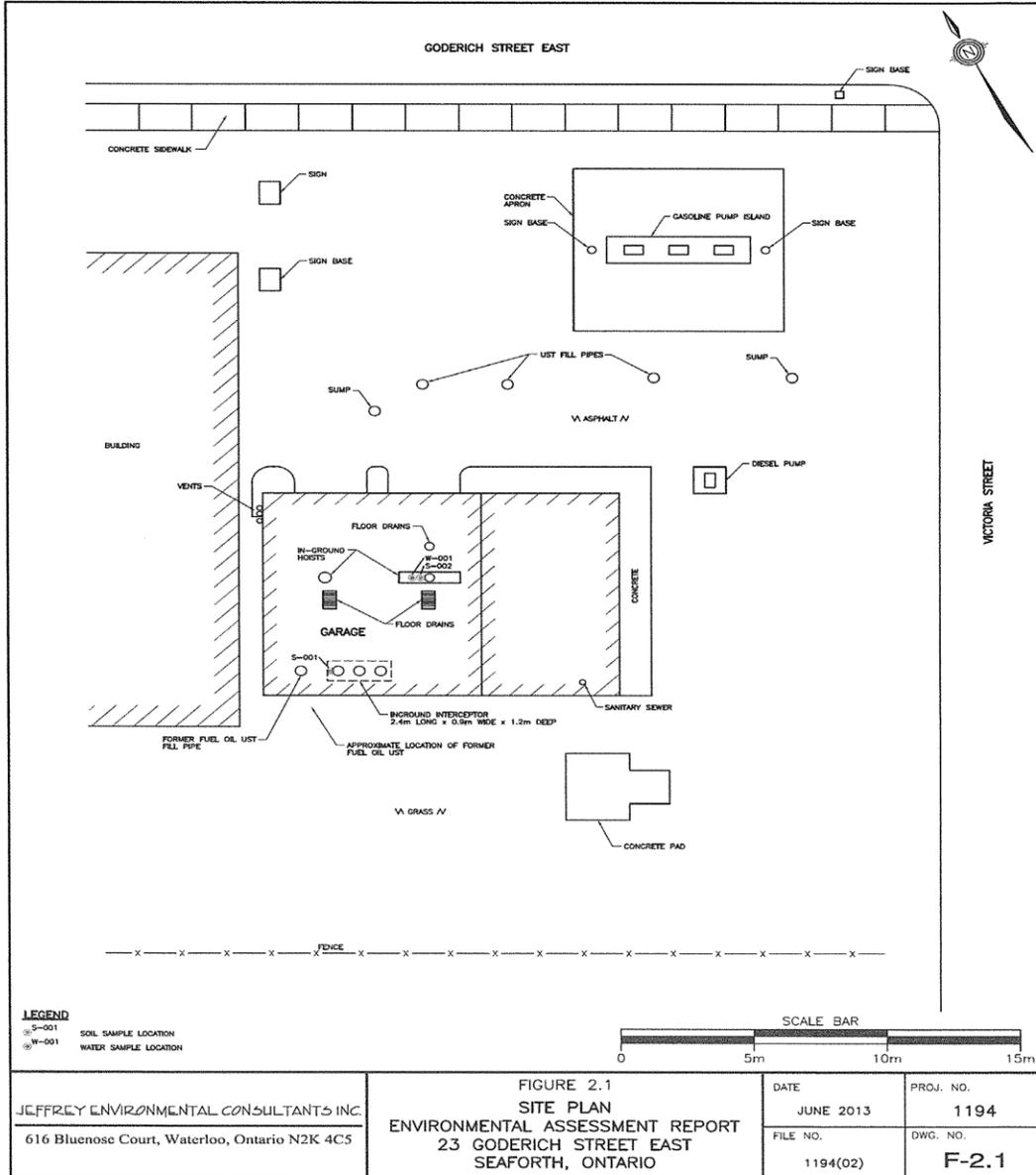
Year	Name of Owner	Description of Property Use	Property Use ¹	Other Observations from Aerial Photographs, Fire Insurance Plans, etc.

Notes:

- ¹ for each owner, specify one of the following types of property use (as defined in O. Reg. 153/04) that applies:
- Agriculture or other use
 - Commercial use
 - Community use
 - Industrial use
 - Institutional use
 - Parkland use
 - Residential use

* When submitting a record of site condition for filing, a copy of this table must be attached.

Appendix B – Site Plan



LEGEND

- ⊙ S-001 SOIL SAMPLE LOCATION
- ⊙ W-001 WATER SAMPLE LOCATION

JEFFREY ENVIRONMENTAL CONSULTANTS INC.
616 Bluenose Court, Waterloo, Ontario N2K 4C5

FIGURE 2.1
SITE PLAN
ENVIRONMENTAL ASSESSMENT REPORT
23 GODERICH STREET EAST
SEAFORTH, ONTARIO

DATE
JUNE 2013
FILE NO.
1194(02)

PROJ. NO.
1194
DWC. NO.
F-2.1

Appendix C - Site Photos



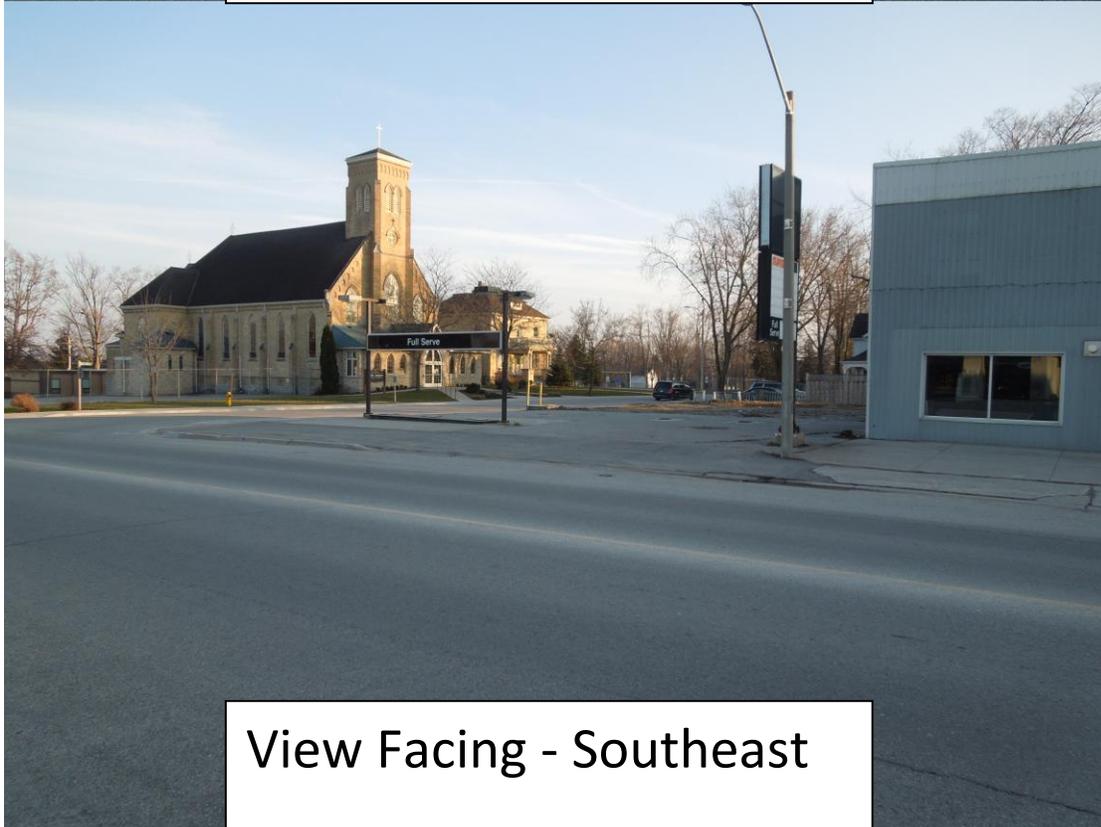
View Facing - West



View Facing - South



View Facing - South



View Facing - Southeast



View Facing - East



View Facing - Southeast



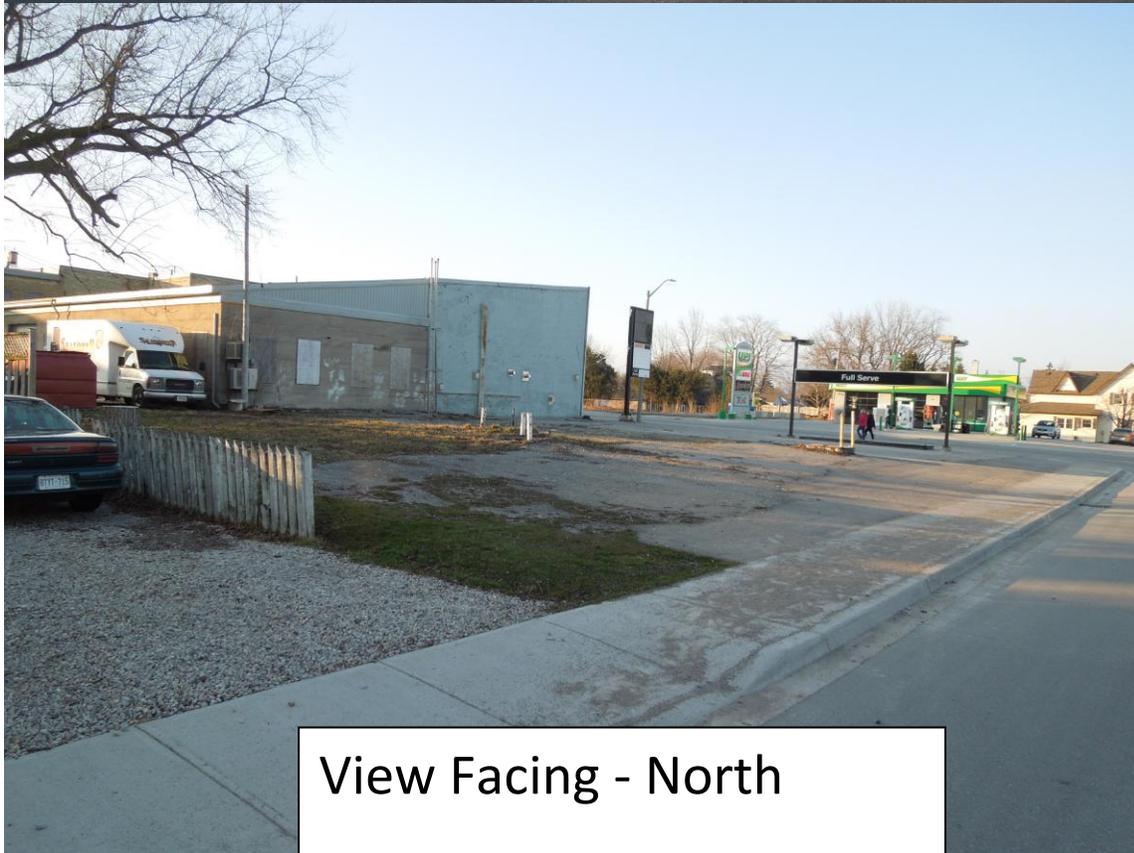
View Facing - West (Goderich Street)



View Facing - Southwest

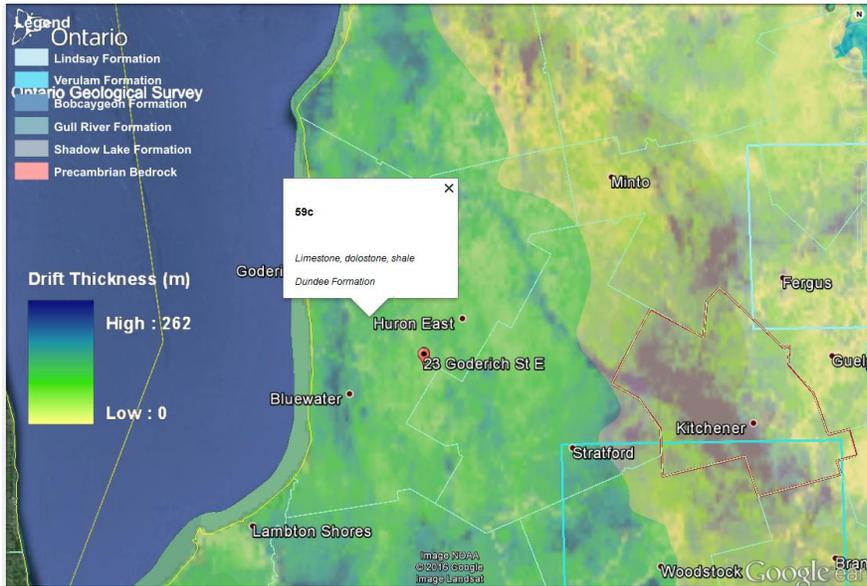


View Facing - West

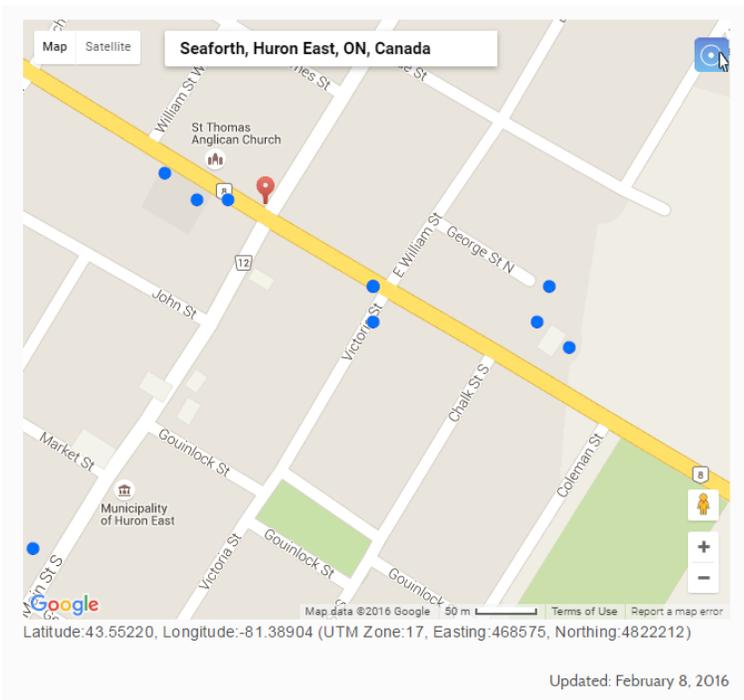


View Facing - North

Appendix F – Drift Thickness



Appendix G – Well Locations¹⁵



¹⁵ <https://www.ontario.ca/environment-and-energy/map-well-records>

Appendix H – Reports Review

Reports

- Groundwater Sampling and Analysis Report October 2007
- Environmental Assessment Report – June 2013
- Letter from MOECC – Dated May 24th, 2011 RE: Remediation of the site and restoration
- Site Monitoring – Jacques Whitford (March 5th, 2009)
- Site Monitoring Report – Pottinger Gaherty (December 21st, 2010)
- Site Monitoring Report – Pottinger Gaherty dated August 8th, 2011
- Site Monitoring Report – Jacques Whitford dated December 14th, 2006
- Site Monitoring Report – Pottinger Gaherty dated April 29th, 2011
- Site Monitoring Report – Jacques Whitford dated June 8th, 2004
- Golder and associates proposed borehole investigation, March 10th, 1994 (includes site plan)
- Letter from MOE dated June 13th, 1994 (Petro-Canada Cleanup)
- Permit with Site plan May 11th, 1983
- Site Monitoring Report – April 4th, 1995
- Site Monitoring Report – June 1st, 2006 (Jacques Whitford)
- Summary of Monitoring Reports – June 3rd, 2004 (Jacques Whitford)
- Site Monitoring Report – November 13th, 2002 (Jacques Whitford)
- Site Monitoring Report – August 15th, 2002 (Jacques Whitford)
- Site Monitoring Report – May 29th, 2002 (Jacques Whitford)
- Site Monitoring Report – March 21st, 2002 (Jacques Whitford)
- Site Monitoring Report – December 20th, 2001 (Jacques Whitford)
- Site Monitoring Report – September 25th, 2001 (Jacques Whitford)
- Site Monitoring Report – August 7th, 2001 (Jacques Whitford)
- Site Monitoring Report – December 22nd, 2000 (Jacques Whitford)
- Site Monitoring Report – May 30th, 2000 (Jacques Whitford)

- Site Monitoring Report – February 28th, 2000 (Jacques Whitford)
- Site Monitoring Report – December 1st, 1999 (Jacques Whitford)
- Site Monitoring Report – October 12th, 1999 (Jacques Whitford)
- Site Monitoring Report – September 13th, 1999 (Jacques Whitford)
- Site Monitoring Report – April 30th, 1999 (Jacques Whitford)
- Site Monitoring Report – May 8th, 1998 (Jacques Whitford)
- Site Monitoring Report – January 21st, 1998 (Jacques Whitford)
- Site Monitoring Report – October 29th, 1997 (Jacques Whitford)
- Site Monitoring Report – July 27th, 1997 (Jacques Whitford)
- Site Monitoring Report – April 17th, 1997 (Jacques Whitford)
- Site Monitoring Report – February 13th, 1997 (Jacques Whitford)
- Site Monitoring Report – August 1st, 1996 (Jacques Whitford)
- Site Monitoring Report – February 13th, 1996 (Jacques Whitford)
- Site Monitoring Report – November 6th, 1995 (Jacques Whitford)
- Site Monitoring Report – July 20th, 1995 (Jacques Whitford)
- Site Monitoring Report – February 17th, 1999 (Jacques Whitford)
- Site Monitoring Report – May 22nd, 1996 (Jacques Whitford)
- Site Monitoring Report – September 30th, 1994 (Jacques Whitford)
- Site Monitoring Report – August 29th, 2000 (Jacques Whitford)
- Borehole Logs – March 22nd and 23rd, 1994
- November 17th, 1993 – Golder and Associates report on behalf of Petro Canada for removal or storage tanks and pumps. Soil removal, soil excavation and tank removal carried out by Mr. Bill Rathwell of Rathwell and Rathwell in Brucefield.

Appendix I – Project Charter/Terms of Reference

Title of Project: Brownfield and Economic Development Strategy in Huron East

Name of Municipality or Organization: Municipality of Huron East

Summary of Project:

The Brownfield and Economic Development Strategy project focuses on the site located at 23 Goderich Street in the former Town of Seaforth. This site, in the Municipality of Huron East, previously housed a gas bar and service centre. Currently, the site has been in arrears for several years, and is going through considerations of further tax sales or having the municipality take ownership of the land. The purpose of this program is to assist the municipality of Huron East in developing a report including an assessment of all previous site uses, identification of possible necessary remedial strategies, and a costing for any cleanup needed to achieve environmental Certificates of Approval. This report could aid in removing barriers to development, and result in increased significant opportunities for commercial, residential, or industrial growth. Additionally, the report may be utilized as a template for other Brownfield sites in Huron East.

Project Goals:

1. An assessment of all previous uses of the specified site.
2. Identification of any necessary remedial strategies.
3. A costing for necessary clean-up in order to achieve environmental Certificates of Approval.
4. Working with municipal staff and industry leaders to create and package a strategy that be used as a tool by both the public and private sectors to attract future investment.

Project Objectives:

1. Conduct research and a site visit to compile a background report on previous uses of land
2. Provide a report with options available to remediate any outstanding environmental contamination
3. Provide a feasibility plan and report for Certificate of Approval requirements (i.e. clean-up costs)
4. Final report consisting of a strategy package for Brownfield sites to promote future investment
5. Presentation of strategy package to stakeholders

Project Scope:

The project will focus on several aspects of the site and property, as well as information on processing through applicable legislation. These areas are broken down into four areas that may impact the property: Municipal process and consideration through the tax sale process; Brownfield legislation and considerations associated with remediation (including historic practices and remediation works); the Planning Act and redevelopment options; and the building code, both use of conformance and redevelopment. The coordination and collaboration between the Economic Development Committee will be facilitated by Jan Hawley in order to gather information from discussions related to business and residential needs, and rehabilitation options or potential uses.

Assumptions:

The following assumptions can be made while completing the Brownfield and Economic Development Strategy project:

- Jan Hawley will act as the primary contact to facilitate the delivery of information with the Huron East Economic Development Committee.
- Any records regarding previous site usage since the service centre and gas station will be provided.
- The Municipality is the current administrator of the site and records, and information associated with the site are available to the Municipality.
- Information available will be presented in the report, missing information or unknowns will be identified as gaps, and will attempt to be filled in or corrected. However, financial resources will not be contributed towards filling gaps.

Deliverables and Milestones:

Deliverables:

- The Municipality will provide background information and known information, which is available for inclusion into the document.
- The Municipality will direct the information they would like presented in the report, which needs to be identified for Municipal interest.
- The project team will review and create a background report on information available.
- The project team will provide briefings on the Municipal Act, Building Code, and Planning Act, which have implications on the site.
- The project team will discuss and present any gaps in information, which may assist the Municipality in moving forward with a decision on the property.
- The project team and Economic Development Coordinator will arrange meetings with the Municipal Economic Development Committee.

Timeline:

The following is an anticipated timeline for the project components:

February:

- Complete Project Charter for February 3, 2016
- Attend Municipal Office & gather any additional background information regarding the site or stakeholders to contact (between February 3-12)

- Review background information, complete a draft key informant interview guide, and contact stakeholders for availability (between February 15-26)

March:

- Complete a Project Update for March 2, 2016
- Finalize key informant interview guide (between February 29-March 4)
- Contact stakeholders and perform all key informant interviews (between March 7-18)
- Complete a draft strategy to be presented to key stakeholders, and the Municipality of Huron East, for refinement (process between March 21-April 1)

April:

- Finalize and present the strategy to all stakeholders and the Huron East Economic Development Committee (between April 4-8)

Appendix J – Project Update

Project Update – March 2nd, 2016

- On March 1st representatives from the project group meet with Huron East staff and contacts to discuss the Brownfield project for the project located at 23 Goderich Street in the Village of Seaforth (Municipality of Huron East)
- Meetings were held with Jan Hawley (Economic Development Officer); Brad Knight (Chief Administrative Officer); Claire Dodds-Weir (Senior Planner with the County of Huron) and Barry Mills (Public Works Manager)
- Scope: review history and documentation of the file, Municipal standing with respect to ownership/tax sale/administrative powers, direction with respect to formulating the report and further meeting and contact requirements
- The site itself is an identified Brownfield with TSSA orders against the property for removal of the tanks located below grade. These TSSA orders are against the property owner currently, however, the Municipality is in the administrator position since the property has gone through several unsuccessful tax sales.
 - o Further discussion is required to identify the role of the TSSA in these sites (gas stations) and the role of the Ministry of Environment and Climate Change (MOECC) due to contaminated ground. A clarification section in the paper may be helpful.
 - Action: include section on TSSA and MOEE with respect to involvement in gas station sites.
- The site requires a clean (or satisfactory) Record of Site Condition (RSC) for the redevelopment and re-use of the site. Currently, the information has been completed with respect to report and some testing, but undertaking works for the record of site condition is an unknown requirement and therefore an indeterminate factor
 - o Action: utilize reporting structure of MOECC Guidelines on RSC (Phase 1 and Phase 2) to assist in completion of report. As a note, no work is proposed under this report therefore completion of the reporting structure will be primarily focused on Phase 1 structure.

- Meetings and contact information – the site has had historical reporting and remediation works completed associated with the removal of gas tanks, lifts, hoists, storage bays, and oil traps. Most of the work was completed by Rathwell and Rathwell, with Bill Rathwell as the main contact. Further follow-up interview is required with Bill Rathwell to discuss the remediation works, and disposal of material, and potential additional remediation required. Mark Jeffery (Jeffery Environmental Consultants Inc.) is the last consultant (qualified professional) who has been active on the file and was involved with some remediation works, which have taken place on site (report completed in 2013 outlining future remediation and monitoring required).
 - o Action: schedule follow-up phone call with Mark Jeffery and, if possible, Bill Rathwell (contact information provided)
- Meetings with Clair Dodds-Weir were completed with respect to permitted uses on the property under the Official Plan and Zoning Bylaw. Property is currently designated as Commercial Fringe, which allows for the greatest possibility of uses. Issues identified in the discussion included that the properties history and uses required a RSC for any amendments or changes through the planning process. The establishment of commercial/industrial vs. residential is varying degree in the remediation requirements, therefore potential for remediation to a residential/commercial standard is needed to identify a risk-reward framework. As part of the discussion with Claire it was also identified that funding/grants are available through the Federation of Canadian Municipalities and through other provincial grants, however, a Community Improvement Plan is typically required to demonstrate benefit. Claire also identified the Source Water protection information to review and identify in the report.
 - o Action: included Section on Zoning and Official Plan status along with accompanying uses and restrictions. Additional highlights may be of assistance for parking stipulation or restrictions as the site is limited in size.
 - o Action: review Source Water Protection document and pull information and mapping from County of Huron website.
 - o Action: follow up may be required with Brad Dietrich (Chief Building Official) with Huron East to discuss requirements under the Building Code for remediation and reporting requirements.
- The site itself contains a long history of testing, remediation, development, redevelopment and inactivity. Therefore a section on the history would provide background and also be consistent with the information provided through the Record of Site Condition guidelines from the MOECC (additional information is appended to this document)
- Discussion was limited around funding opportunities.
 - o Action: a section on funding options around Brownfields would be of benefit to the group and for further Municipal reference once ownership is settled (ie. CIP, FCM Funding, Brown to Green)
- Further follow-up:
 - o Review and discussion may be necessary with the Economic Development Committee from Huron East
 - o Continue to follow-up with Jan and Brad
 - o Additional meetings/discussions may be required to fill in gaps and review draft report

- Additional notes or information
 - o Ontario's Environmental Protection Act – Section 100 (Restoration of Spill/Cleanup)

Review of Terms of Reference and Project Charter

Timeline:

The following is an anticipated timeline for the project components:

February:

- Complete Project Charter for February 3, 2016 – **Completed**
- Attend Municipal Office & gather any additional background information regarding the site or stakeholders to contact (between February 3-12) – **Completed March 1st, 2016**
- Review background information, complete a draft key informant interview guide, and contact stakeholders for availability (between February 15-26) – **Partially Incomplete (no interview guide *this may not be required based on information available)**
- **Creation of various briefing notes on the Municipal Act, Building Code, Brownfield legislation, and Huron East Building By-Law, relevant to this project (February 29) – Completed**

March:

- Complete a Project Update for March 2, 2016 – **Completed**
- Finalize key informant interview guide (between February 29-March 4) ***To be determined if required**
- Contact stakeholders and perform all key informant interviews (between March 7-18)
- Complete a draft strategy to be presented to key stakeholders, and the Municipality of Huron East, for refinement (process between March 21-April 1)

April:

- Finalize and present the strategy to all stakeholders and the Huron East Economic Development Committee (between April 4-8)

References

Federation of Canadian Municipalities. (2015). Tax increment financing. Retrieved from <http://www.fcm.ca/home/programs/partners-for-climate-protection/alternative-financing-mechanisms/tax-increment-financing.htm>

Federation of Canadian Municipalities. (2016). Green Municipal Fund. Retrieved from <http://www.fcm.ca/home/programs/green-municipal-fund.htm>

Government of Canada. (2014). Federal Contaminated Sites Action Plan. Retrieved from <http://www.federalcontaminatedsites.gc.ca/default.asp?lang=en>

Infrastructure Canada. (2011). Building Canada Fund. Retrieved from <http://www.infrastructure.gc.ca/prog/bcf-fcc-eng.html>

Ministry of Environment. (2011). Guide for Completing Phase One Environmental Site Assessments under Ontario Regulation 153/04. Retrieved from <https://dr6j45jk9xcmk.cloudfront.net/documents/996/3-6-1-phase-one-environmental-site-assessments-en.pdf>

Ministry of Municipal Affairs and Housing. (2016). Community Improvement Plans. Retrieved from <http://www.mah.gov.on.ca/Page6850.aspx>

Ministry of Municipal Affairs and Housing. (2015a). Community Improvement Planning Handbook 2008. Retrieved from <http://www.mah.gov.on.ca/Page1297.aspx#Chapter%203%20-%20A%20Community%20Improvement%20Plan%20Process>

Ministry of Municipal Affairs and Housing. (2015b). Financing a Brownfield Project. Retrieved from <http://www.mah.gov.on.ca/Page223.aspx>

Huron East Official Plan. (2014). Adopted August 2014. Retrieved from: http://www.huroneast.com/he_gov/documents/Huron_East_Official_Plan_Aug2014.pdf

Huron East Zoning Bylaw. Zoning By-Law 52-2006. Updates as of August 2015. Retrieved from: http://www.huroneast.com/he_gov/documents/HuE%20ZBL%20Consolidated%20August%202015.pdf

Maitland Valley Source Water Protection Plan. Adopted January 2015. Retrieved from http://www.sourcewaterinfo.on.ca/uploads/MaitlandValley_SPPlan_Approved_Jan_2015.pdf