

# Phase I Environmental Site Assessment

The Birches Parcel, Portion of PID No. 40192528  
Musquodoboit Harbour, Nova Scotia

The Birches Nursing Home  
Report

August 18, 2023  
2307051.000



**ENGLOBE**

# The Birches Nursing Home

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Client Error! No text of specified style in document.

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## Revisions and publications log

REVISION No.	DATE	DESCRIPTION
01	August 18, 2023	Phase I ESA Report

# Executive Summary

Englobe Corp. (Englobe) was retained by The Birches Nursing Home to undertake a Phase I Environmental Site Assessment (ESA) of a portion of the property identified as PID No. 40192528 located in Musquodoboit Harbour, Nova Scotia. The Phase I ESA carried out by Englobe was based on the principles and practices outlined in the Canadian Standards Association (CSA) Standard Z768-01 (reaffirmed 2022), *Phase I Environmental Site Assessment*.

A background study was conducted to determine property ownership and historical land use information. Site reconnaissance was conducted on July 14, 2023, at which time the site was visually inspected for the presence of potential environmental concerns such as petroleum storage tanks, hazardous materials and waste storage, surface staining and potential contamination from adjacent properties.

The site is undeveloped and wooded and is located in an area of Musquodoboit Harbour with road development and undeveloped wooded land to the north, undeveloped wooded land to the east and west and undeveloped wooded land and residential properties to the south. Construction of a new nursing home facility on the site is planned.

Based on the information gathered and observations made during the site reconnaissance, the assessment has revealed no environmental concerns at the site. No further assessment is currently recommended for the site.

However, some considerations to note with respect to future development of the site are noted below:

- Potential wetlands and/or watercourses are present. Standing water and low-lying wet areas were observed within the central northern section of the site boundary. Nova Scotia Department of Natural Resources and Renewables (NSDNRR's) online Wet Area Mapping (WAM) viewer indicated that no watercourses were running into or away from the site. The site has been determined to have an index of "well to moderately-well drained". The site should be assessed for wetlands and watercourses and development of the site must be conducted in accordance with provincial regulations and policies with respect to wetlands and watercourses, if present.

*This Executive Summary is a summary of the findings of the Phase I ESA and must be read in conjunction with the entire report. The statements made in the Executive Summary are subject to the same limitations as described in the report.*

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# 1 Introduction

A Phase I Environmental Site Assessment (ESA) was conducted by Englobe Corp. (Englobe) at the property identified as The Birches Parcel, which is a portion of PID 40192528 located in Musquodoboit Harbour, NS. The proposed parcel is shown on a survey plan in Appendix A and is hereafter referred to as the “site”. The request for this assessment was made by Mr. Michael Eakin of The Birches Nursing Home. At the time of the assessment, subdivision and purchase of the site and development of a nursing home is planned. The Phase I ESA is being conducted to satisfy environmental due diligence requirements.

The purpose of the Phase I ESA is to present factual environmental information and render an opinion regarding the environmental data collected and information reviewed for the site and adjacent properties. This was done by a review of information collected from existing documentation and site visit. The assessment is useful in reducing uncertainty about potential environmental liabilities and may form the basis for further investigation.

## 2 Scope of the Assessment

The Phase I ESA carried out by Englobe was based on the principles and practices outlined in the Canadian Standards Association (CSA) Standard Z768-01 (reaffirmed 2022), *Phase I Environmental Site Assessment*, and was conducted in general accordance with Englobe Proposal No. P2307051.000, dated July 7, 2023.

The following scope of work was included:

- A background investigation including the review of available historical and regulatory records pertaining to the site and adjacent properties;
- Site reconnaissance to visually assess the site for evidence of actual or potential environmental contamination and concerns;
- Interviews with persons familiar with the current and historic use of the site, if available; and
- Preparation of the Phase I ESA report, which presents the methodology of the assessment, evaluation of information obtained, findings, and recommendations for further action, if required.

It should be noted that information and opinions in this report are based on the above-noted research and visual observations during the site reconnaissance on July 14, 2023, and that sampling, testing or moving large objects is typically not included in the scope of work for a Phase I ESA.

# 3 Site Description

## 3.1 Site Location and Physical Setting

The current area of interest is identified as the Birches Parcel, a portion of PID No. 40192528 located in Musquodoboit Harbour, NS. The site is a square-shaped parcel of land with an area of approximately 28,620 m<sup>2</sup> (7.07 acres). Surrounding the site is undeveloped wooded land with road development along the north boundary and residential properties on Highway 7 to the south of the site. A Property Map and Parcel Information Report from the Service Nova Scotia and Municipal Relations (SNSMR) *Property Online* service are provided in Appendix A. Site photographs are provided in Appendix B. A site location map is provided below.

Figure 3-1. Site Location Map



The site is vacant, unserviced and mainly wooded. The subject area of Musquodoboit Harbour is serviced by private water wells and septic sewer systems. Electricity is provided to the surrounding area via overhead lines by Nova Scotia Power (NSP) pole-mounted transformers along Highway 7.

Adjacent property usage is summarized in Table 3-1.

Table 3-1. Adjacent Properties

Direction	Description of Adjacent Properties
North	Undeveloped wooded lands. Road development along north boundary
East	Undeveloped wooded lands.
South	Undeveloped wooded lands, residential properties along Highway 7.
West	Undeveloped wooded lands.

## 3.2 Topography, Geology and Hydrogeology

A summary of the topographic, geologic and hydrogeologic aspects of the site is provided in Table 3-2.

Table 3-2. Topography, Geology and Hydrogeology

Item	Description
Ground Surfaces	The site was accessed via Blueberry Run Trail and an unmarked ATV trail located at the southwestern side of residential property on PID 40192536. The site and surrounding area are currently undeveloped and wooded with mostly new growth, consisting of Balsam Fir, Spruce, Maple and Birch trees. Approximately 50% of the site had been bulldozed to allow for a previous geotechnical test pit investigation. The test pits had been backfilled.
Topography of Site and Surrounding Area	The site slopes downward from north-northwest to south-southeast toward Musquodoboit Harbour. Local regional topography slopes downward to the south toward the Petpeswick Inlet.
Site Grade Relative to Adjacent Properties	The site is at a similar grade as lands to the east and west, which follow a similar downward slope toward Musquodoboit Harbour. The site is downgradient from lands to the north and upgradient from the residential properties to the south.
Surficial Geology	Surficial geology mapping (Stea et al, 1980) indicates that the native soils in this area are identified as glacial deposits known regionally as Slate Till. Slate Tills are described as light olive brown, sandy till with abundant gravel, cobble and boulder sizes.
Bedrock Geology	<p>Bedrock geology mapping of the area (Keppie et al, 2014) indicates that the site is underlain by early Cambrian to early Ordovician-aged Goldenville Formation bedrock of the Meguma Group. This unit is described as sandstone turbidites and slate: continental rise prism (in places metamorphosed to schist and gneiss).</p> <p>Nova Scotia Department of Natural Resources and Renewables (NSDNRR) has developed an interactive <i>Karst Risk Map</i> (<a href="https://fletcher.novascotia.ca/DNRViewer/?viewer=Karst">https://fletcher.novascotia.ca/DNRViewer/?viewer=Karst</a>) to show areas of Nova Scotia where there is a relative high, medium or low risk of encountering karst geology and naturally-occurring sinkholes caused by soluble bedrock. Sudden catastrophic subsidence due to the collapse of cavities in bedrock can result in the development of sinkholes, which can cause extensive damage to buildings, roads, and other infrastructure. The cavities are created by the dissolution of soluble evaporite or carbonate rock in areas of karst terrain. The risk categories are based on several factors including geology, sinkhole occurrences and professional judgement.</p> <ul style="list-style-type: none"> <li>— According to the <i>Karst Risk Map</i>, the site is located in a low-risk zone. The low-risk zone contains less than 0.1% of the sinkholes in the NSDNRR Nova Scotia Sinkhole Database. This zone typically does not contain sinkholes or karst terrain. However, sinkholes may still occur in this area due to unmapped soluble rocks or where soluble rocks are close to the ground surface but are overlain by other rock types or unconsolidated material.</li> </ul>

Item	Description
	<p>Radon is a colourless, odourless and radioactive gas that is naturally occurring. It is produced from the breakdown of uranium contained in soil and bedrock, which is slowly released into the surrounding soil. Geologic settings that typically contain more uranium and resulting radon gas are those comprised of granite and shale. Radon gas typically collects in the lower parts of a building (i.e. basement) as it enters through the foundation of the structure. The entry points may include (but are not limited to) openings in the foundation for services, floor drains, foundation cracks, and unsealed joints in the concrete foundation. Thus, the amount of radon gas that enters a building depends on a variety of factors including the actual amount of radon available in the underlying soil (geologic setting) and the construction details of the building. Long-term exposure to elevated radon concentrations is associated with an increased risk of developing lung cancer. NSDNRR has developed an interactive <i>Potential for Radon in Indoor Air</i> map (<a href="https://fletcher.novascotia.ca/DNRViewer/?viewer=Radon">https://fletcher.novascotia.ca/DNRViewer/?viewer=Radon</a>) to categorize areas of the province in terms of the likelihood of people to be exposed to elevated concentrations of radon in indoor air.</p> <p>– According to the <i>Potential for Radon in Indoor Air</i> map, the site is located in an area of medium risk for radon in indoor air. The NSDNRR test database indicates that 14% of buildings in the medium-risk areas exceed the Health Canada guideline.</p>
Wetlands and Watercourses	<p>Potential wetland areas and watercourses were observed on the north central section of the parcel. Standing water and low-lying wet areas were observed throughout the site in areas that had been cleared for test pit machinery access. NSDNRR's online Wet Area Mapping (WAM) viewer indicated that no watercourses were running into or away from the site. The site has been determined to have an index of "well to moderately-well drained".</p>
Nearest Off-Site Surface Water Body	<p>Petpeswick Inlet is located approximately 700 m to the south of the subject site.          Scots Pond is located approximately 1 km to the northwest of the subject site.          Musquodoboit River is located approximately 850 m to the northeast of the subject site</p>
Inferred Groundwater Flow Direction	<p>South-southeast.</p>

Based on the information presented in Table 3-2 pertaining to topography, geology and hydrogeology, the following was identified and, while not a significant environmental concern for the site, should be taken into consideration if future site redevelopment work or earthworks are planned:

- Potential wetland areas and watercourses were observed on the north central section of the parcel. Standing water and low-lying wet areas were observed throughout the site in areas that had been cleared for test pit machinery access. NSDNRR's online Wet Area Mapping (WAM) viewer indicated that no watercourses were running into or away from the site. The site has been determined to have an index of "well to moderately-well drained". The site should be assessed for wetlands and watercourses and development of the site must be conducted in accordance with provincial regulations and policies with respect to wetlands and watercourses, if present.

### 3.3 Site Operations

The site is vacant, unserviced and mainly wooded. Construction of a nursing home is planned.

## 4 Background Investigation

At the outset of the project, a review of all background information related to the property was undertaken. The purpose of this work was to obtain information on past land use activities and possible types of contamination or hazardous materials arising from previous operational practices.

## 4.1 Aerial Photographs

Aerial photographs for the years 1964, 1974, 1992, and 2003 were obtained from the Nova Scotia Geomatics Centre and reviewed by Englobe. Google Earth aerial imagery from 2002 to 2018 was also reviewed. Copies of select aerial photographs reviewed are provided in Appendix C. A summary of information obtained from review of aerial photographs for the site is provided in Table 4-1.

Table 4-1. Aerial Photograph Review

Year (Scale)	Site	Surrounding Area
1964 (1:15,840)	The site is currently partially wooded and undeveloped.	The surrounding area is occupied by partially wooded undeveloped lands to the north, east and west of the site. Highway 7 is noted to the south of the site with residential lots.
1974 (1:10,000)	Conditions at the site are similar to those in the 1964 aerial photograph.	Conditions in the surrounding area are similar to those in the 1964 aerial photograph.
1982 (1:10,000)	Conditions at the site are similar to those in the 1974 aerial photograph.	Conditions in the surrounding area are similar to those in the 1974 aerial photograph.
1992 (1:10,000)	Conditions at the site are similar to those in the 1982 aerial photograph.	Conditions in the surrounding area are similar to those in the 1982 aerial photograph.
2003 (1:10,000)	The site is undeveloped and partially wooded with indication of treeclearing.	Conditions in the surrounding area was undeveloped and partially wooded with indication of clearcutting.
2004-2018 Google Earth	Conditions at the site are similar to those in the 2003 aerial photograph. From 2002 to 2018 the forest was allowed to regenerate.	Conditions in the surrounding area are similar to those in the 2003 aerial photograph. From 2002 to 2018 the forest was allowed to regenerate.

Based on Englobe's review of historic aerial photographs, no environmental concerns were identified for the site.

## 4.2 SNSMR *Property Online* Information

A review of records available from SNSMR's *Property Online* service was conducted. The records indicate that the site is currently a portion of PID No. 40192528 and is in the process of being subdivided as a separate parcel. A plan showing the proposed subdivided parcel is provided in Appendix A.

Past ownership of PID No. 40192528 is summarized in table 4.2.

Table 4-2. Ownership History

Owner	Years Held
Harbour Garden Village Inc.	2022 - Current
Scott Rowlings	1990 - 2022
Paul Blake Rowlings	1975 -1990
Frances M. Smith	N/A -1975

No other information on property ownership was discovered by Englobe during the preliminary title search conducted for this report. Ownership information was obtained through cursory review of select online deeds and other records and is not intended to be a legal title search.

Based on Englobe's review of SNSMR *Property Online* information, no environmental concerns were identified for the site.

### 4.3 *Enviroscan* Report

Opta Information Intelligence (Opta) maintains historical information for properties including fire insurance plans (FIPs) and insurance underwriters' inspection reports and plans, which may identify environmental liabilities associated with the property.

The site is undeveloped and wooded. An Opta search was not requested for the site.

### 4.4 City Maps and Fire Insurance Plans (FIPs)

Englobe has accumulated a collection of copies of historic city maps and FIPs for various cities and towns. Additionally, FIPs may be obtained through *Enviroscan* reports from Opta (see section 4.3). Historic city maps generally indicate property ownership and building size and location. FIPs are useful in identifying various details that may be relevant to the current environmental conditions of the site, including: the size and shape of buildings present; construction details of buildings; commercial/industrial operations; street addresses; and the presence of potential environmental liabilities such as heating systems and petroleum storage tanks. Some of these records date back to the 1870s, although most were published between 1888 and 1972.

The site and surrounding area are not covered by the city maps and FIPs available for review.

### 4.5 Municipal Directories

Englobe maintains a library of municipal directories for the years 1907, 1920, 1942, 1954, 1966, 1972, 1975-1979 and 1982-1995 and conducted a review of select directories to determine the occupational history of the site and surrounding area.

The site and surrounding area are not covered by the municipal directories available for review.

### 4.6 NSECC Source Information

#### 4.6.1 *Environmental Registry*

Since the 1980s, Nova Scotia Environment and Climate Change (NSECC) has maintained a publicly accessible database of environmental records (registration, installation and removal of petroleum storage tanks, inspection reports, environmental site assessment reports, remediation reports, contaminated sites files, industrial approvals, etc.) on properties in the *Environmental Registry*. Englobe contacted NSECC on July 12, 2023, and requested a search of the *Environmental Registry* for information related to PID No. 40192528.

The records provided by NSECC pertained to an application for subdivision for Lot 1-A, PID Nos. 40192528 and 40192536 (Civic No. 7763 Highway 7) from 2017. The records are not pertinent to the current Phase I ESA.

A copy of the NSECC *Environmental Registry* response is provided in Appendix D.

Based on Englobe's review of the NSECC *Environmental Registry* response, no environmental concerns were identified for the site.

## 4.6.2 Freedom of Information and Protection of Privacy (FOIPOP)

Based on the *Environmental Registry* response (section 4.6.1), a FOIPOP request was not submitted to NSECC.

## 4.7 Previous Environmental Reports

No previous environmental reports for the site were available for review.

Englobe completed a Geotechnical Investigation at the site (report dated March 6, 2023) that consisted of the excavation of six test pits across the site. Topsoil/rootmat was encountered at the surface to depths of between 0.31 and 0.46 m and was underlain by glacial till. Large boulders/bedrock were encountered beneath the till at some of the test pits at depths of between 1.98 and 3.81 m. Boulders/bedrock were not encountered at the other test pits, which were terminated in till at depths of between 2.59 and 2.90 m. No evidence of environmental contamination was identified during the program.

# 5 Site Reconnaissance

Englobe conducted the site inspection on July 14, 2023, to visually inspect the site for the presence of petroleum storage tanks, surface soil staining, hazardous materials, chemicals and waste storage, and potential contamination from adjacent properties. During the site visit, access was limited in some areas due to rough terrain.

## 5.1 Petroleum Storage Tanks

The site is currently undeveloped and wooded. No aboveground storage tanks or evidence of underground storage tanks (i.e. fill/vent pipes) were noted at the site.

## 5.2 Elevators and Hydraulic Systems

The site is currently undeveloped and wooded. No environmental concerns were identified for the site pertaining to elevators or hydraulic systems.

## 5.3 Asbestos

Asbestos has been used in many areas of building construction to make products strong, durable and fire-resistant. Materials found in buildings constructed or renovated prior to 1980 that commonly contain both friable and non-friable forms of asbestos include flooring (vinyl tiles, sheet flooring, mats under hardwood), wall and ceiling materials (shingles, siding, suspended tiles, plaster, stucco, drywall filler compound), mechanical insulation (pipes, fittings, boilers, gaskets), fireproofing (panels, texture coats, sprayed products) and miscellaneous materials such as wallpaper, paints, and adhesives. Asbestos use in building construction was reduced in the late-1970s due to the health hazards associated with the inhalation of asbestos fibres. Buildings constructed in the early-to-mid-1980s may contain asbestos, as inventories of asbestos-containing materials (ACMs) were used up; generally,

buildings constructed or renovated during this period are more likely to contain non-friable ACMs such as floor tiles, sheet flooring and drywall joint compound.

The site is currently undeveloped and wooded. No environmental concerns were identified for the site pertaining to asbestos.

## 5.4 Urea Formaldehyde Foam Insulation (UFFI)

UFFI was developed in the 1950s as an improved means of insulating difficult-to-reach cavities in house walls. It was typically made at a construction site from a mixture of urea-formaldehyde resin, a foaming agent and compressed air. When the mixture was injected into the wall, urea and formaldehyde united and "cured" into an insulating foam plastic. During the 1970s, when concerns about energy efficiency led to efforts to improve home insulation in Canada, UFFI was widely used to retrofit existing houses. Most installations occurred between 1977 and its ban in Canada in 1980.

The site is currently undeveloped and wooded. No environmental concerns were identified for the site pertaining to UFFI.

## 5.5 Polychlorinated Biphenyls (PCBs)

PCBs are a group of chemicals that are extremely persistent in the environment and have been associated with numerous adverse health effects following exposure to high levels (e.g., due to accidental releases or occupational exposures). Exposure to low levels of PCBs, such as those normally found in the environment, is less likely to cause adverse health effects. PCBs were first manufactured in 1929 and were used for decades in many industrial materials such as sealing compounds, cutting oils, inks and paint additives. PCBs were also used in lubricants and coolants for electrical products such as transformers and fluorescent lamp ballasts. By 1979, concerns over the environmental impacts of PCBs led to a North American ban on manufacturing and importing PCBs.

The site is currently undeveloped and wooded. No environmental concerns were identified for the site pertaining to PCBs.

## 5.6 Lead

Lead is normally associated with old paints, weather flashing, old pipes and lead solder on copper pipes. The concentration of lead in paint has been closely regulated and allowable limits significantly decreased between 1950 and 1976. By 1976, Canadian regulations had restricted the use of lead in interior paints to 0.5% by weight, and by 2010 to 0.09%. Consumer paint sold in Canada and the United States since 1992 is considered virtually lead-free.

The site is currently undeveloped and wooded. No environmental concerns were identified for the site pertaining to lead.

## 5.7 Ozone-Depleting Materials (ODSs)

Chlorofluorocarbons are coolants that are typically found in air conditioning and refrigeration systems and are ODSs. The main concerns associated with these units are the prevention of coolant leaks and proper disposal of the coolants when the units are decommissioned. A certified air conditioning/refrigeration technician is required for any maintenance and disposal of ODS-containing units in accordance with the Nova Scotia *Ozone Layer Protection Regulations*.

The site is currently undeveloped and wooded. No equipment that may contain ODSs was observed on the site.

## 5.8 Waste and Hazardous Chemical Storage

The subject property is currently undeveloped and wooded. Minor amounts of miscellaneous debris (residential waste, sections of plastic culvert pipes) were noted on-site.

No environmental concerns were identified during site reconnaissance pertaining to waste and hazardous chemicals.

## 5.9 Water and Sewer

The site is currently unserviced. Upon development, the site will be serviced by two private water wells and a septic sewer system. The proposed drilled wells will be located at the northwest and northeast corners of the property. The septic system is proposed to be located on the southeast side of the site.

## 5.10 Surface Staining

No surface staining was noted during the site inspection.

## 5.11 Microbial Growth and Water Intrusion

The site is currently undeveloped and wooded. No environmental concerns were identified for the site pertaining to microbial growth or water intrusion.

## 5.12 Fill Material

No evidence of the presence of imported fill material representing a potential environmental concern was identified during site reconnaissance.

## 5.13 Air Emissions

Sources of air emissions that are suspected to result in residual contamination to the site were not identified. Further, no strong, pungent, or unusual odours were identified during site reconnaissance.

## 5.14 Electric and Magnetic Fields (EMFs)

EMFs are invisible forces that surround electrical equipment, power cords, and wires that carry electricity. On a daily basis, most people are exposed to EMFs at an extremely low frequency (ELF) from sources such as household wiring, lighting, appliances, computers and other electronics, and power transmission lines. EMFs are strongest when close to their source and rapidly decrease in strength with distance from the source. While it is known that EMFs at ELFs can cause weak electric currents to flow through the human body, scientific research has not established a link between exposure to these low intensity currents and any known health effects. Health Canada does not consider any precautionary measures are necessary regarding daily exposure to EMFs at ELFs.

No potential sources of EMFs were noted during the site investigation.

## 5.15 Noise and Vibration

The effects of noise and vibration on human health vary according to the susceptibility of the individual exposed, the nature of the noise/vibration and whether exposure occurs in the working environment or in the home.

No significant long-term sources of noise and/or vibration were identified at the site. These items are not suspected to be of significant environmental concern.

## 5.16 Potential Sources of Off-Site Contamination

Potential sources of off-site contamination may be migration of petroleum products or other chemicals from accidental leaks or spills on upgradient neighboring properties. During site reconnaissance, adjacent property usage was observed from the site and from publicly accessible locations. Adjacent property usage is summarized in Table 5-1.

Table 5-1 Adjacent Property Usage

Direction	Description of Adjacent Properties
North	Undeveloped wooded lands. Road development along north boundary.
East	Undeveloped wooded lands.
South	Undeveloped wooded lands and residential properties along Highway 7.
West	Undeveloped wooded lands.

No environmental concerns were identified for the site pertaining to adjacent property usage.

# 6 Conclusions

Based on the information gathered and observations made during the site reconnaissance, the assessment has revealed no environmental concerns at the site. No further assessment is currently recommended for the site.

However, some considerations to note with respect to future development of the site are noted below:

- Potential wetland areas and watercourses were observed on the north central section of the parcel. Standing water and low-lying wet areas were observed throughout the site in areas that had been cleared for test pit machinery access. NSDNRR's online WAM viewer indicated that no watercourses were running into or away from the site. The site has been determined to have an index of "well to moderately-well drained". The site should be assessed for wetlands and watercourses and development of the site must be conducted in accordance with provincial regulations and policies with respect to wetlands and watercourses, if present.

# 7 Report Use and Conditions

This report was prepared for the exclusive use of The Birches Nursery Home. It is based on data and information obtained during site visit by Englobe Corp. and is based solely upon the condition of the site on the date of such inspection, supplemented by information obtained and described herein.

The evaluation and conclusions contained in this report have been prepared in light of the expertise and experience of Englobe. In evaluating the site, Englobe has relied in good faith upon representation and information furnished by individuals noted in the report with respect to operations and existing property conditions and the historic use of the site to the extent that they have not been contradicted by data obtained by other sources. Accordingly, Englobe accepts no responsibility for any deficiency or inaccuracy in this report as a result of omissions, misstatements or misrepresentations of the persons interviewed. In addition, Englobe will not accept liability for loss, injury, claim or damage arising from any use or reliance on this report as a result of misrepresentation or fraudulent information.

Environmental conditions are dynamic in nature and changing circumstances in the environment and in the use of the site can alter radically the conclusions and information contained herein.

# Appendix A

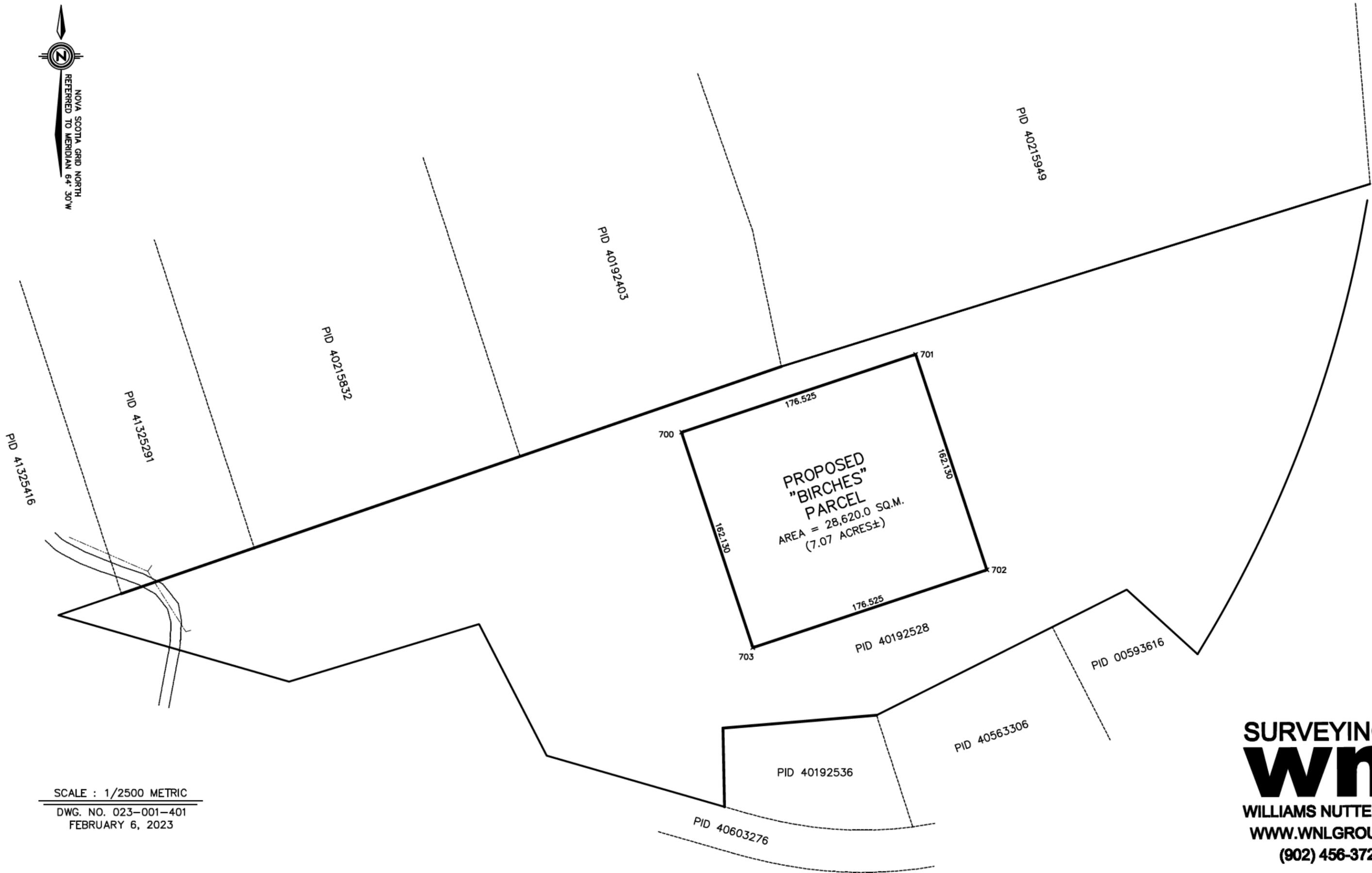
## SNSMR Source Information



**eNGLOBE**



NOVA SCOTIA GRID NORTH  
REFERRED TO MERIDIAN 64° 30'W



PROPOSED  
"BIRCHES"  
PARCEL  
AREA = 28,620.0 SQ.M.  
(7.07 ACRES±)

700 701 702 703

PID 40192536

PID 40192528

PID 40563306

PID 00593616

PID 40603276

PID 40215832

PID 40192403

PID 40215949

PID 41325291

PID 413251416

SCALE : 1/2500 METRIC

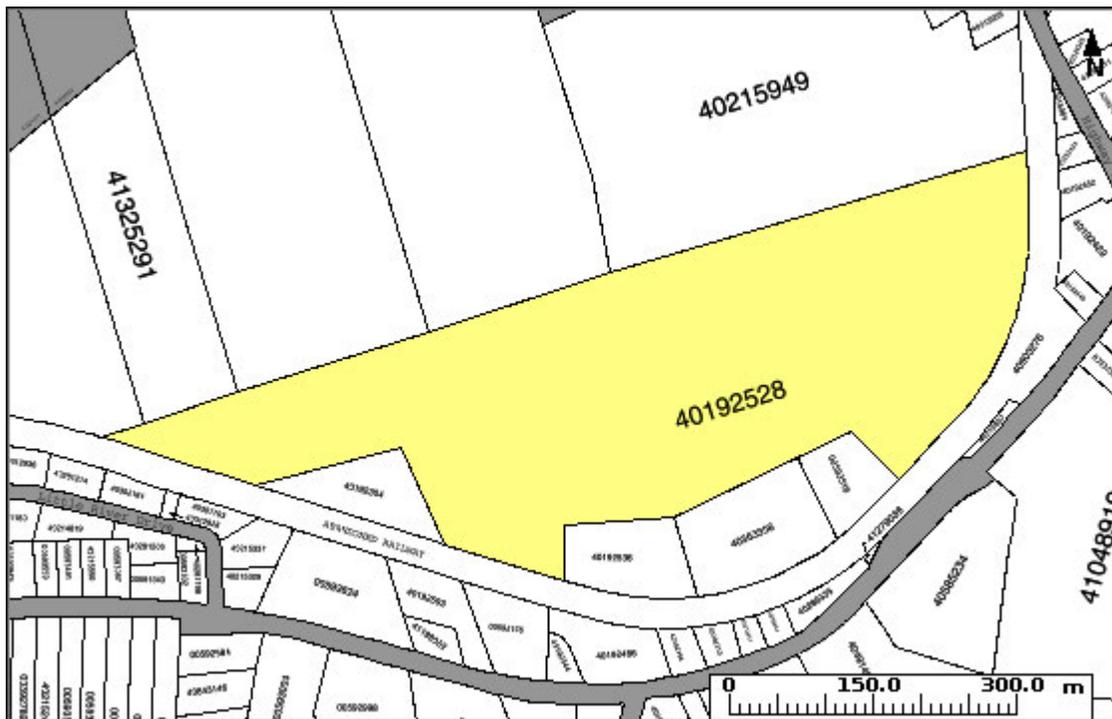
DWG. NO. 023-001-401  
FEBRUARY 6, 2023

**SURVEYING**  
**wnl**  
WILLIAMS NUTTER LTD.  
WWW.WNLGROUP.CA  
(902) 456-3723



## Property Online Map

Date: Jul 25, 2023 4:10:18 PM



**PID:** 40192528      **Owner:** HARBOUR GARDEN VILLAGE INC.      **AAN:** 04067231  
**County:** HALIFAX COUNTY      **Address:** ADDRESS UNDER REVIEW BY MUNICIPALITY      **Value:** \$9,500 (2023 RESIDENTIAL TAXABLE)  
**LR Status:** LAND REGISTRATION      MUSQUODOBOIT HARBOUR

The Provincial mapping is a graphical representation of property boundaries which approximate the size, configuration and location of parcels. Care has been taken to ensure the best possible quality, however, this map is not a land survey and is not intended to be used for legal descriptions or to calculate exact dimensions or area. The Provincial mapping is not conclusive as to the location, boundaries or extent of a parcel [*Land Registration Act* subsection 21(2)]. THIS IS NOT AN OFFICIAL RECORD.

### Property Online version 2.0

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Search Provincial Map Bulletin+Board 1 Help

### Land Registration View

\* Indicates interests inherited on subdivision or re-configuration of parcel

PID	<b>40192528</b>	Parcel Type	STANDARD PARCEL	Status	ACTIVE
Area	46.0 ACRE(S)	Parcel Access	PRIVATE	Manag. Unit	MU0868
Lot		Created	Apr 10, 1979 12:00:00AM		
PDCA Status	APPROVED	Municipal Unit	HALIFAX REGIONAL MUNICIPALITY	Manner of Tenure	NOT APPLICABLE
LR Status	LAND REGISTRATION	LR Date	Aug 03, 2017 11:27:40AM		

Location	County	Primary Location	Source
ADDRESS UNDER REVIEW BY MUNICIPALITY MUSQUODOBOIT HARBOUR	HALIFAX COUNTY	Yes	Not Assigned by Municipality
HIGHWAY 7 MUSQUODOBOIT HARBOUR	HALIFAX COUNTY	No	Not Assigned by Municipality

Comments

Shown as Parcel R-1 on Registered Plan No. 111652112

Assessment Account	Value	Tax District	Tax Ward	Tax Sub
<b>04067231</b>	\$9,500 (2023 RESIDENTIAL TAXABLE)	020	000	

[Back to Results](#) [Details View](#) [Parcel Archive View](#) [Map View](#)

### Registered Interests

Interest Holder (Qualifier)	Interest Holder Type	Mailing Address	Type	Year	Doc #	Book/Page/Plan	Registration Date	NS Non-Res?
HARBOUR GARDEN VILLAGE INC	FEE SIMPLE	6484 JUBILEE ROAD HALIFAX NS CA B3H 2H4	DEED	2022	<b>121725635</b> <a href="#">View Form</a> <a href="#">View Doc</a>		Dec 02 2022	No

### Farm Loan Board - Occupants & Mailing Addresses

Name	Interest Holder Type	Mailing Address
------	----------------------	-----------------

No Records Found

### Benefits to the Registered Interests

Benefit Details	Interest Holder Type	Type	Year	Doc #	Book/Page/Plan	Registration Date
TOGETHER WITH AN EASEMENT / RIGHT OF WAY	EASEMENT / RIGHT OF WAY HOLDER (BENEFIT)	DEED	1975	<b>28884</b> <a href="#">View Doc</a>	Book 2918 Page 732	Jul 10 1975
40192536	SERVIENT TENEMENT PID	DEED	1975	<b>28884</b> <a href="#">View Doc</a>	Book 2918 Page 732	Jul 10, 1975
TOGETHER WITH AN EASEMENT / RIGHT OF WAY	EASEMENT / RIGHT OF WAY HOLDER (BENEFIT)	EASEMENT/RIGHT OF WAY	2011	<b>99359797</b> <a href="#">View Doc</a>		Oct 20 2011
40603276	SERVIENT TENEMENT PID	EASEMENT/RIGHT OF WAY	2011	<b>99359797</b> <a href="#">View Doc</a>		Oct 20, 2011
TOGETHER WITH AN EASEMENT / RIGHT OF WAY	EASEMENT / RIGHT OF WAY HOLDER (BENEFIT)	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16 2015
40312928	SERVIENT TENEMENT PID	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16, 2015

### Burdens on the Registered Interests

Interest Holder (Qualifier)	Interest Holder Type	Mailing Address	Type	Year	Doc #	Book/Page/Plan	Registration Date
41348657	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16, 2015
41394172	EASEMENT/ROW HOLDER (BURDEN) DOMINANT PID	UNKNOWN	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16 2015
41348665	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16, 2015
41348673	EASEMENT/ROW HOLDER (BURDEN) DOMINANT PID	UNKNOWN	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16 2015
41348699	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	EASEMENT/RIGHT OF WAY	2015	<b>106496848</b> <a href="#">View Doc</a>		Jan 16, 2015

Property ID	Interest Holder (Burden)	Interest Holder Type	Registration Year	Document #	Registration Date
41394180	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41348681	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
NOVA SCOTIA POWER INCORPORATED	EASEMENT / RIGHT OF WAY HOLDER (BURDEN)	POST OFFICE BOX 910 HALIFAX NS CA B3J 2W5	2013	<a href="#">103635133</a> View Doc	Aug 21, 2013
40017238	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41325416	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394214	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394222	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394255	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41325291	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394206	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394164	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394230	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394248	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015
41394198	EASEMENT/ROW HOLDER (BURDEN) - DOMINANT PID	UNKNOWN	2015	<a href="#">106496848</a> View Doc	Jan 16, 2015

### Textual Qualifications on Title

Qualifications Text

### Tenants in Common not registered pursuant to the *Land Registration Act*

Interest Holder (Qualifier)	Interest Holder Type	Mailing Address	Type	Year	Doc #	Book/Page/Plan	Registration Date
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No Records Found

### Recorded Interests

Interest Holder (Qualifier)	Interest Holder Type	Mailing Address	Type	Year	Doc #	Book/Page/Plan	Registration Date
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No Records Found

### Parcel Description

All that certain lot, piece or parcel of land situate, lying and being in the district of Musquodoboit Harbour, County of Halifax, Province of Nova Scotia, and shown on plan showing remaining land of the Estate of Frances M. Smith lying north of the Dartmouth-Musquodoboit railway, dated 15 June 1975 and signed by R. J. Donovan, Nova Scotia land surveyor; said land being more particularly described as follows:

Beginning at a point on the north east sideline of the Dartmouth to Musquodoboit Railway where said sideline is intersected by the south boundary of land of Creighton O. Ritcey;

Thence eastwardly along the south boundary of lands of Creighton C. Ritcey, Stewart Rowlings, Gerald Ritcey, Bennett, and MacInnes, three thousand seventy-one and two tenths (3071.2) feet, more or less, to the sideline of the Dartmouth to Musquodoboit Railway;

Thence southeastwardly following the west sideline of the Dartmouth to Musquodoboit Railway a distance of eleven hundred and thirty (1130) feet, more or less, to land of Leone Worrell;

Thence northwestwardly along land of Leone Worrell a distance of two hundred and twenty-five (225) feet or to the northeast corner thereof;

Thence westwardly along land of Leone Worrell a distance of one hundred ninety-five and five tenths (195.5) feet to the northwest corner thereof;

Thence southwardly along land of Leone Worrell a distance of two hundred ninety-seven and five tenths (297.5) feet to said Railway's deline;

Thence westwardly along said Railway sideline a distance of four hundred and ten (410) feet or to land of F.G. Arthur;

Thence northwardly along land of F.G. Arthur a distance of two hundred and ninety-one (291) feet or to the northeast corner thereof;

Thence westwardly along land of F. G. Arthur a distance of one hundred and twenty-two (122) feet to the northwest corner thereof;

Thence southwardly along land of F. G. Arthur a distance of one hundred and sixty-seven (167) feet to a band;

Thence southwardly along land of F. G. Arthur a distance of one hundred (100) feet to the northeast sideline of the said Railway;

Thence northwestwardly along the northeast s deline of said Railway a distance of five hundred and seventy-one (571) feet or to land of Stewart Rowlings;  
 Thence northwardly along land of Stewart Rowlings a distance of three hundred forty-six and eight tenths (346.8) feet to the northwast corner thereof;  
 Thence westwardly along land of Stewart Rowlings a distance of four hundred seventy and three tenths (470.3) feet to said Railway;  
 Thence northwestwardly along the northeast s deline of said Railway a distance of six hundred thirty-one and nine tenths (631.9) feet to the point of beginning.  
 SAVING and EXCEPTING any lands forming lot 1 as identified on plan no. 27597.  
 Saving and excepting Parcel A as shown on Registered Plan No. 111652112 recorded in the Land Registration office for Halifax County .  
 TOGETHER WITH a right-of-way recorded by deed in book 2918 at page 732.  
 TOGETHER WITH an easement recorded as document no. 99359797.  
 TOGETHER WITH and SUBJECT TO an easement recorded as document no. 106496848.  
 SUBJECT TO a NSPI easement recorded as document no. 103635133.

\*\*\* Municipal Government Act, Part IX Compliance \*\*\*

Compliance:

The parcel is created by a subdivis on (details below) that has been filed under the Registry Act or registered under the Land Registration Act  
 Registration Distr ct: HALIFAX COUNTY  
 Registration Year: 2017  
 Plan or Document Number: 111652112

**Non-Enabling Documents**

Inst Type	Inst No	Year	Type	Book/Page	Registration System	Registration Date
Document	<a href="#">111691060</a> View Doc	2017	ADDITION OF PARCEL ACCESS/REMOVAL OF INTERESTS ON S/D		LAND REGISTRATION	Nov 06, 2017

**Non-Enabling Plans**

Inst Type	Inst No	Year	Type	Plan Name	Drawer Number	Registration Date
Plan	<a href="#">111652112</a> View Plan	2017	SUBDIVISION & AMALGAMATIONS	PLAN OF SURVEY OF LOT 1-A; BEING A SUBDIVISION AND CONSOLIDATION OF LANDS CONVEYED TO SCOTT W, ROWLINGS AND LOT 1, LANDS CONVEYED TO DAVID B. BALCOM AND MARGARET E. BALCOM		Oct 30, 2017
Plan	<a href="#">103635240</a> View Plan	2013	DOCUMENT ATTACHMENT	ATTACHMENT TO DOCUMENT NO. 103635133		Aug 21, 2013
Plan	<a href="#">99359821</a> View Plan	2011	DOCUMENT ATTACHMENT	ATTACHMENT TO DOCUMENT NO 99359797		Oct 20, 2011

**AFR Bundles**

Inst Type	Inst No	Year	Type	Filing Reference	Instrument Date
<i>No AFR Bundles Found</i>					

**Parcel Relationships**

Related PID	Type of Relationship
<a href="#">40192536</a>	CONSOLIDATED - NOT RELATED TO
<a href="#">40563306</a>	INFANT PARCEL

[Back to Results](#)
[Details View](#)
[Parcel Archive View](#)
[Map View](#)

This parcel IS REGISTERED PURSUANT TO THE *Land Registration Act*. The registered owner of the registered interest owns the interest defined in this register in respect of the parcel described in the register, subject to any discrepancy in the locat on, boundaries or extent of the parcel and subject to the overriding interests [*Land Registration Act* subsection 20(1)].

No representations whatsoever are made as to the val dity or effect of recorded documents listed in this parcel register. The description of the parcel is not conclusive as to the locat on, boundaries or extent of the parcel [*Land Registration Act* subsection 21(1)].

[Boundary/Area Problem](#)
[General Problem](#)
[Municipal Tax Query](#)

**Property Online version 2.0**

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Please feel free to [Submit Problems](#) you find with the Property Online web site.

Compression: Off

# Appendix B

## Site Photographs





Photo 1 - Road development along the north boundary of site.



Photo 1: Example area of access for test pit locations near the northern boundary.



Photo 3 - Example of backfilled test pit location within the site boundary.



Photo 2: Standing water near the north-eastern boundary.



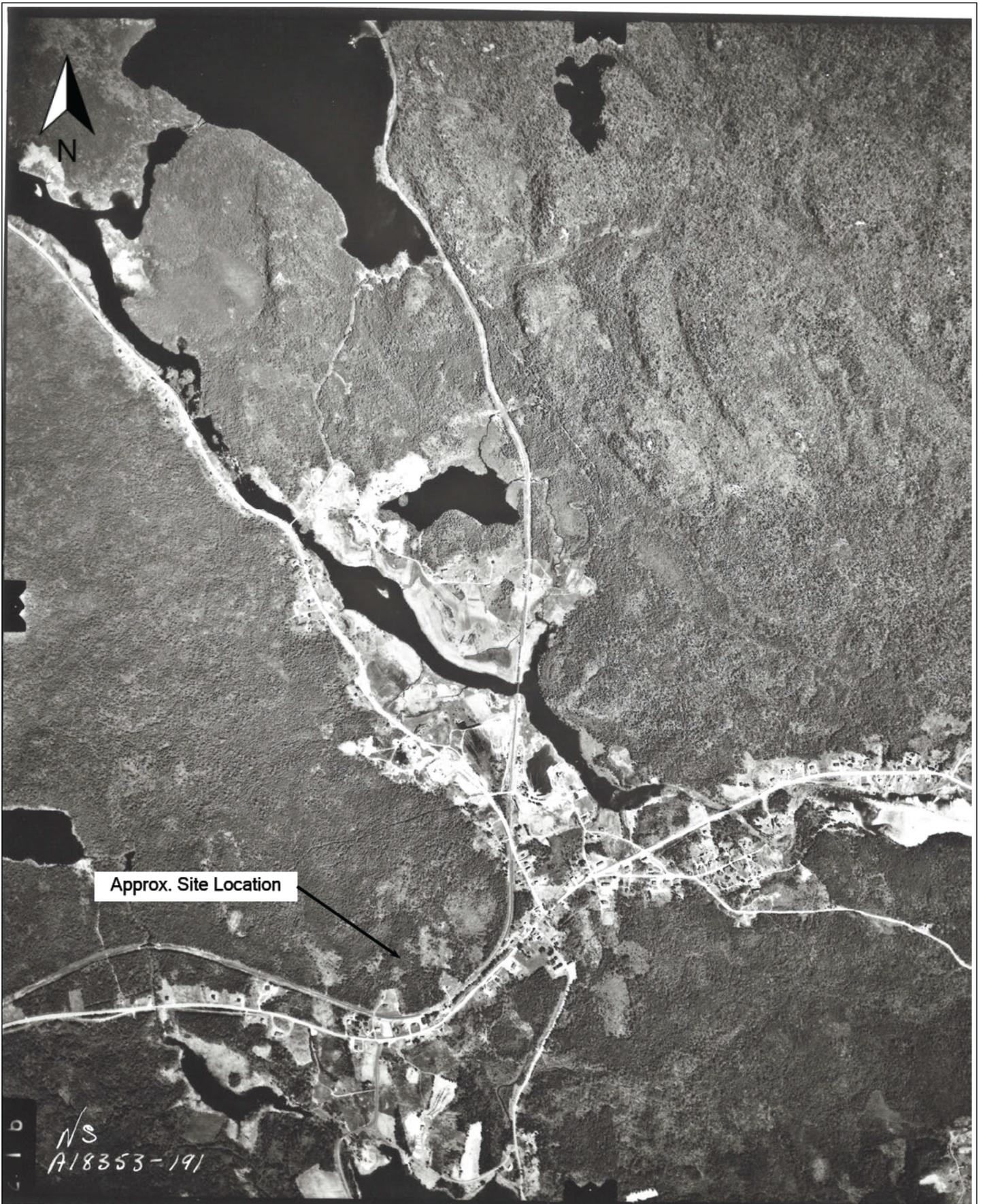
Photo 3: Low lying potential wetland area along the north-eastern site boundary.

# Appendix C

## Aerial Photographs



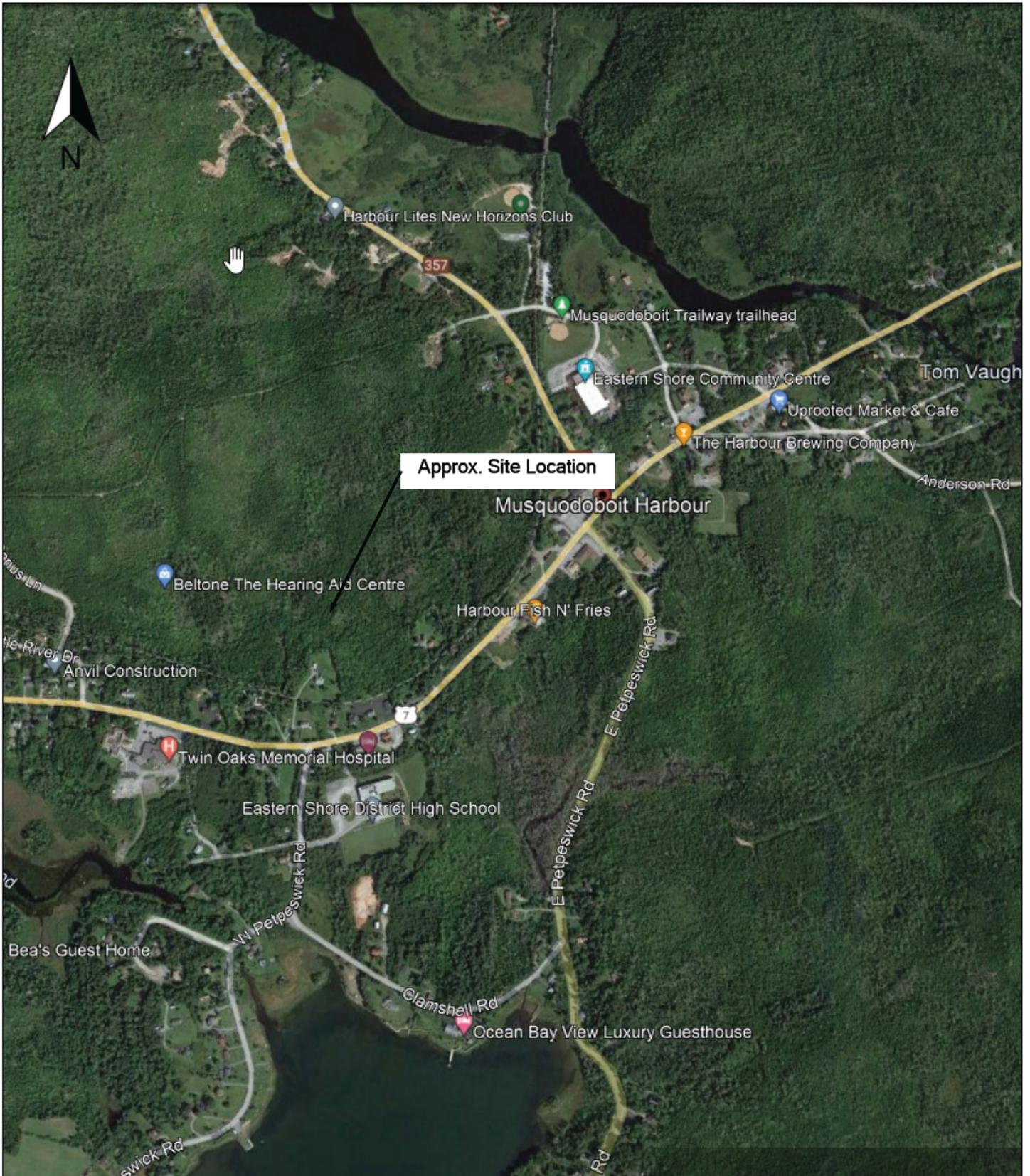
**eNGLOBE**











	<p>Ref.: 2307051.000          Date: August 2023          Scale: 1:10,000 (Approx.)</p>	<p>2002 - Google Earth Aerial Photograph          Phase I Environmental Site Assessment          Portion of PID No. 40192528, Musquodoboit Harbour,          Nova Scotia</p>	<p>Figure C-5</p>
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# Appendix D

## Supporting Documentation



**eNGLOBE**

July 24, 2023

Our file # ENV-2023-2511

**Email:** [duncan.nicholson@englobecorp.com](mailto:duncan.nicholson@englobecorp.com)

Duncan Nicholson  
Englobe  
97 Troop Avenue  
Dartmouth NS B3B 2A7

**RE: PID 40192528 Musquodoboit Harbour**

I refer to your enquiry of the Environmental Registry received on July 12, 2023. We acknowledge receipt of payment for 1 property.

Enclosed is the information that was located through the Environmental Registry with regards to the above referenced property.

Nova Scotia Environment makes no representations or warranties on the accuracy or completeness of the information provided.

Sincerely,

  
Tina Skeir  
Information Access Officer



30 Damascus Road, Suite 115  
Bedford, NS  
Canada B4A 0C1

902-424-7773 T  
902-424-0597 F  
www.novascotia.ca

Our File Number: 96000-32-BED-2017-109718

External Reference #: HRM# 21324

September 20, 2017

MEGAN BACKOS  
HALIFAX REGIONAL MUNICIPALITY  
BOX 1749  
HALIFAX NS, B3J3A5

COPY

Dear Megan Backos:

**RE: Request for Comment of Plan of Subdivision for Lot Number(s): 1-A, PID:  
40192528, 40192536, Musquodoboit Harbour, Halifax County, Nova Scotia.**

---

A plan of the subdivision, plan number 017-074-100, dated August 8, 2017 prepared by Michael Williams has been submitted in support of this subdivision application.

Based on the information available, Lot 1-A has an existing septic system or field, and is increasing in size through a consolidation. The department has no objection to the consolidation of the aforementioned properties.

If you have any questions or comments, please contact me at 902-424-7773.

Yours truly,



Grant Brown  
Inspector Specialist

Cc:  
Williams Nutter LTD



LOT IDENTIFIERS 1 AND 1-A AND PARCEL IDENTIFIERS A AND R-1 (REMAINING LANDS) ORIGINATE WITH THIS PLAN.

PID 40192528 TO BE SUBDIVIDED TO CREATE PARCEL A AND PARCEL R-1 (REMAINING LANDS).

PARCEL A TO BE CONSOLIDATED WITH LOT 1 TO FORM LOT 1-A.

FINAL APPROVAL IS REQUESTED FOR LOT 1-A.

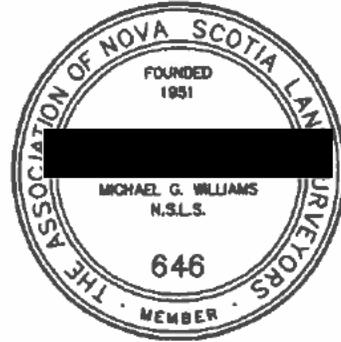
**SURVEYOR'S CERTIFICATE:**

I, MICHAEL G. WILLIAMS, NOVA SCOTIA LAND SURVEYOR, HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAN WAS CONDUCTED UNDER MY SUPERVISION AND THAT THE SURVEY AND PLAN WERE MADE IN ACCORDANCE WITH THE LAND SURVEYORS ACT, REGULATIONS AND STANDARDS MADE THEREUNDER.

DATED THIS 8TH DAY OF AUGUST, 2017.

[Redacted Signature]

MICHAEL G. WILLIAMS, N.S.L.S.



**SURVEYING** **WILLIAMS NUTTER LTD.**  
**wnl** **WWW.WNLGROUP.CA**  
**(902) 456-3723**

Plan of Survey of **LOT 1-A**; being a  
Subdivision and Consolidation of  
Lands Conveyed to  
and **LOT 1**, Lands  
Conveyed to

**HIGHWAY 7**  
**MUSQUODOBOIT HARBOUR**



SCALE : 1"=30'  
DRAWING NO. 017-074-100  
AUGUST 8, 2017

SUBDIVISION FILE NO.

---21324



**eNGLOBE**