From:	Brett Espensen
To:	Chris Roome; jason rotella
Cc:	Ian Barrett; Diana Vasu; ralph.rotella@gmail.com
Subject:	480 Northland - EIS and Addendums Package
Date:	August 23, 2023 4:44:54 PM
Attachments:	C16086 - 480 Northland - EIS Addendums.pdf 480 Northland EIS - November 2019 email version.pdf

Hi Chris,

Jason informed us that you had requested a copy of the final EIS. Please see attached the EIS as well as a PDF compiling the addendums also submitted as part of the EIS.
Also, as you may be aware, we are in the process of completing the transplanting of locally rare and uncommon species on the site and anticipate all works being completed by October 31st, 2023.

Regards,
Brett

Brett Espensen, B.A.(Hons.), EMA, CISEC
Colville Consulting Inc.
432 Niagara Street, Unit 2
St. Catharines, ON L2M 4W3
Tel.: 905 935-2161, Ext. 103
Cell: 905-246-8810
Website: www.colvilleconsulting.com

OUT OF OFFICE ALERT - COVID-19
Please be advised that I am currently working remotely in accordance with government recommendations for social distancing and company Health & Safety Policies. I am working regular hours and am available by email, phone or video conference.

ENVIRONMENTAL IMPACT STUDY

NORTHLAND AVE PROPERTY – CITY OF PORT COLBORNE

Prepared for:

Mr. Ralph Rotella

Prepared by:

Colville Consulting Inc.

File: C16086
November 2019

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1.0 INTRODUCTION

Colville Consulting Inc. was retained by Mr. Ralph Rotella to prepare an Environmental Impact Study (EIS) of the property located north of 480 Northland Avenue, in the City of Port Colborne (hereafter referred to as the Subject Property). This EIS has been prepared to assess potential impacts associated with the creation of four residential lots on natural heritage features on and adjacent to the Subject Property. A summary of our assessment is included below.

1.1 Description of the Subject Lands

The Subject Property is approximately 0.88 hectares (12.6 acres) in size and is described as Part Lot 30, Concession 2, in the Township of Humberstone (See Figure 1). The majority of this property contains a former church and associated amenity areas, with portions of a woodland being located east, west and north of the former church. It appears that the church building may have been converted for residential use in the past, however it appears that the building is currently vacant.

The Subject Property is generally flat and appears to drain from north to south. AgMaps describes the soils in the general area as Franktown – shallow phase, consisting of Loam and Clay Loam, however due to the build nature of the property, it is likely that fill material has been added to the site.

Based on our review of mapping, a portion of the Subject Property has been identified as part of a Significant Woodland and designated as an Environmental Conservation Area (ECA) in the Niagara Region and City of Port Colborne Official Plans. The extent of the natural heritage features on and adjacent to the property are illustrated in Figure 2.

1.2 Description of Proposed Development

It is our understanding that the project consists of severing the existing parcel to create a total of 4 residential lots, all fronting onto Northland Avenue. It is expected that the land use on each of the created parcels will be single family residential, however no details of house locations have been prepared as of yet.

2.0 Environmental Policy

2.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act, and came into effect on May 22, 1996. The PPS was updated in 1997 and more recently in 2014. It applies to all applications submitted after April 30, 2014 and states that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. This EIS has been prepared in compliance with Part V, Policy 2.1 of the PPS, which deals specifically with the long term protection and management of natural heritage features and areas.

The intent of the PPS is to ensure that natural features and areas be protected for the long term. The PPS indicates that diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas and surface water and ground water features.

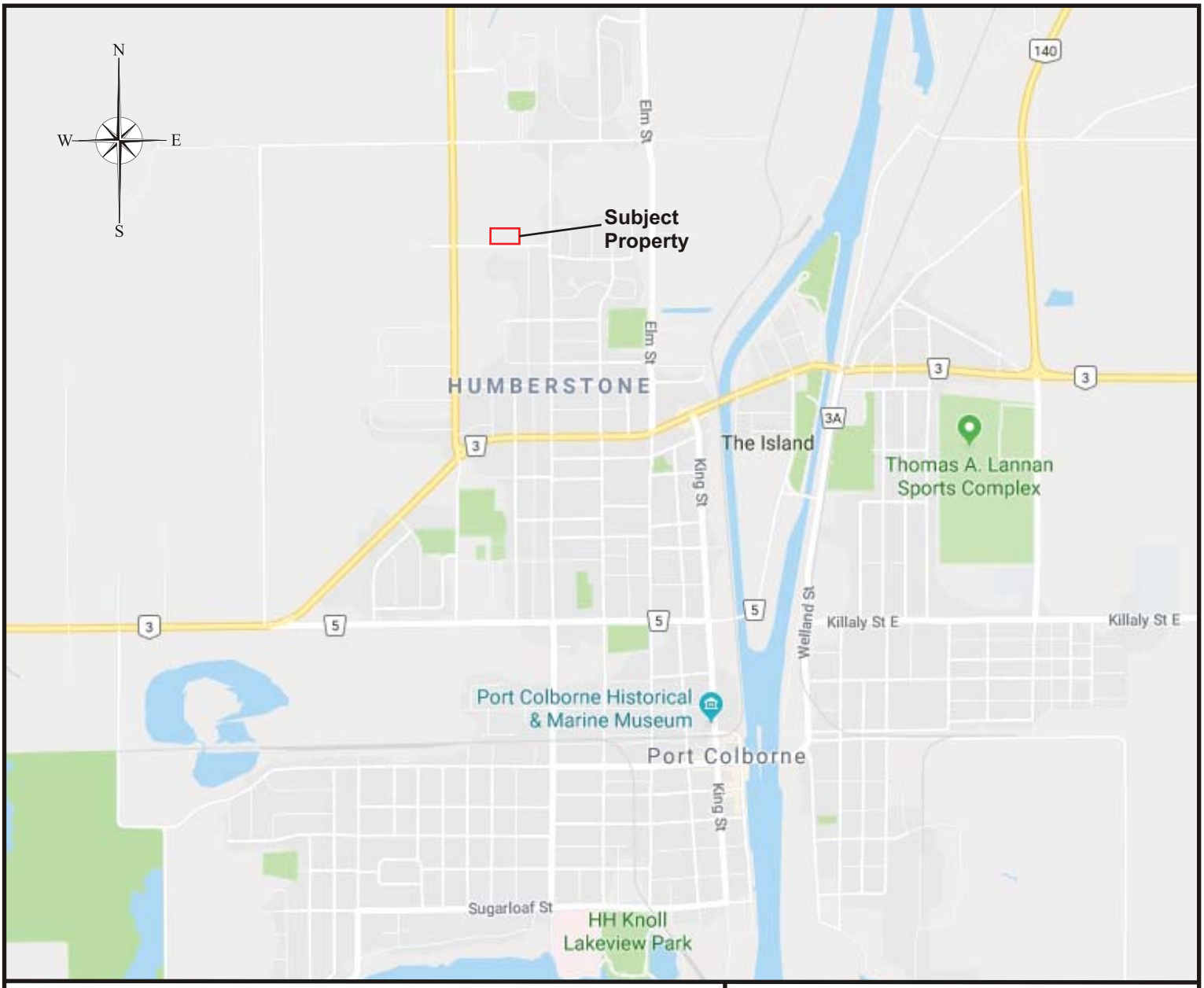

Figure 1
Location of Subject Property

Environmental Impact Statement
480 Northland Avenue

Prepared for: **Mr. Ralph Rotella**

Prepared by: COLVILLE CONSULTING INC.

July 2018

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Legend

- Subject Property
- Significant Woodland

Figure 2
Extent of Mapped Natural Heritage Features on the Subject Property

Environmental Impact Statement
480 Northland Avenue

Prepared for: **Mr. Ralph Rotella**

Prepared by: COLVILLE CONSULTING INC.

July 2018

FILE: C16086

Natural heritage features and areas are defined in the PPS as those which are important for their environmental and social values as a legacy of the natural landscapes of an area and include: significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant habitat of endangered species and threatened species, significant wildlife habitat and significant areas of natural and scientific interest.

Unless it can be demonstrated that there will be no negative impacts on the natural heritage features or their ecological functions, development and site alteration is not permitted in or adjacent to:

- significant woodlands and valleylands south and east of the Canadian Shield (Ecoregions 6E and 7E);
- significant wildlife habitat;
- significant fish habitat; *and*
- significant areas of natural and scientific interest.

Furthermore, development and site alteration shall not be permitted on adjacent lands to the natural heritage features identified above, unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

2.2 Niagara Region Official Plan

Regional Policy Plan Amendment 187 was approved by the Ontario Municipal Board on April 16, 2008, and is an update to Section 7 (Environmental Policy) of the Regional Niagara Policy Plan (2007). This amendment conforms to Section 2.1 of the PPS.

Among other important environmental considerations, the policies address the Region's natural vegetation and wildlife, water resources, landforms, geology and soils, and core natural heritage features such as woodlands, wetlands and fish habitat. Those natural areas considered to be of provincial importance, as identified in the PPS, are identified in the Region's Core Natural Heritage System. The following components are identified in the Region's Core Natural Heritage System:

- Core Natural Areas which are classified as Environmental Protection Areas (EPA) and Environmental Conservation Areas (ECA);
- Potential Natural Heritage Corridors connecting the Core Natural Areas;
- Greenbelt Natural Heritage and Water Resources System; and
- Fish Habitat (this includes key hydrologic features).

Environmental Protection Areas (EPA) include: provincially significant wetlands, provincially significant Life Science ANSIs, and significant habitat of endangered and threatened species.

Environmental Conservation Areas (ECA) include: significant woodlands, significant wildlife habitat, significant habitat of species of concern, regionally significant Life Science ANSIs, other evaluated wetlands, significant valleylands, savannahs and tallgrass prairies, alvars and publicly owned conservation lands.

The Core Natural Heritage Map which accompanies Amendment 187 illustrates the Region's Core Natural Heritage System and includes EPA, ECA, potential corridor, fish habitat and the Greenbelt Natural Heritage and Water Resources System. This map indicates that portions of the Subject Property have been identified as ECA due to the presence of a Significant Woodland.

For development applications that are proposed within or adjacent to the Core Natural Heritage System, Regional policies require that an EIS be completed. Table 1, which was modified from Amendment 187, illustrates under what circumstances an EIS is required. For example, because there is a Significant Woodland located within 50m of the severances, an EIS is required.

Table 1: EIS requirements for lands adjacent to Core Natural Areas.

Core Natural Heritage System Component	Adjacent Lands Where an EIS Shall Be Required for Development Applications
Environmental Protection Area	
➢ Provincially Significant Life Science ANSI	All lands within 50 metres.
➢ Significant Habitat of Threatened and Endangered Species	All lands within 50 metres.
➢ Provincially Significant Wetland.	All lands within 120 metres.
Environmental Conservation Area	
➢ Regionally Significant Life Science ANSIs;	All lands within 50 metres.
➢ Significant Woodlands;	All lands within 50 metres.
➢ Significant Wildlife Habitat;	All lands within 50 metres.
➢ Significant Habitat for Species of Concern;	All lands within 50 metres.
➢ Other evaluated wetlands;	All lands within 50 metres.
➢ Significant Valleylands;	All lands within 50 metres.
➢ Savannahs, Tallgrass Prairies and alvars;	All lands within 50 metres.
➢ Publicly owned conservation lands.	All lands within 50 metres.
Fish Habitat	All lands within 30 metres of the top of bank.

Source: Table 7-1 of the Regional Policy Plan Amendment 187 (2008).

2.3 City of Port Colborne Official Plan

The City of Port Colborne's environmental policies are contained within the Official Plan (OP) and are intended to be complimentary to Provincial and Regional policies. Through the implementation of policies within the OP, the City intends to participate in the protection and conservation of natural heritage features within the geographical jurisdiction of the Town.

The City of Port Colborne's Natural Heritage Policies are contained within Section 4 of the OP and includes polices specific to lands designated as 'Significant Natural Areas' which includes both Environmental Conservation Areas and Significant Woodlands. Schedule 'B2' of the OP indicates that the Subject Property is designated as Significant Woodland.

2.4 Niagara Peninsula Conservation Authority

The Niagara Peninsula Conservation Authority (NPCA) is responsible for the administration of Ontario Regulation 155/06, which provides the NPCA jurisdiction to regulate development activities within and adjacent to flood and erosion hazards, valleys, watercourses and wetlands. The guiding principal of this regulation is to ensure any development works proposed within regulated areas will have no adverse impact on flooding, erosion, pollution, dynamic beaches and the conservation of land.

In order to administer Ontario Regulation 155/06, the Niagara Peninsula Conservation Authority (NPCA) has created a document titled Policies for the Administration of Ontario Regulation 155/06 and the Planning Act (NPCA, 2018). The purpose of the document is to provide guidance for development applications that are located in and adjacent to regulated areas. No portion of the Subject Property is regulated by the NPCA.

3.0 Study Approach

3.1 Background Review

Prior to the commencement of primary field inventories, a review of background material available for the Subject Property and surrounding area was conducted. Some of the background information reviewed included:

- City of Port Colborne Official Plan (2017);
- Niagara Region Official Plan (2015);
- NPCA Policy Document: Policies of the Administration of Ontario Regulation 155/06 and Planning Act (2018);
- NPCA's Natural Areas Inventory (2010); and
- Background data available from the Ministry of Natural Resources and Forestry.

3.2 Field Inventories

In order to identify potential natural heritage constraints on the property, Colville Consulting Inc. conducted the following inventories:

1) Spring, summer and fall botanical inventories of the property, as well as an Ecological Land Classification (ELC) description of the property;
2) Breeding bird surveys;
3) Assessment of Bat Roosting Habitat and,
4) Wildlife surveys to document any additional wildlife species using the property.

The methods employed for each of the above components are provided in the appropriate sections below.

4.0 Study Findings

4.1 Botanical Inventories and Vegetation Mapping

Detailed botanical inventories of the property were conducted on November 17, 2016, May 3 and July 27, 2017, and October 2, 2019. Vegetation communities (ELC units – following Lee et al. 1998) were mapped and described, and a list of botanical species was compiled (see Appendix A). Species status was assessed for Ontario (Oldham and Brinker 2009) and Niagara Region (Oldham 2010). The results of our observations and assessment are provided below.

4.1.1 Botanical Inventories

One hundred and nineteen (119) plant species were documented on the Subject Property during our inventories (see Appendix A).

Of these species, one is considered Endangered in the province (Butternut), three are considered locally rare (Yellow Giant Hyssop, Tall Bellflower and James' Sedge) and five are considered locally uncommon (Black Maple, Arrow-leaved Aster, Northern Dewberry, Bladdernut and Wild Coffee). The locations of these species are illustrated in Figure 3.

Two Butternuts were located north of the property (see Figure 3). One specimen appears to be in fair condition and is approximately 30-40cm dbh (diameter at breast height), while the second specimen is exhibiting dieback in the canopy.

The three locally rare species were all observed north of the property line in the forest interior. A patch of Yellow Giant Hyssop appears in the in forest ground layer, as well as a large patch of Tall Bellflower. James' Sedge was also observed in the forest interior, north of the property line.

The locally uncommon Black Maple and Arrow-leaved Aster were observed mostly on the western portion of the Subject Property and the Northern Dewberry was observed along the northern property line. Bladdernut and Wild Coffee were observed in the northwest corner of the property.

4.1.2 Vegetation Communities

One natural vegetation community occurs on and adjacent to the Subject Property, with the central portion of the property consisting of an abandoned church building, with associated parking area and amenity space. The front yard of the church building consists of a mowed yard with mature forested area which is mowed in the understory.

A detailed description of the treed vegetation community is provided below and the extent is illustrated in Figure 3. Photos illustrating the vegetation community and site conditions of the property are provided in Appendix B.

FODR1-1 Dry-Fresh Sugar Maple-Hardwood Calcareous Shallow Deciduous Forest

The periphery of the Subject Property supports a Dry - Fresh Sugar Maple - Hardwood Calcareous Shallow Deciduous Forest Type (FODR1-1), which occurs on shallow soils over the Onondaga Escarpment.

Legend

	Subject Property
FODR1-1	Dry-Fresh Sugar Maple-Hardwood Calcareous Shallow Deciduous Forest Type
	Location of Butternut
	Location of Yellow Giant Hyssop
	Location of Tall Bellflower
	Location of Bladdernut
	Location of Wild Coffee
	General Location of James' Sedge and Northern Dewberry
	General Location of Black Maple and Arrow-leaved Aster
	Location of Eastern Wood-pewee

Figure 3
Extent of Vegetation Communities on the Subject Property

Environmental Impact Statement
480 Northland Ave

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Prepared by: COLVILLE CONSULTING INC.

October 2019

FILE: C16086

The closed forest canopy (greater than 60% cover) is dominated by Sugar Maple, with occasional associates in the canopy including Black Maple, Red Oak, Shagbark Hickory, Bitternut Hickory, Basswood, and rarely Black Walnut. The sub-canopy layer ranges from 25-60% cover, with Hop Hornbeam, Basswood and Sugar Maple being the most abundant species in this layer. A dense shrub layer (>60% cover) is dominated by Choke Cherry, along with regenerating ash and other tree species. The diverse and dense cover of the ground layer (>60% cover) is dominated by Purple-flowered Blue Cohosh, Yellow Trout Lily, Garlic Mustard, Spotted Crane's-bill, Running Strawberry-bush and Mayapple.

The forest community on this property is contiguous with a larger forest community on the lands north of the Subject Property. The highest quality areas of this larger forest block primarily occur immediately north of the Subject Property, and only extends onto the Subject Property in the northeast and northwest corners of the property. A line of fill\stone aggregate that was likely placed on the property at the time of the church construction appears to limit the extent of high quality woodland on this property and has displaced native vegetation.

4.2 Wildlife and Wildlife Habitat

4.2.1 Breeding Bird Survey

Breeding bird surveys were conducted on May 30 and June 19, 2017 to inventory breeding birds on the Subject Property. Surveys were completed at least 15 days apart, under suitable weather conditions with little to no wind or precipitation. A thorough search of the Subject Property was completed during both surveys between dawn and no later than 10:00 am. All birds seen or heard calling were recorded and the highest breeding evidence per species was determined in accordance with the criteria of the Atlas of the Breeding Birds of Ontario (Cadman et al. 2007).

A total of 25 species of birds were observed or heard on or above the Subject Property and 4 additional species of birds were heard on lands adjacent to the property. According to Ontario conservation status ranks (S-rank) designations, with the exception of two non-native species, all other recorded species are considered to be "secure" (S5 - common, widespread and abundant) or "apparently secure" (S4 - uncommon but not rare) in the province of Ontario. The recorded species are also considered to be very common to common permanent or summer residents in the Niagara Region with the exception of the uncommon summer resident Cooper's Hawk, Ruby-throated Hummingbird, Turkey Vulture, White-breasted Nuthatch, and uncommon permanent resident, Carolina Wren, Hairy Woodpecker and Red-bellied Woodpecker (Niagara Natural Areas Inventory, 2010).

The Barn Swallows observed flying and calling over the Subject Property on the second site visit are listed as Threatened under Ontario's Endangered Species Act. 2007 (ESA) and have been designated as Threatened in Canada by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Present or past nesting evidence was not observed on any part of the existing buildings on the Subject Property.

The Eastern Wood-pewee heard calling on the first site visit, in the adjacent woodland north of the Subject Property, is designated as Special Concern provincially and federally.

Table 2: Results of breeding bird surveys.

Species	S Rank	Niagara Status*	Subject Property Woodland/ Treed	Adjacent Lands	Highest Breeding Evidence**	Breeding Code***
American Crow	S5B	C R	X	X	PO	H
American Goldfinch	S5B	C R	X	X	PO	S
American Robin	S5B	VC R	X	X	PR	A
Barn Swallow	S4B	VC R	X	X	PO	S
Black-capped Chickadee	S5	C P		X	PO	S
Blue Jay	S5	VC P	X	X	PO	H
Brown-headed Cowbird	S4B	VC R		X	PO	S
Carolina Wren	S4	U P	X	X	PO	S
Cedar Waxwing	S5B	C R	X	X	PO	H
Chipping Sparrow	S5B	C R	X	X	PO	H
Common Grackle	S5B	VC R	X	X	PO	S
Cooper's Hawk	S4	U R	X	X	PO	H
Downy Woodpecker	S5	C P	X		PO	S
Eastern Wood-pewee	S4B	C R		X	PO	S
European Starling	SNA	VC P	X	X	PO	S
Gray Catbird	S4B	C R	X	X	PR	A
Hairy Woodpecker	S5	U P	X		PO	S
House Sparrow	SNA	VC P	X	X	PO	S
House Wren	S5B	C R	X		PO	S
Indigo Bunting	S4B	C R		X	PR	A
Northern Cardinal	S5	C P	X	X	PO	S
Northern Flicker	S4B	C R	X		PO	S
Red-bellied Woodpecker	S4	U P	X	X	CO	NY
Red-eyed Vireo	S5B	C R	X	X	PO	S
Ring-billed Gull	S5B,S4N	VC R	X	X	OBS	X
Ruby-throated Hummingbird	S5B	U R	X	X	PO	H
Turkey Vulture	S5B	U R	X		PO	H
White-breasted Nuthatch	S5	U R	X	X	PO	S
Yellow Warbler	S5B	C R	X	X	PO	S

* VC – very common; C – common; U – uncommon; UR – Uncommon to rare; O – Occasional; P – permanent resident; R – summer resident; S - Straggler (Niagara Natural Areas Inventory, 2010)

** OBS – observed, no evidence of breeding; PO – possible breeding; PR – probable breeding; CO - confirmed breeding

*** X – observed in its breeding season, no evidence of breeding

H – species observed in its breeding season in suitable nesting habitat

S – singing male present in its breeding season in suitable nesting habitat

P – pair observed in their breeding season in suitable nesting habitat

A – agitated behavior or anxiety calls of an adult

FY – recently fledged young

CF – adult carrying food for young

NY – nest with young

4.2.2 Incidental Wildlife Observations

Incidental wildlife observations, including signs, were recorded during both the botanical and breeding bird survey visits. Observations include Grey Squirrel, Eastern Chipmunk and evidence of bats. Evidence of bats using the building was observed in the form of bat guano accumulations below the East peak of the building, however a bat exclusion door had been installed and it is unlikely that the building is still being used by bats.

Active hand searches (including searches of debris) were completed during each visit to the property, as well as during site visits conducted on September 27, 2016 and April 13, May 18, June 1 and July 6, 2017. One amphibian species, the Eastern Red-backed Salamander, was observed during these observations. No reptile species were observed during our searches.

4.2.3 Assessment of Potential Bat Roosting Habitat

During the summer, the Little Brown Myotis, Northern Myotis, Eastern Small-footed Myotis and Tri-coloured Bats are found in a variety of forested habitats, as well as abandoned buildings, barns and attics. In forested habitats, cavities in trees, loose bark, foliage and other cover objects are used for roosting. These species forage in a variety of habitats where flying insects and spiders are present, often in association with wetlands, ponds and streams. Overwintering typically occurs in caves.

An assessment of potential bat roosting habitat was conducted on April 4 and June 1, 2017 using methods described in MNRF (2017b). The March 21, 2017 visit was intended to inventory tree cavities and the June 5, 2017 was intended to identify any dead foliage on live oak and maple trees.

From our observations of trees on the property, no cavity trees and no dead foliage on live trees were noted. Although it is possible that small cavities may be present in trees on the property, it is not likely that these trees are providing significant roosting habitat.

As Little Brown Bats are known to utilize structures for roosting, the former church on the property was examined for evidence of bat use. During our observations it was noted that a bat exclusion door had been installed on the church building, likely eliminating the most probable entrance to the building.

5.0 ASSESSMENT OF SIGNIFICANT NATURAL HERITAGE FEATURES

5.1 Species at Risk

5.1.1 Significant Habitat of Endangered and Threatened Species

One Endangered and one Threatened species were observed on or adjacent to the Subject Property during our assessments. As illustrated in Figure 3, two Butternuts (designated as Endangered in Ontario) were documented north of the property line, however one individual appeared to be declining in health. Outward characteristics suggest that these individuals represent genetically pure Butternut.

Since both Butternuts are located north of the Subject Property, the proposed development will not have a direct impact on either of these individuals. To help avoid impacts to these trees, it is recommended that no excavation or site grading occur within the dripline of these trees, which are located outside of the property boundaries.

Several Barn Swallows (designated as Threatened in Ontario) were documented flying and calling above the Subject Property on the second site visit. No nests were observed on the outside of the structures and no behavior suggesting potential nests inside the structures (i.e., flying in, out or around the buildings) was observed. It is therefore our assessment that the Subject Property is providing incidental foraging habitat for this species, but is not providing a significant habitat function.

As part of our assessment of this property we submitted an information request to the Ministry of Natural Resources and Forestry (MNRF), who in their reply indicated that two additional Endangered species (Acadian Flycatcher and Yellow-breasted Chat) have been known to occur in this area (see Appendix C). Typical habitat for these species is not present on the property and neither of these species were documented using the property during our surveys.

Additionally, a species at risk screening conducted for this property suggest that potential or suitable habitat for Eastern Flowering Dogwood (Endangered) and White Wood Aster (Threatened) are located on the property (see Appendix D). Neither of these species were documented during inventories, and therefore the property is not providing habitat for these species.

5.1.2 Species of Conservation Concern

No species of Special Concern were documented on the property during our assessments, however an Eastern Wood Pewee was heard calling from the adjacent property to the north during the first breeding bird survey. It is suspected that the woodland located to the north of the property does provide suitable habitat for this species, however no portion of the Subject Property is providing habitat for this species. The anticipated extent of potential habitat of Eastern Wood-pewee adjacent to the property is illustrated in Figure 4. It is suspected that the narrow nature of the woodland on the east and west sides of the property limits use of the property by this species, and therefore these areas were excluded as potential habitat.

Correspondence from MNRF indicates that Red-headed Woodpecker, Wood Thrush, Snapping Turtle and Eastern Ribbonsnake are known to occur in the vicinity of the property. Although potential habitat for Red-headed Woodpecker and Wood Thrush are located on and adjacent to the property, neither of these species were observed during breeding bird surveys, suggesting that the property and adjacent woodland do not provide habitat for these species. Potential habitat for Snapping Turtle and Eastern Ribbonsnake does not occur on or adjacent to the property, and neither of these species were observed during our surveys. It is therefore our assessment that the property is not providing significant habitat for these species.

In addition to the species listed above, three species observed during the field visit are designated as locally rare (Yellow Giant Hyssop, Tall Bellflower and James' Sedge). All three occurred north of the property on the adjacent lands and are not present on the Subject Property. Additionally, five species designated as locally uncommon (Arrow-leaved Aster, Black Maple, Northern Dewberry, Bladdernut and Wild Coffee) were documented on and adjacent to the property. The locations of these species are illustrated in Figure 3. Mitigation measures to assist in avoiding impacts to these species are provided below.

5.2 Significant Wildlife Habitat

5.2.1 Seasonal Concentration Areas of Animals

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 14 types of seasonal concentrations of animals that may be considered significant wildlife habitat. These include, but are not limited to:

- Waterfowl Stopover and Staging Areas (Aquatic and Terrestrial);
- Shorebird Migratory Stopover Area;
- Raptor Wintering Area;
- Bat Hibernacula;
- Bat Maternity Colonies;
- Turtle Wintering Areas;
- Reptile Hibernaculum;
- Colonially -Nesting Bird Breeding Habitat (Bank and Cliff);
- Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs);
- Colonially -Nesting Bird Breeding Habitat (Ground);
- Migratory Butterfly Stopover Areas;
- Landbird Migratory Stopover Areas; and
- Deer Winter Congregation Areas.

Seasonal concentration areas are typically designated as significant wildlife habitat if it supports a species at risk or a large population may be lost if the habitat is destroyed. Our assessment indicates that none of these types of seasonal concentrations of animals occur on the Subject Property (see summary in Appendix E).

5.2.2 Rare Vegetation Communities

Rare vegetation communities often contain rare species, which depend on such habitats for their survival and cannot readily move to or find alternative habitats. Those areas that qualify as rare habitats are assigned an SRank of S1, S2 or S3 by the Natural Heritage Information Center.

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 7 specialized habitats that may be considered significant wildlife habitat. They are:

- Cliffs and Talus Slopes;
- Sand Barren;
- Alvar;
- Old Growth Forest;
- Savannah;
- Tallgrass Prairie; and
- Other Rare Vegetation Communities.

No rare vegetation communities are present on or adjacent to the Subject Property.

5.2.3 Specialized Habitats of Wildlife considered SWH

Some wildlife species require large areas of suitable habitat for their long-term survival and many wildlife species require substantial areas of suitable habitat for successful breeding. Their populations are at risk of decline when habitat becomes fragmented or reduced in size

Specialized habitats for wildlife include:

- Waterfowl Nesting Area;
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat;
- Woodland Raptor Nesting Habitat;
- Turtle Nesting Areas;
- Seeps and Springs;
- Amphibian Breeding Habitat (Woodland);
- Amphibian Breeding Habitat (Wetlands); and
- Woodland Area-Sensitive Bird Breeding Habitat.

Our assessments indicate that no specialized habitats for wildlife are present on the Subject Property.

5.2.4 Habitats of Species of Conservation Concern considered SWH

Habitats of Species of Conservation Concern include wildlife species that are listed as Special Concern or rare, that are declining, or are featured species. Habitats of Species of Conservation Concern do not include habitats of Endangered or Threatened species as identified by the Endangered Species Act. The following habitats are considered candidate SWH:

- Marsh Breeding Bird Habitat;
- Open Country Bird Breeding Habitat;
- Shrub/Early Successional Bird Breeding Habitat;
- Terrestrial Crayfish; and
- Special Concern and Rare Wildlife Species.

As described above, Eastern Wood-pewee was heard calling from the woodland north of the property. Due to the narrow size of the woodland on this property, it is not likely that that this portion of the woodland is being utilized by Eastern Wood-pewee. The extent of Eastern Wood-pewee habitat on and adjacent to the property is illustrated in Figure 4. It is therefore our assessment that habitat for species of conservation concern is not located on the property.

5.2.5 Migration Corridors

The SWHTG defines animal movement corridors as elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another. To qualify as significant wildlife habitat, these corridors should be a critical link between habitats that are regularly used by wildlife.

Based on our review of aerial photography, background information and our primary observations, the woodland on and adjacent to this property is an isolated feature and is not providing any potential migration corridor function.

Legend

- Subject Property
- Approximate location of proposed lot lines
- Significant Woodland
- Location of Butternut
- 25m buffer from Butternut
- Probable habitat of Eastern Wood-pewee
- Probable extent of selective tree removal

Figure 4
Location of Conceptual Development on the Subject Property

Environmental Impact Statement
480 Northland Avenue

Prepared for: **Mr. Ralph Rotella**

Prepared by: COLVILLE CONSULTING INC.

October 2019 | FILE: C16086

5.3 Significant Woodlands

Our review of background mapping indicates that the treed portion of the property is part of a Significant Woodland, which is contiguous with the larger woodland located north of the property boundary. The overall size of the woodland measures approximately 2.5ha, with approximately 0.4ha occurring on the Subject Property. The portion of the Subject Property considered to be part of the Significant Woodland is primarily located on the east and west sides of the developed portion of the property (see Figure 4).

Based on our assessment, we have confirmed that this woodland meets the criteria to be considered a Significant Woodland, since the woodland measures more than 2ha in size and provides habitat for Endangered and Special Concern species. As indicated above, two Butternuts were documented north of the property. Additionally, Eastern Wood-pewee (designated as a Species of Special Concern) and James' Sedge (designated as S3 in the province) were also documented within the woodland north of the property.

6.0 Impact Assessment

Proposed development on this property is intended to include the severance of the property, to create four new parcels, which are ultimately intended to be used for the construction of single family dwellings. The extent of anticipated lot boundaries are illustrated in Figure 4, however the location of proposed dwellings and amenity areas has yet to be determined. For the purposes of this assessment, it is assumed that future residences on these properties will be located approximately in-line with existing residences to the east and west of the Subject Lands. The extent of anticipated development and tree removal is also illustrated in Figure 4.

As illustrated in Figure 4, the proposed development will be located within a portion of the Significant Woodland. Our assessment indicates that the Significant Woodland is providing habitat for an endangered species, a species of conservation concern, locally rare and uncommon species, as well as several species of wildlife. An assessment of potential impacts is provided below.

6.1 Significant Habitat of Endangered Species

No Endangered or Threatened species were documented on the property during our surveys, however two Butternuts were observed north of the property. Our assessments indicated that one of these individuals is in fair condition, while the other is in poor condition. Since these trees are located entirely on lands north of the property, no portion of the proposed development will directly impact these individuals.

No habitat regulation or critical habitat for Butternut has been established by the province, however to help minimize potential indirect impacts to these trees, it is recommended that structural development and grading be limited within 25m of the trees. The extent of a 25m buffer from the Butternuts is illustrated in Figure 4. Limiting physical development within this area will help ensure the proposed development will not impact the health of these trees.

Provided the recommended mitigation measures included in this report are implemented, the proposed project will have no impact on these Butternuts.

6.2 Species of Special Concern

One Species of Special Concern (Eastern Wood-pewee) was documented during our survey work. The Eastern Wood-pewee was heard calling within the woodland north of the Subject Property. The approximate observed locations of this species are illustrated in Figure 3.

The Eastern Wood-pewee is one of the most common and widespread songbirds associated with North America's eastern forests (COSEWIC 2012). This species breeds in virtually every type of wooded habitat, from urban shade trees, roadsides, woodlots, and orchards to mature forests (McCarty 1996). Breeding territories of Eastern Wood-pewee in Southern Ontario are reported to range from 1.37ha to 2.03ha in size (COSEWIC 2012). This species is still considered common in the Niagara Region, however the declining population of this species has prompted the federal and provincial governments to designate this species as Special Concern.

Our observations indicate that this species was likely breeding in the deciduous forest north of the property, however based on our observations, as well as typical habitat for this species, the narrow woodland areas on this property do not appear to form part of the breeding territory for this species. The anticipated extent of Eastern Wood-pewee habitat is illustrated in Figure 4. Since this species is tolerant of urban development, the proposed development is not likely to impact habitat use by this species.

It is therefore our conclusion that the proposed development will not have a significant impact on Eastern Wood-pewee habitat on or adjacent to the property.

6.3 Locally Rare and Uncommon Species

As illustrated in Figure 3 and described above, four locally uncommon species (Arrow-leaved Aster, Black Maple, Bladdernut and Wild Coffee) were documented on the property. To ensure these species persist in the area, it is recommended that representative individuals of Arrow-leaved Aster, Bladdernut and Wild Coffee be flagged on site and transplanted to suitable habitat areas within the woodland north of the Subject Property. Although a detailed botanical inventory of the woodland north of the property was not completed as part of this project, it is likely these species existing outside of the property boundaries and suitable habitat is available for transplant.

Since the Black Maple observed on the property are likely too large for transplanting, it is recommended that structures and lot grading on the western lot (Part 1 in Figure 4) be designed to minimize impacts to Black Maple trees where possible.

6.4 Significant Woodlands

The woodland on and adjacent to this property has been designated as significant due to size and the presence of significant species. As illustrated in Figure 4, the proposed development proposes to create four residential lots, all fronting onto Northland Avenue. Although the establishment of lot boundaries will pose no ecological impact, future development on the proposed parcels will ultimately lead to a reduction in tree cover in the woodland on the Subject Property. It is anticipated that tree removal required for the establishment of building envelopes on these properties will be limited to approximately 0.28ha, with tree removal likely to occur only on the southern and central portions of the proposed lots. It is anticipated that the northern portion of each lot will remain treed, however some limited removal is possible.

Our observations indicate that the woodland on and adjacent to the Subject property is providing habitat for a variety of bird and wildlife species, many of which are common in the Niagara

Region. The species assemblage on the property appears to be related to the relatively narrow nature of the woodland (approximately 25m in width on the east side of the property and 30m on the west side of the property). Since the woodland on this property appears to be functioning more similar to hedgerows and not a woodland, the proposed parcel fabric and the anticipated partial removal of trees from this area will not affect the overall ecological function of the woodland.

6.5 Indirect Impacts

In addition to the direct impacts discussed above, it is anticipated that the proposed development and the eventual construction of residences on the property may result in several indirect impacts which may affect the woodland on and adjacent to the proposed development. Potential indirect impacts that are possible as part of this project include increases in ambient light and noise, changes in grade and runoff patterns and the inadvertent introduction of invasive species during landscape activities.

Although we are not certain, it is anticipated that security and or exterior decorative lighting will be incorporated into the proposed development plans. It is possible that this lighting, along with lighting from interior illumination, could increase the amount of ambient lighting in the woodland feature north of the property. From our assessment of the property, it appears that external lighting from the former church, along with street and lighting from adjacent properties, currently has an impact on the species utilizing this woodland. Therefore, any increase in ambient lighting is anticipated to be minor and not pose an increased impact to wildlife species using the woodland on and adjacent to this property.

Impacts of anthropogenic noise on wildlife can vary among species, but can include masking mating calls, increases in stress and habitat avoidance behaviors, however the level of impact is generally dependent on sound frequency and species sensitivity. Since wildlife species in the woodland on these properties are currently exposed to noise associated with residential land uses on adjacent properties, it is not anticipated that the proposed development and future use of these properties will impact species use of woodland.

Although some elevated noise levels may be expected during construction activities, it is not anticipated that these activities will pose any significant impact to wildlife using the woodland.

As the proposed development includes the construction of residential dwellings, it is possible that future landscape activities could result in the introduction of non-native or invasive species into the woodland. Although difficult to enforce, it is recommended that only native plant species be incorporated into future landscape plans for these properties.

7.0 Mitigation Measures

As discussed above, it is our expectation that the proposed development will have no impact on the ecological functions of the Significant Woodland on and adjacent to the Subject Property. To assist in avoiding any impacts associated with the proposed development, it is recommended that the following mitigation measures be implemented during detailed design and construction of residences on these properties.

- Any required vegetation removal should be conducted in a manner to avoid impacts to nesting birds that may be utilizing habitats on the property. The breeding bird period for this area is generally March 15 to August 31. A survey for active bird nests should be

conducted prior to any vegetation removal or site alteration planned to occur during this window.

- It is recommended that the existing structures on the property be demolished between October 31 and March 30 to avoid potential impacts to Barn Swallows or bats that may be periodically utilizing the structures.
- Although no suitable roosting habitat was observed in close proximity to the building envelope, it is recommended that 4-5 bat boxes be installed on the property to provide additional roosting opportunities on the property.
- Any grading or filling to be conducted on the Subject Property should be designed to maintain existing overland flow patterns to help avoid hydrological and sedimentation impacts to the woodland.
- A light duty silt fence should be installed at the limit of any excavation and grading to delineate the work area and help minimize impacts (e.g., sedimentation and accidental encroachment) to adjacent vegetation.
- The silt fence should be properly embedded (as per Ontario Provincial Standard Specification 805) into the ground to reduce any offsite movement of silt.
- To minimize potential for contamination from accidental spills, the contractor should have a spill kit on site, the equipment should be inspected for leaks and refueling be completed in accordance with best management practices and at least 30 m away from the woodland.
- No grading should occur within the dripline of the Butternuts located north of the property.
- Any Wild Coffee, Bladdernut and Arrow-leaved Aster be relocated to suitable habitat in the woodland north of the property.
- It is recommended that structures and lot grading on the western lot be designed to minimize impacts to Black Maple trees where possible.
- It is recommended that continuous fencing be installed at the rear property line to delineate property boundaries and limit potential encroachment into the woodland.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Our assessment confirmed that the eastern and western portions of the Subject Property contain Significant Woodland, which is providing habitat for a variety of wildlife species. The narrow nature of the woodland areas on this property appears to limit wildlife use, with the majority of wildlife habitat function provided by the woodland north of the property. Although the proposed development will likely result in the removal of trees from the southern and central portions of each property, this reduction in tree cover will not reduce the size of the overall woodland below the 2ha threshold for significance and will not impact any species of concern. To assist with minimizing impacts associated with the proposed developments, it is recommended that the above mitigation measures be implemented during the final design, construction and future use of these properties.

It is therefore our conclusion that the proposed development is consistent with applicable policies of the Niagara Region and City of Port Colborne, specifically Policies 7.B.1.3 and 7.B.1.11 of the Niagara Region Policy Plan and Policies 4.2.3 and 4.3.5 of the City of Port Colborne Official Plan.

Respectfully submitted by:

Ian Barrett, M.Sc.
Colville Consulting Inc.

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APPENDIX A
List of Botanical Species

Plant List for 480 Northland Avenue, Port Colborne, ON. Conducted on Nov. 17, 2016, May 3, 2017, July 27, 2017, and October 2, 2019

ScientificName	CommonNames	CoeCons.	CoeWet.	GRank	COSEWIC	COSSARO	SRank	Lrank	Notes
Abutilon theophrasti	Velvetleaf	0	4	G?			SE5		
Acer negundo	Manitoba Maple	0	-2	G5			S5		
Acer platanoides	Norway Maple	0	5	G?			SE5		
Acer saccharum ssp. nigrum	Black Maple	7	3	G5Q			S4?	U	
Acer saccharum ssp. saccharum	Sugar Maple	4	3	G5			S5		
Acer X freemanii	Freeman's Maple			G?			S5		
Agastache nepetoides	Yellow Giant Hyssop	8	3	G5			S4	R	Observed just north of the property in forest interior
Agrimonia gryposepala	Tall Agrimony	2	2	G5			S5		
Alliaria petiolata	Garlic Mustard	0	0	G?			SE5		
Allium sp	Onion Species								
Amaranthus sp	Pigweed Species								
Ambrosia artemisiifolia	Common Ragweed	0	3	G5			S5		
Arctium lappa	Great Burdock	0	5	G?			SE5		
Arctium minus ssp. minus	Common Burdock	0	5	G?			SE5		
Arisaema triphyllum ssp. triphyllum	Jack-in-the-pulpit	5	-2	G5			S5		
Aster lanceolatus ssp. lanceolatus	Panicled Aster	3	-3	G5			S5		
Aster lateriflorus var. lateriflorus	One-sided Aster	3	-2	G5			S5		
Aster macrophyllus	Large-leaved Aster	5	5	G5			S5		
Aster urophyllus	Arrow-leaved Aster	6	5	G4			S4	U	
Bidens vulgata	Tall Beggar-ticks	5	-3	G5			S5		
Brachyelytrum erectum	Long-awned Wood Grass	7	5	G5			S4S5		
Campanula americana	Tall Bellflower	8	0	G5			S4	R	Along north property line or just north of property in forest interior
Carex blanda	Common Wood Sedge	3	0	G5?			S5		
Carex cf. jamesii	James' Sedge	8	5	G5			S3	R	Along north property line or just north of property
Carex rosea	Stellate Sedge	5	5	G5			S5		
Carex spp	Sedge Species								
Carpinus caroliniana	Blue Beech	6	0	G5			S5		
Carya cordiformis	Bitternut Hickory	6	0	G5			S5		
Carya ovata	Shagbark Hickory	6	3	G5			S5		
Caulophyllum giganteum	Purple-flowered Blue Cohosh	6	5	G?			S5		
Chamaesyce maculata	Blotched Spurge	0	4	G5?			SE5		
Chelidonium majus	Celandine	0	5	G?			SE5		
Chenopodium album var. album	Lamb's Quarters	0	1	G5			SE5		
Cichorium intybus	Chicory	0	5	G?			SE5		
Circaea lutetiana ssp. canadensis	Canada Enchanter's Nightshade	3	3	G5			S5		
Cirsium arvense	Canada Thistle	0	3	G?			SE5		
Conyza canadensis	Horseweed	0	1	G5			S5		
Cornus amomum ssp. obliqua	Silky Dogwood	5	-4	G5			S5		
Cornus foemina ssp. racemosa	Grey Dogwood	2	-2	G5			S5		
Crataegus punctata	Dotted Hawthorn	4	5	G5			S5		
Crataegus sp	Hawthorn Species								
Dactylis glomerata	Orchard Grass	0	3	G?			SE5		
Daucus carota	Wild Carrot	0	5	G?			SE5		
Digitaria sp	Crabgrass Species								
Dryopteris intermedia	Evergreen Wood Fern	5	0	G5			S5		
Elymus repens	Quack Grass	0	3	G5			SE5		
Erechtites hieracifolia	Pilewort	2	3	G5			S5		
Erigeron annuus	Daisy Fleabane	0	1	G5			S5		
Erigeron sp	Fleabane Species								

ScientificName	CommonNames	CoeCons.	CoeWet.	GRank	COSEWIC	COSSARO	SRank	Lrank	Notes
Erythronium americanum ssp. americanum	Yellow Trout Lily	5	5	G5			S5		
Euonymus fortunei	Winter Creeper	0	5	G?			SE1		
Euonymus obovata	Running Strawberry-bush	6	5	G5			S5		
Fragaria virginiana ssp. virginiana	Common Strawberry	2	1	G5			S5		
Fraxinus americana	White Ash	4	3	G5			S5		
Fraxinus pennsylvanica	Red Ash	3	-3	G5			S5		
Galium sp	Bedstraw Species								
Geranium maculatum	Spotted Crane's-bill	6	3	G5			S5		
Geum canadense	White Avens	3	0	G5			S5		
Glechoma hederacea	Ground Ivy	0	3	G?			SE5		
Glyceria striata	Fowl Manna Grass	3	-5	G5			S5		
Hypericum punctatum	Spotted St. John's-wort	5	-1	G5			S5		
*Juglans cinerea**	Butternut	6	2	G4	END	END	S4		Observed a 30-40cm dbh canpoy sized tree in good health adjacent the subject property near the northern property line and another 40cm dbh tree with some canopy die back just north of property
Juglans nigra	Black Walnut	5	3	G5			S4		
Lactuca sp	Lettuce Species								
Ligustrum vulgare	Common Privet	0	1	G?			SE5		
Lonicera tatarica	Tartarian Honeysuckle	0	3	G?			SE5		
Lonicera X bella	Showy Fly Honeysuckle	0	5	G?			SE2		
Maianthemum canadense	Canada Mayflower	5	0	G5			S5		
Maianthemum racemosum ssp. racemosum	False Solomon's Seal	4	3	G5			S5		
Medicago lupulina	Black Medick	0	1	G?			SE5		
Nepeta cataria	Catnip	0	1	G?			SE5		
Ostrya virginiana	Hop Hornbeam	4	4	G5			S5		
Oxalis sp	Wood-sorrel Species								
Phytolacca americana	Pokeweed	3	1	G5			S4		
Plantago lanceolata	Ribgrass	0	0	G5			SE5		
Plantago major	Common Plantain	0	-1	G5			SE5		
Poa pratensis ssp. pratensis	Kentucky Blue Grass	0	1	G?			S5		
Podophyllum peltatum	Mayapple	5	3	G5			S5		
Polygonum aviculare	Common Knotweed	0	1	G?			SE5		
Polygonum pensylvanicum	Pink Knotweed	3	-4	G5			S5		
Polygonum virginianum	Jumpseed	6	0	G5			S4		
Prunella vulgaris ssp. lanceolata	Heal-all	5	5	G5			S5		
Prunus serotina	Black Cherry	3	3	G5			S5		
Prunus virginiana ssp. virginiana	Choke Cherry	2	1	G5			S5		
Quercus rubra	Red Oak	6	3	G5			S5		
Ranunculus abortivus	Kidney-leaf Buttercup	2	-2	G5			S5		
Rhamnus cathartica	Common Buckthorn	0	3	G?			SE5		
Rhus radicans ssp. negundo	Climbing Poison-ivy	5	-1	G5			S5		
Rhus radicans ssp. rydbergii	Western Poison-ivy	0	0	G5			S5		
Rhus typhina	Staghorn Sumac	1	5	G5			S5		
Ribes cynosbati	Prickly Gooseberry	4	5	G5			S5		
Ribes rubrum	Garden Red Currant	0	5	G4G5			SE5		
Rosa multiflora	Multiflora Rose	0	3	G?			SE4		
Rubus allegheniensis	Common Blackberry	2	2	G5			S5		
Rubus flagellaris	Northern Dewberry	4	4	G5			S4	U	Along north property line or just north of property
Rubus idaeus ssp. melanolasius	Wild Red Raspberry	0	-2	G5			S5		

ScientificName	CommonNames	CoeCons.	CoeWet.	GRank	COSEWIC	COSSARO	SRank	Lrank	Notes
Rubus occidentalis	Black Raspberry	2	5	G5			S5		
Rubus odoratus	Purple Flowering Raspberry	3	5	G5			S5		
Rumex crispus	Curly Dock	0	-1	G?			SE5		
Sanguinaria canadensis	Bloodroot	5	4	G5			S5		
Setaria sp	Foxtail Species								
Smilax herbacea	Herbaceous Carrion Flower	5	0	G5			S4		
Solanum nigrum	Black Nightshade	0	0	G?			SE1		
Solidago altissima var. altissima	Tall Goldenrod	1	3	G?			S5		
Solidago flexicaulis	Zig-zag Goldenrod	6	3	G5			S5		
Sonchus sp	Sow-thistle Species								
Staphylea trifolia	Bladdernut	7	0	G5			S4	U	Observed in NW corner of subject property
Taraxacum officinale	Common Dandelion	0	3	G5			SE5		
Thalictrum dioicum	Early Meadow-rue	5	2	G5			S5		
Thlaspi arvense	Field Penny-cress	0	5	G?			SE5		
Tilia americana	Basswood	4	3	G5			S5		
Trillium grandiflorum	White Trillium	5	5	G5			S5		
Triosteum aurantiacum	Wild Coffee	7	5	G5			S5	U	Observed in NW corner of subject property
Viburnum opulus	European Highbush Cranberry	0	0	G5			SE4		
Viola sororia	Common Blue Violet	4	1	G5			S5		
Viola sp	Violet Species								
Vitis riparia	Riverbank Grape	0	-2	G5			S5		
Xanthium strumarium	Cocklebur	2	0	G?			S5		
Zanthoxylum americanum	Prickly-ash	3	5	G5			S5		

* Genetic testing for hybridity was not conducted for Butternuts. Individuals suspected to be genetically pure base on visual appearance alone.

Legend

CoeCons. - Coefficient of Conservatism. Scores for each species range from 0 (low conservatism) to 10 (high conservatism).
A conservatism value of 0 indicates species is widespread. A value of 8, 9 or 10 indicates that a species is a habitat specialist.
CoeWet. - Coefficient of Wetness
5 - Almost always occur in upland areas
4, 3, 2 - Usually occur in upland areas
1, 0, -1 - Found equally in upland and wetland areas
-2, -3, -4 Usually occur in wetlands
-5 Almost always occur in wetlands

Grank - Global Rank G1 — Critically Imperiled, G2 — Imperiled, G3 — Vulnerable, G4 — Apparently Secure, G5 — Secure

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

COSSARO - Committee on the Status of Species at Risk in Ontario

Srank - Subnational Rank
S1 — Critically Imperiled - Critically imperiled in the province because of extreme rarity, (often 5 or fewer occurrences)
S2 — Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer)
S3 — Vulnerable - Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer)
S4 — Apparently Secure - Uncommon but not rare
S5 — Secure - Common, widespread, and abundant in the province
SE — Exotic

Lrank - Local Rank
U - Uncommon, R - Rare

APPENDIX B
Site Photos

Photo 1. Example of vegetation south of the former church on the Subject Property.

Photo 2. Example of vegetation north of the former church on the Subject Property.

Photo 3. Example of vegetation in the woodland at the north end of the Subject Property.

Photo 4. Example of vegetation in the woodland at the north end of the Subject Property.

Photo 5. Example of vegetation in the woodland at the north end of the Subject Property.

Photo 6. Example of vegetation in the woodland at the north end of the Subject Property.

Photo 7. Example of vegetation on the west side of the Subject Property.

Photo 8. Example of vegetation on the west side of the Subject Property.

APPENDIX C
Correspondence from MNRF

Ministry of Natural Resources and Forestry

Box 5000
4890 Victoria Ave. N.
Vineland Station, Ontario
L0R 2E0

Tel: (905) 562-4147
Fax: (905) 562-1154

Ministère des Richesses naturelles et des Forêts

C.P. 5000
4890 avenue Victoria Nord
Vineland Station, Ontario
LOR 2EO

Tél : 905-562-4147
Téléc.: 905-562-1154

Ontario

October 3, 2017

Ian Barrett, M.Sc.
Senior Biologist/Project Manager
Colville Consulting Inc.
404 Queenston Street
St. Catharines, ON L2P 2Y2
Office: 905-935-2161
Mobile: 905-931-4262

Dear Mr. Barrett,

Thank you for your inquiry regarding the presence of species at risk and other natural heritage features within the vicinity of the identified property at 480 Northland Avenue in the City of Port Colborne, Ontario.

Digital mapping for some natural heritage features is available from Land Information Ontario (LIO). MNRF recommends contacting LIO to obtain relevant feature mapping. Datasets of potential interest (and the corresponding LIO dataset) include – wetlands ('Wetland' dataset), ANSI ('ANSI dataset), wooded areas ('Wooded Areas'), wintering areas ('Wintering Areas'), and fish spawning areas ('Spawning Areas').

WETLANDS

The Ministry notes that there are no wetlands identified on or within the immediate vicinity of the subject property.

Digital mapping of wetlands can be obtained from Land Information Ontario (LIO). The Warehouse Dataset Name is 'Wetlands' within LIO. LIO manages key provincial datasets, and is responsible for housing most of the Ministry's digital natural heritage and resource data. The LIO Warehouse also includes spatial data from a variety of other sources and agencies, including federal ministries and conservation authorities. The LIO website provides instructions on how to request/obtain data, and a full listing of all data in the Warehouse. The link to the LIO website is as follows: http://www.mnr.gov.on.ca/en/Business/LIO/index.html. LIO staff can also be contacted at lio@ontario.ca or at (705) 755-1878 for assistance.

ANSI

The Ministry notes that no ANSI's are located within the general vicinity of the identified property.

Digital mapping of Areas of Natural and Scientific Interest can be obtained from Land Information Ontario (LIO). The Warehouse Dataset Name is 'ANSI' within LIO. LIO manages key provincial datasets, and is responsible for housing most of the Ministry's digital natural heritage and resource data. The LIO Warehouse also includes spatial data from a variety of other sources and agencies, including federal ministries and conservation authorities. The LIO website provides instructions on how to request/obtain data, and a full listing of all data in the Warehouse. The link to the LIO website is as follows: http://www.mnr.gov.on.ca/en/Business/LIO/index.html. LIO staff can also be contacted at lio@ontario.ca or at (705) 755-1878 for assistance.

SPECIES AT RISK

The Ministry notes the following species at risk have been documented within the general vicinity of the subject property:

- Snapping Turtle *(Chelydra serpentina)*- Special Concern
- Eastern Ribbonsnake *(Thamnophis sauritus)*- Special Concern
- Barn Swallow *(Hirundo rustica)*- Threatened
- Wood Thrush *(Hylocichla mustelina)* Special Concern
- Acadian Flycatcher (*Empidonax virescens*)- Endangered
- Red-headed Woodpecker *(Melanerpes erythrocephalus)*- Special Concern
- Yellow-breasted Chat *(Icteria virens*)- Endangered

The Ministry notes that there may be habitat for SAR bats in the wooded area. If the works propose to alter the wooded area then MNRF will require additional information to assess the status of bats on the property.

- Tri-colored Bat *(Perimyotis subflavus)*- Endangered
- Little Brown Myotis *(Myotis lucifigus)*- Endangered
- Northern Myotis *(Myotis Septentrionalis)*- Endangered

Please note that because the province has not been surveyed comprehensively for the presence of species at risk (SAR), the absence in the NHIC database of an EO in a particular geographic area does not indicate the absence of the species in that area. Consequently, the presence of an EO is useful to flag the presence of the species in the area, but is not an appropriate tool to determine whether a species is absent, or whether it should be surveyed for or not in a particular area.

Consequently, we provide the following advice with respect to determining the presence of species at risk on a property for which a land-use change or on-the-ground activity is being proposed (note that some of the following may not apply to a given type of proposed activity, or for a given study area):

I. Habitat Inventory

The District recommends undertaking a comprehensive botanical inventory of the entire area that may be subject to direct and indirect impacts from the proposed activity. The vegetation communities and aquatic habitats in the study area should be classified as per the “Ecological Land Classification (ELC) for Southern Ontario” system, to either the “Ecosite” or “Vegetation Type” level. With respect to aquatic habitats in the study area, we recommend you collect data on the physical characteristics of the waterbodies and inventory the riparian zone vegetation, so that these habitats can be classified as per the Aquatic Ecosites described in the ELC manual.

II. Potential SAR on the property

A list of species at risk that have the potential to occur in the area can be produced by cross-referencing the ecosites described during the habitat inventory with the habitat descriptions of species at risk known to occur in the county or regional municipality within which the area is located. The list of species at risk known to occur in the City of Port Colborne is attached. The species-specific COSEWIC status reports (www.cosewic.gc.ca) are a good source of information on species at risk habitat needs and will be helpful in determining the suitability of the property’s ecosites for a given species.

Please note that the Species at Risk in Ontario list (SARO) is a living document and is amended periodically as a result of species assessment and re-assessments conducted by the Committee on the Status of Species at Risk in Ontario (COSSARO). The SARO list can be accessed on the webpage http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/MNR_SAR_CSSR_SARO_LST_EN.html

COSSARO also maintains a list of species to be assessed in the future. It is recommended to take COSSARO’s list of anticipated assessments into consideration, especially when the proposed start date of the activity is more than 6 months away, or the project will be undertaken over a period greater than 6 months. The list can be viewed by going to

http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/244543.html and clicking on the link Priority List of Species to be Assessed and Classified by COSSARO.

III. SAR surveys

The District is of the opinion that each species at risk identified under Step II should be surveyed for, regardless of whether or not the species has been previously recorded in the area, or whether previous records are historical in nature. The survey report should describe how each species at risk was surveyed for, and provide a rationale for why, if any, certain species appearing on the county/ regional municipal list were not the subject of the survey. These rationales must be based on evidence demonstrating either that: suitable habitat for the species is not present on the property or; the project will not have any impacts -including indirect impacts- on the species. Some SAR surveys require an authorization under the *Endangered Species Act 2007* and/or a Scientific Collector's Permit; please contact me if you require further direction regarding these.

Guelph District additionally recommends contacting the municipal planning approval authority and the conservation authority to determine if they have any additional information or records of interest for the study area.

If your investigations reveal the presence of species at risk on the project area, or you would like further advice regarding the provisions of the Endangered Species Act, please contact the undersigned at 905-562-1196 or david.denyes@ontario.ca.

Sincerely,

David Denyes
Management Biologist

APPENDIX D
Species at Risk Screening

Port Colborne

Species At Risk Designations	
ENDANGERED	
THREATENED	
SPECIAL CONCERN	
EXTIRPATED	

AMPHIBIANS		ESA Protection	Key Habitats Used By Species	Subject Property
Fowler's Toad (*Anaxyrus fowleri*)	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally found in sand dunes and lakeshore habitats; found in shallow areas of permanent water bodies; only occurs on the shores of Lake Erie	Potential breeding and overwintering habitat not present on property.

BIRDS		ESA Protection	Key Habitats Used By Species	Subject Property
Acadian Flycatcher (*Empidonax virescens*)	**Known to Occur**	*Species and General Habitat Protection*	generally requires large areas of mature, undisturbed forest; avoids the forest edge; often found in well wooded swamps and ravines	Suitable habitat not present on property. Not detected during breeding bird surveys.
Bank Swallow (*Riparia riparia*)	**Suspected to Occur**	*Species and General Habitat Protection*	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Suitable habitat not present on property. Not detected during breeding bird surveys.
Barn Owl (*Tyto alba*)	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally prefer low-elevation, open country; often associated with agricultural lands, especially pasture. Nests are located in buildings, hollow trees and cavities in cliffs.	Suitable habitat not present on property. Not detected during breeding bird surveys.
Barn Swallow (*Hirundo rustica*)	**Known to Occur**	*Species and General Habitat Protection*	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Suitable nesting habitat present on property. Observed foraging over property, but no nesting on property documented.
Black Tern (*Childonias niger*)	**Known to Occur**	*N/A*	generally prefer freshwater marshes and wetlands; nest either on floating material in a marsh or on the ground very close to water	potential habitat not present on property. Not detected during breeding bird surveys.
Bobolink (*Dolichonyx oryzivorus*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands	Suitable habitat not present on property. Not detected during breeding bird surveys.
Canada Warbler (*Cardellina canadensis*; formerly *Wilsonia canadensis*)	**Known to Occur**	*N/A*	Generally prefers wet coniferous, decediuous and mixed forest types, with a dense shrub layer. Nests on the ground, on logs or hummocks, and uses dense shrub layer to conceal the nest.	Suitable habitat not present on property. Not detected during breeding bird surveys.
Chimney Swift (*Chaetura pelagica*)	**Known to Occur**	*Species and General Habitat Protection*	historically found in deciduous and coniferous, usually wet forest types, all with a welldeveloped, dense shrub layer; now most are found in urban areas in large uncapped chimneys	Suitable habitat not present on property. Not detected during breeding bird surveys.
Common Nighthawk (*Chordeiles minor*)	**Known to Occur**	*N/A*	generally prefer open, vegetation-free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks. This species also inhabits mixed and coniferous forests. Can also be found in urban areas (nest on flat roof-tops)	Suitable habitat not present on property. Not detected during surveys.
Eastern Meadowlark (*Sturnella Magna*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	Suitable habitat not present on property. Not detected on property.
Eastern Whip-poor-will *(Caprimlugus vociferus)*	**Known to Occur**	*Species and General Habitat Protection*	generally prefer semi-open deciduous forests or patchy forests with clearings; areas with little ground cover are also preferred; In winter they occupy primarily mixed woods near open areas.	Suitable habitat not present on property. Not detected during surveys.
Eastern Wood-Pewee (*Contopus virens*)	**Known to Occur**	*N/A*	Associated with deciduous and mixed forests. Within mature and intermediate age stands it prefers areas with little understory vegetation as well as forest clearings and edges.	Suitable habitat present on property. Heard calling from adjacent woodland north of property boundary.
Henslow's Sparrow *(Ammodramus henslowii)*	**Historically Known to Occur**	*Species and General Habitat Protection*	generally found in old fields, pastures and wet meadows. They prefer areas with dense, tall grasses, and thatch, or decaying plant material	Suitable habitat not present on property. Not detected on property.
Least Bittern *(Ixobrychus exilis)*	**Known to Occur**	*Species and General Habitat Protection*	generally located near pools of open water in relatively large marshes and swamps that are dominated by cattail and other robust emergent plants	Suitable habitat not present on property. Not detected on property.

Northern Bobwhite (*Colinus virginianus*)	**Historically Known to Occur**	*Species and General Habitat Protection*	generally inhabits a variety of edge andgrassland type - habitats including nonintensively farmed agricultural lands.	Suitable habitat not present on property. Not detected on property.
Peregrine Falcon *(Falco peregrinus)*	**Known to Occur**	*N/A*	grassland type - habitats including nonintensively	Suitable habitat not present on property. Not detected during breeding bird surveys.
Red-Headed Woodpecker *(Melanerpes erythrocephalus)*	**Known to Occur**	*N/A*	Generally prefer open oak and beech forests, grasslands, forest edges, orchards, pastures, riparian forests, roadsides, urban parks, golf courses, cemeteries, as well as along beaver ponds and brooks	Potential habitat present on property. Not detected during breeding bird surveys.
Short-eared Owl *(Asio flammeus)*	**Suspected to Occur**	*N/A*	generally prefers a wide variety of open habitats, including grasslands, peat bogs, marshes, sand-sage concentrations, old pastures and agricultural fields	Suitable habitat not present on property. Not detected during breeding bird surveys.
Wood Thrush (*Hylocichla mustelina*)	**Known to Occur**	*N/A*	Nests mainly in second-growth and mature deciduous and mixed forests, with saplings and well-developed understory layers. Prefers large forest mosaics, but may also nest in small forest fragments.	Potential habitat present on property. Not detected during breeding bird surveys.
Yellow-breasted Chat *(Icteria virens)*	**Known to Occur**	*Species and General Habitat Protection*	generally prefer dense thickets around wood edges, riparian areas, and in overgrown clearings	Suitable habitat not present on property. Not detected during breeding bird surveys.

FISH			**Key Habitats Used By Species**	**Subject Property**
Grass Pickerel *(Esox americanus vermiculatus)*	**Known to Occur**	*N/A*	generally occur in wetlands with warm, shallow water and an abundance of aquatic plants; occur in the St. Lawrence River, Lake Ontario, Lake Erie, and Lake Huron	Potential Habitat not present on property.

INSECTS		ESA Protection	**Key Habitats Used By Species**	**Subject Property**
Monarch Butterfly *(Danaus plexippus)*	**Known to Occur**	*N/A*	exist primarily wherever milkweed and wildflowers exist; abandoned farmland, along roadsides, and other open spaces	Suitable habitat not present on property. Not detected during inventories.
Rusty-patched Bumble Bee (*Bombus affinis*)	**Formerly Occurred and May Still Occur**	*Species and General Habitat Protection June 27, 2014*	generally inhabits a range of diverse habitats including mixed farmland, sand dunes, marshes, urban and wooded areas. It usually nests underground in abandoned rodent burrows	Suitable habitat not present on property. Not detected during inventories.
West Virginia White (*Pieris virginiensis*)	**Known to Occur**	*N/A*	generally prefer moist, deciduous woodlands. The larvae feed only on the leaves of the two-leaved toothwort (Cardamine diphylla), which is a small, spring-blooming plant of the forest floor.	Suitable habitat not present on property. Not detected during inventories.

MAMMALS		ESA Protection	**Key Habitats Used By Species**	**Subject Property**
Eastern small-footed Myotis (*Myotis leibii*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: primarily under loose rocks on exposed rock outcrops, crevices and cliffs, and occasionally in buildings, under bridges and highway overpasses and under tree bark.	Potential roosting or maternal habitat present on property (former church building). Exclusion doors installed and no longer functioning as habtiat. No obvious cavity trees observed.
Little Brown Myotis (*Myotis lucifugus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 Maternal Roosts: Often associated with buildings (attics, barns etc.). Occasionally found in trees (25-44 cm dbh).	Potential roosting or maternal habitat present on property (former church building). Exclusion doors installed and no longer functioning as habtiat. No obvious cavity trees observed.
Northern Myotis (*Myotis septentrionalis*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Potential roosting or maternal habitat present on property (former church building). Exclusion doors installed and no longer functioning as habtiat. No obvious cavity trees observed.
Tri-colored Bat (*Perimyotis subflavus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Can be in trees or dead clusters of leaves or arboreal lichens on trees. May also use barns or similar structures.	The potential for roosting or maternal habitat is present on property, however no clusters of dead leaves observed during survey.
Woodland Vole (*Microtus pinetorum*)	**Known to Occur**	*N/A*	generally associated with deciduous forests in areas of soft, friable, often sandy soil beneath deep humus, where it can burrow easily.	Suitable habitat not present on property. Not observed during surveys.

MOLLUSCS		ESA Protection	**Key Habitats Used By Species**	**Subject Property**
Snuffbox (*Epioblasma triquetra*)	**Known to Occur**	*Species and General Habitat Protection June 27, 2014*	Generally found in small to mediumsized rivers in shallow riffle areas with clean, clear, swift-flowing water and firm rubble/gravel/sand substrates that are free of silt.	Potential habitat not present on property.
MOSSES		ESA Protection	**Key Habitats Used By Species**	**Subject Property**

PLANTS		ESA Protection	Key Habitats Used By Species	Subject Property
Butternut (*Juglans cinerea*)	**Known to Occur**	*Species and General Habitat Protection*	generally grows in rich, moist, and well-drained soils often found along streams. It may also be found on well-drained gravel sites, especially those made up of limestone. It is also found, though seldomly, on dry, rocky and sterile soils. In Ontario, the Butternut generally grows alone or in small groups in deciduous forests as well as in hedgerows	Suitable habitat present on property. Two possible specimens detected during bontanical inventories, on either side of the northern property line. Limited development within 25m of trees recommended or complete genetic testing to determine if hybridity is present.
Common Hoptree (*Ptelea trifoliata*)	**Known to Occur**	*Species and General Habitat Protection*	generally grows in sandy soils in areas with a lot of natural disturbance - such as the outer edge of shoreline vegetation, sand spits, and sand points.	Suitable habitat not present on property. Not detected during bontanical inventories.
Eastern Flowering Dogwood (*Cornus florida*)	**Known to Occur**	*Species Protection and **Habitat Regulation***	generally grows in deciduous and mixed forests, in the drier areas of its habitat, although it is occasionally found in slightly moist environments; Also grows around edges and hedgerows	Suitable habitat present on property. Not detected during bontanical inventories.
Swamp Rose-mallow *(Hibiscus moscheutos)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in open, coastal marshes, but it is also sometimes found in open wet woods, thickets and drainage ditches	Suitable habitat not present on property. Not detected during bontanical inventories.
White Wood Aster (*Eurybia divaricata*)	**Known to Occur**	*Species and General Habitat Protection*	generally grows in open, dry, deciduous forests. It has been suggested that it may benefit from some disturbance, as it often grows along trails.	Suitable habitat present on property. Not detected during bontanical inventories.

REPTILES		ESA Protection	Key Habitats Used By Species	Subject Property
Blanding's Turtle *(Emydonidea blandingii)*	**Known to Occur**	*Species and General Habitat Protection*	generally occur in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. They prefer shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams.	Potential habitat not present on property. Not detected on property.
Eastern Hog-nosed Snake (*Heterodon platirhinos*)	**Historically Known to Occur**	*Species and General Habitat Protection*	generally prefer habitats with sandy, well-drained soil and open vegetative cover, such as open woods, brushland, fields, forest edges and disturbed sites. The species is often found near water.	Typical habitat not present on property. Not detected on property.
Eastern Ribbonsnake *(Thamnophis sauritus)*	**Suspected to Occur**	*N/A*	generally occur along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting.	Typical habitat not present on property. Not detected on property.
Massassauga Rattlesnake (*Sistrurus catenatus*)	**Known to Occur**	*Species and General Habitat Protection*	generally occur in habitats ranging from tall grass prairie to cedar bogs to shorelines. All habitats require canopies that are not too open, but they also require access to spots where they can get warm enough to effectively digest their food and reproduce. Sufficient moisuture is also required for them to survive the winter, so they are often associated with wetlands or small, wet depressions in the terrain. (Wainfleet Bog)	Typical habitat not present on property. Not detected on property.
Snapping Turtle (*Chelydra serpentina*)	**Known to Occur**	*N/A*	generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on gravely or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	Potential habitat not present on property. Not detected on property.
Spotted Turtle (*Clemmys guttata*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers the shallow, slow-moving and unpolluted water of ponds, bogs, marshes, ditches, vernal pools and sedge meadows. It can also be found in woodland streams and near the sheltered shores of shallow bays	Potential habitat not present on property. Not detected on property.

APPENDIX E
Significant Wildlife Habitat Screening

Assessment of potential Significant Wildlife Habitat for 480 Northland Avenue.

Significant Wildlife Habitat (SWH) Type	Known or Candidate SWH present/absent	Rationale
SEASONAL CONCENTRATION AREAS OF ANIMALS		
Waterfowl Stopover and Staging Areas	Absent	Suitable habitat not present on Subject Property
Shorebird Migratory Stopover Area	Absent	Suitable habitat not present on Subject Property
Raptor Wintering Area	Absent	Suitable habitat not present on Subject Property
Bat Hibernacula	Absent	Suitable overwintering habitat no longer present on Subject Property. Buildings that appeared to be used previously for overwintering had exclusion doors installed.
Bat Maternity Colonies	Absent	Suitable habitat not present on Subject Property
Turtle Wintering Areas	Absent	Suitable overwintering habitat not present on Subject Property
Reptile Hibernaculum	Absent	No reptiles were observed on Subject Property
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff)	Absent	Suitable habitat not present on Subject Property
Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs)	Absent	Suitable habitat not present on Subject Property
Colonially -Nesting Bird Breeding Habitat (Ground)	Absent	Not present on Subject Property
Migratory Butterfly Stopover Areas	Absent	Suitable habitat not present on Subject Property
Landbird Migratory Stopover Areas	Absent	Suitable habitat not present on Subject Property
Deer Winter Congregation Areas	Absent	Suitable habitat not present on Subject Property
RARE VEGETATION COMMUNITIES		
Cliffs and Talus Slopes	Absent	Habitat type not present on Subject Property
Sand Barren	Absent	Habitat type not present on Subject Property
Alvar	Absent	Habitat type not present on Subject Property
Old Growth Forest	Absent	Habitat type not present on Subject Property
Savannah	Absent	Habitat type not present on Subject Property

Tallgrass Prairie	Absent	Habitat type not present on Subject Property
Other Rare Vegetation Communities	Absent	No rare vegetation communities present on Subject Property
SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH		
Waterfowl Nesting Area	Absent	Suitable habitat not present on Subject Property
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Absent	Suitable habitat not present on Subject Property
Woodland Raptor Nesting Habitat	Absent	Suitable habitat not present on Subject Property
Turtle Nesting Areas	Absent	Suitable habitat not present on Subject Property
Seeps and Springs	Absent	Suitable habitat not present on Subject Property
Amphibian Breeding Habitat (Woodland)	Absent	Suitable habitat not present on Subject Property
Amphibian Breeding Habitat (Wetlands)	Absent	Suitable habitat not present on Subject Property
Woodland Area-Sensitive Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Property
HABITATS OF SPECIES OF CONSERVATION CONCERN CONSIDERED SWH		
Marsh Breeding Bird Habitat	Absent	Suitable habitat not present on Subject Property
Open Country Bird Breeding Habitat	Absent	Species typical of this habitat not present on property
Shrub/Early Successional Bird Breeding Habitat	Absent	Species typical of this habitat not present on property
Terrestrial Crayfish	Absent	Suitable habitat not present on Subject Property
Special Concern and Rare Wildlife Species	Absent	Suitable habitat not present on Subject Property
ANIMAL MOVEMENT CORRIDORS		
Amphibian Movement Corridors	Absent	Suitable habitat not present on Subject Property
Bat Migratory Stopover Area	Absent	Suitable habitat not present on Subject Property

Please note the above SWH criteria are based on guidance provided by the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E and modified to be specific for the Subject Property.

Addendum I

November 8, 2022

Ms. Cara Lampman
Manager Environmental Planning
Regional Municipality of Niagara
1815 Sir Isaac Brock Way
Thorold, ON
L2V 4T7

Dear Ms. Lampman,

Re: EIS Addendum – 480 Northland Avenue, City of Port Colborne

This Environmental Impact Study (EIS) Addendum is submitted in response to comments provided by Niagara Region planning staff regarding the EIS prepared to assess potential impacts associated with the creation of four residential lots on the property located at 480 Northland Avenue, in the City of Port Colborne. This addendum is structured to provide the comments received from the Niagara Region environmental planning staff as part of the second preliminary review of the EIS dated November 2019, as well as provide Colville Consulting Inc.'s response to each.

NIAGARA REGION COMMENTS

Niagara Region Comment #1:

No Butternut Health Assessment was included or discussed in the report, and no correspondence from the MECP is referred to or appended. According to the MECP, since a Butternut tree has been identified, a Butternut Health Assessment will need to be completed to assess the health of the tree. Additi onal information regarding this process is automatically sent in response to emails sent to sarontario@ontario.ca. Correspondence with MECP confirming this process has been followed must be appended to the EIS.

It was also noted that the 25 m setback is not included in the mitigation measures listed in the EIS. The only mitigation recommended specifically to Butternut is "No grading should occur within the dripline of the Butternuts located north of the property." Please update the mitigation measures as applicable, including MECP correspondence, since it contradicts the proposed 25 m setback.

Colville Consulting Inc. Response:

As identified in the November 2019 EIS, two butternuts were located north of the property. One specimen was dead while the second was exhibiting dieback in the canopy and appeared in declining health. A Butternut Health Assessment (BHA) was completed in 2021 to assess the health of the trees and determine the category of each and subsequent protection requirements. The BHA (provided in Appendix A) confirmed that both trees are pure butternut specimens and meet the criteria of "Category 1 Butternut Tree". As defined in O. Reg. 830/21, a Category 1 Butternut Tree is "…affected by Butternut Canker to such an advanced degree that retaining the tree would not support the protection or recovery of Butternut trees in the area in which the tree is located."

The BHA report has recently been submitted to MECP as required. MECP will have 30 days to examine the trees prior to any activities that may kill, harm, or remove the butternut trees. After the 30-day period, Category 1 trees may be killed, harmed or taken unless the results of an MECP examination indicate that the assessment has not been conducted in accordance with the Butternut Assessment Guidelines. Should MECP determine that the BHA Report and findings therein are incorrect, an additional addendum letter

will be provided. This addendum will outline any deficiencies identified and include updated mitigation measures and setbacks pending the results of MECP's findings.

The proposed mitigation measures in the EIS dated November 2019 state that "No grading should occur within the dripline of the Butternuts located north of the property." Section 6.1 of the report states that "...it is recommended that structural development and grading be limited within 25m of the trees". Limiting physical development will help to further ensure that proposed development will not negatively impact the health of these trees. These proposed mitigation measures provide a suitable setback for the Butternut Trees located on lands adjacent to the Subject Property.

Niagara Region Comment #2:

NOT ADDRESSED

Lot lines are still proposed through the Butternut buffer areas. Again, ROP Policy 7.B.1.3 states that significant habitat of endangered species is subject to the policies for Environmental Protection Areas (EPA), within which development or site alteration is not permitted. ROP Policy 7.B.1.18 in turn states that new lot lines shall not extend into lands to be retained in a natural state (including EPA features) or the buffer zone identified in an EIS. Therefore, development and/or site alteration, including new lot lines, cannot be permitted within the proposed Butternut buffer area.

Colville Consulting Inc. Response:

As stated in Section 6.1 of the EIS, "No habitat regulation or critical habitat for Butternut has been established by the province, however, to help minimize potential indirect impacts to these trees, it is recommended that structural development and grading be limited within 25m of the trees." This buffer has been put in place to reduce potential negative impacts to the Butternut trees but does not constitute significant habitat for the species.

As per the Butternut Assessment Guidelines (2014) "Section 10 of the ESA includes prohibitions against damage or destruction of the habitat of an endangered or threatened species." However, the guidelines also state that "subsection 10 (1) of the ESA does not apply with respect to the damage or destruction of the habitat of a butternut tree, if the person was exempt from the clause 9 (1) (a) of the ESA with respect to that tree." As Both Butternut Trees were assessed and determined to be Category 1 Butternut trees, these trees are exempt from clause 9 (1) (a) pending confirmation from MECP.

The Recovery Strategy for the Butternut (2013) states that "It is further recommended that the habitat regulation be applied strictly to Butternut trees that are healthy (i.e., they are not affected by Butternut canker to such a degree that they are considered "non-retainable", as determined by a qualified Butternut Health Assessor and/or Ontario Ministry of Natural Resources…)". Both trees were assessed as Category 1 and considered non-retainable. Therefore, it is recommended that that the habitat regulation not be applied. The lot lines proposed on the property and subsequent physical development will not occur within significant habitat of endangered species, and therefore will not occur within an EPA.

Niagara Region Comment #3:

Impacts to Locally Rare and Uncommon Species (Section 6.3) has been revised to recommend that Arrow-leaved Aster, Wild Coffee and Bladdernut be flagged on site and transplanted to suitable habitat north of the property line. Staff require further information regarding this recommendation as there is a man-made trail through this area and significant deer activity. Please address this concern in the final EIS.

It is also recommended in Section 6.3 that structures and lot grading on the western lot (Part 1 in Figure 4) be designed to minimize impacts to Black Maple trees where possible. As previously mentioned, "building around them"

on Lot 1 does not appear to be a viable mitigation measure or constitute "no impact". Additional justification and mitigation measures are requested for Black Maple should Lot 1 continue to be proposed in the final EIS.

Colville Consulting Inc. Response:

Locally Rare and Uncommon Species are recommended to be transplanted into the woodland north of the Subject Property. To reduce potential impacts associated with the man-made trail and high deer use in this area, it will be recommended that transplanted species be planted in locations that are well removed from the trail and in areas exhibiting lower levels of deer browsing where possible.

It is anticipated that some Black Maple trees will be required to be removed to accommodate development on Lot 1. These trees are unlikely to be suitable candidates for transplanting. It is recommended that the final development plan for Lot 1 retain Black Maple trees to the extent feasible, and that any seedlings be transplanted within the lot where possible. Additional mitigation measures for retention are recommended to be included in a Tree Savings Plan (TSP) for the property once a grading and development plan have been finalized and site-specific requirements, including underground utilities, identified.

Niagara Region Comment #4:

ADDRESSED

Staff note the additional botanical inventory completed on October 2, 2019 to accurately record fall vegetation.

Colville Consulting Inc. Response:

Addressed – No further comment.

Niagara Region Comment #5:

NOT ADDRESSED, BUT NO FURTHER COMMENT

Surveys for snakes are discussed under "Incidental Wildlife Observations". No survey protocol is listed and survey details (conditions at the time of the survey, start time and end time of surveys, and detailed methodology) are not provided. Though staff agree that Eastern Ribbonsnake habitat likely does not occur on the Subject Property (as discussed in Section 5.1.2), surveys for snakes (when required) should not be "Incidental Wildlife Observations". In the future (for other projects), please provide the survey protocol, survey details (conditions at the time of the survey, start time and end time of surveys, and detailed methodology) and data sheets supporting the level of effort.

Colville Consulting Inc. Response:

No further comments.

Niagara Region Comment #6:

NOT ADDRESSED

No EIS Scoping, data sheets or additional correspondence was appended to the EIS. If these items do not exist, please discuss in the EIS.

Colville Consulting Inc. Response:

No formal scoping was completed for the EIS. The project began prior to the involvement of the Region and the requirement for a Terms of Reference. Verbal communication with Niagara Peninsula Conservation Authority staff was undertaken to scope the project. ELC Data cards can be provided upon request.

Niagara Region Comment #7:

The report states that Eastern Wood-pewee "breeds in virtually every type of wooded habitat, from urban shade trees, roadsides, woodlots, and orchards to mature forests". In addition, MECP describes Eastern Wood-pewee habitat as "the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation." This type of habitat is found in the FODR1-1 vegetation community on the east and west sides of the property. In addition, the SWH Criteria Schedules for Ecoregion 7E state that the habitat of Special Concern species is to be linked to ELC ecosites; therefore, staff are of the opinion that the habitat of Eastern Wood-pewee is the FODR1-1 community in its entirety, rather than only the area north of the property as illustrated on Figure 4. Please address this concern in the final EIS.

Colville Consulting Inc. Response:

In addition to the information provided above, the SWH Criteria Schedules for Ecoregion 7E also states "The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH, this must be delineated through detailed field studies. The habitat needs be easily mapped and cover an important life stage component for a species e.g. specific nesting habitat or foraging habitat."

As stated in Section 5.1.2, it is suspected that the narrow nature of the woodland on the east and west sides of the property limits use of the property by this species, and therefore these areas were excluded as potential SWH. Based on the results of field inventories, it appears that the species is using the deciduous forest north of the property for breeding. We have delineated this area in Figure 3 of the EIS to include the woodland north of the property as it is considered significant to habitat form and function per the defining criteria in the SWH Criteria Schedules for Ecoregion 7E outlined above.

The removal of approximately 0.2ha of the FODR1-1 ELC community on the Subject Property will not result in a significant impact to the habitat form or function of the species.

Niagara Region Comment #8:

The report states that no cavity trees were found on the subject property. However, during our site visit, we noted cavity trees in the woodland along the west edge of the property (photo at left). This suggests bat habitat has not been sufficiently assessed, nor has SWH as it relates to bat maternity roosts. Please address this concern in the final EIS.

Colville Consulting Response:

The photograph provided in the comments shows snag trees on the western edge of the property. Our assessment as outlined in the EIS states that although it is possible small cavities may be present in trees on the property, it is not likely that these trees are providing significant roosting habitat.

The trees shown in the photo were assessed as part of the field inventories using the Survey Protocol for Species at Risk Bats within Treed Habitats Little Brown Myotis, Northern Myotis & Tri-Colored Bat (2017). Based on these guidelines, the trees shown in the photo are characterized as decay class 5. Although SAR bats will roost in any trees with suitable roost features, they prefer trees in decay class 1 – 3 (early decay stage). The trees identified by the Region and assessed during out field inventories are snag trees but provide limited roosting features and are less desirable for SAR species compared to decay class 1 -3 trees. Based on the low quality of these snag trees, and higher quality roost sites present in the woodland to the north, these trees are not considered to be SWH for SAR bats.

Acoustic monitoring completed in 2021 did identify myotis species on the Subject Property. The November 2019 EIS identified evidence of bats using the building on site in the form of bat guano accumulations below the east peak of the building. At the time a bat exclusion door had been installed however it appears that this has been ineffective and SAR bats are still utilizing the building on site. Mitigation measures provided in the EIS address this and recommend that the existing structures on the property be demolished between

October 31 and March 30 to avoid potential impacts to Barn Swallows or bats that may be periodically utilizing the structures.

Niagara Region Comment #9:

For future reference only, staff note that the locations of the two Butternuts, as illustrated on Figure 3, differ between the two EIS submissions. The 2019 report shows these trees to be located northeast of their location in the 2018 report. All references to these trees in the 2019 report state that both trees are located north of the property. Regional Environmental Planning staff have visited the site and conclude that the locations of the Butternuts in the 2019 report are correct.

Colville Consulting Inc. Response:

No Comments.

CONCLUSION

Based on our observations of the property and assessment of the proposed project, it is not anticipated that the creation of four residential lots on the property will have a negative impact on the natural heritage features located on or adjacent to the property. Although the proposed development will likely require the removal of some trees from each property, this reduction in tree cover will not reduce the size of the overall woodland below the 2ha threshold for significance and will not impact any species of concern. To help avoid any impact to the Significant Woodland, it is recommended that the mitigations measures included in the EIS, as well as recommendations provided in this addendum, be implemented as described.

Please do not hesitate to contact the undersigned at 905-931-4262 or Brett@colvilleconsultinginc.com should you have any questions or require further information.

Yours sincerely,

Brett Espensen, B.A. (Hons), EP.
Colville Consulting Inc.

Appendix A

Butternut Health Assessment

COLVILLE CONSULTING INC.

October 26, 2022

Mr. Ralph Rotella
c/o Lanthier & Gilmore Surveying Ltd.
173 Clarence Street
Port Colborne, ON
L3K 3G4

Dear Mr. Rotella,

Re: Butternut Health Assessment – Trees 001 and 002, 480 Northland Avenue, City of Port Colborne

This letter is in regard to my assessment of Butternut trees number 001 and 002 adjacent your property located at 480 Northland Avenue, in the City of Port Colborne. Please read this letter carefully as it contains important information about the Endangered Species Act, 2007 (ESA).

Butternut is listed as an endangered species on the Species at Risk in Ontario List, and as such, it is protected under the ESA from being killed, harmed, or removed. If you are planning to undertake an activity that may affect Butternut, you may be eligible to follow the requirements set out in section 25 of Ontario Regulation 830/21 under the ESA. Please visit https://www.ontario.ca/laws/regulation/210830 for the legal requirements of eligible activities and exemptions under section 25 of Ontario Regulation 830/21.

If you are eligible to kill, harm or take Butternut under section 25 of Ontario Regulation 830/21, your first step is to submit the BHA Report and the original data forms enclosed in this package to the Ministry of Environment, Conservation and Parks (MECP). Upon review of the information package, I will submit this report on your behalf. The BHA Report must be submitted at least 30 days prior to registering to kill, harm, or remove a Butternut tree. During this 30 day period, no Butternut trees (of any category) may be killed, harmed, or removed, and MECP may contact you for an opportunity to examine the tree.

If MECP chooses to examine the tree, a representative of the MECP will contact you using the information provided in the BHA Report. After the examination has been completed, MECP will notify you if the examination results change.

As a designated Butternut Health Assessor (BHA), I am providing the following Butternut Health Assessor's Report for trees 001 and 002, for which I completed an assessment during the site visit on June 22, 2021. If there are other Butternut trees on the property that may be affected by the activity and they are not identified in this report, they too must be assessed by a BHA.

Note that municipal by-laws and legislation other than the ESA may also be applicable to the removal or harming of trees.

Please retain this letter and a copy of the BHA Report for your records, along with any other documentation you may receive from the MECP should an examination of the trees occur. If you have any questions, please do not hesitate to contact the undesigned.

Yours sincerely,

Colville Consulting Inc. 432 Niagara Street Unit 2, St. Catharines, Ontario L2M 4W3
Tel: 905 935-2161, e-mail ian@colvilleconsultinginc.ca

Ian Barrett, M.Sc.
Colville Consulting Inc.

Enclosures:

1. Butternut Health Assessor's Report
2. Original data forms 1 and 2
3. Printed copy of the Excel data spreadsheet (BHA Tree Analysis)
4. Photographs of Tree 001 and 002

COLVILLE CONSULTING INC.

Butternut Health Assessor's Report Number: 695-102

October 26, 2022

Ian Barrett, BHA#695
Colville Consulting Inc.
432 Niagara Street, Unit 2
St. Catharines, ON
L2M 4W3
905-931-4262
ian@colvilleconsultinginc.

Mr. Ralph Rotella
c/o Lanthier & Gilmore Surveying Ltd.
173 Clarence Street
Port Colborne, ON
L3K 3G4

Property Location: 480 Northland Avenue, City of Port Colborne

Date of Butternut health assessment: June 22, 2021

Map datum used: NAD83

Total number of trees assessed in this BHA Report: 2

The assessed trees were numbered on site using Aluminum tree tags. The numbers at the site correspond to the tree numbers referenced in this report.

This BHA Report includes the following tables:

- Table 1: Butternut Trees Assessed
- Table 2: Summary of Assessment Results

Table 1. Butternut Trees Assessed

Tree #	UTM coordinates	Category[1] *(1, 2, or 3[2])*	dbh[3] (cm)	Cultivated? *(Y/N)*	Proposed to be: *(enter one: unknown[4], killed, harmed or taken)*	If tree is proposed to be killed, harmed, or taken, indicate reason tree is proposed to be killed, harmed or taken:
001	17T 641792E 4751930N	1	32	N	Unknown	N/A
002	17T 641798E 4751938N	1	38	N	Unknown	N/A

[1] The extent to which the tree is affected by Butternut Canker is presented in the Excel document titled, "BHA Tree Analysis" that accompanies this BHA Report.

[2] dbh: diameter at breast height, rounded to nearest cm (if tree is shorter than breast height, enter zero)

[3] In this column, "unknown" indicates that at the time of assessment, there are no proposals to kill, harm or take this tree that are known to the BHA.

Table 2. Summary of Assessment Results

Result:	Total #:	Important information for persons planning activities that may affect Butternut:
Category 1 Trees	2	• A Category 1 tree is one that is affected by butternut canker to such an advanced degree that retaining the tree would not support the protection or recovery of butternut in the area in which the tree is located; and is considered "non-retainable". • During the 30 day period that follows your submission of this BHA Report to the MNRF District Manager, no Butternut trees (of Category 1, 2, or 3) may be killed, harmed, or taken, and MNRF may contact you for an opportunity to examine the trees. • Category 1 trees may be killed, harmed or taken **after** the 30 day period that follows submission of this BHA Report to the MNRF District Manager, unless the results of an MNRF examination indicate that the assessment has not been conducted in accordance with the document entitled "Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the *Endangered Species Act, 2007*".

Butternut Health Assessor's Comments:
The Butternut trees assessed are located adjacent the Subject Property and to be retained as part of proposed development on the property.

Attachment A: Form 1 and Form 2
Attachment B: Printed copy of Excel data analysis spreadsheet
Attachment C: Photos of Trees 001 and 002

Attachment A
Forms 1 and Form 2

0cm 3cm 15cm

Butternut Data Collection Form 1 - 2010 Edition

Surveyor ID or BHA #: 695

(PLEASE USE BLOCK LETTERS)

Date (dd/mm/yyyy): 22 - 06 - 2021

Shaded fields are mandatory for Butternut Health Assessments

Surveyor Contact

First: IAN Last: BARRETT

Email: IANeCOLVILLECONSULTINGINC.CA

Telephone: (905) 931-4262 Telephone Other: (905) 932-2161 x

Property Owner (check if same as surveyor) ☐

First: RALPH Last: ROTELLA

or Company:

Email:

Telephone: ( ) - Telephone Other: ( ) - x

Property Owner's Mailing address

Address: 173 CLARENCE STREET

City: PORT COLBORNE

Postal Code: L3K 3G4 Prov.: ON

Tree Location (if different from mailing address)

Address/(911#): 480 NORTHLAND AVENUE

Township: Lot: Con:

City: PORT COLBORNE

Directions

☒ Yes ☐ No Can Share Location Information with other Butternut Recovery Organizations?

☒ Yes ☐ No Site visits OK? (prior arrangments will always be made for a site vist)

> (Greater than)
< (Less than)

Butternut Trees Tally by Diameter Class

(Do a dot tally in blank space; write total# in box for each)

Tree Condition	< 3 cm	3-15 cm	16-30cm	>30 cm
Vigorous: > 50% Live Crown Minor or no cankers				
Poor Vigor: <50% Live Crown or >50% Live Crown + heavily cankered stem				01
Dead				01

Historically, do some trees produce seeds? ☐ Y ☐ N ☐ Unkown

Estimated area containing butternut for properties > 1 acre (0.4 hectares): ☐ Acres ☐ Hectares

Overall Property Description (area(s) containing Butternut)

☐ Rolling Upland ☐ Bottomland
☐ Valley Slope ☒ Variable
☐ Tableland ☐ Unknown

Vegetation Community/ies

☐ Open ☐ Fencerow
☒ Shrubland ☐ Roadside
☒ DeciduousForest ☐ Quary
☐ ConiferForest ☐ UrbanYard
☐ MixedForest ☐ UrbanPark

Other

Soil Drainage

☒ Well Drained
☐ Moderately Drained
☐ Poorly Drained
☐ Unknown

Soil Texture

☐ Clay ☐ Sand
☐ Clay Loam ☐ Variable
☐ Loam ☒ Unknown
☐ Loamy Sand

Soil Depth

☐ > 1metre
☐ 30 - 99cm
☒ < 30cm
☐ Variable
☐ Unknown

Please enter matching numerical page link code on forms 1 and 2

Page Link:

(Contact Information follows all applicable privacy policies and guidelines)

Please return forms to:
Forest Gene Conservation Association
Suite 233, 266 Charlotte St.
Peterborough, ON, K9J 2V4
www.fgca.net

49731

Butternut Data Collection FORM 2 (2010 Edition)

(PLEASE USE BLOCK LETTERS)

Shaded fields are mandatory for Butternut Health Assessments

Fill when Form 1 indicates canker is well established. The information opn Form 2 must be filled out for all trees when doing a Butternut Health Assessment.

Site Code(A,B,...Z, AA...): | | | |

Surveyor ID or BHA #: | 6 | 9 | 5 |

Surveyor Last Name: B A R R E T T

Date (dd/mm/yyyy): 22 - 06 - 2021

Tree ID Numbering: 1,2,3,...Starting from 1 for each site

Tree 1

Tree #: 0 6 1 | Zone: 1 7 | Easting: 6 4 1 7 9 2 | Northing: 4 7 5 1 9 3 0

Crown Class: 3 | Live Crown %: 0 0 | Main Stem Length(m) Below crown: 1 0

Seed Signs: ☐ Male Flowers ☐ Female Flowers ☐ Seed Set ☐ None

☐ Twig Dieback ☒ Branch Dieback ☒ Defoliation ☐ Discolouration

#Stems: 1 | DBH(cm): 0 3 2

Butternut Origin: ☑ Natural ☐ Planted ☐ Unknown

Assess below live crown:

		#Open	#Sooty
0	#Epic-Live		
3	#Epic-Dead		
1	Bark Type		
3	# Callused Wounds		
	Root	3	0
	=<2m	2	0
	>2m	0	0

Metres from badly cankered tree: ☒ < 40 ☐ > 40 ☐ None Found

Competing Species: B L K | W A L | S G | M P L

Deep furrowed Bark, raised Ridges, Tree dead

Tree 2

Tree #: 0 0 2 | Zone: 1 7 | Easting: 6 4 1 7 9 8 | Northing: 4 7 5 1 9 3 8

Crown Class: 2 | Live Crown %: 4 0 | Main Stem Length(m) Below crown: 1 2

Seed Signs: ☐ Male Flowers ☐ Female Flowers ☐ Seed Set ☐ None

☑ Twig Dieback ☑ Branch Dieback ☑ Defoliation ☐ Discolouration

#Stems: 1 | DBH(cm): 0 3 8

Butternut Origin: ☑ Natural ☐ Planted ☐ Unknown

Assess below live crown:

		#Open	#Sooty
3	#Epic-Live		
3	#Epic-Dead		
1	Bark Type		
4	# Callused Wounds		
	Root	2	0
	=<2m	0	5
	>2m	0	2

Metres from badly cankered tree: ☒ < 40 ☐ > 40 ☐ None Found

Competing Species: B L K | W A L | S G | M P L

Deep furrowed Bark, tree in poor shape

Tree 3

Tree #: | Zone: 1 | Easting: | Northing:

Crown Class: | Live Crown %: | Main Stem Length(m) Below crown:

Seed Signs: ☐ Male Flowers ☐ Female Flowers ☐ Seed Set ☐ None

☐ Twig Dieback ☐ Branch Dieback ☐ Defoliation ☐ Discolouration

#Stems: | DBH(cm):

Butternut Origin: ☐ Natural ☐ Planted ☐ Unknown

Assess below live crown:

		#Open	#Sooty
	#Epic-Live		
	#Epic-Dead		
	Bark Type		
	# Callused Wounds		
	Root		
	=<2m		
	>2m		

Metres from badly cankered tree: ☐ < 40 ☐ > 40 ☐ None Found

Competing Species:

Tree 4

Tree #: | Zone: 1 | Easting: | Northing:

Crown Class: | Live Crown %: | Main Stem Length(m) Below crown:

Seed Signs: ☐ Male Flowers ☐ Female Flowers ☐ Seed Set ☐ None

☐ Twig Dieback ☐ Branch Dieback ☐ Defoliation ☐ Discolouration

#Stems: | DBH(cm):

Butternut Origin: ☐ Natural ☐ Planted ☐ Unknown

Assess below live crown:

		#Open	#Sooty
	#Epic-Live		
	#Epic-Dead		
	Bark Type		
	# Callused Wounds		
	Root		
	=<2m		
	>2m		

Metres from badly cankered tree: ☐ < 40 ☐ > 40 ☐ None Found

Competing Species:

Tree 5

Tree #: | Zone: 1 | Easting: | Northing:

Crown Class: | Live Crown %: | Main Stem Length(m) Below crown:

Seed Signs: ☐ Male Flowers ☐ Female Flowers ☐ Seed Set ☐ None

☐ Twig Dieback ☐ Branch Dieback ☐ Defoliation ☐ Discolouration

#Stems: | DBH(cm):

Butternut Origin: ☐ Natural ☐ Planted ☐ Unknown

Assess below live crown:

		#Open	#Sooty
	#Epic-Live		
	#Epic-Dead		
	Bark Type		
	# Callused Wounds		
	Root		
	=<2m		
	>2m		

Metres from badly cankered tree: ☐ < 40 ☐ > 40 ☐ None Found

Competing Species:

Please enter matching page link code on forms 1 and 2

Page Link: | | | | | | |

(Contact Information follows all applicable privacy policies and guidelines)

Please return forms to:
Forest Gene Conservation Association
Suite 233, 266 Charlotte St.
Peterborough, ON, K9J 2V4
www.fgca.net

49731

Attachment B
Printed Copy of Excel Data Analysis Spreadsheet

BHA Tree Analysis (version: December 2013)

This table is to be completed by a designated Butternut Health Assessor (BHA).

BHA Report #	1	Assessment Date(s)	22-Jun-21	Total # Butternut Trees in BHA Report	2
BHA ID #	695	BHA Name	Ian Barrett		
Landowner / Client Name			Ralph Rotella		
Property Location			480 Northland Avenue, City of Port Colborne		

input field data										automatic calculations from field data						Categories: 1: non-retainable, 2: retainable, 3: archivable				
Tree #	Live Crown %	Tree dbh (cm)	# bole cankers: sooty (S) (will be assigned 2.5 cm per canker)		# bole cankers: open (O) (will be assigned 5 cm per canker)		# root flare (RF) cankers		<40 m from cankered tree? (Y or N)	Circ. (cm) = Pi x dbh	total bole canker width (sooty x 2.5 + open x 5)	total RF canker width (sooty x 2.5 + open x 5)	bole canker % of circ.	RF canker % of circ.	total bole & root canker % of 2xCirc	LC% >/= 50 & BC% = 0	LC% >70 & BRC % <20	LC% >70 & BC % <20	Preliminary tree call	FINAL TREE CALL a Cat 2, dbh>20cm <40m from a Cat 1
			S <2 m	S >2 m	O <2 m	O >2 m	RF S	RF O		Circ (cm)	BC (cm)	RC (cm)	BC%	RC%	BRC%					
1	0	32	0	0	2	0	3	0	y	100.5	10.0	7.5	**10.0**	**7.5**	**8.7**	1	1	1	**1**	**1**
2	40	38	0	0	5	2	0	2	y	119.3	35.0	10.0	**29.3**	**8.4**	**18.9**	1	1	1	**1**	**1**
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4										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
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Attachment C
Photos of Trees 001 and 002

Photo 1: Root flare on tree 002

Photo 2: Stem and canopy of Tree 001

Photo 3: Stem and canopy of Tree 001

Photo 4: Stem of Tree 002

Addendum II

April 10, 2023

Mr. Chris Roome
Planner
City of Port Colborne
66 Charlotte Street
Port Colborne, On
L3K 3C8

Mr. Adam Boudens, Msc
Senior Environmental Planner/Ecologist
Regional Municipality of Niagara
1815 Sir Isaac Brock Way
Thorold, ON
L2V 4T7

Dear Mr. Roome and Mr. Boudens

Re: April 2023 EIS Addendum – 480 Northland Avenue, City of Port Colborne

This Environmental Impact Study (EIS) Addendum is submitted in response to comments provided by Niagara Region planning staff on December 5th, 2022 regarding the EIS prepared for the property located at 480 Northland Avenue, in the City of Port Colborne to assess potential impacts associated with the creation of four residential lots on the property. The following is breakdown of comments received from Region staff and Colville Consulting Inc.'s response to each comment.

NIAGARA REGION COMMENTS

Niagara Region Comment #1:

A Butternut Health Assessment (2021) was completed for the two butternut trees located north of the property to address previous Regional comments. The Assessment confirms that the two specimens meet the criteria of 'Category 1 Butternut Tree' and therefore are 'non-retainable' and do not require protection. The EIS Addendum indicates that the Health Assessment was submitted to the MECP, as required, and that the MECP has 30 days to examine the Report. Staff will assume that there are no legislative requirements associated with the two Butternut Trees unless informed otherwise by the property owner.

Colville Consulting Inc. Response:

The BHA report was submitted in October 2022 to MECP as required. As per Part 5 of O. Reg. 830/21, MECP had 30 days to examine the trees prior to any activities that may kill, harm, or remove the butternut trees. After the 30-day period, Category 1 trees may be killed, harmed or taken unless the results of an MECP examination indicate that the assessment has not been conducted in accordance with the Butternut Assessment Guidelines. The BHA report was sent to MECP and the document has been accepted. There are no legislative requirements associated with the protection of the two Butternut Trees, however they are still recommended to be retained as they are located on the adjacent property.

Niagara Region Comment #2:

Locally Rare and Uncommon Species (e.g., Arrow-leaved Aster, Wild Coffee, Bladdernut, Black Maple) are recommended to be transplanted into the woodland located north of the Subject Property. Staff require written

confirmation from the owner of the adjacent woodland indicating that they do not object to planting species on their property. Further, the adjacent property owner must also confirm that they do not object to the monitoring of the newly planted species for a minimum of 2 years to ensure success. Staff will recommend monitoring as a condition of approval.

Colville Consulting Inc. Response:

Colville Consulting Inc. staff recommend that the transplant of locally rare and uncommon species be included as a condition of approval for development on the property. We also recommend that further to the staff comment for monitoring the newly transplanted species, that an assessment and recommendation plan be developed based on the screening results for specimens suitable for transplant. We recommend that a screening of the property be completed prior to transplant to identify the exact location of specimens on site and assess the feasibility of transplanting individual specimens. Where it is determined through the screening that transplanting is a viable option, these species should be moved to a suitable location off site.

Colville Consulting Inc. recommends that where possible, transplanting occur on the Subject Property or the adjacent property to the north. Should permission to transplant in this location not be obtained, additional suitable offsite locations will be identified as part of the screening process and transplanting will be directed to these areas.

Niagara Region Comment #3:

The Report indicates that Species at Risk Bats are utilizing the building on site. Staff recommend that the applicant complete their due diligence as it relates to the Endangered Species Act (ESA) before proceeding with demolition. Please let Regional staff know if any additional requirements are identified by MECP.

Colville Consulting Inc. Response:

Colville Consulting Inc. staff recommend that prior to any future demolition of the existing structure on the Subject Property, bat exclusion devices be installed on the building. We recommend that one-way bat doors be installed at vent openings where bat guano was observed to allow bats that may be overwintering in the structure the ability to leave, while preventing bats from re-entering the building. We recommend that installation of these devices be undertaken by the end of April to reduce the potential use of the structure by bats coming out of winter hibernation.

One-way exclusionary devices should be installed at all locations identified on the structure as potential access points for bats. Any demolition on site should only occur once it has been confirmed that bats are no longer utilizing the structure for over wintering and/or roosting to stay compliant with the ESA and MECP policies.

CONCLUSION

I trust the above responses address the remaining comments received from Niagara Region planning staff. Please do not hesitate to contact the undersigned at 905-935-2161 or Brett@colvilleconsultinginc.com should you have any questions or require further information.

Yours sincerely,

Brett Espensen, B.A. (Hons), ISA, EP

Colville Consulting Inc.