

Prepared By:



Environmental Impact Study

50 Saunders Street, Town of Collingwood

Project No. 03-014-2019

December 2019



23 Herrell Avenue
Barrie, Ontario
L4N 6T5

December 2, 2019

Lotco II Limited
24 Executive Place
Kitchener, Ontario
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Attention: Al Allendorf

RE: BIRKS NHC 03-014-2019
Environmental Impact Study
50 Saunders Street, Town of Collingwood

Dear Mr. Allendorf:

Thank you for retaining Birks Natural Heritage Consultants, Inc. (Birks NHC) to prepare an Environmental Impact Study (EIS) for the property described above. It is our understanding that the EIS has been requested by the Nottawasaga Valley Conservation Authority (NVCA) for the proposed development of a subdivision, due to the presence of lands regulated under Ontario Regulation 172/06 associated with wetland habitat.

Site specific data was collected by Birks NHC Ecologists during the 2019 season. Through the assessment of the field data, background information, and applicable policies and regulations, we have determined that portions of the property contain natural heritage features including wetland habitat and potential habitat for Species at Risk.

The report outlines the process used to determine which features are considered important natural heritage features and an assessment of potential impacts associated with the proposed residential development. Where potential impacts are identified, mitigation measures are proposed to reduce the potential impacts that could result to those identified. Assuming the mitigation measures recommended in this report are implemented there is no expectation that



natural heritage features or functions associated with the study area defined herein would be negatively impacted.

If you have any questions or concern regarding this report, please do not hesitate to contact the undersigned.

Yours truly,

Birks Natural Heritage Consultants Inc.

Stephanie Brady, HBES
Ecologist

<https://birksnhc.sharepoint.com/sites/BirksNHC/Shared Documents/MMF Projects/2019/03-014-2019 50 Saunders St. Collingwood/Reporting/Birks NHC 03-014-2019 50 Saunder Street EIS Final 2Dec2019.docx>



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1 INTRODUCTION

Birks Natural Heritage Consultants, Inc. (Birks NHC) was retained by Lotco II Limited to undertake an Environmental Impact Study (EIS) for the proposed residential development of the property identified as 50 Saunders Street in the Town of Collingwood (hereafter described as the 'property'; Figure 1).

1.1 PURPOSE

The objective of this report is to identify and assess the potential functions associated with natural heritage features present within and adjacent to the property. These functions included an evaluation of the potential for the natural habitat to provide Significant Wildlife Habitat, habitat for Species at Risk, and functions associated with the retention and conveyance of water. The intent of this assessment was to identify any potential ecological impacts which could result from the proposed residential development of the property.

This report has been prepared to address the natural heritage requirements of Ontario Regulation (O. Reg.) 172/06 '*Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*' due to the presence of wetland conditions, as well as consideration for policies and regulations within the *Provincial Policy Statement, 2014, Endangered Species Act, 2007*, and the Town of Collingwood Official Plan (2019). Consultation with the Nottawasaga Valley Conservation Authority (NVCA) was completed in scoping the EIS requirements. Appendix A has been provided as background correspondence with the NVCA.

1.2 SITE DESCRIPTION

The property measures approximately 4.1 hectares and is generally naturalized containing woodland and thicket habitats, with a small isolated wetland pocket present in the southwest limits of the property. Naturalized portions are young (*i.e.*, ± 30 years) with historic imagery indicating agricultural past use. Naturalized portions are not contiguous within adjacent lands. Woodland habitat is indicative of a remnant woodlot, present along the length of Saunders Street within the eastern portion of the property.

1.3 ADJACENT LAND USE

The property is surrounded by residential lots to the east and west, an elementary school to the north, and agricultural lands to the south. Natural heritage features, including watercourses (Hamilton Drain) and woodland, are present off property to the south. The property is bound by Poplar Sideroad and Saunders Street.



1.4 STUDY AREA

For the purpose of this EIS, the study area is focussed on an area approximately 120 m surrounding the property. The Ministry of Natural Resources and Forestry (MNRF) published the Natural Heritage Reference Manual (OMNR 2010) to provide technical guidance for the implementation of the natural heritage policies of the Provincial Policy Statement, which outlines a distance of 120 meters for use in consideration of impacts to adjacent features. To allow for the consideration of any other Natural Heritage Features in the area a landscape level screening was also undertaken through a review of air photos within approximately one kilometre surrounding the study area.

2 ENVIRONMENTAL POLICY FRAMEWORK

The following summarizes the planning policies and regulations related to natural heritage that apply to the proposed development.

2.1 PROVINCIAL POLICY STATEMENT (2014)

Ontario's *Planning Act*, 1990 requires that planning decisions shall be consistent with the *Provincial Policy Statement*, 2014 (PPS). Section 2.1 of the PPS specifies policy related to protection of natural heritage features and functions. According Sections 2.1.4 of the PPS, development and site alteration shall not be permitted in the following features:

- a) Significant wetlands in Ecoregions 5E, 6E; and 7E; and
- b) Significant coastal wetlands.

Additional features are protected by Section 2.1.5 of the PPS which states that development and site alteration shall not be permitted in the following natural features unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions:

- a) Significant woodlands in Ecoregions 6E; and 7E;
- b) Significant valleylands in Ecoregions 6E; and 7E;
- c) Significant wildlife habitat;
- d) Significant areas of natural and scientific interest; and
- e) Coastal wetlands in Ecoregions 5E, 6E; and 7E that are not subject to policy 2.1.4(b)

While many of these features are mapped, and direction is available to allow for candidate features and functions to be identified, it remains the responsibility of the Province and/or the Municipality to designate areas identified within Section 2.1.4 and 2.1.5 of the PPS as significant. The Natural Heritage Reference Manual (MNR 2010) and Ecoregion 6E Significant Wildlife Habitat Criterion Schedule (MNRF 2015) were used within this report to identify candidate features and functions.



Sections 2.1.6 and 2.1.7 state that development and site alteration is not permitted in fish habitat or habitat of Endangered and Threatened species except in accordance with federal and provincial requirements.

Section 2.1.8 extends protection of those features defined above to adjacent lands, typically those within 120 metres of the potential impact. Section 2.1.8 states that development and site alteration shall not be permitted on adjacent lands to natural heritage features identified in policies 2.1.4, 2.1.5, and 2.1.6 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 function.

2.2 ENDANGERED SPECIES ACT (2007)

Ontario's *Endangered Species Act*, 2007 (ESA) provides regulatory protection to Endangered and Threatened species, prohibiting harassment, harm and/or killing of individuals and destruction of their habitats. Habitat is broadly characterized within the ESA as the area prescribed by a regulation as the habitat of the species, or, an area on which the species depends, directly or indirectly, to carry on its life processes including reproduction, rearing of young, hibernation, migration or feeding.

O. Reg. 230/08 of the ESA identifies Species at Risk in Ontario and includes species listed as Extirpated, Endangered, Threatened, and Special Concern. As noted above, only species listed as Endangered and Threatened receive species and habitat protection through the ESA. Species designated as Special Concern may receive protection under the Significant Wildlife Habitat Provisions of the PPS.

2.3 NOTTAWASAGA VALLEY CONSERVATION AUTHORITY

Portions of the property associated with Hamilton drain and wetland habitat are regulated by the NVCA in accordance with O. Reg. 172/06 '*Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*' (Appendix A). Under this regulation, the NVCA requires that approvals be obtained for any proposed development within regulated areas.

Consultation with the NVCA was completed to scope the requirements of the EIS (Appendix A).

3 METHODS

The following activities and assessments were undertaken to fulfill the objectives of this study. The scope of the EIS was established in consultation with NVCA Ecologist Mike Francis on November 5, 2019 (phone comm.) as summarized in the NVCA comments to the Town of Collingwood (Appendix A).



3.1 BACKGROUND DATA REVIEW AND SOURCES

Background documents provide information on site characteristics, habitat, wildlife, rare species and communities, and other aspects of the study area. For the purpose of this EIS, the following sources were considered:

- Aerial images (Google);
- Atlas of the Breeding Birds of Ontario [website - <http://www.birdsontario.org/atlas/index.jsp>] (Bird Studies Canada, 2006);
- MNRF Natural Heritage Information Centre [website - <https://www.ontario.ca/page/make-natural-heritage-area-map>] (MNRF, 2019);
- Ministry of Environment Conservation and Parks Species at Risk in Ontario list [website - <https://www.ontario.ca/page/species-risk-ontario>] (MECP, 2019); and
- Ontario Nature – Ontario Reptile and Amphibian Atlas [website - https://www.ontarionature.org/protect/species/reptiles_and_amphibians/index.php] (Ontario Nature, 2019);
- Preliminary Stormwater Management Report - 50 Saunders Street. November 2019. Tatham Engineering.

3.2 VEGETATION COMMUNITY MAPPING AND SURVEYS

Vegetation communities were assessed using Ecological Land Classification (ELC) as a first step in identifying and assessing for potential natural heritage features within the study area. The ELC system for Southern Ontario (Lee *et al.* 1998) was used for the study area. The ecological community boundaries were determined through a review of aerial photography and then further refined during the site visits.

In early 2007, the MNRF refined their original vegetation type codes to more fully encompass the vast range of natural and cultural communities across Southern Ontario. Through this process, new codes have been added while some have changed slightly. These updated ELC codes have also been used for reporting purposes in this study in areas where they are more representative of the vegetation communities within study area.

Field surveys to collect vascular plant information was completed by Birks NHC ecologists on June 12 and August 22, 2019.

3.2.1 Wetland Delineation

The wetland boundary was established in the field using the Ontario Wetland Evaluation System employing the “50% rule” to identify a boundary between upland and wetland habitat based on vegetation cover.



3.3 GENERAL WILDLIFE SURVEYS

A wildlife assessment within the study area was completed through incidental observations while on site by Birks NHC Ecologists. Any incidental observations of wildlife were noted, as well as other wildlife evidence such as dens, tracks, and scat. For each observation notes, and when possible, photos were taken. These observations also helped validate our conclusions on the ecological function of the ecosystems identified within the study area.

Wildlife habitat functions were evaluated according to provincial criteria outlined in the Ecoregion 6E Criterion Schedules (MNRF 2015).

3.4 SPECIES AT RISK ASSESSMENT

The Species at Risk assessment included an analysis of the habitat requirements of Species at Risk reported to occur in the area to identify those having potential to occur within the study area. Birks NHC reviewed the potential habitat for provincially designated species, notably Species at Risk listed under O. Reg. 230/08 as Threatened or Endangered.

4 NATURAL HERITAGE FEATURES AND FUNCTIONS

The following sections present an examination of our findings as they related to natural heritage features and functions in the study area.

4.1 VEGETATION COMMUNITIES AND PLANTS

Vegetation communities and their respective locations within the property limits are illustrated on Figure 1. A total of four (4) vegetation communities were identified on the property. Naturalized portions contain both upland and wetland conditions. The vegetation communities that occur within the study area are as follows:

1. WODM5-3: Fresh-Moist Manitoba Maple Woodland
2. FODM3-1: Dry-Fresh Poplar Deciduous Forest
3. CUM: Cultural Meadow
4. SWTM2-1: Red-osier Dogwood Mineral Deciduous Thicket Swamp

4.1.1 Vascular Plants

Table 1 provides a list of vascular plants documented within the study area. None of the species documented within the study area are considered rare, Threatened, or Endangered.

4.2 WETLAND HABITAT

Background mapping (*i.e.*, Land Information Ontario) does not identify any wetland habitat within the property. Notwithstanding, Birks NHC identified a small area that could be considered a wetland pocket



as shown on Figure 1. Wetland community SWTM2-1 is characteristic of early established wetlands indicative of past disturbance and agricultural use. Standing water was not observed within this community. The function of this wetland community is generally considered to be limited in terms of wildlife habitat. Conditions are not suitable for amphibian breeding and/or turtle overwintering habitat.

The SWTM2-1 community, measured at approximately 0.4 hectares is present in the southern portion of the property, extending north-east from Poplar Sideroad (Figure 1). The condition of this community gradually transitions to a dry upland community with drier conditions in the northern portion of the polygon. Red-osier Dogwood (*Cornus sericea*) is the dominant plant within this community.

According to the Preliminary Stormwater Management Report completed by Tatham Engineering (2019), a slope was created within the property to match the existing grade at the property line shared with the adjacent Garbutt Crescent Subdivision (*i.e.*, Mountaincroft Subdivision). According to the report, 6 metres of the neighbouring lots within the Mountaincroft Subdivision drains overland as sheet flow onto the property. Therefore, the feature would be largely influenced by adjacent drainage associated with the residential development to the west, rather than being a naturally occurring wetland.

4.3 WOODLAND

A small portion of the property contains mature woodland habitat. The FODM3-1 community, measured at approximately 0.7 hectares, borders the eastern property limit along Saunders Street. Birks NHC reviewed the criteria defined by the Natural Heritage Reference Manual (OMNR 2010) for evaluating significant woodlands. Based on the small size of the woodland, location within a settlement area, and overall lack of unique attributes including interior habitat, woodland diversity, and linkages, the woodland is not considered a significant woodland. Furthermore, the Town of Collingwood Official Plan Schedule B does not identify this area as either Category 1 or Category 2 Woodland (Appendix B). Thus, no further consideration of woodland impact, as it relates to Significant Woodland function is warranted.

Notwithstanding, potential impacts resulting from proposed tree removals are considered in sections below.

4.4 SIGNIFICANT WILDLIFE HABITAT

Birks NHC has reviewed the MNRF's Significant Wildlife Habitat Technical Guide (MNR 2000) and the accompanying Ecoregion 6E Criteria Schedules (MNRF 2015) to assess the potential for Significant Wildlife Habitat to be present in the study area. The property, although generally considered naturalized, does not contain features that would qualify for Significant Wildlife Habitat. Habitat is not suitable for Special Concern species (*i.e.*, Eastern Wood-pewee, Wood Thrush) known to breed in the general area. Amphibian breeding habitat is not expected to be present due to the lack of standing water observed and the small size of wetland habitat. Trees within the FODM3-1 community are young



and did not contain features that would be suitable for a bat maternity colony. Thus, no further consideration of significant wildlife habitat impact is warranted.

4.5 HABITAT OF THREATENED AND ENDANGERED SPECIES

Habitat requirements and appropriate designations for all species that could potentially occur in the area are outlined in Table A below. Where it is determined that the species have potential habitat within the study area, survey results were reviewed to determine the function of the potential habitat and whether the proposed works are in compliance with the regulations made under the ESA.

Table A. Species at Risk Assessment

Common Name	Scientific Name	Designation ¹	Habitat Affinities Present Within Study Area
<i>Mammals</i>			
Little Brown Myotis	<i>Myotis lucifugus</i>	Endangered	Marginal – Suitable forested community is small and is largely composed of small (<25cm DBH) trees. Potential day roosting habitat within FODM3-1 community.
Northern Myotis	<i>Myotis septentrionalis</i>	Endangered	Marginal – Suitable forested community is small and is largely composed of small (<25cm DBH) trees. Potential day roosting habitat within FODM3-1 community.
Tri-colored Bat	<i>Perimyotis subflavus</i>	Endangered	No – Forested communities are not representative of suitable summer roosting habitat for this species.
<i>Birds</i>			
Barn Swallow	<i>Hirundo rustica</i>	Threatened	Marginal – Suitable structures are present within the study area (adjacent lands only). Suitable foraging conditions are present within the property.
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened	No - No suitable habitat present within study area.
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened	No - No suitable habitat present within study area.
Chimney Swift	<i>Chaetura pelagica</i>	Threatened	No - Existing structures do not contain suitable features.
Eastern Whip-poor-will	<i>Caprimulgus vociferus</i>	Threatened	No - Woodland areas within the property are not characteristic of key habitat for the species.
<i>Reptiles</i>			
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened	No – Wetland communities do not contain suitable features for this species. Species not documented within the area (ORAA).
<i>Vegetation</i>			
Butternut	<i>Juglans cinerea</i>	Endangered	No - Species not documented within the property.



Designation Status

Provincial Status – Species at Risk in Ontario list maintained by the Ministry of the Environment, Conservation, and Parks, O. Reg. 230/08. *Endangered Species Act*, 2007

Of the species identified in the table above, the following are relevant to the study area and proposed development:

- Endangered Bats Species (Little Brown Myotis, Northern Myotis) - Potential Day Roosting Habitat.
- Barn Swallow - Potential Nesting Habitat (adjacent lands only) and Foraging Habitat.

4.6 FISH HABITAT

The Hamilton Drain, a tributary of the Pretty River, has been identified south of the property (Figure 1). The feature appears to strictly function in the conveyance of overland drainage along Poplar Sideroad during seasonal events, as no surface flow has been observed during the course of the site assessment. Thus, the feature may provide indirect fish habitat to downstream habitats (*i.e.* Pretty River). There appears to be no surface water connection between the property and Hamilton Drain. Further, the Stormwater Management report (Tatham 2019) states that site drainage generally flows from south to north towards existing stormwater infrastructure. Thus, no overland flow from the property enters Hamilton Drain and drainage from the property does not directly contribute to Hamilton Drain or potential fish habitat associated with the feature.

4.7 NATURAL HERITAGE FEATURES AND FUNCTIONS SUMMARY

The results of field surveys, review of background information and analysis indicate the potential for candidate significant natural heritage features and functions to be located on or adjacent to the property. Our impact assessment will consider potential impacts only to features and functions summarized in Table B below.



Table B. Summary of Natural Heritage Features

Natural Heritage Feature	Within Study Area	Actions Required
Candidate Significant Woodlands	Remnant woodland within the property does not meet any criteria to be considered Significant Woodland.	No actions required.
Wetland	Un-evaluated & un-mapped: SWTM2-1.	Evaluation for potential impacts required.
Candidate Significant Wildlife Habitat	None	No actions required.
Habitat of Threatened or Endangered Species	Little Brown Myotis and Northern Myotis - Potential Day Roosting habitat within property. Barn Swallow - potential nesting habitat (adjacent lands only) and foraging habitat within property.	Evaluation for potential impacts to Endangered Bat species day roost habitat and Barn Swallow foraging habitat required.
Fish Habitat	Hamilton Drain (adjacent lands only). No surface water connection to Hamilton Drain, existing property drainage is northwest towards Saunders Street. Thus, no impacts anticipated.	No actions required.
Provincial Areas of Natural and Scientific Interest	None.	No actions required.

5 DEVELOPMENT PLAN

Figure 2 illustrates the proposed site plan layout which includes the following:

- 64 single family detached lots
- 20 metre public right-of-way
- Park Block
- Stormwater Management Block (dry pond)
- Road widening block along Poplar Sideroad

Stormwater from the proposed development will be conveyed to the available storage capacity in the South Collingwood development Stormwater Management Facility to provide the requisite water quality control during major storm events (Tatham 2019). A dry pond will be constructed to control the minor storm peak flows.



It is our understanding that grading will be required within the Park Block, however it will be restored as a natural area rather than a managed public park. Furthermore, only required areas will be graded within the Stormwater Management Block to permit for the construction of a dry pond. Therefore, an area of up to 0.37 hectares of natural habitat would remain post-development.

6 IMPACT ASSESSMENT

Impacts are evaluated on the current knowledge of the property based on data collected in 2019 by Birks NHC Ecologists.

Potential impacts of the proposed residential development are associated with the following development activities:

- Tree and vegetation removals
- Removal of habitat for wildlife

In the following sections we assess the potential for negative ecological impact to the identified natural heritage features and functions.

6.1 TREE AND VEGETATION REMOVAL

6.1.1 Woodland

As discussed, the mature woodland portion of the property is not considered to be Significant Woodland as per the Town of Collingwood Official Plan and as per the criteria defined by the Natural Heritage Reference Manual (OMNR 2010). According to the Blue Mountain Subwatersheds Health Check (NVCA 2013), there is approximately 31.5% or 6,954 hectares of forest cover within the subwatershed containing the study area. Therefore, the loss of 0.7 hectares would constitute 0.01% of the overall forest cover available within the subwatershed. Therefore, the loss of this community would not constitute a significant woodland lost within the watershed. Further, the woodland provides limited wildlife function, given the isolation of the habitat within the Town proper. The habitat does not provide significant wildlife functions, does not represent interior habitat, and is not connected to natural heritage features offsite. Thus, removal of the woodland will not result in loss of ecological function.

Consideration for mitigation measures are provided below.

6.1.2 Wetland

The site plan proposes to remove the identified wetland habitat, SWTM2-1. As discussed, this wetland area is small (0.4 hectares), is not part of a larger wetland complex, and is not expected to provide any wildlife habitat function, specifically amphibian breeding or reptile overwintering habitat. As discussed above, wetland conditions are attributable to stormwater runoff resulting from the adjacent residential



developments. Given the urban setting and small size, it is likely that the function of this wetland is limited to hydrologic function (*i.e.*, water attenuation), and that function associated with fauna and flora habitat is relatively low.

The NVCA does not currently have approved policies for ecological offsetting. Policies within neighbouring watersheds (*i.e.*, Lake Simcoe Region Conservation Authority) provide compensation exemptions for wetlands that are small in size (*i.e.*, <0.5 hectares) and that are not connected to an adjacent key hydrologic feature. Under that exemption, offsetting for wetland loss would not be a requirement. The SWTM2-1 wetland feature appears to meet those exemption criteria.

Due to the anthropogenic origin of the wetland and overall lack of function, it is not expected that compensation will be required. The proposed Stormwater Block will incorporate a dry pond which in turn will function in a similar way. At future design stages, plantings can be incorporated into this block to re-create the SWTM2-1 community. Furthermore, through the use of LIDs such as bioretention and linear retention swales (where appropriate), comparable vegetation communities can be re-created within the property, thus potential negative ecological impacts would be negligible.

Consideration for mitigation measures are provided below.

6.2 REMOVAL OF HABITAT FOR WILDLIFE

6.2.1 Little Brown Myotis and Northern Myotis

It is unlikely that critical habitat (*i.e.* maternity colony or foraging habitat) of Endangered Bat Species, or those protected under the significant wildlife habitat policy, will be significantly impacted through development of the property, given the low representation of mature trees (DBH >25cm) within the FODM3-1 community.

Male bats and non-reproductive females roost individually or in small groups as they move across the landscape. Potential day roosts are also often located within tree cavities, leaf clusters and protected areas within older buildings depending on the species being considered. Day roost is considered a perennial function with bats selecting new locations regularly as they move across the landscape. Thus, removing 0.7 hectares of trees would not significantly impact localized habitat availability. There is no expectation that the removal of these trees would constitute damage to bat habitat as they would not impair the ability of bats to carry out their life functions related to day roost.

Roosting habitat function is only applicable during the spring, summer and fall months, while the species is active. Thus, mitigation relating to timing of tree removal is proposed to avoid accidental contravention of Section 9 of the ESA should roosting occur within the property. Assuming tree clearing occurs at the appropriate time of year, the proposed clearing activities are expected to have no negative effect upon Endangered bat species or the ability for these species to carry out their life processes and will be compliant with the regulations of the ESA.



6.2.2 Barn Swallow

Potential Barn Swallow foraging habitat has been identified in association with the adjacent lands containing suitable nesting habitat. There are no potential nesting structures within the property.

Foraging habitat within 200 metres of an active Barn Swallow nest is considered to be General Habitat by MNRF and protected under the ESA, as per the General Habitat Description for the Barn Swallow Technical Document (Source: MNRF). Barn Swallows may utilize the open areas such as the agricultural field and residual meadow communities of the property as foraging habitat.

The resulting land change from the proposed development will not impact the availability of foraging habitat in the area. Open areas suitable for foraging will be well represented throughout the general area and property following development, specifically within agricultural fields and ponds south of Poplar Sideroad. Therefore, the proposed development will not contravene the ESA as it pertains to the protection of Barn Swallow and associated habitat.

7 RECOMMENDATIONS AND MITIGATION MEASURES

Mitigation refers to the avoidance or reduction of impacts associated with the proposed works through best construction practices. The impact assessment identified four potential direct impacts to the identified natural heritage features, including tree and vegetation removal, removal of areas containing potential Species at Risk habitat and loss of or disturbance to wildlife and wildlife habitat.

The following recommended mitigation measures are recommended to minimize the above listed impacts.

7.1 SPECIES AT RISK

Given the dynamic character of the natural environment, as well as changes to policy (*i.e.*, new species listing), consideration is recommended in the interpretation of potential presence of Threatened or Endangered species as protected under the ESA.

This report was produced based on the most up-to-date policy information, however, is not intended to act as a long-term assessment of potential Species at Risk. The ESA is recognized as being a 'proponent-driven' piece of legislation and therefore it is the responsibility of the landowner/developer to ensure compliance with the regulations made under this act. Should any of the species listed as Threatened or Endangered be encountered on the property it is recommended that a Natural Heritage Ecologist or the Ministry of Environment Conservation and Parks (MECP) be consulted to determine the appropriate actions to avoid accidental contravention of the ESA. A review of the assessment provided within this report should be undertaken by a qualified Ecologist prior to construction on any resultant lots to ensure compliance with the ESA at that time.



All current Threatened or Endangered species listed under O. Reg. 230/08 made under the ESA with a currency date of August 1, 2018 (the most recent as of July 9, 2019) have been considered within this report.

7.2 TIMING RESTRICTIONS

Mitigation of potential impacts to wildlife during construction include:

- Construction activities involving the removal of trees should be restricted between the beginning of April to the end of October. This will ensure that no bats actively roosting in trees will be killed or harmed as a result of clearing activities and is outside of the breeding bird season. Tree cutting should be timed to occur during the calendar months of November 1 to March 31 and no cutting activity in forested areas should occur outside that period.

7.3 WETLAND HABITAT

Portions of the property are regulated under O. Reg 172/06. Therefore, approval from the NVCA may be required in order to alter the wetland conditions identified within the property. Where possible, site works within the wetland feature should be completed in dry conditions.

8 CONCLUSIONS

This EIS was prepared for the proposed development of the property identified as 50 Saunders Street in the Town of Collingwood. It is our understanding that an EIS is required by the NVCA due to the presence of a small and isolated wetland pocket identified by Birks NHC staff. The EIS is part of a submission package for Draft Plan of Subdivision. The intent of the EIS is to identify the presence of natural heritage features within the study area that have the potential to be impacted by the proposed development. The findings of the field survey program completed by Birks NHC are presented in the EIS report and potential impacts to identified natural heritage features are discussed.

Natural heritage features identified within the property are not deemed to be significant within the overall landscape as per provincial and municipal criteria. The mitigation measures recommended in this report have been developed to avoid and mitigate any potential negative ecological impacts associated with the proposed development. Overall, potential ecological impacts are minimal and mitigable provided the listed mitigation measures are applied accordingly. At this time, it is the position of Birks NHC that this EIS supports the application and that developable areas are present within the properties to allow for future site development.



9 REFERENCES

Endangered Species Act, Ontario. 2007. An Act to protect species at risk and to make related changes to other Acts. Bill 184 Chapter 6, Statutes of Ontario 2007.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application.

MNRF. General Habitat Description for Barn Swallow (*Hirundo rustica*).

Nottawasaga Valley Conservation Authority. 2013. Blue Mountain Subwatersheds 2013 Subwatershed Health Check.

Official Plan of the Town of Collingwood. 2019.

Ontario Breeding Bird Atlas (OBBA). 2001. Guide for Participants. Atlas Management Board, Federation of Ontario Naturalists, Don Mills. Available at:
http://www.birdsontario.org/atlas/download/obba_guide_en.pdf.

Ontario Ministry of Municipal Affairs and Housing. Provincial Policy Statement. 2014. Available at
<http://www.mah.gov.on.ca/Page10679.aspx>.

Ontario Ministry of Natural Resources and Forestry. 2015. Eco-region criteria schedule 6E. Available at:
<https://www.ontario.ca/document/significant-wildlife-habitat-ecoregional-criteria-schedules-ecoregion-6e>.

Ontario Ministry of Natural Resources and Forestry. Natural Heritage Information Centre Database.
<http://nhic.mnr.gov.on.ca> Accessed April 2019.

Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual.

Ontario Ministry of Natural Resources and Forestry. 2015. Technical Note Species at Risk (SAR) Bats.

Ontario Ministry of Natural Resources. 2000. Significant Wildlife Habitat Technical Guide. Ontario Ministry of Natural Resources, Fish & Wildlife Branch, Wildlife Section. Peterborough, ON.



50 Saunders Street
Birks NHC 03-014-2019

Figure 1. Existing Conditions

LEGEND

- Property Boundary
- Watercourse (LIO)

Vegetation Communities

- 1) WODM5-3 - Fresh-Moist Manitoba Maple Deciduous Woodland Type
- 2) FODM3-1 - Dry-Fresh Poplar Deciduous Forest Type
- 3) CUM - Cultural Meadow
- 4) SWTM2-1 - Red-osier Dogwood Mineral Deciduous Thicket Swamp Type
- SWTM2-1 Limit GPS August 22, 2019



10 5 0 10 20 30 40
Meters

MAP DRAWING INFORMATION:
DATA PROVIDED BY SIMCOE
COUNTY 2016
MAP CREATED BY SB
MAP CHECKED BY MF
MAP PROJECTION NAD 1983 UTM
ZONE 17N
STATUS DRAFT
DATE 10/21/2019





50 Saunders Street

Birks NHC 03-014-2019

Figure 2. Proposed Site Plan

LEGEND

- Property Boundary
- Watercourse (LIO)

Vegetation Communities

- 1) WODM5-3 - Fresh-Moist Manitoba Maple Deciduous Woodland Type
- 2) FODM3-1 - Dry-Fresh Poplar Deciduous Forest Type
- 3) CUM - Cultural Meadow
- 4) SWTM2-1 - Red-osier Dogwood Mineral Deciduous Thicket Swamp Type
- SWTM2-1 Limit GPS August 22, 2019

Proposed Site Plan

- Stormwater Management Block
- Park Block



10 5 0 10 20 30 40
Meters

MAP DRAWING INFORMATION:
DATA PROVIDED BY SIMCOE COUNTY 2016
MAP CREATED BY SB
MAP CHECKED BY MF
MAP PROJECTION NAD 1983 UTM ZONE 17N
STATUS DRAFT
DATE 26/11/2019



Table 1. Vascular Plant List

Scientific Name	Common Name	Provincial Ranking		
		S_Rank	G_Rank	ESA
<i>Acer negundo</i>	Manitoba Maple	S5	G5	NAR
<i>Acer saccharum</i>	Sugar Maple	S5	G5	NAR
<i>Ambrosia psilostachya</i>	Perennial Ragweed	SU	G5	NAR
<i>Arctium minus</i>	Common Burdock	SNA	GNR	NAR
<i>Asclepias syriaca</i>	Common Milkweed	S5	G5	NAR
<i>Asparagus officinalis</i>	Garden Asparagus	SNA	G5?	NAR
<i>Bromus inermis</i>	Smooth Brome	SNA	G5	NAR
<i>Cichorium intybus</i>	Chicory	SNA	GNR	NAR
<i>Circaea alpina</i>	Small Enchanter's Nightshade	S5	G5	NAR
<i>Cornus sericea</i>	Red-osier Dogwood	S5	G5	NAR
<i>Dactylis glomerata</i>	Orchard Grass	SNA	GNR	NAR
<i>Daucus carota</i>	Wild Carrot	SNA	GNR	NAR
<i>Elaeagnus umbellata</i>	Autumn Olive	SNA	GNR	NAR
<i>Erigeron hyssopifolius</i>	Daisy Fleabane	S5	G5	NAR
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	S5	G5	NAR
<i>Fragaria vesca</i>	Woodland Strawberry	S5	G5	NAR
<i>Frangula alnus</i>	Glossy Buckthorn	SNA	GNR	NAR
<i>Fraxinus americana</i>	White Ash	S4	G5	NAR
<i>Helianthus annuus</i>	Common Sunflower	SNA	G5	NAR
<i>Hypericum perforatum ssp. perforatum</i>	Common St. John's-wort	SNA	GNR	NAR
<i>Juglans nigra</i>	Black Walnut	S4?	G5	NAR
<i>Lathyrus latifolius</i>	Everlasting Pea	SNA	GNR	NAR
<i>Leucanthemum vulgare</i>	Oxeye Daisy	SNA	GNR	NAR
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	SNA	GNR	NAR
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	S4?	G5	NAR
<i>Phleum pratense ssp. pratense</i>	Common Timothy	SNA	GNRTNR	NAR
<i>Phragmites australis ssp. australis</i>	European Reed	SNA	G5T5	NAR
<i>Pinus sylvestris</i>	Scots Pine	SNA	GNR	NAR
<i>Populus alba</i>	White Poplar	SNA	G5	NAR

Table 1

<i>Populus tremuloides</i>	Trembling Aspen	S5	G5	NAR
<i>Prunus virginiana</i>	Choke Cherry	S5	G5	NAR
<i>Rhus typhina</i>	Staghorn Sumac	S5	G5	NAR
<i>Rubus idaeus</i>	Common Red Raspberry	S5	G5	NAR
<i>Rumex crispus</i>	Curly Dock	SNA	GNR	NAR
<i>Securigera varia</i>	Common Crown-vetch	SNA	GNR	NAR
<i>Solidago canadensis</i>	Canada Goldenrod	S5	G5	NAR
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod	S5	G5	NAR
<i>Taraxacum officinale</i>	Common Dandelion	SNA	G5	NAR
<i>Toxicodendron radicans</i>	Poison Ivy	S5	G5	NAR
<i>Tragopogon dubius</i>	Yellow Goat's-beard	SNA	GNR	NAR
<i>Trifolium pratense</i>	Red Clover	SNA	GNR	NAR
<i>Verbascum thapsus ssp. thapsus</i>	Common Mullein	SNA	GNR	NAR
<i>Viburnum acerifolium</i>	Maple-leaved Viburnum	S5	G5	NAR
<i>Vitis riparia</i>	Riverbank Grape	S5	G5	NAR

Table 1

APPENDIX A

NVCA Background Information





Nottawasaga Valley
Conservation
Authority

Search...





Nottawasaga Valley
Conservation Authority

19 November, 2019

Kandas Bondarchuk, MCIP, RPP
Community Planner (Heritage)
Town of Collingwood
P.O. Box 157
Collingwood, ON L9Y 3Z5

Dear Ms. Bondarchuk,

**RE: Pre-consultation for Draft Plan of Subdivision and Zoning By-law Amendment
50 Saunders Road
Town of Collingwood – File No. D001717
NVCA ID # 31462**

Nottawasaga Valley Conservation Authority [NVCA] staff is in receipt of follow-up submission in support of a Draft Plan of Subdivision to facilitate the development of a 66 unit Plan of Subdivision/Condominium located in the Town of Collingwood.

NVCA staff have reviewed the information presented in:

- Tatham Engineering's "Natural Hazard Report" dated October 15, 2019.
- Birks Natural Heritage Consultants Inc. "Existing Conditions Mapping and Vegetation List" dated October 22, 2019.

NVCA staff offers the following comments for consideration:

ENGINEERING

1. After reviewing several previously approved reports provided by the consultant and the Town of Collingwood staff it is evident there are no flood hazard and no erosion hazard associated with 50 Saunders Street.

ECOLOGY

2. The documentation provided by Birks confirmed no rare, threatened, or endangered plant species documented within the property. However, a small SWT community, dominated by Red-osier Dogwood, was recorded and measured at approximately 0.42 hectares. It appeared to be limited in terms of wildlife habitat and no amphibian breeding habitat is expected to be present within this area.
3. Due to the size of the wetland (less than 0.5 hectares) as well as the location of the property (within a settlement area), Birks is of the opinion that it appears wetland offsetting would be deemed acceptable for the proposed removal of the feature. Furthermore, they are of the opinion that this can be completed without the need for an EIS. Details associated with offsetting can be determined at future stages of the application process (*i.e.*, draft plan approval).

4. NVCA staff are of the opinion that a scoped EIS is required to demonstrate conformity to applicable legislation as the newly confirmed wetland community represents a relevant policy constraint under Ontario Regulation 172/06.
5. Mitigation in the form of wetland compensation/offsetting may represent a reasonable means of achieving policy conformity. However, this will require further discussion once we receive an EIS which serves as the guide to this process, i.e. characterizing the constraint(s), evaluating policy conformity of the proposal as it relates to the constraint(s), and outlining the mitigation strategy that is necessary to achieve such conformity.

CONCLUSION

We note that these comments are related to this submission and the information provided within this submission. NVCA requires additional information in order to complete our review and additional comments may be provided in the future.

Please feel free to contact the undersigned at extension 233 or aknapp@nvca.on.ca should you require any further information or clarification on any matters contained herein.

Sincerely,



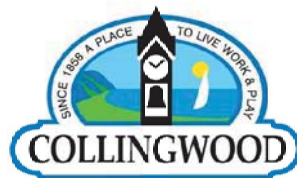
Amy Knapp
Planner II

Copies:
Mr. Jeremy Acres – Tatham Engineering

APPENDIX B

Town of Collingwood Official Plan Schedule B





Official Plan of the Town of Collingwood

SCHEDULE 'B' - Environmental Protection-

Natural Heritage Resource Areas

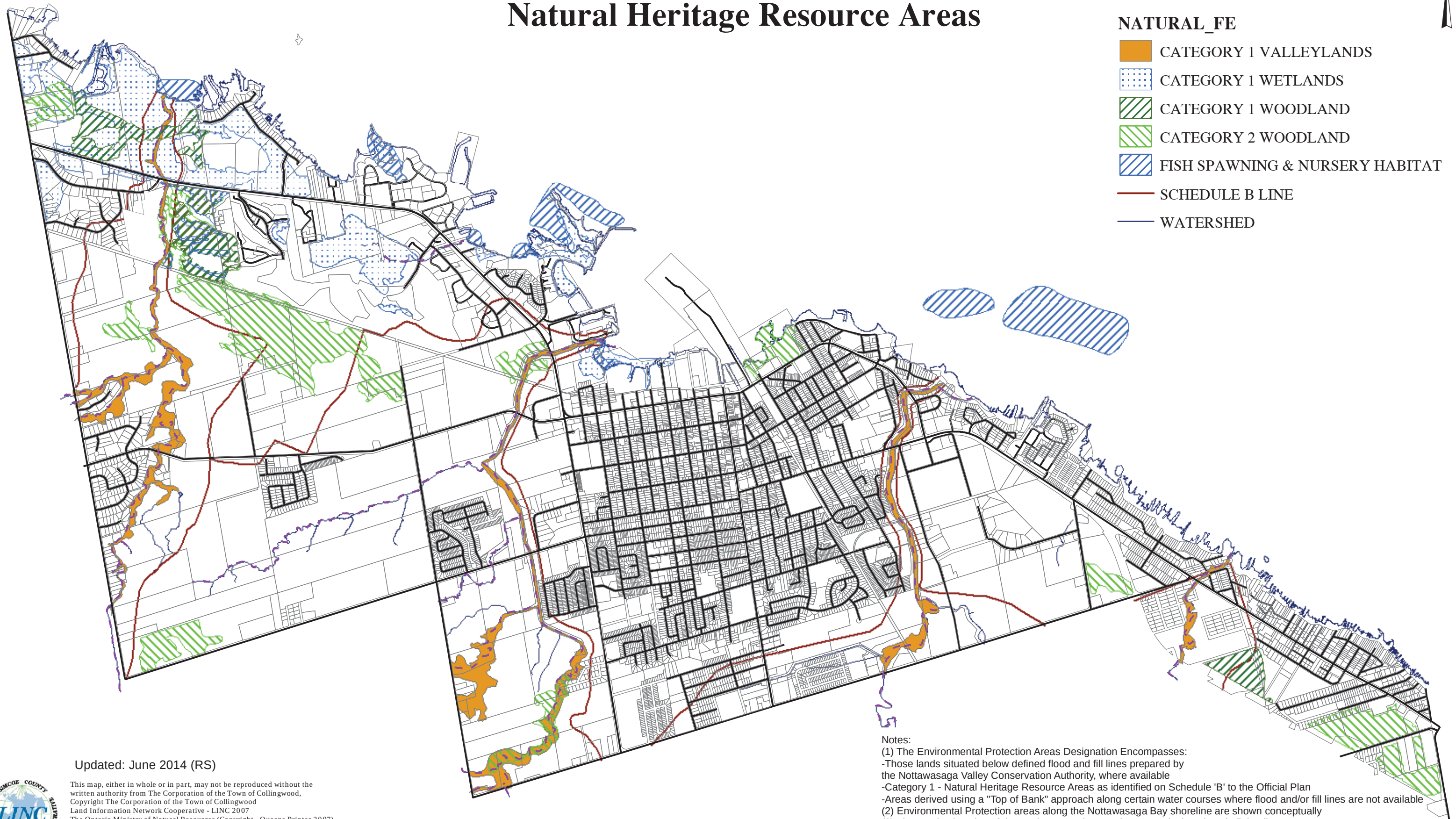
Legend

--- Fish

SCHEDULE B

NATURAL_FE

-  CATEGORY 1 VALLEYLANDS
-  CATEGORY 1 WETLANDS
-  CATEGORY 1 WOODLAND
-  CATEGORY 2 WOODLAND
-  FISH SPAWNING & NURSERY HABITAT
-  SCHEDULE B LINE
-  WATERSHED



Notes:

- (1) The Environmental Protection Areas Designation Encompasses:
 - Those lands situated below defined flood and fill lines prepared by the Nottawasaga Valley Conservation Authority, where available
 - Category 1 - Natural Heritage Resource Areas as identified on Schedule 'B' to the Official Plan
 - Areas derived using a "Top of Bank" approach along certain water courses where flood and/or fill lines are not available
- (2) Environmental Protection areas along the Nottawasaga Bay shoreline are shown conceptually
- (3) The precise location of the Environmental Protection areas designation shall, in all cases, be determined as development proceeds in consultation with The County of Simcoe (Nottawasaga Valley Conservation Authority) and the Town of Collingwood.

Updated: June 2014 (RS)

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