

Prepared By:



# Environmental Impact Study

Pt. Lot 37 Concession 8, Part 1 Plan 16R8475

Geographic Township of Proton

Township of Southgate, County of Grey

Project No. 02-011-2019

November 23, 2019



23 Herrell Avenue  
Barrie, Ontario  
L4N 6T5

November 23, 2019

Mr. Allen Martin  
2893 Moser Young Road RR#1  
St. Clements, Ontario  
N0B 2M0

**RE: BIRKS NHC 02-011-2019**  
**Environmental Impact Study for a proposed Meeting House**  
**Part Lot 37, Concession 8, Part 1 Plan 16R8745**  
**Geographic Township of Proton, Township of Southgate, County of Grey**

Mr. Martin:

Thank you for retaining Birks Natural Heritage Consultants Inc. (Birks NHC) to prepare an Environmental Impact Study for the property located Part Lot 37, Concession 8, Part 1 Plan 16R8745, Geographic Township of Proton, Township of Southgate. The assessment is required for the proposed development of a meeting house and accessory structures.

Site specific data was collected by Birks NHC staff during a single site visit in the 2019 field season. This report outlines the process to determine which features are considered important natural heritage features and an assessment of potential impacts associated with the proposed activity. 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 concerns regarding this report, please do not hesitate to contact the undersigned.

Birks Natural Heritage Consultants Inc.

A handwritten signature in black ink, appearing to read 'M Fuller', written over a light grey rectangular background.

Melissa Fuller  
Ecologist, Consulting Arborist

A handwritten signature in black ink, appearing to read 'B Baker', written over a light grey rectangular background.

Brad Baker, H.B.Sc.  
Ecologist



## Table of Contents

	page
<b>Letter of transmittal</b> .....	<b>i</b>
<b>1 INTRODUCTION</b> .....	<b>1</b>
1.1 Purpose .....	1
1.2 Site Description .....	1
1.3 Adjacent Land Use .....	1
1.4 Study Area .....	1
<b>2 POLICY FRAMEWORK</b> .....	<b>2</b>
2.1 Provincial Policy Statement, 2014 .....	2
2.2 Endangered Species Act, 2007 .....	2
2.3 County of Grey, 2019.....	3
2.4 Township of Southgate, 2006.....	3
2.5 Saugeen Valley Conservation Authority .....	3
<b>3 STUDY APPROACH</b> .....	<b>4</b>
3.1 Data Sources .....	4
3.2 Field Surveys .....	4
3.2.1 Vegetation Community Mapping and Surveys .....	4
3.2.2 Wildlife Surveys.....	5
3.3 Species at Risk.....	5
<b>4 NATURAL HERITAGE FEATURES AND FUNCTIONS</b> .....	<b>5</b>
4.1 Vegetation Communities and Plants .....	5
4.1.1 Vegetation Communities.....	5
4.1.2 Woodland.....	6
4.1.3 Wetland.....	6
4.2 Significant Wildlife Habitat .....	6
4.3 Areas of Natural and Scientific Interest.....	7
4.4 Habitat of Threatened and Endangered Species .....	7
4.5 Natural Heritage Features Summary.....	7



<b>5</b>	<b>PROPOSED DEVELOPMENT .....</b>	<b>9</b>
<b>6</b>	<b>IMPACT ASSESSMENT .....</b>	<b>9</b>
<b>7</b>	<b>RECOMMENDATIONS AND MITIGATION MEASURES .....</b>	<b>11</b>
7.1	Site Restoration.....	11
7.2	Species at Risk.....	11
7.2.1	General.....	11
7.2.2	Timing Windows.....	12
7.3	Migratory Birds .....	12
7.4	Sediment and Erosion Control.....	12
<b>8</b>	<b>POLICY CONFORMITY .....</b>	<b>13</b>
<b>9</b>	<b>CONCLUSIONS .....</b>	<b>13</b>
<b>10</b>	<b>REFERENCES .....</b>	<b>14</b>



## **List of in-text Tables**

Table A Candidate Significant Natural Heritage Features Summary

## **List of Figures**

Figure 1 Existing Conditions

## **List of Appendices**

Appendix A: Evaluated, Non-Significant Riverview Wetland Mapping

Appendix B: Grey County Natural Heritage Feature Mapping

Appendix C: Proposed Development Plan



## 1 INTRODUCTION

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Birks Natural Heritage Consultants, Inc. (Birks NHC) was retained by the current property owners to undertake an Environmental Impact Study (EIS) for the lands identified as Part Lot 37, Concession 8, Part 1 Plan 16R8745 (property), Geographic Township of Proton, Township of Southgate (Township), County of Grey (County).

### 1.1 PURPOSE

The Saugeen Valley Conservation Authority (SVCA) has identified an Evaluated, non-significant Wetland (Riverview Swamp, NHIC), and woodland on the property and thus, the has requested the completion of an EIS to support the proposed development. The objective of the EIS is to identify the potential functions associated with natural heritage features present on the property and determine if potential impacts to those functions could arise from the proposed activity. These functions are directly associated with the ability of the woodland and wetland habitat to provide Significant Wildlife Habitat and habitat for Species at Risk. The intent of this assessment is to identify any potential ecological impacts which could result from construction of the meeting house and amenities.

### 1.2 SITE DESCRIPTION

The property is an existing lot of record, a portion of which is currently maintained lawn (Figure 1). The southern portion of the property is comprised of mature mixed conifer and deciduous forest. A small deciduous swamp is present along the southern property limit (Figure 1).

### 1.3 ADJACENT LAND USE

The property is bound by Grey Road 8 to the east, agricultural fields to the north and west, and wetland and woodland to the south. Varying levels of disturbance are present on the adjacent lands, creating a matrix of rural residential, agricultural, forested and wetland land use.

### 1.4 STUDY AREA

For the purpose of this EIS, the study area is focused on an area approximately 120 metres surrounding the existing lot. The Ministry of Natural Resources and Forestry (MNRF) published the Natural Heritage Reference Manual (MNR, 2010) to provide technical guidance for the implementation of the natural heritage policies of the *Provincial Policy Statement, 2014* (PPS) which outlines a distance of 120 metres for use in consideration of impacts to adjacent features. To allow for the consideration of potential Species at Risk habitat in the area, a landscape level screening was also undertaken through a review of air photos within approximately one kilometer surrounding the study area.



## 2 POLICY FRAMEWORK

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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 PPS.

Section 2.1 of the PPS stipulates policy for the protection of natural heritage features and functions as follows:

Development and site alteration shall not be permitted in:

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

Unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions, development and site alteration shall not be permitted in:

- 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)

Development and site alteration shall not be permitted in fish habitat or habitat of endangered or threatened species except in accordance with provincial and federal requirements.

Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas 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 heritage features or on their ecological function.

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 (MNR, 2015) were used within this report to identify candidate features and functions not currently identified by the province and/or municipality.

### 2.2 ENDANGERED SPECIES ACT, 2007

Ontario's *Endangered Species Act*, 2007 (ESA) provides regulatory protection for Endangered and Threatened species. The ESA prohibits 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.

Ontario Regulation (O. Reg.) 230/08 of the ESA identifies Species at Risk in Ontario. These 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 habitat protection under the Significant Wildlife Habitat provisions of the PPS.

### **2.3 COUNTY OF GREY, 2019**

The County of Grey (the County) has identified the property as Agricultural and Hazard Lands as per Schedule A Map 2 of the County's Official Plan. Policy 5.2.1 (1) (g) of the County's Official Plan states that institutional uses on existing lots are permitted within Agricultural lands, for those populations that primarily utilize horse and buggy for transportation. Policy 7.2 (1) of the Official Plan states that development shall be directed away from Hazard Lands. The identified Hazard lands are likely associated with the presence of mapped Significant Valleylands and the South Saugeen River as indicated within Appendix B of the County's Official Plan and available on the County's web explorer (<http://maps.grey.ca>; Appendix B of this report).

### **2.4 TOWNSHIP OF SOUTHGATE, 2006**

The property has been designated as Agricultural and Hazard Lands, as per Schedule A – Landuse of the Township's Official Plan. The Official Plan permits limited non-farmland uses within Agricultural lands, including social, recreational and institutional uses (Policy 5.1.1. vi) where it has been demonstrated that there is a need and there are no reasonable alternative locations which avoid the Agricultural designation.

Hazard lands within the Township include environmental hazards associated with floodplain, steep slopes, unstable soils and poorly drained areas with high groundwater table (Policy 6.2). Development is generally not permitted within areas identified as Hazard Lands.

### **2.5 SAUGEEN VALLEY CONSERVATION AUTHORITY**

Portions of the property are regulated by the Saugeen Valley Conservation Authority (SVCA) in accordance with O. Reg. 169/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Appendix A). Under O. Reg. 169/06, the SVCA requires that approvals be obtained for any proposed development within regulated areas.



### 3 STUDY APPROACH

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The following activities and assessments were undertaken to fulfill the objectives of this study.

#### 3.1 DATA 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);
- Atlas of the Mammals of Ontario - [Dobbyn J., (1994)];
- Natural Heritage Information Centre [website - <https://www.ontario.ca/page/make-natural-heritage-area-map>] (MNRF, 2019);
- Species at Risk in Ontario list [website - <https://www.ontario.ca/page/species-risk>] (Ontario, 2019);
- Ontario Nature – Ontario Reptile and Amphibian Atlas [website - <https://www.ontarionature.org/oraa/maps/?species=bltu&lat=44.198&long=-80.411&zoom=6>] (Ontario Nature, 2019)
- Grey County Official Plan (2019) and maps; and,
- Township of Southgate Official Plan (2006) and maps.

#### 3.2 FIELD SURVEYS

Natural heritage features and functions within the study area were characterized through completion of field surveys. The following sections outline the methods used for each of the surveys, including specific provincial protocols utilized. Incidental wildlife, plant and habitat observations were considered during all surveys. Searches were also conducted to document the presence or absence of suitable habitat, based on habitat requirements of Threatened or Endangered species with habitat ranges overlapping the property. Birks NHC ecologists conducted a site visit on August 8, 2019 to review site conditions.

##### 3.2.1 Vegetation Community Mapping and Surveys

As a first step in identifying and assessing for potential natural heritage features on the property, the vegetation communities were assessed using Ecological Land Classification (ELC). The ecological community boundaries were determined through a review of aerial photography and then further refined during the site visit on August 8, 2019. The ELC system for Southern Ontario (Lee *et al.*, 1998) was used with modifications. 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 where they are more representative of the vegetation communities within the property. The resulting ELC Mapping is illustrated in Figure 1.



Vascular plants were considered during the August site visit. A formal list typical of a three season vegetation survey was not completed due to the scope of the assignment nor has a list been compiled for inclusion in this report. The list of species identified during the site visit can be provided upon request. No Species at Risk or provincially rare plant species were documented within the study area.

### 3.2.2 Wildlife Surveys

A wildlife assessment within the property was completed through incidental observations while on site. 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 (MNR, 2015).

## 3.3 SPECIES AT RISK

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 data obtained through desktop review and the site visit, related to potential habitat for provincially designated species, notably Species at Risk listed under O. Reg. 230/08 of the ESA as Threatened or Endangered.

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

## 4 NATURAL HERITAGE FEATURES AND FUNCTIONS

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

### 4.1 VEGETATION COMMUNITIES AND PLANTS

#### 4.1.1 Vegetation Communities

The naturalized area of the property contains deciduous forest and lowland ash forest which borders on wetland conditions. The remainder of the property is undeveloped and maintained as a lawn/field which is mowed regularly. A total of 4 vegetation communities were identified within the property limits. Vegetation communities and their respective locations are illustrated on Figure 1. The vegetation communities that occur on the property include:



1. OAGM4 – Cut Meadow
  - The Meadow vegetation community appears to have resulted from lawn that has previously been allowed to grow out. The area was dominated by species that are typical of a disturbed field community.
2. FODM8-1 – Fresh - Moist Poplar Deciduous Forest
  - This ecosite was dominated by young Trembling Aspen with some Green Ash and elm. Ground cover included Buckthorn, Grey Dogwood and Red-osier Dogwood.
3. SWDM4-5 – Poplar Mineral Deciduous Swamp
  - The SWDM4-5 ecosite had an increased occurrence of Black Ash, White Cedar and Balsam Poplar. This ecosite could have fit into the FODM7-2 community but was included as a wetland community due to the proximity to the mapped wetland associated with the Riverview Swamp and the riparian area of the South Saugeen River to the south.
4. FODM7-2 – Fresh - Moist Green Ash-Hardwood Lowland Deciduous Forest
  - Dominated by Green Ash, this vegetation community included a low percentage of elm, Black Ash and Red Maple. The south west corner appeared to have been lower and had an increased area coverage of hydrophilic fern species.

#### 4.1.2 Woodland

The woodland associated with the property is contiguous with an identified wetland (Appendix A) however, it has not been mapped as a Significant Woodland by the County of Grey (Appendix B), presumably due to separation of the woodland from the larger feature south of a tributary of the South Saugeen River. The two woodland features are separated by a wide (>20m) wetland meadow marsh community associated with the South Saugeen River watercourse riparian zone (Appendix B).

#### 4.1.3 Wetland

Riverview Swamp, an evaluated, non-significant wetland has been mapped south of the property associated with the Meadow Marsh along the South Saugeen River watercourse riparian zone. Within the property limit the forested area was denoted as unevaluated wetland (Appendix A). This mapping is intended as a catch-all to ensure that wetlands adjacent to those mapped are picked up in appropriate studies prior to allowing development or other site alterations to occur. During the site assessment it was determined that the ecosite mapped as SWDM4-5 (Poplar Deciduous Swamp community) should be included as wetland, while the remaining areas of tree cover could be considered lowland or moist forest communities (Figure 1).

## 4.2 SIGNIFICANT WILDLIFE HABITAT

As a part of this assessment, Birks NHC staff reviewed the MNRF's Significant Wildlife Habitat Technical Guide (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. Based on that assessment, it was determined that the following candidate significant wildlife habitat functions may be associated with the property and adjacent lands:



#### Seasonal Concentrations of Areas of Animals

- Raptor Wintering Area (Assumed) – Woodland/Wetland
- Bat Maternity Colonies (Assumed) – Woodland/Wetland

#### Habitat for Species of Conservation Concern

- Special Concern and Rare Wildlife Species - Snapping Turtle (Assumed), Eastern Wood-Pewee (Assumed), Wood Thrush (Assumed) – Woodland/Wetland

All functions noted above are directly linked to the presence of woodland and wetland habitat.

### 4.3 AREAS OF NATURAL AND SCIENTIFIC INTEREST

No Areas of Natural and Scientific Interest are located within 120m of the property.

### 4.4 HABITAT OF THREATENED AND ENDANGERED SPECIES

The habitat requirements of those species listed as Threatened and Endangered under the ESA were considered in relation to the habitat features noted within the property limits and the adjacent lands. Based on habitat use, site knowledge and data available from online resources (*i.e.* the Ontario Breeding Bird Atlas, the Ontario Reptile and Amphibian Atlas) we have determined that the following species have candidate habitat within and adjacent to the property, and have the potential to occur in the general area:

- Mammals: Little Brown Myotis (Endangered), Northern Myotis (Endangered), Tri-colored Bat (Endangered)

NHIC mapping also indicated that Bobolink had been documented somewhere within 10km of the property. At the time of the site assessment, appropriate habitat was not present, so this species is not considered further.

### 4.5 NATURAL HERITAGE FEATURES SUMMARY

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



**Table A. Candidate Significant Natural Heritage Features Summary**

Natural Heritage Feature	Within study area
<b>Provincially Significant Wetland</b>	No Provincially Significant Wetland have been identified within 120m of the property limits.
<b>Evaluated, Non-significant Wetland</b>	A portion of the Riverview Swamp is located within the property limits.
<b>Significant Woodlands</b>	The woodland habitat has not been mapped as significant by the County. Thus no further consideration of woodland impact, as it relates to Significant Woodland function is warranted.
<b>Significant Valleylands</b>	Significant Valleylands have been mapped within 120m of the property limits, by the County. Valleylands are associated with the South Saugeen River (Appendix B)
<b>Significant Wildlife Habitat</b>	Potential: Seasonal Concentrations of Areas of Animals <ul style="list-style-type: none"> <li>• Raptor Wintering Area (Assumed) – Woodland/Wetland</li> <li>• Bat Maternity Colonies (Assumed) – Woodland/Wetland</li> </ul> Habitat for Species of Conservation Concern <ul style="list-style-type: none"> <li>• Special Concern and Rare Wildlife Species - Snapping Turtle (Assumed), Eastern Wood-Pewee (Assumed), Wood Thrush (Assumed) – Woodland/Wetland</li> </ul>
<b>Provincial Areas of Natural and Scientific Interest</b>	None present in the study area.
<b>Fish Habitat</b>	At its closest point, the South Saugeen River is located 96m from the property limits. The proposed development is sufficiently removed from the habitat feature, that impact is not likely. No further consideration is warranted.
<b>Habitat of Threatened or Endangered Species</b>	Potential to be present: <ul style="list-style-type: none"> <li>• Endangered Bat Species – potential roost habitat is present within forest communities present in the study area. (Woodland)</li> </ul>



## 5 PROPOSED DEVELOPMENT

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The proposal involves the construction of a Meeting House for the local Mennonite community. Numerous horse tie-ups are proposed, most of which will be grassed. Access to the facility will be through a gravel road, with bus turn-around. The development will be serviced with private well and septic (Appendix C).

## 6 IMPACT ASSESSMENT

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The intent of this assessment is to identify any potential ecological impacts to identified Natural Heritage Features and Functions which could result from the proposed development. For the purpose of this EIS impacts will be considered with a focus on the woodland area of the property and the functions associated with that area. The proposal calls for the removal of approximately 0.3ha of woodland habitat for the creation of horse tie-ups. As discussed above, the feature may provide both candidate significant wildlife habitat and potential habitat for Endangered and Threatened species. For the purpose of this EIS, impacts for the woodland is being considered inclusive of those functions as outlined in Table B. The following points were important in the consideration of potential impacts:

- Direct Impact could occur through the removal of Natural Heritage Features including potential significant wildlife habitat.
  - The area proposed for removal accounts for only a small portion of the forest habitat in the area. Approximately 0.3 ha will be removed to allow for the proposed development. Currently, none of the removed forest habitat is mapped as significant woodland or wetland.
  - The alteration is proposed within 100m of potential habitat functions, but along the northernmost edge. There is no expectation that the removals would result in fragmentation of habitat and connectivity will be maintained south and west of the property. Thus, local fauna, including Snapping Turtle (Special Concern), may continue to utilize the retained natural lands on the property.
  - Though mature trees are present within the area of removal, no raptor nests were located within the proposed severances limits and no large freestanding trees ideal for perching or nesting were noted.
  - Candidate significant wildlife habitat functions will be preserved within the property limits and on adjacent forested lands. Thus, alteration of the relatively small development envelope will have negligible direct impact on the woodland feature and candidate significant wildlife habitat.
- Direct Impacts could occur through the introduction of sediments or soils to the Natural Heritage Features resulting from intentional or accidental placement of those materials.
  - We understand that the development area directly adjacent to the retained forest and natural heritage features will be disturbed only temporarily. Following the disturbance, that area will be mainly grass upon which horses will be kept during occasions when the proposed Meeting House are in use. Assuming sedimentation is controlled during



construction, there should be no potential for later introduction of soils or sediment into the retained natural heritage features.

- Direct Impact could occur through the intentional or accidental contraventions of Ontario's ESA.
  - The only species with habitat potential occurring on the property were Endangered Bat Species, specifically Little Brown Myotis. While it was not identified in the study area during the 2018 field season, this species commonly roosts in trees during the active season, usually April 30 through the end of September.
  - It is unlikely that critical habitat (*i.e.* nesting, roosting, 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 (diameter at breast height =20 cm or greater) within the area of removal. Further, the forest cover on the property is in proximity to a much larger forest community present to the south, that would provide more suitable habitat for the species. There is no expectation that the larger forest community will be removed in the near future. Thus, it will continue to provide habitat function for any bats which may be present in the area.
  - 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 0.3ha 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 severance limits. 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.
- Indirect impacts could occur through the intentional or accidental change in water availability.
  - The deciduous swamp will be retained post-development; no portion of the development is proposed within the wetland feature. The areas directly adjacent to that retained natural heritage feature will be horse tie ups which will have linear concrete strips for the posts and grass areas in between. This will allow for infiltration of ground water in the area similar to what is currently present on the property. Hard surfaces are limited to the meeting house and washrooms.
  - All site runoff will be infiltrated ensuring that local surface water contribution is maintained.
  - It is generally understood that drilled wells access aquifers well below those that influence surface water. The surface water pattern and wetland habitat should remain unaltered through severance and development of the proposed lots.



- Mitigation measures are proposed in Section 7 to encourage the continued infiltration of surface water.
- Indirect Impacts could occur through the introduction of foreign equipment, new activities or noise in proximity to the Natural Heritage Features.
  - The meeting house is not expected to be in constant use. These facilities tend to be used for only a period of time daily or weekly. With the exception of the noise during construction and temporary use by busses there is no indication that the facility will function as a permanent source of noise and activity. As such, there is no expectation that the activity would result disturbance to the wildlife present in the retained and adjacent Natural Heritage Features.
- Indirect impacts could result through the accidental discharge of contaminants such as fuel or oil when cleaning, fueling or servicing equipment.
  - Mitigation measures are proposed in Section 7 to encourage the appropriate equipment operations with respect to Natural Heritage.

## 7 RECOMMENDATIONS AND MITIGATION MEASURES

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### 7.1 SITE RESTORATION

Areas disturbed during construction should be restored immediately following the development. Site restoration should include revegetation efforts of all excavated and erodible soils. Where appropriate, erosion and sediment controls should be incorporated to minimize impacts beyond the work area. All disturbed areas should be revegetated with native and non-invasive trees and shrubs, combined with a grass mix suitable for residential applications.

### 7.2 SPECIES AT RISK

#### 7.2.1 General

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 November 18, 2019) have been considered within this report.

#### 7.2.2 Timing Windows

Site alteration should occur outside of the active breeding/roosting/nesting season (April 1 – October 31) for all Species at Risk species that may utilize the property. If the work schedule requires that site alteration be completed during the active season, screening by an ecologist with knowledge of species present in the area should be undertaken to ensure that the risk of impacting Species at Risk has been evaluated and assumed to be low to non-existent.

### 7.3 MIGRATORY BIRDS

Construction activities involving the removal of vegetation should be restricted from occurring during the bird breeding season. Migratory birds, nests, and eggs are protected by the *Migratory Birds Convention Act*, 1994 and the *Fish and Wildlife Conservation Act*, 1997. Environment Canada outlines dates when activities in any region have potential to impact nests at the Environment Canada Website ([http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1#\\_03](http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1#_03))

For this location, vegetation removal should be avoided between April 1st and August 30th of any given year. If vegetation clearing is required between these dates, screening by an ecologist with knowledge of bird species present in the area could be undertaken to ensure that the vegetation has been confirmed to be free of nests prior to clearing.

### 7.4 SEDIMENT AND EROSION CONTROL

In advance of any vegetation clearing or earth works (*i.e.*, clearing or grubbing) it is recommended that the development limit be established to prevent accidental encroachment into the retained woodland. We suggest that sediment and erosion controls be installed prior to all construction activities. Sediment and erosion controls must be maintained throughout construction and until vegetation is re-established post-construction.



## 8 POLICY CONFORMITY

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The policy framework, as outlined within the PPS, the County Official Plan and the Township Official Plan, as outlined within Section 2 of this report, generally mandates that any natural heritage features and functions determined to be associated with the property will not hinder the development of a Meeting House, provided that the proposal will not impact natural heritage features (Candidate Significant Wildlife Habitat, Evaluated, Non-Significant wetland, Endangered and Threatened species and/or their habitat), or their ecological function. This report demonstrates that the development can be achieved under these conditions by concentrating site alteration within the edge habitat of the feature (and therefore maintaining connectivity south and west of the disturbance area) and applying specific timing windows to vegetation clearing and site alteration.

Given the above, the application, as proposed, conforms with all applicable policies associated with the property.

## 9 CONCLUSIONS

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Through the assessment, it was determined that the property and adjacent lands provide natural heritage features and functions relating to the presence of woodland habitat, Evaluated, non-significant wetland, candidate Significant Wildlife habitat and potential habitat for Species at Risk. Though there is some potential to impact these features, impacts can be mitigated through the implementation of the recommendations within this report, in keeping with the overarching policy framework of the property, as described herein. Thus, there is no expectation that the proposed works will negatively impact the natural heritage features and functions associated with the property during construction or into the future.



## 10 REFERENCES

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**CHURCH PROPERTY  
EIS**  
BIRKS NHC 02-011-2019  
  
**FIGURE 1. EXISTING  
CONDITIONS**

**LEGEND**

— Property Limit

**Vegetation Communities**

- 1) OAGM4 - Cut Meadow
- 2) FODM8-1 - Fresh-Moist Poplar Deciduous Forest
- 3) SWDM4-5 - Poplar Mineral Deciduous Swamp
- 4) FODM7-2 - Fresh-Moist Green Ash-Hardwood Lowland Deciduous Forest

10 5 0 10 20 30 40  
Meters

**MAP DRAWING INFORMATION:**  
 DATA PROVIDED BY ESRI Canada  
 MAP CREATED BY SB  
 MAP CHECKED BY BB  
 MAP PROJECTION NAD 1983 UTM  
 ZONE 17N  
 STATUS DRAFT  
 DATE 10/28/2019




## **APPENDIX A**

Evaluated, Non-Significant Riverview Swamp Mapping





**Legend**

-  Assessment Parcel
-  Woodland
-  Conservation Reserve
-  Provincial Park
-  Natural Heritage System
-  Ecoregion
- Wetland**
  -  Provincially Significant Wetland Evaluated
  -  Non - Provincially Significant Wetland Evaluated
  -  Unevaluated Wetland
- Area of Natural Heritage & Scientific Interest (ANSI)**
  -  Provincially Significant Life Science ANSI
  -  Provincially Significant Earth Science ANSI
- Greenbelt Plan**
  -  Boundary
  -  River Valley Connections
- Land Use Designations**
  -  Protected Countryside
  -  Towns and Villages
  -  Hamlets
  -  Urban River Valley
  -  Specialty Crop Area
- Niagara Escarpment Plan (NEP)**
  -  Boundary
  -  Parks and Open Space System
- Land Use Designations**
  -  Escarpment Natural Area
  -  Escarpment Protection Area
  -  Escarpment Rural Area
  -  Mineral Resource Extraction Area
  -  Escarpment Recreation Area
  -  Urban Area
  -  Minor Urban Centre
- Oak Ridges Moraine Conservation Plan (ORM)**
  -  Boundary
  -  Natural Core Area
  -  Natural Linkage Area
  -  Countryside Area
  -  Rural Settlement
  -  Palgrave Estates Residential Community
  -  Settlement Area

0.3                      0                      0.16                      0.3 Kilometers



This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry(OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

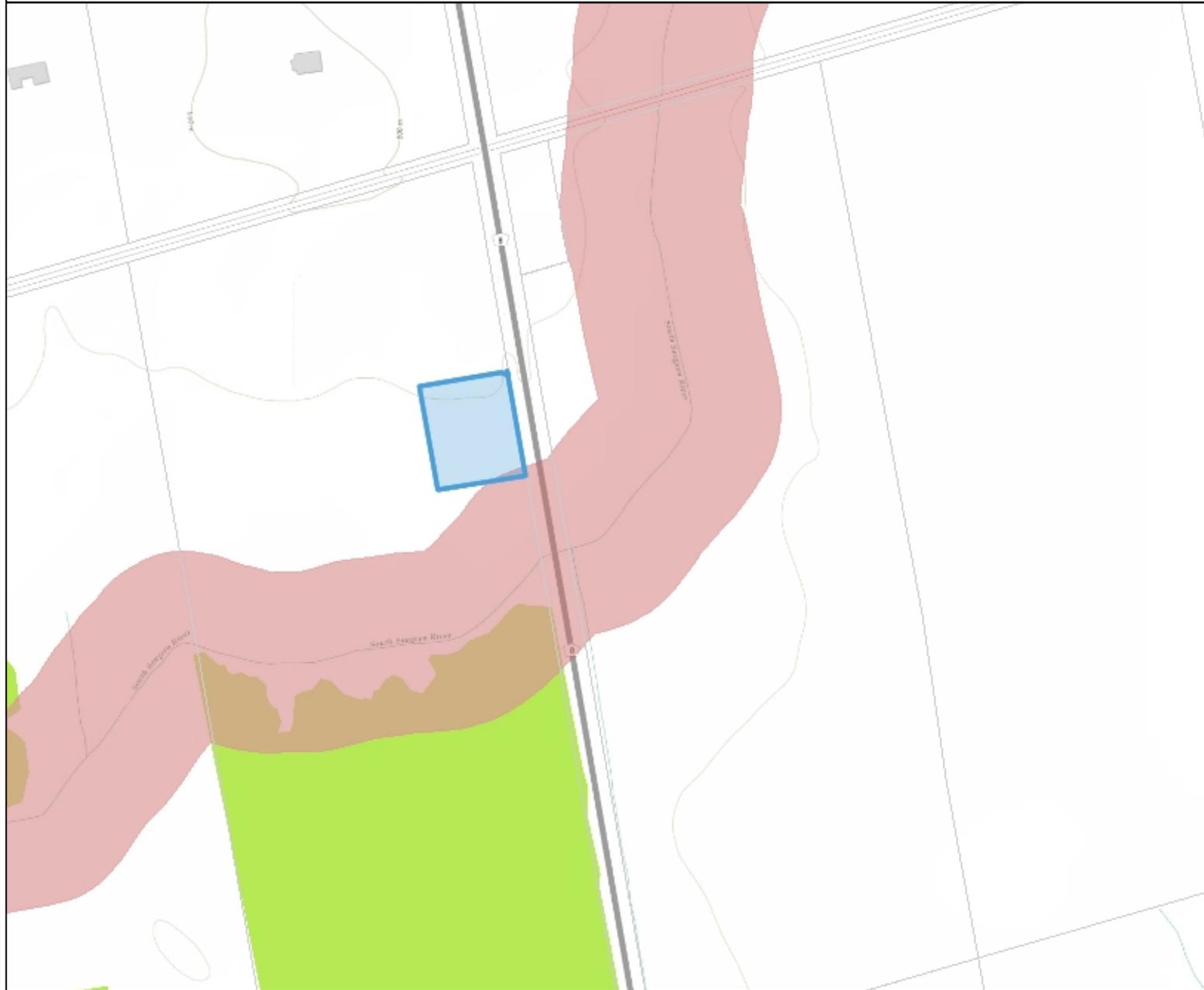
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## **APPENDIX B**

### Grey County Natural Heritage Feature Mapping

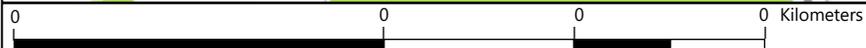




## Legend

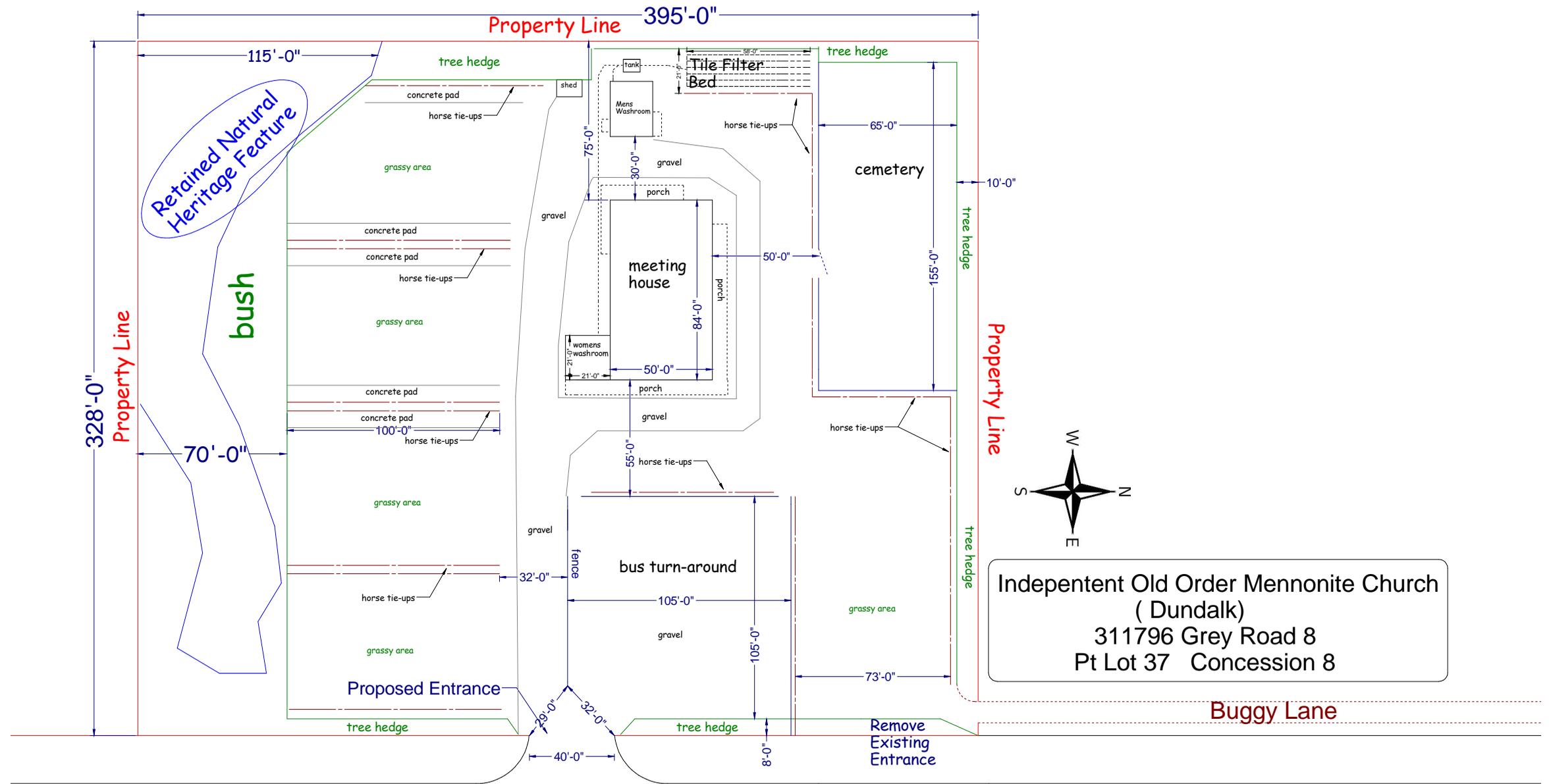
- Parcels
- Hazardous Forest Types for Wildlar**
- Extreme
- High
- Landfills**
- Abandoned Landfill: D-4 Recommended to
- Abandoned Landfill: Previously Evaluated
- Abandoned Landfill: Previously Identified
- Existing Landfill Site
- Petroleum Wells**
- Abandoned Well
- Active Well
- Unknown
- Wastewater
- Intake Protection Zone**
- IPZ-1
- IPZ-2
- Intake Protection Zone 3
- Wellhead Protection Zone E
- Wellhead Protection**
- WHPA-A
- WHPA-B
- WHPA-C
- WHPA-D
- Karst Area
- ANSI**
- ANSI, Earth Life Science
- ANSI, Earth Science
- ANSI, Life Science
- Other Wetlands
- Significant Valleylands
- Significant Woodlands
- NEC Boundary
- NHS Core
- NHS Linkage

## Notes



**APPENDIX C**  
Proposed Development Plan





# Grey Rd 8