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TOWNSHIP OF UXBRIDGE
DEVELOPMENT SERVICES



DILLON
CONSULTING

SALEVILLE LIMITED PARTNERSHIP

Saleville Property

Environmental Impact Study



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1.0 Introduction

1.1 Background

Dillon Consulting Limited was retained by Saleville Limited Partnership to complete an Environmental Impact Study (EIS) for the proposed residential development on lands located within the Township of Uxbridge and Regional Municipality of Durham. The subject property is legally described as Pt 4, 40R17204 in the Township of Uxbridge. The subject property is located on the south side of Elgin Park Drive, and is bound by Wooden Sticks Golf Course to the east and south, and Uxbridge Brook and Uxbridge Brook Headwater Wetland Complex to the west (**Figure 1**).

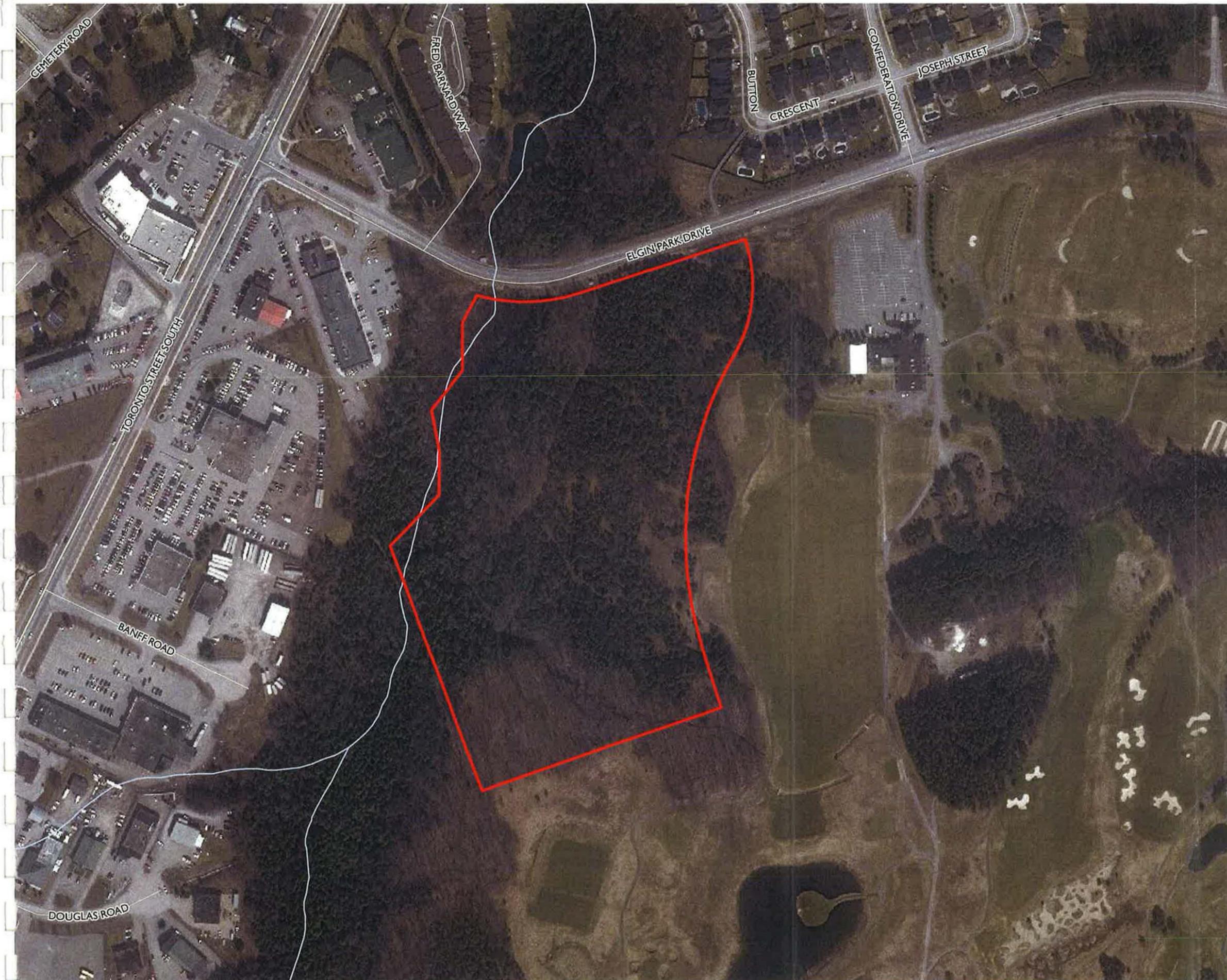
The subject property is currently a vacant lot in a natural state that provides recreational function to the surrounding community. A portion of the subject property is proposed to be developed into single-family residences. This EIS was prepared in general conformity with the Watershed Development Guidelines, 2015 prepared by the Lake Simcoe Region Conservation Authority (LSRCA). This report discusses existing conditions of the natural environment, identification of natural heritage features and functions, potential impact identification and analysis, responses to impacts, mitigation to preserve and/or restore natural features and conclusions and recommendations.

1.2 Development Proposal

The proposed Saleville project is a low density, residential development. Access to the proposed development will be provided from Elgin Park Drive. The subject property area is 8.35 ha with a proposed development area of 1.71 ha. The frontage of the subject property onto Elgin Park Drive is approximately 225 metres. Currently the property is designated as a part of the Uxbridge Secondary Plan Area in the Township of Uxbridge Official Plan, 2014.

1.3 Natural Features of Concern

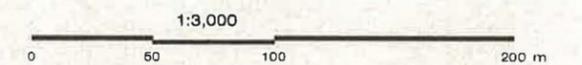
The Uxbridge Brook Headwater Wetland Complex Provincially Significant Wetland (PSW) and Uxbridge Brook falls within the subject property. The subject property also falls within the Oak Ridges Moraine Conservation Plan (ORMCP) boundary and the property is designated as a Settlement Area under the ORMCP. The property is designated as an Environmental Constraint Area, Natural Hazard Area, Significant Woodland and Wetland on the western portion of the subject property, while the eastern portion of the subject property is designated as Recreational Mixed Use under the Township of Uxbridge Official Plan (Schedule A, **Appendix A**). The Uxbridge Brook Headwater Wetland Complex PSW was staked with the Ministry of Natural Resources (MNRF) on October 30, 2015.



**SALEVILLE PROPERTY
UXBRIDGE, ONTARIO**

**FIGURE 1
SITE LOCATION**

- ▭ Project Boundary
- Watercourse



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: GM
MAP CHECKED BY: SR
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 152274
STATUS: DRAFT
DATE: 12/14/2016

2.0 Municipal and Agency Requirements

2.1 General

The assessment of the natural features and functions on the subject property was undertaken having regard for the requirements of the following legislation, policies, plans, and regulations:

- Provincial Policy Statement, 2014
- Fisheries Act, 1985
- Endangered Species Act, 2007
- Oak Ridges Moraine Conservation Plan, 2002
- Greenbelt Plan, 2005
- Durham Region Official Plan, 2015
- Durham Region Tree Cutting By-law (2008-027)
- Township of Uxbridge Official Plan, 2014
- Conservation Authorities Act - Ontario Regulation 166/06, 2006
- Lake Simcoe Region Conservation Authority Watershed Policies
- Lake Simcoe Region Uxbridge Brook Watershed Study

2.2 Provincial Policy Statement

The Provincial Policy Statement (PPS), 2014 provides overall policy direction on matters of provincial interest related to land use planning and development in Ontario. The PPS provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. Policies within Section 2.1 of the PPS, Natural Heritage, provide for the protection and management of natural heritage resources.

Policy 2.1.5 and 2.1.4 identifies the following natural heritage features and areas for protection from development and site alteration, unless it can be demonstrated that there will be no negative impacts on the natural features or their ecological functions:

Policy 2.1.4 states development and site alteration shall not be permitted in:

- significant wetlands in Ecoregions 5E, 6E and 7E1 ; and
- significant coastal wetlands.

Policy 2.1.5 states development and site alteration shall not be permitted in:

- significant wetlands (Provincially Significant) in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
- significant woodlands in Ecoregions 6E and 7E;
- significant valleylands in Ecoregions 6E and 7E;

- significant wildlife habitat;
- significant areas of natural and scientific interest; and
- coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4.

Policy 2.1.8 specifies that development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas 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 functions.

Within the boundaries of the subject property, the natural features present that are protected under Policy 2.1.4 are significant woodlands and wetlands (see **Section 3.0** for further details).

2.3 Fisheries Act

The Uxbridge Brook to the west has been identified as fish habitat by the LSRCA. Fisheries Act Authorizations, issued by Fisheries and Oceans Canada (DFO), are now only required for work that causes serious harm to fish in waterbodies that are part of or support commercial, recreational or Aboriginal fisheries and no longer for the Harmful Alteration, Disruption or Destruction (HADD) of fish habitat. Serious harm is defined as *“the death of fish or any permanent alteration to, or destruction of, fish habitat”*.

The Uxbridge Brook constitutes a waterbody that is part of or supports commercial, recreational or Aboriginal fisheries. However, it is not anticipated that the proposed development would result in serious harm to fish due to: the relatively small, localized nature of the proposed development, proposed buffers and setbacks to the Uxbridge Brook, and recommended mitigation measures for vegetation clearing and erosion and sediment control (refer to **Section 6.5** of this report), Therefore, an authorization under the Fisheries Act is not an anticipated requirement.

2.4 Endangered Species Act, 2007

With the enactment of the Federal Species at Risk Act (SARA) in 2004, and the Provincial *Endangered Species Act* (ESA) in 2008, Ontario has strong policies in place for the protection and recovery of Species at Risk. The ESA protects species and their habitats. When a species is listed as endangered or threatened under the ESA, its habitat is afforded protection under the Act.

Discussion regarding Species at Risk findings is provided in **Section 4.8**.

2.5 Oak Ridges Moraine Conservation Plan

The Oak Ridges Moraine Protection Act, 2001, was introduced by the Minister of Municipal Affairs and Housing in May 2001 and led to the establishment of the Oak Ridges Moraine

Section 10A.2.2 “ Any proposal for development or site alteration, except buildings and structures for agricultural, agricultural-related and secondary uses in Major Open Space Areas and/or the Greenbelt Natural Heritage System, as permitted by the policies of the Plan, shall demonstrate that:

- a) *There will no negative effects on key natural heritage or hydrologic features or their functions;*
- b) *Connectivity between key natural heritage or hydrologic features is maintained, or where possible, enhanced for the movement of native plants and animals across the landscape;*
- c) *The removal of other natural features not identified as key natural heritage or hydrologic features should be avoided. Such features should be incorporated into the planning and design of the proposed use wherever possible; and*
- d) *The disturbed area of any site does not exceed 25 percent, and the impervious surface does not exceed 10 percent, of the total developable area, except for major recreational uses and aggregate extraction areas”.*

2.8 Township of Uxbridge Official Plan

The Township of Uxbridge Official Plan was consolidated in 2014. The subject property is located within the Secondary Plan Area (**Appendix A**).

The Township of Uxbridge Official Plan indicates that although lands on the subject property have various designations in the OP Schedules that a specific set of designations apply to the subject property. This section is discussed below.

The subject property is subject to a specific clause in the Official Plan, listed below.

2.3.3.6.2 *Lands south of Elgin Park Dr. west and north of Wooden Sticks Golf Course, and east of Uxbridge Brook notwithstanding any other policies of this section, the lands in the Environmental Constraint Area designation south of Elgin Park Drive, west and north of Wooden Sticks Golf Course and east of Uxbridge Brook shall be subject to the following policies:*

i) The permitted uses shall be conservation, enhancement and preservation of the natural environment and non-obtrusive/passive recreational uses which will have minimal impact on the natural features and ecological functions of the area.

ii) The Township will work with the Region of Durham, the Lake Simcoe Conservation Authority and the land owner to determine how the lands will be managed for their long term protection, including the potential acquisition of the lands by the Township or other public agency. Where the lands are not acquired by a

With respect to Natural Hazard Areas:

2.3.2.1 The Natural Hazard Area overlay designation includes those lands that could be unsafe for development due to naturally occurring processes such as flooding, erosion susceptibility and slope instability. All floodplain areas which have been mapped by the Conservation Authority are included in the Natural Hazard Area overlay designation and the floodplain boundaries are identified on Schedules "A" and "B" to the Plan.

2.9 Conservation Authorities Act

Ontario Regulation 179/06, made under the authority of Section 28 of the Conservation Authorities Act, is intended to ensure public safety and protect property with respect to natural hazards and to safeguard watershed health by preventing pollution and destruction of sensitive environmental areas such as wetlands, shorelines and watercourses.

Ontario Regulation 179/06 establishes Regulated Areas where development could be subject to flooding, erosion or dynamic beaches, or where interference with wetlands and alterations to shorelines and watercourses might have an adverse effect on those environmental features. Under Ontario Regulation 179/06, any proposed development, interference or alteration within a Regulated Area requires a permit from LSRCA.

2.10 Lake Simcoe Region Protection Plan

As part of Ontario's overall strategy to protect and restore the ecological health of the Lake Simcoe watershed, the Lake Simcoe Protection Act, 2008 was established. The Act provides the authority for the creation of and amendments to the Lake Simcoe Protection Plan (LSPP), which was passed in July 2009. In the event of a conflict between a designated policy of the LSPP and another provincial plan, the provision that gives the greatest protection to the ecological health of the Lake Simcoe Watershed prevails.

Chapter 6 policies which specifically apply to Settlement Areas include the following:

6.10-DP Where, in accordance with the policies of the Plan, development or site alteration is permitted within 120 metres of the Lake Simcoe shoreline, other lakes in the Lake Simcoe watershed, or any permanent or intermittent stream or a wetland, the development or site alteration should be integrated with and should not constrain ongoing or planned stewardship and remediation efforts.

6.11-DP Where, in accordance with the policies of this Plan, a proposal for development or site alteration is permitted within 30 metres of the Lake Simcoe shoreline, other lakes in the Lake Simcoe watershed, or a permanent or intermittent stream or wetland outside of settlement areas and the Greenbelt area and Oak Ridges Moraine area, the proposal for development or site alteration shall comply with the following where applicable:

This limit is based upon a peer review study completed by Fred Johnson that delineated the key natural heritage feature to the west of the developable area within the subject property. This line indicates the appropriate setback from the natural features (wooded feature and PSW) to the west and permits development to the east of this line. Please refer to **Appendix A** for full correspondence.

2.14 Analysis of Significance and Sensitivity

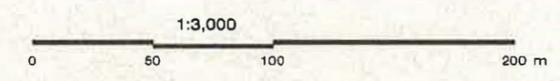
The significance of natural heritage features has been evaluated based on their size, shape, age, degree of disturbance, sensitive species, species diversity, corridor function, adjacent land use and protected designated lands (i.e. PSW, ESA). Parameters defining significance criteria follow those suggested in the PPS and Natural Heritage Reference Manual (NHRM) (Ontario Ministry of Natural Resources 1999), and the Township of Uxbridge Official Plan. Identification and evaluation of significance has been augmented by the Significant Wildlife Habitat Technical Guide (SWHTG) (Ministry of Natural Resources, 2000), where appropriate.



**SALEVILLE PROPERTY
UXBRIDGE, ONTARIO**

**FIGURE 2
DESIGNATED NATURAL HERITAGE FEATURES**

- Project Boundary
- Fred Johnson Line
- Staked PSW Dripline (MNR)
- Watercourse
- Provincially Significant Wetland
Woodland



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: GM
MAP CHECKED BY: SR
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 152274
STATUS: DRAFT
DATE: 3/11/2016

3.0 Methodology of Biophysical Inventory

3.1 Landform Features and Soils

A background review of Durham Region Soil mapping was conducted to assess soil conditions on the subject property. A review of Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) soils reports was done to determine soil classification on the property, as discussed in **Section 4.2**.

3.2 Watercourses

The mapped watercourse features identified within the subject property boundaries (i.e., Uxbridge Brook) are far removed from the anticipated development limits and as such, a comprehensive aquatic assessment was not completed. A desktop and background information review was completed to complement existing data. Furthermore, the proposed development is located in an area where there is sufficient existing information to assess the health and sensitivity of the watercourse. The aquatic desktop review included the evaluation of sources related to fisheries and aquatic habitats such as Fisheries and Oceans Canada (DFO) Aquatic Species at Risk mapping and the LSRCA Uxbridge Brook Watershed Study.

3.3 Vegetation

Botanical surveys were undertaken in mid-July to inventory summer vegetation in conjunction with Ecological Land Classification (ELC). Surveys consisted of wandering transects and/or area searches to determine the presence, richness and abundance of floral species on the subject property. Species nomenclature was based on the species lists for Ontario maintained by NHIC which uses international standards for taxonomy and nomenclature.

3.3.1 Tree Analysis

A Tree Analysis of the trees anticipated to be impacted by development was conducted by a Dillon biologist on January 21, 2016. Results and further discussion are found in **Section 4.4.1 and Appendix E**.

3.4 Ecological Land Classification

Ecological Land Classification protocol (Lee et al. 1998) techniques were used to assess vegetation communities within the subject property. Where present, vegetation community boundaries were determined through the review of aerial photography, and then further refined through on-site soil and vegetation studies. Vegetation studies involved identifying the dominant species in each vegetation community type based on visual estimates of species abundances and biomass. All vegetation communities were identified using second

4.0 Results of Biophysical Inventory

4.1 General

A biophysical inventory of natural features on the subject property was conducted during the 2015 field season. Through the analysis of data collected to date in the field and from secondary source information, a detailed biophysical inventory of natural features located on the subject property was available for completing this EIS.

4.2 Landform Features and Soils

The subject property is located within two physiographic regions. These regions are the Oak Ridges Moraine (ORM) and the Peterborough Drumlin Field (Chapman and Putnam, 1984). Approximately 500 metres north of the subject property are clay plains associated with the Peterborough Drumlin Field (Chapman and Putnam, 1984). The Peterborough Drumlin Field is characterized as a rolling drumlinized till plain. The drumlins are composed of a stone-rich, slightly silty to medium grained sand till. The subject property is located in the ORM physiographic region and consists of the kame moraines formed during the Late Wisconsin glaciation time period (Chapman and Putnam, 1984). The ORM generally rises in elevation from east to west peaking in elevation near the community of Uxbridge, as a result of the western portion of the moraine receiving earlier and more frequent sedimentary deposition than the eastern portion.

4.3 Watercourses

The subject property is located within the Uxbridge Brook Subwatershed (part of the Lake Simcoe watershed), approximately 28 kilometers (km) south of Lake Simcoe and 32 km north of Lake Ontario. The Uxbridge Brook subwatershed has a drainage area of 178 km² and is drained by the Uxbridge Brook, which flows generally in a northerly direction to Pefferlaw Brook, and eventually drains into Lake Simcoe. The headwaters originate from discharge springs and seepages along the northern flanks of the Oak Ridges Moraine.

The Uxbridge Brook Watershed Study (LSRCA, 1997) states that during the aquatic evaluation of the Uxbridge Brook in 1996, a total of 18 different fish species were documented in the Uxbridge Brook including both cold and warmwater species.

The study (LSRCA, 1997) indicates that the Uxbridge Brook in the vicinity of the subject property, is a coolwater system that supports a variety of aquatic life. Species such as Brook Trout (*Salvelinus fontinalis*), Bluntnose Minnow (*Pimephales natatus*) and Brown Trout (*Salmo trutta*) can be found within the reaches of the Uxbridge Brook. Sensitive species such as Brook Trout have been noted as occurring in the cooler headwaters of Uxbridge Brook, while less sensitive species such as Sculpin (*Cottus sp.*) can be found in the warmer southern reaches of

Scot's Pine is the dominant species (85% species composition) found within the development area as the ecological community within this general area has been identified as a Pine Coniferous Forest type.

The majority of trees were in fair or good condition, while only 4% of trees inventoried were in poor condition.

Detailed tree inventory results, including species, diameter at breast height and tree condition, are provided in **Appendix E**.

Upon confirmation that the LSRCA and Township are in general agreement with the proposed Site Plan and the proposed stormwater management strategy, additional tree inventory will be provided in all disturbed areas (i.e. 3:1 sloping areas, emergency access route, and LID/stormwater management areas).

4.5 Ecological Land Classification

ELC was completed for the subject property on July 23, 2015. A total of 5 ELC communities were identified during the ELC exercise. The location, type, and boundaries of natural features located within the subject property are shown on **Figure 3**. None of the vegetation communities documented on-site are considered rare in Ontario. Natural vegetation communities were classified to nearest ecosite class.

The dominant community on the property is Dry-fresh Pine Coniferous Forest (FOCM1). Other communities found on the property include Dry-Fresh Coniferous Woodland (WOCM1), Dry-fresh Poplar Deciduous Forest (FODM3), Mixed Forest (FOM) and Deciduous Swamp (SWD).

Natural communities (e.g. forest) on the subject property have been disturbed due to cultural activity and are characterized by the presence of early successional species in some areas. The one dominant forest community (FOCM1) dominated by Scot's Pine is found on the eastern portion of the subject property. Below is a brief summary of each vegetation community located within the subject property.

4.5.1 Dry-Fresh Pine Coniferous Forest (FOCM1)

A 4.37 ha portion of this mid-age coniferous forest community is located on the subject property and accounts for the majority of the east side of the subject property and east of the Fred Johnson Line in the proposed development area. The dominant tree species within the canopy layer of this community is Scot's Pine, followed by Green Ash (*Fraxinus pennsylvanica*). Commonly observed species in the sub-canopy and understory include additional Scot's Pine occurrences, Alternate-leaved Dogwood (*Cornus alternifolia*) and Common Buckthorn (*Rhamnus cathartica*). The ground layer of this community is dominated by Dog-strangling vine (*Cynanchum rossicum*) and Canada Goldenrod (*Solidago canadensis canadensis*). Other species observed within these vegetation layers include Trembling Aspen (*Populus tremuloides*), White Spruce (*Picea glauca*), Thimbleberry (*Rubus parviflorus*) and Wild Bergamot (*Monarda*

fistulosa). Soil samples indicate the community is characterized by clay loam with a moisture regime of 2 (dry-fresh).

4.5.2 Dry-fresh Poplar Deciduous Forest (FODM3)

A 1.41 ha portion of this mid-age deciduous forest community is located on the subject property to the west and south of the proposed development. This community is dominated by Large-tooth Aspen (*Populus grandidentata*) and Sugar Maple (*Acer saccharum*). Common species observed in the sub-canopy and understory include Alternate-leaved Dogwood, and Common Buckthorn. Common species observed in the ground layer include Spotted Jewelweed (*Impatiens capensis*), Sensitive Fern (*Onoclea sensibilis*) and Colt's Foot (*Tussilago farfara*). Other species observed within these vegetation layers include Green Ash, Canada Wild Ginger (*Asarum canadense*) and Blue Cohosh (*Caulophyllum giganteum*).

4.5.3 Dry-Fresh Coniferous Woodland (WOCM1)

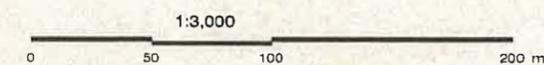
A 0.32 ha portion of this woodland community is located on the eastern edge of the subject property. Due to the age of this community there are no species found within the canopy layer. Species in the sub-canopy and understory included Scot's Pine, Trembling Aspen and Black Cherry (*Prunus serotina*). The ground level is dominated by the non-native European Swallow-wort or Dog-strangling Vine (*Cynanchum rossicum*) with some occurrences of Common Milkweed (*Asclepias syrica*).



**SALEVILLE PROPERTY
UXBRIDGE, ONTARIO**

**FIGURE 3
ECOLOGICAL LAND CLASSIFICATION AND
NATURAL ENVIRONMENTAL SURVEY POINTS**

- Breeding Bird Survey Point
 - Project Boundary
 - Fred Johnson Line
 - Countryside Preserve Trail
 - Watercourse
- Ecological Land Classification**
- FOCM1: Dry - Fresh Pine Coniferous Forest
 - FODM3-1: Dry - Fresh Poplar Deciduous Forest
 - FOM: Mixed Forest
 - SWD: Deciduous Swamp
 - WOCM1: Dry-Fresh Coniferous Woodland



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: GM
MAP CHECKED BY: SR
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 152274
STATUS: DRAFT
DATE: 3/11/2016

4.5.4 Mixed Forest (FOM)

A 0.81 ha portion of this mixed forest community is located on the subject property to the west of the proposed development. This community is largely associated with the outer reaches in the transitional zone of the Uxbridge Brook Headwater Wetland Complex PSW. The Countryside Preserve trail runs to the east of this community in a north south fashion (**Figure 3**). The PSW and its form and function are further discussed in **Section 4.10**.

4.5.5 Deciduous Swamp (SWD)

A 0.45 ha portion of this deciduous swamp community is located in the northwest corner of the subject property. Similar to the Mixed Forest community this swamp community is also associated with the Uxbridge Brook Headwater Wetland Complex PSW that occurs in the western portion of the property. The PSW and its form and function are further discussed in **Section 4.10**.

4.6 Breeding Bird Survey

Point counts and area searches were conducted within the subject property as shown on **Figure 3**. One breeding bird survey was conducted on July 8, 2015. During the breeding bird survey, thirteen species were observed in or immediately adjacent to the subject property. A list of birds and their breeding evidence observed within the subject property during the 2015 breeding season is documented in **Table 1**. Based on field observations, 10 species out of 12 observed showed signs of possible breeding evidence. 3 species out the observed 12 bird species are considered area sensitive, while 9 out of the 12 species observed were typical of an urban/agricultural setting and common in woodland and edge features. One Species of Conservation Concern was observed during field studies and is further discussed in **Section 4.8**.

All the of birds observed to date were either displaying signs of “possible” breeding evidence, or were, not showing evidence of breeding, as defined by Bird Studies Canada (2001). Possible breeding evidence observed across a range of species included: species observed in its breeding season and presence of singing males. A background search of the Ontario Breeding Bird Atlas was also performed, the results of this exercise are found in **Appendix B**.

TABLE 1: BREEDING BIRD SURVEY RESULTS

FAMILY	NAME		SARA ¹	ESA ²	SRank ³	HIGHEST BREEDING EVIDENCE
	Scientific	Common				
Corvidae	<i>Corvus brachyrhynchos</i>	American Crow	---	---	S5B	S
Fringillidae	<i>Carduelis tristis</i>	American Goldfinch	---	---	S5B	F/O
Turdidae	<i>Turdus migratorius</i>	American Robin	---	---	S5B	S
Laridae	<i>Poecile atricapillus</i>	Black-capped Chickadee	---	---	S5	S
Corvidae	<i>Cyanocitta cristata</i>	Blue Jay	---	---	S5	S
Cardinalidae	<i>Passerina cyanea</i>	Indigo Bunting	---	---	S4B	S
Parulidae	<i>Seiurus aurocapilla</i>	Ovenbird	---	---	S4B	S
Vireonidae	<i>Vireo olivaceus</i>	Red-eyed Vireo	---	---	S5B	S
Sittidae	<i>Sitta canadensis</i>	Red-breasted Nuthatch	---	---	S5	S
Laridae	<i>Larus delawarensis</i>	Ring-billed Gull	---	---	S5B	F/O
Turdidae	<i>Hylocichla mustelina</i>	Wood Thrush	---	SC	S4B	S
Troglodytidae	<i>Troglodytes troglodytes</i>	Winter Wren	---	---	S5B	S

1. Federal Species at Risk Act (Source: SARA Public Registry, 2007) Note: END – Endangered, THR – Threatened, SC – Special Concern
2. Provincial Endangered Species Act (Source: OMNR website, 2007) Note: END – Endangered, THR – Threatened, SC – Special Concern
3. Subnational (Provincial) Rank (Source: OMNR National Heritage Information Centre website, 2007)
 ➤ S-ranks - S5 = Very Common; S4 = Common; S3 = Rare-Uncommon; S2 = Rare; S1 = Extremely Rare; SNA (SE) = conservation status ranking not applicable (exotic), ? -status uncertain
4. Breeding Evidence: Possible Nesting – S = singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season; Confirmed Nesting – CF = Adult carrying food for young; F/O – species observed flying over the site and not within the property

4.7 Incidental Wildlife Observations

Incidental wildlife species observed within the subject property to date are listed in **Table 2** below. All of the species listed below are considered common and secure in Ontario.

TABLE 2: INCIDENTAL WILDLIFE OBSERVATIONS

SCIENTIFIC NAME	COMMON NAME	SRANK ¹	SARA ²	ESA ³
<i>Corvus brachyrhynchos</i>	American Crow	S5B	---	---
<i>Carduelis tristis</i>	American Goldfinch	S5B	---	---
<i>Poecile atricapillus</i>	Black-capped Chickadee	S5	---	---
<i>Setophaga virens</i>	Black-throated Green Warbler	S5B	---	---
<i>Cyanocitta cristata</i>	Blue Jay	S5	---	---
<i>Picoides pubescens</i>	Downy Woodpecker	S5	---	---
<i>Sylvilagus floridanus</i>	Eastern Cottontail	S5	---	---
<i>Regulus satrapa</i>	Golden-crowned Kinglet	S5B	---	---
<i>Tamiasciurus hudsonicus</i>	Red Squirrel	S5	---	---
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	S5	---	---
<i>Bonasa umbellus</i>	Ruffed Grouse	S4	---	---
<i>Sitta carolinensis</i>	White-breasted Nuthatch	S5	---	---
<i>Odocoileus virginianus</i>	White-tailed Deer	S5	---	---

1. Subnational (Provincial) Rank (Source: OMNR National Heritage Information Centre website, 2007)

2. Federal *Species at Risk Act* (Source: SARA Public Registry, 2007)

3. Provincial Endangered Species Act (Source: OMNR website, 2007)

4.8 Endangered, Threatened and Rare Species

A search of the MNR's NHIC database revealed no occurrence records for Species at Risk within a 1 kilometre vicinity of the subject property (17PJ4983, 17PJ4984, 17PJ5084 & 17PJ5083). Additionally, a search of the OBBA data revealed seven occurrence records for Species at Risk within a 10 kilometre vicinity of the subject property. The species identified through background review and observed in the field are shown in **Table 3** below.

TABLE 3: SPECIES AT RISK WITH THE POTENTIAL TO OCCUR

SCIENTIFIC NAME	COMMON NAME	SARA ²	ESA ³	SRANK ¹	HABITAT	POTENTIAL HABITAT ON-SITE	OBSERVED IN FIELD
<i>Hirundo rustica</i>	Barn Swallow	---	THR	S4B	Man-made structures	N	N
<i>Riparia riparia</i>	Bank Swallow	---	THR	S4B	Natural and artificial sites with vertical banks	N	N
<i>Dolichonyx oryzivorus</i>	Bobolink	---	THR	S4B	Hay fields and Meadow	N	N
<i>Juglans cinerea</i>	Butternut	END	END	S3	Lowlands and riparian areas	Y	Y
<i>Cardellina canadensis</i>	Canada Warbler	THR	SC	S4B	Deciduous/Coniferous forest, with dense	N	N

					shrub layer		
<i>Sturnella magna</i>	Eastern Meadowlark	---	THR	S4B	Hay fields and Meadow	N	N
<i>Colinus virginianus</i>	Northern Bobwhite	END	END	S1	Grasslands and croplands	N	N
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	THR	SC	S4B	Deciduous mature forest	Y	N
<i>Hylocichla mustelina</i>	Wood Thrush	---	SC	S4B	Deciduous/coniferous mature forest	Y	Y

1. Subnational (Provincial) Rank (Source: OMNR National Heritage Information Centre website, 2007)

2. Federal *Species at Risk Act* (Source: SARA Public Registry, 2007)

3. Provincial Endangered Species Act (Source: OMNR website, 2007)

There is suitable habitat for Red-headed Woodpecker (*Melanerpes erythrocephalus*) within the deciduous forest communities that occurs outside the development limits to the west.

Butternut were observed to the southwest and outside of the proposed development. Both specimens showed signs of canker and one was in poor condition, while the other was dead standing.

One Species of Conservation Concern (SCC), Wood Thrush (*Hylocichila mustelina*) was observed during the breeding bird survey on July 8, 2015. This species was heard within the subject property within suitable nesting habitat, however no nests or breeding behavior were observed. Direct negative impacts are not anticipated to any of the aforementioned species due to lack of encroachment into their respective habitats. Negative impacts to birds could be avoided by adhering to Migratory Bird Act timing windows for nesting avian species when conducting vegetation removal. Refer to **Section 5 and 6** for further discussion and details on potential negative impacts to breeding bird habitat.

4.9 Significant Wildlife Habitat

Guidelines for identifying and confirming significant wildlife habitat are outlined in the NHRM, Significant Wildlife Habitat Technical Guide (MNR, 2015), and the guide's addendum for the Ecodistrict 6E (MNR, 2015). Provincially rare species with the potential to occur on the subject property were previously discussed in **Section 4.8**. Using the ELC classifications described in **Section 4.5** and site observations, candidate significant wildlife habitat within the Study Area includes the following:

- Candidate Woodland Area-Sensitive Bird Breeding Habitat – Ovenbird, Black-throated Green Warbler and Winter Wren were observed and heard within suitable breeding habitat, within and adjacent to the subject property. The contiguous woodland surrounding the subject is greater than 30 hectares.

- Candidate Amphibian Breeding Habitat (Woodland) – The deciduous swamp associated with the PSW on the western portion of the subject property provides suitable habitat for woodland amphibian species.

These potential wildlife habitats are associated with the Uxbridge Brook corridor and surrounding wooded areas. There is also potential for wildlife to use Uxbridge Brook as a movement corridor to travel between seasonal habitats upstream and downstream, located north and south of Elgin Park Drive.

Field studies to evaluate the significance of candidate significant wildlife habitat have not been completed, and as such, it will be assumed that these habitats are significant. An assessment of potential impacts and mitigation measures is provided in **Section 6**.

4.10 Significant Wetlands

The subject property contains portions of the Provincially Significant Uxbridge Brook Headwater Wetland Complex. This feature was staked on October 30th, 2015 with a MNRF wetland biologist and a Dillon biologist. The revised PSW boundary is shown on **Figure 2** and **Figure 4**. The development encroaches into this feature due to the requirement of the widening of the Countryside Preserve Trail for emergency access only (trail connection). There will be no development of lots or houses within the 30 metre PSW buffer. The development provides an average distance of 37 metres from the PSW to the edge of the development. At the closest point, the trail widening will encroach into a 0.04 hectare PSW buffer area adjacent to Elgin Park Drive. The furthest point from the PSW buffer measures 73 metres.

It is not anticipated that the minor encroachment in the PSW buffer will have any permanent, direct effects. The Countryside Preserve Trail will continue to function and provide a pedestrian walkway for recreational purposes.

Minimum buffers to PSW's are generally 30 metres. Based on a review of the quality of the wetland and the level of impact of the proposed development, a 30 metre buffer is sufficient for the protection of the wetland. The proposed development exceeds this minimum required buffer by an average of 37 metres.

4.11 Significant Woodlands

The province delegates the responsibility of defining the evaluation criteria for significant woodlands to the local planning authority. Evaluation criteria are generally based on the guidelines of the Natural Heritage Reference Manual (NHRM) (i.e., woodland size, ecological functions, uncommon characteristics and, economic and social functional values). The Township of Uxbridge Official Plan does not explicitly define the criteria for significant woodlands, however, the forested community associated with Uxbridge Brook is defined as a woodland under the Township of Uxbridge Regional Tree By-law #27-2008. The treed areas

within and adjacent to the subject property are delineated on OP Schedule B map in **Appendix A**.

Thus, with regard to the woodland associated with the Uxbridge Brook, and based on the criteria outlined in the NHRM, the woodland feature west of the Fred Johnson Line is considered significant because it is greater than 4 ha (> 50 ha) and has proximity to other habitats and significant natural features such as the Uxbridge Brook and Uxbridge Brook Headwater Wetland Complex.

4.12 Ecological Function

The natural heritage features within the subject property are comprised of several vegetation community types. The area east of the Fred Johnson Line is a generally homogeneous community dominated by planted and non-native species that provide moderate ecological function to the surrounding natural heritage communities. The property is bordered by urban land uses such as Elgin Park Drive to the north and Wooden Sticks Golf Course to the east and south, while natural features such as the Uxbridge Brook Headwater Wetland Complex and Countryside Preserve Trail lie within and adjacent to the subject property to the west and south.

Uxbridge Brook originates in the Oak Ridges Moraine and outlets to Pefferlaw Brook 8.5 kilometres south of Lake Simcoe. Uxbridge Brook is considered as an extremely important cold and warm water fishery (LSRCA, 1999). Uxbridge Brook supports a natural heritage system that includes riparian habitat, woodlands and wetlands located within and adjacent to the subject property. Together, they support the various life cycles of wildlife, provide a riparian function and provide important fish and wildlife habitat.

Although the woodlands associated with Uxbridge Brook extend beyond the immediate corridor, the vegetation communities within the development envelope provide moderate ecological function due to the lack of native vegetation species. In addition, Elgin Park Drive bisects the Uxbridge Brook system, and can be considered a barrier to wildlife movement and may impact the function of Uxbridge Brook to act as a corridor. The corridor function of the subject property is generally limited to the key natural heritage features delineated west of the Fred Johnson Line (as per the LSRCA agreement, **Appendix A**). Given, that the vegetation communities provide moderate ecological function, they may act as a significant throughway or mechanism of dispersal for species to the west that may be utilizing the habitat within Uxbridge Brook.

Moderate ecological functions provided by natural heritage features within the development envelope and east of the Fred Johnson Line subject property include prevention of erosion and runoff, facilitating hydrological and nutrient cycling, and improving localized soil, water and air quality. At the site level, the treed areas of the features provide cover, foraging, refuge and nesting habitat for urban terrestrial wildlife.

5.0 Impact Assessment

5.1 Direct Impacts

The proposed residential development plan as per the Conceptual Draft Plan is shown on **Figure 4**.

Direct impacts are those that are immediately evident as a result of the development. Typically, the adverse effects of direct impacts are most evident during the site preparation and construction phase of a development. The potential direct impacts of the proposed residential development are:

- Tree and vegetation removal;
- Diversion of surface water flows;
- Sedimentation of natural features; and
- Loss of and/or disturbance to wildlife and wildlife habitat.

5.1.1 Potential Impacts to Trees and Vegetation

The proposed development plan indicates removal of the trees and ground vegetation to facilitate the development construction. The Tree Analysis prepared by Dillon concludes that in order to facilitate construction of the development, 189 trees will need to be removed.

Tree removals will be confined to the Dry-fresh Pine Coniferous Forest (FOCM1) and will include mostly non-native specimens (161 Scot's Pine and ground cover dominated by Dog-strangling Vine). Tree removal will be confined to the footprint of the proposed site development, and construction limits, which will minimize the impacts to natural cover and ecological function. Tree removal will result in a reduction of tree cover, marginal wildlife habitat loss, and alteration of soil conditions. These impacts will be mitigated by installing native tree plantings, tree and shrub buffer plantings and a naturalized area. Please refer to **Section 6** for mitigation and enhancement opportunities.

5.1.2 Diversion of Surface Water Flows

As discussed in **Section 4.3**, storm-water flows are currently directed to Uxbridge Brook and flow in a northerly fashion off the subject property with an ultimate outlet to Lake Simcoe. Stormwater flows are currently not managed on the subject property. Post-development, surface flow from the subject property would be expected to be maintained through the use of an integrated storm-water management system which consists of low impact design (LID) techniques including rain gardens and dry ponds. Impacts to flow are expected to be minimal and will correspond with storm/rain events. Refer to **Section 6** for further information on mitigation and enhancement opportunities.

5.1.3 Sedimentation of Natural Features

Potential impacts to natural features are generally associated with sedimentation during construction. When soils are exposed for site works (e.g. grading), sediment, if not properly controlled, has the potential to travel and discharge within the treed areas or along Uxbridge Brook, eventually leading to Lake Simcoe. This potential impact is preventable with the use of best construction practices, an erosion and sediment control plan and monitoring of the plan. Refer to **Section 6** for mitigation and enhancement opportunities.

5.1.4 Loss of or Disturbance to Wildlife and Wildlife Habitat

Habitat for flora and fauna is expected to be impacted due to the proposed development footprint located within treed community dominated by non-native vegetation. Tree and vegetation removal and site disturbance during construction would deter wildlife from using natural features. On average, the development is approximately 8 metres away from the Fred Johnson Line and tree removal will not occur in any areas to the west of the Line. Post-construction, loss of wildlife foraging and breeding habitat is expected due to the removal select trees and deciduous shrubs.

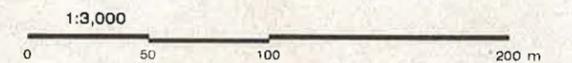
The development is located at an average distance of 37 metres from the 30 metre PSW buffer. Thus, loss of or disturbance to the wetland and/or amphibian habitat on the subject property are not anticipated. Accordingly, wildlife impact mitigation measures have been recommended for the subject property in **Section 6**.



**SALEVILLE PROPERTY
UXBRIDGE, ONTARIO**

**FIGURE 4
SITE PLAN & GRADING**

- Project Boundary
 - Fred Johnson Line
 - Recreational Mixed Use
 - Lot Boundary
 - Curb
 - Grading
 - Watercourse
 - Staked PSW Dripline (MNR)
 - Staked PSW Dripline 30 m Buffer
- Ecological Land Classification**
- FOCM1: Dry - Fresh Pine Coniferous Forest
 - FODM3-1: Dry - Fresh Poplar Deciduous Forest
 - FOM: Mixed Forest
 - SWD: Deciduous Swamp
 - WOCM1: Dry-Fresh Coniferous Woodland



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: GM
MAP CHECKED BY: SR
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 152274

STATUS: DRAFT

DATE: 5/24/2016

5.2 Indirect Impacts

Indirect impacts are those that do not always manifest in the core development area, but in the lands adjacent to the subject property. Indirect impacts can begin in the construction phase; however, they can continue post-construction. Potential indirect impacts of the proposed development include anthropogenic disturbance and colonization of exotic species.

5.2.1 Anthropogenic Disturbance

Disturbance to local wildlife communities due to indirect impacts on the lands adjacent to the proposed development could result if left unmitigated. Noise, light, vibration and human presence are indirect impacts that can adversely influence the population size and breeding success of local wildlife. These effects are more pronounced when new development is introduced in non-urban areas. The proposed development is within an area with a high degree of recreational use presently. The small scale of the development, coupled with the separation between the development and more sensitive natural features will minimize the anthropogenic disturbance.

5.2.2 Invasion of Exotic Species

Physical site disturbance may increase the likelihood that exotic and/or invasive flora species will be introduced to the surrounding vegetation communities. Invasive flora can establish in disturbed sites more efficiently than native flora and can then encroach into adjacent undisturbed areas. This effect can be largely mitigated through the use of native species in landscaping plans, in particular it is expected that an improvement to species diversity occurs post development due to the homogeneous composition of the eastern portion of the subject property.

6.0 Mitigation and Opportunities for Enhancement

Mitigation involves the avoidance or minimization of developmental impacts through good design, construction practices and/or restoration and enhancement activities. The feasibility of mitigation options has been evaluated based on the natural features within and adjacent to the subject property. The impact assessment of the development plan highlighted four potential direct impacts, which include tree and vegetation removal, diversion of surface water flows, potential loss of wildlife and wildlife habitat, and sedimentation of natural features.

A variety of mitigation techniques can be used to minimize or eliminate the above-mentioned impacts. These measures include a restoration/compensation planting plan, a wildlife impact mitigation plan, a stormwater management plan, low impact development (LID) techniques, an erosion and sediment control plan and an environmental monitoring plan. Each mitigation measure is introduced below. Detailed mitigation measures will be finalized in consultation with the LSRCA and the Township of Uxbridge as part of the preliminary and detailed design of the development.

6.1 Natural Heritage Feature Buffers & Enhancement

In order to mitigate potential encroachment from residents, as well as the spread of invasive species into the adjacent woodland and wetland, vegetated buffers are to be established (refer to **Figure 4**). The width of the buffer is 10 metres on the eastern portion of the subject property bordering onto Wooden Sticks Golf Course. An average setback distance of at least 8 metres has been proposed between the limit of development and the Fred Johnson Line on the west side of the development envelope.

In addition to the proposed buffers, a portion of the property has been identified for enhancement. This portion of the property is located between the Fred Johnson Line and the development and is designated *Environmental Constraint Area*. Within this area for enhancement, native plantings are proposed to further naturalize the area and promote an enhanced edge habitat adjacent to the woodland designated *Environmental Constraint Area*. Enhancement would be undertaken to support the adjacent *Environmental Constraint Area* and meets the objectives, as outlined under the Township's Official Plan, for *Environmental Constraint Area*, which the enhancement area is designated (see **Section 2.8**).

6.2 Natural Heritage Feature Buffers & Enhancement Planting Plan

The proposed development plan will require the removal of select trees, shrubs, wildflowers and, therefore a Buffer & Enhancement Planting Plan is provided within the Conceptual Landscape Plan that will be submitted under separate cover. Compensation plantings of trees are generally based on the number of removals required to facilitate construction of the development. The exact number of compensation plantings is to be determined once the number of trees to be removed is confirmed. The preliminary proposed plantings include:

- A mix of native deciduous and coniferous;
- A mix of native low and tall deciduous shrubs; and,
- A native seed mix recommended by suppliers for enhancement of early successional meadow habitats.

6.3 Low Impact Design

The potential LID techniques that should be utilized include rain gardens, dry ponds and bio-swales. Quality control for the controlled discharge of storm-water flows could be provided by oil/grit separators. Discharge of storm-water flows are to enter the existing 650 mm diameter CSP culvert that outlets to Elgin Park Drive. This will minimize the need to re-grade the ditch along Elgin Park Drive as well as the requirement for a culvert under the emergency access/trail. After discharging into the culvert, storm-water flows will be conveyed via the ditch through existing vegetation that would provide further water quality treatment prior to flows entering the Uxbridge Brook. As a result of the described SWM plan, storm-water flows are not anticipated to have a significant impact on aquatic systems within Uxbridge Brook.

6.4 Erosion and Sediment Control Plan

Construction activity, especially operations involving the handling of earthen material, increases the availability of sediment for erosion and transport by surface drainage. In order to mitigate the adverse environmental impacts caused by the release of sediment-laden runoff into receiving watercourses, measures for erosion and sediment control are required. This is an important component of land development that plays a large role in the protection of downstream watercourses and aquatic habitat.

Control measures must be selected that are appropriate for the erosion potential of the site and it is important that they be implemented and modified on a staged basis to reflect the site activities. Furthermore, control measure effectiveness decreases with sediment loading and therefore, inspection and maintenance is required.

As part of detailed design, an Erosion and Sediment Control Plan is to be developed for the proposed development that includes (as appropriate): the installation of geotextile silt fences,

rock check dams, ditch checks, temporary sediment ponds, designated topsoil stockpile areas, and cut-off swales and ditches to divert surface flows to the appropriate sediment control area.

The Erosion and Sediment Control Plan is to be prepared for review and approval by the Township of Uxbridge prior to any major site works being undertaken. This plan is to address phasing, inspection, and monitoring aspects of erosion and sediment control.

Sediment control devices generally are to remain in place until construction, grading, topsoiling and grading are complete. Upon completion of construction works and stabilization of the site, siltation control devices are removed as directed by the Township's Engineer.

6.5 **Wildlife Impact Mitigation Plan**

Strategies to mitigate impacts to wildlife prior to and during construction are proposed. These may include (but are not limited to):

- Clearing trees and vegetation outside the breeding bird season (May 1st to July 31st). If any vegetation clearing must occur during this period a qualified biologist will conduct nest searches prior to clearing;
- Prior to site disturbance it should be confirmed that migratory birds are not making use of the site for nesting. Works should be scheduled in order to conform to the *Migratory Birds Convention Act* (1994) and that no migratory bird nests are not impacted by the proposed work;
- Visual monitoring for wildlife species and avoidance where encountered if possible; and,
- If necessary, have a qualified biologist monitor construction in the areas of potential wildlife habitat.

6.6 **Environmental Monitoring Plan**

The Environmental Monitoring Plan (EMP) would be carried out through the duration of construction activities on-site to ensure that the erosion and sediment control (ESC) measures operate effectively and to monitor the potential impact, if any, upon the natural environment. The duration of construction is defined as the period of time from the beginning of earthworks until the site is stabilized. Site stabilization is defined as the point in time when the roads have been paved, buildings have been built, lawns have been sodded and restoration plantings have been completed.

The EMP would consist of monitoring the ESC measures and the restoration/compensation plantings. ESC measures would be regularly monitored and they will require periodic cleaning (e.g. removal of accumulated silt), maintenance and/or re-construction. Inspections of all of the erosion and sediment controls on the construction site should be undertaken by a certified sediment and erosion control monitor. If damaged control measures are found they should be repaired and/or replaced promptly. Site inspection staff and construction managers should

refer to the Erosion and Sediment Control Inspection Guide (2008) prepared by the Greater Golden Horseshoe Area Conservation Authorities. This Inspection Guide provides information related to the inspection reporting, problem response and proper installation techniques.

Compensation planting will require periodic monitoring to ensure that they are not impacted by adjacent development. Should any impacts be observed, necessary steps will be taken to ensure that the impacted vegetation is either restored or replaced.

7.0 Summary

A proposal for the development of a residential community has been prepared through this application for the property located on Elgin Park Drive and legally described as Pt 4, 40R17204 in the Township of Uxbridge. This EIS has been prepared due to the proximity of the natural heritage features located on and adjacent to the subject property.

Through field studies conducted to date, dominant tree species found on the property were Scot's Pine and most were in good or fair condition.

Wildlife common to the urban environment have been documented on the subject property and are likely to continue to use this area. However, significant natural heritage features are found on the subject property and are associated with the Uxbridge Brook corridor, and the Uxbridge Brook Headwater Wetland Complex PSW to the west and south, that provide significant wildlife habitat for a number of species.

The proposed development will require removal of trees and vegetation on a portion of the subject property. However, the removal of 189 trees within the subject property is not anticipated to impact the adjacent significant natural features, as these trees are primarily non-native and the area will be enhanced and naturalized using native tree and shrub plantings. Additionally, a developable limit line (Fred Johnson Line, **Figure 4**) which delineates adjacent natural heritage features was agreed upon by LSRCA and the Township of Uxbridge that permits development to the east of line. A comprehensive buffer planting plan will be developed, which will assist in mitigating potential impacts as previously described in this report. To prevent sedimentation of natural features, an erosion and sediment control plan will be developed to ensure the natural features located in proximity to the proposed development are not adversely affected as a result of construction activities. In addition, a stormwater management plan will be developed to maintain existing surface water run-off patterns. An environmental monitoring plan is recommended during construction to monitor impacts on the natural environment and ensure mitigation measures are implemented.

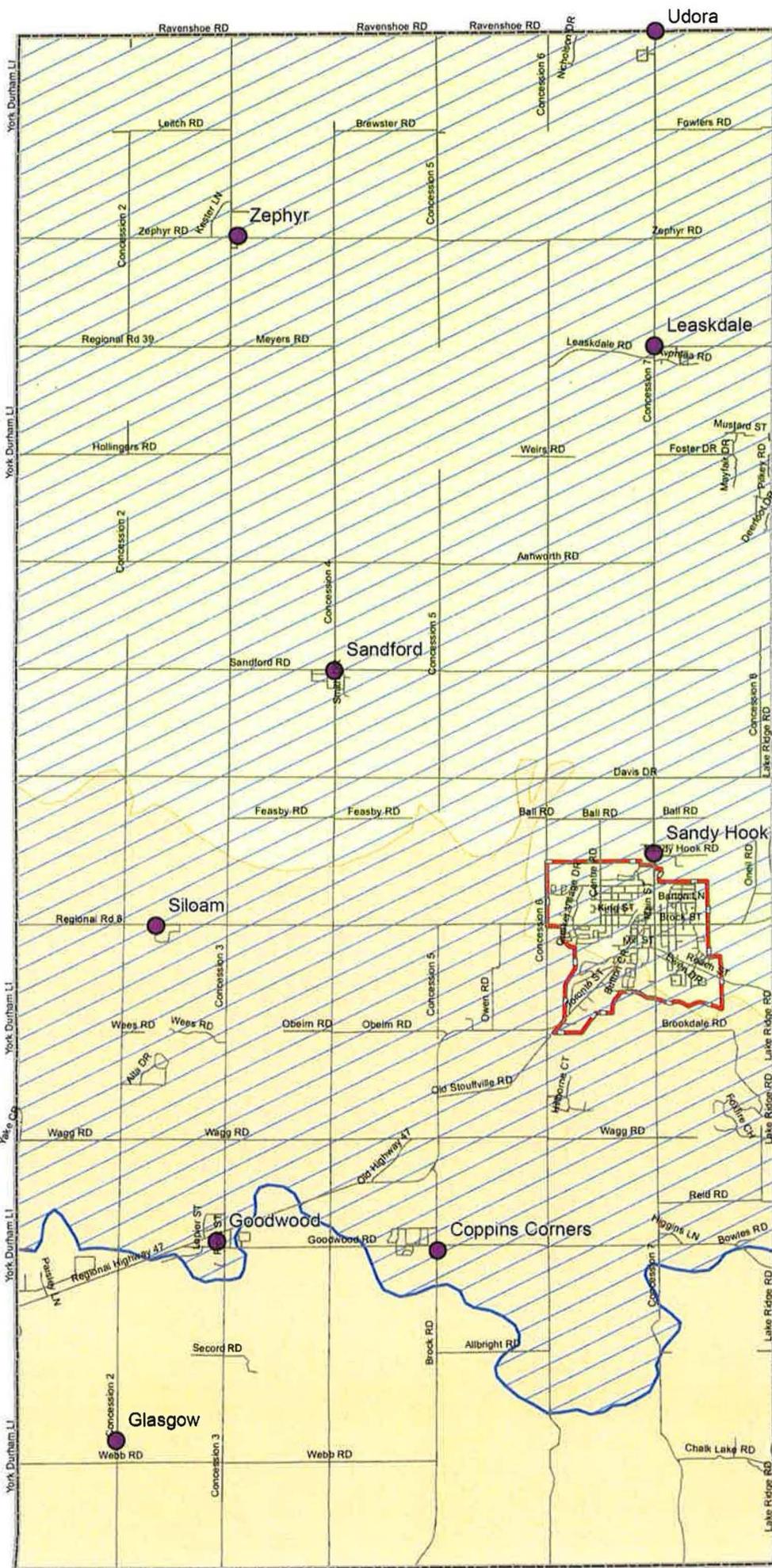
With the implementation of the above noted measures, the proposed plan can meet the requirement for natural heritage protection of the Township of Uxbridge, the Region of Durham and the Province of Ontario.

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- Township of Uxbridge Official Plan. Approved 2014.

Appendix A
Supplementary Information

Map 1 Township of Uxbridge Community Structure & Provincial Plan Areas



Legend

- Hamlets
- Township of Uxbridge Boundary
- Uxbridge Urban Area Boundary
- Oak Ridges Moraine Conservation Plan Area
- Greenbelt Plan Area
- Lake Simcoe Protection Act Watershed Boundary

Note: This map is provided for information purposes only and does not form part of the Official Plan

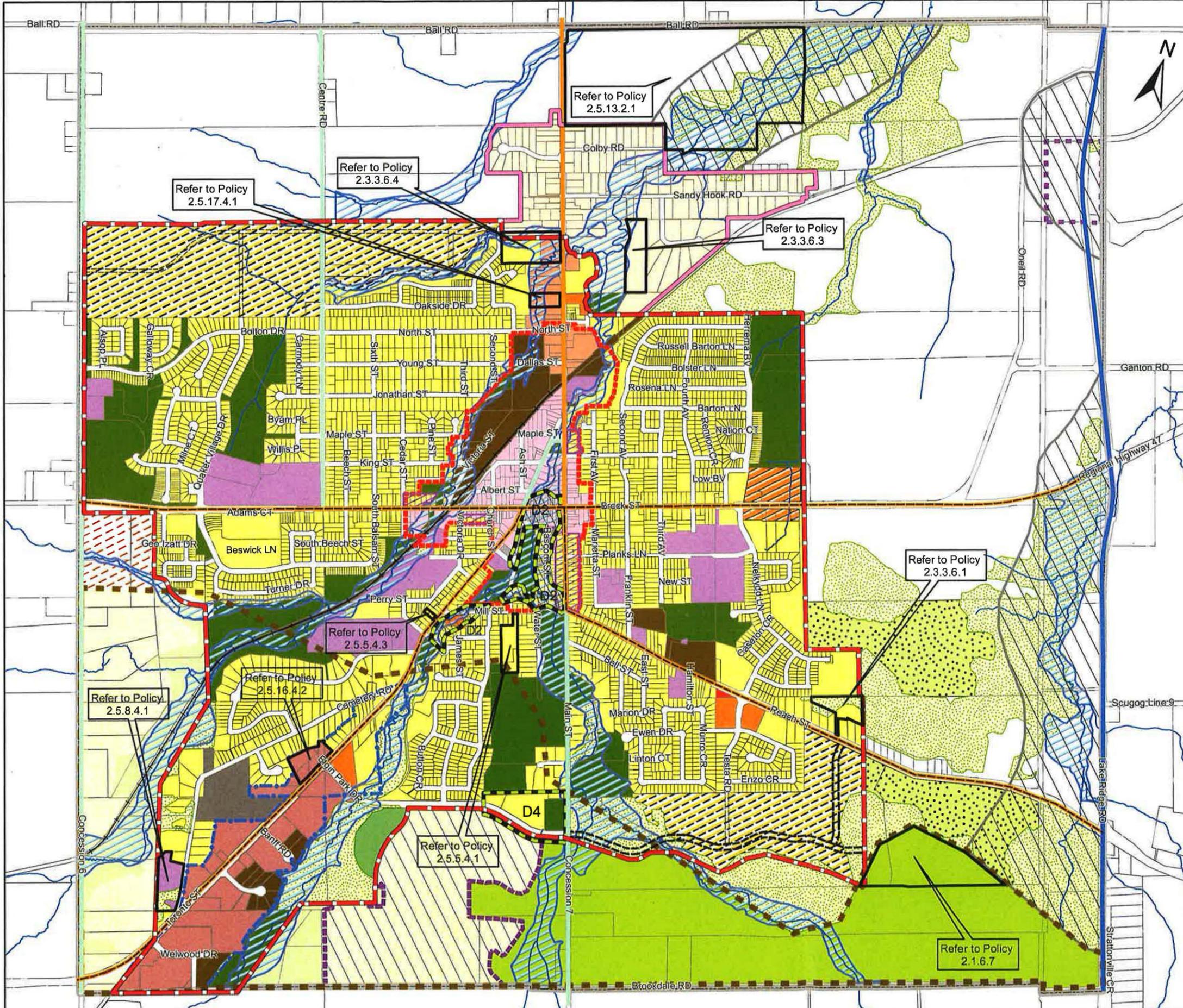


Schedule "A"

Land Use and Transportation Plan

Uxbridge Urban Area

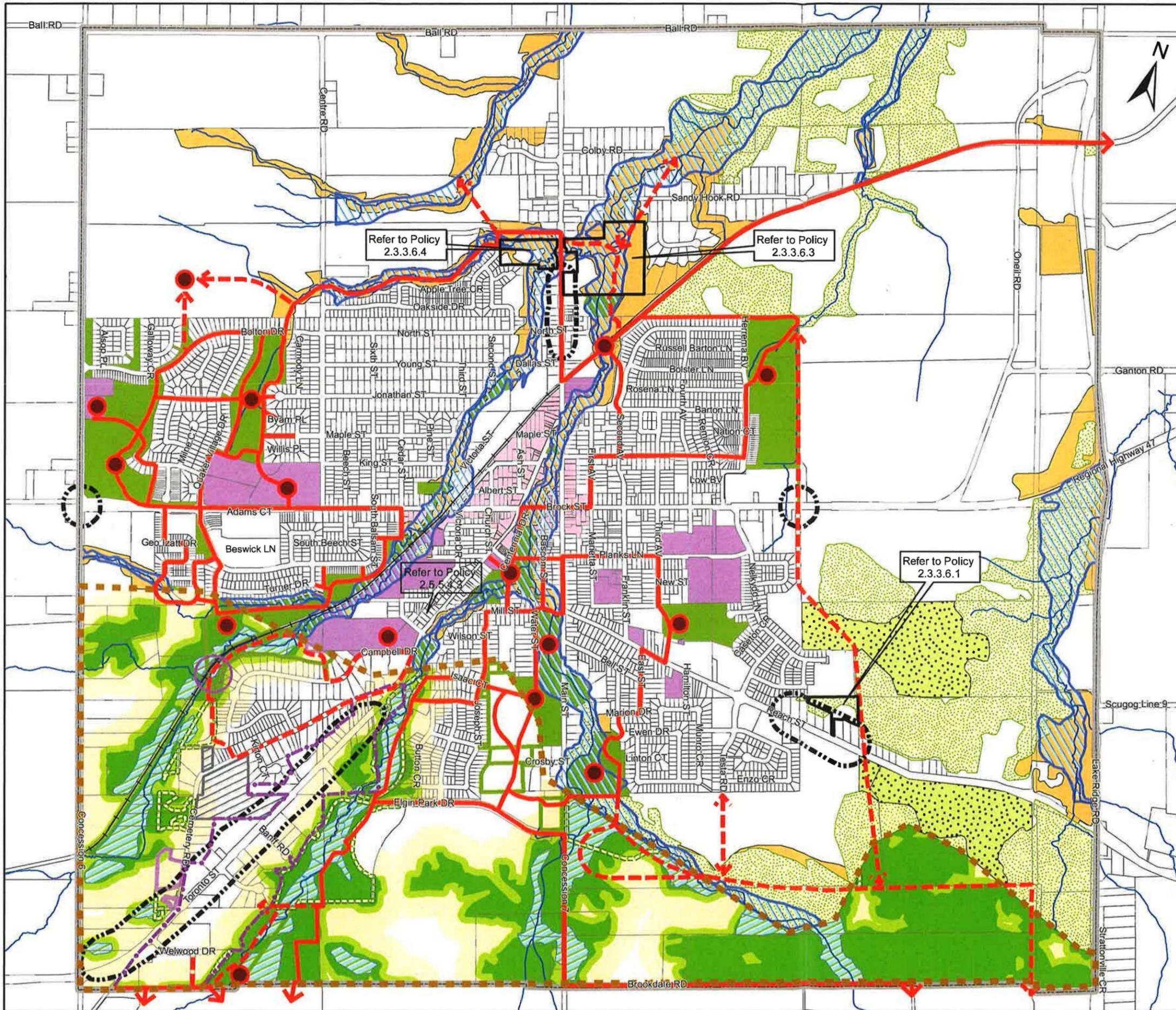
Official Plan of the Township of Uxbridge



- Transportation**
- Type A Arterial
 - Type B Arterial
 - Collector Road
 - Regional Transit Spine
 - Potential Future Collector Road
 - Proposed Local Road
- Natural Heritage**
- Natural Hazard Area
 - Environmental Constraint Area
 - Watercourses & Waterbodies
- Oak Ridges Moraine**
- Oak Ridges Moraine Conservation Plan Area Boundary
 - Countryside Area
 - Natural Linkage Area
 - Natural Core Area
- General Land Use**
- Secondary Plan Area
 - Urban Area Boundary
 - Downtown
 - Main Central Area
 - Mixed Use Area
 - Brock Street Mixed Use Area
 - Recreational Mixed Use Area
 - Corridor Commercial Area
 - Local Commercial Area
 - Residential Area
 - Residential Area Higher Density
 - Future Residential Area
 - Institutional Area
 - Employment Area
 - Park and Open Space Area
 - Major Open Space Areas
 - Private Open Space Area
 - Cemetery Area
 - Hamlet Boundary
 - Hamlet Area
 - Rural Estate Area
 - Prime Agricultural Areas
 - Waste Disposal Area
 - Special Policy Area
 - D2
 - Policy Area 2.1.6.7 Approved Major Recreation Use
 - Mixed Use Special Policy Area
 - Lands Subject to 18(6) of the Moraine Plan
 - Deferral



Schedule "B"
Natural Heritage System
and Supportive Uses
Uxbridge Urban Area
 Official Plan of the Township of Uxbridge



Supporting Uses

-  Secondary Plan Area
-  Main Central Area
-  Private Open Space Area
-  Cemetery Area
-  Institutional Area
-  Park and Open Space Area
-  Gateway Area
-  Land Subject to Section 18(6) of the Moraine Plan

Natural Heritage

-  Natural Hazard Area
-  Environmental Constraint Area
-  Environmental Potential Area
-  Watercourses & Waterbodies

Oak Ridges Moraine

-  Oak Ridges Moraine Conservation Plan Area Boundary
-  Wetlands
-  Significant Woodlands
-  Minimum Vegetation Protection Zone
-  Minimum Area of Influence

Trail System

-  Potential Pedestrian/Bicycle Railroad Crossing
-  Open Space Nodes
-  Existing Trails
-  Proposed Trails

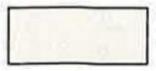


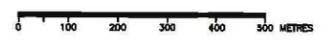
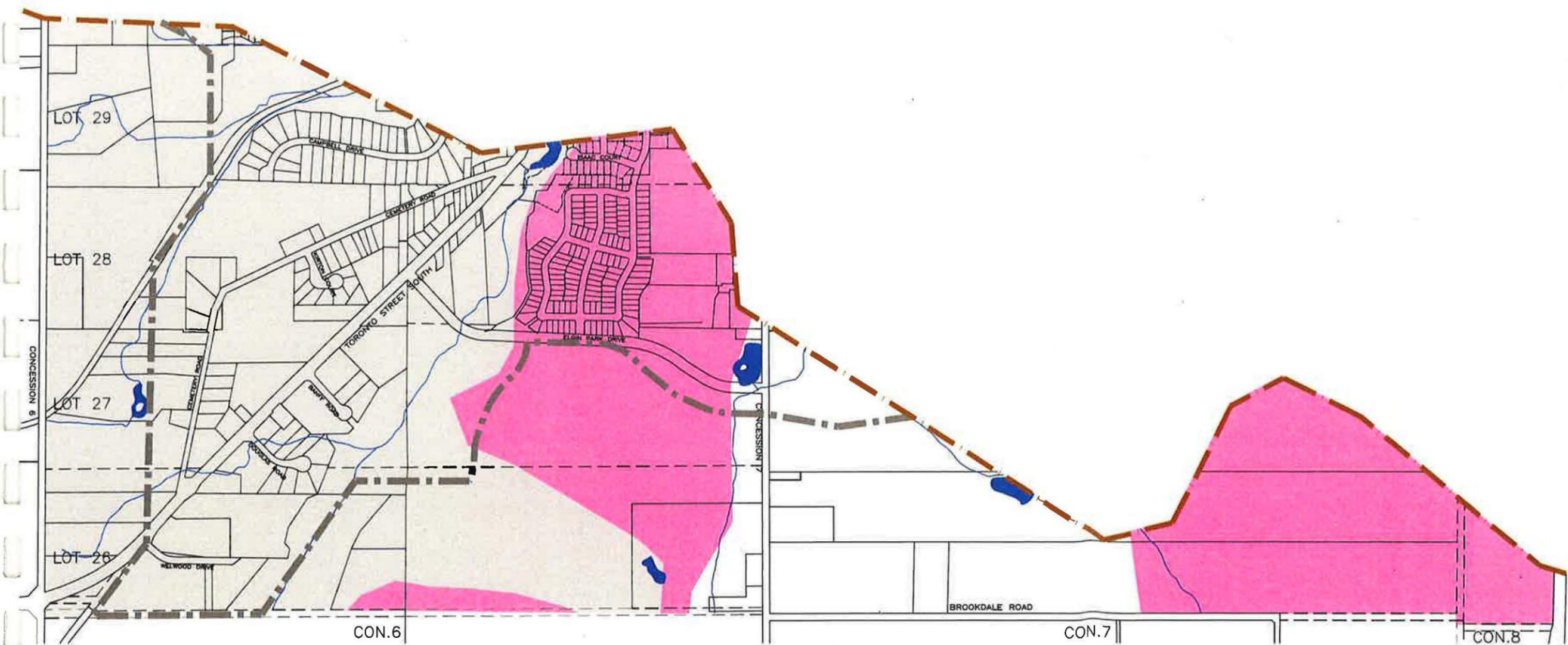
SCHEDULE "B2"

OAK RIDGES MORaine
CONSERVATION PLAN

LANDFORM CONSERVATION AREAS

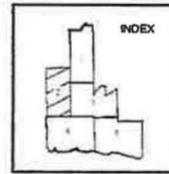
UXBRIDGE URBAN AREA

-  Urban Area Boundary
-  Oak Ridges Moraine Conservation Plan Area Boundary
-  Watercourses
-  Waterbodies
-  Landform Conservation Area Category 1
-  Landform Conservation Area Category 2





**OFFICIAL PLAN OF THE
REGIONAL MUNICIPALITY
OF DURHAM**



**SCHEDULE 'A' - MAP 'A2'
REGIONAL STRUCTURE**

LEGEND

URBAN SYSTEM

- URBAN AREA BOUNDARY
- REGIONAL CENTRE
- * URBAN GROWTH CENTRE
- REGIONAL CORRIDOR
- LIVING AREAS
- EMPLOYMENT AREAS
- S MUNICIPAL SERVICE
- ▨ AREAS DEVELOPABLE ON FULL/PARTIAL MUNICIPAL SERVICES
- ▨ AREAS DEVELOPABLE ON MUNICIPAL WATER SYSTEMS & PRIVATE WASTE DISPOSAL SYSTEMS
- ▨ AREAS DEVELOPABLE ON PRIVATE WELLS & MUNICIPAL SEWER SYSTEMS
- ▨ AREAS DEVELOPABLE ON PRIVATE WELLS & PRIVATE WASTE DISPOSAL SYSTEMS
- BUILT BOUNDARY

RURAL SYSTEM

- PRIME AGRICULTURAL AREAS

RURAL SETTLEMENTS :

- HAMLET
- ③ RURAL EMPLOYMENT AREA (SEE TABLE E3 FOR DESCRIPTION)
- ⑫ COUNTRY RESIDENTIAL SUBDIVISION (SEE TABLE E2 FOR DESCRIPTION)
- SHORELINE RESIDENTIAL
- ▲ REGIONAL NODE (SEE SECTION 9C FOR DESCRIPTION)
- ⑫ AGGREGATE RESOURCE EXTRACTION AREA (SEE TABLE E1 FOR DESCRIPTION)

GREENLANDS SYSTEM

- MAJOR OPEN SPACE AREAS
- WATERFRONT AREAS
- OAK RIDGES MORaine BOUNDARY
- ▲ TOURIST ACTIVITY / RECREATIONAL NODE
- OPEN SPACE LINKAGE
- OAK RIDGES MORaine AREAS
- ▨ GREENBELT BOUNDARY
- ▲ WATERFRONT PLACE
- WATERFRONT LINKS

TRANSPORTATION SYSTEM

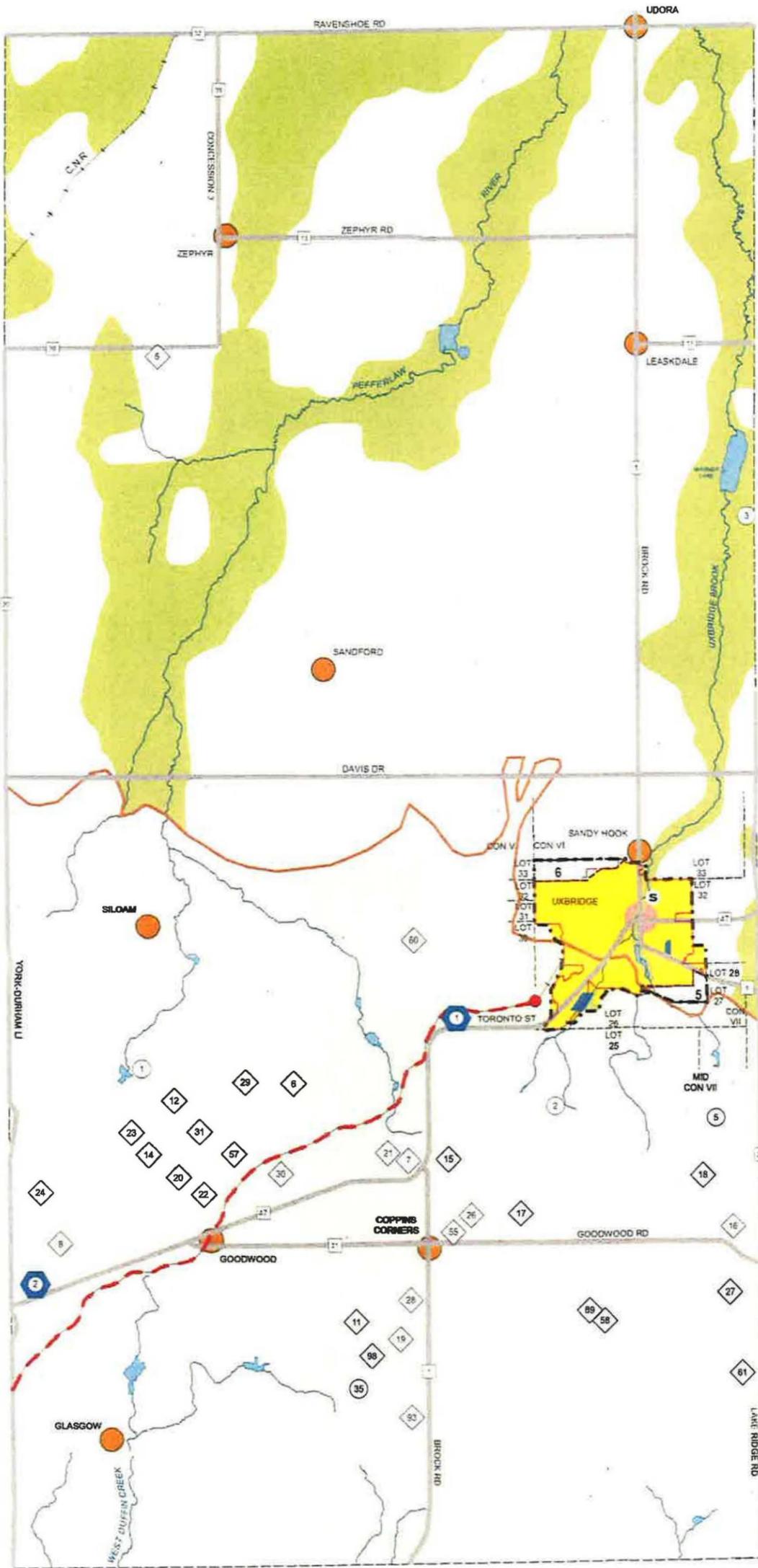
SEE SCHEDULE C FOR DESIGNATIONS

THE FOLLOWING IS SHOWN SELECTIVELY, FOR EASE OF INTERPRETATION OF OTHER DESIGNATIONS ONLY.

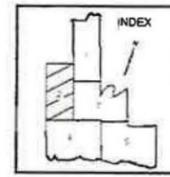
- | EXISTING | | FUTURE |
|----------|---------------|--------|
| — | ARTERIAL ROAD | — |
| — | FREEWAY | — |
| — | INTERCHANGE | — |
| — | GO RAIL | — |
| ● | GO STATION | ● |

SPECIAL AREAS

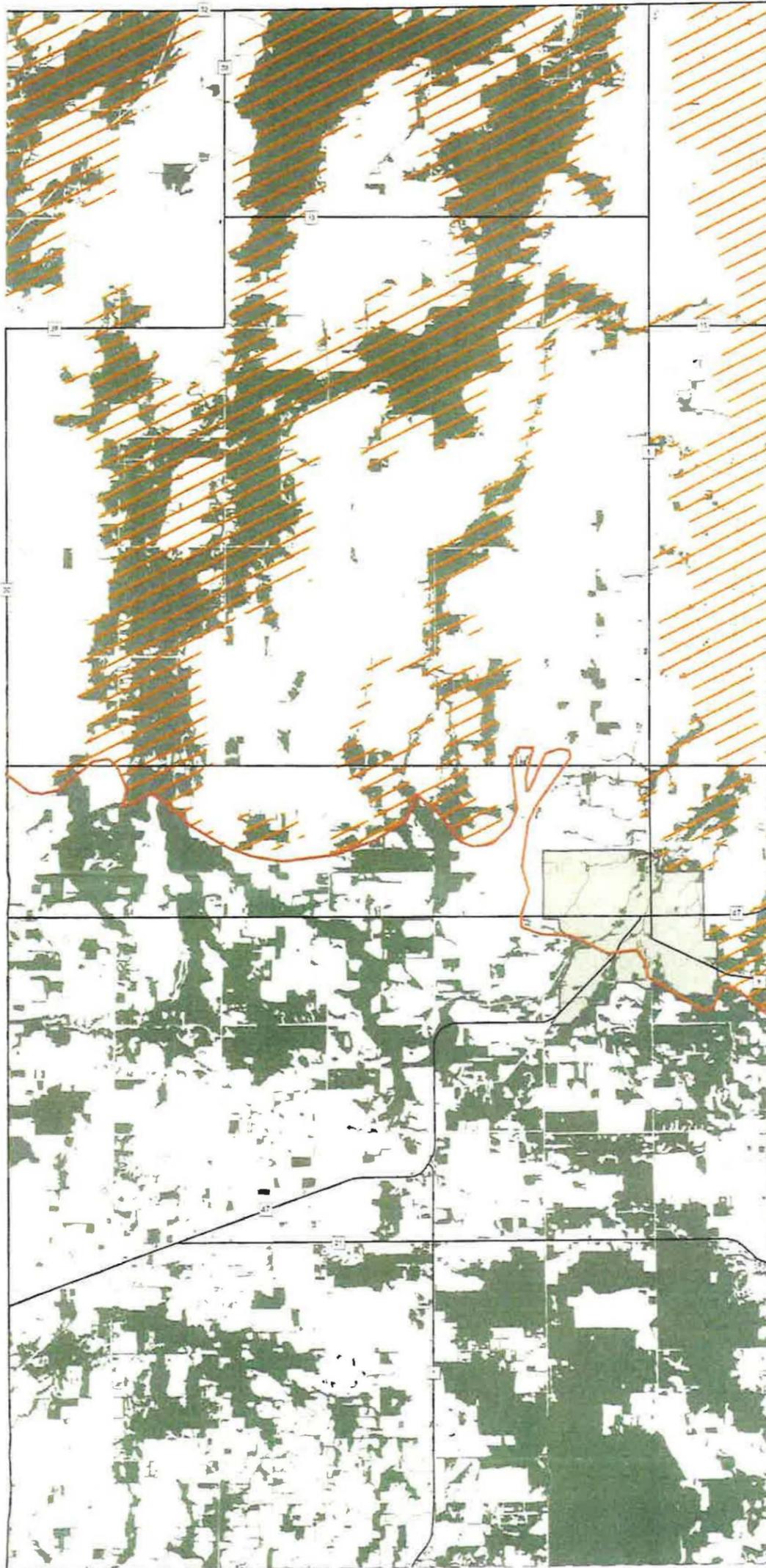
- ② SPECIAL STUDY AREA
- D2 DEFERRED BY MINISTER OF MUNICIPAL AFFAIRS
- A SPECIFIC POLICY AREA
- APPEALED TO O.M.B.
- LANDS APPEALED TO OMB, REFER TO POLICY 14.13.7



NOTES:
 1) THIS MAP FORMS PART OF THE OFFICIAL PLAN OF THE REGIONAL MUNICIPALITY OF DURHAM AND MUST BE READ IN CONJUNCTION WITH THE TEXT
 2) THE DESIGNATIONS FOR THE DEFERRED AREA REFLECT THE POSITION OF REGIONAL COUNCIL. PLEASE REFER TO POLICY 14.13.7
 3) OFFICE CONSOLIDATION - JUNE 28, 2015
SOURCES
 1) OAK RIDGES MORaine BOUNDARY: MINISTRY OF MUNICIPAL AFFAIRS & HOUSING 2002 1:100 000
 2) GREENBELT PLAN: © QUEEN'S PRINTER FOR ONTARIO 2005. REPRODUCED WITH PERMISSION
 3) DELINEATED BUILT BOUNDARY: © QUEEN'S PRINTER FOR ONTARIO, 2008. REPRODUCED WITH PERMISSION



**SCHEDULE 'B' - MAP 'B1b'
GREENBELT NATURAL
HERITAGE SYSTEM &
KEY NATURAL HERITAGE
AND HYDROLOGIC
FEATURES**



LEGEND

-  KEY NATURAL HERITAGE AND HYDROLOGIC FEATURES
-  GREENBELT NATURAL HERITAGE SYSTEM
-  OAK RIDGES MORAINES CONSERVATION PLAN AREA
-  URBAN AREA
-  LANDS APPEALED TO OMB,
REFER TO POLICY 14.13.7.
-  SPECIFIC POLICY AREA

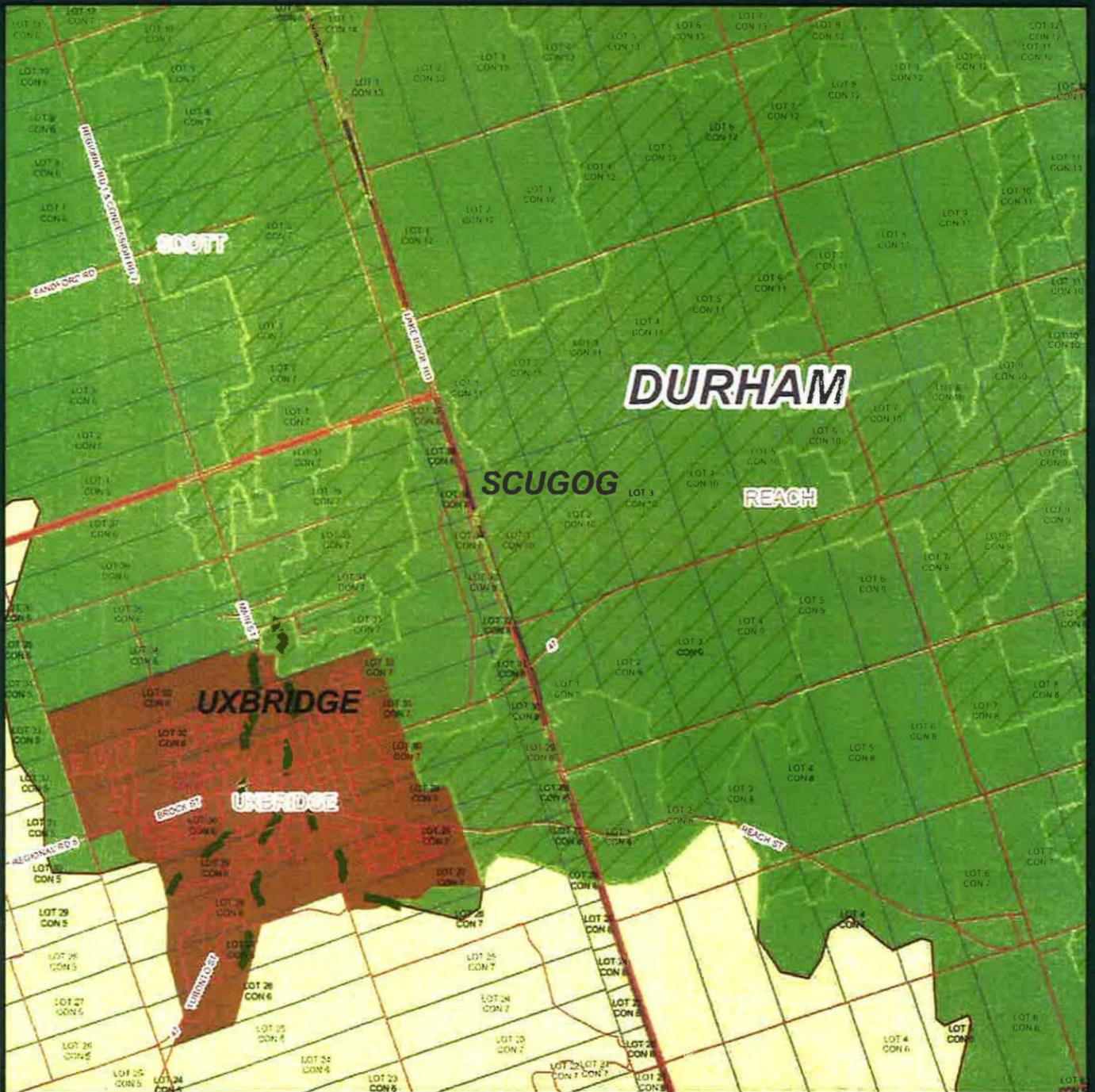
NOTES:
 1) THIS MAP FORMS PART OF THE OFFICIAL PLAN OF THE REGIONAL MUNICIPALITY OF DURHAM AND MUST BE READ IN CONJUNCTION WITH THE TEXT.
 2) ROADS ARE FOR REFERENCE PURPOSES ONLY.
 3) OFFICE CONSOLIDATION - JUNE 28 2015
SOURCES
 1) OAK RIDGES MORAINES; BOUNDARY: MINISTRY OF MUNICIPAL AFFAIRS & HOUSING 2002 1:100 000
 2) NATURAL HERITAGE FEATURES; MINISTRY OF NATURAL RESOURCES 1:10 000
 3) CONSERVATION AUTHORITIES
 4) GREENBELT PLAN © QUEEN'S PRINTER FOR ONTARIO 2005 REPRODUCED WITH PERMISSION

Greenbelt Plan Map division and enlargement



LEGEND

- Greenbelt Area*
 - Proposed Conduits
 - Towns and Villages†
 - Niagara Equipment Flight Area
 - Oak Ridge Moraine Area
- Settlement Areas Outside the Greenbelt
- Natural Heritage System
 - River Make Connections
 - Upper-tier Municipal Boundaries
 - Single-tier Municipal Boundaries
 - Lots and Concessions
 - Major/Minor Roads
 - Geographic Townships
 - Water
- Province of Ontario
- Province of Ontario 1:750,000
Copyright Queen's Printer for Ontario, February 20, 2010
Produced and distributed by the Ministry of Agriculture and Food, Ministry of Municipal Affairs and Housing, and Ministry of Natural Resources
Additional Data Sources: DMTI, Seismic Inc.
- Notes:
Conduits are shown based on the Official Plan. For precise boundaries and locations of Settlement Areas, Towns/Villages and Moraine, the applicable municipal maps should be consulted.
The Greenbelt boundary on this map has been derived from aerial imagery. Where there is a discrepancy between the imagery and the information on this map, the map should be used as the authoritative source of information. The map should not be used as a legal document or as a basis for any legal proceedings.
* Ontario Regulation 24/10.
- 0.5 0.25 0 0.5 1 1.5
Kilometres



g r e e n b e l t



RECEIVED

May 7, 2007

MAY 09 2007

The Regional
Municipality
of Durham

Alex Grant, MCIP, RPP
Chief Administrative Officer
Township of Uxbridge
51 Toronto Street South
P.O. Box 190
Uxbridge, Ontario
L9P 1T1

Planning Department

605 ROSSLAND ROAD E
4TH FLOOR
PO BOX 623
WHITBY ON L1N 6A3
CANADA
905-668-7711
Fax: 905-666-6208
E-mail: [planning@
region.durham.on.ca](mailto:planning@region.durham.on.ca)

www.region.durham.on.ca

A.L. Georgieff, MCIP, RPP
Commissioner of Planning

Dear Mr. Grant:

Re: Post Circulation Comments
Resolution of Deferral 1 to Amendment 19 to the Township of
Uxbridge Official Plan
Our File No.: OPA 1999-009

Our review of the recommendations included in report #DS 64-06 pertaining to the Uxbridge Urban Area Secondary Plan, Deferral Area 1 is now complete. A number of issues have been identified that must be addressed prior to approval by the Region. Accordingly, attached to this correspondence are modifications to the Township's proposed policies that are necessary to ensure conformity with Provincial and Regional policy.

Prior to our presenting the approval to Regional Planning Committee and Council, we request the Township's concurrence with the necessary modifications. In the event that Council does not concur with the proposed change, we respectfully request the reason be expressed. Once we have received Council's response, we will be in a position to present this matter for a decision.

One of the key issues identified is the extent to which the Oak Ridges Moraine Implementation Guidelines apply. Although the Guidelines form the basis for processing the Regional Official Plan Amendment and resolving the deferral (i.e. defining the urban boundary and the internal land use designations), this amendment process can not have the effect of "grandfathering" subsequent applications from the Oak Ridges Moraine Conservation Act. As such, once the deferral is resolved, the site will be subject to the Oak Ridges Moraine Conservation Act and the "Settlement Area" policies of the Oak Ridges Moraine Conservation Plan (ORMCP).

Through our discussion with the Township's planning consultant, there has been a concern raised that the conformity of subsequent applications with the ORMCP could result in a building envelope that would be unsuitable for development. In this regard, it is important to note that there is consensus

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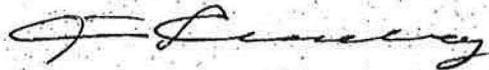


between the Township of Uxbridge, the Lake Simcoe Region Conservation Authority (LSRCA) and the Region of Durham that the peer review study undertaken by Fred Johnson adequately delineated the key natural heritage feature for this site, effectively defining the building envelope. As such, the Township, in consultation with the LSRCA, will determine any further setbacks that may be necessary, in accordance with the requirements of the ORMCP (Section 21 (3) and (4)) and the Regional Official Plan (Section 14.4.10), through the local approval process.

Further, the comments provide by the LSRCA identify requirements to be satisfied prior to the development of the site. Although these requirements are not being included as Official Plan policy, it is important that the Township work with the Conservation Authority to ensure that their requirements are satisfied at the appropriate time.

We look forward to Township Council's resolution on the contents of this correspondence. If you have any questions, or require further clarification, please contact Lori Riviere, Project Planner, at 905-668-4113, extension 2572.

Yours truly,



Nestor Chornobay, MCIP, RPP
Director, Strategic Planning

c.c.: Don Given, Malone Given Parsons
Janet Wong, Lake Simcoe Region Conservation Authority

Attach.

Proposed Modifications - Resolution of Deferral 1 to Amendment 19 to the Township of Uxbridge Official Plan

The proposed modifications are as follows:

1. Section 2.3.3.5 ii):

Delete the reference to the "Oak Ridges Moraine Implementation Guidelines" so that the section reads as follows:

- ii. *"The Township will work with the Region of Durham, the Lake Simcoe Conservation Authority and the land owner to determine how the lands will be managed for their long term protection, including the potential acquisition of the lands by the Township or other public agency. Where the lands are not acquired by a public agency, the Township shall seek the long term protection of the lands through the use of stewardship or other agreement."*

Once the deferral is resolved, the site will be subject to the Oak Ridges Moraine Conservation Act and "Settlement Area" policies of the Oak Ridges Moraine Conservation Plan (ORMCP), as such it is not appropriate to reference the "Oak Ridges Moraine Implementation Guidelines", which are no longer in use by the Province. Further, it appears that the Official Plan policy for the "Forest Area" designation is to provide for the long-term protection of the remaining woodlot, while the primary purpose of the Implementation Guidelines was to guide how development may occur.

2. Section 2.5.24.3.1 i) a):

Include the reference to the Durham Regional Official Plan, so that the section reads as follows:

- a) *"The application satisfies the requirements of Section 2.3.5.3 of this Plan and the relevant policies of the Durham Regional Official Plan with respect to development applications in the Oak Ridges Moraine Area;"*

The reference to the Regional Official Plan should remain to ensure that all relevant Official Plan policies are considered when an application is being reviewed.

3. Section 2.5.34.3.1 i) e):

Delete the reference to the Oak Ridges Moraine Implementation Guidelines, so that the section reads as follows:

- e) *"The appropriate siting, design, construction and management requirements have been established and are reflected in the proposed development based on the submissions of the following studies to the satisfaction of the Township and Conservation Authority:*
- a landform conservation plan that demonstrates how the proposed development will be sited, designed, constructed and managed to minimize changes to grading and landform character on site both during and after construction;*
 - a woodland management plan that demonstrates how the proposed development will be sited, designed constructed and managed to maximize the protection of woodlands on site both during and after construction;*
 - an erosion, sedimentation and stormwater management plan that demonstrates how the proposed development will be sited, designed, constructed and managed to minimize the reduction in recharge, water quality and off site impacts both during and after construction."*

Again, once the deferral is resolved, the site will be subject to the Oak Ridges Moraine Conservation Act and "Settlement Area" policies of the ORMCP, as such it is not appropriate to reference the "Oak Ridges Moraine Implementation Guidelines", which are no longer in use by the Province.

Additionally, there are proposed modifications to Schedules A and B outlined below:

4. Schedule A:

The urban boundary for the southern portion of the site should be consistent with the property boundary and extend east to the existing urban boundary.

This proposed modification is consistent with correspondence from Township staff in October 2006, suggesting that it would be more appropriate to have the urban boundary expansion based on the property boundary.

5. Schedules A and B:

The additional "Forest Area" on the southern part of the property should align with the urban boundary to the south.

As requested by the Lake Simcoe Region Conservation Authority.



Sent by Facsimile: 1-905-666-6206

February 14, 2007

Ms. Lori Riviere
Region of Durham
P.O. Box 623
Whitby, ON L1N 6A3

DURHAM REGION PLANNING	
File No.: OPA-1999-009	MS No.: PORC371C2
FEB 21 2007	
ATTENTION	COPIES TO
NCLLR	
FILE #	

Dear Ms Riviere:

**RE: Regional Official Plan Amendment
Township of Uxbridge Official Plan Deferral 1
Saleville Property
Part Lot 27, Concession 6
Township of Uxbridge**

Staff of the Lake Simcoe Region Conservation Authority has received your circulation requesting comments on this application. The Region is proposing to amend its Official Plan at the request of the Township of Uxbridge to expand the Urban Boundary to resolve a deferral to the Township of Uxbridge Official Plan Amendment 19. Approval would result in establishing an Official Plan designation and policies for the subject lands in the Township and Regional documents, resolving the deferral.

We have reviewed the report prepared by Frederick Johnson, Enviroscope Consulting Services, September 9, 2006. We do not have a copy of the LGL information referred to in that letter, including a record of the top of bank staking undertaken, as well as the Golder Associates information. We would appreciate a copy of these documents for our records.

The Johnson recommendation for a potential development area is based on the Potential Development area identified by Michalski Nielsen, Natural Heritage Evaluation, October 2004, figure 4. The issue of buffer and development within this area will need to be further assessed with site specific plans. The top of bank will need to be confirmed with a development proposal and as a minimum the limit of development will need to be 10 metres from this edge.

The delineation of this area is based on an evaluation under the Oak Ridges Moraine Implementation Guidelines. Since the Amendment 19, the Oak Ridges Moraine Conservation Plan has been adopted by the Province and changes to the Planning Act have been made. Moving forward, we do not believe it is appropriate to assess future proposals on dated guidelines. Current legislation, plans and policies should be used. This includes Provincial Policy Statement policies relevant to a site specific development.

We consider the Johnson review to have delineated the key natural heritage feature as defined in the ORMCP for this site and development would not extend beyond this limit. It is our interpretation of the Johnson review that the minimum vegetation protection zone of 30 metres anticipated by the ORMCP may not be necessary and

Tel: 905-895-1281
1-800-465-0437
Fax: 905-853-5881
E-Mail: info@lsrca.on.ca
Web: www.lsrca.on.ca

120 Bayview Parkway
Box 282
Newmarket, Ontario
L3Y 4K1

A
**Watershed
for Life**



February 14, 2007
File No.: OPA 1999-009
IMS No.: POFC371C2
Ms. Lori Riviere
Region of Durham
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would be further defined with a site specific proposal and development of a woodland management plan, grading, erosion and sediment control plans. We believe the grading and site layout for a proposal should be supported by a natural heritage evaluation that includes:

1. an inventory for provincially or regionally endangered or threatened species, or watershed rare species;
2. description of woodlands features and functions that may be affected by the development. Should more than three years elapse from the previous breeding bird survey, then a new survey should be undertaken to determine the current breeding function and to add to the inventory for endangered or threatened species;
3. mapping of these species and areas;
4. mitigation measures that will maintain or enhance the significant woodland, including provision of an appropriate buffer;
5. an overall strategy to address the loss of woodlands in the development area, including compensation measures and potential for protecting and integrating woodlands into the final design; and
6. mitigation measures for provincially or regionally endangered or threatened species, or watershed rare species.

With respect to the Johnson review of Groundwater Resources, a water balance and appropriate mitigation measures will need to be provided with the site specific proposal to demonstrate that recharge will be protected or enhanced.

Thus our comments on the proposed text modifications to Official Plan Amendment 19 are as follows.

1. 2.5.24.3.1d), we note that the Landform guidelines for the ORMCP, recommend a contour interval of 2 metres or less and would suggest that this be used rather than 2.5 metres if a number is to be referenced.
2. 2.5.24.3.1e) first bullet, we do not believe policy 30(13) under the ORMCP is more stringent than the Implementation Guidelines. We would recommend deleting the last sentence and adding to the end of the first sentence for clarity reference to section 30(13) of the ORMCP.
3. 2.5.24.3.1e) second bullet, we recommend deleting the second sentence and substituting the following:

'The woodland management plan will be based on a natural heritage evaluation that includes:



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 Region of Durham
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- a. an inventory for provincially or regionally endangered or threatened species, or watershed rare species;
 - b. description of woodlands that may be affected by the development;
 - c. mapping of these species and areas;
 - d. mitigation measures that will maintain or enhance the significant woodland, including provision of an appropriate buffer;
 - e. an overall strategy to address the loss of woodlands in the development area, including compensation measures and potential for protecting and integrating woodlands into the final design; and
 - f. mitigation measures for provincially or regionally endangered or threatened species, or watershed rare species. For endangered and threatened species, proposed mitigation measures will need to be approved by the Ministry of Natural Resources.'
4. 2.5.24.3.1c) third bullet, we recommend deleting the second sentence and substituting:
- 'This will include provision of a water balance and mitigation measures to maintain the quality and quantity of recharge to the groundwater system, provide stormwater quality control to meet as a minimum Enhanced criteria, and provide stormwater quantity control to predevelopment conditions for the 1:2 to 1:100 year storm events.'
5. We request that a policy be included indicating that the top of bank will be confirmed at the time of a development application and that all development will be a minimum distance of 10 metres from the top of bank.
6. It may be appropriate to include a statement clarifying that the boundary of the key natural heritage feature has been established by the Forest Area designation.

On review of the schedules proposed we have the following comments.

Town Official Plan Amendment Schedule "A":

1. Due to the scale it is difficult for us to confirm that the westerly and southerly limit of the Recreational Mixed Use Area (RMUA) reflects the boundary of the potential development area. While the basis of the Forest Area extending across the Wooden Sticks Golf Course (Private Open Space(Golf)), is not entirely clear, we believe the southerly limit of the RMUA designation would follow the current limit of the Forest Area at the south end.



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2. The westerly limit of the RMUA defines the shape of the area, and this limit should be no greater than 150 metres from the east proposed Urban Boundary limit at the road and no greater than 70 metres from the Urban Boundary limit where it meets the Forest Area.
3. There should be Forest Area west of the RMUA to the old Urban Boundary.

Town Official Plan Amendment Schedule "B":

1. Upon review of the airphoto for the site and Michalski Neilsen Figure 4, we believe it is more representative to not delete the Forest Area at the south-west part of the site.
2. We believe it is more representative to extend the Add "Forest Area" at the south edge such that the boundary is an extension of the south boundary of the existing Forest Area to the east.

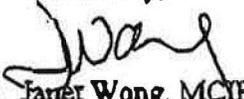
Regional Official Plan Amendment Schedule "A2":

1. We note that the south limit of the Urban Boundary Area does not coincide with the Town limit. They should coincide.
2. We have no concerns with the Urban Boundary including lands south of the RMUA limit provided that the Major Open Space designation, over the corresponding Forest Designation in the Town Official Plan, has the same policy direction as the Major Open Space-Oak Ridges Moraine.

We have no further concerns with including proposed designations in the Town and Region Official Plans with incorporation of these comments. Please advise this office of any decision on this application.

Please contact me if you have any questions. Please reference the above file numbers in future correspondence.

Yours truly,


 Janet Wong, MCIP, RPP
 Senior Planner

JW/cn

op-uxbridge.suleville property J.wpd

Appendix B
Species Lists
(Results of the OBBA Review)
(Compiled Plant List)

RESULTS OF THE ONTARIO BREEDING BIRD ATLAS REVIEW

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
Tyrannidae	<i>Empidonax alnorum</i>		Alder Flycatcher	---	---	S5B	•
Corvidae	<i>Corvus brachyrhynchos</i>		American Crow	---	---	S5B	•
Fringillidae	<i>Carduelis tristis</i>		American Goldfinch	---	---	S5B	•
Falconidae	<i>Falco sparverius</i>		American Kestrel	---	---	S4	•
Parulidae	<i>Setophaga ruticilla</i>		American Redstart	---	---	S5B	•
Turdidae	<i>Turdus migratorius</i>		American Robin	---	---	S5B	•
Scolopacidae	<i>Scolopax minor</i>		American Woodcock	---	---	S4B	•
Icteridae	<i>Icterus galbula</i>		Baltimore Oriole	---	---	S4B	•
Hirundinidae	<i>Riparia riparia</i>		Bank Swallow	---	THR	S4B	•
Hirundinidae	<i>Hirundo rustica</i>		Barn Swallow	---	THR	S4B	•
Strigidae	<i>Strix varia</i>		Barred Owl	---	---	S5	•
Alcedinidae	<i>Megaceryle alcyon</i>		Belted Kingfisher	---	---	S4B	•
Parulidae	<i>Mniotilta varia</i>	<i>Dendroica caerulescens</i>	Black-and-white Warbler	---	---	S5B	•
Cuculidae	<i>Coccyzus erythrophthalmus</i>		Black-billed Cuckoo	---	---	S5B	•
Paridae	<i>Poecile atricapillus</i>		Black-capped Chickadee	---	---	S5	•
Parulidae	<i>Setophaga</i>	<i>Dendroica</i>	Black-throated	---	---	S5B	•

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
	<i>caerulescens</i>	<i>caerulescens</i>	Blue Warbler				
Parulidae	<i>Setophaga virens</i>	<i>Dendroica virens</i>	Black-throated Green Warbler	---	---	S5B	•
Corvidae	<i>Cyanocitta cristata</i>		Blue Jay	---	---	S5	•
Icteridae	<i>Dolichonyx oryzivorus</i>		Bobolink	---	THR	S4B	•
Accipitridae	<i>Buteo platypterus</i>		Broad-winged Hawk	---	---	S5B	•
Certhiidae	<i>Certhia americana</i>		Brown Creeper	---	---	S5B	•
Mimidae	<i>Toxostoma rufum</i>		Brown Thrasher	---	---	S4B	•
Icteridae	<i>Molothrus ater</i>		Brown-headed Cowbird	---	---	S4B	•
Anatidae	<i>Branta canadensis</i>		Canada Goose	---	---	S5	•
Parulidae	<i>Cardellina canadensis</i>	<i>Wilsonia canadensis</i>	Canada Warbler	THR	SC	S4B	•
Bombycillidae	<i>Bombycilla cedrorum</i>		Cedar Waxwing	---	---	S5B	•
Parulidae	<i>Setophaga pennsylvanica</i>	<i>Dendroica pennsylvanica</i>	Chestnut-sided Warbler	---	---	S5B	•
Emberizidae	<i>Spizella passerina</i>		Chipping Sparrow	---	---	S5B	•
Hirundinidae	<i>Petrochelidon pyrrhonota</i>		Cliff Swallow	---	---	S4B	•
Icteridae	<i>Quiscalus quiscula</i>		Common Grackle	---	---	S5B	•

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
Corvidae	<i>Corvus corax</i>		Common Raven	---	---	S5	●
Parulidae	<i>Geothlypis trichas</i>		Common Yellowthroat	---	---	S5B	●
Scolopacidae	<i>Calidris alpina</i>		Dunlin	---	---	S4B,S5N	●
Turdidae	<i>Sialia sialis</i>		Eastern Bluebird	---	---	S5B	●
Tyrannidae	<i>Tyrannus tyrannus</i>		Eastern Kingbird	---	---	S4B	●
Icteridae	<i>Sturnella magna</i>		Eastern Meadowlark	---	THR	S4B	●
Tyrannidae	<i>Sayornis phoebe</i>		Eastern Phoebe	---	---	S5B	●
Strigidae	<i>Megascops asio</i>		Eastern Screech- Owl	---	---	S4	●
Emberizidae	<i>Pipilo erythrophthalmus</i>		Eastern Towhee	---	---	S4B	●
Tyrannidae	<i>Contopus virens</i>		Eastern Wood- pewee	---	SC	S4B	●
Sturnidae	<i>Sturnus vulgaris</i>		European Starling	---	---	SNA	●
Emberizidae	<i>Spizella pusilla</i>		Field Sparrow	---	---	S4B	●
Regulidae	<i>Regulus satrapa</i>		Golden-crowned Kinglet	---	---	S5B	●
Emberizidae	<i>Ammodramus savannarum</i>		Grasshopper Sparrow	---	SC	S4B	●
Mimidae	<i>Dumetella carolinensis</i>		Gray Catbird	---	---	S4B	●
Tyrannidae	<i>Myiarchus crinitus</i>		Great Crested Flycatcher	---	---	S4B	●
Strigidae	<i>Bubo virginianus</i>		Great Horned	---	---	S4	●

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
			Owl				
Ardeidae	<i>Butorides virescens</i>		Green Heron	---	---	S4B	•
Picidae	<i>Picoides villosus</i>		Hairy Woodpecker	---	---	S5	•
Anatidae	<i>Lophodytes cucullatus</i>		Hooded Merganser	---	---	S5B,S5N	•
Alaudidae	<i>Eremophila alpestris</i>		Horned Lark	---	---	S5B	•
Fringillidae	<i>Carpodacus mexicanus</i>		House Finch	---	---	SNA	•
Passeridae	<i>Passer domesticus</i>		House Sparrow	---	---	SNA	•
Troglodytidae	<i>Troglodytes aedon</i>		House Wren	---	---	S5B	•
Cardinalidae	<i>Passerina cyanea</i>		Indigo Bunting	---	---	S4B	•
Charadriidae	<i>Charadrius vociferus</i>		Killdeer	---	---	S5B,S5N	•
Tyrannidae	<i>Empidonax minimus</i>		Least Flycatcher	---	---	S4B	•
Strigidae	<i>Asio otus</i>		Long-eared Owl	---	---	S4	•
Parulidae	<i>Setophaga magnolia</i>	<i>Dendroica magnolia</i>	Magnolia Warbler	---	---	S5B	•
Anatidae	<i>Anas platyrhynchos</i>		Mallard	---	---	S5	•
Columbidae	<i>Zenaida macroura</i>		Mourning Dove	---	---	S5	•

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
Parulidae	<i>Geothlypis philadelphia</i>		Mourning Warbler	---	---	S4B	•
Parulidae	<i>Oreothlypis ruficapilla</i>		Nashville Warbler	---	---	S5B	•
Odontophoridae	<i>Colinus virginianus</i>		Northern Bobwhite	END	END	S1	•
Cardinalidae	<i>Cardinalis cardinalis</i>		Northern Cardinal	---	---	S5	•
Picidae	<i>Colaptes auratus</i>		Northern Flicker	---	---	S4B	•
Accipitridae	<i>Accipiter gentilis</i>		Northern Goshawk	---	---	S4	•
Accipitridae	<i>Circus cyaneus</i>		Northern Harrier	---	---	S4B	•
Anatidae	<i>Anas acuta</i>		Northern Pintail	---	---	S5	•
Hirundinidae	<i>Stelgidopteryx serripennis</i>		Northern Rough-winged Swallow	---	---	S4B	•
Parulidae	<i>Parkesia noveboracensis</i>		Northern Waterthrush	---	---	S5B	•
Pandionidae	<i>Pandion haliaetus</i>		Osprey	---	---	S5B	•
Parulidae	<i>Seiurus aurocapilla</i>		Ovenbird	---	---	S4B	•
Picidae	<i>Dryocopus pileatus</i>		Pileated Woodpecker	---	---	S5	•
Fringillidae	<i>Carduelis pinus</i>		Pine Siskin	---	---	S4B	•
Parulidae	<i>Setophaga pinus</i>	<i>Dendroica pinus</i>	Pine Warbler	---	---	S5B	•
Fringillidae	<i>Carpodacus purpureus</i>		Purple Finch	---	---	S4B	•
Sittidae	<i>Sitta canadensis</i>		Red-breasted	---	---	S5	•

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
			Nuthatch				
Vireonidae	<i>Vireo olivaceus</i>		Red-eyed Vireo	---	---	S5B	•
Picidae	<i>Melanerpes erythrocephalus</i>		Red-headed Woodpecker	THR	SC	S4B	•
Accipitridae	<i>Buteo lineatus</i>		Red-shouldered Hawk	---	---	S4B	•
Accipitridae	<i>Buteo jamaicensis</i>		Red-tailed Hawk	---	---	S5	•
Icteridae	<i>Agelaius phoeniceus</i>		Red-winged Blackbird	---	---	S4	•
Phasianidae	<i>Phasianus colchicus</i>		Ring-necked Pheasant	---	---	SNA	•
Columbidae	<i>Columba livia</i>		Rock Pigeon	---	---	SNA	•
Cardinalidae	<i>Pheucticus ludovicianus</i>		Rose-breasted Grosbeak	---	---	S4B	•
Trochilidae	<i>Archilochus colubris</i>		Ruby-throated Hummingbird	---	---	S5B	•
Phasianidae	<i>Bonasa umbellus</i>		Ruffed Grouse	---	---	S4	•
Emberizidae	<i>Passerculus sandwichensis</i>		Savannah Sparrow	---	---	S4B	•
Accipitridae	<i>Accipiter striatus</i>		Sharp-shinned Hawk	---	---	S5	•
Emberizidae	<i>Melospiza melodia</i>		Song Sparrow	---	---	S5B	•
Scolopacidae	<i>Actitis macularius</i>		Spotted Sandpiper	---	---	S5	•
Emberizidae	<i>Melospiza georgiana</i>		Swamp Sparrow	---	---	S5B	•

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
Hirundinidae	<i>Tachycineta bicolor</i>		Tree Swallow	---	---	S4B	•
Cathartidae	<i>Cathartes aura</i>		Turkey Vulture	---	---	S5B	•
Scolopacidae	<i>Bartramia longicauda</i>		Upland Sandpiper	---	---	S4B	•
Turdidae	<i>Catharus fuscescens</i>		Veery	---	---	S4B	•
Emberizidae	<i>Poocetes gramineus</i>		Vesper Sparrow	---	---	S4B	•
Vireonidae	<i>Vireo gilvus</i>		Warbling Vireo	---	---	S5B	•
Sittidae	<i>Sitta carolinensis</i>		White-breasted Nuthatch	---	---	S5	•
Emberizidae	<i>Zonotrichia albicollis</i>		White-throated Sparrow	---	---	S5B	•
Phasianidae	<i>Meleagris gallopavo</i>		Wild Turkey	---	---	S5	•
Scolopacidae	<i>Gallinago delicata</i>		Wilson's Snipe	---	---	S5B	•
Troglodytidae	<i>Troglodytes troglodytes</i>		Winter Wren	---	---	S5B	•
Anatidae	<i>Aix sponsa</i>		Wood Duck	---	---	S5	•
Turdidae	<i>Hylocichla mustelina</i>		Wood Thrush	---	SC	S4B	•
Parulidae	<i>Setophaga petechia</i>		Yellow Warbler	---	---	S5B	•
Picidae	<i>Sphyrapicus varius</i>		Yellow-bellied Sapsucker	---	---	S5B	•
Cuculidae	<i>Coccyzus</i>		Yellow-billed	---	---	S4B	•

FAMILY	SCIENTIFIC NAME	SYNONYM(S)	COMMON NAME	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK))	SQUARE # 17PJ 49
Parulidae	<i>americanus</i> <i>Setophaga</i> <i>coronata</i>		Cuckoo Yellow-rumped Warbler	---	---	S5B	•

NOTE: RESULTS ARE FOR THE 10KM X 10KM AREA THAT INCLUDES THE SUBJECT PROPERTY

COMPILED PLANT SPECIES LIST

SCIENTIFIC NAME	COMMON NAMES	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK)	COEFFICIENT CONSERVATION	COEFFICIENT WETNESS	OBSERVED IN SITE
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	---	---	S5	6	5	•
<i>Tilia americana</i>	American Basswood	---	---	S5	4	3	•
<i>Malus sp.</i>	Apple sp.	---	---	---	---	---	•
<i>Symphotrichum sp.</i>	Aster sp.	---	---	---	---	---	•
<i>Geum sp.</i>	Avens sp.	---	---	---	---	---	•
<i>Bromus inermis</i>	Awnless Brome	---	---	SNA	---	5	•
<i>Abies balsamea</i>	Balsam Fir	---	---	S5	5	-3	•
<i>Fraxinus nigra</i>	Black Ash	---	---	S4	7	-4	•
<i>Rudbeckia hirta</i> var. <i>hirta</i>	Black-eyed Susan	---	---	SU	0	3	•
<i>Elymus hystrix</i>	Bottlebrush Grass	---	---	S5	5	5	•
<i>Pteridium aquilinum</i>	Bracken Fern	---	---	S5	2	3	•
<i>Aralia hispida</i>	Bristly Sarsaparilla	---	---	S5	8	5	•
<i>Juglans cinerea</i>	Butternut	END	END	S3?	6	2	•
<i>Solidago canadensis</i> var. <i>canadensis</i>	Canada Goldenrod	---	---	S5	1	3	•
<i>Asarum canadense</i>	Canada Wild- ginger	---	---	S5	6	5	•
<i>Hypericum canadense</i>	Canadian St. John's-wort	---	---	S4?	8	-3	•
<i>Tussilago farfara</i>	Colt's-foot	---	---	SNA	---	3	•

SCIENTIFIC NAME	COMMON NAMES	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK)	COEFFICIENT CONSERVATION	COEFFICIENT WETNESS	OBSERVED IN SITE
<i>Malus pumila</i>	Common Apple	---	---	SNA	---	5	•
<i>Rhamnus cathartica</i>	Common Buckthorn	---	---	SNA	---	3	•
<i>Asclepias syriaca</i>	Common Milkweed	---	---	S5	0	5	•
<i>Erigeron hyssopifolius</i>	Daisy Fleabane	---	---	S5	10	-3	•
<i>Dianthus armeria</i>	Deptford Pink	---	---	SNA	---	5	•
<i>Betula papyrifera</i>	White Birch	---	---	S5	2	2	•
<i>Pinus strobus</i>	Eastern White Pine	---	---	S5	4	3	•
<i>Urtica dioica</i> ssp. <i>dioica</i>	European Stinging Nettle	---	---	SNA	---	-1	•
<i>Cynanchum rossicum</i>	European Swallow-wort	---	---	SNA	---	5	•
<i>Equisetum arvense</i>	Field Horsetail	---	---	S5	0	0	•
<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil	---	---	SNA	---	1	•
<i>Caulophyllum giganteum</i>	Giant Blue Cohosh	---	---	S4?	6	5	•
<i>Solidago</i>	Goldenrod sp.	---	---	S5	1	3	•
<i>Fraxinus pennsylvanica</i>	Green Ash	---	---	S4	3	-3	•
<i>Polygonatum pubescens</i>	Hairy Solomon's Seal	---	---	S5	5	5	•
<i>Populus grandidentata</i>	Large-tooth Aspen	---	---	S5	5	3	•

SCIENTIFIC NAME	COMMON NAMES	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK)	COEFFICIENT CONSERVATION	COEFFICIENT WETNESS	OBSERVED IN SITE
<i>Actaea rubra</i>	Red Baneberry	---	---	S5	5	5	•
<i>Acer rubrum</i>	Red Maple	---	---	S5	4	0	•
<i>Trillium erectum</i>	Red Trillium	---	---	S5	6	1	•
<i>Pinus sylvestris</i>	Scotch Pine	---	---	SNA	---	5	•
<i>Onoclea sensibilis</i>	Sensitive Fern	---	---	S5	4	-3	•
<i>Circaea alpina</i>	Small Enchanter's Nightshade	---	---	S5	6	-3	•
<i>Impatiens capensis</i>	Spotted Jewelweed	---	---	S5	4	-3	•
<i>Acer saccharum</i>	Sugar Maple	---	---	S5	4	3	•
<i>Parthenocissus inserta</i>	Thicket Creeper	---	---	S5	3	3	•
<i>Rubus parviflorus</i>	Thimbleberry	---	---	S4	7	2	•
<i>Populus tremuloides</i>	Trembling Aspen	---	---	S5	2	0	•
<i>Vicia cracca</i>	Tufted Vetch	---	---	SNA	---	5	•
<i>Viola sp.</i>	Violet sp.	---	---	---	---	---	•
<i>Ageratina altissima</i>	White Snakeroot	---	---	S5	5	3	•
<i>Picea glauca</i>	White Spruce	---	---	S5	6	3	•
<i>Monarda fistulosa</i> var. <i>fistulosa</i>	Wild Bergamot	---	---	S5	6	3	•
<i>Prunus serotina</i>	Wild Black Cherry	---	---	S5	3	3	•
<i>Daucus carota</i>	Wild Carrot	---	---	SNA	---	5	•
<i>Rubus sachalinensis</i> var.	Wild Red Raspberry	---	---	S5	0	-2	•

SCIENTIFIC NAME	COMMON NAMES	FEDERAL SARA REGISTRY STATUS	ONTARIO ESA SPECIES AT RISK LIST STATUS	PROVINCIAL CONSERVATION RANK (SRANK)	COEFFICIENT CONSERVATION	COEFFICIENT WETNESS	OBSERVED IN SITE
<i>sachalinensis</i>							
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	---	---	S5	4	3	•
<i>Salix species</i>	Willow Species	---	---	---	0	0	•
<i>Agrimonia striata</i>	Woodland Agrimony	---	---	S4?	---	---	•
<i>Solidago flexicaulis</i>	Zigzag Goldenrod	---	---	S5	6	3	•
				Avg.	4.5	Total	56
				# >6	2		
				% > 6	3.7%		

Appendix D
Photo Plate and ELC Field Sheets

**Saleville Property, Township of Uxbridge
Environmental Impact Study**

Photograph 1

July 23, 2015

Looking east
from eastern
edge of
property onto
Wooden Stick
Golf Course.



Photograph 2

July 23, 2015

FODM3-1 Dry-
Fresh Poplar
Deciduous
Forest



Photograph 3

July 23, 2015

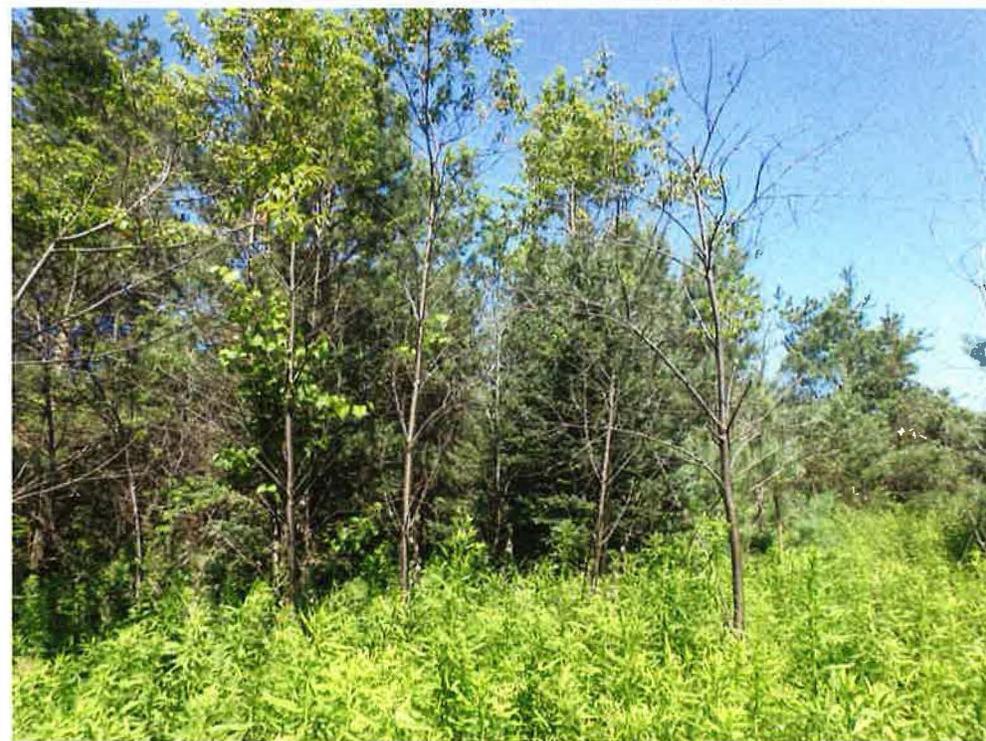
WOCM1 –
Dry-Fresh
Coniferous
Woodland
Ecosite



Photograph 4

July 23, 2015

WOCM1 –
Dry-Fresh
Coniferous
Woodland
Ecosite



**Saleville Property, Township of Uxbridge
Environmental Impact Study**

Photograph 5

July 23, 2015

FOCM1 – Dry-
Fresh Pine
Coniferous
Forest



ELC SOILS ONTARIO	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

P/A	PP	Dr	Slope				UTM				
			Position	Aspect	%	Type	Class	Z	EASTING	NORTHING	
1	A	S	3	4	SW	5	E				
2											
3											
4											
5											

SOIL	1	2	3	4	5
TEXTURE & HORIZON	A				
	B				
	C				

A	TEXTURE	LVFS			
	COURSE FRAGMENTS	0			
B	TEXTURE	LVFSL			
	COURSE FRAGMENTS	0			
C	TEXTURE	Si			
	COURSE FRAGMENTS	0			
	EFFECTIVE TEXTURE	Si			
	SURFACE STONINESS	0			
	SURFACE ROCKINESS	0			

DEPTH TO / OF					
MOTTLES	999				
GLEYS	999				
BEDROCK	999				
WATER TABLE	999				
CARBONATES	999				
DEPTH OF ORGANICS	-				
PORE SIZE DISC #1					
PORE SIZE DISC #2					
MOISTURE REGIME	3				
SOIL SURVEY MAP					
LEGEND CLASS					

ELC PLANT SPECIES LIST	SITE:	Sakeville
	POLYGON:	2
	DATE:	23/07/15
	SURVEYOR(S):	JWH

LAYERS: 1= CANOPY 2= SUB-CANOPY 3= UNDERSTOREY 4= GROUND (GRD.) LAYER
 ABUNDANCE CODES: R= RARE O= OCCASIONAL A= ABUNDANT D= DOMINANT

SPECIES CODE	LAYER				COL.
	1	2	3	4	
Papugra	O				
Papw tree	R				
Sugar Maple	O				
Prunser	R	R			
Tilidame	R	R			
Frax nig		R			
Salix sp.		R			
Frax pen		O			
White birch	R	R	R		
Pinus syl	R				
Lugl cin	R	R			
cornalt			O		
Chamrat			R	R	
Phithe Creeper				R	
Impa cap				A	
Colts foot				O	
Witchhush gals				R	
Sticky m. etc.				R	
Canada enchanters nightshade				R	
Sensitive fern.				O	
ferns sp.				R	✓

SPECIES CODE	LAYER				COL.
	1	2	3	4	
DSV					⊙ A
red hawberry					R
wild ginger					⊙ A
blue cohosh					O
Solomon's seal sp.					R
Aster sp.					R
Equisarv					R
plat mag					R
Stem sp.					R
Eig-zag sold.					R
Trollan sp.					R
Viola sp.					R
Ostrich fern					R
bracken fern					R
white snake root					O
wild sunspiller					R

creek

extended creek riparian valley bed.

Bn1- canker present, poor condition - near trail
 Bn2- large tree, 2 stem - dead.

Appendix D

Development Plan

Appendix E
Tree Analysis Memo



MEMO

TO: Ms. Sonya Scarrow, Saleville Limited Partnership, c/o Paul Gingrich
FROM: Sara Ross, BES, Dillon Consulting Limited
cc: Ian Roul, MSc., Dillon Consulting Limited
DATE: March 10, 2016
SUBJECT: Tree Analysis Memo for the Saleville Property located on Elgin Park Drive in the Township of Uxbridge in the Municipality of Durham, Ontario.
OUR FILE: File # 152274

Dillon Consulting Limited (Dillon) has been retained by Saleville Limited Partnership to complete a Tree Analysis Memo for the Saleville Property located in the Township of Uxbridge in the Municipality of Durham. The purpose of this memo is to determine the location, number, species and health of trees that are to be impacted as a result of the development. The tasks that were completed for this scope of work include:

1. Completion of one (1) field survey to document the tree species, number and health of specimens greater than 20 cm diameter at breast height (DBH) identified to be within the development/disturbance area; and,
2. Completion of the Tree Analysis Memo.

Property Description

The subject property is currently a mix of recreational, natural and successional communities, and the subject property is proposed to be developed into multiple single-family townhomes. The subject property is legally described as Pt 4, 40R17204 in the Township of Uxbridge on Elgin Park Drive. The subject property is bound by Wooden Sticks Golf Course to the east and south, Uxbridge Brook, Uxbridge Brook Headwater Complex Provincially Significant Wetland (PSW) and the Countryside Preserve Trail to the west and Elgin Park Drive to the north.

Policy Context

Due to a previous agreement with the Township of Uxbridge and the Lake Simcoe Region Conservation Authority (LSRCA), a development limit referred to as the "Fred Johnson Line" has been approved with regard to the developable area on the subject property (May, 2007). This line indicates the previously delineated key natural heritage feature to the west on the subject property and effectively defines the building envelope. The key natural heritage feature to the west is considered to be significant based on the guidelines of the Natural Heritage Reference Manual (NHRM) (i.e., woodland size, ecological functions, uncommon characteristics and, economic and social functional values).

The Regional Municipality of Durham Regional Trees in Woodlands #2008-027 does not apply to the forested area to the east of the Fred Johnson Line and development is permitted within the effective building envelope. The Fred Johnson line is delineated on the figure in **Appendix A**.

Methodology

An International Society of Arboriculture (ISA) Certified Arborist conducted a general inventory and condition assessment of trees located within the proposed development/disturbance area on January 21, 2015.

The inventory only documented trees with a DBH of greater than 20 cm within the proposed development areas (shown as “Blocks” and “Roadway” in **Appendix A**). Each tree was identified to the species level and its condition was assessed based on the following definitions:

- *Dead* – The specimen tree is considered dead when it has no living tissue.
- *Hazard Tree* – Hazard trees could either be alive or dead but pose a hazard to people or property. These trees have the potential for splitting, breaking and/or falling over during inclement weather, and because of their proximity to residential neighbourhoods, could cause personal injury and/or severe damage to municipal infrastructure and/or private property.
- *Poor* – Trees in poor condition show major symptoms of decline. At least 50% of main scaffold branches are dead, missing or in a diseased state. The trunk shows evidence of advanced rot, deadwood or is hollow throughout. Twig development on the main branches or throughout the canopy is poor and sucker growth is limited. Callus growth around wounds is minimal. A tree in poor condition could become a safety hazard and removal prior to development should be considered if it is a hazard tree.
- *Fair* – Trees in fair condition show moderate symptoms of decline in lower canopy or scaffold branches, but more than 50% of scaffold branches are present and viable. The trunk shows limited evidence of rot or insect damage. Removal or preservation of these trees depends on the location of the specimen and associated hazard potential and would depend on the species and its tolerance to grading, trenching and surviving in an urban environment. Some major arboricultural maintenance may be required in the future and may include major scaffold or secondary branch removal, bracing and/or cabling.
- *Good* - Trees in good condition show no symptoms of decline in the trunk, and all scaffold branches are present and are in good condition. Most scaffold branches are at right angles to the trunk, and show good vigour. Small amounts of dead wood may be present in secondary branches, but account for less than 25% of the canopy. Depending on the grading in the immediate area, a tree in good condition would be recommended for preservation. Such a tree would survive to maturity without major arboricultural maintenance.
- *Excellent* - The specimen tree(s) shows no symptoms of decline in trunk, scaffold or secondary branches. Trees in this condition have an excellent growth habit and should survive to maturity without major arboricultural maintenance.

Results

The tree inventory and condition assessment recorded 189 trees with a DBH greater than 20 cm within the blocks and roadways (see Table 1 in **Appendix A**). Of the 189 inventoried trees, 161 Scot’s Pine (*Pinus sylvestris*), 15 Trembling Aspen (*Populus tremuloides*), 7 Paper Birch (*Betula papyrifera*), 4 Black

Cherry (*Prunus serotina*), 1 White Spruce (*Picea glauca*), and 1 White Pine (*Pinus strobus*) and were identified to be within the development area and have the potential to be impacted.

Scot's Pine is the dominant species (85% species composition) found within the development area as the ecological community within this general area has been identified as a Pine Coniferous Forest type.

Block 1, which is nearest to Elgin Park Drive has the highest amount of trees greater than 20 cm DBH (76 trees, .04 trees/m²), with Block 4 having the second highest amount of trees with 27 trees (.02 trees/m²) greater than 20 cm DBH. The figure attached shows how many trees greater than 20 cm DBH are in each block and the roadway (**Appendix A**). The development does not encroach into the Fred Johnson Line and maintains an average buffer of approximately 48 m from the Staked PSW Dripline 30 m Buffer.

The majority of trees were in fair or good condition, while only 4% of trees inventoried were in poor condition.

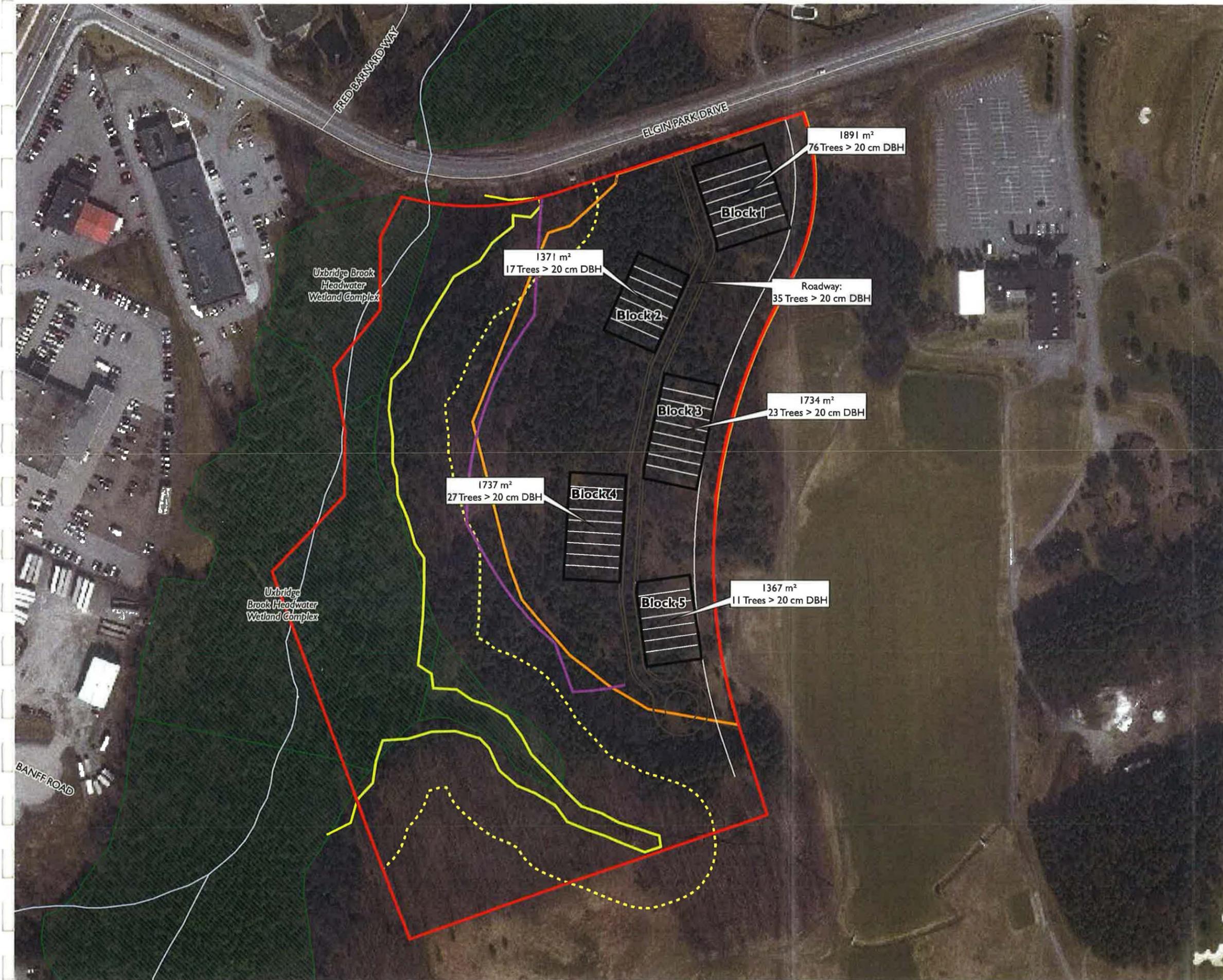
Detailed tree inventory results, including species, diameter at breast height, condition is provided in **Appendix B**.

Appendix A – Tree Analysis Figure

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235 Yorkland Boulevard, Suite 800, Toronto, ON M2J 4Y8

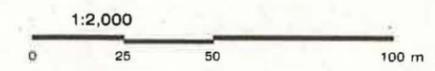
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**SALEVILLE PROPERTY
UXBRIDGE, ONTARIO**

TREE ANALYSIS

- Block
- Project Boundary
- Fred Johnson Line
- Recreational Mixed Use
- Lot Boundary
- Curb
- Watercourse
- Staked PSW Dripline (MNR)
- Staked PSW Dripline 30 m Buffer
- Provincially Significant Wetland



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: GM
MAP CHECKED BY: SR
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 152274
STATUS: DRAFT
DATE: 3/3/2016

Appendix B – Tree Inventory Results

DILLON CONSULTING LIMITED

235 Yorkland Boulevard, Suite 800, Toronto, ON M2J 4Y8

www.dillon.ca

MEMO



Table 1: Summary of Saleville Property Tree Inventory

Scientific Name	Common Name	No. of individuals	Percentage Composition	Average of DBH (cm)	Health Condition			% Health Condition		
					Good	Fair	Poor	Good	Fair	Poor
<i>Betula papyrifera</i>	Paper Birch	7	3.7	24.5	7	0	0	100.0	0.0	0.0
<i>Picea glauca</i>	White Spruce	1	0.5	15.8	1	0	0	100.0	0.0	0.0
<i>Pinus strobus</i>	White Pine	1	0.5	22.0	1	0	0	100.0	0.0	0.0
<i>Pinus sylvestris</i>	Scots Pine	161	84.9	22.6	51	103	7	26.0	69.7	4.3
<i>Populus tremuloides</i>	Trembling Aspen	15	7.9	21.9	15	0	0	100	0.0	0.0
<i>Prunus serotina</i>	Black Cherry	4	2.1	28.5	1	3	0	33.0	33.0	0.0
Total	6	189	---	---	76	106	7	---	---	---
Average	---	---	---	22.5	---	---	---	---	---	---
Percentage	---	---	---	---	35.3	61.0	3.7	---	---	---

DILLON CONSULTING LIMITED

235 Yorkland Boulevard, Suite 800, Toronto, ON M2J 4Y8

www.dillon.ca



Table 2: Saleville Property Tree Inventory List

Block	Scientific Name	Common Name	DBH (cm)	Health	Location
1	<i>Pinus sylvestris</i>	Scots Pine	26	Fair	WP1106
1	<i>Pinus sylvestris</i>	Scots Pine	20	Good	WP1110
1	<i>Populus tremuloides</i>	Trembling Aspen	27	Good	WP1111
1	<i>Pinus sylvestris</i>	Scots Pine	26	Good	WP1113
1	<i>Pinus sylvestris</i>	Scots Pine	21	Good	WP1115
1	<i>Pinus sylvestris</i>	Scots Pine	24	Good	WP1116
1	<i>Pinus sylvestris</i>	Scots Pine	20	Good	WP1119
1	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1121
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1122
1	<i>Pinus sylvestris</i>	Scots Pine	30	Poor	WP1123
1	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1124
1	<i>Pinus sylvestris</i>	Scots Pine	20	Good	WP1125
1	<i>Pinus sylvestris</i>	Scots Pine	30	Good	WP1126
1	<i>Pinus sylvestris</i>	Scots Pine	22	Poor	WP1127
1	<i>Pinus sylvestris</i>	Scots Pine	21	Fair	WP1128
1	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1129
1	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1130
1	<i>Pinus sylvestris</i>	Scots Pine	28	Good	WP1131
1	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1134
1	<i>Betula papyrifera</i>	Paper Birch	20	Good	WP1135
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1136
1	<i>Pinus sylvestris</i>	Scots Pine	35	Good	WP1137
1	<i>Pinus sylvestris</i>	Scots Pine	39	Good	WP1138
1	<i>Pinus sylvestris</i>	Scots Pine	36	Good	WP1139
1	<i>Pinus sylvestris</i>	Scots Pine	35	Good	WP1144
1	<i>Pinus sylvestris</i>	Scots Pine	26	Fair	WP1145
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1146
1	<i>Pinus sylvestris</i>	Scots Pine	28	Fair	WP1147
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1150
1	<i>Pinus sylvestris</i>	Scots Pine	30	Good	WP1151



Block	Scientific Name	Common Name	DBH (cm)	Health	Location
1	<i>Populus tremuloides</i>	Trembling Aspen	22	Good	WP1152
1	<i>Populus tremuloides</i>	Trembling Aspen	30	Good	WP1154
1	<i>Pinus sylvestris</i>	Scots Pine	20	Good	WP1156
1	<i>Populus tremuloides</i>	Trembling Aspen	20	Good	WP1157
1	<i>Pinus sylvestris</i>	Scots Pine	20	Good	WP1159
1	<i>Pinus sylvestris</i>	Scots Pine	30, 22	Fair	WP1162
1	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1165
1	<i>Pinus sylvestris</i>	Scots Pine	28	Fair	WP1166
1	<i>Populus tremuloides</i>	Trembling Aspen	25	Good	WP1167
1	<i>Populus tremuloides</i>	Trembling Aspen	35	Good	WP1168
1	<i>Populus tremuloides</i>	Trembling Aspen	22	Good	WP1169
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1170
1	<i>Betula papyrifera</i>	Paper Birch	22, 20, 10	Good	WP1171
1	<i>Populus tremuloides</i>	Trembling Aspen	22	Good	WP1172
1	<i>Populus tremuloides</i>	Trembling Aspen	20	Good	WP1173
1	<i>Populus tremuloides</i>	Trembling Aspen	25	Good	WP1174
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1176
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1177
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1186
1	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1187
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1188
1	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1191
1	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1194
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1195
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1196
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1197
1	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1198
1	<i>Pinus sylvestris</i>	Scots Pine	28	Fair	WP1199
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1200
1	<i>Pinus sylvestris</i>	Scots Pine	25	Poor	WP1201
1	<i>Pinus sylvestris</i>	Scots Pine	20	Poor	WP1202



Block	Scientific Name	Common Name	DBH (cm)	Health	Location
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1205
1	<i>Pinus sylvestris</i>	Scots Pine	36	Good	WP1206
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1212
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1213
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1214
1	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1217
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1220
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1222
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1228
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1234
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1235
1	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1244
1	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1246
1	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1251
1	<i>Pinus sylvestris</i>	Scots Pine	22, 12	Poor	WP1264
2	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1270
2	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1271
2	<i>Pinus sylvestris</i>	Scots Pine	40	Fair	WP1272
2	<i>Pinus sylvestris</i>	Scots Pine	22	Good	WP1273
2	<i>Pinus sylvestris</i>	Scots Pine	20	Good	WP1274
2	<i>Pinus sylvestris</i>	Scots Pine	40	Good	WP1275
2	<i>Pinus sylvestris</i>	Scots Pine	30	Good	WP1276
2	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1277
2	<i>Pinus sylvestris</i>	Scots Pine	36	Good	WP1278
2	<i>Pinus sylvestris</i>	Scots Pine	28	Fair	WP1279
2	<i>Pinus sylvestris</i>	Scots Pine	42	Fair	WP1280
2	<i>Pinus sylvestris</i>	Scots Pine	34	Fair	WP1281
2	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1283
2	<i>Pinus sylvestris</i>	Scots Pine	26	Fair	WP1284
2	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1285
2	<i>Pinus sylvestris</i>	Scots Pine	27	Fair	WP1286



Block	Scientific Name	Common Name	DBH (cm)	Health	Location
2	<i>Pinus sylvestris</i>	Scots Pine	27	Fair	WP1287
3	<i>Pinus sylvestris</i>	Scots Pine	26	Good	WP1288
3	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1289
3	<i>Pinus sylvestris</i>	Scots Pine	21	Fair	WP1290
3	<i>Pinus sylvestris</i>	Scots Pine	21	Fair	WP1291
3	<i>Pinus sylvestris</i>	Scots Pine	21	Fair	WP1292
3	<i>Pinus sylvestris</i>	Scots Pine	32	Fair	WP1293
3	<i>Pinus sylvestris</i>	Scots Pine	23	Poor	WP1294
3	<i>Prunus serotina</i>	Black Cherry	32	Fair	WP1295
3	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1296
3	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1297
3	<i>Pinus sylvestris</i>	Scots Pine	26	Good	WP1298
3	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1299
3	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1300
3	<i>Pinus sylvestris</i>	Scots Pine	26	Fair	WP1301
3	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1302
3	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1303
3	<i>Pinus sylvestris</i>	Scots Pine	29	Good	WP1304
3	<i>Pinus sylvestris</i>	Scots Pine	29	Fair	WP1305
3	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1306
3	<i>Pinus sylvestris</i>	Scots Pine	22	Good	WP1307
3	<i>Populus tremuloides</i>	Trembling Aspen	24	Good	WP1308
3	<i>Picea glauca</i>	White Spruce	22	Good	WP1309
3	<i>Prunus serotina</i>	Black Cherry	24	Good	WP1310
4	<i>Pinus sylvestris</i>	Scots Pine	27	Poor	WP1311
4	<i>Populus tremuloides</i>	Trembling Aspen	21	Good	WP1312
4	<i>Prunus serotina</i>	Black Cherry	30	Fair	WP1313
4	<i>Pinus sylvestris</i>	Scots Pine	22	Good	WP1314
4	<i>Pinus strobus</i>	White Pine	22	Good	WP1315
4	<i>Betula papyrifera</i>	Paper Birch	20	Good	WP1316
4	<i>Pinus sylvestris</i>	Scots Pine	28	Good	WP1317



Block	Scientific Name	Common Name	DBH (cm)	Health	Location
4	<i>Pinus sylvestris</i>	Scots Pine	38	Fair	WP1318
4	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1319
4	<i>Pinus sylvestris</i>	Scots Pine	21	Good	WP1320
4	<i>Pinus sylvestris</i>	Scots Pine	47	Fair	WP1321
4	<i>Pinus sylvestris</i>	Scots Pine	29	Good	WP1322
4	<i>Pinus sylvestris</i>	Scots Pine	21	Fair	WP1323
4	<i>Betula papyrifera</i>	Paper Birch	27, 24, 20	Good	WP1324
4	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1325
4	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1326
4	<i>Pinus sylvestris</i>	Scots Pine	23	Good	WP1327
4	<i>Pinus sylvestris</i>	Scots Pine	28	Good	WP1328
4	<i>Pinus sylvestris</i>	Scots Pine	23	Good	WP1329
4	<i>Betula papyrifera</i>	Paper Birch	24, 23	Good	WP1330
4	<i>Betula papyrifera</i>	Paper Birch	25	Good	WP1331
4	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1332
4	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1333
4	<i>Prunus serotina</i>	Black Cherry	28	Fair	WP1334
4	<i>Pinus sylvestris</i>	Scots Pine	24	Good	WP1335
4	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1336
4	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1337
5	<i>Pinus sylvestris</i>	Scots Pine	30	Good	WP1339
5	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1340
5	<i>Pinus sylvestris</i>	Scots Pine	23	Good	WP1341
5	<i>Pinus sylvestris</i>	Scots Pine	27	Good	WP1342
5	<i>Pinus sylvestris</i>	Scots Pine	35	Fair	WP1343
5	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1344
5	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1345
5	<i>Pinus sylvestris</i>	Scots Pine	22	Good	WP1346
5	<i>Pinus sylvestris</i>	Scots Pine	23	Good	WP1347
5	<i>Pinus sylvestris</i>	Scots Pine	27	Good	WP1348
5	<i>Pinus sylvestris</i>	Scots Pine	28	Good	WP1349



Block	Scientific Name	Common Name	DBH (cm)	Health	Location
Roadway	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1351
Roadway	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1352
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1353
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1354
Roadway	<i>Pinus sylvestris</i>	Scots Pine	26	Fair	WP1355
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Good	WP1356
Roadway	<i>Pinus sylvestris</i>	Scots Pine	25	Poor	WP1357
Roadway	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1359
Roadway	<i>Pinus sylvestris</i>	Scots Pine	22, 24	Fair	WP1360
Roadway	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1361
Roadway	<i>Pinus sylvestris</i>	Scots Pine	30	Fair	WP1362
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Good	WP1363
Roadway	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1364
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1365
Roadway	<i>Pinus sylvestris</i>	Scots Pine	29	Fair	WP1366
Roadway	<i>Betula papyrifera</i>	Paper Birch	22	Good	WP1367
Roadway	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1368
Roadway	<i>Pinus sylvestris</i>	Scots Pine	25	Good	WP1369
Roadway	<i>Pinus sylvestris</i>	Scots Pine	22	Fair	WP1370
Roadway	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1371
Roadway	<i>Pinus sylvestris</i>	Scots Pine	27	Good	WP1372
Roadway	<i>Pinus sylvestris</i>	Scots Pine	23	Fair	WP1373
Roadway	<i>Pinus sylvestris</i>	Scots Pine	29	Fair	WP1374
Roadway	<i>Pinus sylvestris</i>	Scots Pine	28	Fair	WP1375
Roadway	<i>Pinus sylvestris</i>	Scots Pine	29, 23	Fair	WP1376
Roadway	<i>Pinus sylvestris</i>	Scots Pine	25	Fair	WP1377
Roadway	<i>Pinus sylvestris</i>	Scots Pine	22	Good	WP1378
Roadway	<i>Pinus sylvestris</i>	Scots Pine	27	Good	WP1379
Roadway	<i>Populus tremuloides</i>	Trembling Aspen	26	Good	WP1380
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1381
Roadway	<i>Pinus sylvestris</i>	Scots Pine	24	Fair	WP1382



Block	Scientific Name	Common Name	DBH (cm)	Health	Location
Roadway	<i>Pinus sylvestris</i>	Scots Pine	21	Fair	WP1383
Roadway	<i>Pinus sylvestris</i>	Scots Pine	20	Fair	WP1384
Roadway	<i>Populus tremuloides</i>	Trembling Aspen	20	Good	WP1385
Roadway	<i>Populus tremuloides</i>	Trembling Aspen	21	Good	WP1386