ENVIRONMENTAL IMPACT STATEMENT

May 20, 2025

5426, 5452 and 5584 Lakeshore Road
Town of Whitchurch-Stouffville
Region of York

Prepared for: FarSight Homes

ROOTS ENVIRONMENTAL

24 Melrose Ave.
Barrie, ON L4M 2A7
705.718.6153
www.rootsenvironmental.ca

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Appendix C- Species Lists
Appendix D- Easement Instrument
Appendix E – Significant Wildlife Habitat Assessment
Appendix F – SAR Assessment
Appendix G - CV for Kyle Fleming

1 INTRODUCTION

Roots Environmental Inc. ('Roots') has been retained by FarSight Homes to complete an Environmental Impact Statement (EIS) for the properties located at 5426, 5452 and 5584 Lakeshore Road in the Town of Whitchurch-Stouffville, Region of York, as illustrated in *Figure 1 – Site Location*. Collectively, the properties will be herein referred to as the "site" in this EIS.

The proposed development of the site is for residential uses. An EIS is required to support a Zoning By-Law Amendment (ZBA) and Plan of Subdivision for the development per policies of the Town of Whitchurch-Stouffville and York Region Official Plan.

The report will rely on field investigations, information and mapping provided to FarSight Homes in the EIS completed by Ages Consultants Ltd. (revised September 2022) for the applications. The 2022 EIS was revised through technical review comments by the Town and Lake Simcoe Region Conservation Authority (LSRCA) from 2019-2022.

The purpose of the EIS is to identify the presence of any natural heritage features on the site or adjacent lands of 120 metres, assess any impacts resulting from the proposed development, and identify any preventative, mitigative or remedial measures to ensure no negative impacts.

2 POLICY AND LEGISLATION OVERVIEW

A detailed review of relevant environmental legislation and policies will be included in Section 8 of this EIS. This review will include the Provincial Planning Statement, Greenbelt Plan, Oak Ridges Moraine Conservation Plan (ORMCP), Lake Simcoe Protection Plan, Region of York Official Plan, Town of Whitchurch-Stouffville Official Plan, *Endangered Species Act* (ESA), *Conservation Authorities Act* and *Migratory Birds Convention Act*.

3 METHODOLOGY

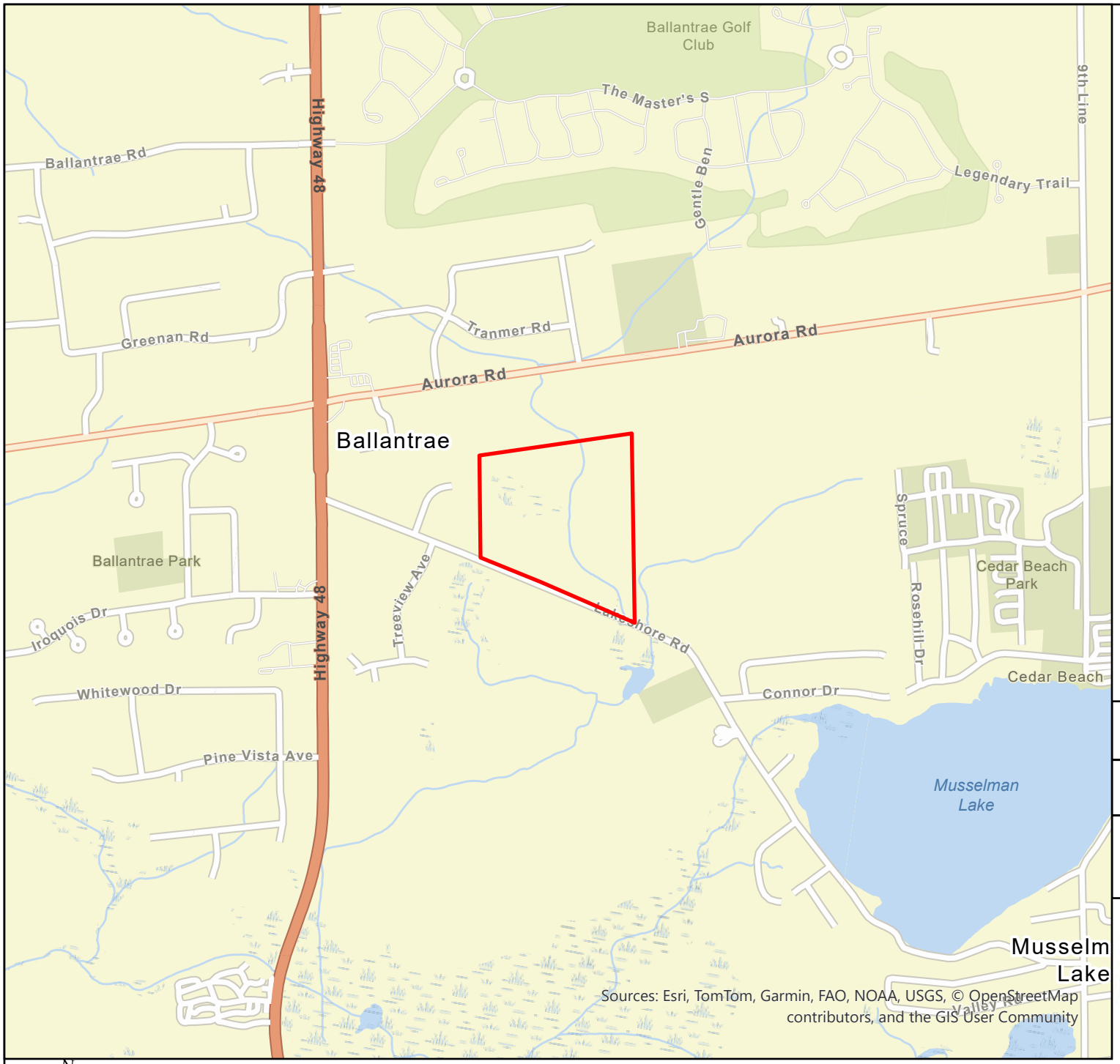
Preparation of the EIS involves a desktop review of available information, field investigations and consultation with applicable agencies. The following provides a summary of tasks completed for the EIS.

3.1 Consultation with Agencies

3.1.1 Town of Whitchurch Stouffville

It is our understanding that an 'EIS Terms of Reference' was submitted to the Town of Whitchurch-Stouffville for the 2019 EIS. The Terms of Reference are attached as Appendix A.

The Town, through its peer reviewer RJ Burnside, provided comments on the original EIS and subsequent revisions from 2019-2022. Subsequent comments by the LSRCA in 2023 are addressed through this updated 2025 EIS.



Legend

Site Boundaries

N

375 187.5 0 375 750 1,125 1,500

Meters

ENVIRONMENTAL IMPACT STATEMENT

Figure 1
Site Location

5426, 5452 and 5584 Lakeshore Road (Balantrae)
Town of Whitchurch-Stouffville

ROOTS ENVIRONMENTAL

A meeting was held with the Town and RJ Burnside staff on September 9, 2024, to discuss their comments and outline requirements for the updated 2025 EIS.

3.1.2 Lake Simcoe Region Conservation Authority

LSRCA provided comments on EIS reports (Ages Consultants Limited) from 2019-2022. Subsequent comments in 2023 by the LSRCA are addressed through this updated 2025 EIS.

It is our understanding that meetings and site visits with LSRCA staff occurred with the Farsight Homes project team from 2019-2022. A subsequent meeting was held with LSRCA staff on September 9, 2024, to discuss their comments and outline requirements for the updated 2025 EIS. A site visit was also held with LSRCA staff on October 3, 2024, to delineate boundaries of wetland features within the subject properties and to discuss offsetting requirements for the applications.

3.2 Desktop Review

A desktop review was completed to identify previously known natural features and occurrences of potential rare species or SAR in the Study Area. Sources included the following:

- The Ministry of Natural Resources (MNR) Natural Heritage Information Centre (NHIC) Make A Map: Natural Heritage Areas;
- York Region and Town of Whitchurch-Stouffville Official Plan;
- Ontario Nature Reptile and Amphibian Atlas;
- iNaturalist; and
- LSRCA Regulation Mapping.

3.3 Field Investigations

Site investigations were completed in 2015-2024 based on a preliminary desktop review for the Study Area, habitats present on site, and the agreed upon Terms of Reference for the EIS. Table 1 below provides a summary of dates and tasks completed.

Detailed site investigations were limited to the subject property. Adjacent lands of 120-metres were investigated through roadside observations where feasible, aerial photography and background mapping.

Table 1: Summary of Site Investigations (2015, 2016 & 2024)

Task	Survey Dates (Duration)	Weather Conditions	Personnel
Breeding Bird Surveys	July 3, 2015	13°C; No wind; 0% Cloud Cover (CC)	M. Straus
	June 7, 2016	14°C; 2-4 wind*; 90-100% CC	B. Miller
	June 28, 2016	16°C; 0 wind; 0% CC	M. Straus
Amphibian Breeding Surveys	April 28, 2016	6°C; 0 wind; 70% CC	A.Corrigon/M. Straus
	May 26, 2016	14°C; 1 wind; 25% CC	A.Corrigon/M. Straus
	June 18, 2016	22°C; 0 wind; 5% CC	S. Catton/R. Dibbley

Botanical Surveys	June 7, 2016 June 28, 2016 Sept. 1, 2016	14°C; 2-4 wind*; 90-100% CC 16°C; 0 wind; 0% CC 18-22°C; 3 wind; 40% CC	B. Miller M. Straus M. Straus
Ecological Land Classification	July 3, 2015 June 7, 2016 June 28, 2016 Sept. 1, 2016	13°C; No wind; 0% Cloud Cover (CC) 14°C; 2-4 wind*; 90-100% CC 16°C; 0 wind; 0% CC 18-22°C; 3 wind; 40% CC	M. Straus B. Miller M. Straus M. Straus
Wetland Delineation	October 3, 2024	N/A	Kyle Fleming LSRCA staff

*Wind Measurement using Beaufort Scale (0-6)

3.3.1 Vascular Plants

Vascular plant surveys were completed in the early and late spring, and fall growing seasons were completed using roving transects through all habitats within the development area. Adjacent lands were completed using observations from the site property line.

Particular attention was paid during field investigations for rare species and Species at Risk listed under the Ontario *Endangered Species Act*. Incidental observations were also completed during other surveys on site.

The significance of vascular plants sampled was assessed based on the Natural Heritage Information Centre's (NHIC) rankings (S-rank) for provincial rarity.

3.3.2 Vegetation Communities

Vegetation communities were identified using the Ecological Land Classification (ELC) for Southern Ontario, First Approximation (Lee et al., 1998). Polygons within the development area were delineated using aerial photography, field sampled and classified into the most appropriate vegetation type. The polygons were identified based on vegetative cover, soils and landscape features. Vegetation communities within adjacent lands are identified to the Ecosite or Community Level dependent on accessibility or roadside observations.

The significance of the vegetation communities was assessed based on the Natural Heritage Information Centre's (NHIC) provincial rankings where applicable.

3.3.3 Breeding Birds

Three (3) breeding surveys were completed from 2015-2016 using a wandering transect methodology through all habitats on site, recording all auditory and visual detections of bird species. The timing of the surveys followed general protocols in the Ontario Breeding Bird Atlas. All birds detected on site during both surveys in suitable habitat during the breeding season were assumed to be breeding.

The significance of species detected during surveys has been assessed based on the Natural Heritage Information Centre's (NHIC) provincial rankings.

3.3.4 SAR Bat Maternity Roost (Treed)

Through consultation with the Town/RJ Burnside, bat maternity roost surveys will be completed as a condition of Draft Plan Approval. Surveys will be completed using the methodology approved by the Ministry of Environment, Conservation and Parks (MECP) at the time of the survey. Any requirements under the ESA must be carried out prior to construction.

3.3.5 Amphibians

Surveys for breeding amphibians (i.e., frog species) were conducted using protocols in the Marsh Monitoring Program Participant's Handbook (Bird Studies Canada, 2009). The survey station area is a 100 m radius semicircle. At each survey and station, all calling toads and frogs are identified and recorded over a three-minute time period. Call levels are described using values of 1, 2, or 3. Level 1 indicates that individuals can be counted, and calls are not simultaneous. Level 2 indicates that calls are distinguishable with some simultaneous calling. Level 3 indicates a full chorus where calls are continuous and overlapping. Calling toad or frog species from outside of the survey station, or those heard off property, are also recorded.

3.3.6 Aquatic Features

A municipal drain is present within the site that will be rerouted and enhanced as part of the proposed development. This drain has no direct connection to fish habitat and is entirely dependent on stormwater input from adjacent developments to the north of Aurora Road and west from Somer Rumm Court. Further analysis relative to this drain is provided in Section 4.4 of this report.

3.3.7 Wetlands

A wetland delineation was completed for all unevaluated wetlands found within the site with LSRCA staff in accordance with general criteria in the *Ontario Wetland Evaluation System (OWES)* (Southern Manual 2022). Based on the small size of these wetlands and lack of significant ecological functions, no evaluation under OWES was deemed to be warranted.

3.3.8 Incidental Wildlife Observations

Incidental observations were made for mammals and herptiles (amphibians and reptiles) during field investigations through observations of physical evidence (scats, tracks) and for shelter, feeding and breeding sites (e.g., vernal pools, rock piles, etc.).

4 EXISTING CONDITIONS

4.1 Desktop Review

4.1.1 MNRF NHIC Make-A-Map: Natural Heritage Areas

The NHIC geographic search for the subject property and adjacent lands of 120-metres (Squares 17PJ3677 and 17PJ3777) was completed to identify previous records for natural features and species in the area as shown on *Figure 2 – NHIC Natural Areas Map*. Occurrences documented by NHIC may include those beyond the site and on habitats suitable to those species. The following records of rare species or SAR were found:

- Midland Painted Turtle (*Chrysemys picta marginata*) (S4)
- Eastern Wood-pewee (*Contopus virens*) (S4B) (Special Concern) (SC)
- Snapping Turtle (*Chelydra serpentina*) (S4) (SC)
- Gypsy Cuckoo Bumble Bee (*Bombus bohemicus*) (S1S2) (Endangered) (END)

Unevaluated wetlands are mapped within the development area as illustrated in Figure 2. No other natural heritage features (i.e., ANSI) were identified in the review. A summary of the records is included in Appendix B.

Figure 2: NHIC Mapping (Property Boundary illustrated in red).

4.1.2 Town of Whitchurch-Stouffville Official Plan

The site is in the Ballantrae-Musselman Lake and Environs Secondary Plan Area (OPA 90) to the Town of Whitchurch-Stouffville Official Plan. Schedule E to the Secondary Plan designates the site as Balantrae Future Residential Area II. Appendix A identifies Natural Heritage Feature Conservation Area within the subject site.

As part of the secondary plan process, an 'Environmental Management Strategy' (NRSI March 2013) was completed to support OPA 136, the new Secondary Plan adopted by Council in 2014 and approved by the Ontario Land Tribunal (OLT) January 31, 2025. This report was completed to identify natural features and functions in the plan area, connectivity within and to areas outside the study area, and ensure consistency with existing policies/guidelines.

Through the secondary plan, part of the site was identified as containing Core NHS with the broader Natural Heritage System due to the presence of unevaluated wetlands, forests and a watercourse. This Core NHS is reflected in the Natural Heritage Feature System overlay in Appendix A to the Secondary Plan (OPA 136).

4.1.3 Ontario Nature Reptile and Amphibian Atlas

A geographic query of occurrence square 17PJ37 was completed using the Ontario Nature Reptile and Amphibian Atlas for observations of species collected from 1970-2019. Observations will include observations beyond the site and on habitats suitable to those species.

Two Species at Risk (SAR) were found in the search:

- Blanding's Turtle (*Emydoidea blandingii*) (THR)
- Snapping Turtle (SC)

Other species noted in the search are common to Ontario. A summary of the records is included in Appendix B.

4.1.4 iNaturalist

A geographic query was completed for iNaturalist records within the site and adjacent lands. Observations of one were noted in records for the area:

- Snapping Turtle (SC)

All other species were found to be common (S4 or higher) and non-at-risk in Ontario.

4.1.5 LSRCA Regulation Mapping

Part of the site is regulated under O. Reg. 41/24 of the *Conservation Authorities Act* by the LSRCA. The regulation mapping identifies the presence of a watercourse (further discussed as a municipal drain) within the site, originating at Aurora Road and flowing south through the site.

4.2 Vegetation

4.2.1 Ecological Land Classification

Vegetation communities were identified on site using ELC to the vegetation type within the proposed development area. Adjacent lands are classified to the Ecosite where possible. Provided below are descriptions of communities, which are shown on *Figure 3 – Existing Conditions* and *Table 2 – Site Photos*.

AGR: Agriculture
This area occupies the majority of the site and proposed development area. In 2024, Corn (*Zea mays*) was planted on site.

RES – Residential Uses
These areas represent active residential uses/disturbance within the site.

HR – Hedgerows
Along the north boundary and between agricultural fields, deciduous and coniferous hedgerows are present. Species composition in the hedgerows varies. The central hedgerow between fields contains semi-mature and mature Scots Pine (*Pinus sylvestris*), Manitoba Maple (*Acer negundo*), Trembling Aspen (*Populus tremuloides*) and thickets of Staghorn Sumac (*Rhus typhina*). Along the north boundary, Norway Spruce (*Picea abies*) and Manitoba Maple was prevalent.

CUM1-1/CUW1: Dry-Moist Old Field Meadow Type/Mineral Cultural Woodland
This community, found between active agricultural lands and Lakeshore Road, is a culturally influenced community consisting of open meadow with sporadic tree cover. Species include Kentucky Bluegrass (*Poa pratensis*), Canada Goldenrod (*Solidago canadensis*), Awnless Brome (*Bromus inermis*), Raspberry species (*Rubus* spp.) and Tufted vetch (*Vicia cracca*), Scots Pine, White Pine (*Pinus strobus*), White Birch, Norway Spruce, Trembling Aspen and Manitoba Maple.

CUP3-3: Scots Pine Coniferous Plantation Type
Regenerating Scots Pine plantation with associates of Trembling Aspen, Green Ash (*Fraxinus pennsylvanica*) with a shrub and ground layer consisting of Chokecherry (*Prunus virginiana*), Strawberry species (*Fragaria* spp.), Raspberry species (*Rubus* spp.), Grasses, Coltsfoot (*Tussilago farfara*) and Dandelion (*Taraxacum officinale*).

FOD3-1: Dry-Fresh Poplar Deciduous Forest Type
This upland woodland was found to have a high concentration of Black Cherry (Prunus serotina) with Trembling Aspen, Manitoba Maple and White Pine. The understory and ground cover included Poison Ivy *(Rhus radicans)*, Riverbank Grape (*Vitis riparia*), Yellow Avens (*Geum aleppicum*), Garlic Mustard (*Alliaria petiolate*), Common Helleborine (*Epipactis helleborine*), Alternate-leaved Dogwood (*Cornus alternifolia*) and Bracken Fern *(Pteridium aquilinum*).

SWD4-3: White Birch–Poplar Mineral Deciduous Swamp Type
This swamp is dominated by Trembling Aspen with associates of White Birch (*Betula papyrifera*) and Black Cherry (*Prunus serotina*). The sub-canopy and understorey were also dominated by Trembling Aspen with Sensitive Fern (*Onoclea sensibilis*), Sedge species (*Carex* spp.) and Spotted Jewelweed (*Impatiens capensis*) in the ground layer.

Legend

- Site Boundaries
- Adjacent Lands (120m)
- Municipal Drain
- Waterbody
- Unevaluated Wetlands (LSRCA/Roots)
- Unevaluated Wetlands (MNR)
- Ecological Land Classification Units

ENVIRONMENTAL IMPACT STATEMENT

Figure 3
Existing Conditions

5426, 5452 and 5584 Lakeshore Road (Balantrae)
Town of Whitchurch-Stouffville

ROOTS ENVIRONMENTAL

N

125 62.5 0 125 250 375 500

Meters

Table 2: Site Photos (K Fleming 2025).

	
AGR: Agriculture within the west part of the subject property.	SWD4-3: White Birch–Poplar Mineral Deciduous Swamp Type in the west part of the subject property.
	
Municipal drain in the central part of the subject property.	SWD4-3: White Birch–Poplar Mineral Deciduous Swamp Type in the central part of the subject property.
	

FOD3-1: Dry-Fresh Poplar Deciduous Forest Type in the central part of the subject property.	MAM2-2: Reed-canary Grass Mineral Meadow Marsh Type in the central part of the subject property.
	
CUP3-3: Scots Pine Coniferous Plantation Type in the central part of the subject property.	Existing agricultural entrance from Lakeshore Road in the southwest part of the subject property.

MAM2-2: Reed-canary Grass Mineral Meadow Marsh Type
Found within the edge of agricultural lands and infiltration area of the municipal drainage swale (See Section 4.4), this community is dominated by Reed Canary Grass (*Phalaris arundinacea*).

SWT2-5: Red-osier Mineral Thicket Swamp Type
Patchy thicket swamp largely comprised of Red-osier Dogwood (*Cornus servicea*), Willow species (*Salix* spp.), and smaller MAM2-2 pockets and with some overstorey coverage by Trembling Aspen. Ground cover consists primarily of Reed-canary Grass, with a variety of other species such as Horsetail (*Equisetum* spp.), Sensitive Fern, and Fowl Manna Grass (*Glyceria striata*).

4.2.2 Botanical Inventory

A total of 168 species of vascular plants were recorded from the Study Area. It is noted that the Study Area of the 2022 EIS included lands that are now excluded from the development area.

Of the species observed, 69% were native. 65% of these native plants have a rank of S5, indicating they are common and secure within Ontario. 6 species (4 %) have a rank of S4 (apparently secure).

Fourteen plants locally rare (R1-10) or uncommon (U) in York region were identified in the Study Area, including:

- Thimbleweed (*Anemone cylindrical)* – R8
- Spotted water-hemlock (*Cicuta maculata*) – U
- Running strawberry-bush (*Euonymus 11bovate*) – R6
- Virginia stickweed (*Hackelia virginiana*) – R5
- Black walnut (*Juglans nigra*) – R
- Biennial lettuce (*Lactuca biennis*) – R10
- Pennsylvania smartweed (*Persicaria pensylvanica*) – R3
- Indian-pipe (*Monotropa uniflora*) – U

- Common evening-primrose (*Oenothera biennis*) – U
- Arrow-leaved aster (*Symphyotrichum urophyllum*) – R9
- Thin-leaved sedge (*Carex cephaloidea*) – R3
- Fringed sedge (*Carex crinite*) – U
- Pubescent sedge (*Carex hirtifolia*) – U
- Bur reed sedge (*Carex sparganioides*) – U.

No provincially rare species or SAR were found within the development area or adjacent lands. All species were found to be common to similar habitats found in Ontario or are listed as non-native/exotic species. A detailed list of species is provided in Appendix C.

4.3 Wildlife

4.3.1 Breeding Birds

In total, 30 species of birds were observed; 29 of which are likely to be breeding on the property. Observed species not expected to be breeding within the subject lands include Turkey Vulture, which was observed as a flyover.

One species of Special Concern, the Eastern Wood-Pewee, was identified within deciduous woodlands on site (FOD3-1) in June 2016, however, this species was not confirmed in both surveys, therefore, it is assumed that it was a flyover or incidental observation.

Remaining species were found to be common to Ontario. Species found included the Black-capped Chickadee (*Poecile atricapillus*), American Robin (*Turdus migratorius*), American Goldfinch (*Spinus tristis*), Blue Jay (*Cyanocitta cristata*), European Starling (*Sturnus vulgaris*), Downy Woodpecker (*Picoides pubescens*) and Red-winged Blackbird (*Agelaius phoeniceus*). A list of species detected is included in Appendix C.

4.3.2 Amphibians

Surveys completed for the site between May – June 2016 found a low abundance and diversity of breeding amphibians. Breeding amphibian detections were limited to May 2016 only, as wetland features on site and the municipal drainage swale were found to be dry by June 2016, thereby inhibiting any use by local amphibian populations. The municipal drainage swale was found to American Toad (*Anaxyrus americanus*) (visually), as well as Level 1 calling for Gray Treefrog (*Hyla versicolor*) and a full chorus (Level 3) for Spring Peepers (*Pseudacris crucifer*) in May, with no calling activity in June.

4.3.3 Incidental Wildlife Observations

Incidental wildlife observations made during site visits included the Eastern Grey Squirrel (*Sciurus carolinensis*) and Striped Skunk (*Mephitis mephitis*). These observations are included in Appendix C.

4.4 Aquatic Habitats

A municipal drainage swale is present within the subject property as illustrated in Figure 4. This swale was constructed to convey stormwater drainage from lands north of Aurora Road through an easement (Instrument #296315) between the landowners (in 1981) and the Town of Whitchurch-Stouffville. A copy of the easement is provided in Appendix D. Instrument #296315 describes activities within the easement as:

> *"..lay down, construct, operate, maintain, inspect, alter, remove, replace, reconstruct, supplement, repair, keep in good condition, relocate and add to one or more pipelines or conduits for the carriage, conveyance and transportation of storm sewage, or any such materials."*

The swale was constructed by the Town in the mid-1980's (per communication with the current landowner) and as shown in *Table 3 – Historic Aerial Photography*. Table 3 clearly demonstrates that the swale did not exist prior to 1988. No flow is observed in the swale until the subdivision north of Aurora Road came online between 1995-2002.

This swale also conveys drainage from Somer Rumm Court to the west of the site through a steel corrugated culvert to the municipal swale.

The swale typically conveys drainage during the spring (freshet) and during larger storm events. The swale infiltrates at the end of the municipally constructed swale within existing agricultural lands, and no channel or overland flow is present past that point.

As the swale is isolated, dry part of the year, and there is no connection to any other watercourse, fish habitat is not present.

No aquatic features (i.e., watercourses, waterbodies, etc.) exist within the development area.

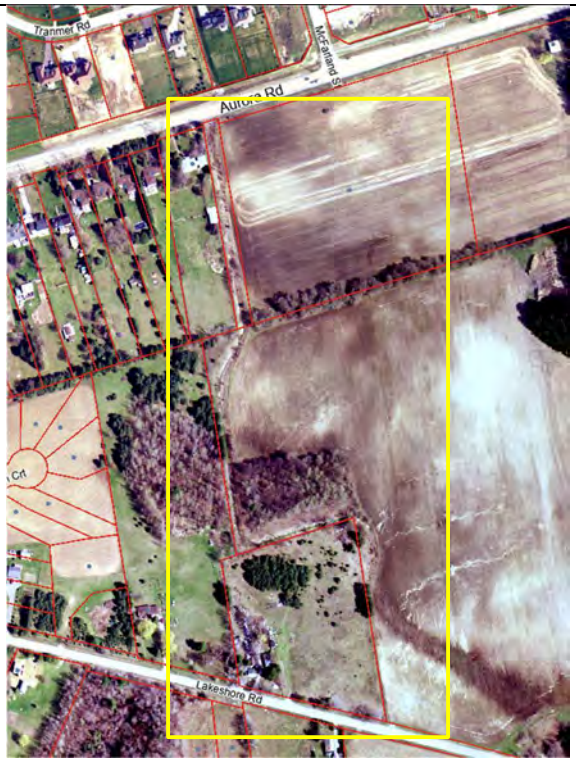
Table 3: Historic Aerial Photography

	
1954 – no swale present.	1970 – No swale present.

1978 – No swale present.

1988 – swale constructed.

1995 – Swale constructed. No flow as subdivision to north of Aurora Road has not been constructed.



2002 – Construction of subdivision north of Aurora Road is ongoing and drainage visible in swale.

4.5 Wetlands

Three wetlands were delineated in-field with LSRCA staff in 2024. These wetlands are illustrated in Figure 4. Two of the wetlands, #A & B, result from overland drainage from agricultural fields and are 0.24 and 0.16-ha, respectively. Wetland #C (0.14-ha) appears to be result of the municipal swale, which ends at the north end of this wetland and infiltrates into the ground. No standing water was visible within the wetlands during the delineation.

A fourth wetland is found within the southeast corner of the site. No development or site alteration will occur in this wetland.

5 ASSESSMENT OF NATURAL HERITAGE FEATURES/AREAS

Identification of natural heritage features is based on the PPS, the MNRF "Natural Heritage Reference Manual" (2nd Edition) (MNRF 2010), ORMCP and Town of Whitchurch-Stouffville Official Plan, "Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E" (MNRF January 2015), and listings and habitat descriptions for species listed in the ESA.

5.1 Significant Wetlands (and Coastal Wetlands)

A review of the MNRF NHIC mapping found no Provincially Significant Wetland on or within 120 metres of the site.

5.2 Other Wetlands (Unevaluated, Non-Provincially Significant)

The ORMCP '*Technical Paper Series #1 – Identification of Key Natural Heritage Features*' provides criteria for the identification of Key Natural Heritage Features (KNHF) within the plan area. Wetlands are identified as a KNHF in the ORMCP. *Table 4 – ORMCP Wetlands Criteria Assessment*, provides an assessment of criteria in the technical paper relative to existing site conditions of unevaluated wetlands on the site.

Table 4: ORMCP Wetlands Criteria Assessment

Criteria	Site Conditions	Presence/Absence
Evaluated as a PSW by MNR.	No, wetlands on site have not been evaluated as provincially significant.	Absent.
Wetlands > 0.5-ha in size.	All wetlands on site are less than 0.5-ha in size.	Absent.
Wetlands < 0.5-ha with surface water connection to a permanent or intermittent key hydrological feature.	No watercourses are present within the site.	Absent
Wetlands < 0.5-ha in size within a significant recharge to the underlying aquifer.	Wetlands are small and would not provide a significant recharge value to the underlying aquifer.	Absent

Wetlands < 0.5-ha with a direct hydraulic connection between the wetland and underlaying aquifer.	No seeps are present and the wetland on site provides only intermittent drainage through onsite mineral soils to the underlaying aquifer.	Absent
A KNHF other than a wetland (e.g., Significant Wildlife Habitat)	No Significant Wildlife Habitat or other KNHF's are associated with the wetlands.	Absent
Important Ecological Linkages to adjacent KNHF's.	No other KNHF's are present.	Absent
Habitat for a rare species.	No provincially rare species are present within the wetlands.	Absent

As shown in Table 4, wetlands on site do not meet criteria in the ORMCP technical paper to be considered a KNHF.

O. Reg. 41/24 of the *Conservation Authorities Act* Section 2 (3) regulates activities within and/or 30-metres of a wetland. It has been confirmed with the LSRCA that a permit will be required for the removal of any wetland on site. This EIS addresses the requirements of the LSRCA for that permit application through an impact assessment provided in Section 7 of this report.

Additional unevaluated wetlands are identified in MNR mapping to the south of the site and Lakeshore Road, as illustrated in *Figure 4 – Unevaluated Wetlands and Key Natural Heritage Features*. Confirmation of these wetlands could not be completed, as they are located on private lands. As the wetlands are located within adjacent lands to the proposed development, and impact assessment is provided in Section 7 of this report.

5.3 Significant Woodlands

The ORMCP '*Technical Paper Series #7 – Identification and Protection of Significant Woodlands*' provides criteria for the identification of significant woodlands in the plan area. *Table 5 – ORMCP Significant Woodlands Criteria Assessment*, provides an assessment of criteria in the technical paper relative to wooded areas within the subject site.

Table 5: ORMCP Significant Woodlands Criteria Assessment

Criteria	Site Conditions	Presence/Absence
4 hectares or larger in size located in the Countryside or Settlement Areas of the ORMCP.	Woodlands within the development area have a total size of 1.97-ha.	Absent.
0.5 hectare or larger in size located in the Natural Core or Natural Linkage Areas of the ORMCP.	The site is within the Community of Ballantrae which is designated Settlement Areas in the ORMCP.	Absent.
0.5 hectare or larger located within or intersecting with a key natural	No KNHF's are present within or intersecting with woodlands on site.	Absent.

heritage feature or hydrologically sensitive feature or their vegetation protection zone.		

As shown in Table 5, woodlands on site do not meet criteria in the ORMCP technical paper to be considered a KNHF.

Significant Woodlands are present within adjacent lands to the northeast and south (across Lakeshore Road) as illustrated in Figure 5. As these woodlands are found within adjacent lands to the proposed development, an impact assessment has been provided in Section 7 of this report.

5.4 Significant Valleylands

No significant valley land features were identified during the desktop review or found during field surveys on the site.

5.5 Significant Wildlife Habitat

An assessment of candidate Significant Wildlife Habitat (SWH) has been completed using the "Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E" (MNRF 2015) based on the results of the desktop review, habitats present and field investigations. No Significant Wildlife Habitat was identified within the site. This assessment is included as Appendix E.

5.6 Significant Areas of Natural and Scientific Interest

A desktop review of available information found no Provincially Significant ANSI within 120 metres of the subject property.

5.7 Fish Habitat/Watercourses

A municipal drainage swale is present within the site as illustrated in Figure 3. This swale would be identified as municipal infrastructure, as it is within a municipal easement and constructed for the sole purpose of stormwater conveyance through the site. Therefore, it would not be identified as a naturally occurring hydrologically sensitive feature, as it can be relocated, repaired, altered and/or maintained in accordance with the requirements of the Town. We note that the Town, through discussions with Farsight Homes, has agreed to relocate the swale and revise the easement agreement.

5.8 Habitat of Endangered Species and Threatened Species

A SAR Assessment was completed based on existing records obtained through the desktop review, habitats present within the development area and field investigations. The results of the SAR Assessment are provided in Appendix F.

As noted in Section 3.3.4, bat maternity roost surveys will be completed as a condition of Draft Plan Approval. Surveys will be completed using the methodology approved by the MECP at the time of the survey. Any requirements under the ESA must be carried out prior to construction.

Legend

- Site Boundaries
- Adjacent Lands (120m)
- Waterbody
- Significant Woodlands
- Unevaluated Wetlands (LSRCA/Roots)
- Unevaluated Wetlands (MNR)

N

125 62.5 0 125 250 375 500

Meters

ENVIRONMENTAL IMPACT STATEMENT

Figure 4
Unevaluated Wetlands and Key Natural Heritage Features

5426, 5452 and 5584 Lakeshore Road (Balantrae)
Town of Whitchurch-Stouffville

ROOTS ENVIRONMENTAL

6 PROPOSED DEVELOPMENT

The proposed development will include 145 residential lots with blocks for Stormwater Management (SWM), Open Space Conservation, Open Space, utilities, private roads and future development areas as illustrated in *Figure 5 – Draft Plan of Subdivision*. The subdivision will be accessed from Lakeshore Road and include three proposed internal roads.

A large Open Space Conservation area (Block 150) is proposed in the central part of the site, which will contain the realigned municipal drainage swale, wetland compensation areas, woodland compensation plantings, trails, community open space and SWM facilities.

7 IMPACT ASSESSMENT

Two natural heritage features have been identified on the site and adjacent lands:

- Unevaluated Wetlands; and
- Significant Woodlands.

This section will assess potential impacts to these features and ecological functions resulting from the proposed development and provides mitigation measures to ensure no negative impacts. This report utilizes the definition of a "negative impact" in the PPS (Page 48) "i*n regard to other natural heritage features and areas, degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities.*"

This section will assess potential for direct (i.e., removal of the feature) and indirect impacts (i.e., use of invasive horticultural plants, changes in light, noise, and moisture regimes, etc.) for each natural heritage feature.

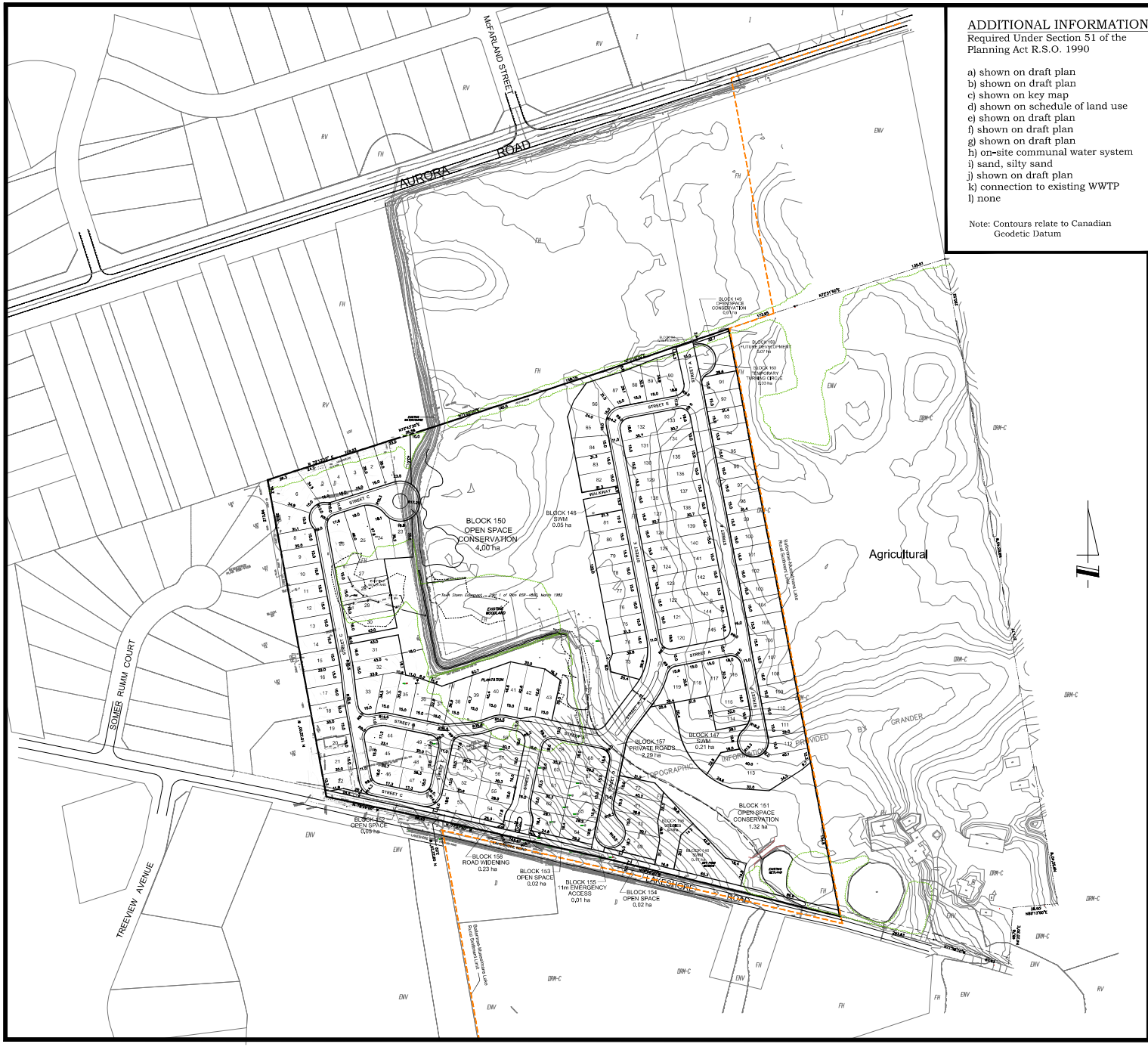
7.1 Unevaluated Wetlands

As illustrated in *Figure 6 – Setbacks and Mitigation Measures*, the proposed development will result in the removal and/or impact to 0.4ha of unevaluated, non-provincially significant wetland on site. These wetlands, as detailed in Section 5.2, do not meet criteria under the ORMCP to be defined as key natural heritage or hydrologic feature.

Per Sections 8.3.3 and 8.5 of the LSRCA "*Conservation Authorities Act and Ontario Regulation 41/24 Implementation Guidelines*", an impact assessment and mitigation plan for removal of portions of these wetlands is provided below.

Development within Wetlands A and C (Figure 6) will remove portions of these wetlands. Remaining parts of the wetlands will be retained and will be maintained through rear lot drainage as illustrated in the grading plan for the development. Wetland B will be impacted through grading to occur in Block 150 by removal contributing surface drainage. Wetland D will be maintained as no development is proposed in this area.

No significant ecological functions (i.e., SWH, SAR, etc.) were identified within these wetlands. The wetlands are the result of agricultural overland drainage and a municipal swale. As the wetlands are



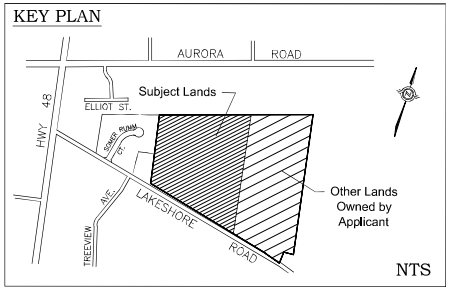
ADDITIONAL INFORMATION

Required Under Section 51 of the Planning Act R.S.O. 1990

a) shown on draft plan
b) shown on draft plan
c) shown on key map
d) shown on schedule of land use
e) shown on draft plan
f) shown on draft plan
g) shown on draft plan
h) on-site communal water system
i) sand, silty sand
j) shown on draft plan
k) connection to existing WWTP
l) none

Note: Contours relate to Canadian Geodetic Datum

KEY PLAN



SCHEDULE OF LAND USE

Lots 1-145 - Condominium Single Detached Residential	7.72 ha	47 %
Blocks 146-148 - Storm Water Management (SWM)	0.43 ha	2 %
Blocks 149-151 - Open Space Conservation	5.33 ha	32 %
Blocks 152-154 - Open Space	0.09 ha	1 %
Block 155 - Emergency Access	0.01 ha	1 %
Block 156 - Utilities	0.11 ha	1 %
Block 157 - Private Roads (21.4m-11.0m)	2.29 ha	12 %
Block 158 - Road Widening	0.23 ha	1 %
Block 159 - Future Development	0.07 ha	1 %
Block 160 - Temporary Turning Circle	0.03 ha	1 %
Block 161 - 0.3m Reserve	0.01 ha	1 %
TOTAL	16.32 ha	100.0%

OWNER'S AUTHORIZATION

We, hereby, authorize Alcorn & Associates Limited to prepare and submit this Revised Draft Plan of Subdivision 19T(W)14.003 to the Town of Whitchurch-Stouffville.

Original Signed — Dec 20, 2018
2506339 Ontario Inc. — Date

Original Signed — Dec 20, 2018
Richard Schickedanz — Date

SURVEYOR'S CERTIFICATE

We, hereby, certify that the boundaries of the lands to be subdivided and their relationship to adjacent lands are accurately drawn and correctly shown.

Original Signed — Nov 13, 2018
Greg Robinson, O.L.S. — Date
JD Barnes Limited

Draft Plan of Subdivision
19T(W)-19.001

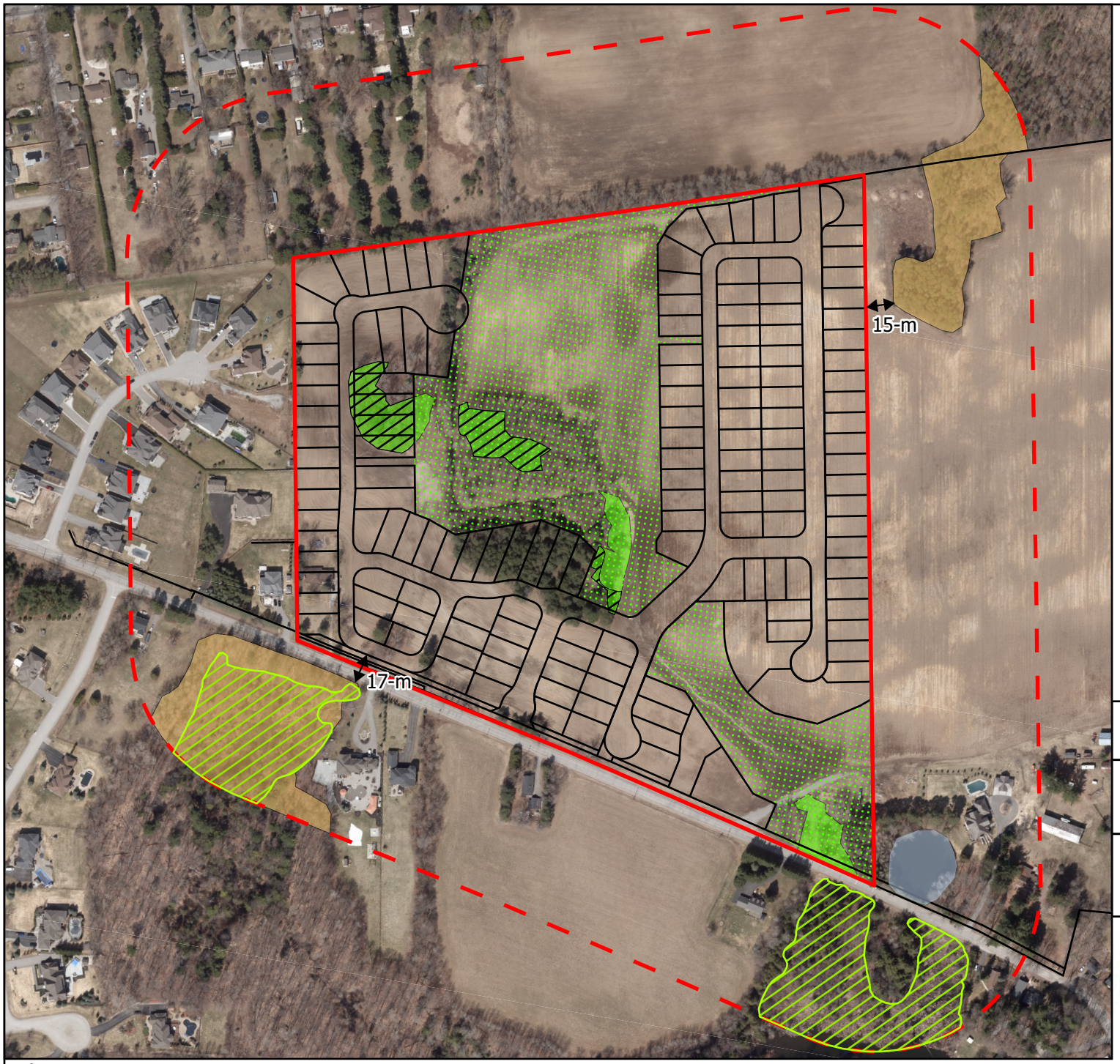
PART OF LOTS 19 & 20, CONCESSION 8
TOWN OF WHITCHURCH - STOUFFVILLE
REGIONAL MUNICIPALITY OF YORK
Farsight Developments Ballantrae Inc.
5426, 5452 and 5584 Lakeshore Road, Ballantrae

SCALE 1:1500

ALCORN & ASSOCIATES LIMITED
Land Planning and Development Consultants

12 Greenvalley Circle,
Stouffville, Ontario L4A 2L4
Tel: (905) 940-0931

February 16, 2025



Legend

- Site Boundaries
- Adjacent Lands (120m)
- Waterbody
- Significant Woodlands
- Unevaluated Wetlands (LSRCA/Roots)
- Unevaluated Wetlands (MNR)
- Wetlands to be Removed/Impacted (0.40ha)
- Landscape and Environmental Master Plan Area

N

125 62.5 0 125 250 375 500

Meters

ENVIRONMENTAL IMPACT STATEMENT

Figure 6
Setbacks and Mitigation Measures

5426, 5452 and 5584 Lakeshore Road
(Balantrae)
Town of Whitchurch-Stouffville

ROOTS ENVIRONMENTAL

isolated and have no outlet to any hydrologic features or other wetlands, removal is not anticipated to have any downstream negative impacts. To compensate for loss of wetlands on site, a *Landscape and Environmental Enhancement Master Plan* has been completed for the development, as illustrated in *Figure 7 – Landscape and Environmental Enhancement Master Plan*. As shown on the plan, compensation for loss of wetland resulting from the development, will be provided in Block 150 and total 1.2ha. This will be a net gain of 3:1 per LSRCA requirements. In addition, additional landscaping (woodlands) will be completed for Block 150, which will be a significant improvement and enlargement of natural areas on site compared to existing conditions.

Wetlands to be created through the Master Plan will be maintained by rear lot drainage, upslope areas in Block 150, and seasonal flow from the realigned municipal drainage swale.

A planting plan for the wetlands and Master Plan area will be completed as part of detailed design for the development.

During construction, Erosion and Sediment Control (ESC) fencing will be installed to control sediments leaving the construction area. This fence is to be maintained until all construction and landscaping/restoration is completed.

Adjacent wetlands to the south of the development occur across Lakeshore Road as illustrated in Figure 5. No development or site alteration will occur in these wetlands. No direct connection to these wetlands was found, and it is anticipated that they are maintained through localized drainage patterns and/or seasonal groundwater input. Existing drainage will be maintained down gradient of the development area through the realignment of the municipal drainage swale and site grading, thereby ensuring continued infiltration to the local groundwater table.

As wetlands on site to be removed and/or impacted by development are not identified as a Key Natural Heritage or Hydrologic Feature by the ORMCP, and a mitigation plan has been implemented, which will result in a net gain of 0.8ha of wetland habitat within a larger naturalized enhancement area, we anticipate no negative impacts resulting from the proposed development.

7.2 Significant Woodlands

Significant Woodlands are present within adjacent lands to the northeast and south of the development as illustrated in Figure 6. No development will occur in these woodlands.

The woodland to the east will have a setback of 15-metres or greater from the limit of development, as illustrated in Figure 6. The setback area will continue to be utilized for agriculture post-development.

The woodland to the south is across Lakeshore Road and will have a setback of at least 17-metres to the limit of development.

These setbacks exceed recommendations in the Ballantrae-Musselman Lake and Environs Environmental Management Strategy (NRSI March 2013) for a 10-metres setback from woodlands.

As there will be no direct removal of the woodlands and setbacks will be maintained, there are no anticipated negative impacts to Significant Woodlands resulting from the proposed development.

FARSIGHT HOMES

LAKESHORE ROAD COMMUNITY

TOWN OF WHITCHURCH-STOUFFVILLE

LANDSCAPE AND ENVIRONMENTAL ENHANCEMENT MASTER PLAN

May 20, 2025

LEGEND

- EXISTING FLOODLINE (SKA)
- PROPOSED FLOODLINE (TOWN)
- PROPOSED TOWN TRAIL
- PROPOSED PRIVATE TRAIL

SCHOLLEN & Company Inc.
20 West Wilmot Court, Unit 10
Richmond Hill, Ontario L4B 1B9
T: 289-695-0009
F: 289-695-0010
PROJECT NO. 19009

FARSIGHT HOMES

7.3 Additional Recommendations

To avoid potential direct impacts to bird species (i.e. destruction of nests) protected under the *Migratory Birds Convention Act,* it is recommended that no clearing of vegetation occurs between April 1 – August 31st.

As noted in Section 3.3.4, bat maternity roost surveys will be completed as a condition of Draft Plan Approval. Surveys will be completed using the methodology approved by the MECP at the time of the survey. Any requirements under the ESA must be carried out prior to construction.

8 POLICY AND LEGISLATION COMPLIANCE

8.1 Environmental Planning Policies

The following tables provide a summary of planning policies and rationale for compliance with the Provincial Planning Statement, Greenbelt Plan, ORMCP, LSPP, Region of York Official Plan and Town of Whitchurch-Stouffville Official Plan for the proposed development. This environmental policy consistency and conformity was undertaken by Charles F. Burgess, MCIP, RPP of Burgess Gleason Environmental Inc.

Table 6: Provincial Planning Statement (2024)

Section	Policy	Policy Consistency
4.1.3	Natural heritage systems shall be identified in Ecoregions 6E and 7E[1] recognizing that they will vary in size and form in settlement areas, rural areas, and prime agricultural areas.	The Natural Heritage System (NHS) is typically illustrated on Schedules to municipal Official Plans or identified by the Ministry of Natural Resources and Forestry. Based on mapping, a Natural Heritage System exists on the subject property.
4.1.4	Development and site alteration shall not be permitted in significant wetlands and coastal wetlands.	There are no significant wetlands or coastal wetlands on the subject property.
4.1.5	Development and site alteration shall not be permitted in valleylands, woodlands, wildlife habitat, and ANSI that are significant including coastal wetlands unless it has been demonstrated that there will be no negative impacts on the natural feature and their ecological functions.	Based on existing information and a site inspection, there are no natural heritage features as listed in Policy 4.1.5 on the subject property.
4.1.6	Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.	There are no watercourses that contain fish habitat on the subject property.

4.1.7	Development and site alteration shall not be permitted in habitat of endangered species and threatened species except in accordance with provincial and federal requirements.	Prior to any development and site alteration on the subject lands, the provisions of the *Endangered Species Act* will be met.
4.1.8	Development and site alteration shall not be permitted on adjacent lands to features identified in 4.1.4, 4.1.5, and 4.1.6 unless it has been demonstrated that there will be no negative impacts.	The proposed development will be located adjacent to significant woodlands that are situated off of the property. Given that all new development will be setback from this natural heritage feature, there will be no negative impacts on the significant woodlands.

Table 7: Greenbelt Plan (2017)

Section	Policy	Conformity
2	This section identifies that the Greenbelt Area includes lands within the Niagara Escarpment Plan Area, Oak Ridges Moraine Area, and lands designated Protected Countryside by the Greenbelt Plan.	Given that the property is located within the Oak Ridges Moraine Conservation Plan Area, the subject lands are part of the provincially designated Greenbelt Area.
2.1	This section of the Greenbelt Plan refers to Lands within the Oak Ridges Moraine Area.	Based on this section, the requirements of the Oak Ridges Moraine Conservation Plan continue to apply and the Protected Countryside policies of the Greenbelt Plan do not apply except for section 3.3 (Parkland, Open Space, and Trails). On this basis, the policies of the ORMCP prevail as it relates to the development of the subject lands within the Greenbelt Area.

Table 8: Oak Ridges Moraine Conservation Plan (2017)

Section	Policy	Conformity
Ontario Regulation 140/02 Map	This Map shows the Land Use Designations on the Oak Ridges Moraine.	Based on this Map, the subject property is designated Settlement Areas (Community of Ballantrae). The proposed residential subdivision is permitted in the Settlement Areas designation.
18 Settlement Areas	This Section provides a policy framework for land use proposals within the Settlement Area designation.	The proposed land use and development helps fulfil the policy requirements of Section 18 of the ORMCP.

22(1) Key natural heritage features	This Subsection defines the key natural heritage features in the Plan Area such as significant woodlands and fish habitat.	The subject property does not contain any key natural heritage features based on field investigations and evaluation.
22(3) Natural Heritage Evaluation (NHE)	This policy states that any development proposed within the area of influence of key natural heritage features shall be accompanied with a natural heritage evaluation.	The preparation of this Natural Heritage Evaluation satisfies this policy requirement given that the mapping shows a watercourse and wetland area. However, the field inspections have demonstrated that a watercourse and wetland area does not exist on the property based on the technical definitions of these features.
23 NHE Requirement	This Section identifies criteria for formulating a Natural Heritage Evaluation.	This Natural Heritage Evaluation has been prepared in the context of the Section 23 criteria.
26(1) Key hydrologic features	This Subsection defines the key hydrologic features in the Plan Area such as permanent and intermittent streams.	The mapping shows the presence of a municipal drain and wetland areas. However, the field inspections and analysis has demonstrated that the wetland and municipal drain are not KHF's based on technical definitions of these features.
26(3) Hydrological Evaluation	This policy states that any development proposed within the area of influence of key hydrologic features shall be accompanied with a hydrological evaluation.	The preparation of this Natural Heritage Evaluation or EIS satisfies this policy requirement given the mapped watercourse and wetland. However, the field inspections have demonstrated that a watercourse and wetland area does not exist on the property based on the technical definitions of these features.
26(4) Hydrological Evaluation Requirement	This Section identifies criteria for formulating a Hydrological Evaluation.	This Natural Heritage Evaluation or EIS has been prepared in the context of the Section 26 criteria.
30(13) Landform Conservation Areas	Subsection 30(13) provides a framework for addressing development and site alteration on Landform Conservation Areas (1 and 2) within Settlement Areas.	The approval authority (Town of Whitchurch-Stouffville) will ensure that the development of the subject lands will be designed through proper engineering studies and plans that will help fulfil the policy requirements of the Landform Conservation Area policies. The proposed development is not within the Landform Conservation Area Category 1 or 2 based on Schedule J of the Town Official Plan.
45 and 46 Stormwater Management	This Section provides policies related to proper stormwater management.	Engineering studies and plans have been prepared in the context of these stormwater management policies.

Table 9: Lake Simcoe Protection Plan (2009)

Section	Policy	Conformity
6.32-DP	Policies 6.32-6.34 apply to existing settlement areas and adjacent littoral zones, and these areas are not subject to policies 6.1-6.3, 6.5, 6.11, and 6.20-6.29.	The property is located in a settlement area (Ballantrae) and, on this basis, it is acknowledged that these policies apply to this land use proposal.
6.33-DP	An application for development and site alteration shall, where applicable, improve fish habitat, include landscaping, minimize urban stormwater runoff, and establish/ increase the vegetation protection zone adjacent to Lake Simcoe.	Through this land use proposal, proper storm water management and landscaping including an enhanced flood plain area will be provided.
6.34-DP	If a buffer is required to be established as a result of the application of the PPS, then the buffer shall be composed of and maintained as natural self-sustaining vegetation.	Based on this analysis, the area susceptible to flooding or local drainage will be restored and enhanced through the provision of a Landscape Plan and planting of native trees and shrubs.
6.35-DP	For lands incorporated into a settlement area after the effective date of this Plan, the policies of Chapter 6 apply other than 6.32-6.34.	The subject property has been located in a defined settlement area prior to 2009. As a result, policies 6.32-6.34 apply to this application.

Table 10: Region of York Official Plan (2022)

Schedule/Section	Designation/Policy	Conformity
Map 1 Regional Structure	Based on Map 1, the subject property is within the Towns and Villages designation.	The Towns and Villages designation is intended to promote and allow for urban uses including residential plans of subdivision.
Map 1A Land Use Designations	Map 1A shows that the property is designated Community Area.	The Community Area designation reflects the settlement area of Ballantrae where urban uses and development are promoted and permitted.
Map 1B Urban Systems Overlay	The subject property is located in a built-up area based on Map 1B.	The built-up area designation is intended to allow for urban land uses and development such as the proposed residential plan of subdivision.
Map 1C Oak Ridges Moraine Conservation Plan and Greenbelt Plan	Map 1C illustrates that the subject lands are within the Settlement Areas designation of the ORMCP.	The proposed use and development are encouraged and permitted in the Settlement Areas designation. Please refer to the Table 8 for conformity with the ORMCP.

Designations		
Map 2 Regional Greenland System	This Map illustrates that the subject property is outside the Regional Greenlands System.	The property is within the Settlement Areas designation where growth and development are encouraged such as the proposed residential plan of subdivision.
Map 3 ANSI	Map 3 shows the ANSI within the Region.	The property is located outside any ANSI based on this Map and provincial mapping.
Map 4 Key Hydrologic Features	This Map shows the presence of a watercourse and unevaluated wetland on the property.	Based on field inspections and further evaluation, it was determined that a watercourse does not exist on the subject lands. Further, the wetland is not classified as a KHF based on the technical definitions and its lack of size and significance.
Map 5 Woodands	Map 5 illustrates that woodland may be located on the property.	The woodland on the property is not classified as a key natural heritage feature due to its size and lack of significance.

Table 11: Ballantrae-Musselman Lake and Environs Secondary Plan (Consolidation 2023)

Schedule/Section	Designation/Policy	Conformity
Schedule E Land Use Plan	Schedule E illustrates that the subject property is within the Ballantrae Future Residential Area II designation.	This land use designation is intended to allow for the proposed urban uses and residential plan of subdivision on the subject lands.
Schedule E Land Use Plan	This Schedule also shows that a watercourse traverses the subject lands.	Field evaluations and analysis has demonstrated that a continuous perennial watercourse does not exist on the subject property.
Appendix A Natural Feature Enhancement Areas	The subject property contains a Natural Feature Conservation Area based on Appendix A.	Through the development of the subject lands, an enhancement area approximately 6 hectares in size will be constructed. This enhancement area will include a vegetated flood plain area using native trees and shrubs. This will result in a net environmental improvement to the area.

8.2 Endangered Species Act

Subject to the results of the bat maternity roost survey to be completed as a condition of draft plan approval; we conclude that habitat for threatened and/or endangered species is not present within the developable area and no contravention of sections 9 and 10 of the *Endangered Species Act* is anticipated.

8.3 Conservation Authorities Act

A permit under O. Reg. 41/24 to the *Conservation Authorities Act* will be required by the Lake Simcoe Region Conservation Authority as removal of wetlands and grading/site alteration is proposed within 30-metres of a wetland. Further consultation with LSRCA should be undertaken to determine any requirements for the future permit application.

8.4 Migratory Birds Convention Act

Tree and shrub species found within the subject site can support nesting migratory birds as defined under the *Migratory Birds Convention Act*. Provided timing restrictions of April 1 – August 31st for any clearing of trees and/or shrubs is implemented, no contravention of the *Migratory Birds Convention Act* is anticipated.

9 CONCLUSIONS

Roots Environmental Inc. has been retained by FarSight Homes to complete an Environmental Impact Statement for the properties located at 5426, 5452 and 5584 Lakeshore Road in the Township of Whitchurch-Stouffville, Region of York for residential development.

Two key natural heritage features were found on adjacent lands to the proposed development: Unevaluated Wetlands and Significant Woodland. The unevaluated wetlands are not defined as a key natural heritage feature but are subject to O. Reg. 41/24 as administered by the LSRCA.

Provided development occurs as shown on the draft plan of subdivision and mitigation measures in this report are implemented, we anticipate no negative impacts to identified natural heritage features on adjacent lands to the development. Further, a *Landscape and Environmental Enhancement Master Plan* has been completed for the development, as illustrated in *Figure 7*. The implementation of this *Enhancement Master Plan* will result in an overall net ecological benefit to the subject lands through wetland creation and tree and shrub plantings.

Respectively submitted by Roots Environmental Inc.:

Kyle Fleming, BSc. (Wildlife)
Senior Ecologist

REFERENCES

Government of Ontario. 2024. Provincial Planning Statement. Queen's Printer of Ontario.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P.Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Natural Heritage Information Centre (NHIC) Database. 2021. Provincial Status of Plants, Wildlife and Vegetation Communities Database. Ministry of Natural Resources and Forestry, Peterborough.

Natural Resources Solutions Inc. (NRSI). March 2013. Ballantrae-Musselman Lake and Environs: Environmental Management Strategy.

Ontario Ministry of Natural Resources and Forestry. January 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.

Ontario Ministry of Natural Resources and Forestry. March 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005.

APPENDIX A

Agency Correspondence

EIS TERMS OF REFERENCE
Farsight Homes, Lakeshore Road
Ballantrae, Town of Whitchurch Stouffville

Table of Contents

Purpose of an EIS

While the studies for the Secondary Plan for Ballantrae included a comprehensive, broad-scale analysis of the Natural Heritage and Water Resource System within and outside of the Secondary Plan Area, the EIS will include a more detailed examination of natural features and functions and assessment of the impact that the proposed development application will have on the features and their functions within the Residential designation and Settlement Area of the ORMCP. A summary of recommended strategies for mitigating the environmental impacts of the development will be developed. The EIS shall be submitted on a site-specific basis prior to the approval of Official Plan Amendments, Zoning Bylaw Amendments, draft plan of subdivision or a site plan.

The EIS shall conform to, and expand upon, the findings and conclusions in the Secondary Plan. Furthermore, the EIS is not meant to reproduce the approved MESP, rather the EIS shall provide more detailed information and analysis on the various components such as the precise boundaries of the Natural Heritage System and an evaluation of the post development impacts on the environmental features (the list of more detailed information are provided in the terms below). For lands within the Oak Ridges Moraine Plan Area where Natural Heritage System lands are also characterized as a Key Natural Heritage Features, the EIS shall address the requirements of a Natural Heritage Evaluation as set out in Section 23(1) of the Oak Ridges Moraine Conservation Plan. For lands within the Oak Ridges Moraine Plan Area and where Natural Heritage System lands are also characterized as a Hydrologically Sensitive Feature, the EIS shall address the requirements of a Hydrological Evaluation as set out in Section 26(4) of the Oak Ridges Moraine Conservation Plan.

For lands which contain or are within 120 metres of a Provincially Significant Wetland and/or an endangered species habitat and/or if the proposed development impacts the Provincially Significant Wetland and/or endangered species habitat, the EIS will address the requirements of the Provincial Policy Statement (2014).

Part I: Defining the Natural Heritage System

1.0 Site Description

The natural heritage and water resource system on the site should be described in as much detail as possible at landscape, vegetation community and species scales. The site description should make use of existing, relevant reports and. Methodology, timing, and techniques selected and used to undertake ecological inventories and water balance assessments should be described. All primary source information collected in support of the EIS should be referenced.

Specifically, the site description should include the following:

a) A description of the soils, landforms and surficial geology of the site based on a review of available mapping and literature.

b) Identification of any hydrological or hydrogeological features/resources, including surface water features, recharge/discharge zones, groundwater elevations and flow directions, connections between groundwater and surface water features.

c) A pre-development water balance analysis, which establishes the quantity and quality of existing water budget components on the site. If there are existing natural heritage features on the subject property (e.g., wetlands, woodlands, and watercourses) then a more detailed feature-based water balance will be required to determine existing flow paths and contributions to each of these features. This assessment will identify existing precipitation, evapotranspiration, runoff and infiltration volumes.

d) A description of the present natural features on and adjacent to the subject property (i.e. wetland, ESA, ANSI, woodland, vegetation patch, geological or landform features, river, stream, or ravine corridor) including an ecological land classification. The significance of the natural features at a Provincial and Regional level with reference to standard information sources from the Province and the LSRCA should also be indicated.

e) A biological inventory and analysis of both terrestrial and aquatic communities on site (it is expected that studies will be undertaken during the appropriate season). The significance of individual species should be evaluated using Species of Conservation Concern, COSEWIC and COSSARO lists, as well as Natural Heritage Information Centre records

f) A determination of the precise boundaries of the Natural Heritage System including natural heritage and hydrological features with the required linkages. Any feature staking that has been done to date should also be indicated as well as the calculated hazard land limits (e.g. floodplain analysis, geotechnical review of slope stability and watercourse erosion, meander belt width analysis, etc.).

1.1 Assessment of Function

The EIS is to describe and discuss in detail the ecological, social and biophysical functions of the various components of the natural heritage and water resource systems on the subject site. Specifically, this section should:

• Analyze the inter-relationship of natural and hydrological features on the subject site and relationship to the larger local and regional ecosystem. For example, linkages between features, such as groundwater vegetation communities or groundwater-surface water relationships should be described. The investigation of the existing features should extend beyond the subject site and include adjacent areas. The level of effort may be reduced for the adjacent areas since a full investigation may be hindered by access issues, however, a remote investigation should occur as a minimum.

• Determine how each natural and hydrological feature contributes to the quality and integrity of the larger natural heritage and water resource system;

• Assess whether each natural and hydrological feature contributes to the significance of the larger natural heritage and water resource system;

Part II- The Development Proposal

Part II will outline the proposed development, impact analysis, and recommended mitigation and/or compensation. The intent of this piece of the EIS is to determine, first, whether the form of development proposed can be accommodated given the ecological sensitivities and natural hazards of the site. Secondly, if the development is not compatible on its own, whether mitigation and/or compensation measures could be proposed to ensure that negative effects are mitigated and that the development results in a net ecological gain. Although we have separated the impacts and mitigation into distinct sections below, these two pieces can be combined in the EIS report, if it makes more sense to do so. A concept plan for the proposed development, which includes existing and proposed grades, should be provided within the EIS. The concept plan should be overlaid on an aerial photograph in order to clearly illustrate opportunities and constraints. Mapping and description of the sensitivity of the features and functions.

2.0 Evaluation of the Ecological Impacts

This section of the EIS will describe and evaluate the potential environmental effects/impacts of the development proposal with reference to the natural features and functions identified in the earlier sections of the EIS. Information should be presented in tabular format. Scientific literature must be consulted and referenced in the body of the report to support all statements made. The description and evaluation of impacts should include, but not be limited to the following:

• Impacts during construction (e.g., sedimentation) and after construction (e.g., occupancy-related impacts such as increased disturbance and indirect impact from increased access, pets, lighting, noise, encroachment);

• Direct on-site effects (e.g., loss of feature or habitat) and indirect off site impacts;

• Individual and cumulative impacts;

• Irreversible and reversible impacts;

• Immediate and long-term impacts;

• Impacts to surface hydrological features, groundwater features and water balance (e.g. stream temperature changes, sedimentation of watercourses, erosion, impedance of groundwater movement, impacts to groundwater discharge areas, construction-related impacts to aquifer integrity, groundwater contamination);

• Impacts to the key characteristics of the natural areas (e.g. loss of habitat, change in habitat, edge effects and impacts to sensitive species or communities, effects on connectivity of habitat);

• The nature, extent and duration of each potential impact should be described;

and

• A post-development overall water balance assessment will be required depending on the size, form, and use of the proposed development. A post-development feature-based water balance will be required for wetlands and watercourses. The post-development scenario must be compared to the existing condition and mitigation measures will be required in order to maintain existing flow regimes on a monthly basis for both groundwater and surface water.

2.1 Description of Mitigating Measures

The description of mitigation measures must include identification and detailed explanation of alternative options and measures that would mitigate any predicted environmental impacts. Mitigation measures should be provided for impacts associated with both the construction and post-construction phases of development (i.e. mitigation measures may be temporary or permanent). This should include modifications to development proposals to avoid effects on key features or functions, and/or methods to restore features or functions that might be impacted. Of these, avoidance is preferred. Where avoidance is not possible, a rationale should be provided along with alternative options including measures to minimize impacts. Subsequent monitoring of effects to ensure successful implementation may be required. This section should include

descriptions of as many feasible and recommended mitigating measures as possible that are relevant to the potential impacts of the proposed development including:

• Buffers and setbacks;

• Timing/scheduling recommendations for specific activities;

• Low Impact Development (LID) techniques and other design techniques;

• Sediment and erosion control measures;

• Measures to reduce the impacts of occupancy;

• Ecological restoration (e.g., woodlot/wetland edge management, invasive species management, compensation planting, buffer restoration, planting to re-stabilize graded areas or to mitigate the impacts of stormwater outfall);

and

• Measures to ensure water balance or confirmation that the water management scheme (for both surface and groundwater resources) does not negatively impact on the Natural Heritage System features and functions.

2.2 Monitoring

The purpose of monitoring is to measure effects over time. Monitoring will enable planning agencies, through development agreements, to require subsequent changes to site conditions if the environmental effects are found to exceed predicted effects or targets, or if there are identifiable negative effects. Monitoring the environmental effects of developments also provides well-documented, local examples of best management practices for particular types of development and particular types of features or functions. Where mitigation is achieved through avoidance of negative impacts, a simplified monitoring plan to ascertain the success of the project is all that may be required. In these situations, the predicted net effects after mitigation may be negligible, and only the assumptions need to be tested. However, where mitigation is achieved by methods or measures to minimize but not to eliminate environmental effects, the predicted net effects after mitigation will be described and a monitoring plan designed to measure those effects may be required.

The Natural Heritage Reference Manual produced by the Ministry of Natural Resources (MNR) states that monitoring may be required where:

• The large scale of a development or the sensitivity of the key functions are such that effects may be difficult to predict and/or are relatively untested or unproven in the field;

• The mitigation technology proposed is not proven in Ontario;

• There are some long-term operations associated with a development that could facilitate some future or ongoing refinement to the mitigation strategy.

Depending on specific circumstances, monitoring may be required in pre-construction, construction/operation and post construction periods. Details of the monitoring program will be specific to the development proposal and will be determined through the review of the development application and the EIS. Monitoring may be conducted by the proponent or can be completed by others.

2.3 Recommendations

Recommended mitigation measures should be summarized in a list and drawing (i.e., Environmental Management Plan). The recommendations section of the EIS should also include summary statements regarding whether:

• The proposal should proceed as planned;

• The proposal should be revised to reduce/eliminate effects and if so, how (proposed revisions should be illustrated conceptually on the resource mapping base);

• Whether monitoring is required and if so what protocol will be followed.

It is expected that the EIS report will identify measures that will be taken to mitigate the effects on the natural heritage system. The proponent will be responsible for assessing the feasibility of the proposed mitigation measures and ensuring that they can be incorporated into the development proposal. Future reviews will ensure that these measures have been incorporated. Where applicable, a demonstration that the development meets the requirements of the York Region Official Plan, the Oak Ridges Moraine Conservation Plan and the Provincial Policy Statement are required.

PART III - Additional Requirements

3.0 Appendices

The EIS appendices should include all relevant supplementary information such as the following:

• Literature cited;

• Field collection record, flora and fauna species lists by area and by date of inventory (see Appendix A for further detail on reporting);

• List of people contacted during the study or referenced in the report.

3.1 Executive Summary

Include a summary at the front of the report that contains a description of the proposed development, the effects of the environment and all recommendations.

APPENDIX B

Desktop Review

NHIC Data

To work further with this data select the content and copy it into your own word or excel documents.

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1029201	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17PJ3677	
1029201	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17PJ3677	
1029201	SPECIES	Gypsy Cuckoo Bumble Bee	Bombus bohemicus	S1S2	END	END	17PJ3677	
1029211	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17PJ3777	
1029211	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17PJ3777	

Species list in taxonomic order for square 17PJ37

All species

Number of rows of data displayed below: 17.

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
1	Blanding's Turtle	1	2017	2017
3	Midland Painted Turtle	35	1987	2018
6	Snapping Turtle	24	1984	2019
10	Dekay's Brownsnake	1	2013	2013
12	Eastern Gartersnake	8	1990	2017
15	Eastern Milksnake	2	1989	1989
25	American Bullfrog	16	1913	2011
28	Gray Treefrog	40	1977	2018
29	Green Frog	23	1989	2016
31	Northern Leopard Frog	26	1923	2016
32	Pickerel Frog	1	1998	1998
33	Spring Peeper	70	1984	2013
34	Western Chorus Frog	3	1985	2002
35	Wood Frog	60	1913	2013
36	American Toad	32	1989	2018
44	Eastern Red-backed Salamander	2	1913	2013
51	Red-spotted Newt	2	1913	2013

TEA home page | Main atlas page

APPENDIX C

Species Lists

VASCULAR PLANT LIST FOR 5452 LAKESHORE ROAD, BALLANTRAE, ONTARIO					
LATIN NAME	COMMON NAME	C VALUE	WETLAND PLANT SPECIES	INVASIVE SPECIES	PROVINCIAL STATUS (S-Rank)
PTERIDOPHYTES	**FERNS & ALLIES**				
Athyrium filix-femina* var. *angustum	Northern Lady Fern	4	T		S5
Dryopteris carthusiana	Spinulose Wood Fern	5	T		S5
Dryopteris intermedia	Evergreen Wood Fern	5			S5
Equisetum arvense	Field Horsetail	0	T		S5
Equisetum hyemale	Scouring-rush	2	T		S5
Onoclea sensibilis	Sensitive Fern	4	I		S5
Osmunda cinnamomea	Cinnamon Fern	7	I		S5
Pteridium aquilinum var. latiusculum	Eastern Bracken-fern	2			S5
GYMNOSPERMS	**CONIFERS**				
***Juniperus* sp.**	Juniper Species				
Picea abies	Norway Spruce				SE3
Pinus nigra	Austrian Pine				SE2
Pinus resinosa	Red Pine	8			S5
Pinus strobus	Eastern White Pine	4	T		S5
Pinus sylvestris	Scotch Pine			YES	SE5
Thuja occidentalis	Eastern White Cedar	4	T		S5
DICOTYLEDONS	**DICOTS**				
Acer negundo	Manitoba Maple	0	T		S5
Acer rubrum	Red Maple	4	T		S5
Acer saccharum	Sugar Maple	4			S5
Acer X freemanii	Freeman's / Swamp Maple		I		S4?
Actaea pachypoda	White Baneberry	6	5		S5
Actaea rubra	Red Baneberry	5			S5
Ageratina altissima	White Snakeroot	5	T		S5
Agrimonia gryposepala	Tall Hairy Agrimony	2			S5
Alliaria petiolata	Garlic Mustard			YES	SE5
Amphicarpaea bracteata	Hog Peanut	4	T		S5
Anemone cylindrica	Thimbleweed	7			S4
Anemone virginiana	Thimbleweed	4			S5
***Antennaria* sp.**	Pussytoes Species				
Aralia nudicaulis	Wild Sarsaparilla	4			S5
Arctium minus	Common Burdock				SE5
Asclepias syriaca	Common Milkweed	0			S5
Betula papyrifera	White Birch		T		S5
Bidens cernua	Nodding Beggar-ticks	2	I		S5
Bidens frondosa	Devil's Beggar-ticks	3	I		S5

VASCULAR PLANT LIST FOR 5452 LAKESHORE ROAD, BALLANTRAE, ONTARIO					
LATIN NAME	COMMON NAME	C VALUE	WETLAND PLANT SPECIES	INVASIVE SPECIES	PROVINCIAL STATUS (S-Rank)
Chenopodium album	Lamb's Quarters				SE5
Cicuta maculata	Spotted Water-hemlock	6	I		S5
Circaea canadensis	Enchanter's Nightshade	3			S5
Cornus alternifolia	Alternate-leaved Dogwood	6			S5
Cornus stolonifera	Red-osier Dogwood	2	F*		S5
Corylus cornuta	Beaked Hazel	5			S5
Crataegus sp.	Hawthorn species				
Cynanchum rossicum	Dog Strangling Vine			YES	SE5
Daucus carota	Wild Carrot				SE5
Echinocystis lobata	Prickly Cucumber	3	T		S5
Elaeagnus umbellata	Autumn Olive			YES	SE3
Epilobium hirsutum	Great Hairy Willow-herb		I	YES	SE5
Erigeron philadelphicus	Philadelphia Fleabane	1	T		S5
Euonymus alata	Winged Spindle Tree			YES	SE2
Euonymus cf. *obovata*	Running Strawberry-bush	6			S5
Euthamia graminifolia	Grass-leaved Goldenrod	2			S5
Eutrochium maculatum	Spotted Joe-pye-weed	3	I		S5
Fagus grandifolia	American Beech	6			S5
Fragaria virginiana	Wild Strawberry	2			S5
Fraxinus americana	White Ash	4			S5
Galeopsis tetrahit	Common Hemp-nettle				SE5
Galium cf. *palustre*	Marsh Bedstraw	5	I		S5
Galium verum	Yellow Bedstraw			YES	SE5
Geranium robertianum	Herb-robert				SE5
Geum fragarioides	Barren Strawberry	5			S5
Geum urbanum	Wood Avens			YES	SE2
Hackelia virginiana	Virginia Stickweed	5			S5
Hieracium aurantiacum	Devil's Paintbrush				SE5
Hieracium pilosella	Mouse-ear Hawkweed				SE5
Hydrophyllum virginianum	Virginia Water-leaf	6			S5
Hypericum perforatum	Common St. John's-wort			YES	SE5
Impatiens capensis	Spotted Touch-me-not	4	I		S5
Juglans nigra	Black Walnut	5			S4
Lactuca biennis	Biennial Lettuce	6			S5
Laportea canadensis	Wood Nettle	6	T		S5
Leonurus cardiaca	Motherwort				SE5
Leucanthemum vulgare	Ox-eye Daisy				SE5
Linaria vulgaris	Butter-and-eggs				SE5

VASCULAR PLANT LIST FOR 5452 LAKESHORE ROAD, BALLANTRAE, ONTARIO					
LATIN NAME	COMMON NAME	C VALUE	WETLAND PLANT SPECIES	INVASIVE SPECIES	PROVINCIAL STATUS (S-Rank)
Persicaria pensylvanica	Pennsylvania Smartweed	3	I		S5
Lonicera morrowii	Morrow's Honeysuckle			YES	SE3
Lonicera tatarica	Tartarian Honeysuckle			YES	SE5
Lycopus europaeus	European Water-horehound		I	YES	SE5
Malus pumila	Common Apple				SE5
***Malus* sp.**	Apple Species				
Medicago lupulina	Black Medick				SE5
Melilotus alba	White Sweet-clover				SE5
Monotropa uniflora	Indian-pipe	6			S5
Oenothera* cf. *biennis	Common Evening-primrose	0			S5
Oxalis* cf. *stricta	Yellow Wood-sorrel	0			S5
Parthenocissus vitacea	Inserted Virginia-creeper	3			S5
Populus balsamifera	Balsam Poplar	4	T		S5
Populus tremuloides	Trembling Aspen		T		S5
Potentilla recta	Rough-fruited Cinquefoil				SE5
Prunus pensylvanica	Pin Cherry	3			S5
Prunus serotina	Black Cherry	3			S5
Prunus virginiana	Choke Cherry	2			S5
Pyrola elliptica	Shinleaf	5			S5
Quercus rubra	Red Oak	6			S5
Ranunculus acris	Tall Buttercup		T		SE5
Ranunculus recurvatus	Hooked Buttercup	4			S5
Rhamnus cathartica	Common Buckthorn		T	YES	SE5
Rhus typhina	Staghorn Sumac	1			S5
Ribes americanum	Wild Black Currant	4	T		S5
Ribes cynosbati	Prickly Gooseberry	4			S5
Rubus idaeus* ssp. *strigosus	Wild Red Raspberry	0			S5
Rubus occidentalis	Black Raspberry	2			S5
Rubus odoratus	Purple Flowering Raspberry	3			S5
Rubus pubescens	Dwarf Raspberry	4	I*		S5
Rudbeckia hirta	Black-eyed Susan	0			S5
Rumex acetosella	Sheep Sorrel				SEU
Salix amygdaloides	Peach-leaved Willow	6	T		S5
Salix bebbiana	Long-beaked Willow	4	I		S5
Salix discolor	Pussy Willow	3	I		S5
Salix eriocephala	Missouri Willow	4	T		S5
Salix euxina	Crack Willow				SE
Salix petiolaris	Slender Willow	3	I		S5

VASCULAR PLANT LIST FOR 5452 LAKESHORE ROAD, BALLANTRAE, ONTARIO					
LATIN NAME	COMMON NAME	C VALUE	WETLAND PLANT SPECIES	INVASIVE SPECIES	PROVINCIAL STATUS (S-Rank)
Sambucus canadensis	Common Elderberry	5	T		S5
Sambucus racemosa	Red-berried Elderberry	5			S5
Sanguinaria canadensis	Bloodroot	5			S5
Saponaria officinalis	Bouncing-bet				SE5
Silene vulgaris	Bladder Campion				SE5
Solanum dulcamara	Bitter Nightshade		T	YES	SE5
Solidago altissima	Tall Goldenrod	1			S5
Solidago canadensis	Canada Goldenrod	1			S5
Sonchus arvensis	Field Sow-thistle				SE5
Sorbus aucuparia	European Mountain-ash				SE4
Symphyotrichum lanceolatum	Panicled Aster	3	I		S5
Symphyotrichum novae-angliae	New England Aster	2			S5
Symphyotrichum puniceum	Purple-stemmed Aster	6	I		S5
Symphyotrichum urophyllum	Arrow-leaved Aster	6			S4
Syringa vulgaris	Common Lilac				SE5
Taraxacum officinale	Common Dandelion				SE5
Tiarella cordifolia	False Mitrewort	6	T		S5
Tilia americana	Basswood	4			S5
Toxicodendron rydbergii	Poison-ivy	0			S5
Tragopogon dubius	Doubtful Goat's-beard				SE5
Tussilago farfara	Coltsfoot		T	YES	SE5
Ulmus americana	White Elm	3	T		S5
Urtica dioica* ssp. *gracilis	American Stinging Nettle	2	T		S5
Verbascum thapsus	Common Mullein				SE5
Viburnum opulus	Guelder Rose			YES	SE4
Vicia cracca	Tufted Vetch			YES	SE5
Vicia tetrasperma	Slender Vetch				SE5
Viola pubescens	Downy Yellow Violet				S5
Vitis riparia	Riverbank Grape	0			S5
MONOCOTYLEDONS	**MONOCOTS**				
***Alisma* sp.**	Water-plantain				
Arisaema triphyllum	Jack-in-the-pulpit	5	T		S5
Asparagus officinalis	Garden Asparagus				SE5
Bromus inermis	Awnless Brome			YES	SE5
Carex arctata	Drooping Wood Sedge	5			S5
Carex cephaloidea	Thin-leaved Sedge	6			S5
Carex crinita	Fringed Sedge	6	I		S5
Carex cristatella	Crested Sedge	3	I		S5

VASCULAR PLANT LIST FOR 5452 LAKESHORE ROAD, BALLANTRAE, ONTARIO					
LATIN NAME	COMMON NAME	C VALUE	WETLAND PLANT SPECIES	INVASIVE SPECIES	PROVINCIAL STATUS (S-Rank)
Carex deweyana	Dewey's Sedge	6			S5
Carex gracillima	Graceful Sedge	4	T		S5
Carex hirtifolia	Pubescent Sedge	5			S5
Carex intumescens	Bladder Sedge	6	I		S5
Carex peckii	Peck's Sedge	6			S5
Carex pedunculata	Long-stalked Sedge	5			S5
Carex projecta	Necklace Sedge	5	I		S5
Carex radiata	Radiate Sedge	4	T		S4
Carex rosea	Stellate Sedge	5			S5
Carex sparganioides	Bureed Sedge	5			S5
Carex stipata	Awl-fruited Sedge	3	I		S5
Convallaria majalis	Lily-of-the-valley			YES	SE5
Cyperus cf. esculentus	Yellow Nut-grass	1	T		S5
Dactylis glomerata	Orchard Grass				SE5
Elymus repens	Quack Grass				SE5
Glyceria striata	Fowl Meadow Grass	3	I		S5
Hemerocallis fulva	Orange Day-lily			YES	SE5
Leersia oryzoides	Rice Cut Grass	3	I		S5
Maianthemum canadense	Wild Lily-of-the-valley	5			S5
Maianthemum racemosum	False Solomon's Seal	4			S5
Phalaris arundinacea	Reed Canary Grass	0	T		S5
Phleum pratense	Timothy				SE5
Poa pratensis	Kentucky Bluegrass	0			S5
Scirpus cyperinus	Wool-grass	4	I		S5
Smilax herbacea	Herbaceous Carrion Flower	5			S4
Typha latifolia	Broad-leaved Cattail	3	I		S5

FLORISTIC SUMMARY & ASSESSMENT			
SPECIES DIVERSITY			
Total Species:		**168**	
Native Species:		**116**	69%
Exotic Species		**52**	31%
Regionally Significant Species		**8**	5%
S1-S3 Species	*rare in Ontario*	**0**	0%
S4 Species	*uncommon in Ontario*	**6**	4%
S5 Species	*common in Ontario*	**110**	65%
CO-EFFICIENT OF CONSERVATISM (C) AND FLORISTIC QUALITY INDEX (FQI)			
mean C		**3.7**	

VASCULAR PLANT LIST FOR 5452 LAKESHORE ROAD, BALLANTRAE, ONTARIO					
LATIN NAME	COMMON NAME	C VALUE	WETLAND PLANT SPECIES	INVASIVE SPECIES	PROVINCIAL STATUS (S-Rank)
C 0 to 3	*lowest sensitivity*	**45**	27%		
C 4 to 6	*moderate sensitivity*	**64**	38%		
C 7 to 8	*high sensitivity*	**3**	2%		
C 9 to 10	*highest sensitivity*	**0**	0%		
FQI		**40**			
PRESENCE OF INVASIVE SPECIES					
Total Invasive Plant Species		**20**	12%		
PRESENCE OF WETLAND PLANT SPECIES					
Total Wetland Tolerant (T) Plant Species as identified in OWES Manual		**32**	19%		
Total Wetland Indicator (I) Plant Species as identified in OWES Manual		**28**	17%		

COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	GLOBAL STATUS	COSSARO	COSEWIC
AMPHIBIANS					
American Toad	*Anaxyrus americanus*	S5	G5		
Tetraploid Gray Treefrog	*Hyla versicolor*	S5	G5		
Spring Peeper	*Pseudacris crucifer*	S5	G5		
Northern Green Frog	*Lithobates clamitans*	S5	G5		
Northern Leopard Frog	*Lithobates pipiens*	S5	G5	NAR	NAR
BIRDS					
Mourning Dove	*Zenaida macroura*	S5	G5		
Killdeer	*Charadrius vociferus*	S5B, S5N	G5		
Turkey Vulture	*Cathartes aura*	S5B	G5		
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B	G5		
Downy Woodpecker	*Picoides pubescens*	S5	G5		
Hairy Woodpecker	*Picoides villosus*	S5	G5		
Northern Flicker	*Colaptes auratus*	S4B	G5		
Pileated Woodpecker	*Dryocopus pileatus*	S5	G5		
Eastern Wood-Pewee	*Contopus virens*	S4B	G5	SC	SC-NS
Eastern Phoebe	*Sayornis phoebe*	S5B	G5		
Great Crested Flycatcher	*Myiarchus crinitus*	S4B	G5		
Eastern Kingbird	*Tyrannus tyrannus*	S4B	G5		
Blue Jay	*Cyanocitta cristata*	S5	G5		
American Crow	*Corvus brachyrhynchos*	S5B	G5		
Common Raven	*Corvus corax*	S5	G5		
Black-capped Chickadee	*Poecile atricapillus*	S5	G5		
Red-breasted Nuthatch	*Sitta canadensis*	S5	G5		
House Wren	*Troglodytes aedon*	S5B	G5		
American Robin	*Turdus migratorius*	S5B	G5		
European Starling	*Sturnus vulgaris*	SNA	G5		
Cedar Waxwing	*Bombycilla cedrorum*	S5B	G5		
Mourning Warbler	*Geothlypis philadelphia*	S4B	G5		
Yellow Warbler	*Setophaga petechia*	S5B	G5		
Song Sparrow	*Melospiza melodia*	S5B	G5		
Northern Cardinal	*Cardinalis cardinalis*	S5	G5		
Indigo Bunting	*Passerina cyanea*	S4B	G5		
American Goldfinch	*Spinus tristis*	S5B	G5		
Red-winged Blackbird	*Agelaius phoeniceus*	S4	G5		
Brown-headed Cowbird	*Molothrus ater*	S4B	G5		
Baltimore Oriole	*Icterus galbula*	S4B	G5		
MAMMALS					
Grey Squirrel	*Sciurus carolinensis*	S5	G5		
Striped Skunk	*Mephitis mephitis*	S5	G5		
Bat species					
SUMMARY					
Total Amphibians: 5					
Total Birds: 30					
Total Breeding Birds: 29					
Total Mammals: 3					
SIGNIFICANT SPECIES					
National: 1					
Provincial: 1					
Explanation of Status and Acronymns					
COSSARO: Committee on the Status of Species at Risk in Ontario					
COSEWIC: Committee on the Status of Endangered Wildlife in Canada					
REGION: Rare in a Site Region					
S1: Critically Imperiled—Critically imperiled in the province (often 5 or fewer occurrences)					
S2: Imperiled—Imperiled in the province, very few populations (often 20 or fewer),					
S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)					
S4: Apparently Secure—Uncommon but not rare					
S5: Secure—Common, widespread, and abundant in the province					
SX: Presumed extirpated					
SH: Possibly Extirpated (Historical)					
SNR: Unranked					
SU: Unrankable—Currently unrankable due to lack of information					
SNA: Not applicable—A conservation status rank is not applicable because the species is not a suitable target for conservation activities.					
S#S#: Range Rank—A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species					
S#B- Breeding status rank					
S#N- Non Breeding status rank					
?: Indicates uncertainty in the assigned rank					
G1: Extremely rare globally; usually fewer than 5 occurrences in the overall range					
G1G2: Extremely rare to very rare globally					
G2: Very rare globally; usually between 5-10 occurrences in the overall range					
G2G3: Very rare to uncommon globally					
G3: Rare to uncommon globally; usually between 20-100 occurrences					
G3G4: Rare to common globally					
G4: Common globally; usually more than 100 occurrences in the overall range					
G4G5: Common to very common globally					
G5: Very common globally; demonstrably secure					
GU: Status uncertain, often because of low search effort or cryptic nature of the species; more data needed.					
GNR: Unranked—Global rank not yet assessed.					
T: Denotes that the rank applies to a subspecies or variety					
Q: Denotes that the taxonomic status of the species, subspecies, or variety is **questionable.**					
END: Endangered					
THR: Threatened					
SC: Special Concern					
2, 3 or NS after a COSEWIC ranking indicates the species is either on Schedule 2, Schedule 3 or No Schedule of the Species At Risk Act (SARA)					
NAR: Not At Risk					

IND: Indeterminant, insufficient information to assign status												
DD: Data Deficient												
LATEST STATUS UPDATE												
Amphibians: July 2016												
Reptiles: July 2016												
Birds: August 2016												
Mammals: June 2016												
S and G ranks and explanations: December 2011												
NOTE												
All rankings for birds refer to breeding birds unless the ranking is followed by N												
REFERENCES												
COSSARO Status												
Endangered Species Act, 2007 (Bill 184). Species at Risk in Ontario List.												
COSEWIC Status												
COSEWIC. 2007. Canadian Species at Risk. Committee on the Status of Endangered Wildlife in Canada.												
Local Status												
Dwyer, Jill K, 2003. Nature Counts Project Hamilton Natural Areas Inventory 2003. Species Checklists, Hamilton Naturalists Club.												
Ontario Partners in Flight. 2008. Ontario Landbird Conservation Plan Lower Great Lakes/St. Lawrence Plain (North American Bird Conservation Region 13), Priorities, Objectives and Recommended Actions. Environment Canada and Ontario Ministry of Natural Resources. Draft, February 2008.												
Region of Waterloo. 1996. Regionally Significant Breeding Birds.												
TRCA. 2003. Revised Fauna Scores and Ranks, February 2003. Toronto Region Conservation Authority.												

APPENDIX D

Easement Instrument

9

296315

THIS INDENTURE made this 1st day of April, 1981.

B E T W E E N:

DAVID JOHN MOSS, of the Town of Whitchurch-Stouffville, in the Regional Municipality of York, and DENISE MARILYN BEACH, of the said Town of Whitchurch-Stouffville, Executor and Executrix of the Estate of Myrtle Eleanor Moss, late of the said Town of Whitchurch-Stouffville, deceased,

hereinafter called the GRANTORS

OF THE FIRST PART:

- and -

THE CORPORATION OF THE TOWN OF WHITCHURCH-STOUFFVILLE,

hereinafter called the GRANTEE,

OF THE SECOND PART.

WHEREAS Myrtle Eleanor Moss died on the 2nd day of July, 1980;

AND WHEREAS the said Myrtle Eleanor Moss was at the time of her death seized and possessed of the lands hereinafter described;

AND WHEREAS Letters Probate of the estate of the said Myrtle Eleanor Moss were granted by the Surrogate Court of the Judicial District of York Region, on the 9th day of October, 1980, to the Grantors herein, Instrument No. 259212

AND WHEREAS pursuant to the powers vested in them as personal representatives of the said Myrtle Eleanor Moss the Grantors herein have agreed to grant to the Grantee the Right-of-way and easement hereinafter described;

WITNESSETH that in consideration of other good and valuable consideration and the sum of TWO ($2.00) Dollars of lawful money of Canada now paid by the Grantee to the Grantors the receipt of which thereof is acknowledged, the Grantors do hereby grant and convey and transfer unto the Grantee, its successors and assigns the right, license, privilege and easement on, over, under and through the lands of the Grantors described in Schedule A, to lay down, construct, operate, maintain, inspect, alter, remove, replace, reconstruct, supplement, repair, keep in good condition, relocate and add to one or more pipelines or conduits for the carriage, conveyance and transportation of storm sewage, or any of such materials.

The Grantee shall have and is hereby given the exclusive right, license, liberty and privilege in, on, over, under and through the said lands described in Schedule A to construct, operate, maintain, inspect, patrol, alter, remove, replace, reconstruct and repair all the property of the Grantee in connection with its undertaking on the lands of the Grantors, together with the right to use such lands of the Grantors immediately adjacent thereto, as may be reasonably required by the Grantee in conjunction with the construction of the pipelines and works of the Grantee, and together with the right of ingress and egress to and from the said lands of the Grantors for its servants, agents, contractors and sub-contractors with vehicles, supplies and equipment for all purposes necessary or incidental to the exercise and enjoyment of the right and privilege herein granted as and from the date hereof and for so long thereafter as the Grantee desires to exercise the rights and privileges hereby granted.

The aforesaid rights and easements are herein granted on the following terms, stipulations and conditions which are hereby mutually covenanted and agreed to by and between the Grantors and the Grantee:

(a) The Grantee may keep the said land clear of all brush, trees and other obstructions of any nature whatsoever as may be necessary to the exercise and for the enjoyment of the rights, privileges, license and easement herein granted;

(b) The Grantors shall have the right to fully use the said Right-of-way subject always to and so as not to interfere with the easements, rights and privileges hereby granted and conferred upon the Grantee;

(c) Notwithstanding any rule or law or equity the pipe, (which term shall include all pipelines, valves, fittings, connections and all other equipment and appurtenances brought on to, laid or erected upon or buried in or under the said lands by the Grantee) shall at all times remain the property of the Grantee

notwithstanding the same may be annexed to or affixed to the freehold and shall at any time and from time to time be removable in whole or in part by the Grantee or its assigns.

(d) The Grantee performing and observing the covenants and conditions on its part to be observed and performed, shall and may peaceably hold and enjoy the rights, liberties, privileges and easements hereby granted without hindrance, molestation or interruption on the part of the Grantors or of any person claiming by, through, or under or in trust for, the Grantors;

(e) Neither this Indenture nor anything herein contained shall affect or prejudice the Grantee's statutory rights to acquire the said easements, licenses and privileges hereby granted;

(f) The rights, liberties, privileges and easements hereby granted are and shall be of the same force and effect to all intents and purposes as a covenant running with the land and this Indenture, including all the covenants and conditions herein contained, shall extend to, be binding upon and enure to the benefit of the heirs, executors, administrators, successors-in-title and assigns of the parties hereto respectively;

(g) The rights, licenses, liberties, privileges and easements herein granted are declared to be appurtenant to the lands of the Grantee adjacent or connected thereto.

(h) The Grantors covenant to the Grantee that they have the right to convey the said easements to the Grantee, notwithstanding any act of the Grantors;

AND THAT the Grantee shall have quiet possession of the said easement, free from all encumbrances.

AND the Grantors covenant with the Grantee that they will execute such further assurances of the said easements as may be requisite.

AND the said Grantors covenant with the said Grantee that they have done no act to encumber the said Right-of-way.

THIS grant shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF the Grantors have hereunto set their hands and seals.

SIGNED, SEALED AND DELIVERED in the presence of

David Moss
(David John Moss)

Denise Marilyn Beach
(Denise Marilyn Beach)

Executor and Executrix of the Estate of Myrtle Eleanor Moss

SCHEDULE "A"

ALL AND SINGULAR that certain parcel or tract of land and premises situate, lying and being in the Town of Whitchurch-Stouffville, in the Regional Municipality of York, being part of Lot 20, Concession 8, designated as Part 1, , on a Plan of Survey deposited in the Registry Office for the Registry Division of York Region (No. 65) as Plan No. 65- 4860 .

Newsome and Gilbert, Limited
Form 1054

Affidavit: The Planning Act
Registry Act lands only
Revised April, 1981

The Registry Act

IN THE MATTER OF THE PLANNING ACT (as amended)

AND IN THE MATTER OF THE TITLE TO Part of Lot 20, Concession 8

designated as Part 1, , Plan 65R- 4860 in the Town of Whitchurch-Stouffville, in the Regional Municipality of York.

Deed, Mortgage, Partial Discharge of Mortgage, Lease, etc.

AND IN THE MATTER OF A TRANSFER OF EASEMENT

THEREOF, FROM DAVID JOHN MOSS and DENISE MARILYN BEACH

TO THE CORPORATION OF THE TOWN OF WHITCHURCH-STOUFFVILLE

DATED April 1st 19 81.

I, DENISE MARILYN BEACH,

of the Town of Whitchurch-Stouffville in the Regional Municipality of York,
MAKE OATH AND SAY AS FOLLOWS:

1. I am one of the Grantors the named in the above mentioned Instrument, and have knowledge of the matters hereinafter sworn.

2. A consent under section 29 of The Planning Act, as amended, in respect of the said Instrument is not required because

Delete (a) if not applicable

(a) ~~the person conveying or otherwise dealing with land in the said Instrument does not retain the fee or the equity of redemption in, or a power or right to grant, assign or exercise a power of appointment with respect to any land abutting the land that is being conveyed or otherwise dealt with.~~

State other reason if any

(b) The within Transfer of Easement is a transfer in favour of a municipality as provided by Section 29(4) (b) of The Planning Act R.S.O. 1970, Chapter 349.

SWORN before me
at the City of Toronto,
in the Municipality of Metropolitan Toronto,
this 8th
day of June, 19 81.

Denise Marilyn Beach
(Denise Marilyn Beach)

A COMMISSIONER FOR TAKING AFFIDAVITS ETC

ELIZABETH ROBINSON
A Commissioner, etc., Province of Ontario,
for WALSH and WALSH, Barristers
Expires November 26th, 1981.

Newsome and Gilbert, Limited
Form 1054

Affidavit: The Planning Act
Registry Act lands only
Revised April, 1981

The Registry Act

IN THE MATTER OF THE PLANNING ACT (as amended)

AND IN THE MATTER OF THE TITLE TO Part of Lot 20, Concession B

designated as Part 1, , Plan 65R- 4860 in the Town of Whitchurch-Stouffville, in the Regional Municipality of York.

Deed, Mortgage, Partial Discharge of Mortgage, Lease, etc.

AND IN THE MATTER OF A TRANSFER OF EASEMENT

THEREOF, FROM DAVID JOHN MOSS and DENISE MARILYN BEACH

TO THE CORPORATION OF THE TOWN OF WHITCHURCH-STOUFFVILLE

DATED April 1st 19 81.

I, DENISE MARILYN BEACH,

of the Town of Whitchurch-Stouffville in the Regional Municipality of York,
MAKE OATH AND SAY AS FOLLOWS:

1. I am one of the Grantors the named in the above mentioned Instrument, and have knowledge of the matters hereinafter sworn.

2. A consent under section 29 of The Planning Act, as amended, in respect of the said Instrument is not required because

Delete (a) if not applicable

~~(a) the person conveying or otherwise dealing with land in the said Instrument does not retain the fee or the equity of redemption in, or a power or right to grant, assign or exercise a power of appointment with respect to any land abutting the land that is being conveyed or otherwise dealt with.~~

State other reason if any

(b) The within Transfer of Easement is a transfer in favour of a municipality as provided by Section 29(4) (b) of The Planning Act R.S.O. 1970, Chapter 349.

SWORN before me
at the City of Toronto,
in the Municipality of Metropolitan Toronto,
this 8th
day of June, 19 81.

Denise Marilyn Beach
(Denise Marilyn Beach)

A COMMISSIONER FOR TAKING AFFIDAVITS ETC

ELIZABETH ROBINSON
A Commissioner, etc., Province of Ontario,
for WALSH and WALSH, Barristers
Expires November 28th, 1981.

AFFIDAVIT OF SUBSCRIBING WITNESS

I, FERGUS PATRICK WALSH,

of the City of Toronto,

in the Municipality of Metropolitan Toronto,

make oath and say:

*See footnote I am a subscribing witness to the attached instrument and I was present and saw it executed at the Town of Vaughan by DAVID JOHN MOSS ~~ZXXXXXXXXXX~~

~~XXXXXXXXXXXXXXXX~~
~~MARILYN BEACH~~

*See footnote I verily believe that each person whose signature I witnessed is the party of the same name referred to in the instrument.

SWORN before me at the City of Toronto, in the Municipality of Metropolitan Toronto,

this 9th day of June, 19 81

A COMMISSIONER FOR TAKING AFFIDAVITS, ETC.

* *Where a party is unable to read the instrument or where a party signs by making his mark or in foreign characters add "after instrument had been read to him and he appeared fully to understand it". Where executed under a power of attorney insert "(name of attorney) as attorney for (name of party)"; and for last clause substitute "I verily believe that the person whose signature I witnessed was authorized to execute the instrument as attorney for (name)".*

AFFIDAVIT AS TO AGE AND SPOUSAL STATUS

I/WE

of the

in the

(severally) make oath and say: When I/WE executed the attached instrument,

* If attorney, see footnote

I WAS/WE WERE EACH at least eighteen years old.

And within the meaning of section 1(f) of The Family Law Reform Act, 1978,

(a) I WAS/WAS NOT a spouse.

Strike out inapplicable clause.

(b) was my spouse.

(c) We were spouses of one another.

** Not a matrimonial home, etc., see footnote.

Resident of Canada, etc.

(SEVERALLY) SWORN before me at the

this day of 19

A COMMISSIONER FOR TAKING AFFIDAVITS, ETC.

* *Note: Where affidavit made by an attorney substitute: "When I executed the attached instrument as attorney for (name), he/she was (spousal status, and if applicable, name of other spouse) within the meaning of section 1(f) of The Family Law Reform Act, 1978 and when he/she executed the power of attorney, he/she had attained the age of majority".*

** *Note: See Section 42(3) of The Family Reform Act, 1978 where spouse does not join in or consent; or complete a separate affidavit.*

Dye & Durham Limited — Toronto, Canada
Form No. 347

AFFIDAVIT OF SUBSCRIBING WITNESS

I, **ELIZABETH ROBINSON,**

of the **City of Toronto,**

in the **Municipality of Metropolitan Toronto,**

make oath and say:

I am a subscribing witness to the attached instrument and I was present and saw it executed

*See footnote at **the City of Toronto** by **DENISE MARILYN BEACH.**

*See footnote I verily believe that each person whose signature I witnessed is the party of the same name referred to in the instrument.

SWORN before me at the **City of Toronto,**
in the Municipality of Metropolitan Toronto,
this **9th** day of **June,** 19**81.**

Elizabeth Robinson

A COMMISSIONER FOR TAKING AFFIDAVITS, ETC

*Where a party is unable to read the instrument or where a party signs by making his mark or in foreign characters add "after the instrument had been read to him and he appeared fully to understand it". Where executed under a power of attorney insert "(name of attorney) as attorney for (name of party)", and for next clause substitute "I verily believe that the person whose signature I witnessed was authorized to execute the instrument as attorney for (name)".

MARCH, 1978

AFFIDAVIT AS TO AGE AND SPOUSAL STATUS

I/WE

of the

in the

*If attorney see footnote make oath and say: When executed the attached instrument,

I/WE at least eighteen years old.

Within the meaning of section 1(f) of The Family Law Reform Act, 1978:—

Strike out inapplicable clauses.

a) I was a spouse.

b) We were spouses of one another.

c) was my spouse.

**Not a Matrimonial Home, etc. see footnote

Resident of Canada, etc.

(SEVERALLY) SWORN before me at the

this day of 19

A COMMISSIONER FOR TAKING AFFIDAVITS, ETC

*Where affidavit made by attorney substitute: "When I executed the attached instrument as attorney for (name), he/she was (personal status and, if applicable, name of spouse) within the meaning of Section 1(f) of The Family Law Reform Act, 1978, and when he/she executed the power of attorney, he/she had attained the age of majority".

**Where spouse does not join in or consent, see Section 12(3) of The Family Law Reform Act, 1978 (to complete separate affidavit).

296315

No. 1
Registry Division of York Region (65)
I CERTIFY that this instrument is registered as of
82 JUN 15 P 4: 15 in the
Land Registry Office at Newmarket, Ontario.
Land Registrar

296315

DATED: April 1st, 1981

Pt lot 25, Con 8, W.S.

DAVID JOHN MOSS and DENISE MARILYN BEACH

and

THE CORPORATION OF THE TOWN OF WHITCHURCH-STOUFFVILLE

GRANT OF EASEMENT

THOMAS P. McIVER, Q.C.,
Barrister and Solicitor,
Suite 2215, 44 King St. W.,
TORONTO, Ontario.
M4H 1E2

Ch. $ 15.00

142

FEE $ 15.00

APPENDIX E

Significant Wildlife Habitat Assessment

Seasonal.Concentration.of.Areas.of.Animals				
Type	ELC.Codes	Habitat.Criteria	Defining.Criteria	Presence–Absence.of. Candidate.SWH?
Waterfowl Stopover and Staging Areas (Terrestrial)	CUM1 CUT1 *With evidence of annual flooding from melt water or run-off	Fields with sheet water during Spring (mid-March to May). Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available.	Any mixed species aggregations of 100 or more individuals required. The flooded field ecosite habitat plus a 100-300m radius area, dependant on local site conditions and adjacent land use is the significant wildlife habitat.	Not present – no flooding and habitat is not suitable.
Waterfowl Stopover and Staging Areas (Aquatic)	MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment ponds and storm water ponds do not qualify as a SWH, however a reservoir managed as a large wetland or pond/lake does qualify. These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water)	Aggregations of 100 or more of listed species for 7 days, results in > 700 waterfowl use days. Areas with annual staging of ruddy ducks, canvasbacks, and redheads are SWH. The combined area of the ELC ecosites and a 100m radius area is the SWH.	Not present – Ecosites present are not large enough to support large aggregations of waterfowl and were found to not be flooded.
Shorebird Migratory Stopover Area	BBO1 BBO2 BBS1 BBS2 BBT1 BBT2 SDO1 SDS2 SDT1 MAM1 MAM2 MAM3 MAM4 MAM5	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as a SWH.	Presence of 3 or more of listed species and > 1000 shorebird use days during spring or fall migration period. Any site with >100 Whimbrel used for 3 years, or more is significant. The area of significant shorebird habitat includes the mapped ELC shoreline ecosites plus a 100m radius area.	Not present – Ecosites present are not large enough to support large aggregations of waterfowl and were found to not be flooded.
Raptor Wintering Area	Hawks/Owls: Combination of ELC Community Series; need to have present one Community Series from each land class: Forest: FOD FOM FOC Upland: CUM CUT CUS CUW Bald Eagle: Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Raptor wintering sites (hawk/owl) need to be > 20 ha with a combination of forest and upland. Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands. Field area of the habitat is to be wind swept with limited snow depth or accumulation. Eagle sites have open water, large trees and snags available for roosting.	One or more Short-eared Owls or one or more Bald Eagles or At least 10 individuals and two of the listed hawk/owl species. To be significant a site must be used regularly (3 in 5 years) for a minimum of 20 days by the above number of birds. The habitat area for an Eagle winter site is the shoreline forest ecosites directly adjacent to the prime hunting area.	Not present – FOD and SWD communities on site do not meet size (area) requirements.
Bat Hibernacula	CCR1 CCR2 CCA1 CCA2 Buildings are not considered to be SWH.	Hibernacula may be found in caves, mine shafts, underground foundations and Karsts. Active mine sites should not be considered as SWH	All sites with confirmed hibernating bats are SWH. The habitat area includes a 200m radius around the entrance of the hibernaculum for most development types.	Not present – no hibernacula are found on site.
Bat Maternity Colonies	FOD FOM SWD SWM	Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH).	Maternity Colonies with confirmed use by; >10 Big Brown Bats >5 Adult Female Silver- haired Bats	Not present – FOD/SWD woodland habitat on site does not contain greater than 10

		Maternity colonies located in Mature deciduous or mixed forest stands with >10/ha large diameter (>25cm dbh) wildlife trees. Female Bats prefer wildlife tree (snags) in early stages of decay, class 1-3. Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.	The area of the habitat includes the entire woodland or a forest stand ELC Ecosite or an Eco element containing the maternity colonies.	trees/ha with diameters greater than 25-cm DBH.
Turtle Wintering Areas	Snapping and Midland Painted Turtles; ELC Community Classes; SW, MA, OA and SA, ELC Community Series; FEO and BOO. Northern Map Turtle: Open Water areas such as deeper rivers or streams and lakes with current can also be used as over-wintering habitat.	For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate Dissolved Oxygen. Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH.	Presence of 5 over-wintering Midland Painted Turtles is significant. One or more Northern Map Turtle or Snapping Turtle over- wintering within a wetland is significant. The mapped ELC ecosite area with the over wintering turtles is the SWH. If the hibernation site is within a stream or river, the deep-water pool where the turtles are over wintering is the SWH.	Not present – SWD and MAM habitats were found to have little to no water present which would provide suitable overwintering habitat.
Reptile Hibernaculum	For all snakes, habitat may be found in any ecosite other than very wet ones. For Five-lined Skink, ELC Community Series of FOD and FOM and Ecosites: FOC1 FOC3	For snakes, hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH. Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures.	Presence of snake hibernacula used by a minimum of five individuals of a snake sp. or individuals of two or more snake spp. Congregations of a minimum of five individuals of a snake sp. or individuals of two or more snake spp. near potential hibernacula (e.g. foundation or rocky slope) on sunny warm days in Spring (Apr/May) and Fall (Sept/Oct) If there are Special Concern Species present, then site is SWH. The feature in which the hibernacula is located plus a 30 m radius area is the SWH.	Not present – No burrows, fissures, crevices or anthropogenic habitats (i.e., rock piles) were present. There are no records for five-lined skink in the immediate area and rock outcrops are not present.
Colonially - Nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles. Cliff faces, bridge abutments, silos, barns. Habitat found in the following ecosites: CUM1 CUT1 CUS BLO1 BLS1 BLT1 CLO1 CLS1 CLT1	Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area. Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. Does not include a licensed/permitted Mineral Aggregate Operation.	Presence of 1 or more nesting sites with 8 or more cliff swallow pairs and/or rough- winged swallow pairs during the breeding season. A colony identified as SWH will include a 50m radius habitat area from the peripheral nests.	Not present – suitable habitats (ELC units) not present on site.
Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs)	SWM2 SWM3 SWM5 SWM6 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7 FET1	Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. Most nests in trees are 11 to 15 m from ground, near the top of the tree.	Presence of 5 or more active nests of Great Blue Heron or other listed species. The habitat extends from the edge of the colony and a minimum 300m radius or extent of the Forest Ecosite containing the colony or any island <15.0ha with a colony is the SWH.	Not present – Field investigations within SWD habitats found no evidence of nesting of the Great Blue Heron or other listed species.

Colonially - Nesting Bird Breeding Habitat (Ground)	Any rocky island or peninsula (natural or artificial) within a lake or large river. Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird) MAM1 – 6 MAS1 – 3 CUM CUT CUS	Nesting colonies of gulls and terns are on islands or peninsulas associated with open water or in marshy areas. Brewer's Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands.	Presence of > 25 active nests for Herring Gulls or Ring-billed Gulls, >5 active nests for Common Tern or >2 active nests for Caspian Tern. Presence of 5 or more pairs for Brewer's Blackbird. Any active nesting colony of one or more Little Gull, and Great Black-backed Gull is significant. The edge of the colony and a minimum 150m radius area of habitat, or the extent of the ELC ecosites containing the colony or any island <3.0ha with a colony is the SWH.	Not present – islands and peninsulas not present.
Migratory Butterfly Stopover Areas	Combination of ELC Community Series; need to have present one Community Series from each land class: Field: CUM CUT CUS Forest: FOC FOD FOM CUP	Minimum of 10 ha in size with a combination of field and forest habitat present and will be located within 5 km of Lake Ontario. Habitat is typically a combination of field and forest. The habitat should not be disturbed, fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements for this habitat.	The presence of Monarch Use Days (MUD) during fall migration (Aug/Oct). MUD of >5000 or >3000 with the presence of Painted Ladies or Red Admiral's is to be considered significant.	Not present – site not within 5km of Lake Ontario.
Landbird Migratory Stopover Areas	FOC FOM FOD SWC SWM SWD	Woodlots need to be >10 ha in size and within 5 km of Lake Ontario. If multiple woodlands are located along the shoreline those Woodlands <2km from Lake Ontario are more significant. Woodlots and forest fragments are important habitats to migrating birds, these features located along the shore and located within 5km of Lake Ontario are Candidate SWH cxlviii.	Use of the habitat by >200 birds/day and with >35 spp. with at least 10 bird spp. recorded on at least 5 different survey dates.	Not present - site not within 5 km of Lake Ontario.
Deer Yarding Areas	OMNRF to determine this habitat. FOM FOC SWM SWC CUP2 CUP3 FOD3 CUT	The yard is composed of two areas referred to as Stratum I and Stratum II. Stratum II covers the entire winter yard area and is usually a mixed or deciduous forest with plenty of browse available for food.	Deer Yards are mapped by MNR District offices.	Not present – MNR does not identify this site as part of a Deer Yard.
Deer Winter Congregation Areas	FOC FOM FOD SWC SWM SWD Conifer plantations much smaller than 50 ha may also be used.	Woodlots will typically be >100 ha in size. Woodlots <100ha may be considered as significant based on MNRF studies or assessment.	Deer winter congregation areas considered significant will be mapped by MNR.	Not present – MNR does not identify this site as part of a Deer Yard.
Rare.Vegetation.Communities				
Cliffs and Talus Slopes	TAO CLO TAS CLS TAT CLT	A Cliff is vertical to near vertical bedrock >3m in height. Most cliff and talus slopes occur along the Niagara Escarpment.	ELC Vegetation Type for Cliffs or Talus Slopes.	Not present – applicable ELC units are not present on site.
Sand Barren	SBO1 SBS1 SBT1	A sand barren area >0.5ha in size	ELC Vegetation Type for Sand Barrens. Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.)	Not present – applicable ELC units are not present on site.
Alvar	ALO1 ALS1 ALT1 FOC1 FOC2 CUM2 CUS2 CUT2-1 CUW2	An Alvar site > 0.5 ha in size.	Field studies that identify four of the five Alvar Indicator Species at a Candidate Alvar site is Significant.	Not present – applicable ELC units are not present on site.

			Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	
Old Growth Forest	FOD FOC FOM SWD SWC SWM	Woodland areas 30 ha or greater in size or with at least 10 ha interior habitat assuming 100 m buffer at edge of forest .	If dominant trees species of the are >140 years old, then the Ecosite or eco-element within an ecosite containing these trees is SWH. The forested area containing the old growth characteristics will have experienced no recognizable forestry activities.	Not present –Woodlands on site are not > 30ha and trees on site are not > 140 years in age.
Savannah	TPS1 TPS2 TPW1 TPW2 CUS2	A Savannah is a tallgrass prairie habitat that has tree cover between 25 – 60%. No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH.	Confirm one or more of the Savannah indicator species. Area of the ELC Ecosite is the SWH. Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	Not present – applicable ELC units are not present on site.
Tallgrass Prairie	TPO1 TPO2	An open Tallgrass Prairie habitat has < 25% tree cover. No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH.	Field studies confirm one or more of the Prairie indicator species. Area of the ELC Ecosite is the SWH. Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	Not present – applicable ELC units are not present on site.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities.	The MNR/NHIC will have up to date listing for rare vegetation communities.	Area of the ELC Vegetation Type polygon is the SWH.	Not present – ELC units found on site are not provincially rare (S1-S3).
Specialized.Habitat.for.Wildlife				
Waterfowl Nesting Area	All upland habitats located adjacent to these wetland ELC Ecosites are Candidate SWH: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SWT1 SWT2 SWD1 SWD2 SWD3 SWD4	A waterfowl nesting area extends 120 m from a wetland (> 0.5 ha) or a wetland (>0.5ha) and any small wetlands (0.5ha) within 120m or a cluster of 3 or more small (<0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur. Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. Wood Ducks and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites.	Presence of 3 or more nesting pairs for listed species excluding Mallards, or; Presence of 10 or more nesting pairs for listed species including Mallards. Any active nesting site of an American Black Duck is considered significant.	Not present – no wetlands present on site or adjacent lands capable of supporting nesting habitat.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	ELC Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. Nests located on man-made objects are not to be included as SWH (e.g. telephone poles and constructed nesting platforms).	For an Osprey, the active nest and a 300 m radius around the nest or the contiguous woodland stand is the SWH. For a Bald Eagle the active nest and a 400-800 m radius around the nest is the SWH. Area of the habitat from 400-800m. To be significant a site must be used annually. When found inactive, the site must be known to be inactive for > 3 years or suspected of not being used for >5 years before being considered not significant.	Not present – woodland communities on site are not adjacent to larger rivers, or lakes and wetlands. No detections were made for the Bald Eagle and Osprey.

Woodland Raptor Nesting Habitat	May be found in all forested ELC Ecosites.	All natural or conifer plantation woodland/forest stands >30ha with >10ha of interior habitat. Interior habitat determined with a 200m buffer.	Presence of 1 or more active nests from species list is considered significant. Red-shouldered Hawk and Northern Goshawk – A 400m radius around the nest or 28 ha area of habitat is the SWH. Barred Owl – A 200m radius around the nest is the SWH. Broad-winged Hawk and Coopers Hawk – A 100m radius around the nest is the SWH. Sharp-Shinned Hawk – A 50m radius around the nest is the SWH.	Not present – adjacent woodland areas on adjacent lands are not > 30ha and provide no interior habitat.
Turtle Nesting Areas	Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within the following ELC Ecosites: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 BOO1 FEO1	Must provide sand and gravel that turtles are able to dig in and are in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH.	Presence of 5 or more nesting Midland Painted Turtles. One or more Northern Map Turtle or Snapping Turtle nesting is a SWH. The area or collection of sites within an area of exposed mineral soils where the turtle's nest, plus a radius of 30-100m around the nesting area is the SWH. Travel routes from wetland to nesting area are to be considered within the SWH as part of the 30-100m area of habitat.	Not present – applicable ELC Units are not present within adjacent areas to the site.
Seeps and Springs	Seeps/Springs are areas where ground water comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs.	Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system.	Presence of a site with 2 or more seeps/springs should be considered SWH. The area of a ELC forest ecosite or an Eco element within ecosite containing the seeps/springs is the SWH.	Not present – no seeps/springs were observed on site or adjacent lands.
Amphibian Breeding Habitat (Woodland)	FOC FOM FOD SWC SWM SWD	Presence of a wetland, pond or woodland pool (including vernal pools) >500m2 within or adjacent (within 120m) to a woodland (no minimum size). Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.	Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3. The habitat is the wetland area plus a 230m radius of woodland area.	Not present – SWD habitats on site were found not to contain 2 or more species with call level codes of 3.
Amphibian Breeding Habitat (Wetlands)	Classes SW, MA, FE, BO, OA and SA.	Wetlands>500m2 (about 25m diameter). Bullfrogs require permanent water bodies with abundant emergent vegetation.	Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog/toad species with Call Level Codes of 3; or; Wetland with confirmed breeding Bullfrogs are significant.	Not present – MAM habitats were not found to contain 2 or more frog/toad species with call level codes of 3.

			The ELC ecosite wetland area and the shoreline are the SWH.	
Area-Sensitive Bird Breeding Habitat	FOC FOM FOD SWC SWM SWD	Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha. Interior forest habitat is at least 200 m from forest edge habitat.	Presence of nesting or breeding pairs of 3 or more of the listed wildlife species. Any site with breeding Cerulean Warblers or Canada Warblers is to be considered SWH.	Not present – woodland habitats on site and adjacent lands are not > 30ha and contain no interior habitat.
Habitat.for.Species.of.Conservation.Concern.(not.including.Endangered.or.Threatened.Species¡)				
Marsh Breeding Bird Habitat	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SAS1 SAM1 SAF1 FEO1 BOO1 For Green Heron: All SW, MA and CUM1 sites.	All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present. For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees.	Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or or 1 pair of Sandhill Cranes; or breeding by any combination of 5 or more of the listed species. Any wetland with breeding of 1 or more Black Terns, Trumpeter Swan, Green Heron or Yellow Rail is SWH. Area of the ELC ecosite is the SWH.	Not present – MAM found to not contain shallow water and indicator species not found during surveys.
Open Country Bird Breeding Habitat	CUM1 CUM2	Large grassland areas (includes natural and cultural fields and meadows) >30 ha. Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e. no row cropping or intensive hay or livestock pasturing in the last 5 years).	Presence of nesting or breeding of 2 or more of the listed species. A field with 1 or more breeding Short-eared Owls is to be considered SWH.	Not present – CUM1 community on site not greater than 30-ha in size.
Shrub/Early Successional Bird Breeding Habitat	CUT1 CUT2 CUS1 CUS2 CUW1 CUW2	Large field areas succeeding to shrub and thicket habitats >10ha in size. Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (i.e. no row-cropping, haying or live-stock pasturing in the last 5 years).	Presence of nesting or breeding of 1 of the indicator species and at least 2 of the common species. Habitat with breeding Yellow- breasted Chat or Golden-winged Warbler is to be considered as SWH. The area of the SWH is the contiguous ELC ecosite field/thicket area.	Not present – CUM1/CUW1 not greater than 10-ha in size. Indicator bird species not found during surveys.
Terrestrial Crayfish	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 MAS1 MAS2 MAS3 SWD SWT SWM CUM1 with inclusions of above meadow marsh or swamp ecosites can be used by terrestrial crayfish.	Wet meadow and edges of shallow marshes (no minimum size).	Presence of 1 or more individuals of species listed or their chimneys (burrows) in suitable meadow marsh, swamp or moist terrestrial sites. Area of ELC ecosite or an Eco element area of meadow marsh or swamp within the larger ecosite area is the SWH.	Not present – no chimneys/burrows were observed within the SWD, SWT or MAM communities.
Special Concern and Rare Wildlife Species	All plant and animal element occurrences (EO) within a 1 or 10km grid.	When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially Rare species; linking candidate habitat on the site needs to be completed to ELC Ecosites.	The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH.	Not present – habitat for Special Concern or rare species are not present based on field investigations and SAR Assessment.
Animal.Movement.Corridors				
Amphibian Movement Corridors	Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat.	Movement corridors between breeding habitat and summer habitat. Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH.	Corridors should consist of native vegetation, with several layers of vegetation. Corridors unbroken by roads, waterways or bodies, and undeveloped areas are most significant.	Not present- Amphibian Breeding Habitat not found within the site.

			Corridors should have at least 15m of vegetation on both sides of waterway or be up to 200m wide of woodland habitat and with gaps <20m.	
Deer Movement Corridors	Corridors may be found in all forested ecosites.	Movement corridor must be determined when Deer Wintering Habitat is confirmed as SWH.	Corridors that lead to a deer wintering habitat should be unbroken by roads and residential areas. Corridors should be at least 200m wide with gaps <20m and if following riparian area with at least 15m of vegetation on both sides of waterway.	Not present – no deer wintering habitat has been identified on site by MNRF.
Exceptions.for.EcoRegion.6E				
6E-14 Mast Producing Areas for Black Bear	FOM FOD	Woodland ecosites >30ha with mast-producing tree species, either soft (cherry) or hard (oak and beech).	All woodlands > 30 ha with a 50% composition of these ELC Vegetation Types are considered significant: FOM1-1 FOM2-1 FOM3-1 FOD1-1 FOD1-2 FOD2-1 FOD2-2 FOD2-3 FOD2-4 FOD4-1 FOD5-2 FOD5-3 FOD5-7 FOD6-5	N/A
6E- 17 Lek for Sharp-tailed Grouse	CUM CUS CUT	Grasslands (field/meadow) are to be >15ha when adjacent to shrubland and >30ha when adjacent to deciduous woodland. Grasslands are to be undisturbed with low intensities of agriculture (light grazing or late haying).	Any site confirmed with sharp-tailed grouse courtship activities is considered significant. The field/meadow ELC ecosites plus a 200 m radius area with shrub or deciduous woodland is the lek habitat.	N/A

APPENDIX E

SAR Assessment

Species at Risk Assessment (THR, END and SCC)
Farsight Homes- Lakeshore Road – Town of Whitchurch-Stouffville

Species	Source	Status (SARO)	Habitat Preferences	Presence/Absence
Eastern Meadowlark (Sturnella.magna)	Habitat Assessment/ Distribution	THR	Obligate-grassland species, nesting in native prairies, savannahs and alvars, and anthropogenic habitats such as pastures and hayfields, shrubby overgrown fields, or other open areas. Larger tracts of grasslands preferred (>5ha) over smaller fragmented areas.	Absent – CUM1-1 not large enough to support nesting habitat. Species not identified during surveys.
Wood Thrush (Hylocichla.mustelina)	Habitat Assessment/ Distribution	SC	Mature deciduous and mixed forests with well-developed undergrowth and tall trees. Prefer large forests but will also use smaller stands of trees.	Absent – no detections during breeding bird surveys.
Bobolink (Dolichonyx.oryzivorus)	Habitat Assessment/ Distribution	THR	Obligate-grassland species, nesting in native prairies, savannahs and alvars, and anthropogenic habitats such as pastures and hayfields, shrubby overgrown fields, or other open areas. Larger tracts of grasslands preferred (>10ha) over smaller fragmented areas.	Absent – CUM1-1 not large enough to support nesting habitat. Species not identified during surveys.
Eastern Wood-Pewee (Contopus.virens)	NHIC	SC	Found in forest clearings and edges of deciduous and mixed forests. Prefer intermediate-age mature forest stands with little understory vegetation.	Absent– only detected once during surveys, which indicates the species is not actively nesting on site.
Snapping Turtle (Chelydra.serpentina)	NHIC, ONRAA, iNaturalist	SC	Found in aquatic habitats such as ponds, marsh wetlands, shallow bays, slow moving streams/rivers and anthropogenic habits including golf course and aggregate ponds, irrigation canals, etc.	Absent – preferred flooded aquatic habitats not found within the development areas.

Blanding's Turtle (Emydoidea.blandingii)	ONRAA	THR	Shallow water, usually in large wetlands and shallow lakes with lots of water plants. Can be found hundreds of metres from the nearest water body, especially while they are searching for a mate or traveling to a nesting site. Hibernate in the mud at the bottom of permanent water bodies from late October until the end of April.	Absent – no suitable wetland habitats present in the development area.
Black Ash (Fraxinus.nigra)	Habitat Assessment/ Distribution	END	Wetland species found in swamps, floodplains and fens.	Absent – site surveys found no Black Ash within adjacent swamp wetland habitats within the development area.
Butternut (Juglans.cinerea)	Habitat Assessment/ Distribution	END	Associated with deciduous forests, establishing under canopy openings or along forest edges. Prefers moist, well-drained soil and frequently occurs within the floodplains of streams or small rivers.	Absent – site surveys found no Butternut within the development area.
Gypsy Cuckoo Bumble Bee (Bombus.bohemicus)	NHIC	END	Habitats such as open meadows, agricultural and urban areas, boreal forest and woodlands.	Absent – site surveys did not identify the species within the development area.
Little Brown Myotis (Myotis.lucifugus)	Habitat Assessment/ Distribution	END	Maternity roosts sites most often include buildings and large diameter trees with cracks, crevices, and/or exfoliating bark. Overwinters in caves and mines that maintain temperatures above 0°C.	Potential – woodlands on site have potential to support maternity roosting habitat.
Northern Myotis (Myotis.septentrionalis)	Habitat Assessment/ Distribution	END	Maternity roosts most often include large diameter trees with cracks, crevices, and/or exfoliating bark.	Potential – woodlands on site have potential to support maternity roosting habitat.

			Overwinters in caves and mines that maintain temperatures above 0°C.	
Tri-colored Bat (Perimyotis.subflavus)	Habitat Assessment/ Distribution	END	Maternity roosts include Maple and Oak with dead/dying leaf clusters. Overwinters in caves and mines that maintain temperatures above 0°C.	Potential – woodlands on site have potential to support maternity roosting habitat.
Eastern Small-footed Myotis (Myotis.leibii)	Habitat Assessment/ Distribution	END	Roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. Hibernate, most often in caves and abandoned mines that maintain temperatures above 0°C.	Absent – site surveys within the development areas found no rock outcrops (talus), buildings, or large diameter trees will hollow cavities.

Species Status:

SC: Special Concern

THR: Threatened

END: Endangered

Source References:

NHIC: Natural Heritage Information Centre (NHIC) https://www.ontario.ca/page/make-natural-heritage-area-map

iNat.: iNaturalist https://inaturalist.ca/

ONRAA: Ontario Nature Reptile and Amphibian Atlas https://www.ontarioinsects.org/herp/

APPENDIX G

CV – Kyle Fleming (Roots Environmental Inc.)

Kyle Fleming, BSc. (Wildlife)

Senior Ecologist/President

Qualifications

Kyle has over 20 years experience as an ecologist where he has been responsible completing over 350 Environmental Impact Studies, Species at Risk Assessments, environmental monitoring, and related projects throughout Central, Southern and Eastern Ontario. He is a Qualified Wetland Evaluator & Certified Butternut Assessor by the MNRF, is trained and experienced in the use of Ecological Land Classification (ELC) and has been qualified as an expert at the Ontario Municipal Board/LPAT. His work is readily accepted by municipalities, conservation authorities and government agencies, and he is very familiar with provincial and federal policies and legislation.

Professional Experience

MAY 2019 - PRESENT

Senior Ecologist/President / Roots Environmental Inc., Barrie, ON

As the Senior Ecologist with Roots Environmental, Kyle is responsible the managing and implementation of environmental impact assessments, species at risk assessments and related studies for private and public sector clients throughout Ontario.

MAY 2004- MAY 2019

Senior Terrestrial Ecologist / Skelton, Brumwell & Associates, Barrie, ON

Responsible for completing Natural Environmental Reports, Environmental Impact Studies, Species at Risk Assessments for private and public sector clients throughout Ontario.

kyle@rootsenvironmental.ca 705.718.6153 65 Melrose Ave, Barrie, ON L4M 2B1

APRIL – AUGUST 2003

Project Supervisor/Field Biologist / Hamer Environmental L.P., Mt. Vernon, WA, USA

Responsible for supervising and managing a threatened seabird monitoring project on state lands.

NOVEMBER 2002 – JANAURY 2003

Environmental Technician / Aqua-Terre Solutions Inc., Toronto, ON

Responsible for data management of water and soil sampling for sites across the GTA.

APRIL – AUGUST 2002

Field Biologist / Hamer Environmental L.P., Mt. Vernon, WA, USA

Conducted threatened seabird surveys on state lands to determine presence/absence relative to forestry activities.

MAY – AUGUST 2001

Field Technician/ University of Washington, Forks, WA, USA

June-August 2001, Field Technician

Research project on nest predation of threatened seabirds and impacts of forestry practices on nesting sites.

Education

2002

Bachelor of Science in Wildlife Biology / University of Northern British Columbia, Prince George, BC

1998

Diploma in Fish and Wildlife Technology / Sir Sandford Fleming College, Lindsay, ON

Certifications/Courses

- Ontario Wetland Evaluation Training Course, 2004.
- Ecological Land Classification for Southern Ontario Training Course, 2005.
- Certificate of Participation: Wildlife Acoustics Bat Detector & Analysis Course, 2015.
- Ministry of Natural Resources (MNR) Butternut Assessment Course, 2009, 2014 & 2019.
- OPPI- The Planner at the Ontario Municipal Board Seminar, 2006.

kyle@rootsenvironmental.ca 705.718.6153 65 Melrose Ave, Barrie, ON L4M 2B1