



**Update
Scoped Environmental Impact Study
Linksview
Town of Collingwood**

Prepared for:
Wyview Group

Prepared by:
Azimuth Environmental
Consulting, Inc.

May 2024

AEC 23-266



Environmental Assessments & Approvals

May 2, 2024

AEC 23-226

Wyeview Group
625 Cochrane Drive, Suite 802
Markham, Ontario
L3R 9R9

Attention: Eric Zou, VP - Development and Construction

Re: **Update to a Scoped Environmental Impact Study for Linksview, Part of Lot 43, Concession 11, Town of Collingwood, County of Simcoe**

Dear Eric Zou:

As requested, Azimuth Environmental Consulting, Inc. (Azimuth) has completed an update to the Environmental Impact Study (EIS) prepared by Azimuth in December 2014 with respect to development proposed and ultimately approved in 2016 for the Linksview lands in the Town of Collingwood, County of Simcoe. This report includes an assessment based on the Terms of Reference confirmed with the Town of Collingwood's review consultant (Natural Resource Solutions Inc.) on July 21, 2023, and as such, this EIS update should be reviewed in conjunction with Azimuth's 2014 EIS for a full explanation of existing conditions, proposed development, potential impacts to natural heritage features, and mitigation.

If you have questions or require additional information please do not hesitate to contact the undersigned

Yours truly,

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Alexa Pompilio-Grant, H.B.Sc.
Terrestrial Ecologist



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1.0 INTRODUCTION

Azimuth Environmental Consulting, Inc. (Azimuth) was retained by the Wyeview Group to complete an update to the 2014 scoped Environmental Impact Study (EIS) with respect to a draft plan of subdivision that was approved June 22, 2016 (Appendix A) for the property located at Part of Lot 43, Concession 11, in the Town of Collingwood (Town), County of Simcoe (County). The original EIS was prepared by Azimuth on December 17, 2014 for the Landex Capital Corporation. This EIS update is required by the Town as a redline revision to the approved draft plan of subdivision (Appendix B) has been proposed.

For the purposes of this EIS update, the study area comprises the property, as referred to as the subject lands, as shown on Figures 1-3 and adjacent lands (within approximately 120 metres (m)) of the property limits. Natural features in the overall planning area beyond the defined study area limits are discussed where applicable throughout this report.

Azimuth submitted a proposed Terms of Reference for the EIS update to the Town's natural heritage review consultant, Natural Resource Solutions Inc. (NRSI), on July 9, 2023 (Appendix C). A response was issued from NRSI on July 21, 2023 (Appendix C) (not received by Azimuth until September 18, 2023) indicating the following study requirements:

- Updates to the documentation of existing conditions, including revised land use and vegetation communities mapping (refer to Section 2);
- Update consideration of Species at Risk (SAR) according to provincial guidelines, including the Ministry of Environment, Conservation, and Parks (MECP) Client's Guide to Preliminary Screening for Species at Risk (2019) (refer to Section 3);
- Identify potential rare species, SAR, and/or Species of Conservation Concern (SCC) that have the potential to occur on or adjacent to the subject lands (refer to Section 3);
- Update consideration of potential bat habitat according to recent (2022) MECP guidance documents (refer to Section 4);
- Complete birds surveys to evaluate potential presence of Eastern Wood-pewee detected on-site in 2014 (refer to Section 5);
- Re-assess the health status of the four Butternut assessed in 2014 and search for new Butternut seedlings/saplings that may have seeded into lands in proximity to those trees (refer to Section 6); and,
- Update the impact assessment based on current conditions, findings of the SAR assessment, and proposed redline revisions to the plan (refer to Section 10).



Since the 2014 EIS predated the publication of the Significant Wildlife Habitat Criteria Schedule for Ecoregion 6E (MNR, 2015), this EIS update provides a Significant Wildlife Habitat Assessment based on those criteria (refer to Section 7).

2.0 EXISTING CONDITIONS UPDATE

2.1 Field Program Summary

Azimuth undertook the following field surveys to update the existing conditions of the subject lands:

- Updated/revised vegetation community types based on Ecological Land Classification (ELC) for Southern Ontario (Lee *et al.*, 1998; 2008) methods (October 4, 2023);
- One (1) vascular plant inventory (October 4, 2023);
- Two (2) dawn breeding bird surveys (June 9 and 19, 2023);
- Characterized the woodland and existing dwelling for potential habitat for bats, including Endangered bats (June 9, June 19 and October 4, 2023); and,
- A search for Butternut (Endangered) seedlings/saplings that may have seeded into lands in proximity to the original four Butternut trees that were identified in Azimuth's 2014 EIS (June 9, June 19 and October 4, 2023).

2.2 Background Mapping Review

2.2.1 Provincial

There are no wetlands or Areas of Natural and Scientific Interest (ANSIs) identified on the subject lands according to provincial mapping (Appendix D). Adjacent lands contain unevaluated wetlands. There are no ANSIs identified on adjacent lands.

2.2.2 Nottawasaga Valley Conservation Authority

The Nottawasaga Valley Conservation Authority (NVCA) identifies an area of regulated land associated with the watercourse that traverses the northwest corner of the subject lands (Appendix C).

2.2.3 Town of Collingwood

As per Schedule 'A' of the Town of Collingwood Official Plan ('Town OP'; 2019) (Appendix C), the subject lands are designated Residential with an Environmental Protection (EP) applied to portions of the woodland located in the northwest section of the property. The EP lands are of size and shape representing the Block 359 established in the approved draft plan (Appendix A).



As per Schedule ‘B’ of the Town OP, the Town does not identify valleylands, woodlands or wetlands on the subject lands. The watercourse that traverses the woodlands in the northwest section of the property is identified as fish habitat. While Schedule ‘B’ illustrates two tributaries extending onto the subject lands from the north, results from 2023 field studies indicate that these features does not exist (Figure 2).

2.3 Land Use

The subject lands are approximately (~) 40.6 hectares (ha) and located in the southwest region of the Town. As shown on Figure 2, the subject lands are largely defined by agricultural land uses, including row crop (corn in 2023) and lands that are actively plowed. Woodlands in the northwest corner are vacant but are traversed by property access laneways connecting with lands to the west. There is a vacant single-detached dwelling in the southeast section of the subject lands adjacent to the Tenth Line road (Figure 2).

Adjacent lands to the north are recreational (Blue Mountain Golf & Country Club) and adjacent lands to the east contain residential development (Georgian Meadows). Lands to the south contain a mix of recreational (Fisher Fields), ‘institutional’ (Bygone Days private museum – pioneer village recreation) and agriculture (pasture/fallow/mowed). Lands to the west are agricultural (fallow primarily).

2.4 Vegetation Communities

2.4.1 Vegetation Community Mapping and Surveys

Prior to undertaking the field studies, Azimuth reviewed the ELC presented in the 2014 EIS. Vegetation community boundaries were then checked in the field on October 4, 2023 (J. Broadfoot) during the growing season when the emergent ground cover vegetation layer was present. Vegetation community types were classified using ELC protocols.

2.4.2 Results

The limits of all ELC communities identified within the subject lands are illustrated in Figure 2 and a complete list of vascular plant species identified on-site is presented in Table 1.

Most of the subject lands are actively farmed and have been classified as Open Agriculture Annual Row Crops (OAGM1; corn in 2023), and Open Agriculture (OAG; plowed in 2023). The berms present on the property in 2014 have been removed to facilitate farming.



Four areas of fallow farmland occur on the subject lands. These include two complex communities composed of Cultural Thicket (CUT) and Cultural Meadow (CUM), each containing wetland inclusions. The CUTa community in the northeast corner of the property covers ~0.53ha, 0.1ha of which is wetland inclusion (Figure 2). The wetland inclusion has characteristics of a Narrow-leaved Sedge Graminoid Mineral Meadow Marsh (MAM2-5). This community has developed on a former elevated driving range tee box. The CUM community in the north/central section of the property is ~1.4ha in size and contains two wetland inclusions measuring ~0.15ha and ~0.13ha. Both wetland inclusions have composition and structure of MAM2-5. The CUTb habitat on the northwest portion of the subject lands is located adjacent to the woodland and covers ~2.5ha. Lastly, there is a relatively long and narrow complex community along the southern property boundary that contains CUT and CUM habitat (~1.3ha).

The southeast section of the property contains a vacant single storey building (Single Family Residential [CVR_3]).

Woodlands occurring on the northwest corner of the property are composed of two forest communities: Dry-Fresh Poplar Deciduous Forest (FOD3-1; ~0.9ha) and Dry-Fresh Sugar Maple-White Ash Deciduous Forest (FOD5-8; ~1.9ha). The FOD5-8 community contains a wetland inclusion, a Mixed Forb Mineral Meadow Marsh (MAM2-10), that is ~0.1ha in size. A single Black Ash (Endangered) with a diameter at breast height (DBH) of less than 10 centimetres (cm) was observed within the MAM2-10 inclusion of the woodland (Figure 2).

None of the vegetation communities documented are of federal or provincial conservation concern (MNRF, 2023).

3.0 SPECIES AT RISK AND SPECIES OF CONSERVATION CONCERN UPDATE

Species at Risk are designated as Extirpated, Endangered, Threatened and Special Concern under the *Endangered Species Act*, 2007 (ESA) while SCC refers to species assigned a SRank of 1, 2, 3 or H by the Natural Heritage Information Centre (NHIC) and are therefore considered provincially rare. The following background data sources were accessed to define a list of SAR and SCC:

- Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC; MNRF, 2023);
- Ontario Breeding Bird Atlas (<https://www.birdsontario.org/>);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020);



- Ontario Butterfly Atlas (Toronto Entomologist Society, 2022);
- Ontario Odonata Atlas (NHIC, 2023);
- Fisheries and Oceans Canada (DFO) Aquatic SAR Mapping (DFO, 2023);
- Ontario Mammal Atlas (Dobbyn, 1994);
- iNaturalist (NHIC) Rare Species of Ontario (iNaturalist, 2023);
- eBird (Cornell Laboratory of Ornithology, 2024a); and,
- Fish ON-Line (MNRF, 2022).

Provincial data (*i.e.*, NHIC records) and iNaturalist data were acquired for an area of land centered on the subject lands that was ~45 kilometer² (km) in size. Atlas data were acquired for the 10km X 10km assessment square 17NK52 that includes the subject lands.

3.1 Species at Risk

Table 2 provides a SAR habitat assessment inclusive of Endangered, Threatened and Special Concern species identified in background data for the area and as revealed through field surveys. Based on this assessment in combination with vegetation communities and other environmental features observed during the site investigation, the following species are considered below in this report:

- **Threatened and Endangered:** Black Ash, Butternut, Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat
- **Special Concern:** Monarch

3.1.1 Black Ash

One Black Ash was observed within the Mixed Forb Mineral Meadow Marsh (MAM2-10) wetland inclusion of the woodland in the northwest corner of the property.

Black Ash was listed as Endangered in Ontario in January 2022 and has only recently become protected under the ESA as of January 26, 2024. Ontario has implemented the application of the ‘species protection’ prohibitions in subsection 9 (1) of the ESA to Black Ash located within geographic areas where significant Emerald Ash Borer impacts have been experienced, this includes Simcoe County. The prohibition also includes the protection of “healthy” Black Ash that are at least 1.37m in stem height with a diameter of at least 8cm. Furthermore, Ontario has implemented habitat protection prohibitions in subsection 10 (1) of the ESA to the area within 30m from a stem of every “healthy” Black Ash. Therefore, protections only apply to healthy Black Ash larger than 8cm DBH with a stem height of at least 1.37m in addition to the lands within 30m. Black Ash is therefore considered in the Impact Assessment (Section 10).



3.1.2 Butternut

Butternut is considered in Section 6.

3.1.3 Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat

Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat are considered in Section 4.

3.1.4 Monarch

A few adult Monarch Butterfly were observed on the subject lands on October 4, 2023 outside of the breeding season with no observations of adults or caterpillars during the breeding season. The autumn observations were not indicative of any particular attribute attracting Monarch to the site, as at that time of year, and under the observation conditions of the day (unseasonably warm), Monarch could be spotted in basically any environment including urban settings. Also, the subject lands are not within a Migratory Butterfly Stopover Area (*i.e.*, not within 5km of Lake Ontario) under Significant Wildlife Habitat. Since there was no evidence of use of the subject lands as breeding habitat and the lands are not significant with respect to migratory stopover, the subject lands do not function as significant habitat in the context of Monarch. This species is no longer considered in this report.

3.2 Species of Conservation Concern

The following SCC species (SRank of 1, 2, 3 or H) have been recorded within proximity to the subject lands:

- Black-crown Night-heron (*Nycticorax nycticorax*, S3B, S2N, S4M) (NHIC Square 17NK5929)
- Blue-winged Teal (*Spatula discors*, S3B, S4M) (NHIC Square 17NK6228)
- Common Gallinule (*Gallinula galeata*, S3B) (NHIC Square 17NK6027)
- Great Egret (*Ardea alba*, S2B, S3M) (NHIC Square 176128)
- Purple Martin (*Progne subis*, S3B) (NHIC Square 17NK6128)
- Stiff Yellow Flax (*Linum medium* *vas. medium*, S3?) (NHIC Square 17NK5829)
- Upland Sandpiper (*Bartramia longicauda*, S2B) (NHIC Square 18NK6129)

3.2.1 Black-crowned Night-heron

Black-crowned Night-heron was reported by the NHIC (Square 17NK5929) at least 2km from the property in proximity to Silver Creek Provincially Significant Wetland (PSW). This species is found in wetland habitats including estuaries, marshes, streams, lakes and reservoirs (Cornell University, 2024b). There is no suitable habitat on the subject lands



for Black-crowned Night-heron and this species was not detected on or adjacent to the subject lands during breeding bird surveys.

3.2.2 Blue-winged Teal

Blue-winged Teal was reported by the NHIC (Square 17NK6228) at least 2.7km from the property in proximity to Georgian Bay shoreline. This species nests among grasses or herbaceous vegetation and in the summer forages in shallow ponds or pond-marsh mixes (Cornell University, 2024b). There is no suitable habitat on the subject lands and no Blue-winger Teal were detected on or adjacent to the subject lands during breeding bird surveys.

3.2.3 Common Gallinule

Common Gallinule was reported by the NHIC (Square 17NK6027) in adjacent lands (NHIC square 17NK6027) at least 500m from the property in proximity to Black Ash Creek. This species resides in freshwater or brackish marshes, ponds and lakes with a mix of submerged, floating and emergent vegetation and open water (Cornell University, 2024b). There is no suitable habitat on the subject lands for Common Gallinule and this species was not detected on or adjacent to the subject lands during breeding bird surveys.

3.2.4 Great Egret

Great Egret was reported by the NHIC (Square 176128) at least 1.8km from the property in proximity to the shoreline of Georgian Bay and Silver Creek PSW. Great Egrets live in freshwater, brackish and marine wetlands, and during the breeding season they live in colonies in trees and shrubs (Cornell University, 2024b). There is no suitable habitat on the subject lands and no Great Egret were detected on or adjacent to the subject lands during breeding bird surveys.

3.2.5 Purple Martin

Purple Martin was reported by the NHIC (Square 17NK6128) at least 1.8km from the property in proximity to Georgian Bay shoreline and Silver Creek PSW. This species forages over towns, parks, open fields, dunes, streams, wet meadows, beaver ponds and other open areas. They breed along forest edges and rivers where dead snags offer woodpecker holes to nest in (Cornell University, 2024b). While potential habitat is present on the property, Purple Martin was not detected on or adjacent to the subject lands during breeding bird surveys.

3.2.6 Stiff Yellow Flax

Stiff Yellow Flax was reported by the NHIC (Square 17NK5829) at least 2km from the property in proximity to Silver Creek PSW. Stiff Yellow Flax grows in dry to moist



sandy shores, sandy, sunny swales, and even marshy places, sometimes with Jack Pine (University of Michigan Herbarium, 2024). This species was not documented during Azimuth's field surveys.

3.2.7 Upland Sandpiper

Upland Sandpiper was reported by the NHIC (Square 18NK6129) at least 2.5km from the property in proximity to Georgian Bay shoreline and Silver Creek PSW. Upland Sandpiper nests in grasslands, pastures, both grazed and ungrazed, and in agricultural fields, especially fallow fields, but sometimes hay or other crop fields (Cornell University, 2024b). While potential habitat is present on the property, this species was not detected on or adjacent to the subject lands during breeding bird surveys.

4.0 POTENTIAL BAT HABITAT

4.1 Woodlands

Due to the property's proximity to the Niagara Escarpment, woodlands on-site were also considered to provide potential Eastern Small-foot Myotis habitat (albeit a low probability), in addition to potential habitat for Little Brown Myotis, Northern Myotis and Tri-colored Bat. The provincial guideline Treed Habitats – Maternity Roost Surveys (MECP, 2022a) identifies Deciduous Forest (FOD) as habitat that has the potential to function as bat maternity roost habitat. Therefore, Azimuth assessed the characteristics of woodland communities FOD5-8 and FOD 3-1 as potential daytime and maternity roost habitat. Both forest communities are mature aged and hence, based on Azimuth's experience with other similar woodlands, they are likely to contain at least 10 large diameter (> 25cm DBH) wildlife trees per hectare. Therefore, snag density surveys or snag tree mapping according to the criteria of the MECP's Maternity Roost Surveys (Forests/Woodlands) (2022b) methodology was not completed as doing so would only confirm what is already known.

Further, acoustic sampling was not completed in part because the Terms of Reference for the EIS was not established until July 21, 2023 (not received by Azimuth until September 18, 2023) which is outside of the acoustic monitoring season as defined by the province (*i.e.*, between June 1 and June 30). Additionally, based on experience completing acoustic monitoring in similar woodlands of the area, it is anticipated that Endangered bats are present. Therefore, in keeping with direction of the MECP's Species at Risk Bats Survey Standards Note (2022c) that 'in cases where acoustic monitoring surveys are not performed, MECP will assume species at risk bat presence in all habitats containing potentially suitable roost trees', the assumption of presence of Endangered bats is reasonable. This assumption is applied in the Impact Assessment below (Section 10).



4.2 Buildings and Other Anthropogenic Structures

In keeping with the MECP's Species at Risk Bats Survey Note (2022c), the abandoned dwelling located in the southeast section of the subject lands was assessed on October 4, 2023 (J. Broadfoot) for its potential to provide bat maternity or day roost habitat.

The on-site dwelling is low (single storey) and is in relatively good condition. Surrounding vegetation shades the structure, limiting the amount of sunlight reaching the building. As such, the building lacks warm daytime conditions of value to bats in terms of maternity roost habitat. Furthermore, the surrounding lands do not consist of habitats that produce an abundance of foraging insects. Therefore, based on professional experience, the anthropogenic structure has a low potential to provide bat maternity roost habitat.

5.0 BIRD SURVEYS

5.1 Methods

A combined point count and roving survey methodology was used to assess bird use of the subject and adjacent lands. Six point count stations were established as shown on Figure 2. Point count survey duration was 5 minutes per station as per the methods of the Ontario Breeding Bird Atlas (OBBA) program (OBBA, 2021a/b). All birds detected (seen, heard) while completing point count sampling and while moving from station to stations (*i.e.*, during roving survey) were identified to species and the highest level of breeding evidence for that observation was recorded based on OBBA breeding evidence codes. Point count surveys were completed during the peak of the breeding season for southern Ontario as defined under the OBBA program (24 May – July 10) on two mornings spaced one week or more apart (June 9 and June 19, 2023). Two site visits were deemed adequate as that strategy conforms to OBBA protocol and there are no large grasslands on the subject lands warranting application of the '3 site visit protocol' applied to grassland habitat (Bobolink Survey Methodology - MNR Aurora District, 2013). Surveys were completed between half an hour before sunrise and five hours after sunrise and under rain free conditions and winds assessed as Beaufort Wind Scale 3 or less consistent with OBBA criteria. Incidental observations of birds made outside the breeding season on October 4, 2023 were recorded.

5.2 Results

Table 3 provides a list of birds observed during the breeding season as well as incidental observations outside of the breeding season on October 4, 2023. The lists also reports weather conditions associated with the surveys.



Twenty-nine (29) bird species were observed on and adjacent to the subject lands during the June breeding bird surveys and an additional nine (9) species were documented as incidentals during the October 4, 2023 site visit. None of the species showing possible or probable breeding on the subject lands are listed as Endangered, Threatened, Special Concern or a SCC. Eastern Meadowlark (Threatened) was detected on adjacent lands to the south but repeated observations revealed no use of the subject lands. Eastern Wood-pewee (Special Concern) was observed on the subject lands outside of the breeding season on August 7, 2014 however, this species was not detected during breeding bird surveys in 2023 or as an incidental observation outside of the breeding season on October 4, 2023. Eastern Meadowlark and Eastern Wood-pewee are not considered further in this report.

6.0 BUTTERNUT

6.1 Search

The subject lands were searched for Butternut on June 9, June 19 and October 4, 2023. Particular search effort was applied to lands in proximity to the four mature Butternut observed in 2014 in order to find any Butternut that may have seeded into those areas. Searches were completed by a certified Butternut Health Assessor (BHA) with experience searching for and assessing Butternut seedlings and saplings (J. Broadfoot, BHA #033). Intensive searches were completed within ~50m of the four mature Butternut recognizing that this is the typical extent of 'core seedling establishment from a parent tree' (MNRF, 2017).

Search results revealed that the four Butternut identified and assessed in 2014 are still present. No other mature Butternut or seedling/sapling Butternut were found during the 2023 field searches. No Butternut were observed on adjacent lands.

6.2 Health

A Butternut Health Assessment (BHA) following provincial protocols was not completed in 2023. However, the general health status of the four Butternut trees (Figure 2) associated with the subject lands was assessed by a certified BHA (J. Broadfoot, BHA #033) based on field observations in June and October 2023 as follows:

Butternut # B0077 (metal tag #) (Bn # 1 in BHA Report 137-1, August 25, 2014)

- Single stem 54cm DBH, located in shared fencerow with golf course to the north, no canker evident, good condition

Butternut # B0070 (metal tag #) (Bn # 2 in BHA Report 137-1, August 25, 2014)



- Double stem 48cm DBH & 25cm DBH; fork height 110cm above ground, narrowest part of main stem below fork 48cm; evidence of canker but in relatively good condition

Butternut # B1881 (metal tag #) (Bn # 3 in BHA Report 137-1, August 25, 2014)

- Single stem 56cm DBH, partly uprooted/significant lean, canker evident, poor condition

Butternut # B1883 (metal tag #) (Bn # 4 in BHA Report 137-1, August 25, 2014)

- Single stem 25cm DBH, minor canker evident, good condition

7.0 SIGNIFICANT WILDLIFE HABITAT

An assessment of the potential for Significant Wildlife Habitat within the study area was conducted, using the criteria outlined within the Significant Wildlife Habitat Technical Guide (OMNR, 2000) and the accompanying the Ecoregion 6E Criteria Schedules (MNRF, 2015). An assessment of potential Significant Wildlife Habitat categories relative to documented vegetation communities and habitats within the study area is presented in Table 4. The following Significant Wildlife Habitat type was determined to have potential to be present within the study area based on the results of the field program:

- Bat Maternity Colonies

7.1 Seasonal Concentration Areas of Animals

7.1.1 Bat Maternity Colonies

Deciduous woodlands on the northwest corner of the subject lands have potential to function as Bat Maternity Colony Significant Wildlife Habitat. As such, this function is considered in the Impact Assessment (Section 10).

8.0 NATURAL HERITAGE FEATURES SUMMARY

The results of Azimuth's site investigation combined with review of background information indicate the following additional natural heritage features are to be considered in the EIS Update:

- Habitat for Threatened and Endangered Species
 - Black Ash
 - Butternut



- Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis, Tri-colored Bat
- Candidate Significant Wildlife Habitat
 - Bat Maternity Colonies

9.0 REDLINE REVISION

As per MHBC's Planning Justification Report (2024), the existing plan of subdivision approved for the subject lands is split into two phases. Phase 1 includes the development of 39 single detached residential units, 8 townhouses, 117 to 190 apartment units in one apartment block, and one school or 117 to 187 apartment units on one block. Phase 2 includes the development of 400 residential units, two park blocks, one Environmental Protection block, and one stormwater management (SWM) block. The current approved draft plan of subdivision layout that was approved in 2016 is appended in Appendix A.

The purpose of the redline revised draft plan of subdivision application is to permit the development of 299 single detached unit lots, 10 future single detached unit lots, 187 townhouse units, three park blocks, a school block, an Environmental Protection block, a high density residential block (Apartment Block), 11 open space blocks, and a SWM block. The development is planned to be serviced by municipal water and wastewater services. The proposed redline revised draft plan of subdivision layout is shown on Figure 3 and is appended in Appendix B.

The proposed revised draft plan of subdivision has been revised to include the following elements:

- Addition of a third park block adjacent to the existing approved apartment block;
- Added additional walkways to facilitate connections to adjacent properties and potential future land uses;
- Shifted and redistributed density in response to pre-consultation correspondence with the Town;
- Added an additional Street 'M' to the north east area of the plan to allow for a more efficient configuration of the proposed lots in that area of the draft plan;
- Realigned the road network to provide for a more efficient grid-like road pattern while maintaining some bends on the collector road to provide traffic calming measures. The proposed collector road Street 'A' is curvilinear in nature to assist in calming traffic;
- Additional diversification of residential unit types, including four varying frontage sizes of single detached lots, and a variety of unit types (single detached lots, townhouses and apartments);



- Revised the access block around the SWM pond in response to correspondence with Town staff;
- Reduced the amount of irregularly shaped and inefficient corner lots; and,
- Increased the overall unit count for the low/medium density residential development as currently approved. Maintained the overall unit counts for the high density apartment block.

All of the redline revised draft plan revisions occur within the same development footprint that were approved for development in 2016. The Environmental Protection block in the southwest corner of the site that protects the woodland is the same size and shape as that proposed in the approved 2016 Draft Plan of Subdivision.

10.0 IMPACT ASSESSMENT

This impact assessment is prepared with regards to the construction footprint of proposed development, as described above and illustrated in Figure 3. The impact assessment related to the on-site watercourse (Taylor's Creek) within the northwest corner of the property (Figure, 2 and 3) is contained within the original 2014 EIS report and remains valid.

10.1 Black Ash

A single Black Ash was identified within the MAM2-10 wetland inclusion in the northwest FOD5-8 community during 2023 field investigations (Figure 3). The approved impact to the woodland requires removal of ~0.24ha of edge habitat from the existing 2.8ha woodland in order to configure the limits of the approved Environmental Protection Block 359 (2.56ha). As such, development will occur at a minimum of 36m from the edge of the MAM2-10 within the northwest forest. Since development is greater than 30m from the Black Ash, no negative impact to the species or its habitat is anticipated and there is no expectation that there will be any contravention of Ontario's ESA as it relates to Black Ash.

10.2 Butternut

The results of Azimuth's 2023 field surveys revealed that there are four mature Butternut trees associated with the subject lands. We recommend that a BHA is completed according to provincial protocol (MNRF, 2014) to establish ESA permitting requirements with respect to removal and/or works in proximity to Butternut trees. A BHA is to be completed in advance of completing clearing and grubbing activities on lands within 50m of these trees. As per Section 6.2 of this report, it appears that most of the Butternuts on-site are in reasonably good condition. As such, permitting is likely required as a healthy Butternut would score as a Category 2 or Category 3 under a BHA. Regardless of the



assessment results, since there only four Butternut on the subject lands (Figure 2), there will be 15 or fewer Category 2 Butternut and/or 5 or fewer Category 3 Butternut. Therefore, following the completion of a BHA Report and assuming one or more of the Butternut score as a Category 2 or Category 3, the development would be able to proceed through submission of a notice of Butternut impact (a Registry submission) to the MECP in keeping with Part V of Ontario Regulation 830/21. Further, given that there would be 15 or fewer Category 2 Butternut and 5 of fewer Category 3 Butternut, offsetting for kill/take/harm of Butternut could be achieve through payment to the Species at Risk Conservation Trust in accordance with Section 10 of Ontario Regulation 829/21 (Species Conservation Charges).

10.3 Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat

10.3.1 Woodlands

The proposed redline revision (Appendix B) does not encroach further into the northwest woodland than the approved draft plan. The approved impact to the woodland requires removal of ~0.24ha of edge habitat from the existing 2.8ha woodland in order to configure the limits of the approved Environmental Protection Block 359 (2.56ha). As such, the approved and proposed redline revision retains more than 90% of the existing woodland and hence the development preserves the vast majority of tree cover that may be of value to bats as potential daytime and maternity roost habitat. Post-development, the woodlands will continue to provide sufficient habitat to retain potential habitat function for bat species overall, including SAR species. Further, the development does not fragment the woodland but retains the woodland as a block and introduces no barriers preventing bats to access the woodlands.

By removing a proportionally small number of potential habitat trees and retaining the woodland as a block, the approved site plan and proposed redline revision does not represent damage or destruction to the habitat of Endangered bats based on definitions of MECP's guidance document Categorizing and Protecting Habitat under the *Endangered Species Act* (2012). Damage is defined as the likelihood to alter the habitat in ways that *impair* the function (usefulness) of the habitat for supporting one or more of the species' life processes, and destruction is defined as the likelihood to alter the habitat in ways that *eliminate* the function (usefulness) of the habitat for supporting one or more of the species' life processes. As damage or destruction is not anticipated to occur, there is no expectation that the proposed development will negatively impact the ability of bats, including Endangered bats, to carry out their life processes provided mitigation measures are adhered to. Given that acoustic monitoring was not completed (not required based on provincial direction - Species at Risk Bats Survey Note 2022c) and that the escarpment is located in close proximity to the property, Eastern Small-footed Myotis cannot



confidently be ruled out as present on-site. As such, in order to avoid potential impacts to SAR bats, including Eastern Small-footed Myotis, tree clearing should be completed outside of the active season in southern Ontario, defined by the MECP as between March 15 – November 30 (*i.e.*, clear trees between December 1 and March 14).

10.3.2 Buildings and Other Anthropogenic Structures

Since potential does exist and because any structure can provide day roost habitat for bats, it is recommended that demolition of the structure occur outside of the bat active season in southern Ontario, defined by the MECP as between March 15 – November 30 (*i.e.*, demolish the dwelling between December 1 and March 14).

10.4 Significant Wildlife Habitat

10.4.1 Seasonal Concentrations Areas of Animals

Bat Maternity Colonies

Refer to Section 10.3.1 for a discussion on potential impacts to Bat Maternity Colonies.

11.0 RECOMMENDATIONS

11.1 Species at Risk

It should be noted that the absence of a protected species within the study area does not indicate that they will never occur within the area. Given the dynamic character of the natural environment, there is a constant variation in habitat use. Care should be taken in the interpretation of presence of species of concern including those listed under the ESA. Changes to policy, or the natural environment, could result in shifts, removal, or addition of new areas to the list of areas currently considered SAR habitat. This report is intended as a point in time assessment of the potential to impact SAR; not to provide long term “clearance” for SAR. While there is no expectation that the assessment should change significantly, it is the responsibility of the proponent to ensure that they are not in contravention of the ESA at the time that site works are undertaken. A review of the assessment provided in this report by a qualified person should be sufficient to provide appropriate advice at the time of the onset of future site works

11.1.1 Endangered Bats

Activities involving tree removal, particularly within woodlands on the property, and building demolition should be avoided between **March 15 through November 30** of any given year, during the active period for bat species that may utilize trees or buildings for maternity and day roosting purposes. It is anticipated that adherence to this timing restriction will avoid impacts to individual SAR bats, therefore remaining in compliance with Section 9 of the ESA affording individual protection to Endangered species.



11.1.2 Butternut

Prior to clearing and grubbing activities on lands within 50m of Butternut trees, a BHA is to be completed according to provincial protocol (MNRF, 2014) to establish ESA permitting requirements with respect to removal and/or works in proximity to Butternut trees.

12.0 CONCLUSION

- Our impact assessment has given full consideration to the habitat requirements of all SAR assumed and documented to occur in the area and results indicate the proposed site development will not result in negative direct or indirect impacts to habitat of SAR providing conformance is demonstrated to mitigation measures described in Section 11. A BHA is to be completed according to provincial protocol (MNRF, 2014) to establish ESA permitting requirements with respect to removal and/or works in proximity to Butternut trees.
- The proposed works are not expected to negatively impact significant ecological functions associated with Significant Wildlife Habitat outlined in Section 7 if the appropriate mitigation measures outlined in Section 11 are followed.



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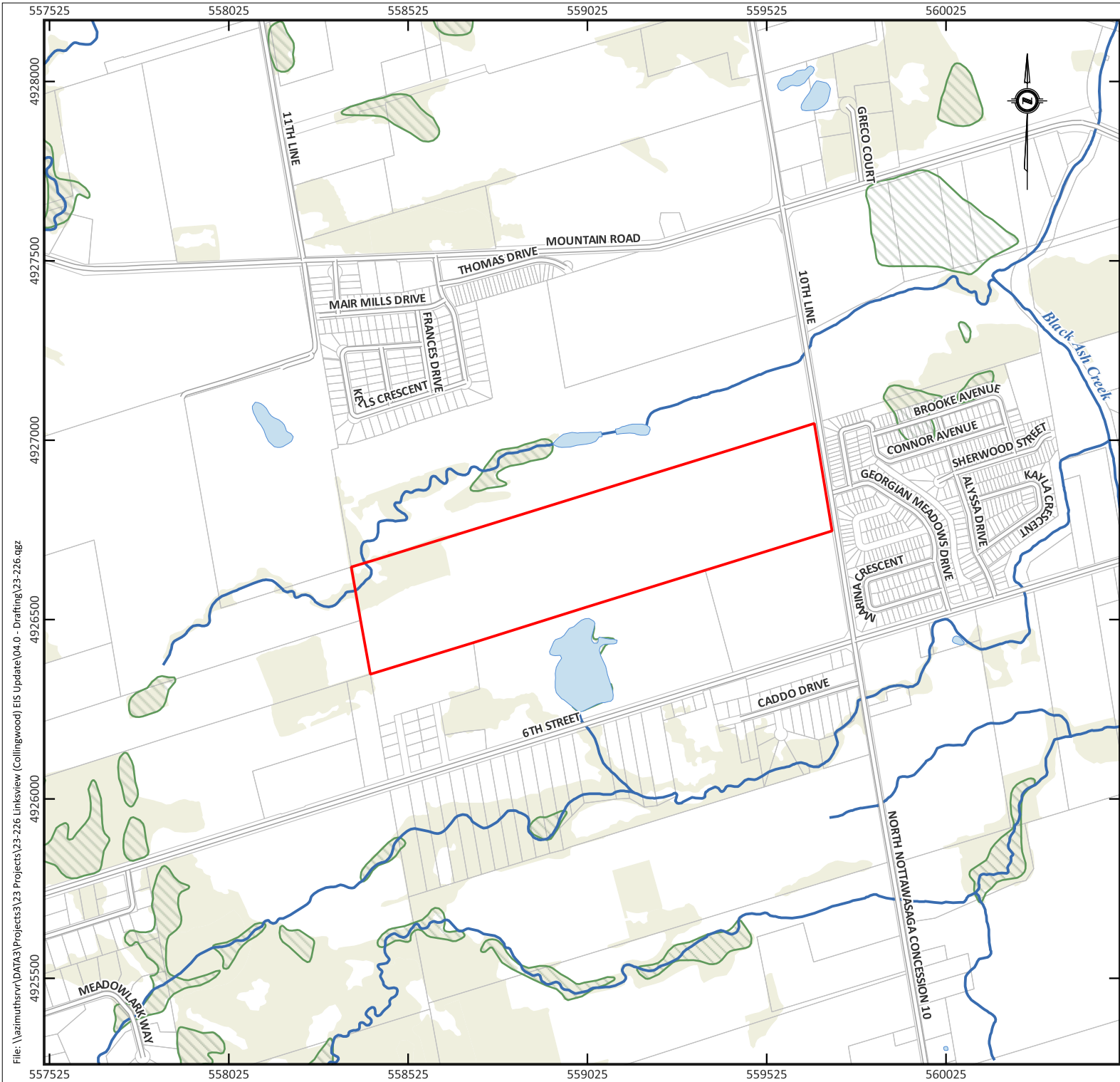
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LEGEND

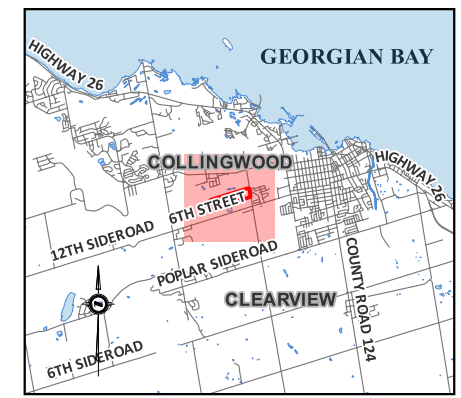
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- Waterbody
- Mapped Watercourse
- Unevaluated Wetland
- Wooded Area
- Road

NOTES

1. Watercourse, Waterbody, Wetland, Woodland and ANSI layers are derived from MNR GIS data, retrieved December 2022.

REGIONAL MAP

SCALE 1:250000



SITE LOCATION		
PART OF LOT 43, CONCESSION 11 COLLINGWOOD, ON		
DATE ISSUED:	FEBRUARY 2024	Figure No. 1
CREATED BY:	A.L.	
PROJECT NO.:	23-226	
BASE MAP:	MNR	

Printed by: AUI on February 28, 2024 at 11:42am
File: \\schubert\work\DATA\Projects\23-226 Linkview Collinwood\ EIS Update\04.0 - Drafting\23-226 Site Layout.dwg Layout: ENVIRONMENTAL FEATURES Plotcode: 1



LEGEND:

--- APPROX. PROPERTY BOUNDARY
— WATERCOURSE
--- INTERMITTENT DRAINAGE FEATURE
— CULVERT

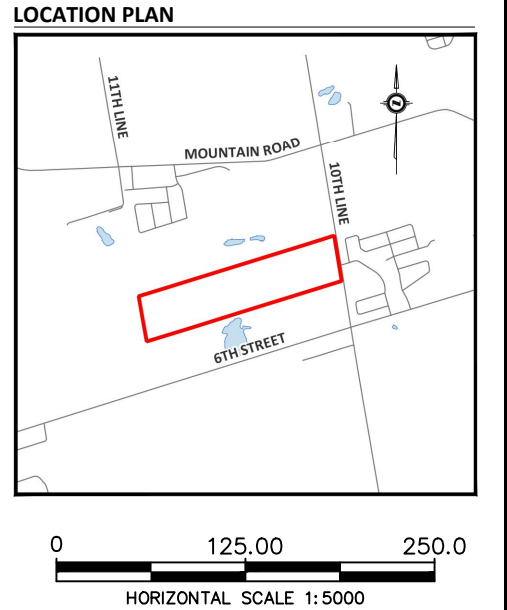
ELC UPLAND COMMUNITIES:

CVR_3 SINGLE FAMILY RESIDENTIAL
CUM CULTURAL MEADOW
CUT CULTURAL THICKET
FOD3-1 DRY-FRESH POPLAR DECIDUOUS FOREST
FOD5-8 DRY-FRESH SUGAR MAPLE-WHITE ASH DECIDUOUS FOREST
OAGM1 ANNUAL ROW CROPS
OAG OPEN AGRICULTURE

ELC WETLAND COMMUNITIES:

MAM2-5 (incl.) NARROW-LEAVED SEDGE GRAMINOID MINERAL MEADOW MARSH (WETLAND INCLUSION)
MAM2-10 (incl.) MIXED FORB MINERAL MEADOW MARSH (WETLAND INCLUSION)

○ BUTTERNUT TREE LOCATION
📍 DAWN BREEDING BIRD SURVEY STATION



ENVIRONMENTAL FEATURES

PART OF LOT 43, CONCESSION 11
COLLINGWOOD, ON

DATE ISSUED:	FEBRUARY 2024	Figure No.
CREATED BY:	A.L.	2
PROJECT NO.:	23-226	
REFERENCE:	SIMCOE COUNTY	

LEGEND:

APPROX. PROPERTY BOUNDARY

WATERCOURSE

INTERMITTENT DRAINAGE FEATURE

CULVERT

ELC UPLAND COMMUNITIES:

CVR_3

SINGLE FAMILY RESIDENTIAL

CUM

CULTURAL MEADOW

CUT

CULTURAL THICKET

FOD3-1

DRY-FRESH POPLAR DECIDUOUS FOREST

FOD5-8

DRY-FRESH SUGAR MAPLE-WHITE ASH DECIDUOUS FOREST

OAGM1

ANNUAL ROW CROPS

OAG

OPEN AGRICULTURE

ELC WETLAND COMMUNITIES:

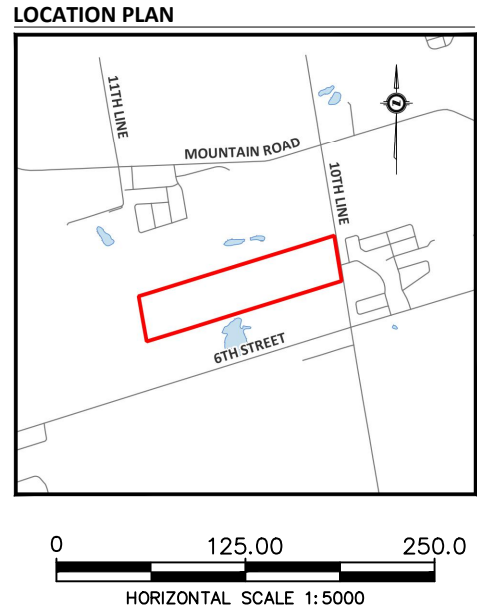
MAM2-5 (incl.)

NARROW-LEAVED SEDGE GRAMINOID MINERAL MEADOW MARSH (WETLAND INCLUSION)

MAM2-10 (incl.)

MIXED FORB MINERAL MEADOW MARSH (WETLAND INCLUSION)

BUTTERNUT TREE LOCATION



AZIMUTH ENVIRONMENTAL CONSULTING, INC.

ENVIRONMENTAL ASSESSMENTS & APPROVALS

PROPOSED REDLINE REVISION TO THE DRAFT PLAN OF SUBDIVISION

PART OF LOT 43, CONCESSION 11
COLLINGWOOD, ON

DATE ISSUED: FEBRUARY 2024

CREATED BY: A.L.

PROJECT NO.: 23-226

REFERENCE: SIMCOE COUNTY

Figure No.
3

Printed by: AUJ on February 28, 2024, at 11:42am
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Table 1: Vascular Plant Species List, Linksvew EIS Update, Town of Collingwood

AEC23-226

FAMILY ¹	SCIENTIFIC_NAME ¹	COMMON NAME ¹	Vegetation Community ²							3				
			FOD5-8	FOD3-1	CUTa	CUTb	CUT/CUM	CUM	CVR_3	Fencerows	S RANK	SARO STATUS	SARA STATUS	GRANK
Aceraceae	<i>Acer negundo</i>	Manitoba Maple	x						x	x	S5			G5
Aceraceae	<i>Acer rubrum</i>	Red Maple	x								S5			G5
Aceraceae	<i>Acer saccharum</i>	Sugar Maple	x	x					x	x	S5			G5
Amaranthaceae	<i>Amaranthus retroflexus</i>	Redroot Amaranth				x		x			SNA			G5
Anacardiaceae	<i>Rhus typhina</i>	Staghorn Sumac	x	x	x	x	x	x	x	x	S5			G5
Anacardiaceae	<i>Toxicodendron radicans</i>	Poison Ivy	x	x					x		S5			G5
Apiaceae	<i>Daucus carota</i>	Wild Carrot			x	x	x	x			SNA			GNR
Apocynaceae	<i>Apocynum androsaemifolium</i>	Spreading Dogbane			x	x	x	x			S5			G5
Apocynaceae	<i>Asclepias syriaca</i>	Common Milkweed			x	x	x	x	x		S5			G5
Asteraceae	<i>Achillea millefolium</i>	Common Yarrow		x							SNA			G5
Asteraceae	<i>Ambrosia artemisiifolia</i>	Common Ragweed			x	x	x	x	x		S5			G5
Asteraceae	<i>Arctium minus</i>	Common Burdock		x							SNA			GNR
Asteraceae	<i>Artemisia biennis</i>	Biennial Wormwood			x						SNA			G5
Asteraceae	<i>Bidens cernua</i>	Nodding Beggarticks			x			x			S5			G5
Asteraceae	<i>Cichorium intybus</i>	Wild Chicory			x	x	x	x	x		SNA			GNR
Asteraceae	<i>Cirsium arvense</i>	Canada Thistle			x	x	x	x			SNA			G5
Asteraceae	<i>Cirsium vulgare</i>	Bull Thistle			x			x			SNA			GNR
Asteraceae	<i>Erigeron canadensis</i>	Canada Horseweed			x	x	x	x	x		S5			G5
Asteraceae	<i>Erigeron philadelphicus</i>	Philadelphia Fleabane	x		x	x	x				S5			G5
Asteraceae	<i>Eurybia macrophylla</i>	Large-leaved Aster	x								S5			G5
Asteraceae	<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod			x			x			S5			G5
Asteraceae	<i>Eutrochium maculatum</i>	Spotted Joe Pye Weed	x								S5			G5
Asteraceae	<i>Leucanthemum vulgare</i>	Oxeye Daisy				x		x			SNA			GNR
Asteraceae	<i>Matricaria discoidea</i>	Pineappleweed			x	x					SNA			G5
Asteraceae	<i>Pilosella piloselloides</i>	Tall Hawkweed			x	x	x	x			SNA			GNR
Asteraceae	<i>Solidago canadensis</i>	Canada Goldenrod		x	x	x	x	x	x		S5			G5
Asteraceae	<i>Solidago gigantea</i>	Giant Goldenrod			x			x			S5			G5
Asteraceae	<i>Solidago rugosa</i>	Rough-stemmed Goldenrod			x	x	x	x	x		S5			G5
Asteraceae	<i>Sonchus arvensis</i>	Field Sow-thistle			x	x	x	x	x		SNA			GNR
Asteraceae	<i>Symphyotrichum lanceolatum</i>	Panicled Aster			x			x			S5			G5

Table 1: Vascular Plant Species List, Linksview EIS Update, Town of Collingwood

AEC23-226

FAMILY ¹	SCIENTIFIC_NAME ¹	COMMON NAME ¹	Vegetation Community ²							3				
			FOD5-8	FOD3-1	CUTa	CUTb	CUT/CUM	CUM	CVR_3	Fencerows	S RANK	SARO STATUS	SARA STATUS	GRANK
Asteraceae	<i>Symphyotrichum lateriflorum</i>	Calico Aster	x	x							S5			G5
Asteraceae	<i>Symphyotrichum novae-angliae</i>	New England Aster			x	x	x	x	x		S5			G5
Asteraceae	<i>Taraxacum officinale</i>	Common Dandelion			x	x	x	x	x		SNA			G5
Asteraceae	<i>Tragopogon pratensis</i>	Meadow Goatsbeard				x	x				SNA			GNR
Asteraceae	<i>Tussilago farfara</i>	Coltsfoot	x		x			x			SNA			GNR
Balsaminaceae	<i>Impatiens capensis</i>	Spotted Jewelweed	x		x						S5			G5
Betulaceae	<i>Betula papyrifera</i>	Paper Birch	x	x						x	S5			G5
Betulaceae	<i>Ostrya virginiana</i>	Eastern Hop-hornbeam	x	x						x	S5			G5
Boraginaceae	<i>Echium vulgare</i>	Common Viper's Bugloss			x	x	x	x	x		SNA			GNR
Brassicaceae	<i>Alliaria petiolata</i>	Garlic Mustard		x					x		SNA			GNR
Brassicaceae	<i>Brassica nigra</i>	Black Mustard			x		x				SNA			GNR
Brassicaceae	<i>Capsella bursa-pastoris</i>	Common Shepherd's Purse			x	x	x	x	x		SNA			GNR
Brassicaceae	<i>Thlaspi arvense</i>	Field Pennycress			x	x	x	x			SNA			GNR
Caryophyllaceae	<i>Silene noctiflora</i>	Night-flowering Catchfly			x			x			SNA			GNR
Caryophyllaceae	<i>Silene vulgaris</i>	Bladder Campion			x	x	x	x			SNA			GNR
Convolvulaceae	<i>Convolvulus arvensis</i>	Field Bindweed			x	x	x	x	x		SNA			GNR
Cornaceae	<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	x						x	x	S5			G5
Cornaceae	<i>Cornus rugosa</i>	Round-leaved Dogwood	x	x						x	S5			G5
Cornaceae	<i>Cornus sericea</i>	Red-osier Dogwood	x		x	x	x	x	x	x	S5			G5
Cupressaceae	<i>Thuja occidentalis</i>	Eastern White Cedar		x							S5			G5
Cyperaceae	<i>Carex gracillima</i>	Graceful Sedge	x	x							S5			G5
Cyperaceae	<i>Carex rosea</i>	Rosy Sedge		x							S5			G5
Cyperaceae	<i>Carex vulpinoidea</i>	Fox Sedge			x						S5			G5
Cyperaceae	<i>Cyperus esculentus</i>	Perennial Yellow Flatsedge			x			x			S5			G5
Dennstaedtiaceae	<i>Pteridium aquilinum</i>	Bracken Fern	x								S5			G5
Dryopteridaceae	<i>Cystopteris bulbifera</i>	Bulblet Bladder Fern	x								S5			G5
Dryopteridaceae	<i>Onoclea sensibilis</i>	Sensitive Fern	x	x							S5			G5
Equisetaceae	<i>Equisetum arvense</i>	Field Horsetail	x	x	x	x	x	x	x		S5			G5
Equisetaceae	<i>Equisetum hyemale</i>	Common Scouring-rush			x						S5			G5
Fabaceae	<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil			x	x	x	x	x		SNA			GNR

Table 1: Vascular Plant Species List, Linksvew EIS Update, Town of Collingwood

AEC23-226

			Vegetation Community ²								3			
FAMILY ¹	SCIENTIFIC_NAME ¹	COMMON NAME ¹	FOD5-8	FOD3-1	CUTa	CUTb	CUT/CUM	CUM	CVR_3	Fencerows	S RANK	SARO STATUS	SARA STATUS	GRANK
Fabaceae	<i>Medicago lupulina</i>	Black Medick			x	x	x	x	x		SNA			GNR
Fabaceae	<i>Medicago sativa</i>	Alfalfa			x		x				SNA			GNR
Fabaceae	<i>Melilotus albus</i>	White Sweet-clover	x		x		x				SNA			G5
Fabaceae	<i>Robinia pseudoacacia</i>	Black Locust		x					x	x	SNA			G5
Fabaceae	<i>Trifolium hybridum</i>	Alsike Clover	x		x				x		SNA			GNR
Fabaceae	<i>Trifolium pratense</i>	Red Clover	x		x	x	x	x	x		SNA			GNR
Fabaceae	<i>Trifolium repens</i>	White Clover	x		x	x	x	x	x		SNA			GNR
Fabaceae	<i>Vicia cracca</i>	Tufted Vetch			x		x				SNA			GNR
Fagaceae	<i>Fagus grandifolia</i>	American Beech	x	x						x	S4			G5
Fagaceae	<i>Quercus rubra</i>	Northern Red Oak	x							x	S5			G5
Grossulariaceae	<i>Ribes cynosbati</i>	Eastern Prickly Gooseberry	x	x							S5			G5
Iridaceae	<i>Iris versicolor</i>	Harlequin Blue Flag	x								S5			G5
Juglandaceae	<i>Juglans cinerea</i>	Butternut		x						x	S2?	END	END	G3
Juglandaceae	<i>Juglans nigra</i>	Black Walnut		x						x	S4?			G5
Juncaceae	<i>Juncus balticus</i>	Baltic Rush			x	x	x				S5			G5
Juncaceae	<i>Juncus effusus</i>	Soft Rush			x			x			S5			G5
Lamiaceae	<i>Leonurus cardiaca</i>	Common Motherwort			x	x	x	x			SNA			GNR
Lamiaceae	<i>Nepeta cataria</i>	Catnip			x		x				SNA			GNR
Lamiaceae	<i>Prunella vulgaris</i>	Common Self-heal			x	x	x	x	x		S5			G5
Liliaceae	<i>Maianthemum canadense</i>	Wild Lily-of-the-valley	x	x							S5			G5
Liliaceae	<i>Maianthemum stellatum</i>	Star-flowered False Solomon's Seal		x							S5			G5
Lythraceae	<i>Lythrum salicaria</i>	Purple Loosestrife			x			x			SNA			G5
Malvaceae	<i>Malva neglecta</i>	Common Mallow			x		x				SNA			GNR
Oleaceae	<i>Fraxinus americana</i>	White Ash	x	x						x	S4			G4
Oleaceae	<i>Fraxinus nigra</i>	Black Ash	x								S4	END		G5
Oleaceae	<i>Fraxinus pennsylvanica</i>	Red Ash	x		x			x			S4			G4
Onagraceae	<i>Circaea alpina</i>	Small Enchanter's Nightshade	x	x							S5			G5
Pinaceae	<i>Picea abies</i>	Norway Spruce							x		SNA			G5
Pinaceae	<i>Picea glauca</i>	White Spruce							x	x	S5			G5
Pinaceae	<i>Picea pungens</i>	Blue Spruce							x		SNA			G5

Table 1: Vascular Plant Species List, Linksvew EIS Update, Town of Collingwood

AEC23-226

FAMILY ¹	SCIENTIFIC_NAME ¹	COMMON NAME ¹	Vegetation Community ²							3				
			FOD5-8	FOD3-1	CUTa	CUTb	CUT/CUM	CUM	CVR_3	Fencerows	S RANK	SARO STATUS	SARA STATUS	GRANK
Pinaceae	<i>Pinus strobus</i>	Eastern White Pine		x							S5			G5
Plantaginaceae	<i>Plantago lanceolata</i>	English Plantain			x	x	x	x	x		SNA			G5
Plantaginaceae	<i>Plantago major</i>	Common Plantain			x	x	x	x	x		SNA			G5
Poaceae	<i>Agrostis gigantea</i>	Redtop			x	x	x	x	x		SNA			G4G5
Poaceae	<i>Bromus inermis</i>	Smooth Brome			x	x	x	x	x		SNA			G5T5
Poaceae	<i>Dactylis glomerata</i>	Orchard Grass			x	x	x	x	x		SNA			GNR
Poaceae	<i>Echinochloa crus-galli</i>	Large Barnyard Grass			x	x	x	x			SNA			GNR
Poaceae	<i>Elymus canadensis</i>	Canada Wildrye			x	x	x	x			S5			G5
Poaceae	<i>Muhlenbergia mexicana</i>	Mexican Muhly		x							S5			G5
Poaceae	<i>Panicum capillare</i>	Common Panicgrass			x	x	x	x	x		S5			G5
Poaceae	<i>Phalaris arundinacea</i>	Reed Canarygrass	x		x	x	x	x			S5			G5
Poaceae	<i>Phleum pratense</i>	Common Timothy			x	x	x	x			SNA			GNR
Poaceae	<i>Phragmites australis</i>	Common Reed			x			x			SU			G5
Poaceae	<i>Poa compressa</i>	Canada Bluegrass		x		x			x		SNA			GNR
Poaceae	<i>Poa pratensis</i>	Kentucky Bluegrass			x	x	x	x	x		S5			G5
Poaceae	<i>Setaria viridis</i>	Green Foxtail			x	x		x			SNA			GNR
Poaceae	<i>Sorghum halepense</i>	Johnson Grass			x		x	x			SNA			GNR
Polygonaceae	<i>Persicaria maculosa</i>	Spotted Lady's-thumb			x			x			SNA			G3G5
Polygonaceae	<i>Rumex crispus</i>	Curled Dock			x	x	x	x	x		SNA			GNR
Ranunculaceae	<i>Ranunculus acris</i>	Common Buttercup	x		x	x	x	x	x		SNA			G5
Ranunculaceae	<i>Ranunculus repens</i>	Creeping Buttercup			x						SNA			GNR
Rhamnaceae	<i>Rhamnus cathartica</i>	European Buckthorn	x		x	x	x	x	x		SNA			GNR
Rosaceae	<i>Amelanchier arborea</i>	Downy Serviceberry		x							S5			G5
Rosaceae	<i>Crataegus chrysocarpa</i>	Fireberry Hawthorn			x	x	x	x		x	S5			G5
Rosaceae	<i>Crataegus monogyna</i>	English Hawthorn			x	x	x	x		x	SNA			G5
Rosaceae	<i>Fragaria vesca</i>	Woodland Strawberry	x	x							S5			G5
Rosaceae	<i>Fragaria virginiana</i>	Wild Strawberry	x	x	x	x	x	x	x		S5			G5
Rosaceae	<i>Geum aleppicum</i>	Yellow Avens		x		x	x				S5			G5
Rosaceae	<i>Malus pumila</i>	Common Apple			x	x	x	x		x	SNA			G5
Rosaceae	<i>Potentilla argentea</i>	Silvery Cinquefoil			x		x				SNA			GNR

Table 1: Vascular Plant Species List, Linksvew EIS Update, Town of Collingwood

AEC23-226

FAMILY ¹	SCIENTIFIC_NAME ¹	COMMON NAME ¹	Vegetation Community ²							3				
			FOD5-8	FOD3-1	CUTa	CUTb	CUT/CUM	CUM	CVR_3	Fencerows	S RANK	SARO STATUS	SARA STATUS	GRANK
Rosaceae	<i>Prunus serotina</i>	Black Cherry	x	x						x	S5			G5
Rosaceae	<i>Prunus virginiana</i>	Chokecherry		x		x	x			x	S5			G5
Rubiaceae	<i>Galium mollugo</i>	Smooth Bedstraw			x			x			SNA			GNR
Salicaceae	<i>Populus balsamifera</i>	Balsam Poplar			x			x		x	S5			G5
Salicaceae	<i>Populus grandidentata</i>	Large-toothed Aspen		x						x	S5			G5
Salicaceae	<i>Populus tremuloides</i>	Trembling Aspen	x	x						x	S5			G5
Salicaceae	<i>Salix bebbiana</i>	Bebb's Willow			x			x			S5			G5
Salicaceae	<i>Salix discolor</i>	Pussy Willow			x	x	x	x			S5			G5
Scrophulariaceae	<i>Chelone glabra</i>	White Turtlehead	x								S5			G5
Scrophulariaceae	<i>Linaria vulgaris</i>	Butter-and-eggs				x	x				SNA			GNR
Scrophulariaceae	<i>Verbascum thapsus</i>	Common Mullein			x	x	x				SNA			GNR
Solanaceae	<i>Solanum dulcamara</i>	Bittersweet Nightshade	x		x		x		x		SNA			GNR
Tiliaceae	<i>Tilia americana</i>	Basswood	x	x	x	x	x	x		x	S5			G5
Typhaceae	<i>Typha angustifolia</i>	Narrow-leaved Cattail	x		x			x			SNA			G5
Ulmaceae	<i>Ulmus americana</i>	White Elm		x						x	S5			G4
Vitaceae	<i>Parthenocissus quinquefolia</i>	Virginia Creeper	x	x	x	x	x	x	x		S4?			G5
Vitaceae	<i>Vitis riparia</i>	Riverbank Grape	x	x	x	x	x	x	x		S5			G5

¹ Nomenclature based on Ministry of Natural Resources and Forestry (MNR) Natural Heritage Information Centre (NHIC, 2022)² ELC Codes based on Ecological Land Classification for Southern Ontario manual (Lee et al., 1998, 2008)³ Conservation Rankings: From Ontario Ministry of Natural Resources and Forestry, Natural Heritage Information Centre (<https://www.ontario.ca/page/natural-heritage-information-centre>)

Taxa	Common Name	Scientific Name	SARO Status	Habitat Requirements ¹	Habitat on Property?	Observed?	Issue Affecting Proposed Development?
Bird	Bank Swallow	<i>Riparia riparia</i>	THR	Nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits - typically banks of rivers and lakes, but also in sand and gravel pits and piles.	No	No	No
Bird	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	Large grasslands - hayfields, pastures	No	No	No
Bird	Chimney Swift	<i>Chaetura pelagica</i>	THR	Found in and around urban settlements where they nest and roost in chimneys and other manmade structures.	No	No	No
Bird	Eastern Meadowlark	<i>Sturnella magna</i>	THR	Large grasslands - hayfields, pastures	No	No ²	No ²
Bird	Loggerhead Shrike	<i>Lanius ludovicianus</i>	END	Prefers pasture or other grasslands with scattered low trees and shrubs and lives in fields or alvars (areas of exposed bedrock) with short grass. Habitat includes spiny, multi-branched shrubs used for prey storage.	No	No	No
Bird	Louisiana waterthrush	<i>Parkesia motacilla</i>	THR	Usually found in steep, forested ravines with fast-flowing streams. Although it prefers running water, especially clear, coldwater streams, it also less frequently inhabits heavily wooded, deciduous swamps having large pools of open water. It nests among the roots of fallen trees, in niches of stream banks, and in or under mossy logs.	Potential - watercourse contained within woodland of northwestern section of property	No	No - not observed and no impacts to watercourse or associated woodland
Fish	Lake Sturgeon (Great Lakes Upper St. Lawrence Population)	<i>Acipenser fulvescens</i>	END	Freshwater lakes and rivers with soft bottoms of mud, sand or gravel. Spawn in relatively shallow, fast-flowing water (usually below waterfalls, rapids, or dams) with gravel and boulders.	No	No fish sampling	No, species not reported for the watercourse (DFO SAR mapping), watercourse is a minor feature with intermittent flow (not suitable habitat)
Mammal	Eastern Small-footed Bat	<i>Myotis leibii</i>	END	Winter hibernation - caves, abandoned mines, etc. Summer - eastern small-footed bats will 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.	Potential given property's proximity to the escarpment	No acoustic sampling	No, minimal impacts to woodlands offering potential summer roosting habitat, no rock structure (talus, stone fences, stone piles, etc.) providing potential habitat
Mammal	Little Brown Myotis	<i>Myotis lucifugus</i>	END	Winter hibernation - caves, abandoned mines, etc. Summer maternity colony - typically buildings (attics, etc.) but occasionally in tree cavities.	Yes, trees	No acoustic sampling	No, minimal impacts to woodlands offering potential summer roosting habitat
Mammal	Northern Myotis	<i>Myotis septentrionalis</i>	END	Winter hibernation - caves, abandoned mines, etc. Summer maternity roost - tree cavities.	Yes, trees	No acoustic sampling	No, minimal impacts to woodlands offering potential summer roosting habitat
Mammal	Tri-colored Bat	<i>Perimyotis subflavus</i>	END	Winter hibernation - caves, abandoned mines, etc.. Summer - day roosts and maternity colonies in older forest and occasionally in barns or other structures.	Yes, trees	No acoustic sampling	No, minimal impacts to woodlands offering potential summer roosting habitat
Plant	Black Ash	<i>Fraxinus nigra</i>	END	Swamp wetlands, riparian habitat zones	Yes	Yes	No, species observation limited to wetland inclusion within woodlands of the northwestern section of property that is unaffected by the approved development or red-line revision
Plant	Butternut	<i>Juglans cinerea</i>	END	Forests, woodlands, fencerows	Yes	Yes	Yes
Reptile	Massasauga (Great Lakes - St. Lawrence Population)	<i>Sistrurus catenatus</i>	THR	Various habitats including tall grass prairie, bogs, marshes, shorelines, forests and alvars. Pregnant females are most often found in open, dry habitats such as rock barrens or forest clearings. Foraging and mating habitat includes open wetlands, bogs and the shorelines of lakes and rivers providing grasses/sedges lands. Hibernation underground in crevices in bedrock, sphagnum swamps, tree root cavities and animal burrows below the frost line.	No	No	No
Bird	Eastern Wood-pewee	<i>Contopus virens</i>	SC	Most abundant in intermediate-age mature forest stands with little understory vegetation utilizing the mid-canopy layer of forest clearings and edges of deciduous and mixed forests.	Yes	No	No
Bird	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	SC	Prefers to nest in areas with young shrubs surrounded by mature forest. Also found in locations that have recently been disturbed, such as field edges, hydro or utility right-of-ways, or logged areas.	Yes	No	No
Bird	Wood Thrush	<i>Hylocichla ustelina</i>	SC	Mature deciduous and mixed (conifer-deciduous) moist forests with well-developed undergrowth. Prefer large forests, but will also use smaller stands of trees.	Yes	No	No
Bird	Barn Swallow	<i>Hirundo rustica</i>	SC	Barn Swallows often live in close association with humans, building their cup-shaped mud nests almost exclusively on human-made structures such as open barns, under bridges and in culverts. The species is attracted to open structures that include ledges where they can build their nests, which are often re-used from year to year.	Yes	Yes, Flyover only. No nests observed on anthropogenic structure	No
Plant	American Hart's Tongue Fern	<i>Asplenium scolopendrium</i> var. <i>americanum</i>	SC	Grows on calcareous rocks in deep shade on slopes in deciduous forest.	No	No	No

Taxa	Common Name	Scientific Name	SARO Status	Habitat Requirements ¹	Habitat on Property?	Observed?	Issue Affecting Proposed Development?
Reptile	Snapping Turtle	<i>Chelydra serpentina</i>	SC	Spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams often taking advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	No	No	No
Reptile	Eastern Ribbonsnake	<i>Thamnophis saurita</i>	SC	Usually found close to water, especially in marshes where it hunts for frogs and small fish. Congregate to hibernate in underground burrows or rock crevices.	No	No	No
Insect	Monarch	<i>Danaus plexippus</i>	SC	Throughout their life cycle, Monarchs use three different types of habitat. Caterpillars feed on milkweed plants and are confined to meadows and open areas where milkweed grows. Adult butterflies can be found in more diverse habitats where they feed on nectar from a variety of wildflowers. During migration, groups of Monarchs numbering in the thousands can be seen along the north shores of Lake Ontario and Lake Erie.	No, Milkweed not abundant and subject lands not in Migratory Butterfly Stopover Area (i.e. , not within 5km of Lake Ontario)	No adults or caterpillars observed during site visits during the breeding season. A few adults observed during October site visit outside of breeding season.	No
Fish	Silver Lamprey	<i>Ichthyomyzon unicuspis</i>	SC	Silver lampreys require clear water so they can find fish hosts, relatively clean stream beds of sand and organic debris for larvae to live in, and unrestricted migration routes for spawning.	No, watercourse intermittent	Not Assessed	No - habitat not suitable and no impacts to watercourse or woodland

¹Based in part on the SARO List descriptions (<https://www.ontario.ca/page/species-risk-ontario>)

² Eastern Meadowlark detected calling from adjacent lands to the south in June 2023. Species not detected on the subject lands and subject lands do not provide habitat (cropland - corn and plowed in 2023).

Table 3: Dawn Breeding Bird List, Linksview EIS Update, Town of Collingwood

			Location ^{1,2}								Conservation Rankings ³			
FAMILY	SCIENTIFIC NAME	COMMON NAME	1	2	3	4	5	6	Incidental	Breeding Evidence	SRANK	ESA	SARA	GRANK
Accipitridae	<i>Accipiter cooperii</i>	Cooper's Hawk							x	Observed	S4	NAR		G5
Accipitridae	<i>Buteo jamaicensis</i>	Red-tailed Hawk			fo,					Observed	S5	NAR		G5
Anatidae	<i>Anas platyrhynchos</i>	Mallard							x	Observed	S5			G5
Anatidae	<i>Branta canadensis</i>	Canada Goose							x	Observed	S5			G5
Cardinalidae	<i>Cardinalis cardinalis</i>	Northern Cardinal				s,s				Probable	S5			G5
Cardinalidae	<i>Passerina cyanea</i>	Indigo Bunting				s,s	,s	s,s		Probable	S5B			G5
Charadriidae	<i>Charadrius vociferus</i>	Killdeer	c,c	h,c	c,		h,h	c,		Probable	S4B			G5
Columbidae	<i>Zenaida macroura</i>	Mourning Dove	h	h			h,		x	Possible	S5			G5
Corvidae	<i>Corvus brachyrhynchos</i>	American Crow	c,	c,	c,		c,c	c,	x	Probable	S5			G5
Corvidae	<i>Corvus corax</i>	Common Raven							x	Observed	S5			G5
Corvidae	<i>Cyanocitta cristata</i>	Blue Jay							x	Observed	S5			G5
Fringillidae	<i>Spinus tristis</i>	American Goldfinch	s,	c,c	s,		c,c	s,		Probable	S5			G5
Hirundinidae	<i>Hirundo rustica</i>	Barn Swallow		fo,						Observed	S4B	SC	THR	G5
Icteridae	<i>Agelaius phoeniceus</i>	Red-winged Blackbird	c,c		s,			s,	x	Probable	S5			G5
Icteridae	<i>Icterus galbula</i>	Baltimore Oriole			s,	,s				Possible	S4B			G5
Icteridae	<i>Molothrus ater</i>	Brown-headed Cowbird				c,				Possible	S5			G5
Icteridae	<i>Quiscalus quiscula</i>	Common Grackle		c,c			c,h		x	Probable	S5			G5
Icteridae	<i>Sturnella magna</i>	Eastern Meadowlark					s (adj.),s (adj.)	s (adj.),s (adj.)		Observed	S4B,S3N	THR	THR	G5
Laridae	<i>Larus delawarensis</i>	Ring-billed Gull	,x							Observed	S5			G5
Paridae	<i>Poecile atricapillus</i>	Black-capped Chickadee							x	Observed	S5			G5
Parulidae	<i>Geothlypis trichas</i>	Common Yellowthroat	s,		s,s			s,s		Probable	S5B,S3N			G5
Parulidae	<i>Setophaga petechia</i>	Yellow Warbler	s,	s,s	s,	,s	s,s	s,		Probable	S5B			G5
Parulidae	<i>Setophaga ruticilla</i>	American Redstart				s,s				Probable	S5B			G5
Passerellidae	<i>Melospiza melodia</i>	Song Sparrow	s,s	s,	s,		s,s	s,	x	Probable	S5			G5
Passerellidae	<i>Passerculus sandwichensis</i>	Savannah Sparrow				s,s				Probable	S5B,S3N			G5
Passerellidae	<i>Spizella passerina</i>	Chipping Sparrow				s,s		s,		Probable	S5B,S3N			G5
Passerellidae	<i>Spizella pusilla</i>	Field Sparrow			s,s					Probable	S4B,S3N			G5
Passerellidae	<i>Zonotrichia albicollis</i>	White-throated Sparrow							x	Observed	S5			G5
Phasianidae	<i>Meleagris gallopavo</i>	Wild Turkey							x	Observed	S5			G5
Picidae	<i>Dryocopus pileatus</i>	Pileated Woodpecker							x	Observed	S5			G5
Picidae	<i>Melanerpes carolinus</i>	Red-bellied Woodpecker			c,	c,				Possible	S5			G5

Table 3: Dawn Breeding Bird List, Linksview EIS Update, Town of Collingwood

			Location ^{1,2}								Conservation Rankings ³			
FAMILY	SCIENTIFIC NAME	COMMON NAME	1	2	3	4	5	6	Incidental	Breeding Evidence	SRANK	ESA	SARA	GRANK
Picidae	<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker				c,				Possible	S5B,S3N			G5
Sturnidae	<i>Sturnus vulgaris</i>	European Starling	h,h						x	Probable	SNA			G5
Troglodytidae	<i>Troglodytes aedon</i>	House Wren	s,	,s						Possible	S5B			G5
Turdidae	<i>Turdus migratorius</i>	American Robin	c,	s,			c,h			Probable	S5			G5
Tyrannidae	<i>Tyrannus tyrannus</i>	Eastern Kingbird			,p					Possible	S4B			G5
Vireonidae	<i>Vireo gilvus</i>	Warbling Vireo			s,s	s,s				Probable	S5B			G5
Vireonidae	<i>Vireo olivaceus</i>	Red-eyed Vireo			s,	s,s				Probable	S5B			G5

¹**Visit 1:** June 9, 2023: Start Time 09:25hr, End Time 10:15hr; Temperature +14°C, Wind B0, Cloud Cover 100%; Precipitation Occasional light drizzle; Sunrise 05:37hr; Observer J. Broadfoot

Visit 2: June 19, 2023: Start Time 08:09hr, End Time 09:05hr; Temperature +15°C, Wind B0, Cloud Cover < 5%; Precipitation Nil; Sunrise 05:36hr; Observer J. Broadfoot

² Breeding Bird Evidence Codes: X - Species observed, C - Call heard, FO - Flyover (Species presence); H - Species observed in its breeding season in suitable nesting habitat, S - Singing male (Possible Breeding); P - Pair observed , T - Territorial behaviour, A - Agitated behaviour or anxiety calls of adult, V - Visiting a probably nest site, N - Nest building or excavation of nest hole (Probable Breeding); DD - Distraction display or injury feigning, NU - Used Nest or egg shells, FY - Recently fledged young, AE - Adult leaving or entering nest sites, FS - Adult carrying fecal sac, CF - Adult carrying food for young, NE - Nest containing eggs, NY - Nest with young seen or heard (Confirmed Breeding).

³ Conservation Rankings: From Ontario Ministry of Natural Resources and Forestry, Natural Heritage Information Centre (<https://www.ontario.ca/page/natural-heritage-information-centre>)

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Significant Wildlife Habitat Criteria Schedule for Ecoregion 6E

Table 1.1 Seasonal Concentration Areas of Animals

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Waterfowl Stopover and Staging Areas (Terrestrial) <u>Rationale:</u> Habitat important to migrating waterfowl.	American Black Duck Wood Duck Green-winged Teal Blue-winged Teal Mallard Northern Pintail Northern Shoveler American Wigeon Gadwall	CUM1 CUT1 Plus evidence of annual spring flooding from melt water or run-off within these Ecosites.	Fields with sheet water during Spring (mid-March to May). - Fields flooding during springmelt and run-off provide important invertebrate foraging habitat for migrating waterfowl. - Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available. <u>Information Sources</u> - Anecdotal information from the landowner, adjacent landowners or local naturalist clubs may be good information in determining occurrence. - Reports and other information available from Conservation Authorities - Sites documented through waterfowl planning processes (e.g. EHJV implementation plan) - Field Naturalist Clubs - Ducks Unlimited Canada - Natural Heritage Information Centre (NHIC) Waterfowl Concentration Area	Studies carried out and verified presence of an annual concentration of any listed species, evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects” - 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. - Annual use of habitat is documented from information sources or field studies (annual use can be based on studies or determined by past surveys with species numbers and dates). - SWHMiST Index #7 provides development effects and mitigation measures.	No signs of seasonally flooded fields on the subject lands – Not Applicable.
Waterfowl Stopover and Staging Areas (Aquatic) <u>Rationale:</u> Important for local and migrant waterfowl populations during the spring or fall migration or both periods combined. Sites identified are usually only one of a few in the eco-district.	Canada Goose Cackling Goose Snow Goose American Black Duck Northern Pintail Northern Shoveler American Wigeon Gadwall Green-winged Teal Blue-winged Teal Hooded Merganser Common Merganser Lesser Scaup Greater Scaup Long-tailed Duck Surf Scoter White-winged Scoter Black Scoter Ring-necked duck Common Goldeneye Bufflehead Redhead Ruddy Duck Red-breasted Merganser Brant	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). <u>Information Sources</u> - Environment Canada - Naturalist clubs often are aware of staging/stopover areas - OMNRF Wetland Evaluations indicate presence of locally and regionally significant waterfowl staging. - Sites documented through waterfowl planning processes (e.g. EHJV implementation plan) - Ducks Unlimited projects - Element occurrence specification by Nature Serve: http://www.natureserve.org - Natural Heritage Information Centre (NHIC) Waterfowl Concentration Areas	Studies carried out and verified presence of: - Aggregations of 100or 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. - Wetland area and shorelines associated with sites identified within the SWHTG Appendix K are significant wildlife habitat. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - Annual Use of Habitat is Documented from Information Sources or Field Studies (Annual can be based on completed studies or determined from past surveys with species numbers and dates recorded). - SWHMiSTIndex #7 provides development effects and mitigation measures.	Subject lands not associated with a marsh, lake, bay, coastal inlet, or large watercourse – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
	Canvasback Ruddy Duck				
Shorebird Migratory Stopover Area Rationale: High quality shorebird stopover habitat is extremely rare and typically has a long history of use.	Greater Yellowlegs Lesser Yellowlegs Marbled Godwit Hudsonian Godwit Black-bellied Plover American Golden-Plover Semipalmated Plover Solitary Sandpiper Spotted Sandpiper Semipalmated Sandpiper Pectoral Sandpiper White-rumped Sandpiper Baird’s Sandpiper Least Sandpiper Purple Sandpiper Stilt Sandpiper Short-billed Dowitcher Red-necked Phalarope Whimbrel Ruddy Turnstone Sanderling Dunlin	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. <u>Information Sources</u> - Western hemisphere shorebird reserve network - Canadian Wildlife Service (CWS) Ontario Shorebird Survey - Bird Studies Canada - Ontario Nature - Local birders and naturalist clubs - Natural Heritage Information Center (NHIC) Shorebird Migratory Concentration Area	Studies confirming: - Presence of 3 or more of listed species and > 1000 shorebird use days during spring or fall migration period. (shorebird use days are the accumulated number of shorebirds counted per day over the course of the fall or spring migration period) - Whimbrel stop briefly (<24hrs) during spring migration, 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. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiSTIndex #8 provides development effects and mitigation measures.	Subject lands not associated with shoreline of lake, river or large wetland with mud flats – Not Applicable.
Raptor Wintering Area Rationale: Sites used by multiple species of individuals and used annually are most significant	Rough-legged Hawk Red-tailed Hawk Northern Harrier American Kestrel Snowy Owl Special Concern: Short-eared Owl Bald Eagle	<u>Hawks/Owls:</u> 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. <u>Bald Eagle:</u> 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 windswept with limited snow depth or accumulation. - Eagle sites have open water, large trees and snags available for roosting. <u>Information Sources:</u> - OMNRF Ecologist or Biologist Field Naturalist Clubs - Natural Heritage Information Center (NHIC) Raptor Winter Concentration Area - Data from Bird Studies Canada - Results of Christmas Bird Counts Reports and other information available from Conservation Authorities.	Studies confirm the use of these habitats by: - 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. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiSTIndex #10 and #11 provides development effects and mitigation measures.	Subject lands do not provide a combination of fallow/idle or lightly grazed field/meadow habitat >15ha and woodlands – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Bat Hibernacula Rationale: Bat hibernacula are rare habitats in all Ontario landscapes.	Big Brown Bat Tri-coloured Bat	Bat Hibernacula may be found in these ecosites: CCR1 CCR2 CCA1 CCA2 (Note: 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 - The locations of bat hibernacula are relatively poorly known. <u>Information Sources</u> - OMNRF for possible locations and contact for local experts - Natural Heritage Information Center (NHIC) Bat Hibernaculum Ministry of Northern - Development and Mines for location of mine shafts. - Clubs that explore caves (<i>e.g.</i> Sierra Club) - University Biology Departments with bat experts.	- 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 and 1000m for wind farms - Studies are to be conducted during the peak swarming period (Aug. – Sept.). Surveys should be conducted following methods outlined in the “Bats and Bat Habitats: Guidelines for Wind Power Projects. - SWHMiST Index #1 provides development effects and mitigation measures.	No caves, mine shafts, underground foundations and karsts associated with subject or adjacent lands – Not Applicable.
Bat Maternity Colonies Rationale: Known locations of forested bat maternity colonies are extremely rare in all Ontario landscapes.	Big Brown Bat Silver-haired Bat	Maternity colonies considered SWH are found in forested Ecosites. All ELC Ecosites in ELC Community Series: 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 roosts are not found in caves and mines in Ontario. - 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 or class 1 or 2. - 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. <u>Information Sources</u> - OMNRF for possible locations and contact for local experts - University Biology Departments with bat experts.	- Maternity Colonies with confirmed use by; >10 Big Brown Bats >5 Adult Female Silver-haired Bats - The area of the habitat includes the entire woodland or a forest stand ELC Ecosite or an Ecoelement containing the maternity colonies. - Evaluation methods for maternity colonies should be conducted following methods outlined in the “Bats and Bat Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #12 provides development effects and mitigation measures.	Woodlands of the northwest section of the subject lands are mature and hence are likely to contain >10 large diameter (> 25cm dbh) wildlife trees per hectare – Applicable.
Turtle Wintering Areas Rationale: Generally sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	Midland Painted Turtle Special Concern: Northern Map Turtle Snapping Turtle	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. <u>Information Sources</u> - EIS studies carried out by Conservation Authorities. - Local field naturalists and experts, as well as university herpetologists may also know where to find some of these sites. - OMNRF Ecologist or Biologist - Field Naturalist clubs - Natural Heritage Information Center (NHIC)	- 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. - Over wintering areas may be identified by searching for congregations (Basking Areas) of turtles on warm, sunny days during the fall (Sept. – Oct.) or spring (Mar. – May) - Congregation of turtles is more common where wintering areas are limited and therefore significant - SWHMiST Index #28 provides development effects and mitigation measures for turtle wintering habitat.	No ponds or areas of wetlands providing persistent surface water of value to turtles on the subject lands - Not Applicable.

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Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Reptile Hibernaculum Rationale: Generally sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	Snakes: Eastern Gartersnake Northern Watersnake Northern Red-bellied Snake Northern Brownsnake Smooth Green Snake Northern Ring-necked Snake Special Concern: Milksnake Eastern Ribbonsnake Lizard: Special Concern (Southern Shield population): Five-lined Skink	For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, Rock Barren, Crevice, Cave, and Alvar sites may be directly related to these habitats. Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator. 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. - Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line. - 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. <u>Information Sources</u> - In spring, local residents or landowners may have observed the emergence of snakes on their property (<i>e.g.</i> old dug wells). - Reports and other information available from Conservation Authorities. - Field Naturalists clubs - University herpetologists - Natural Heritage Information Center (NHIC) - OMNRF ecologist or biologist may be aware of locations of wintering skinks	Studies confirming: - 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 (<i>e.g.</i> foundation or rocky slope) on sunny warm days in Spring (Apr/May) and Fall (Sept/Oct) <u>Note:</u> If there are Special Concern Species present, then site is SWH <u>Note:</u> Sites for hibernation possess specific habitat parameters (<i>e.g.</i> temperature, humidity, <i>etc.</i>) and consequently are used annually, often by many of the same individuals of a local population (i.e. strong hibernation site fidelity). Other critical life processes (<i>e.g.</i> mating) often take place in close proximity to hibernacula. The feature in which the hibernacula is located plus a 30 m radius area is the SWH. - SWHMiST Index #13 provides development effects and mitigation measures for snake hibernacula. - Presence of any active hibernaculum for skink is significant. - SWHMiSTIndex #37 provides development effects and mitigation measures for five-lined skink wintering habitat.	No snakes were observed during multiple site visits conducted during summer/autumn, under weather conditions when snakes would be active and hence observable. No features such as rock piles or slopes, old stone fences, and abandoned crumbling foundations noted on-site - Not Applicable.
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff) Rationale: Historical use and number of nests in a colony make this habitat significant. An identified colony can be very important to local populations. All swallow population are declining in Ontario.	Cliff Swallow Northern Rough-winged Swallow (this species is not colonial but can be found in Cliff Swallow colonies)	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 CUS1 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. <u>Information Sources</u> - Reports and other information available from Conservation Authorities. - Ontario Breeding Bird Atlas - Bird Studies Canada; <i>NatureCounts</i> http://www.birdscanada.org/birdmon/ - Field Naturalist Clubs.	Studies confirming: - Presence of 1 or more nesting sites with 8or 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. - Field surveys to observe and count swallow nests are to be completed during the breeding season. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #4 provides development effects and mitigation measures.	No exposed soil banks on subject lands. No Cliff, Blank or Northern Rough-winged Swallows detected during breeding bird surveys – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs) Rationale: Large colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Great Blue Heron Black-crowned Night-Heron Great Egret Green Heron	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. <u>Information Sources</u> - Ontario Breeding Bird Atlas, colonial nest records. - Ontario Heronry Inventory 1991 available from Bird Studies Canada or NHIC (OMNRF). - Natural Heritage Information Center (NHIC) Mixed Wader Nesting Colony - Aerial photographs can help identify large heronries. - Reports and other information available from CAs. - MNRF District Offices - Local naturalist clubs	Studies confirming: - 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. - Confirmation of active heronries are to be achieved through site visits conducted during the nesting season (April to August) or by evidence such as the presence of fresh guano, dead young and/or eggshells. - SWHMiST Index #5 provides development effects and mitigation measures.	No suitable habitat on subject lands. None of listed species observed during breeding bird surveys – Not Applicable.
Colonially-Nesting Bird Breeding Habitat (Ground) Rationale: Colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Herring Gull Great Black-backed Gull Little Gull Ring-billed Gull Common Tern Caspian Tern Brewer’s Blackbird	Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1;50,000 NTS map). 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. - Brewers Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands. <u>Information Sources</u> - Ontario Breeding Bird Atlas , rare/colonial species records. - Canadian Wildlife Service - Reports and other information available from CAs. - Natural Heritage Information Center (NHIC) Colonial Waterbird Nesting Area - MNRF District Offices - Field Naturalist clubs	Studies confirming: - 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. - Studies would be done during May/June when actively nesting. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #6 provides development effects and mitigation measures.	Subject lands do not contain rocky islands/peninsulas within a lake or river. No gull nesting habitat on or adjacent to property. Brewer’s Blackbirds not observed during breeding bird surveys - Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Migratory Butterfly Stopover Areas Rationale:Butterfly stopover areas are extremely rare habitats and are biologically important for butterfly species that migrate south for the winter.	Painted Lady Red Admiral <u>Special Concern</u> Monarch	Combination of ELC Community Series; need to have present one Community Series from each land class: <u>Field:</u> CUM CUT CUS <u>Forest:</u> FOC FOD FOM CUP Anecdotaly, a candidate site for butterfly stopover will have a history of butterflies being observed.	A butterfly stopover area will be a 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. - The habitat is typically a combination of field and forest, and provides the butterflies with a location to rest prior to their long migration south. - 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. - Staging areas usually provide protection from the elements and are often spits of land or areas with the shortest distance to cross the Great Lakes. <u>Information Sources</u> - OMNRF (NHIC) - Agriculture Canada in Ottawa may have list of butterfly experts. - Field Naturalist Clubs - Toronto Entomologists Association - Conservation Authorities	Studies confirm: - The presence of Monarch Use Days (MUD) during fall migration (Aug/Oct). MUD is based on the number of days a site is used by Monarchs, multiplied by the number of individuals using the site. Numbers of butterflies can range from 100-500/day, significant variation can occur between years and multiple years of sampling should occur. - Observational studies are to be completed and need to be done frequently during the migration period to estimate MUD. - MUD of >5000 or >3000 with the presence of Painted Ladies or Red Admiral’s is to be considered significant. - SWHMiST Index #16 provides development effects and mitigation measures.	Subject lands not located within 5km of Lake Ontario – Not Applicable.
Landbird Migratory Stopover Areas Rationale:Sites with a high diversity of species as well as high numbers are most significant.	All migratory songbirds. Canadian Wildlife Service Ontario website. All migratory songbirds. Canadian Wildlife Service Ontario website:	All Ecosites associated with these ELC Community Series; 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. - Sites have a variety of habitats; forest, grassland and wetland complexes. - The largest sites 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 . <u>Information Sources</u> - Bird Studies Canada - Ontario Nature - Local birders and naturalist club - Ontario Important Bird Areas (IBA) Program	Studies confirm: - 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. This abundance and diversity of migrant bird species is considered above average and significant. - Studies should becompleted during spring (Apr./May) and fall (Aug/Oct) migration using standardized assessment techniques. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #9 provides development effects.	Subject lands not located within 5km of Lake Ontario – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Deer Yarding Areas Rationale: Winter habitat for deer is considered to be the main limiting factor for northern deer populations. In winter, deer congregate in “yards” to survive severe winter conditions. Deer yards typically have a long history of annual use by deer, yards typically represent 10-15% of an areas summer range.	White-tailed Deer	Note: OMNRF to determine this habitat. ELC Community Series providing a thermal cover component for a deer yard would include; FOM, FOC, SWM and SWC. Or these ELC Ecosites; CUP2 CUP3 FOD3 CUT	- Deer yarding areas or winter concentration areas (yards) are areas deer move to in response to the onset of winter snow and cold. This is a behavioural response and deer will establish traditional use areas. 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. Agricultural lands can also be included in this area. Deer move to these areas in early winter and generally, when snow depths reach 20 cm, most of the deer will have moved here. If the snow is light and fluffy, deer may continue to use this area until 30 cm snow depth. In mild winters, deer may remain in the Stratum II area the entire winter. - The Core of a deer yard (Stratum I) is located within the Stratum II area and is critical for deer survival in areas where winters become severe. It is primarily composed of coniferous trees (pine, hemlock, cedar, spruce) with a canopy cover of more than 60%. - OMNRF determines deer yards following methods outlined in “Selected Wildlife and Habitat Features: Inventory Manual”. - Woodlots with high densities of deer due to artificial feeding are not significant.	No Studies Required: - Snow depth and temperature are the greatest influence on deer use of winter yards. Snow depths > 40cm for more than 60 days in a typically winter are minimum criteria for a deer yard to be considered as SWH. - Deer Yards are mapped by OMNRF District offices. Locations of Core or Stratum 1 and Stratum 2 Deer yards considered significant by OMNRF will be available at local MNRF offices or via Land Information Ontario (LIO). - Field investigations that record deer tracks in winter are done to confirm use (best done from an aircraft). Preferably, this is done over a series of winters to establish the boundary of the Stratum I and Stratum II yard in an "average" winter. MNRF will complete these field investigations. - If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. - SWHMiST Index #2 provides development effects and mitigation measures.	Subject and adjacent lands not mapped as part of a deer yard by the province (Ontario GeoHub – Wildlife Values Area [Wildlife Values Area Wildlife Values Area Ontario GeoHub (gov.on.ca)])). No sign of browsing on saplings/shrubs of subject lands at levels consistent with traditional use as deer yard habitat – Not Applicable.
Deer Winter Congregation Areas Rationale: Deer movement during winter in the southern areas of Ecoregion 6E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands to reduce or avoid the impacts of winter conditions.	White-tailed Deer	All Forested Ecosites with these ELC Community Series; 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 movement during winter in the southern areas of Ecoregion 6E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands . - If deer are constrained by snow depth refer to the Deer Yarding Area habitat within Table 1.1 of this Schedule. - Large woodlots > 100ha and up to 1500 ha are known to be used annually by densities of deer that range from 0.1-1.5 deer/ha. - Woodlots with high densities of deer due to artificial feeding are not significant. <u>Information Sources</u> - MNRF District Offices - LIO/NRVIS	Studies confirm: - Deer management is an MNRF responsibility, deer winter congregation areas considered significant will be mapped by MNRF. - Use of the woodlot by white-tailed deer will be determined by MNRF, all woodlots exceeding the area criteria are significant, unless determined not to be significant by MNRF. - Studies should be completed during winter (Jan/Feb) when >20cm of snow is on the ground using aerial survey techniques, ground or road surveys. or a pellet count deer density survey. - If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. - SWHMiST Index #2 provides development effects and mitigation measures.	Subject lands occur in area of province where deer typically migrate to traditional deer yarding areas – function assessed above.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood
Table 1.2.1 Rare Vegetation Communities

Rare Vegetation Community	Candidate SWH			Confirmed SWH	Assessment
	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	Defining Criteria	
Cliffs and Talus Slopes Rationale: Cliffs and Talus Slopes are extremely rare habitats in Ontario.	Any ELC Ecosite within Community Series: TAO TAS TAT CLO CLS CLT	A Cliff is vertical to near vertical bedrock >3m in height. A Talus Slope is rock rubble at the base of a cliff made up of coarse rocky debris.	Most cliff and talus slopes occur along the Niagara Escarpment. <u>Information Sources</u> - The Niagara Escarpment Commission has detailed information on location of these habitats. - OMNRF District - Natural Heritage Information Center (NHIC) has location information available on their website - Field Naturalist clubs - Conservation Authorities	- Confirm any ELC Vegetation Type for Cliffs or Talus Slopes - SWHMiST Index #21 provides development effects and mitigation measures.	No cliffs or talus slopes on subject lands - Not Applicable.
Sand Barren Rationale: Sand barrens are rare in Ontario and support rare species. Most Sand Barrens have been lost due to cottage development and forestry	ELC Ecosites: SBO1 SBS1 SBT1 Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always ≤ 60%.	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered, but less than 60%.	A sand barren area >0.5ha in size. <u>Information Sources</u> - MNRF Districts - Natural Heritage Information Center (NHIC) has location information available on their website. - Field Naturalist clubs - Conservation Authorities	- Confirm any ELC Vegetation Type for Sand Barrens - Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.) - SWHMiST Index #20 provides development effects and mitigation measures.	No sand barrens on subject lands - Not Applicable.
Alvar Rationale: Alvars are extremely rare habitats in Ecoregion 6E. Most alvars in Ontario are in Ecoregions 6E and 7E. Alvars in 6E are small and highly localized just north of the Palaeozoic-Precambrian contact.	ALO1 ALS1 ALT1 FOC1 FOC2 CUM2 CUS2 CUT2-1 CUW2 Five Alvar Species: 1) <i>Carex crawei</i> 2) <i>Panicum philadelphicum</i> 3) <i>Eleocharis compressa</i> 4) <i>Scutellaria parvula</i> 5) <i>Trichostema brachiatum</i> These indicator species are very specific to Alvars within Ecoregion 6E.	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animal species. Vegetation cover varies from patchy to barren with a less than 60% tree cover.	An Alvar site > 0.5 ha in size. <u>Information Sources</u> - Alvars of Ontario (2000), Federation of Ontario Naturalists. - Ontario Nature – Conserving Great Lakes Alvars. - Natural Heritage Information Center (NHIC) has location information available on their website - OMNRF Districts - Field Naturalist clubs - Conservation Authorities	- Field studies that identify four of the fiveAlvar Indicator Species at a Candidate Alvar site is Significant. - Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). - The alvar must be in excellent condition and fit in with surrounding landscape with few conflicting land uses. - SWHMiST Index #17 provides development effects and mitigation measures.	No alvar on subject lands - Not Applicable.

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Rare Vegetation Community	Candidate SWH			Confirmed SWH	Assessment
	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	Defining Criteria	
Old Growth Forest Rationale: Due to historic logging practices, extensive old growth forest is rare in the Ecoregion. Interior habitat provided by old growth forests is required by many wildlife species.	Forest CommunitySeries: FOD FOC FOM SWD SWC SWM	Old Growth forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.	Woodland areas 30 ha or greater in size or with at least 10 ha interior habitat assuming 100 m buffer at edge of forest. <u>Information Sources</u> • OMNRF Forest Resource Inventory mapping • OMNRF Districts. • Field Naturalist clubs • Conservation Authorities • Sustainable Forestry Licence (SFL) companies will possibly know locations through field operations. • Municipal forestry departments	Field Studies will determine: • If dominant trees species are >140 years old, then the area containing these trees is Significant Wildlife Habitat. • The forested area containing the old growth characteristics will have experienced no recognizable forestry activities (cut stumps will not be present). • The area of forest ecosites combined or an eco-element within an ecosite that contains the old growth characteristics is the SWH. • Determine ELC vegetation types for the forest area containing the old growth characteristics. • SWHMiST Index #23 provides development effects and mitigation measures.	Woodlands of the subject lands measure ~2.8ha, well below the 30ha threshold and have been subject to past disturbance with portions having composition and structure of relatively young successional forest – Not Applicable.
Savannah Rationale: Savannahs are extremely rare habitats in Ontario.	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. <u>Information Sources</u> • Natural Heritage Information Center (NHIC) has location information available on their website • OMNRF Districts • Field Naturalist clubs • Conservation Authorities	Field studies confirm one or more of the Savannah indicator species listed in Appendix N should be present. Note: Savannah plant spp. list from Ecoregion 6E should be used. • Area of the ELC Ecosite is the SWH. • Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). • SWHMiST Index #18 provides development effects and mitigation measures.	No savannah on subject lands - Not Applicable.
Tallgrass Prairie Rationale: Tallgrass Prairies are extremely rare habitats in Ontario.	TPO1 TPO2	A Tallgrass Prairie has ground cover dominated by prairie grasses. 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. <u>Information Sources</u> • Natural Heritage Information Center (NHIC) has location information available on their website • OMNRF Districts • Field Naturalist clubs • Conservation Authorities	Field studies confirm one or more of the Prairie indicator species listed in Appendix N should be present. Note: Prairie plant spp. list from Ecoregion 6E should be used. • Area of the ELC Ecosite is the SWH. • Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). • SWHMiST Index #19 provides development effects and mitigation measures.	No tallgrass prairie on subject lands - Not Applicable.
Other Rare Vegetation Communities Rationale: Plant communities that often contain rare species which depend on the habitat for survival.	Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG. Any ELC Ecosite Code that has a possible ELC Vegetation Type that is Provincially Rare is Candidate SWH.	Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	ELC Ecosite codes that have the potential to be a rare ELC Vegetation Type as outlined in appendix M The OMNRF/NHIC will have up to date listing for rare vegetation communities. <u>Information Sources</u> • Natural Heritage Information Center (NHIC) has location information available on their website • OMNRF Districts • Field Naturalist clubs • Conservation Authorities	Field studies should confirm if an ELC Vegetation Type is a rare vegetation community based on listing within Appendix M of SWHTG. • Area of the ELC Vegetation Type polygon is the SWH. • SWHMiST Index #37 provides development effects and mitigation measures.	No rare vegetation communities observed on subject lands – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood
1.2.2 Specialized Habitat for Wildlife

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Waterfowl Nesting Area Rationale: Important to local waterfowl populations, sites with greatest number of species and highest number of individuals are significant.	American Black Duck Northern Pintail Northern Shoveler Gadwall Blue-winged Teal Green-winged Teal Wood Duck Hooded Merganser Mallard	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 Note: includes adjacency to Provincially Significant Wetlands	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. <u>Information Sources</u> - Ducks Unlimited staff may know the locations of particularly productive nesting sites. - OMNRF Wetland Evaluations for indication of significant waterfowl nesting habitat. - Reports and other information available from Conservation Authorities.	Studies confirmed: - 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. - Nesting studies should be completed during the spring breeding season (April - June). Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - A field study confirming waterfowl nesting habitat will determine the boundary of the waterfowl nesting habitat for the SWH, this may be greater or less than 120 m from the wetland and will provide enough habitat for waterfowl to successfully nest. - SWHMiST Index #25 provides development effects and mitigation measures.	No wetlands providing habitat conditions of value to waterfowl associated with the subject. No waterfowl observed utilizing the subject or adjacent lands during breeding bird surveys in June 2023 – Not Applicable.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat Rationale: Nest sites are fairly uncommon in Eco-region 6E and are used annually by these species. Many suitable nesting locations may be lost due to increasing shoreline development pressures and scarcity of habitat.	Osprey Special Concern Bald Eagle	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. - Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree’s canopy. - Nests located on man-made objects are not to be included as SWH (e.g. telephone poles and constructed nesting platforms). <u>Information Sources</u> - Natural Heritage Information Center (NHIC) compiles all known nesting sites for Bald Eagles in Ontario. - MNRF values information (LIO/NRVIS) will list known nesting locations. Note: data from NRVIS is provided as a point and does not represent all the habitat. - Nature Counts, Ontario Nest Records Scheme data. - OMNRF Districts - Check the Ontario Breeding Bird Atlas or Rare Breeding Birds in Ontario for species documented - Reports and other information available from Conservation Authorities. - Field Naturalists clubs	Studies confirm the use of these nests by: - One or more active Osprey or Bald Eagle nests in an area. - Some species have more than one nest in a given area and priority is given to the primary nest with alternate nests included within the area of the SWH. - For an Osprey, the active nest and a 300 m radius around the nest or the contiguous woodland stand is the SWH, maintaining undisturbed shorelines with large trees within this area is important. - 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 is dependent on site lines from the nest to the development and inclusion of perching and foraging habitat. - 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. - Observational studies to determine nest site use, perching sites and foraging areas need to be done from mid March to mid August. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #26 provides development effects and mitigation measures.	No stick nests observed on the subject lands and Osprey and Bald Eagle not observed during breeding bird or other surveys – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Woodland Raptor Nesting Habitat <u>Rationale:</u> Nests sites for these species are rarely identified; these area sensitive habitats and are often used annually by these species.	Northern Goshawk Cooper’s Hawk Sharp-shinned Hawk Red-shouldered Hawk Barred Owl Broad-winged Hawk	May be found in all forested ELC Ecosites. May also be found in SWC, SWM, SWD and CUP3	All natural or conifer plantation woodland/forest stands >30ha with >10ha of interior habitat. Interior habitat determined with a 200m buffer - Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers Hawk nest along forest edges sometimes on peninsulas or small off-shore islands. - In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest. <u>Information Sources</u> - OMNRF Districts. - Check the Ontario Breeding Bird Atlas or Rare Breeding Birds in Ontario for species documented. - Check data from Bird Studies Canada. - Reports and other information available from Conservation Authorities.	Studies confirm: - 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 . (The 28 ha habitat area would be applied where optimal habitat is irregularly shaped around the nest). - 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. - Conduct field investigations from mid-March to end of May. The use of call broadcasts can help in locating territorial. (courting/nesting) raptors and facilitate the discovery of nests by narrowing down the search area. - SWHMiST Index #27 provides development effects and mitigation measures.	Woodlands of the subject lands measure ~2.8ha, well below the 30ha threshold and contain no interior habitat. No stick nests observed on subject lands – Not Applicable.
Turtle Nesting Areas <u>Rationale:</u> These habitats are rare and when identified will often be the only breeding site for local populations of turtles.	Midland Painted Turtle <u>Special Concern Species</u> Northern Map Turtle Snapping Turtle	Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within the following ELC Ecosites: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 BOO1 FEO1	- Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. - For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. - Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used. <u>Information Sources</u> - Use Ontario Soil Survey reports and maps to help find suitable substrate for nesting turtles (well-drained sands and fine gravels). - Check the Ontario Herpetofaunal Summary Atlas records or other similar atlases for uncommon turtles; location information may help to find potential nesting habitat for them. - Natural Heritage Information Center (NHIC) - Field Naturalist clubs	Studies confirm: - 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 turtles nest, plus a radius of 30-100m around the nesting area dependant on slope, riparian vegetation and adjacent land use 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. - Field investigations should be conducted in prime nesting season typically late spring to early summer. Observational studies observing the turtles nesting is a recommended method. - SWHMiST Index #28 provides development effects and mitigation measures for turtle nesting habitat.	No ponds or wetlands containing persistent surface water of value to turtles on the subject lands. No evidence of turtle nesting detected (predated nests/scattered egg shells, <i>etc.</i>) during multiple site visits completed in June (nesting season) and October (hatching time) - Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Seeps and Springs Rationale: Seeps/Springs are typical of headwater areas and are often at the source of coldwater streams.	Wild Turkey Ruffed Grouse Spruce Grouse White-tailed Deer Salamander spp.	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. - Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species. <u>Information Sources</u> - Topographical Map - Thermography - Hydrological surveys conducted by Conservation Authorities and MOE. - Field Naturalists clubs and landowners. - Municipalities and Conservation Authorities may have drainage maps and headwater areas mapped.	Field Studies confirm: - Presence of a site with 2 or more seeps/springs should be considered SWH. - The area of a ELC forest ecosite or an ecoelement within ecosite containing the seeps/springs is the SWH. The protection of the recharge area considering the slope, vegetation, height of trees and groundwater condition need to be considered in delineation the habitat. - SWHMiST Index #30 provides development effects and mitigation measures.	No seeps or springs observed on the subject lands – Not Applicable.
Amphibian Breeding Habitat (Woodland). Rationale: These habitats are extremely important to amphibian biodiversity within a landscape and often represent the only breeding habitat for local amphibian populations.	Eastern Newt Blue-spotted Salamander Spotted Salamander Gray Treefrog Spring Peeper Western Chorus Frog Wood Frog	All Ecosites associated with these ELC Community Series; FOC FOM FOD SWC SWM SWD Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be used due to reduced risk to migrating amphibians.	- Presence of a wetland, pond or woodland pool (including vernal pools) >500m² (about 25m diameter) within or adjacent (within 120m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians. - Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat. <u>Information Sources</u> - Ontario Herpetofaunal Summary Atlas (or other similar atlases) for records. - Local landowners may also provide assistance as they may hear spring-time choruses of amphibians on their property. - OMNRF District - OMNRF wetland evaluations - Field Naturalist clubs - Canadian Wildlife Service - Amphibian Road Call Survey - Ontario Vernal Pool Association:http://www.ontariovernalpools.org	Studies confirm; - 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. - A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the woodland/wetlands. - The habitat is the wetland area plus a 230m radius of woodland area. If a wetland area is adjacent to a woodland, a travel corridor connecting the wetland to the woodland is to be included in the habitat. - SWHMiST Index #14 provides development effects and mitigation measures.	Wetland inclusion within woodland of northwest section of subject lands is vegetated throughout and hence does not provide persistent surface water (<i>i.e.</i> , “containing water in most years until mid-July”) and hence is unlikely to function as significant amphibian breeding habitat – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Amphibian Breeding Habitat (Wetlands) Rationale: Wetlands supporting breeding for these amphibian species are extremely important and fairly rare within Central Ontario landscapes.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog	ELC Community Classes SW, MA, FE, BO, OA and SA. Typically these wetland ecosites will be isolated (>120m) from woodland ecosites, however larger wetlands containing predominantly aquatic species (<i>e.g.</i> Bull Frog) may be adjacent to woodlands.	- Wetlands>500m² (about 25m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNRF mapping and could be important amphibian breeding habitats. - Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators. - Bullfrogs require permanent water bodies with abundant emergent vegetation. <u>Information Sources</u> - Ontario Herpetofaunal Summary Atlas (or other similar atlases) - Canadian Wildlife Service Amphibian Road Surveys and Backyard Amphibian Call Count. - OMNRF Districts and wetland evaluations - Reports and other information available from Conservation Authorities	Studies confirm: - 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. - The ELC ecosite wetland area and the shoreline are the SWH. - A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the wetlands. - If a SWH is determined for Amphibian Breeding Habitat (Wetlands) then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. - SWHMiST Index #15 provides development effects and mitigation measures.	Wetland inclusions within areas of fallow farmland do not provide persistent surface water and hence do not function as significant breeding habitat for wetland amphibians particularly those requiring permanent water (<i>i.e.</i> , Bullfrog, Green Frog, Eastern Newt, <i>etc.</i>) – Not Applicable.
Woodland Area-Sensitive Bird Breeding Habitat Rationale: Large, natural blocks of mature woodland habitat within the settled areas of Southern Ontario are important habitats for area sensitive interior forest song birds.	Yellow-bellied Sapsucker Red-breasted Nuthatch Veery Blue-headed Vireo Northern Parula Black-throated Green Warbler Blackburnian Warbler Black-throated Blue Warbler Ovenbird Scarlet Tanager Winter Wren Special Concern: Cerulean Warbler Canada Warbler	All Ecosites associated with these ELC Community Series; 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. <u>Information Sources</u> - Local bird clubs. - Canadian Wildlife Service (CWS) for the location of forest bird monitoring. - Bird Studies Canada conducted a 3-year study of 287 woodlands to determine the effects of forest fragmentation on forest birds and to determine what forests were of greatest value to interior species. - Reports and other information available from Conservation Authorities.	Studies confirm: - Presence of nesting or breeding pairs of 3 or more of the listed wildlife species. - Note: any site with breeding Cerulean Warblers or Canada Warblers is to be considered SWH. - Conduct field investigations in spring and early summer when birds are singing and defending their territories. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #34 provides development effects and mitigation measures.	Woodlands of the subject lands measure ~2.8ha, well below the > 30ha threshold and contain no interior habitat. Further, only one of listed species was detected during breeding bird surveys (Yellow-bellied Sapsucker) and no Cerulean or Canada Warblers detected – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

1.3 Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Marsh Breeding Bird Habitat Rationale: Wetlands for these bird species are typically productive and fairly rare in Southern Ontario landscapes.	American Bittern Virginia Rail Sora Common Moorhen American Coot Pied-billed Grebe Marsh Wren Sedge Wren Common Loon Sandhill Crane Green Heron Trumpeter Swan Special Concern: Black Tern Yellow Rail	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SAS1 SAM1 SAF1 FEO1 BOO1 For Green Heron: All SW, MA and CUM1 sites.	- Nesting occurs in wetlands. - 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. Less frequently, it may be found in upland shrubs or forest a considerable distance from water. <u>Information Sources</u> - OMNRF District and wetland evaluations. - Field Naturalist clubs - Natural Heritage Information Center (NHIC) Records. - Reports and other information available from Conservation Authorities. - Ontario Breeding Bird Atlas	Studies confirm: - Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or 1 pair of Sandhill Cranes; or breeding by any combination of 5 or more of the listed species. - Note: 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. - Breeding surveys should be done in May/June when these species are actively nesting in wetland habitats. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #35 provides development effects and mitigation measures.	No wetlands of value to marsh nesting birds on subject lands and none of listed species or special concern species observed during breeding bird surveys – Not Applicable.
Open Country Bird Breeding Habitat Sources Defining Criteria Rationale: This wildlife habitat is declining throughout Ontario and North America. Species such as the Upland Sandpiper have declined significantly the past 40 years based on CWS (2004) trend records.	Upland Sandpiper Grasshopper Sparrow Vesper Sparrow Northern Harrier Savannah Sparrow Special Concern Short-eared Owl	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). - Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older. - The Indicator bird species are area sensitive requiring larger grassland areas than the common grassland species. <u>Information Sources</u> - Agricultural land classification maps, Ministry of Agriculture. - Local bird clubs. - Ontario Breeding Bird Atlas - Reports and other information available from Conservation Authorities.	Field Studies confirm: - 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. - The area of SWH is the contiguous ELC ecosite field areas. - Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #32 provides development effects and mitigation measures.	No large grasslands (i.e., >30ha) on the subject lands and only one of listed species observed (Savannah Sparrow) during breeding bird surveys and no Short-eared Owl observed – Not Applicable.
Shrub/Early Successional Bird Breeding Habitat Rationale: This wildlife habitat is declining throughout Ontario and North America. The Brown Thrasher has declined significantly over the past 40 years based on CWS (2004)	Indicator Spp: Brown Thrasher Clay-coloured Sparrow Common Spp. Field Sparrow Black-billed Cuckoo Eastern Towhee Willow Flycatcher Special Concern: Yellow-breasted Chat	CUT1 CUT2 CUS1 CUS2 CUW1 CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species	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). - Shrub thicket habitats (>10 ha) are most likely to support and sustain a diversity of these species. - Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands. <u>Information Sources</u> - Agricultural land classification maps, Ministry of Agriculture. - Local bird clubs - Ontario Breeding Bird Atlas - Reports and other information available from Conservation	Field Studies confirm: - Presence of nesting or breeding of 1 of the indicator species and at least 2 of the common species. - A habitat with breeding Yellow-breasted Chat or Golden-winged Warbler is to be considered as Significant Wildlife Habitat. - The area of the SWH is the contiguous ELC ecosite field/thicket area. - Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - SWHMiST Index #33 provides development effects and	Shrub/early successional fallow field areas on-site measure well below the 10ha threshold. No indicator and only one common species (Field Sparrow) were observed during breeding bird surveys and none of the special concern species detected – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
trend records.	Golden-winged Warbler		Authorities.	mitigation measures.	
Terrestrial Crayfish Rationale: Terrestrial Crayfish are only found within SW Ontario in Canada and their habitats are very rare.	Chimney or Digger Crayfish; <i>(Fallicambarus fodiens)</i> Devil Crayfish or Meadow Crayfish; <i>(Cambarus Diogenes)</i>	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) should be surveyed for terrestrial crayfish. - Constructs burrows in marshes, mudflats, meadows, the ground can’t be too moist. Can often be found far from water. - Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually the soil is not too moist so that the tunnel is well formed. <u>Information Sources</u> - Information sources from “Conservation Status of Freshwater Crayfishes” by Dr. Premek Hamr for the WWF and CNF March 1998.	Studies Confirm: - 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 ecoelement area of meadow marsh or swamp within the larger ecosite area is the SWH. - Surveys should be done April to August in temporary or permanent water. Note the presence of burrows or chimneys are often the only indicator of presence, observance or collection of individuals is very difficult. - SWHMiST Index #36 provides development effects and mitigation measures.	No crayfish chimneys observed on the subject lands – Not Applicable.
Special Concern and Rare Wildlife Species Rationale: These species are quite rare or have experienced significant population declines in Ontario.	All Special Concern and Provincially Rare (S1-S3, SH) plant and animal species. Lists of these species are tracked by the Natural Heritage Information Centre.	All plant and animal element occurrences (EO) within a 1 or 10km grid. Older element occurrences were recorded prior to GPS being available, therefore location information may lack accuracy.	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 <u>Information Sources</u> - Natural Heritage Information Centre (NHIC) will have Special Concern and Provincially Rare (S1-S3, SH) species lists with element occurrences data. - NHIC Website “Get Information” : http://nhic.mnr.gov.on.ca - Ontario Breeding Bird Atlas - Expert advice should be sought as many of the rare spp. have little information available about their requirements.	Studies Confirm: - Assessment/inventory of the site for the identified special concern or rare species needs to be completed during the time of year when the species is present or easily identifiable. - The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH, this must be delineated through detailed field studies. The habitat needs be easily mapped and cover an important life stage component for a species <i>e.g.</i> specific nesting habitat or foraging habitat. - SWHMiST Index #37 provides development effects and mitigation measures.	A few adult Monarch observed on the subject lands on October 4, 2023 outside of the breeding season with no observations of adults or caterpillars during site visits in June 2023. As above, subject lands are not within a Migratory Butterfly Stopover Area. Since there was no evidence of use of the subject lands as breeding habitat and the lands are not significant with respect to migratory stopover, the subject lands do function as significant habitat in the context of Monarch. No Provincially Rare plants or animals observed on or adjacent to the subject lands – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

1.4 Animal Movement Corridors

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite	Habitat Criteria and Information Sources	Defining Criteria	
Amphibian Movement Corridors Rationale: Movement corridors for amphibians moving from their terrestrial habitat to breeding habitat can be extremely important for local populations.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog	Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1	Movement corridors between breeding habitat and summer habitat. - Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH from Table 1.2.2 (Amphibian Breeding Habitat –Wetland) of this Schedule. <u>Information Sources</u> - MNRF District Office - Natural Heritage Information Center (NHIC) - Reports and other information available from Conservation Authorities. - Field Naturalist Clubs	- Field Studies must be conducted at the time of year when species are expected to be migrating or entering breeding sites. - Corridors should consist of native vegetation, with several layers of vegetation. - Corridors unbroken by roads, waterways or bodies, and undeveloped areas are most significant. - 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. - Shorter corridors are more significant than longer corridors, however amphibians must be able to get to and from their summer and breeding habitat. - SWHMiST Index #40 provides development effects and mitigation measures.	Wetlands and ponds on site do not function as Amphibian Breeding Habitat – Wetland (see above) - Not Applicable.
Deer Movement Corridors Rationale: Corridors important for all species to be able to access seasonally important life-cycle habitats or to access new habitat for dispersing individuals by minimizing their vulnerability while travelling.	White-tailed Deer	Corridors may be found in all forested ecosites. A Project Proposal in Stratum II Deer Wintering Area has potential to contain corridors.	Movement corridor must be determined when Deer Wintering Habitat is confirmed as SWH from Table 1.1 of this schedule. - A deer wintering habitat identified by the OMNRF as SWH in Table 1.1 of this Schedule will have corridors that the deer use during fall migration and spring dispersion. - Corridors typically follow riparian areas, woodlots, areas of physical geography (ravines, or ridges). <u>Information Sources</u> - MNRF District Office - Natural Heritage Information Center (NHIC). - Reports and other information available from Conservation Authorities. - Field Naturalist Clubs	- Studies must be conducted at the time of year when deer are migrating or moving to and from winter concentration areas. - 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. - Shorter corridors are more significant than longer corridors. - SWHMiST Index #39 provides development effects and mitigation measures.	No deer yarding habitat associated with the subject or adjacent lands – Not Applicable.

Table 4: Significant Wildlife Habitat Assessment, Linksview EIS Update, Town of Collingwood

1.5 Exceptions for EcoRegion 6E

EcoDistrict	Wildlife Habitat and Species	Candidate			Confirmed SWH	Assessment
		Ecosites	Habitat Description	Habitat Criteria and Information	Defining Criteria	
6E-14 <u>Rationale:</u> The Bruce Peninsula has an isolated and distinct population of black bears. Maintenance of large woodland tracts with mast-producing tree species is important for bears.	Mast Producing Areas Black Bear	All Forested habitat represented by ELC Community Series: FOM FOD	- Black bears require forested habitat that provides cover, winter hibernation sites, and mast-producing tree species. - Forested habitats need to be large enough to provide cover and protection for black bears.	Woodland ecosites >30ha with mast-producing tree species, either soft (cherry) or hard (oak and beech). <u>Information Sources</u> Important forest habitat for black bears may be identified by OMNRF.	All woodlands > 30ha 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 SWHMiST Index #3 provides development effects and mitigation measures.	Subject lands not on Bruce Peninsula – Not Applicable.
6E- 17 <u>Rationale:</u> Sharp-tailed grouse only occur on Manitoulin Island in Eco-region 6E, Leks are an important habitat to maintain their population	Lek Sharp-tailed Grouse	CUM CUS CUT	- The lek or dancing ground consists of bare, grassy or sparse shrubland. There is often a hill or rise in topography. - Leks are typically a grassy field/meadow >15ha with adjacent shrublands and >30ha with adjacent deciduous woodland. Conifer trees within 500m are not tolerated.	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) - Leks will be used annually if not destroyed by cultivation or invasion by woody plants or tree planting <u>Information Sources</u> - OMNRF district office - Bird watching clubs - Local landowners - Ontario Breeding Bird Atlas	Studies confirming lek habitat are to be completed from late March to June. - 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 - SWHMiST Index #32 provides development effects and mitigation measures	Subject lands not on Manitoulin Island – Not Applicable.



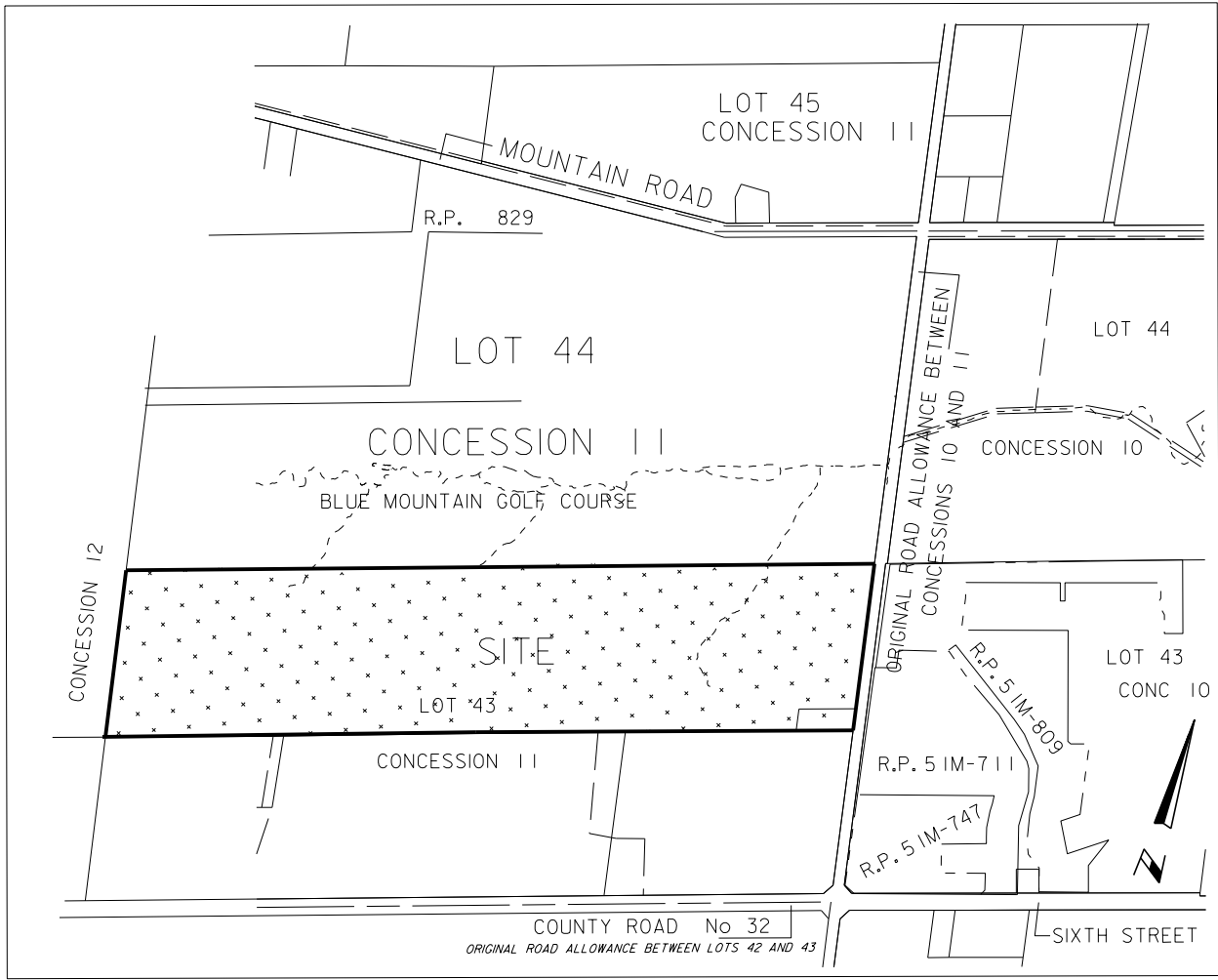
APPENDICES

- Appendix A: Approved Draft Plan of Subdivision**
 - Appendix B: Redline Draft Plan of Subdivision**
 - Appendix C: Municipal Correspondence and Mapping**
 - Appendix D: Provincial Mapping**
-
-



APPENDIX A

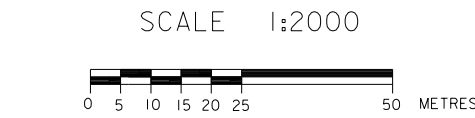
Approved Draft Plan of Subdivision



KEY PLAN
SCALE 1:15,000

DRAFT PLAN OF SUBDIVISION OF
THE NORTH HALF OF LOT 43

CONCESSION 11
(GEOGRAPHIC TOWNSHIP OF NOTTAWASAGA)
TOWN OF COLLINGWOOD
COUNTY OF SIMCOE



ZUBEK, EMO, PATTEN & THOMSEN LTD.

2016

METRIC
DISTANCES ON THIS PLAN ARE IN METRES AND CAN
BE CONVERTED TO FEET BY DIVIDING BY 0.3048

ADDITIONAL INFORMATION REQUIRED
UNDER SECTION 51(17) OF THE
PLANNING ACT

- A. AS SHOWN
- B. AS SHOWN
- C. AS SHOWN
- D. AS SHOWN
- E. AS SHOWN
- F. AS SHOWN
- G. AS SHOWN
- H. MUNICIPAL WATER SUPPLY
- I. CLAY LOAM
- J. AS SHOWN
- K. MUNICIPAL SANITARY SEWERS
- L. AS SHOWN

PROPOSED LAND USE AREA (ha)

PHASE 1		
LOTS		
1-39 incl. RESIDENTIAL	MAX 39 UNITS	2.205
BLOCKS		
40-41 RESIDENTIAL	8 UNITS	0.277
78 APARTMENTS	117 TO 190 UNITS	2.114
84, 85 WALKWAY/EMERGENCY ACCESS		0.252
91 SCHOOL OR 117-187 APARTMENT UNITS		2.074

PHASE 2		
BLOCKS		
42-77, 108 RESIDENTIAL	400 UNITS	17.196
101-102 RES./TEMP. TURNING CIRCLE		0.118
79, 105, 106 10.0 METRE DEDICATION		0.896
103, 104 10.0 M. DED./TEMP. TURNING CIRCLE		0.034
80, 81, PARK LAND		0.859
82 ENVIRONMENTAL PROTECTION "EP"		2.546
83 STORM WATER		2.347
92, 93 ROAD WIDENING		0.075
87-90, 107 WALKWAY		0.113
94 TO 100 INCL. 0.30 RESERVE		0.006
86 WALKWAY/EMERGENCY ACCESS		0.069

ROADS	
STREET A, B, C, D, E, F, G, H, I, J, K, L, M	9.484
TOTAL	40.660

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND
THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE
ACCURATELY SHOWN ON THIS PLAN.

JUNE 22, 2016
LYNN H. PATTEN
ONTARIO LAND SURVEYOR
COLLINGWOOD

OWNER'S CERTIFICATE

LINKSVIEW DEVELOPMENT CORPORATION HEREBY AUTHORIZES
THE SUBMISSION OF THIS DRAFT PLAN OF SUBDIVISION
TO THE TOWN OF COLLINGWOOD PLANNING DEPARTMENT
JUNE , 2016

PER LARRY DUNN

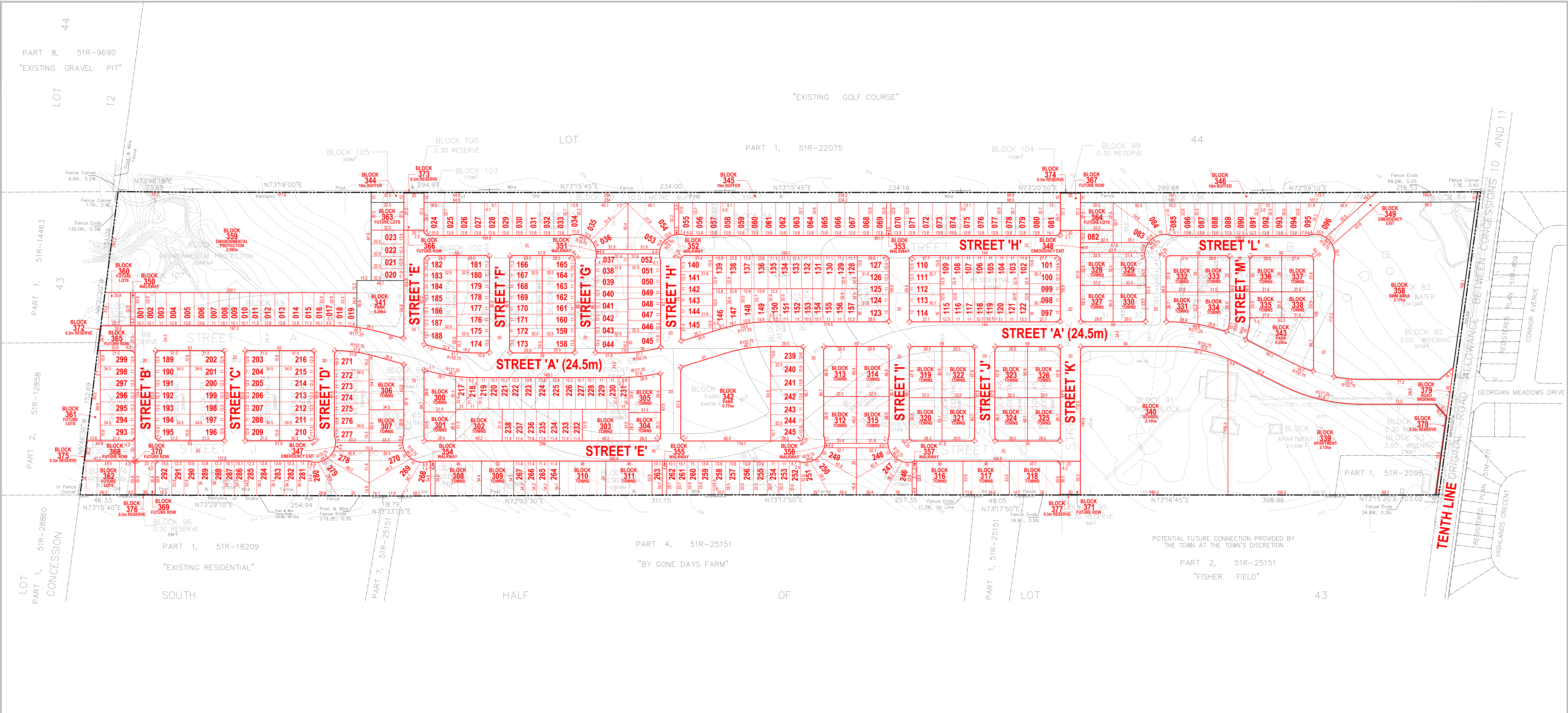
ZUBEK, EMO PATTEN & THOMSEN LIMITED	ONTARIO LAND SURVEYORS 200 MOUNTAIN ROAD, SUITE 4 COLLINGWOOD, ONTARIO L9Y 4V5 PHONE: (705) 445-4910 FAX: (705) 445-5866
JOB No. 72-253-3	SURVEY FOR: LINKSVIEW DEVELOPMENT CORPORATION

DDN FILE: G:\DDN\ 2016-DDN LINKSDP.DGN



APPENDIX B

Redline Draft Plan of Subdivision



LAND USE SUMMARY			
LAND USE	LOT / BLOCK #	UNITS	AREA
SINGLE DETACHED - 33ft / 10.1m LOTS	001, 002, 008-010, 016, 017, 118, 119, 153, 154, 220, 221, 227, 228, 261-263, 286, 287	20	0.66ha
	003, 007, 011, 015, 018-020, 037-039, 044, 045, 047-052, 062, 087-089, 101-110, 112-114, 116, 117, 120, 121, 123-125, 127-135, 140, 142-145, 151, 152, 155, 156, 158-164, 189, 190, 194-197, 201-204, 208-211, 215-219, 229-239, 243-254, 260, 264-275, 278-281, 292-294, 298, 299	151	6.49ha
SINGLE DETACHED - 36ft / 11m LOTS			
SINGLE DETACHED - 40ft / 12.2m LOTS	021, 022, 040-043, 046, 089-091, 100, 111, 115, 122, 126, 141, 150, 157, 185-188, 191-193, 198-200, 205-207, 212-214, 222, 226, 282, 285, 288, 291, 295-297	43	1.77ha
	004, 006, 012-014, 023-036, 053-081, 083-088, 092-096, 136-139, 146-149, 223-225, 240-242, 255-259, 276, 277, 283, 284, 289, 290	85	4.27ha
SINGLE DETACHED - 45ft / 13.7m LOTS			
TOWNHOUSE - 23ft / 7m UNITS	300-338	187	5.16ha
APARTMENT (MIN. 55 UPH / MAX. 90 UPH)	339	(MIN. 118) (MAX. 192)	2.13ha
SCHOOL	340		2.14ha
PARK	341-343		1.26ha
10m BUFFER	344-346		0.95ha
EMERGENCY EXIT	347-349		0.29ha
WALKWAY	350-357		0.14ha
STORMWATER MANAGEMENT AREA	358		2.17ha
ENVIRONMENTAL PROTECTION	359		2.56ha
FUTURE RESIDENTIAL LOTS	360-364	(10)	0.52ha
FUTURE RIGHT OF WAY	365-371		0.47ha
0.3m RESERVE	372-378		<0.01ha
ROAD WIDENING	379		0.09ha
RIGHT OF WAY			9.46ha
TOTALS		486 (MIN. 614) (MAX. 698)	40.66ha

PROPOSED LAND USE	AREA (ha)
PHASE 1 LOTS	
1-39 Incl. RESIDENTIAL MAX 39 UNITS	2.205
BLOCKS	
40-41 RESIDENTIAL 8 UNITS	0.277
78 APARTMENTS 117 TO 190 UNITS	2.114
84, 85 WALKWAY/EMERGENCY ACCESS	0.252
91 SCHOOL OR 117-187 APARTMENT UNITS	2.074
PHASE 2 BLOCKS	
42-77, 108 RESIDENTIAL 400 UNITS	17.196
101-102 RES./TEMP. TURNING CIRCLE	0.118
79, 105, 106 10.0 METRE DEDICATION	0.896
103, 104 10.0 M. DED./TEMP. TURNING CIRCLE	0.034
80, 81, PARK LAND	0.859
82 ENVIRONMENTAL PROTECTION "EP"	2.546
83 STORM WATER	2.347
92, 93 ROAD WIDENING	0.075
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94 TO 100 INCL. 0.30 RESERVE	0.006
86 WALKWAY/EMERGENCY ACCESS	0.069
ROADS	
STREET A, B, C, D, E, F, G, H, I, J, K, L, M	9.484
TOTAL	40.660

LEGAL DESCRIPTION

NORTH HALF OF LOT 43
CONCESSION 11
GEOGRAPHIC TOWNSHIP OF NOTTAWASAGA
TOWN OF COLLINGWOOD
COUNTY OF SIMCOE

KEY PLAN

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT R.S.O. 1990 C.P.13 AS AMENDED

A. AS SHOWN	F. AS SHOWN	K. MUNICIPAL SANITARY SEWERS
B. AS SHOWN	G. AS SHOWN	ALL SERVICES AS REQUIRED
C. AS SHOWN	H. MUNICIPAL WATER SUPPLY	(WATER, SANITARY, STORMWATER, HYDRO)
D. AS SHOWN	I. CLAY LOAM	L. AS SHOWN
E. AS SHOWN	J. AS SHOWN	

OWNER'S CERTIFICATE

I HEREBY AUTHORIZE MACNAUGHTON HERMSEN BRITTON CLARKSON PLANNING LIMITED TO SUBMIT THIS PLAN FOR APPROVAL.

DATE: _____

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE: _____

REVISION No.

DATE

ISSUED / REVISION

BY

LEGEND

- SUBDIVISION BOUNDARY
- ORIGINAL ROW LINE
- ORIGINAL BLOCK LINE
- ORIGINAL LOT LINE
- ORIGINAL UNIT LINE
- PARCEL FABRIC
- REVISED ROW LINE
- REVISED BLOCK LINE
- REVISED LOT LINE
- REVISED UNIT LINE
- REMOVED ROW LINE
- REMOVED BLOCK LINE
- REMOVED LOT LINE / UNIT LINE

PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE

MHBC PLANNING

113 COLLIER STREET
BARRIE, ON. L4M 1H2
P: 705 728 0045 F: 705 728 2010
WWW.MHBCPLAN.COM

STAMP

DATE MAR. 8, 2022

FILE No. 18138B

SCALE 1:1,800 (ARCH D)

DRAWN BY M.M.

CHECKED BY K.C.

OTHER

PROJECT

LINKSVIEW SUBDIVISION

WYVIEW GROUP
625 COCHRANE DRIVE, SUITE 802
MARKHAM, ON L3R 9R9
P:(905) 604-8077
WWW.WYVIEWGROUP.COM

FILE NAME REDLINE DRAFT PLAN OF SUBDIVISION

DWG No. 1 of 1

SCALE BAR

0 8 16 24 32 40 60 80 120 160m

MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

N:\Collingwood\780 Line 10 - Draft Plan Redesign-Linksview - 18138B\Drawings\Draft Plan - Redline\CAD\18138B - Draft Plan Redline - 2022-03-08.dwg



APPENDIX C

Municipal Correspondence and Mapping

Jim Broadfoot

From: Jim Broadfoot
Sent: July 13, 2023 4:15 PM
To: Erin Bannon (ebannon@nrsl.on.ca); rarcher@nrsl.on.ca
Cc: mbryan@collingwood.ca; James Newlands; Eric Zou (eric@wyviewgroup.com)
Subject: FW: Linksvlew - TOR for EIS Peer Review
Attachments: 13-301 Collingwood Scoped EIS 20141217.pdf

Erin Bannon, Ryan Archer
Natural Resource Solutions Inc. (NRSI)

Hello Erin, Ryan

As per the Town of Collingwood's direction we are contacting NRSI to establish a terms of reference for an update to a Scoped Environmental Impact Study (SEIS) that was completed in 2014 (copy of SEIS attached). We understand that development was approved for the lands based on the findings and impact assessment presented in the 2014 SEIS and that a "redline revision" is proposed to the approved development plan.

I completed a site-visit on June 9, 2023. That site visit revealed that the lands are substantively actively farmed (cash crops – corn and beans) with the woodland located in the northwest corner of the property remaining. The driving range and berms reflected on Figure 2 of the 2014 SEIS are no longer there.

Based on site conditions/land use we propose the following terms of reference for an update to the 2014 SEIS:

- Existing conditions update (revised land use and vegetation communities mapping);
- Species at Risk (SAR) update according to provincial guidelines (i.e., MECP's Client's Guide to Preliminary Screening for Species at Risk) and including re-assessment of the 4 Butternut assessed in 2014; and,
- Update to the impact assessment based on current conditions, findings of the SAR assessment, and proposed redline revisions to the plan.

Please do not hesitate to call to discuss.

Thank you.

J b'foot

Jim Broadfoot, Terrestrial Ecologist

Azimuth Environmental
642 Welham Road
Barrie, ON
L4N 9A1
(705) 623-1161 Mobile
(705) 721-8451 x 206

Providing services in hydrogeology, terrestrial and aquatic ecology, environmental engineering & arborist assessment

From: James Newlands [mailto:jnewlands@mhbcplan.com]
Sent: July-11-23 11:50 AM
To: Mark Bryan; Jim Broadfoot
Cc: ebannon@nrsl.on.ca; rarcher@nrsl.on.ca; Kory Chisholm
Subject: RE: Linksvlew - TOR for EIS Peer Review

Thanks very much, Mark.

Jim from Azimuth will contact NRSl (Erin and Ryan) directly.

JAMES NEWLANDS, HBComm, MSc, MCIP, RPP | Associate

MHBC Planning, Urban Design & Landscape Architecture

113 Collier Street | Barrie | ON | L4M 1H2 | T 705 728 0045 x 234 | C 705 238 0540 | F 705 728 2010
| jnewlands@mhbcplan.com

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From: Mark Bryan <mbryan@collingwood.ca>
Sent: July-11-23 8:52 AM
To: James Newlands <jnewlands@mhbcplan.com>; jim@azimuthenvironmental.com
Cc: ebannon@nrsl.on.ca; rarcher@nrsl.on.ca
Subject: RE: Linksvlew - TOR for EIS Peer Review

Good morning James,

Please see the contact information below for Natural Resource Solutions Inc. (the Town's primary peer review on natural heritage matters). I am copying Erin and Ryan on this email so they are aware of the Town's discussions with you on this matter.

Erin Bannon is our primary contact (full contact details below).
Please also copy Ryan Archer: rarcher@nrsl.on.ca



Erin Bannon B.E.S. Certified Arborist
Terrestrial and Wetland Biologist
Natural Resource Solutions Inc.
415 Phillip Street, Unit C
Waterloo, ON N2L 3X2
(p) 519-725-2227 Ext. 242 (f) 519-725-2575
(m) 519-998-6068

(w) www.nrsi.on.ca (e) ebannon@nrsi.on.ca

 [@nrsinews](https://twitter.com/nrsinews)  [Natural Resource Solutions Inc.](https://www.linkedin.com/company/natural-resource-solutions-inc/)
Over 20 years of environmental consulting excellence

Yours truly,

Mark Bryan, MCIP, RPP
Senior Planner

Town of Collingwood
P.O. Box 157
Collingwood, ON L9Y 3Z5
T: 705-445-1290 ext. 3242
C: 705-446-4221
F: 705-445-1463
www.collingwood.ca

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From: James Newlands <jnewlands@mhbcplan.com>

Sent: Wednesday, July 5, 2023 4:43 PM

To: Mark Bryan <mbryan@collingwood.ca>

Cc: Lindsay Ayers <layers@collingwood.ca>; Jim Broadfoot <Jim@Azimuthenvironmental.Com>; Kory Chisholm <kchisholm@mhbcplan.com>

Subject: RE: Linksview - TOR for EIS Peer Review

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Hi Mark,

We have received confirmation from our Client for the NRSI Terms of Reference ecological peer review. I have copied Jim Broadfoot from Azimuth on this email as he is the landowner's ecologist. If you could assist in putting him in contact with NRSI, that would be appreciated.

Thanks,

JAMES NEWLANDS, HBCComm, MSc, MCIP, RPP | Associate

MHBC Planning, Urban Design & Landscape Architecture

113 Collier Street | Barrie | ON | L4M 1H2 | T 705 728 0045 x 234 | C 705 238 0540 | F 705 728 2010
| jnewlands@mhbcplan.com

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From: Kory Chisholm <kchisholm@mhbcplan.com>

Sent: June-28-23 11:26 AM

To: Mark Bryan <mbryan@collingwood.ca>

Cc: James Newlands <jnewlands@mhbcplan.com>; Lindsay Ayers <layers@collingwood.ca>

Subject: RE: Linksview - TOR for EIS Peer Review

Thanks Mark for this update, we will seek confirmation from our Client and aim to get back to you quickly.

Kind regards,

KORY CHISHOLM, BES, M.Sc, MCIP, RPP | Partner

MHBC Planning, Urban Design & Landscape Architecture

113 Collier Street | Barrie | ON | L4M 1H2 | T 705 728 0045 x 224 | F 705 728 2010 | C 249 359 0222
| kchisholm@mhbcplan.com

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From: Mark Bryan <mbryan@collingwood.ca>

Sent: June 28, 2023 9:27 AM

To: Kory Chisholm <kchisholm@mhbcplan.com>

Cc: James Newlands <jnewlands@mhbcplan.com>; Lindsay Ayers <layers@collingwood.ca>

Subject: RE: Linksview - TOR for EIS Peer Review

Good morning Kory,

Thank you for your inquiry regarding updating the 2014 Environmental Study for the Linksview property. Due to recent legislative changes to the Conservation Authorities Act affecting their jurisdiction over natural heritage matters, the Town is now responsible for natural heritage reviews. We have retained the peer review services of

Natural Resource Solutions Inc. (NRSI). Review of terms of reference is something we would have NRSI undertake. Town staff have obtained a standard quote for Terms of Reference ecological peer review at a cost of \$900 + HST, which could be facilitated quickly to accommodate any comments in the 2023 field season work plan. Please provide confirmation of acceptability at your earliest convenience and we will facilitate discussion with NRSI.

Yours truly,

Mark Bryan, MCIP, RPP
Senior Planner

Town of Collingwood
P.O. Box 157
Collingwood, ON L9Y 3Z5
T: 705-445-1290 ext. 3242
C: 705-446-4221
F: 705-445-1463
www.collingwood.ca

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From: Kory Chisholm <kchisholm@mhbcpplan.com>
Sent: Wednesday, June 14, 2023 7:50 AM
To: Mark Bryan <mbryan@collingwood.ca>
Cc: James Newlands <jnewlands@mhbcpplan.com>
Subject: RE: Linksview - TOR for EIS Peer Review

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Morning Mark,

As a follow up our Client has retained Azimuth to do an update to their previous 2014 environmental study and Azimuth has proposed the following scope, it would be appreciated if the Town can confirm the following terms of reference for their updated work. Alternatively if there is anyone that Azimuth can reach out to directly perhaps the Town's peer review consultant just let us know.

Proposed scope for update to 2014 EIS:

- Existing conditions update;
- Species at Risk (SAR) update; and,
- Update to the impact assessment based on current conditions, findings of the SAR assessment, and proposed redline revisions to the plan.

Thanks for your help,

KORY CHISHOLM, BES, M.Sc, MCIP, RPP | Partner

MHBC Planning, Urban Design & Landscape Architecture

113 Collier Street | Barrie | ON | L4M 1H2 | T 705 728 0045 x 224 | F 705 728 2010 | C 249 359 0222
| kchisholm@mhbcplan.com

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From: Kory Chisholm

Sent: June 5, 2023 6:37 PM

To: Mark Bryan <mbryan@collingwood.ca>

Cc: James Newlands <jnewlands@mhbcplan.com>

Subject: Linksview - TOR for EIS Peer Review

Hi Mark,

I hope you are doing well.

Our Client is working on required updates to the previous EIS.

With the recent changes and the NVCA no longer reviewing the natural heritage matters are you able to confirm if there is a standard terms of reference the Town's peer review consultant is able to provide?

Thanks for your help.

Kind regards,

KORY CHISHOLM, BES, M.Sc, MCIP, RPP | Partner

MHBC Planning, Urban Design & Landscape Architecture

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July 21, 2023

3229

Town of Collingwood
11476 Highway 26
Collingwood, Ontario

Attention: Mark Bryan
Senior Planner, Town of Collingwood

**RE: Linksview, Collingwood
Peer Review of Proposed Terms of Reference for Update to Scoped
Environmental Impact Statement**

As requested, Natural Resource Solutions Inc. (NRSI) has completed a peer review of the Terms of Reference (ToR) prepared by Azimuth Environmental (Azimuth). The ToR was prepared for an update to the Scoped Environmental Impact Statement (EIS) in support of Landex Capital Corporation's (proponent) proposed residential subdivision development. The subject property is located at Part of Lot 43, Concession 11, Collingwood, Ontario. Our comments are set out below.

Background

The subject property is located south of Georgian Bay and Mountain Road, and north of Sixth Street, in Collingwood, Ontario. The subject property consists of agricultural lands, and a wooded area, and portions of the subject property were previously actively used for recreational activities. A ToR was submitted via email to the Town of Collingwood on July 13, 2023 by Jim Broadfoot on behalf of Azimuth.

Reviewed Materials

In order to complete this review assignment, NRSI has assessed the following materials:

- Linksview - ToR for EIS Peer Review, email (July 13, 2023);
- Environmental Impact Study for Part of Lot 43, Concession 11, Town of Collingwood, County of Simcoe (December 2014);
- Natural Heritage Information Centre (NHIC) database (2023);
- "Make a Map: Natural Heritage Areas", Ministry of Northern Development, Mines, Natural Resources and Forestry (2023); and
- Official Plan Town of Collingwood (2019).

Comments and Recommendations on Reviewed Materials

Through our review of the ToR, the following comments have been developed:

- The ToR states that a site visit was completed by Jim Broadfoot of Azimuth on June 9, 2023, which revealed that the lands are substantively actively farmed, that the woodland in the northwest corner of the property remains, and that the driving range and berms are no longer present.
- The ToR proposes updates to the documentation of existing conditions, including revised land use and vegetation communities mapping. NRSI agrees with this approach.
- The ToR proposes updated consideration of Species at Risk (SAR) according to provincial guidelines, including the Ministry of Environment, Conservation, and Parks' (MECP) Client's Guide to Preliminary Screening for Species at Risk. NRSI recommends that all relevant background sources including, but not limited to, the Ontario Reptile and Amphibian Atlas (Ontario Nature 2019), Ontario Mammal Atlas (Dobbyn 1994), Ontario Butterfly Atlas (Macnaughton et al. 2023), and Ontario Odonate Atlas (NHIC 2023) be consulted to inform the field program and habitat evaluation. These references should be consulted to identify potential rare species, Species at Risk (SAR), and/or Species of Conservation Concern (SCC) that have the potential to occur on or adjacent to the subject lands.
- Should the updated consideration result in the identification of potential bat habitat, it is recommended that leaf on/off bat habitat assessment occur following the methodologies outlined within:
 - Ministry of Environment, Conservation and Parks (MECP). 2022. Maternity Roost Surveys (Forests/Woodlands). 3pp.
 - Ministry of Environment, Conservation and Parks (MECP). 2022. Species at Risk Bats Survey Note 2022. 3pp.
- Upon review of the EIS and ToR, NRSI notes that no specific bird surveys were conducted, but EWPW was incidentally recorded during the single field visit conducted in 2014. If habitat for this species is deemed present as a result of the screening, NRSI recommends that surveys to evaluate potential presence of this species be considered if the proposed development has the potential to impact this species or its habitat.
- NRSI recommends that the extent of the proposed development be included in future ToRs if that information is available, to inform consideration of potential impacts to habitats/retention of features, as it relates to the scope of recommended surveys.
- The ToR states that the 4 Butternut assessed in 2014 will be re-assessed. NRSI recommends that an area search for new trees/saplings be conducted in proximity to these trees due to the time since the previous assessment. There is potential for new trees to have grown within the 9 years since the previous survey.
- The ToR states that updates to the impact assessment will be prepared based on current conditions, findings of the SAR assessment, and proposed redline revisions to the plan.
- Through review of a ToR, NRSI aims to provide acceptance/approval of the background review/screening, survey types to detect target species, survey methods, and often even number and/or location of preliminary monitoring stations to provide the confirmation or confidence that there wouldn't be a need for further surveys identified after completion of the field season and submission of the updated Scoped EIS. We cannot comment on whether the suite of surveys to be conducted are appropriate to detect target species

without a background review identifying those species, nor information on the survey protocol. As a result, a detailed review of methods will be provided at the EIS stage.

- For these reasons, we suggest that this level of information be provided in future ToRs to provide Azimuth and their clients added confidence that certain items would be covered off prior to the end of the field season and additional comments would not need to be provided once the project proceeds to the EIS report stage.

Summary of Review:

- Of the limited information available for review within Azimuth's ToR email, everything presented is acceptable. NRSI notes that since details on the methods are not included; the scope of our review is similarly limited at this time.

Please do not hesitate to contact us if you require further clarification on these matters.

Sincerely,



Erin Bannon, B.E.S.
Terrestrial and Wetland Biologist
Natural Resource Solutions Inc.

Nottawasaga Valley Conservation Authority



Toolbar



Quick Tools

Measurement Tools

Printing & Sharing T...

NVCA_Public



Regulated Area

NVCA_Staff_1_2_1



Jurisdiction Boundary



Municipalities



NVCA Properties

Major Roads



Major Highway



Highway



Major Road





Official Plan of the Town of Collingwood

SCHEDULE 'A' - Land Use Plan

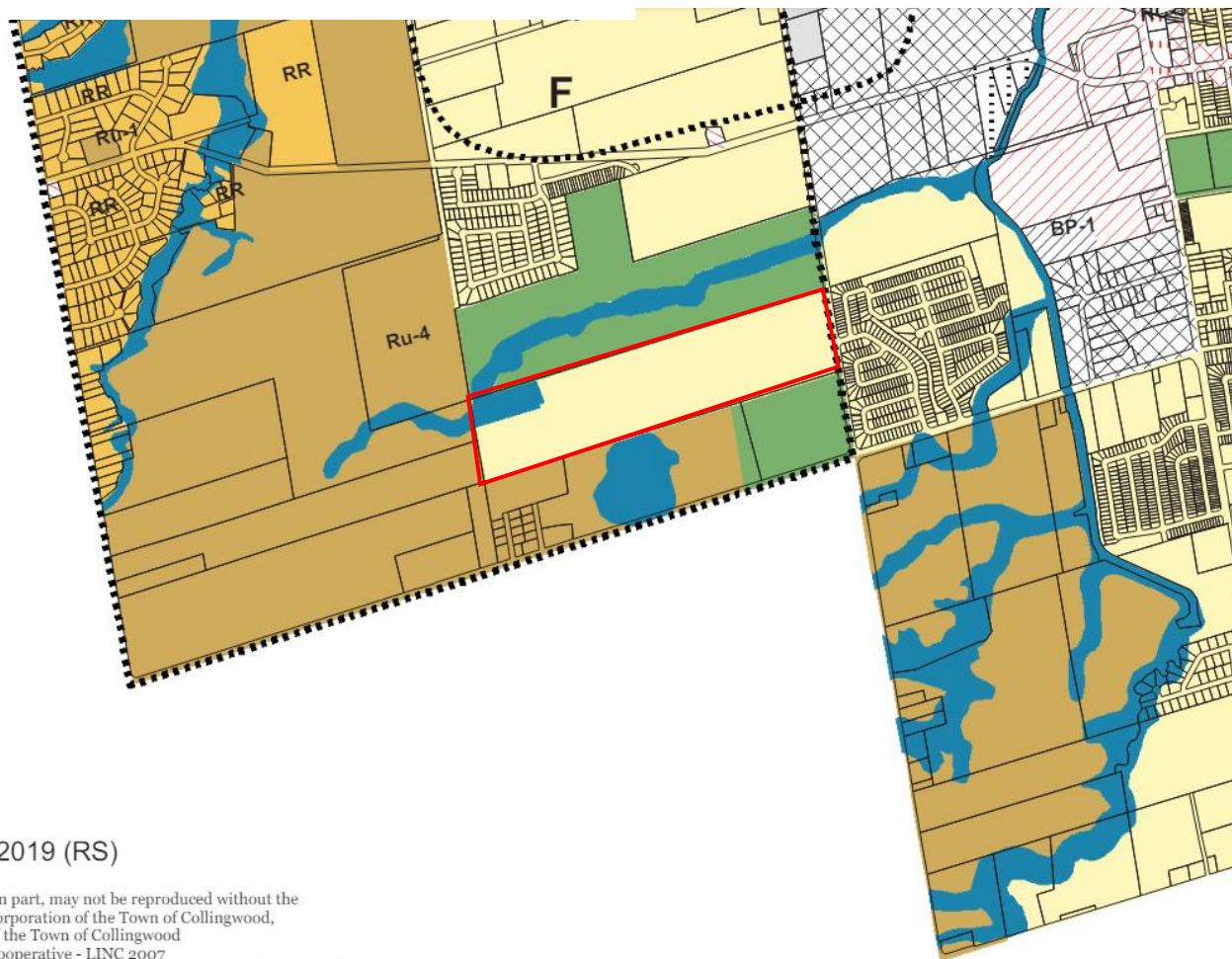
Depicting OMB Appeals [See Appellant Chart/Appeal Disposition]
and Non-Decisions [See Forward]



Legend

- Inactive Private Landfill
- Industrial Fringe
- Pretty River Flood Fringe
- Secondary Plan Boundary
- Waste Disposal Assessment Areas
- Business Park
- Downtown Commercial Core
- Environment Protection
- Highway Commercial
- Industrial Park
- Light Industrial
- Mixed Use Commercial
- Industrial
- Recreation
- Regional Commercial District
- Residential
- Resort Commercial
- Restrictive Commercial
- Rural
- Rural Residential
- Shipyards
- Special Policy Area- Health
- Well Head
- Residential-Mixed Use

1:30,000



Printed : January 2019 (RS)

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Official Plan of the Town of Collingwood

SCHEDULE 'B' - Environmental Protection-

Natural Heritage Resource Areas



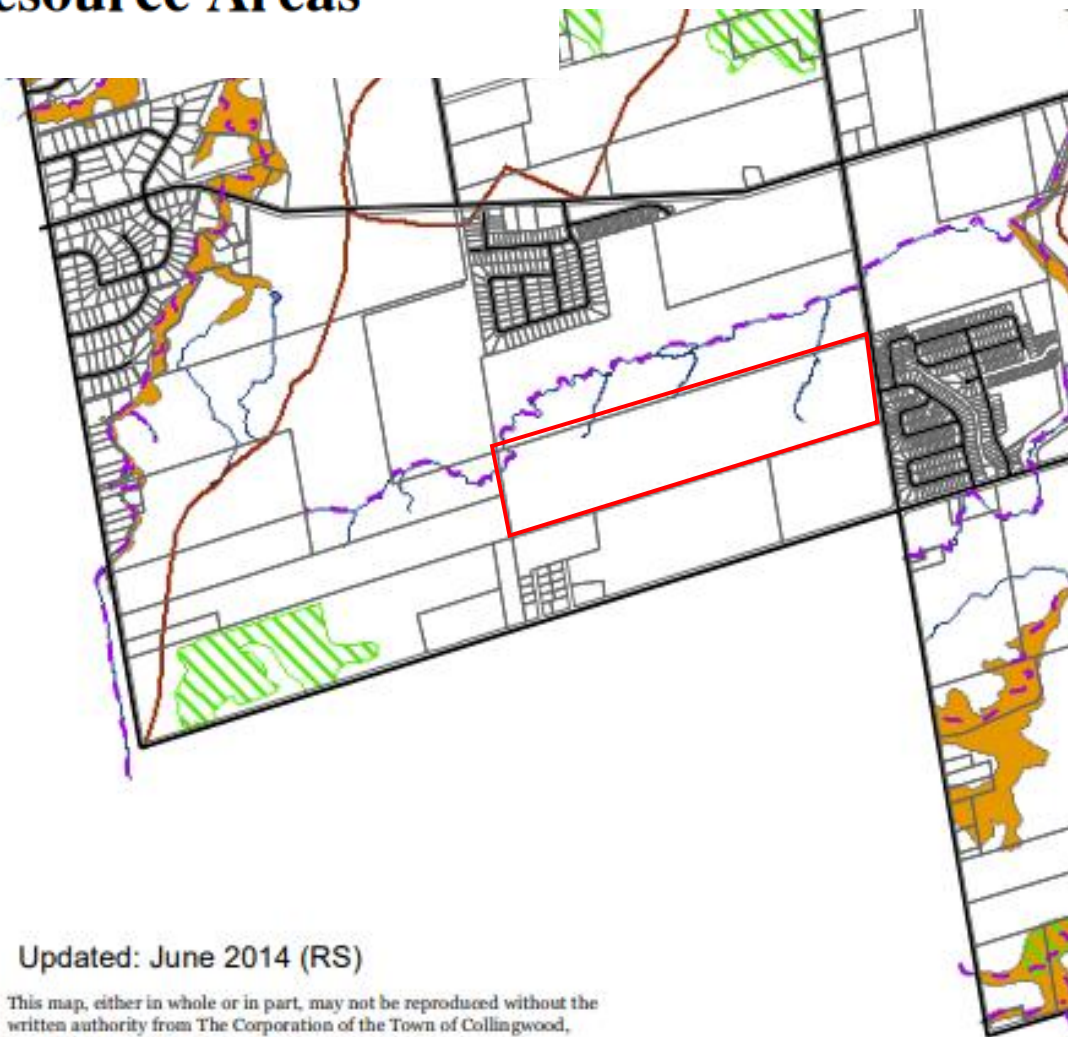
Legend

- - - Fish

SCHEDULE B

NATURAL_FE

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



Updated: June 2014 (RS)



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APPENDIX D

Provincial Mapping

Appendix D. Provincial Mapping. Approximate subject lands boundary in red polygon

