SCOPED ENVIRONMENTAL IMPACT STATEMENT AND TREE PRESERVATION PLAN

400 Lanark Street, Carleton Place, Ontario

Egis Project No.: CCO-22-0957

Prepared for:

Wintergreen Ridge Ltd.

Prepared by:

Egis
115 Walgreen Road, R.R. 3
Carp, Ontario
K0A 1L0

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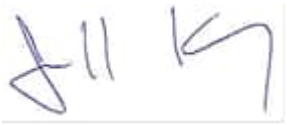
UPDATED FINAL

August 22, 2024

Prepared by:

Danica Rice
Junior Biologist
Egis

Reviewed by:



Jeff King
Senior Biologist
Egis

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1.0 PROPERTY INFORMATION AND INTRODUCTION

The subject property for this Environmental Impact Statement (EIS) is an approximately 7.40 acre parcel of land located at 400 Lanark Street, Carleton Place, Ontario, directly off of Townline Road East within the jurisdiction of the Ministry of Natural Resources (MNR) - Kemptville District, the Ministry of Environment, Conservation and Park's (MECP) – Ottawa District, and the Mississippi Valley Conservation Authority (MVCA).

The subject property consists of habitat that is disturbed in nature as it is a decommissioned Christmas Tree farm. The existing landscape on the property consists of sparse meadow and of stands of young trees both coniferous and deciduous. This EIS report assesses the potential impacts that the proposed project works may have upon the existing natural heritage features and their function's with specific focus on species at risk (SAR) and their habitat as the other functions are limited within the property.

Egis (formerly Mcintosh Perry Consulting Engineers Ltd.) was retained by Wintergreen Ridge Ltd. to carry out an EIS to assess the existing natural heritage features. This EIS summarizes the findings of the surveys, outlines potential impacts from the proposed development, and provides recommendations to mitigate anticipated impacts on natural heritage features. The information contained in this report represents a single survey undertaken on June 29, 2023, and does not represent year-round data.

This scoped EIS report is a requirement of the Town of Carleton Place in order to meet development approval. It has been prepared in accordance with the Official Plan for the Lanark County (2012) and the Town of Carleton Place Official Plan (2013). This EIS includes an assessment of the identified and potential environmental constraints and the potential for SAR.

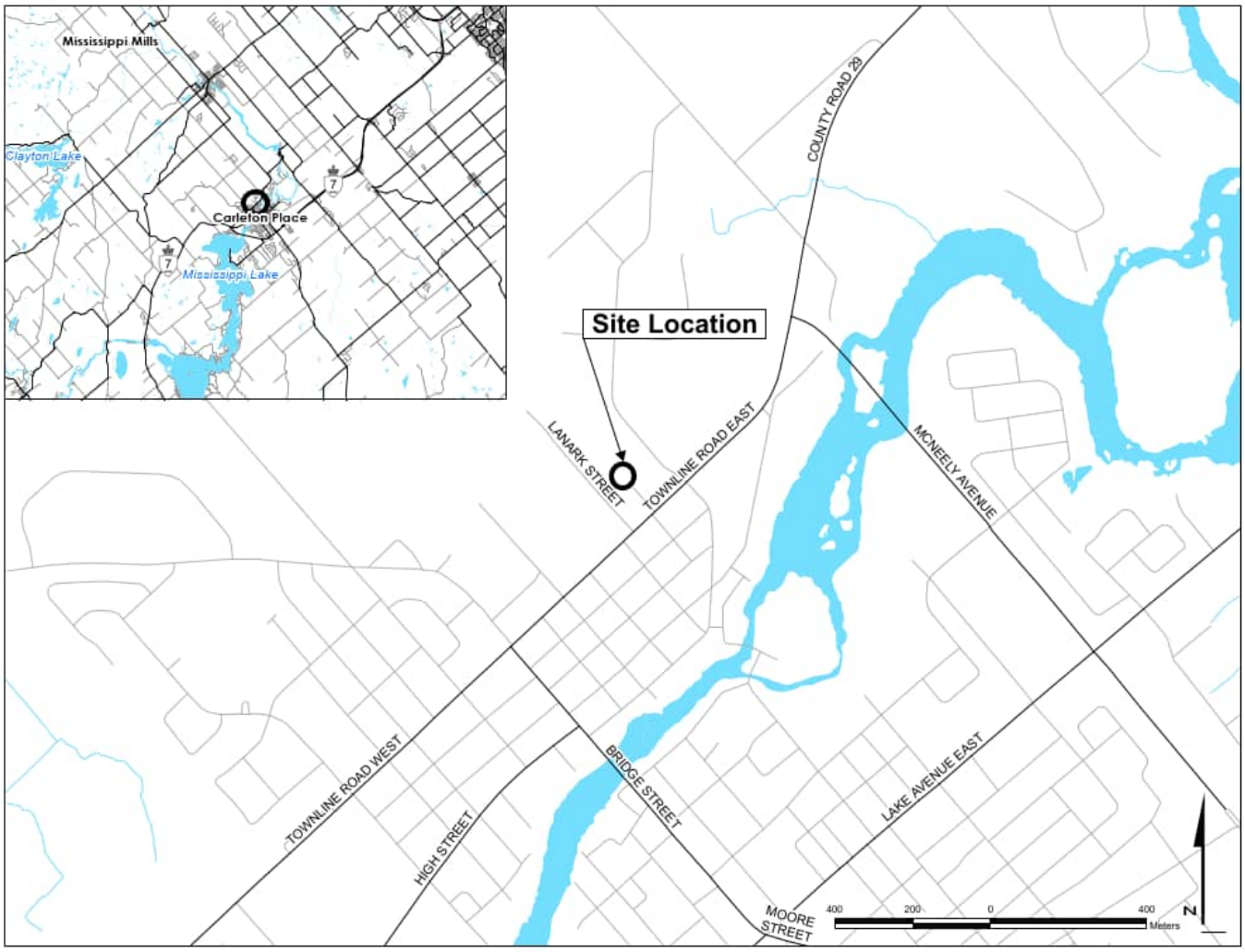


Figure 1: Study Area Key Map

2.0 METHODOLOGY

To acquire information on habitat present within and adjacent to the area of the proposed development, field investigations were carried out June 29, 2023, by L. Bennett of Egis (**Table 1**). The field investigations were carried out for the entire property. The subject property is primarily covered by stands of young white spruce (*Picea glauca*) and saplings of other species such as black walnut (*Juglans nigra*) and trembling Aspen (*Populus tremuloides*) and disturbed/meadow habitat. The property surveyed will be hereafter referred to in this report as the "study area." The field investigation was conducted to provide an inventory and assessment of the natural heritage features of the study area. The field investigation included the identification (where applicable) of the following features within the study area:

- Existing vegetation communities;
- Significant woody vegetation;
- Areas of critical or significant habitat (i.e., Significant Valleylands, Significant Woodlands, Significant Wildlife Habitat, Provincially Significant Wetland [PSW's], etc.);
- Areas of groundwater recharge and discharge, drainage patterns, watercourses, wetland habitat, other areas of surface water;
- SAR and their habitat, and
- Resident or migratory birds and other wildlife species.

Table 1 outlines activities carried out within the study area during the field investigations.

Table 1: Summary of Field Investigation Activities

Date	Personnel Involved	Time of Survey	Weather Conditions	Purpose of Visit
June 29, 2023	L. Bennett	0900-1300	20°C, mostly overcast, wind 20 km/h	Habitat assessment.

The vegetation communities observed within the study area were assessed using the Ecological Land Classification (ELC) protocol (Lee et al., 1998) if possible. During the field investigations, observations of wildlife species were made through sight, sound, and physical evidence.

Photographs were taken during the field investigations depicting vegetation communities and natural heritage features observed within the study area. This photographic record can be found in **Appendix A** of this report.

Background information on wildlife and plant species, and other significant natural heritage features known to occur within or adjacent to the study area was obtained from the following sources:

- The Natural Heritage Information Centre (NHIC) database accessed via the MNR's Make a Map: Natural Heritage Areas. This search tool allows areas to be searched at up to 1 km^2 grid resolution and provides reports concerning rare species tracked by the NHIC. Information for each 1 km^2 square within the proposed alignment options was reviewed for occurrences of rare species tracked by NHIC (MNR, 2023a);

- The MNR's Geospatial Ontario (GO) Metadata Management Tool contains information (e.g., location of PSWs, SAR element occurrences, etc.) licensed under the Open Government License for Ontario (MNR, 2023b);
- Fish ON-Line sport fish and stocking resource (MNR, 2023c);
- Fisheries and Oceans Canada (DFO) Aquatic SAR Mapping (DFO, 2023);
- Data from the Ontario Breeding Bird Atlas Database (OBBA) was accessed from the data summaries page of the Atlas of the Breeding Birds of Ontario website. Information for each 10 km^2 grid square was reviewed for the proposed alignment options (Bird Studies Canada et al., 2006);
- Ontario Reptile and Amphibian Atlas (ORRA) was accessed for the data summaries. Information for each 10 km^2 grid square was reviewed for the proposed alignment options (Ontario Nature, 2023);
- Ontario Butterfly Atlas was accessed for data summaries. Information for each 10 km^2 grid square was reviewed for the proposed alignment options (Toronto Entomologists' Association, 2023);
- Habitat in the proposed alignment options was evaluated using aerial photography accessed through Google Earth aerials and StreetView mapping (Maxar Technologies, 2023);
- The Cornell Lab, online database of bird distribution and habitat was accessed for background screening of potential SAR (Cornell University, 2023); and
- Data from Ontario Geological Survey. (MNR, 2010d).

3.0 DESCRIPTION OF THE SITE AND THE NATURAL ENVIRONMENT

3.1 Existing Land Use

The subject property is currently a decommissioned Christmas Tree farm and consists primarily of white spruce stands (which due to neglect are beginning to see the addition of other species such as back walnut and trembling Aspen as well as other successional species) and disturbed mixed meadows. There are two barn structures located in the westernmost portion of the property as well.

3.2 Natural Heritage System Components

The following background information was collected from various sources (refer to Section 2.0 of this report):

- According to the MNR's Geospatial Ontario (GO) Metadata Management Tool, the following occurrences and natural features have been identified within the vicinity (2 km) of the study area:
    - Blandings Turtle Occurrence Square Associated with the Mississippi River;
    - Surface Water features (The Mississippi River);
    - Ok Kee Lee Wetland (non-PSW), and
    - Waterfowl Staging Area.

3.3 Landforms, Soils and Geology

According to the *Ontario Geological Survey*, the study area lies within a region of shallow till and rock ridges. It is part of the Smith Falls' Ecodistrict 6E-11, where the geology of the area is influenced by the underlying Paleozoic bedrock. The land was formed by glaciers that left behind morainal material (89% of deposition), a gently rolling topography, escarpments, and faults.

3.4 Surface Water and Fish Habitat

The property itself is reasonably flat with no areas of surface water or fish habitat noted within available background information or as a result of the field review. Due to its urban nature it is expected that overland flow drains into the municipal system.

3.4.1 Fish Habitat

No fish habitat exists within 30 m of the subject property/study area. The nearest fish bearing watercourse is the Mississippi River which has habitat for baitfish species and is known to contain habitat for species such a Northern Pike (*Esox lucius*), Largemouth Bass (*Micropterus salmoides*), and Yellow Perch (*Perca flavescens*). Due to the distance from the property fish habitat will not be further discussed.

3.4.2 Wetland

Ok Kee Lee Wetland is located along the Mississippi River and is greater than 30 m from the study area and is separated by urban development from the subject property. This area was not reviewed as part of this study and is not applicable to this assessment. No PSW's are located in proximity to the study area.

3.5 Vegetation Cover

A summer vegetation survey was completed on June 29, 2023. Habitat observed during the field investigation included approximately two vegetation communities, including a mixed meadow (MEM), and a coniferous plantation (TAGM1). The following section outlines the existing vegetation identified within the study area. Vegetation species observed within the study area during the field investigations are found within the text of this report below. No species at risk (SAR) vegetation was observed on the property during field investigations.

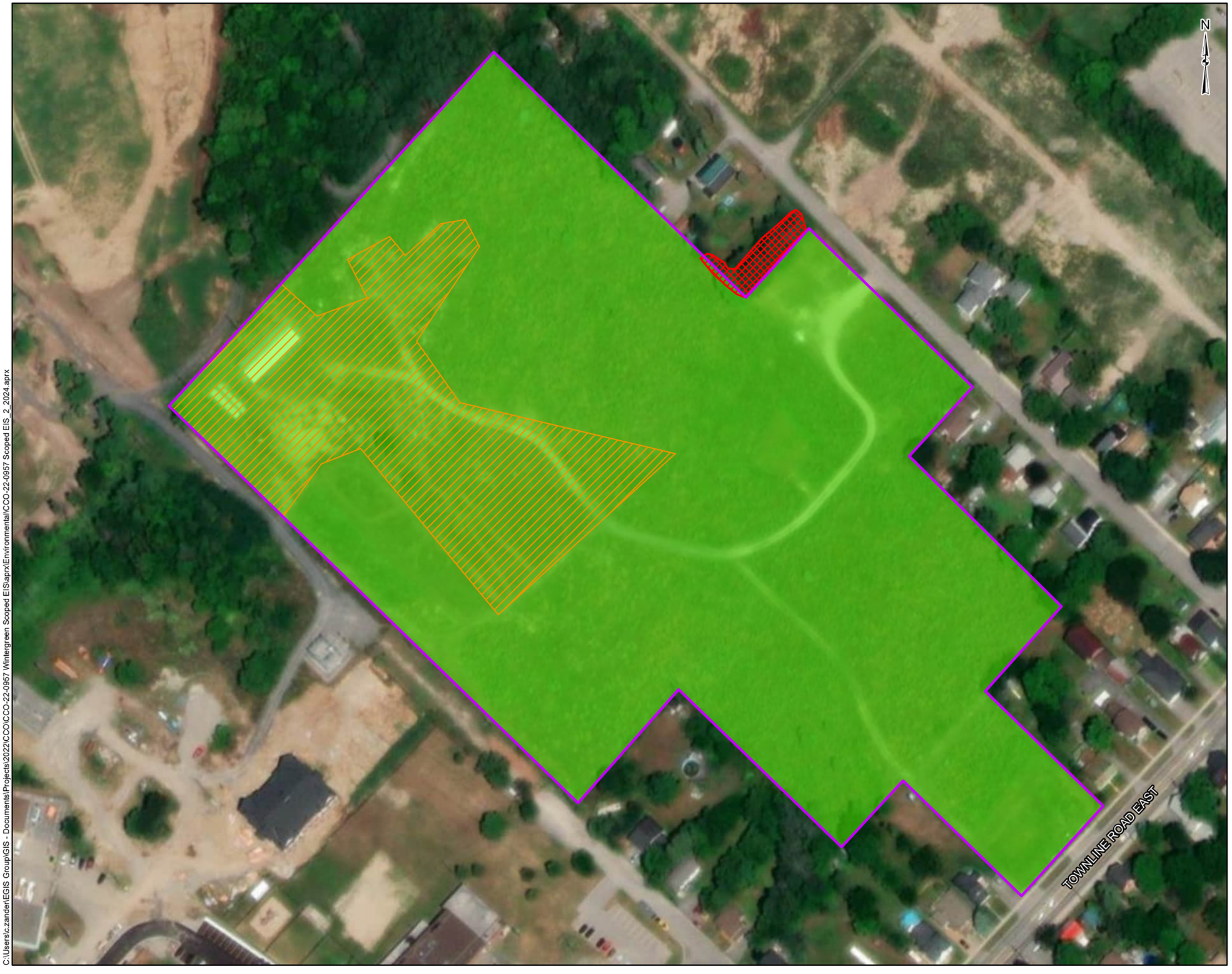
3.5.1 Vegetation Community 1: Coniferous Plantation (TAGM1)

Vegetation Community 1 was dominated by young white spruce trees (*Picea glauca*) (**Photos 1 – 6**). This community occupies more than half of the property and due to its decommissioned and neglected state has begun to see woody growth of other species within the white spruce stands. Additional woody vegetation included species such as trembling aspen (*Populus tremuloides*), Manitoba maple (*Acer negundo*), black walnut (*Juglans nigra*), honey locust (*Gleditsia triacanthos*), red-osier dogwood (*Cornus sericea*), red raspberry (*Rubus idaeus*), sumac (*Rhus sp.*), and white ash (*Fraxinus americana*). Additional species observed in the understorey included milkweed (*Asclepias sp.*), Philadelphia fleabane (*Erigeron philadelphicus*), grasslands lancelot (*Plantago Lancelot),* red clover (*Trifolium pratense),* and goldenrod *(Solidago sp.).*

3.5.2 Vegetation Community 2: Mixed meadow (MEM)

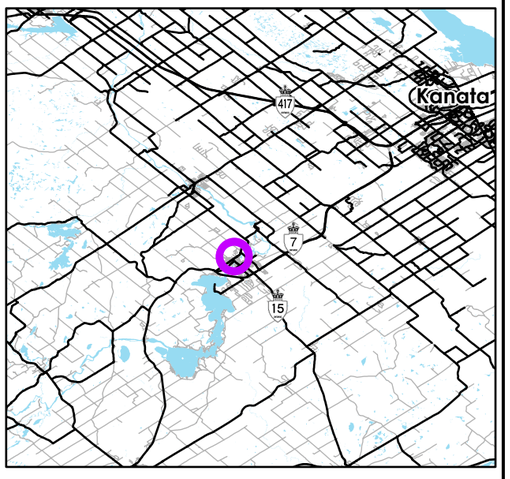
Vegetation Community 2 was classified as a Mixed Meadow (MEM) (**Photos 1, 6-9**). This community lacked significant woody vegetation. This community was noted primarily within the western and central region of the property (Figure 2), though due to the decommissioned and neglected nature of this site, small patches of meadowlike habitat existed within the coniferous plantation community as well. This community included species such as milkweed (*Asclepias sp.*), Philadelphia fleabane (*Erigeron philadelphicus*), grasslands lancelot (*Plantago Lancelot),* silvery cinquefoil (*Potentilla argentea*), goldenrod (*Solidago sp.*), and spotted knapweed (*Centaurea stoebe).* The herbaceous vegetation within the community was sparse at times, likely due to past uses and areas of surficial bedrock.

Additionally, trees associated with residential properties exist along the border of the study area which may be impacted by the proposed project works. Of particular note is a hedgerow composed of large (> 20 cm diameter at breast height [dbh]) Norway spruce (*Picea abies*), which is present along the fencerow in the eastern portion of the study area (**Figure 2**).



LEGEND

- Project Area
- Hedgerow (Large Norway Spruce)
- Mixed Meadow (MEM)
- Coniferous Plantation (TAGM1)



REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2024.

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CLIENT: WINTERGREEN RIDGE LTD.

PROJECT: 400 LANARK SUBDIVISION

TITLE: CONSTRAINTS AND OPPORTUNITIES

egis
115 Walgreen Road, RR3, Carp, ON K0A1L0
Tel: 613-836-2184 Fax: 613-836-3742

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3.6 Habitat for Species at Risk

Background information obtained from the sources listed in Section 2.0 of this report, indicated that SAR and their habitat were potentially present within the study area. These species are listed in **Table 2** as well as their status under the federal *Species at Risk Act* (SARA, 2002) and the provincial *Endangered Species Act* (ESA, 2007). Given habitat observed during the field investigation, a determination was made as to whether these have suitable habitat present within the study area.

Table 2: Species at Risk Potentially present or Confirmed to be Present within the Study Area				
***Common Name**	**Scientific Name**	**Provincial Status (ESA, 2007)**	**Federal Status (SARA Schedule 1)**	**Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries**
Plants				
Black ash	*Fraxinus nigra*	Endangered	No status	No habitat present, no individual trees.
Butternut	*Juglans cinerea*	Endangered	Endangered	Habitat present, no individual trees.
Insects				
Monarch	*Danaus plexippus*	Special Concern	Special Concern	Limited habitat
Reptiles and Amphibians				
Blanding's Turtle (Great Lakes/St. Lawrence population)	*Emydoidea blandingii*	Threatened	Threatened	Known in Mississippi River. No habitat present.
Common Snapping Turtle	*Chelydra serpentina*	Special Concern	Special Concern	No habitat present.
Eastern Milksnake	*Lampropeltis triangulum*	No Status	Special Concern	Habitat present; It was determined that the foundation of the structures in the western portion of the study area is suitable snake hibernacula. However, species is a habitat generalist, and may be found anywhere within the study area. No individuals were observed during field investigations.
Eastern Musk Turtle	*Sternotherus odorata*	Special Concern	Special Concern	No habitat present.
Northern Map Turtle	*Graptemys*	Special Concern	Special Concern	No habitat present.

Table 2: Species at Risk Potentially present or Confirmed to be Present within the Study Area				
***Common Name**	**Scientific Name**	**Provincial Status (ESA, 2007)**	**Federal Status (SARA Schedule 1)**	**Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries**
	geographica			
Western Chorus Frog Great Lakes - St. Lawrence - Canadian Shield population	*Pseudacris triseriata*	No status	Threatened	Limited habitat present. This species usually breeds seasonal aquatic habitats such as vernal forest pools or temporary wetlands. Though through consultation with the Carleton Place Urban Forest Committee it was noted that breeding habitat for this species is present within the lands surrounding the study area, no significant pooling was observed at the time of the site visit. Minor pooling (**Photo 9**) was observed within the meadow habitat which may constitute marginal habitat for this species during the spring months.
Midland painted turtle	*Chrysemys picta marginata*	No status	Special concern	No habitat present.
Birds				
Bank Swallow	*Riparia riparia*	Threatened	Threatened	No habitat present.
Barn Swallow	*Hirundo rustica*	Special Concern	Threatened	Marginal habitat present associated with the structures in the western portion of the study area, which could provide nesting for this species. None were observed. Could nest in the structures however based on the timing of the field visit species would have been observed.
Bobolink	*Dolichonyx*	Threatened	Threatened	No habitat present.

Table 2: Species at Risk Potentially present or Confirmed to be Present within the Study Area				
***Common Name**	**Scientific Name**	**Provincial Status (ESA, 2007)**	**Federal Status (SARA Schedule 1)**	**Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries**
	oryzivorus			
Canada Warbler	*Cardellina canadensis*	Special Concern	Threatened	No habitat present.
Chimney Swift	*Chaetura pelagica*	Threatened	Threatened	No habitat present. Seen flying over houses adjacent to study area.
Common Nighthawk	*Chordeiles minor*	Special Concern	Special Concern	No habitat present.
Eastern Meadowlark	*Sturnella magna*	Threatened	Threatened	Marginal habitat present. This species has been known to nest in fragmented meadow habitats with abundant graminoid vegetation. Though the meadow habitat within the study area may be suitable as nesting habitat for this species, it's suitability is limited due to the exposed bedrock and successional state of the site. In addition, the field investigation took place during the core nesting period (April 15 – July 31) for this conspicuous species and no individuals were observed.
Golden-winged Warbler	*Vermivora chrysoptera*	Special Concern	Threatened	No habitat present.
Least Bittern	*Ixobrychus exilis*	Threatened	Threatened	No habitat present.
Olive-sided Flycatcher	*Contopus cooperi*	Special Concern	Special Concern	No habitat present.
Wood Thrush	*Hylocichla mustelina*	Special Concern	Threatened	No habitat present.

Table 2: Species at Risk Potentially present or Confirmed to be Present within the Study Area				
***Common Name**	**Scientific Name**	**Provincial Status (ESA, 2007)**	**Federal Status (SARA Schedule 1)**	**Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries**
Mammals				
Eastern Small-footed Myotis	*Myotis leibii*	Endangered	N/A	Marginal habitat present associated with the structures in the western portion of the study area, which could provide roosting for these species. Additionally, suitable roosting habitat exists within the trees outside of the study area which may still be impacted by planned construction.
Hoary Bat	*Lasiurus cinereus*	Endangered **(effective January 31, 2025)**	Endangered **(pending)**	
Eastern Red Bat	*Lasiurus borealis*	Endangered **(effective January 31, 2025)**	Endangered **(pending)**	
Little Brown Myotis	*Myotis lucifugus*	Endangered	Endangered	
Northern Myotis	*Myotis septentrionalis*	Endangered	Endangered	
Silver-haired Bat	*Lasionycteris noctivagans*	Endangered **(effective January 31, 2025)**	Endangered **(pending)**	
Tri-coloured Bat	*Perimyotis subflavus*	Endangered	Endangered	

*This table was assembled from various sources of background information. The following information sources were consulted to compile background information: 1 – GO geodatabase (MNR, 2022); 2 – Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019); 3 – Atlas of the Breeding Birds of Ontario (Bird Studies Canada et al., 2008); 4 – NHIC data (MNR, accessed June 2022); 5 – General range

Marginal habitat for SAR bats was determined to be present due to the structures in the western region of the study area which have the potential to be suitable as roosting habitat for these species (**Photos 8, 11, 12**). It should be noted that since the writing of the initial EIS report the Eastern Red Bat, Hoary Bat, and Silver-haired Bat, have been scheduled to be uplisted to 'Endangered' status under the ESA as of January 31, 2025, and therefore have been added to **Table 2**. No evidence of usage of the property by bats was observed during the 2023 field investigation (i.e. droppings, etc.). The study area has only marginal suitability which was confirmed by the lack of appropriately sized snags for maternity colonies as well as the lack of suitable tree size/ species that these bats would use for roosting, maternity colonies, or overwintering. However, it is of note that appropriately sized trees for SAR bat habitat are present in association with trees located outside the study area, which may be impacted by project works due to their proximity to the proposed project boundary. These trees area recommended to be protected prior to and during construction, as will be further discussed in Section 6.0.

Eastern Milksnake potential habitat is present within the general study area itself and in association with the structures on the subject property, which were found to have crumbling foundations during the summer 2023 field investigation (**Photo 10**). Milksnakes can often be found hibernating underneath building such as this, however no evidence of the species was observed within the property and due to the limited availability of water and the cut off and small nature of the habitat it is unlikely that the Milksnake is present. This species is listed as 'Special Concern' under the ESA and do not receive habitat protection. No individuals or evidence of these species was observed during the field investigation.

Limited breeding habitat for the Western Chorus Frog may exist within the study area as minor pooling was observed in one (1) spot (**Photo 9**) during the summer site visit. As the pooling was observed in late June this habitat may be marginally suitable as breeding habitat for this species during the spring months, though the small size and shallow depth of the depression here does not indicate significant habitat. The Western Chorus Frog is not listed under the ESA and is listed at 'Threatened' under SARA; therefore this species receives habitat protection on federal lands only.

The Barn Swallow can be found nesting in barns and other structures, and forages in open areas for flying insect. This species may have potential marginal habitat within the study area as the structures within the study area could provide roosting habitat for it (**Photos 8,11,12**). This species is listed as 'Special Concern' under the ESA and does not receive habitat protection. No individuals of this species were observed during the field investigation. Eastern Meadowlarks have been known to breed in many kinds of grassy areas which are at a minimum 6 acres. Due to the fractured and non-continuous nature of this site, it is very unlikely that the study area would act as habitat for this species and the area that is marginally suitable is well under 6 acres. No individuals of this species were observed during the field investigations. The Eastern Meadowlark is listed as 'Threatened' under the ESA.

Monarch Butterflies have potential restricted habitat within the study area due to the presence of meadow habitat containing milkweed, which is the sole source of food for this species (**Photos 6,7**). Because of the small size of and discontinuous nature of this area, this is only considered limited Monarch habitat. This species is listed as 'Special Concern' under the ESA and do not receive habitat protection. No individuals of these species were observed during the field investigation.

3.7 Wildlife & Significant Wildlife Habitat

Characteristic wildlife present within this Ecoregion includes white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mepthitis*), Red-spotted Newt (*Notophthalmus viridescens*), Snapping Turtle, Eastern Garter Snake (*Thamnophis sirtalis sirtalis*) and Common Watersnake (*Nerodia sipedon*). Representative bird species include Field Sparrow (*Spizella pusilla*), Grasshopper Sparrow and Eastern Meadowlark (Crins et al., 2009). Wildlife observed during the summer 2023 field investigation included American Goldfinch (*Spinus tristis*), Blue Jay (*Cyanocitta cristata*), Pine Siskin (*Spinus pinus*), American Redstart (*Setophaga ruticilla*), Warbling vireo (*Vireo gilvus*), Song Sparrow (*Melospiza melodia*) and *Leporidae sp.*

For those observations of birds, the time of assessment was within the breeding bird window for some species. Migratory birds, their nests, and eggs are protected under the MBCA. Species expected to use the site such as the American Crow, Common Grackle (*Quiscalus quiscula*), and European Starling (*Sturnus vulgaris*) are not afforded protection under the federal *Migratory Bird Convention Act* (MBCA, 1994) or provincial *Fish and Wildlife Conservation Act* (FWCA, 1997). Habitat for many species observed within the study area is limited on the property or within the greater study area.

The study area was examined under the *Significant Wildlife Habitat Technical Guide* (MNR, 2000) and its supporting document *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNR 2015) to determine if significant wildlife habitat is present within the existing study area. **Table 3** outlines the various significant wildlife habitat categories and their designation within the study area.

Table 3: Significant Wildlife Habitat within the Study Area

Specialized Wildlife Habitat Category	Candidate Significant Wildlife Habitat (Y/N)	Confirmed Significant Wildlife Habitat (Y/N)
Waterfowl Stopover and Staging Areas (Terrestrial)	No	No
Waterfowl Stopover and Staging Areas (Aquatic)	No	No
Shorebird Migratory Stopover Area	No	No
Raptor Wintering Area	No	No
Bat Hibernacula	No	No
Bat Maternity Colonies	No	No
Turtle Wintering Area	No	No
Reptile Hibernaculum	No	No
Colonially-Nesting Bird Breeding Habitat (Bank and Cliff)	No	No
Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs)	No	No
Colonially-Nesting Bird Breeding Habitat (Ground)	No	No
Migratory Butterfly Stopover Area	No	No

Table 3: Significant Wildlife Habitat within the Study Area		
Specialized Wildlife Habitat Category	**Candidate Significant Wildlife Habitat (Y/N)**	**Confirmed Significant Wildlife Habitat (Y/N)**
Landbird Migratory Stopover Areas	No	No
Deer Winter Congregation Areas	No	No
Cliff and Talus Slopes	No	No
Sand Barren	No	No
Alvar	No	No
Old Growth Forest	No	No
Savannah	No	No
Tallgrass Prairie	No	No
Other Rare Vegetation Communities	No	No
Waterfowl Nesting Area	No	No
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No	No
Woodland Raptor Nesting Habitat	No	No
Turtle Nesting Areas	No	No
Seeps and Springs	No	No
Amphibian Breeding Habitat (Woodland)	No	No
Amphibian Breeding Habitat (Wetlands)	No	No
Woodland Area-Sensitive Bird Breeding Habitat	No	No
Marsh Bird Breeding Habitat	No	No
Open Country Bird Breeding Habitat	No	No
Shrub/Early Successional Bird Breeding Habitat	No	No
Terrestrial Crayfish	No	No
Special Concern and Rare Wildlife Species	No	No
Amphibian Movement Corridors	No	No
Deer Movement Corridors	No	No

Based on the results of the background review using the sources listed in Section 2.0, as well as observations taken during the June 2024 field investigation, no significant wildlife habitat is known to exist within the study area.

Though marginally suitable breeding habitat for amphibians was observed within the study area in association with a small area of pooling (**Photo 9**), due to the small size of this area and the lack of forest or wetland habitat present

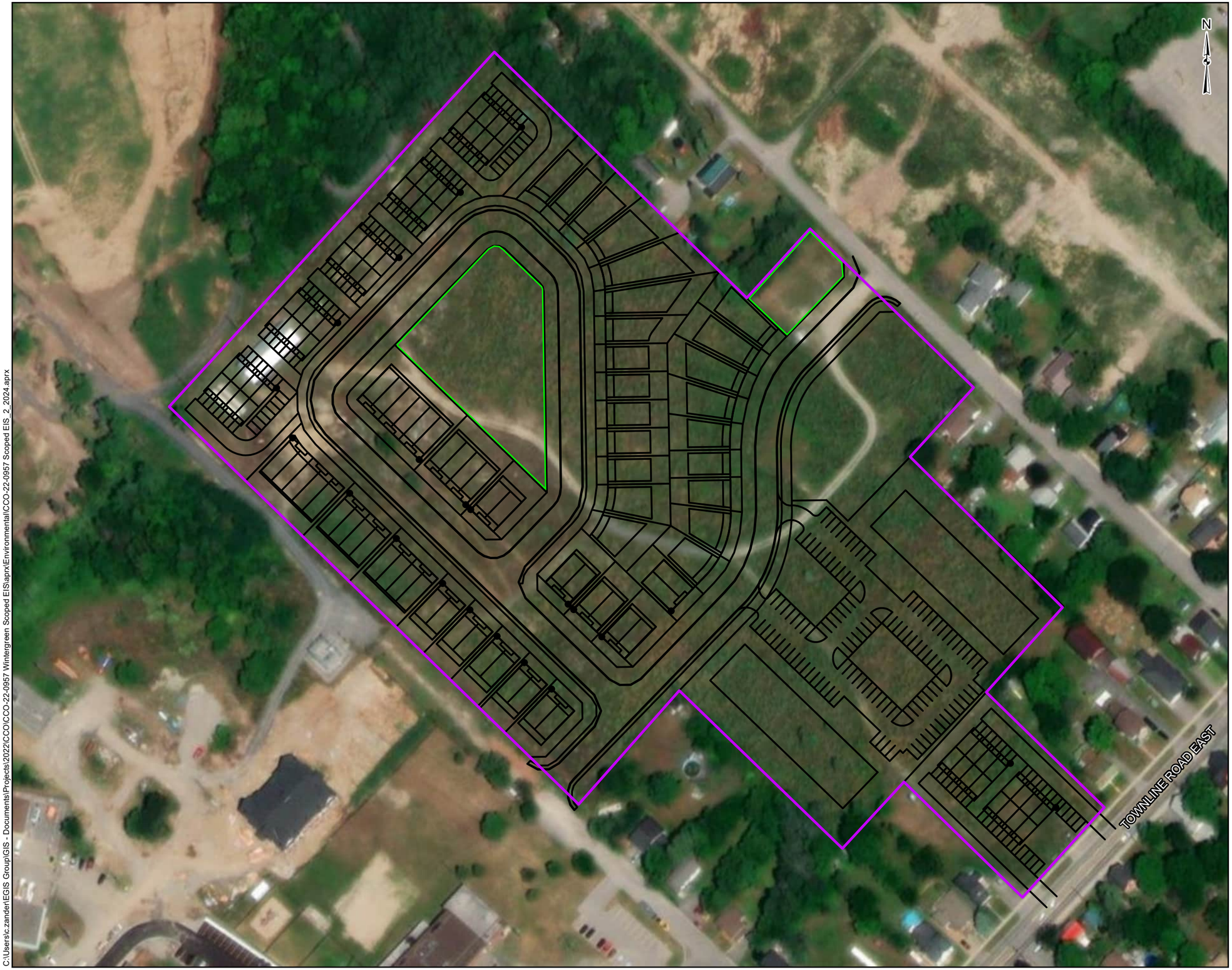
within the property, this pooling would not be considered significant wildlife habitat in the form of Amphibian Breeding Habitat (Woodlands/Wetlands).

4.0 DESCRIPTION OF THE PROPOSED PROJECT

The proposed development is a subdivision within the subject property which has an area of approximately 6.26 hectares. This subdivision will include 204 units which will be both medium and high density. The current plan for this subdivision includes the following:

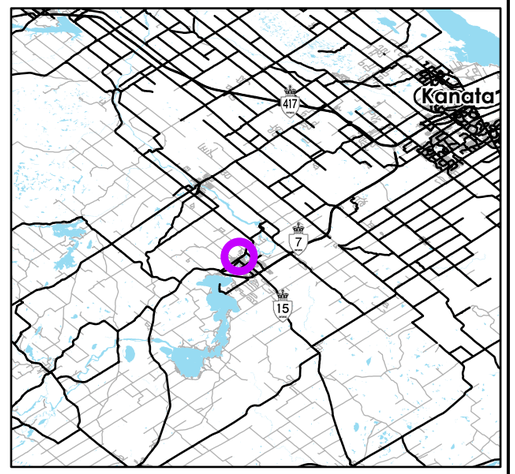
- 23 single family units;
- 20 semi detached units;
- 23 townhouse units;
- 56 back-to-back condo townhouse units, and
- 82 apartment units.

The subdivision will result in the removal of most of the vegetation on site, with the exception of the 'park' areas seen in the proposed Development Plan outlined in **Figure 3**.



LEGEND

- Project Area
- Site Layout
- Park



REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2024.

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Scale 1:1,500 Metres

CLIENT:	WINTERGREEN RIDGE LTD.
PROJECT:	400 LANARK SUBDIVISION
TITLE:	PROPOSED DEVELOPMENT PLAN

egis
115 Walgreen Road, RR3, Carp, ON K0A1L0
Tel: 613-836-2184 Fax: 613-836-3742

PROJECT NO: CCO-22-0957		FIGURE: 3
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5.0 IMPACT ASSESSMENT & RECOMMENDATIONS

The following sections outline and assess any potential impacts that are expected as a result of the proposed development. Recommendations for mitigation measures to avoid/reduce these impacts are outlined in Section 6.0 of this report.

5.1 Natural Heritage System Components, Surface Water, Groundwater and Fish Habitat

5.1.1 Natural Heritage System

There are no Natural Heritage systems identified on the subject property. The property is generally disturbed and is found within a generally urban surrounding. There are no migration corridors that extend to the property. The closest wetland and fish habitats are found approximately 450 m from the study area.

Removal of the trees and property grading will result in changes to the water retention, species composition, wildlife habitat, and surface water contaminants. Grading, and excavation for the proposed development will result in changes to surface water and groundwater quality however since this is an urban area there is infrastructure that will be built and is already in place to deal with this. The impacts of this are expected to be negligible beyond the existing site.

5.1.2 Fish Habitat

Fish habitat is located approximately 450 m from the study area and therefore is not a factor for this report/project.

5.1.3 Wetlands

There are no wetlands in close proximity to the study area that will be impacted by proposed site works.

5.2 Vegetation Cover

5.2.1 Vegetation communities

The proposed works will include the removal and clearing of most of the trees and vegetation within the study area except for the vegetation within the designated 'Park' areas (**Figure 3**). Due to the nature of the plantation/meadow as an already disturbed part of the property, there is no expectation of significant loss of wildlife habitat or ecosystem functionality. No rare or SAR vegetation was identified within this area, and it is likely that there are no rare or SAR species utilizing this habitat for critical life processes.

Trees on the border of the study area which are part of residential properties should be delineated via visual barriers such as fencing before and during construction. This fencing should include the critical root zone (CRZ) for each tree. This area can be measured as 10 centimetres from the trunk of a tree for every centimetre of trunk diameter (i.e. 1 m away from a tree with a 10 cm diameter). Of particular note is the hedgerow of large Norway spruce which exist along the fence line (**Figure 2**) on the border of the study area. These trees will border the new park space

according to the current proposed development plan (**Figure 3**), and on the south facing side of the hedgerow residential units are planned.

Clearing the area for the development of the subdivision will remove the bulk of the trees within the study area. Due to the limited function that this habitat serves the impacts of its removal are expected to be minimal. The species that were observed within the subject property generally thrive in an urban context. No significant vegetation species were observed within the area to be disturbed during the field investigation. A significant number of young black walnut were observed within the study area during the field review. As these trees provide food for squirrels and wildlife, maintenance of these trees (where practical) is recommended, as well as the transplanting of young trees which are removed, if appropriate, and if the timing of development and transplanting the trees coincide. The trees should be transplanted in the fall or the early spring before new growth starts.

In addition, as per suggestion of the Carleton Place Urban Forest Committee, it is recommended that, if appropriate, the white spruce (Christmas Trees) which are to be removed could be considered for a charitable donation prior to the holiday months (December) if this coincides with development.

To reduce potential impact to wildlife, it is recommended clearing of vegetation occur outside the breeding bird window of April 15th to September 15th of any year to avoid killing, harming, and harassing birds that receive protection under the MBCA and FWCA. This timing window is a general guideline based on the species expected to be present and observed within the study area during the 2023 field investigations as well as early and late nesting dates for these species outlined in the Bird Studies Canada Nesting Calendar Query Tool (Hussell and Lepage, 2015). Alternatively, if removal of vegetation is proposed from April 15th to September 15th, of any year, a visual inspection of the areas to be cleared should be conducted by a qualified avian specialist before disturbance to ensure that no birds are using the area for nesting. If migratory bird breeding and/or nesting activity is encountered at any time of year within the study area, an appropriate setback distance should be maintained from the nest/nesting birds. Works should not continue in the location of the nest until after it has been determined by an avian specialist that the young have fledged and vacated the nest and work areas.

5.3 Habitat for Species at Risk

No SAR were observed within the property limits. Habitat for SAR is considered very limited to not existent and no critical habitat for SAR was observed to be present within the study area.

Bat habitat, in the form of roosting habitat, was observed within the study area due to the two (2) existing structures. No snags or maternal roosting areas or confirmed cavity trees were observed in the area to be disturbed. It is recommended that the demolition of the existing structures be completed outside of the active bat maternity window (May 1st to August 31st of any year) to avoid killing, harming, and harassing SAR bats that may be roosting there, or alternatively that a visual inspection of the structures to be demolished should be conducted by a qualified bat specialist before disturbance to ensure that no bats are using the area for roosting. Additionally, tree removals should not occur during the bat maternity period for this region (May 1st – August 31st) when various species of bats (both at risk and not at risk) may be actively rearing young as bats may still use the property for aerial foraging, and as a result may be impacted by vegetation removals. Bats may be found roosting in trees which boarder the study area both on residential properties and surrounding fragmented woodlots. Trees which border the study area that

may be impacted by project works should be properly identified and planned to be isolated from project works prior to that start of construction in order to mitigate potential impacts to SAR bats.

Eastern Meadowlark were not observed during the June field investigation which took place during their core breeding period (April 15 – July 31) and based on the small area of sparse meadow are unlikely to utilize the property for nesting. This habitat is not usable or at best marginal for these species. No Barn Swallows were observed within the study area and were not seen utilizing the existing structures. It is anticipated that this habitat will be removed however no impacts to SAR will occur, providing that demolition of the structures occurs outside of the breeding bird window of April 15th to September 15th, or alternatively that a visual inspection of the structures to be demolished should be conducted by a qualified avian specialist before disturbance to year to avoid killing, harming, and harassing birds that receive protection under the MBCA and FWCA.

Potential hibernacula for Eastern Milksnake is present underneath the existing structures. However due to the limited availability of water and the cut off and small nature of the habitat it is unlikely that the Milksnake is present within this study area.

As observed during the summer 2024 field investigation, marginal breeding habitat for the Western Chorus Frog exists within the study area. As such, project activities are recommended, if practical, to take place outside of the breeding season for this species (early March – mid May), the timing of which overlaps with the bird nesting window for this region. Though this species is not currently protected outside of federal lands, clearing outside of the breeding period will mitigate risks to individuals of this species.

5.4 Wildlife & Significant Wildlife Habitat

Migratory birds are anticipated to be encountered during construction nesting within the vegetation present in the study area. Timing windows allow vegetation removal activities to avoid periods when birds are actively nesting. The migratory bird nesting period for this project is from April 15th to September 15th, of any year (i.e., the period when most birds are anticipated to be actively nesting). The period when a bird is actively nesting is considered its most critical life stage as many species are highly dependant on the habitat around their nest site to supply food for nestlings and to conceal their nest, eggs, and young.

Given that the proposed work will be completed within a meadow as well as treed area, it is important to note that this timing window should not be applied only to the removal of trees but should also include all vegetation clearing.

If vegetation removal must occur within the nesting window, a qualified avian specialist should conduct a nesting survey before vegetation removal or clearing. If migratory birds exhibiting nesting behaviours or their nests are encountered at any time of the year, works should not continue in the location of the nest until:

- After it has been determined by an avian specialist that the young have fledged and vacated the nest and work area; **or**
- An avian specialist determines a suitable buffer distance at which work may continue to prevent disturbance of the bird(s); **and**,
- Where a buffer distance has been implemented, an avian specialist must undertake monitoring during construction to ensure migratory birds and their eggs are not disturbed, destroyed, or taken.

As stated above, all trees which may be impacted by project works outside of the subject property, and within the designated 'Park' spaces throughout the development (**Figure 3**) should be isolated and protected from project activities in order to preserve any potential nesting/roosting habitat for avian and bat species.

5.5 Tree Conservation and Protection

The Town of Carleton Place official plan stipulates tree planting and tree preservation will occur so that all areas of the town are provided with a sufficient number of trees to maintain a high standard of amenity and appearance. Where new development will result in the loss of existing wooded areas, a condition of development approval will require that the lost trees be replaced at a 1 to 3 ratio (1 new tree for every 3 trees). The replacement ratios will only apply to the removal of trees having a minimum caliper of 20 cm or more. The new trees will be planted within the boundary of the proposed development to the greatest extent possible with the remaining trees to be planted in public parks or on publicly owned lands as directed by the town.

A review of the trees within the study area was completed during the 2023 field investigation. Based on the field review there are no trees within the study are boundaries which have a caliper of 20 cm or greater. As such, no compensation trees are required. However, where trees are not currently growing, but green space is designated a planting plan with native vegetation should be prepared. It is recommended that trees be conserved wherever possible during the proposed works and acknowledged that all trees within the 'Park' spaces (**Figure 3**) of the development plan are to be protected throughout the proposed works. As the design moved forward to the Detailed Design phase, a Landscaping Plan is to be completed and submitted as part of the contract package.

As discussed in Section 5.2 all trees located directly beside the planned project area which may be impacted by construction are to be identified and fenced off prior to and during project works in order to preserve these trees and their CRZ's.

Additionally, it should be noted that any site alteration or vegetation removal will require a Class 1 Development Permit prior to undertaking.

6.0 RECOMMENDED MITIGATION

To minimize or eliminate environmental impacts and to help achieve ecological and environmental improvements from the proposed construction and development, the following mitigation measures are recommended:

- All lands cleared as part of development should be revegetated as soon as practical to stabilize disturbed soils and prevent the mobilization of sediment-laden surface runoff;
- It is recommended that only locally appropriate native species be used to plant within the Project Area, as well as any cleared areas are to be re-established after use (i.e., laydown areas). This would contribute to re-establishing native plants within the wider landscape, reduce runoff created from project works, and potentially have a positive impact for biodiversity. Use of non-native plant material should be discouraged. Locally appropriate, native species of trees can include, but are not limited to:
    - Large trees: bur oak (*Quercus macrocarpa*), eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), paper birch (*Betula papyrifera*), and white elm (*Ulmus americana*); and
    - Small trees (smaller specimens that are considered shrubs but are also considered trees when larger): alternate-leaved dogwood (*Cornus alternifolia*), American mountain-ash (*Sorbus americana*), Canada plum (*Prunus nigra*), silky dogwood (*Cornus obliqua*), downy serviceberry (*Amelanchier arborea*), and red-osier dogwood (*Cornus sericea*).
- Exposed soils should be revegetated as soon as possible using a seed mix composed of native species such as OSC's native seed mix, native trees and shrubs, which are appropriate for the site conditions. Revegetation should consist of vegetation native to the area;
- If there is insufficient time in the growing season for the seed to sprout, the site shall be stabilized with temporary erosion and sediment control measures and seeded in the following spring. It is important to note that many of the seed mixes outlined above are best established through fall seeding to allow normal dormancy and then germination the following spring as these species are adapted to the Ontario environment;
- An erosion and sediment control (ESC) plan should be developed and all applicable measures to mitigate erosion and sediment transport and maintained until disturbed soils are stabilized by successful revegetation or other permanent means of soil stabilization;
- Natural areas to be retained, should be isolated by sturdy construction fencing or similar barriers at least 1 m in height during construction in order to ensure their retention.;
- To prevent the introduction and spread of invasive plant species, equipment utilized during construction should be inspected and cleaned in accordance with the *Clean Equipment Protocol for Industry*. The Invasive Species Act should be followed for all activities;
- During construction, the Contractor should have a spill kit on-hand at all times, in case of spills;
- To prevent the harm, harassment or death of birds, their eggs, or their nests no clearing of any vegetation should occur from April 15th to September 15th, unless a qualified biologist has determined that no nesting is occurring within 5 days prior to the clearing. Note: these dates are based upon breeding bird nesting data for eastern Ontario, provided by Environment Canada. The nests and eggs of many species are protected under federal and/or provincial legislation (i.e., MBCA, FWCA);

- It is recommended that all clearing of vegetation as well as the demolition of the two (2) structures occurs outside of the breeding bird window of April 15th to September 15th, or alternatively that a visual inspection of the areas to be cleared should be conducted by a qualified avian specialist before disturbance to year to avoid killing, harming, and harassing birds that receive protection under the MBCA and FWCA;
- All clearing of trees as well as the demolition of the (2) existing structures should be completed outside of the active bat maternity window (May 1st to August 31st of any year) to avoid killing, harming, and harassing SAR bats that may be roosting there, or alternatively targeted acoustic surveys should take place prior to clearing to ensure no bats will be impacted by project works;
- Conservation of existing young trees such as black walnut is recommended as these trees provide food for wildlife such as squirrels and other animals;
- The transplanting of young trees which are removed is recommended if the timing of development and transplanting the trees coincide. The trees should be transplanted in the fall or the early spring before new growth starts;
- Where appropriate, as per suggestion of the Carleton Place Urban Forest Committee, it is recommended that the white spruce (Christmas Trees) which are to be removed, be considered for charitable donation prior to the holiday months (December);
- Should any SAR be discovered during construction, a management biologist at MECP – Eastern District should be contacted immediately, and operations modified to avoid any negative impacts to SAR or their habitat until further direction is provided;
- In order to protect any trees bordering the study area which may be impacted by the planned project works, proper fencing should be erected outside the CRZ for each tree. This area can be measured as 10 centimetres from the trunk of a tree for every centimetre of trunk diameter (i.e. 1 m away from a tree with a 10 cm diameter);
    - Of particular note are the mature Norway Spruce located along the project boundary (**Figure 2**) which should be protected with fencing prior to construction starting and during the construction period;
    - All trees located in the planned 'Park' areas (**Figure 3**) should be fenced off, in addition to all trees located on residential properties bordering the planned project works which may be impacted by construction activities;
- As the design moved forward to the Detailed Design phase, it is recommended that a Landscaping Plan be completed and submitted as part of the contract package; and
- It should be noted that any site alteration or vegetation removal will require a Class 1 Development Permit prior to undertaking.

7.0 SUMMARY

This updated EIS supports the development of a subdivision on the subject property as required by the Town of Carleton Place.

This EIS has assessed existing land use and determined the impacts to the natural heritage features (i.e. wildlife habitat, etc.), as well as SAR and SAR habitat as a result of the proposed development. The project should incorporate mitigation measures to protect natural heritage features or replace potential loss of these features that may occur outside of the area needed for the structures. The mitigation measures should include various strategies to achieve no residual effects on the natural heritage features (i.e. erosion and sediment control).

If the recommendations and mitigation measures provided in Sections 5.0 and 6.0 of this report are followed, the proposed development is not anticipated to negatively impact the function of the natural heritage features observed to be present within the subject property and surrounding lands.

8.0 LIMITATIONS

The investigations undertaken by Egis with respect to this report and any conclusions or recommendations made in this report reflect Egis's judgment based on the site conditions observed at the time of the site inspection on the date set out in this report and on information available at the time of the preparation of this report.

This report has been prepared for specific application to this site, and it is based, in part, upon visual observation of the site and terrestrial investigations at various locations during a specific time interval, as described in this report. Unless otherwise stated, the findings cannot be extended to previous or future site conditions, or portions of the site which were unavailable for direct investigation.

If site conditions or applicable standards change or if any additional information becomes available at a future date, modifications to the findings, conclusions, and recommendations in this report may be necessary.

If you have any question, comments, or concerns, please do not hesitate to contact the undersigned at Egis.

Sincerely,
Egis

_____

Danica Rice
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Email: danica.rice@egis-group.com

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APPENDIX A – SITE PHOTOGRAPHS

Photo 1: View from eastern side of the property looking southwest. White spruce stands can be seen in the background. June 29, 2023.

Photo 2: Study Area existing conditions, mixed meadow (MEM) in the foreground, white spruce in the middle ground (TAGM1). The large deciduous trees in the background are outside of the study area and therefore not within the purview of this report. Facing south , June 29, 2023.

Photo 3: A White spruce being overtaken by a Black walnut, June 29, 2023.

Photo 4: A White spruce plantation (TAGM1) makes up the majority of the study area, June 29, 2023.

Photo 5: Overgrown pathways cutting through the TAGM1 area of the property, June 29, 2023.

Photo 6: Meadow habitat (MEM) encroaching on the Christmas tree plantation (TAGM1), June 29, 2023.

Photo 7: Existing conditions within the study area, illustrating Milkweed which is the host species of Monarch, June 29, 2023.

Photo 8: Meadow habitat (MEM) surrounding one of the existing structures in the western portion of the study area, June 29, 2023.

Photo 9: Existing conditions, illustrating poor drainage within the northwestern portion of the property, June 29, 2023.

Photo 10: A view of the bottom of the structure in the western portion of the study area (potential snake hibernacula), June 29, 2023.

Photo 11: Side view of on of the structures, illustrating potential roosting opportunities for Barn Swallows, June 29, 2023.

Photo 12: Structure within the study area, holes indicate it has potential to be used as a roost for bats and barn Swallows, June 29, 2023.