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**Environmental Impact Statement
Proposed Zoning Amendment
375 Didsbury Road
City of Ottawa, Ontario**

GEMTEC Project: 102857.005

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Submitted to:

FCRI Properties LP
RDC# 113-7600 Boul. Viau
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H1S 2P3

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375 Didsbury Road
City of Ottawa, Ontario**

July 14, 2026

GEMTEC Project: 102857.005

EXECUTIVE SUMMARY

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by FCRI Properties LP (the Proponent) to complete an Environmental Impact Statement (EIS) for the property located at 375 Didsbury Road, in the City of Ottawa, Ontario. This EIS has been completed in support of a zoning amendment to amend the zoning to be consistent with the surrounding land uses and implement the Official Plan designation for the lands. This report has been completed in accordance with all federal, provincial and municipal policies and guidelines, as applicable.

In support of this EIS, an initial desktop review was completed to identify potential natural heritage features and species at risk (SAR) that are identified on-site, to assist with scoping future field investigation efforts. Two field investigations were completed in 2025 to describe, in general, the natural and physical setting of the subject property with a focus on confirming the presence or absence of natural heritage features and potential SAR or their habitat as identified in the desktop review.

Following completion of the desktop review and site investigation, the following natural heritage features were identified on-site or within the 120 m study area surrounding the site: local wetlands, floodplain, fish habitat, significant wildlife habitat (SWH) for habitat of special concern and rare wildlife species and species at risk (SAR). The following SAR and their habitat were identified as having a moderate potential to occur on-site or within the study area: bobolink, eastern meadowlark, least bittern, Blanding's turtle, bat species.

As the proposed project does not entail any physical changes to the site, no impacts to natural heritage features identified above are anticipated. Accordingly, the proposed development complies with the natural heritage policies of the Provincial Planning Statement and the City of Ottawa Official Plan.

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1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by FCRI Properties LP (the Proponent) to assist with a proposed zoning amendment application for an approximately 7.33 ha parcel located at 375 Didsbury Road, in the City of Ottawa, Ontario (hereafter referred to as “the subject property”). The general location of the subject property is illustrated on Figure A.1 in Appendix A.

1.1 Purpose

The proponent is seeking to rezone the existing 7.33 ha subject property to be consistent with the surrounding land uses and implement the Official Plan designation for the lands. Based on *Section 4.7 – Environmental Protection* of the City of Ottawa Official Plan (Ottawa, 2022b) an EIS is required demonstrating that the rezoning and any potential development inline with the rezoning conditions will not negatively impact any potential natural heritage features which may be present within the study area. The study area is defined as the property boundary and the adjacent lands encompassing an area of 120 m beyond the property boundary. The subject project and the extents of the study area are illustrated on Figure A.2 in Appendix A.

1.2 Objective

The objective of the EIS presented herein is to identify and evaluate the significance of any natural heritage features, as defined in the Provincial Planning Statement (MMAH, 2024), on the subject property and within the broader Study Area and to assess the potential impacts from the proposed rezoning on any natural heritage features identified and recommend appropriate and defensible mitigation measures to ensure the long-term protection of any natural heritage features identified.

To meet these objectives, the EIS presented herein has been completed in accordance with the following federal, provincial, and municipal policies and guidelines:

- Provincial Planning Statement (MMAH, 2024);
- Species Conservation Act (Ontario, 2025);
- Fisheries Act (Canada, 1984);
- Conservation Authorities Act (Ontario, 1990);
- Migratory Birds Convention Act (Government of Canada, 1994);
- Invasive Species Act (Ontario, 2015);
- Natural Heritage Reference Manual (OMNR, 2010);
- City of Ottawa EIS Guidelines (Ottawa, 2023); and
- City of Ottawa Official Plan (Ottawa, 2022b).

1.3 Physical Setting

The subject property is municipally addressed as 375 Didsbury Road and is currently vacant. Vegetation on-site is comprised of cultural meadow, a woodland and a meadow marsh.

The property is bound to the south by Campeau Drive and to the east by Didsbury Road. To the north the site is bound by 401 Didsbury Road and 1660 Richardson Side Road, and to the west is bound by an unaddressed property fronting the Carp River.

1.4 Land Use Context

The Study Area is situated within a broader suburban residential and commercial area. The existing land use designation for the study area from the Official Plan (Ottawa, 2022b) is Rural and the zoning is Development Reserve Zone (DR).

2.0 METHODOLOGY

2.1 Desktop Review

A desktop information review was completed to aid in the scoping of field investigation and to gather information relating to natural heritage features that may be present within the subject property or within 1 km of the study area. An additional component of the desktop review was to assess the potential presence of SAR to occur on the subject property or within the study area based on a review of publicly accessible occurrence records, and review of SAR habitat requirements and range maps.

Information regarding the potential presence of natural heritage features and SAR within the vicinity of the site was obtained from the following sources:

- Make A Map: Natural Heritage Areas (OMNRF, 2014a);
- Land Information Ontario (OMNR, 2011b);
- Ontario Geological Survey (OGS, 2019);
- Department of Fisheries and Oceans Canada SAR Maps (DFO, 2023);
- Fish ON-Line (MNRF, 2023);
- Fish Activity Area (MNRF, 2022);
- Natural Heritage Information Centre Biodiversity Explorer (OMNRF, 2013a);
- Breeding Bird Atlas of Ontario (Cadman et al., 2007)
- Atlas of Mammals of Ontario (Dobbyn, 1994);
- Ontario Herpetofaunal Atlas (Oldham and Weller, 2000);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020);
- eBird Canada Hotspots (eBird Canada, 2023);
- iNaturalist Explore Observations Map (iNaturalist, 2023);
- iNaturalist Herps of Ontario Map (iNaturalist, 2023);

- Wildlife Values Area Geohub (Ontario, n.d.);
- City of Ottawa Official Plan (Ottawa, 2022b); and
- City of Ottawa EIS Guidelines (Ottawa, 2023).

2.2 Field Investigations

Two field investigations were undertaken in 2025, to describe in general, the natural and physical setting of the subject property with a focus on natural heritage features and to identify any potential SAR or their habitat that may exist at the subject property. All incidental wildlife, habitat, and pertinent landscape data was recorded to support a thorough assessment of the study area. Photographs of site features taken during field investigations are provided in Appendix B. A summary of incidental wildlife observations is provided in Table C.1, Appendix C.

All field investigations completed on the subject property are outlined in Table 2.1 below.

Table 2.1 Summary of Field Investigations

Date	Time	Weather	Purpose
October 17, 2025	10:00 – 13:30	8°C, 60% cloud cover, Beaufort 2, no precipitation	Ecological Land Classification
November 18, 2025	08:30 – 10:15	-3°C, 100% cloud cover, Beaufort 3, no precipitation	Watercourse and Wetland Review

2.2.1 Ecological Land Classification

Vegetation communities were delineated during the 2025 field investigations, following the Ecological Land Classification System for Southern Ontario (Lee *et al.*, 2008). Vegetation communities were confirmed in the field by employing the random meander methodology while documenting dominant vegetation species within the various vegetation community forms.

2.3 Data Analysis

An evaluation of the significance of natural heritage features, the sensitivity of identified flora and fauna and the potential impacts posed by the proposed development was undertaken through an analysis of desktop and field investigation data using the approaches and criteria outlined in the following documents:

- Natural Heritage Reference Manual (OMNR, 2010);
- Significant Wildlife Habitat Technical Guide (OMNR, 2000);
- Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015b); and
- Significant Wildlife Habitat Mitigation Support Tool (OMNRF, 2014b).

3.0 EXISTING ENVIRONMENT

3.1 Ecoregion

The site is situated in Ecoregion 6E-11 (Lake Simcoe-Rideau), that extends from Lake Huron in the west to the Ottawa River in the east. The climate of Ecoregion 6E is categorized as humid, high to moderate temperate ecoclimate with a mean annual temperature range between 4.9°C to 7.8°C with annual precipitation ranging between 759 mm to 1,087 mm (Crins *et al.*, 2009).

The eastern portion of the Ecoregion, which the subject property is located, is underlain by glaciomarine deposits as a result of the brief post-glacial incursion of salt water from the Champlain Sea along the St. Lawrence Valley. This Ecoregion falls with Rowe's (1972) Great Lakes-St. Lawrence Forest Region, including its Huron-Ontario and Upper St. Lawrence sections, and a small part of the Middle Ottawa Forest section (Crins *et al.*, 2009).

3.2 Landforms, Soils and Bedrock Geology

The topography of the property is relatively flat, with a slight downward slope from the west to east. The property has a topographical high of 95 mASL in the western portion of the property within the small on-site woodland, and a topographical low of 93 mASL located along the eastern property boundary.

One topographical landform, as mapped by Chapman and Putnam (1984) is described on the subject property, clay plains of the Ottawa Valley Clay Plains physiographic region.

The Ontario Geological Survey (OGS, 2019) identifies one surficial soil unit on the subject property: fine-textured glaciomarine deposits, consisting of massive to well laminated silt and clay, minor sand and gravel.

Bedrock on the site is comprised of limestone, dolostone, shale, arkose, and sandstone of the Ottawa Group, Simcoe Group, and Shadow Lake Formation.

3.3 Study Area Land Use

Figure 1 below provides an illustration of the temporal changes in land use within the study area from 1976, 2002, 2015, and 2022 aerial imagery taken from GeoOttawa.

In 1976, it can be seen that the subject property appears to be used as agricultural land. The surrounding greater study area is comprised of agricultural land use, forested areas, and rural residential properties. Based on aerial imagery and historical reports (CCL, 1994) sometime between 1991 and 1999, two stormwater management ponds were constructed immediately north of the subject property, in addition to alterations to the unnamed tributary to the Carp River.

By 2002, the subject property appears to have gone fallow and was no longer used for agriculture. Land use within the greater study area has shifted from primarily agricultural fields to a mosaic of agriculture, commercial development and residential neighborhoods.

By 2015, no significant changes occur to the subject property. The adjacent property to the south has been developed and residential neighborhoods continue to be developed within the greater study area. Between 2015 and 2017, a significant realignment and naturalization project was undertaken and completed for the Carp River immediately adjacent to the west and north of the site.

By 2022, no significant changes occur to the subject property, and it is consistent with present day. Residential and commercial development continues within the greater study area.



Figure 1 – Temporal Changes in Land Use within Study Area

3.4 Carp River Watershed/Subwatershed Study and The Carp River Restoration Project

The Carp River Subwatershed Study (CRSWS) (Robinson, 2004) was completed, in part, to ensure that planning of future development proceeds in an environmentally sound manner. Specifically, the CRSWS aims to achieve this objective through making recommendations relating to how water resources and sub-watershed features, including their ecological functions are protected. The Carp River watershed encompasses an area of approximately 30,600 ha surrounding the former municipalities of West Carleton, Kanata and Goulbourn. The CRSWS identifies opportunities and constraints for improvement of the Carp River Watershed while

providing a series of Best Management Practices (BMPs) that may be implemented in order to protect, enhance or restore the environment.

According to the CRSWS, the Carp River Tributary on-site falls into the degraded warmwater fish community, which is distributed throughout the headwaters of Huntley Creek, west of Highway 417, and the upper Carp (upstream of Richardson Side Road). As such, under the recommendations provided by the CRSWS, where development is contemplated, the Carp River should receive a minimum 15 m setback and revegetating up to 50% of the total stream length with native wood, riparian vegetation.

The Carp River Restoration Project, in addition to enhancing the Carp River corridor, engineered the floodplain to accommodate planned future development. This was achieved by a series of cuts and fills throughout the restoration area. A comprehensive hydraulic analysis was conducted as part of the restoration work to verify the floodplain storage in the corridor. All approved cuts were performed during the Carp River Restoration Project, while the associated fills are being performed by individual landowners based on their development timelines. Due to this time-delayed cut-and-fill process, several identified fill areas had not been filled at the time of the MVCA's Carp River Floodplain Mapping Update. As such, the 'Carp River Restoration Policy Area' (CRR Policy Area), as illustrated on Figure A.2, identifies the area where the floodplain cut-and-fill balance has already been accounted for.

3.5 Surface Water, Groundwater, and Fish Habitat

Surface water features identified within the study area during the desktop review include the Carp River, an unnamed tributary of the Carp River, two stormwater management ponds, and local wetlands. Surface water features identified on-site during the desktop review, and confirmed during the field investigation, include the tributary of the Carp River and a local wetland. Photos of surface water features are provided in Appendix B.

The Carp River is located approximately 35 m west of the subject property, within the study area. During the field investigation, the Carp River was observed to have flowing conditions. The banks were noted as having a mosaic of vegetation and large boulders. The depth of the Carp River was not determined during the field investigation. No fish were directly observed in the Carp River during the field investigation; however, it is known to provide habitat for a variety of fish species.

An unnamed tributary of the Carp River was observed on-site and within the study area during the field investigation. The tributary originates within the north-south orientated ditch along Didsbury Road and enters the subject property from the easternmost property boundary. Based on plans reviewed (Stantec, 2015), it is apparent that this unnamed tributary was previously approved to be infilled with all upgradient stormwater generated from the various properties fronting to Terry Fox was designed to flow through the stormwater collection system which discharges to the two stormwater management ponds located immediately north of the subject property.

The unnamed tributary travels across the subject property in a northwest direction for approximately 80 m before exiting the property via the northern property boundary, just southeast of the two stormwater management ponds. The tributary then continues off-site in a northwestern direction for approximately 100 m before receiving the stormwater management pond discharge and then ultimately continuing in a westerly direction for another 190 m before discharging into the Carp River.

During field investigations, the portion of the tributary on-site was noted as dry with saturated soils, with the exception of a small pool of water surrounding the culvert outlet on-site. Within the pool, depths were measured at approximately 35 cm and no flow was observed. Vegetation within the tributary on-site was noted as dense and was comprised of grasses and cattails. The remainder of the tributary, located off-site, was noted as having standing water and no emergent or submerged vegetation. No fish were directly observed within the tributary at the time of the field investigation; however, connectivity to the Carp River, it is assumed that the unnamed tributary provides fish habitat for warmwater, tolerant species of small bodied fish. Based on the observations made during the field investigation, the portion of the tributary on-site serves as an ephemeral watercourse, only maintaining water depths following now melt or large precipitation events. A review of the Ontario Aquatic Resource Area Line Segment database indicates the presence of the following warmwater, tolerant fish species within the Carp River Tributary on-site: brook stickleback (*Culaea inconstans*), central mudminnow (*Umbra limi*), and northern redbelly dace (*Chrosomus eos*).

Located within the study area, immediately north of the subject property, are two stormwater management ponds, collectively referred to as the Broughton Pond (Kanata Town Center Stormwater Management, CCL, April 1994). During the field investigation, depths were not determined; however, standing water was observed.

During the desktop analysis, GeoOttawa identified two local wetland communities within the study area, associated with the Carp River; however, field investigations completed by GEMTEC only confirmed the presence of one local wetland community. The unevaluated wetlands identified by GeoOttawa north of the subject property were confirmed in the field at a high-level (i.e., boundaries not ground truthed), however, the wetlands illustrated on GeoOttawa adjacent to the Carp River were confirmed not to be present. Based on comparison of historical air photos, it is evident that the wetland mapping on GeoOttawa illustrated adjacent to the Carp River is reflective of the pre-2015 realignment and Carp River Restoration Project construction and does not reflect current conditions.

During the field investigation, an unmapped local wetland indicative of a meadow marsh was identified on the subject property. At the time of the investigation, the on-site local wetland did not contain surface water. Based on a review of historical air photos, this wetland which lies within the pre-approved cut/fill areas of the Carp River Restoration Policy Area, rarely contains surface

water its presence is likely associated with low permeability soils in this area of the site. Vegetation within this meadow marsh was dominated by invasive phragmites.

No other surface water features were identified within the study area during the desktop review or the field investigation. Additionally, no critical habitat for aquatic SAR has been identified within the study area.

Groundwater investigations were not completed in support of this EIS.

3.6 Vegetation Communities

Vegetation communities on-site were confirmed by GEMTEC in 2025, following protocols utilized in the Southern Ontario Ecological Land Classification System (Lee *et al.*, 2008). Vegetation on-site is comprised of a mosaic of deciduous forest, cultural meadow, and meadow marsh. Table 3.1 below provides a summary of the vegetation community identified on-site.

Table 3.1 Vegetation Communities On-site

ELC Type	Description	Size (ha)
Fresh-Moist Poplar Deciduous Woodland (WODM5-1)	Located within the west-central portion of the property is an early successional deciduous woodland dominated by trembling aspen (<i>Populus tremuloides</i>), and to a lesser extent blue spruce (<i>Picea pungens</i>). The shrub layer was comprised of trembling aspen, American elm (<i>Ulmus americana</i>), willow (<i>Salix</i> sp.), and red-osier dogwood (<i>Cornus sericea</i>). The herbaceous layer was minimal and included goldenrod (<i>Solidago</i> sp.) and grasses.	0.54
Cultural Meadow (CUM)	Occupying the majority of the property is a cultural meadow. Tree species were sparse; however, where present, included red-osier dogwood, willow, sumac (<i>Rhus</i> sp.), Manitoba maple (<i>Acer negundo</i>), and common buckthorn (<i>Rhamnus cathartica</i>). The composition within the herbaceous layer varied across the property. Herbaceous species included: white vervain (<i>Verbena urticifolia</i>), aster (<i>Aster</i> sp.), goldenrod, creeping thistle (<i>Cirsium arvense</i>), wild parsnip (<i>Pastinaca sativa</i>), and common milkweed (<i>Asclepias syriaca</i>).	5.67
Common Reed Graminoid Mineral Meadow Marsh (MAMM1-12)	Located within the northeastern corner of the property is a graminoid meadow marsh dominated by common reed (<i>Phragmites australis</i>). Other common constituents included purple loosestrife (<i>Lythrum salicaria</i>), creeping thistle, and cattail (<i>Typha</i> sp.).	1.12

3.7 Wildlife

During the completed field investigation within the study area, all terrestrial wildlife, including calls and sign, were recorded. These observations are summarized in Table C.1 in Appendix C.

4.0 NATURAL HERITAGE FEATURES

Natural heritage features are defined in the PPS as "features and areas, including *significant wetlands, significant coastal wetlands, fish habitat, significant woodlands* south and east of the Canadian Shield, *significant valleylands* south and east of the Canadian shield, *significant habitats of endangered species and threatened species, significant wildlife habitat* and *significant areas of natural and scientific interest*, which are important for their environmental and social values as a legacy of the natural landscape of an area".

4.1 Provincially Significant and Local Wetlands

As described in the Natural Heritage Reference Manual (OMNR, 2010), wetlands are "lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface." While *significant* in regard to wetlands means "an area identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time."

No Provincially Significant Wetlands (PSWs) are present on-site or within study area. As discussed in Section 3.3, GeoOttawa mapping identified two local unevaluated wetland communities within the study area; whereas the field investigation identified one local wetland (ELC code: MAMM1-12) on the subject property. However, as outlined in Section 3.5, of the two off site wetlands, only the wetland to the north was confirmed to be present.

As mentioned in Section 3.4, the Carp River Restoration Project, in addition to enhancing the Carp River corridor, engineered the floodplain to accommodate planned future development through a cut and fill process. The CRR Policy Area, as illustrated on Figure A.2, identifies the area on-site where the floodplain cut-and-fill balance has already been accounted for. As such, the local wetland on-site, located within the CRR Policy Area has been pre-approved for cut-and-fill. It is to be noted that off-site wetlands within the study area are also located within the CRR Policy Area.

Impacts to local wetlands from the proposed development is discussed in Section 6.

4.2 Significant Woodlands

Significant woodlands are defined in the natural heritage reference manual (OMNR, 2010) as "an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history."

At the local scale, significant woodlands are defined and designated by the local planning authority. Generally, most planning authorities have defined significant woodlands as any woodland that contains any of the four criteria listed in Section 7.2 of the natural heritage reference

manual (OMNR, 2010), including: woodland size, ecological functions, uncommon characteristics and economic and social functional values. Furthermore, the City of Ottawa provides a supplementary document *Significant Woodland: Guidelines for Identification, Evaluation, and Impact Assessment* (Ottawa, undated) to evaluate woodlands and ensure compliance with the city's policies.

The subject site is located within the urban policy area of the City of Ottawa. As established in the City of Ottawa Significant Woodlands Guidelines (Ottawa, 2022b), woodlands in the urban policy area are to be considered significant if they are greater than 60 years old and greater than 0.8 ha in size. To assess the urban woodlands, the 1976 aerial photograph from GeoOttawa was used to identify areas of woodlands greater than 60 years old and larger than 0.8 ha in size.

Based on the 1976 aerial imagery, the woodlands present on-site are not considered significant as they only began generating between 2002 and 2005. Accordingly, significant woodlands are not discussed or evaluated further in this EIS.

4.3 Significant Valleylands

In Southern Ontario, conservation authorities have identified valleylands as part of their regulation mapping (i.e., floodplain mapping); however, where valleys lands have not been defined, their physical boundaries are generally determined as the 'top-of-bank' or 'top-of-slope' associated with a watercourse. For less well-defined valleys, the physical boundary may be defined by riparian vegetation, flooding hazard limits, ordinary high watermarks, or the width of the stream meander belt (OMNR, 2010).

As discussed in Section 3.2, the topography of the site is relatively flat, however mapping from the MVCA and City of Ottawa Official Plan identifies that portions of the property occur within the 1:100-year floodplain. Additionally, as mentioned in Section 3.4, the Carp River Restoration Project, in addition to enhancing the Carp River corridor, engineered the floodplain to accommodate planned future development. In accordance with MVCA and City of Ottawa Official Plan policies, no development is permitted within the 1:100-year floodplain. The 100-year floodplain is illustrated on Figure A.4 in Appendix A. In accordance with the City's EIS guidelines, for the purpose of informing future climate change resilience, the City's 1:350-year floodplain mapping is also illustrated on Figure A.4

Potential impacts to significant valleylands associated with the 1:100-year floodplain is discussed in Section 6.

4.4 Significant Areas of Natural and Scientific Interest

The MNRF identifies two types of areas of natural and scientific interest (ANSI) in Ontario: life sciences ANSIs typically represent significant segments of Ontario's biodiversity and natural

landscapes, while earth science ANSIs typically represent significant examples of bedrock, fossils or landforms in Ontario (OMNR, 2010).

No ANSI were identified within the study area during the desktop review or during the site investigation.

4.5 Significant Wildlife Habitat

The Natural Heritage Reference Manual (OMNR, 2010), in combination with the Significant Wildlife Habitat Technical Guide (MNRF, 2000) and the Significant Wildlife Habitat Ecoregion 6E Criterion Schedules (OMNRF, 2015b) were used to identify and evaluate potential significant wildlife habitat (SWH) on-site. The SWH are broadly categorized as habitats of seasonal concentration of animals, rare vegetation communities, specialized habitats for wildlife, habitats of species of conservation concern, and animal movement corridors. Table C.3, C.4, C.5 and C.6 in Appendix C, provide the screening rationale for each category of SWH, respectively.

4.5.1 Habitats of Seasonal Concentrations of Animals

Seasonal concentration areas are habitats where large numbers of species congregate at one particular time of the year. The Significant Wildlife Habitat Technical Guide (OMNR, 2000) and Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015b) identify 11 types of seasonal concentration habitats that may be considered SWH. These 11 types of seasonal habitat are presented in Table C.3 in Appendix C, including a brief description of the rationale as to why they are or are not assessed further in this EIS.

Following a review of Table C.3 in Appendix C, no habitats of seasonal concentration of animals have been identified as being present on-site or within the study area.

4.5.2 Rare Vegetation Communities

Rare vegetation communities in the province are described generally as those with an S1 to S3 ranking by the NHIC, and typically include communities such as sand barrens, alvars, old growth forests, savannahs, and tallgrass prairies.

The vegetation community identified on-site and described in Section 3.4 of this report is not ranked by the NHIC as S1, S2, or S3 and are therefore not considered to be rare vegetation communities.

4.5.3 Specialized Habitats for Wildlife

Specialized wildlife habitats are microhabitats that provide a critical resource to some groups of wildlife. The Significant Wildlife Habitat Technical Guide (OMNR, 2000) and Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015b) identify eight specialized habitats that may constitute SWH, these eight types of specialized wildlife habitats are evaluated in Table C.4 in Appendix C.

Following a review of Table C.4 in Appendix C, one *candidate* specialized wildlife habitat has been identified as being present on-site or within the study area: wetland amphibian breeding habitat.

4.5.3.1 Wetland Amphibian Breeding Habitat

Candidate wetland amphibian breeding habitat is associated with the local wetlands within the study area located immediately north of the subject property, as well as within the riparian zone of the Carp River.

Wetland amphibian breeding habitat occurs throughout swamps, marshes, fens, bogs, open aquatic and submerged aquatic habitats. Wetland amphibian breeding habitat provides critically important breeding habitat for the following wildlife species: 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 and bullfrog. The local wetland identified on the subject property is unlikely to support wetland amphibian breeding habitat.

Targeted amphibian breeding surveys were outside of the scope of this EIS. As such the presence or absence of wetland amphibian breeding SWH was not confirmed.

Impacts to *candidate* wetland amphibian breeding SWH from the proposed development are discussed in Section 6 below.

4.5.4 Habitats of Species of Conservation Concern

Provincial rankings are used by the Natural Heritage Information Centre to set protection priorities for rare species, similar to those described in Section 4.5.2 above for vegetation communities. Provincial rankings (S-ranks) are not legal designations such as those used to define the various protection statuses of species at risk. They are only intended to consider factors within the political boundaries of Ontario that might influence a particular species abundance, distribution or population trend.

Based on the guidance provided in the Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015b), when a plant or animal element occurrence is recorded for any species with an S-rank of S1 (extremely rare), S2 (very rare), S3 (rare to uncommon) or SH (historically present), the corresponding vegetation ecosite is considered to provide *candidate* habitat for species of conservation concern and further consideration within the EIS is warranted.

The Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015b) provides five general habitat types known to support a wide range of species of conservation concern in Ontario. The five general habitat types for Ecoregion 6E are provided in Table C.5 in Appendix C, including a brief rationale as to why they are or are not considered further in this EIS.

Following a review of Table C.5 in Appendix C, one *candidate* habitats of species of conservation concern has been identified on-site; habitats of Special Concern and Rare Wildlife Species for barn swallow, eastern wood-pewee, wood thrush, and snapping turtle.

4.5.4.1 Special Concern and Rare Wildlife Species SWH

No species of species concern were directly observed on-site during the site investigation. Based on occurrence data from the NHIC, four species of special concern have been identified within the study area, barn swallow, eastern wood-pewee, wood thrush, and snapping turtle. No other species of special concern or rare wildlife species were identified on-site or within the study area.

Barn Swallow

The barn swallow (*Hirundo rustica*) is medium-sized, insectivorous bird with an S-rank of S4B (uncommon but not rare, breeding population) and is listed as a species of special concern in Ontario. The NHIC has identified historic observations for the species within 1 km of the subject property; however, the species was not observed during the field investigation. The cultural meadow (ELC code: CUM) may provide suitable foraging habitat to support barn swallow; however, no structures occur on-site to support nesting habitat. Given the availability of foraging habitat on-site and availability of nesting structures within the study area, there is a moderate potential for barn swallow to occur on-site.

Eastern Wood-pewee

The eastern wood-pewee (*Contopus virens*) is a small flycatcher bird with an S-rank of S4 (uncommon but not rare) and is listed as a species of special concern in Ontario. The species is often found near clearings and forest edges. The NHIC has identified an occurrence record for the species within 2 km of the subject property; however, the species was not observed on-site during the site investigation. The forest on-site (ELC code: FODM8-1) may provide suitable nesting and foraging habitats to support eastern wood-pewee. Given the availability of forest habitat within the study area, there is a moderate potential for eastern wood-pewee or suitable habitat to occur on-site.

Wood Thrush

The wood thrush (*Hylocichla mustelina*) is a medium-sized songbird with an S-rank of S4B (breeding is uncommon but not rare) in Ontario. Wood thrush is a woodland species often found in moist, deciduous hardwood or mixed forests stands, with dense deciduous undergrowth and tall trees. The NHIC has identified historic observations for the species within 1 km of the subject property; however, the species was not observed during the field investigation. The forest on-site (ELC code: FODM8-1) may provide suitable nesting and foraging habitats to support wood thrush. Given the availability of forest habitat within the study area, there is a moderate potential for wood thrush or suitable habitat to occur on-site.

Snapping Turtle

The snapping turtle (*Chelydra serpentina*) is a highly aquatic turtle species with an S-rank of S3 (rare to uncommon). Snapping turtles are aquatic generalists, found in a variety of wetlands, water bodies and watercourses. As a highly aquatic species, snapping turtles prefer wetlands and waterbodies to be permanently flooded. The NHIC has identified historic observations for the species within 1 km of the subject property; however, the species was not observed during the field investigation. The tributary on the subject property may support snapping turtle foraging and transient habitat. As such, there is a moderate chance of snapping turtle to occur on-site.

4.5.5 Animal Movement Corridors

Animal movement corridors are elongated areas used by wildlife to move from one habitat to another and allow for the seasonal migration of animals (OMNRF, 2015b). The Significant Wildlife Habitat Ecoregion Criterion Schedules for Ecoregion 6E-11 (OMNRF, 2015b) identifies two types of animal movement corridors: amphibian movement corridors and deer movement corridors. As per guidance presented by the OMNRF (2015b), animal movement corridors should only be identified as significant wildlife habitat when a *confirmed or candidate* significant wildlife habitat has been identified by the MNRF district office or by the regional planning authority.

As outlined in Section 4.5.3.1 above, *candidate* significant wildlife habitat for wetland amphibian breeding was identified off-site within the unevaluated wetlands to the north and within the riparian zone of the Carp River.

Potential impacts to off-site animal movement corridors are discussed in Section 6.

4.6 Fish Habitat

The protection of fish and fish habitat is a federal responsibility and is administered by the Department of Fisheries and Oceans Canada (DFO). Fish habitat as defined in the Fisheries Act (Canada, 1985) means, “spawning grounds and nursery, rearing food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

When development is unable to avoid resulting in the harmful alteration, disturbance or destruction of fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under the Fisheries Act is required for the project to proceed.

A fisheries assessment was not conducted as part of this EIS, the Carp River is known to provide fish habitat for a variety of fish species. The tributary and local wetlands on-site may provide temporary fish habitat, contributing to base flow conditions for downstream habitat particularly during spring freshet and following significant precipitation events.

It is to be noted that the CRR Policy Area, as illustrated on Figure A.2, identifies the area where the floodplain cut-and-fill balance has already been accounted for. As such, the portion of the

tributary that occurs on-site, located within the CRR Policy Area, has been pre-approved for cut-and-fill. Similarly, the removal of this same on-site portion of the unnamed tributary was addressed and approved through the construction of the stormwater management system serving the Kanta Town Centre and commercial properties fronting to Terry Fox (Stantec, 2015).

Impacts to fish habitat from the proposed development are discussed in Section 6.

4.7 Species at Risk

The probability of occurrence for species at risk to occur on-site and within the broader study area was determined through the desktop review stage of this EIS, as described in Section 2.1, and through the site investigation conducted as part of this EIS, outlined in Section 2.2.

Table C.7 in Appendix C, provides a summary of all Species at Risk that were considered to have the potential to occur on-site or within the broader study area. The table summarizes each species protection status under the provincial SCA (Ontario, 2025) and the federal SARA (Canada, 2002), their probability of occurrence and a brief rationale of that probability. For birds, their status under the MBCA is provided. Impacts to endangered or threatened protected species determined to have a moderate or high potential to occur on-site or within the broader study area are discussed further in Section 6.

5.0 PROPOSED PROJECT

The proposed project is to amend the current zoning on the subject site from Development Reserve – DR to a Neighbourhood Mixed-Use Zone. There is no development or site plan for the site at this time.

The zoning amendment is required to amend the zoning to be consistent with the surrounding land uses and implement the Official Plan designation for the lands. It is envisioned that the subject site could consist of several commercial buildings grouped on the site and connected by internal access lanes and parking areas. It is anticipated that the Gross Floor Area of the combined uses may be in the order of 18,615 m² and will be primarily slab-on-grade and single story. The application would seek an exception to also permit a gas bar, day care, residential and hotel as permitted uses. The future commercial development would be municipally serviced.

Potential environmental impacts from the proposed zoning amendment and contemplated future permitted site uses are discussed in Section 6 below, at a conceptual level. This EIS will require updates in the future once development plans are realized and as part of Site Plan Controls.

6.0 IMPACT ASSESSMENT

Potential impacts to natural heritage features on-site and within the broader Study Area are assessed for direct, indirect, and cumulative effects based on the proposed project outlined in

Section 5. Natural heritage features identified in Section 4 of this report as present or likely to be present are discussed in the subsections below.

Potential effects to the environment of the site from the proposed development outlined in Section 5 include: a potential loss of woodlands and cultural meadow habitat, a potential increase in impervious surface, a potential increase in stormwater generation, a potential increase in night lighting, a potential increase in noise and litter/refuse generation,

6.1 Local Wetlands

As outlined in Section 3.3 and 4.1, GeoOttawa mapping identified two local unevaluated wetland communities within the study area; whereas the field investigation identified one local wetland (ELC code: MAMM1-12) on the subject property.

As mentioned in Section 4.1, the local wetlands, both on and off-site, are located within the CRR Policy Area, and as such, have been pre-approved for cut-and-fill process. As such, no impacts to local wetlands are anticipated from the proposed project or future developments.

6.2 Floodplain

As discussed in Section 4.3, significant valleylands are present on-site in conjunction with MVCA and City of Ottawa Official Plan mapping for the 1:100-year floodplain.

In accordance with MVCA and City of Ottawa Official Plan policies, no development is permitted within the 1:100-year floodplain.

No development is proposed to occur within the 1:100-year floodplain. As such no negative impacts to significant valleylands – floodplain is anticipated as a result of the proposed project or future developments .

6.3 Significant Wildlife Habitat

The potential presence of SWH on-site and within the Study Area was evaluated in Section 4.5. As a result of this assessment, one type of SWH was determined to be present on-site or within the study area; *candidate* habitat of special concern and rare wildlife species.

Potential impacts to each type of SWH are discussed in greater detail in the following subsections, while mitigation measures intended to prevent such impacts are presented in Section 7.

6.3.1 Candidate Wetland Amphibian Breeding Habitat

Candidate wetland amphibian breeding habitat is associated with the local wetlands within the study area, located immediately north of the subject property and within the riparian corridor of the Carp River offsite.

No direct impacts to off-site *candidate* wetland amphibian breeding habitat are anticipated from the proposed zoning amendment. Potential impacts associated with future developments are not anticipated, primarily as a result of the separation distance between *candidate* habitat and the subject site (i.e., greater than 30 m. Potential future indirect impacts may include long-term human disturbance such as noise generation, off-site migration of refuse/litter and an increase in night-lighting.

Mitigation measures to protect *candidate* wetland amphibian breeding habitat are provided in Section 7.

6.3.2 Habitats of Special Concern and Rare Wildlife Species

6.3.2.1 Barn Swallow

Barn swallows typically build their nests out of mud on ledges or walls on barns or other human made structures. Natural sites, including cliffs and caves are rarely used for nesting (Cadman et al., 2007). Foraging occurs within fields and ponds. Barn swallows are less common in highly urban area and areas with higher forest cover (Cadman et al., 2007).

The NHIC provides historical occurrence data for the species within 1 km of the project area; however, the species was not identified during the field investigation.

No impacts to barn swallow and their habitat are anticipated from the proposed zoning amendment. Potential impacts from future development on barn swallows and their habitat is limited to the cultural meadow habitat (ELC code: CUM), which may provide suitable foraging habitat. No nests or suitable nesting structures were directly observed on-site; however, suitable nesting structures may occur off-site within the study area. During the field investigation, one inactive barn swallow nest was observed on the underside of the bridge, located off-site, immediately north of the subject property. Additionally, an abundance of habitat for foraging barn swallow is present within the study area. Impacts to barn swallow habitat may include the loss of foraging habitat, increased fragmentation and increased human interaction. Impacts from increased human presence are anticipated to be negligible given the existing development surrounding the subject property and availability of suitable habitat within the greater study area.

Mitigation measures intended to prevent negative impacts to foraging barn swallow are presented in Section 7.

6.3.2.2 Eastern Wood-Pewee

Threats to eastern wood-pewee are not well understood however, loss of suitable forest habitat does not appear to be a significant issue across their Canadian breeding range (COSEWIC, 2012a). Furthermore, research indicates that the species is not very sensitive to forest fragmentation effects or forest size (COSEWIC, 2012a). Eastern wood-pewee may be sensitive to human habitation, in Ontario they occur less frequently in woods with surrounding development

than those without houses (COSEWIC, 2012a). Other threats to eastern wood-pewee may include changes in the availability of aerial insects, mortality during migration and/or wintering, nest predation and habitat changes due to white-tailed deer browsing (COSEWIC, 2012a).

The NHIC provides historical occurrence data for the species within 2 km of the project area; however, the species was not identified during the field investigation.

Impacts to eastern wood-pewee and their habitat on-site are not expected from the proposed zoning amendment. Future potential development impacts are limited to the woodland habitat on-site (ELC code: FODM8-1) that may provide suitable nesting and foraging habitat.

Impacts to eastern wood-pewee habitat may include the potential loss of up to 0.54 ha of forest habitat on-site and increased human interaction. Impacts from increased human presence are anticipated to be minimal given the existing suburban development surrounding the subject property, and the availability of suitable habitat within the greater study area.

Mitigation measures intended to prevent negative impacts to nesting and foraging eastern wood-pewee are presented in Section 7.

6.3.2.3 Wood Thrush

During the breeding season, the wood thrush is found in moist, deciduous hardwood or mixed forest stands, often in previously disturbed sites with dense, deciduous undergrowth and tall trees that are used as singing perches (COSEWIC, 2012b). For wood thrush, habitat selection is based more on the structure of the forest, preferring sites with lower elevations, trees taller than 16 m, closed canopy (>70%), with a high variety of deciduous species, moist soil and decaying leaf litter (COSEWIC, 2012b).

The NHIC provides historical occurrence data for the species within 1 km of the project area; however, the species was not identified during the field investigation.

Impacts to wood thrush and their habitat on-site from the proposed zoning amendment are not anticipated. Future potential development impacts are limited to the forest habitat on-site (ELC code: FODM8-1) that may provide suitable nesting and foraging habitat.

Impacts to wood thrush habitat may include the potential loss of up to 0.54 ha of forest habitat on-site and increased human interaction. Impacts from increased human presence are anticipated to be minimal given the existing suburban development surrounding the subject property, and the availability of suitable habitat within the greater study area.

Mitigation measures intended to prevent negative impacts to nesting and foraging wood thrush are presented in Section 7.

6.3.2.4 Snapping Turtle

Threats to snapping turtle are primarily related to their life-history, their slow recruitment, late maturity, long lifespan and high adult survival make them extremely vulnerable to a variety of anthropogenic impacts (COSEWIC, 2008). Short, cool summers also reduce hatching success. In Canada, snapping turtles are most impacted by events that increase adult mortality, such as harvesting of adults, persecution and road mortality (COSEWIC, 2008). Other threats include loss of habitat, environmental contamination and nest predation (COSEWIC, 2008).

The NHIC provides historical occurrence data for the species within 1 km of the project area; however, the species was not identified during the field investigation.

As discussed in Section 3.5, the Carp River, a tributary, two ponds, and local wetlands have been identified on-site or within the study area. While water depths were not measured during the field investigation, the Carp River within the study area may provide suitable conditions for *candidate* overwintering habitat, as well as general habitat for Blanding's turtle use. The tributary on-site is unlikely to provide suitable overwintering habitat given the lack of permanent water and insufficient water depths. As mentioned in Section 3.5, the banks were noted as a mosaic of vegetation and boulders; thus, nesting and basking habitat is unlikely to be present. While the tributary is unlikely to provide overwintering, nesting, and basking turtle habitat, it may be present within the Carp River, ponds, or local wetlands within the greater study area. Additionally, the subject property may provide suitable habitat for transient individuals and act as a wildlife corridor for turtles migrating between winter and summer habitats.

As mentioned in Section 3.4, CRR Policy Area on-site is pre-approved for cut-and-fill. As such, no direct impacts to the on-site local wetland or the tributary are anticipated. Potential impacts include short duration construction impacts, including: heavy machinery encroachment, fill placement and long-term human disturbance such as noise generation, dumping of refuse and yard waste and trampling. The proposed zoning amendment is not anticipated to impact turtle habitat. Similarly, future potential development is not anticipated to impact or impede habitat for transient turtles.

Mitigation measures to protect snapping turtle and their habitat from the proposed development are presented in Section 7.

6.3.3 Animal Movement Corridors

As outlined in Section 4.5.3.1 above, *candidate* significant wildlife habitat for wetland amphibian breeding was identified off-site within the unevaluated wetlands to the north and within the riparian zone of the Carp River.

Given the distance between the *candidate* habitat and the proposed development (i.e., greater than 30 m), and in consideration of no direct impacts to off-site wetlands, shorelines or vegetation

cover as part of the development. the project is not anticipated to impact or impede habitat for transient amphibians.

6.4 Fish Habitat

According to the Provincial Planning Statement (MMAH, 2024), “development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.” Fish habitat as defined in the Fisheries Act (Canada, 1985) means “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

Under the Fisheries Act, protection is afforded to all fish and fish habitat, not just those that support either a recreational, commercial or Aboriginal fishery. Under the Fisheries Act, work that is conducted in or near waterbodies must avoid “the death of fish, other than by fishing” (Canada, 1985). Furthermore, the new Fisheries Act states that work must avoid “the harmful alteration, disruption or destruction (HADD) of fish habitat” (Canada, 1985).

When activities are unable to avoid or mitigate harm to fish or fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under Subsection 35 (2) of the Fisheries Act is required for the project to proceed without contravening the Act.

As mentioned in Section 4.6, the on-site portion of the tributary and local wetland are located within the CRR Policy Area, and as such, have been pre-approved for cut-and-fill process. Additionally, based on the Storm Drainage Plan provided by Stantec in 2015, and approved by the City of Ottawa, drainage to the existing ditch is proposed to be redirected into the recently constructed storm sewer along Didsbury, which outlets to the Broughton Pond. No impacts to fish habitat within the tributary and on-site local wetlands are anticipated as a result of the proposed zoning amendment. Future development may pose impacts to fish habitat, and will require assessment once development details are known.

Potential impacts to fish habitat within the Carp River, off-site portion of the tributary, and local wetlands within the study area are not anticipated as a result of the proposed zoning amendment. Future potential indirect impacts may include increased human disturbance, increase storm water generation and potentially increased nutrient loading to adjacent surface water features.

Other potential impacts may include short duration construction impacts, including: heavy machinery encroachment, fill placement and long-term human disturbance such as noise generation, dumping or refuse and yard waste and trampling.

Mitigation measures intended to protect fish and fish habitat within the study area are provided in Section 7.

6.5 Species at Risk

6.5.1 Species Conservation Act (Ontario, 2025)

The SCA identifies endangered and threatened species under the Protected Species in Ontario (PSO) list that receive individual and habitat protections. Species of special concern and their habitat are not protected under the SCA. COSSARO maintains SAR designations and assessment for special concern, threatened and endangered species, but only those threatened and endangered species listed in the Protected Species in Ontario list receive protection under the SCA.

The SCA provides habitat definitions for specific species (e.g. black ash), for all other species whose habitat is not specifically outlined in the SCA, the following definition is used:

“‘habitat’ means:

- a) In respect of an animal species:
 - i. A dwelling-place such as a den, nest or other similar place, that is occupied or habitually occupied by one or more members of a species for the purposes of breeding, rearing, staging, wintering or hibernating, and
 - ii. The area immediately around a dwelling place described in subclause (i) above that is essential for the purposes set out in that subclause
- b) In respect of a vascular plant species: the critical root zone surroundings a member of the species, and
- c) In respect of all other species: an area on which any member of a species directly depends in order to carry on its life processes”

Endangered and threatened species identified in Table C.7 as having a moderate or high potential to occur on-site are discussed in the sub-sections below.

The proposed zoning amendment is not anticipated to result in any impacts to SAR. Impacts associated with future potential developments to threatened or endangered species identified as having a moderate or high potential to occur on-site in Section 4.7, are discussed on a species-by-species basis in subsections below.

6.5.2 SAR Bats

6.5.2.1 Eastern Red Bat

Eastern red bat (*Lasiurus borealis*) is a medium-large sized (typically 10-17 g), insectivorous bat found in Ontario. The fur of an eastern red bat is usually orange, but can vary from yellowish-red to yellowish-grey, with white or white-tipped hairs (COSEWIC, 2023).

The eastern red bat is found throughout Canada (except Prince Edward Island), the United States, and northeast Mexico; with distribution uncommon west of the Western Cordillera. In Ontario, the species occurs throughout Ontario, appearing as far north as James Bay (COSEWIC, 2023).

Eastern red bats overwinter in warmer climates in the southern extent of the United States, typically beneath leaf litter (COSEWIC, 2023). In comparison to many other Ontario bat species, they do not overwinter in caves. During the spring and summer months, they typically utilize the foliage of trees and occasionally shrubs for roosting habitat, with a preference for roosting near the edge of the crown and at sufficient heights to prevent access from mammalian predators (COSEWIC, 2023).

6.5.2.2 Eastern Small-footed Myotis

Eastern small-footed myotis (*Myotis leibii*) is the smallest (typically 3-5 g), insectivorous bat found in Ontario. The fur of an eastern small-footed myotis is golden-brown in colour, with a distinct black mask across the face. The eastern small-footed myotis is very similar in appearance to the little brown myotis and is distinguishable by their small foot and keeled calcar (Fraser, MacKenzie & Davy, 2007).

The eastern small-footed myotis is found throughout eastern North America. In Ontario, the species has been observed in the areas south of Lake Superior across to the Ontario-Quebec border (Humphrey, 2017).

Eastern small-footed myotis overwinter primarily in caves and abandoned mines with low humidity and temperatures and stable microclimates (Humphrey, 2017). In comparison to other Ontario bat species, they are able to tolerate much colder temperatures, drier conditions and draftier locations for hibernating (Humphrey, 2017). During the spring and summer months, they utilize a variety of habitats for roosting, including under rocks or rock outcrops, in buildings, under bridges, or in caves, mines or hollow trees (Ontario, 2021a).

6.5.2.3 Hoary Bat

Hoary bat (*Lasiurus cinereus*) is a large (typically 16-38 g), insectivorous bat found in Ontario and is the largest bat found in Canada. The fur of a hoary bat is dense and include a complex mixture of colors, ranging from light to dark brown, and have white tipped hairs on the dorsal and ventral sides (COSEWIC, 2023). The hoary bat is distinguishable by the large size and light yellow-brown fur on the head, throat, and anterior margins of the wings (COSEWIC, 2023).

The hoary bat range spans across all provinces and territories within Canada, all the states within the United States, and has a wide distribution throughout Mexico (COSEWIC, 2023). In Ontario, the hoary bat is found throughout the province, and has been observed north of James Bay (COSEWIC, 2023).

Hoary bats overwinter in warmer climates in the southern extent of the United States, typically beneath leaf litter (COSEWIC, 2023). In comparison to many other Ontario bat species, they do not overwinter in caves. During the spring and summer months, they typically utilize the foliage of trees and occasionally shrubs for roosting habitat, with a preference for roosting near the edge of the crown and at sufficient heights to prevent access from mammalian predators (COSEWIC, 2023).

6.5.2.4 Little Brown Myotis

Little brown myotis (*Myotis lucifugus*) is a small (typically 4-11 g), insectivorous bat. The fur of a little brown myotis is bi-coloured; fur is a glossy brown with a darker coloured base. The tragus of the little brown myotis is long and thin, with a rounded tip (Fraser, MacKenzie & Davy, 2007).

In Canada, little brown myotis occur throughout all of the provinces and territories (except Nunavut), with its range extending south through the majority of the United States as well. In Ontario, the little brown myotis is widespread in southern Ontario and has been found as far north as Moose Factory and Favourable Lake (Ontario, 2021b).

Little brown myotis overwinter in caves and abandoned mines, they require highly humid conditions and temperatures that remain above the freezing mark (Ontario, 2021b). During the summer months, maternity colonies are often located in buildings or large-diameter trees. Little brown myotis roost in trees and buildings. Foraging occurs over water and along waterways, forest edges and in gaps in the forest. Open fields and clear-cuts are not typically utilized for foraging (COSEWIC, 2013).

6.5.2.5 Silver-haired Bat

Silver-haired bat (*Lasionycteris noctivagans*) is a medium-sized (typically 9-17 g), insectivorous bat. The fur is one of the darkest of all bats in Canada, with black skin membranes and black to dark brown fur (COSEWIC, 2023).

In North America, the silver-haired bat is widely distributed and spans from the southern extent of the Canadian provinces to east-central Mexico (COSEWIC, 2023). In Canada, the distribution spans from coast to coast, but appears to be uncommon in Atlantic Canada. In Ontario, the species occurs throughout Ontario, appearing as far north as James Bay (COSEWIC, 2023).

Silver-haired bats overwinter in mines, rock crevices, trees, and snags across North America, including the United States, the Great Lakes region of Ontario, and in some areas of British Columbia (COSEWIC, 2023). Foraging typically occurs in young and old forests. Silver-haired bat roost primarily under bark and in cavities of trees; however, may occasionally roost on or in buildings (COSEWIC, 2023).

6.5.2.6 Tri-colored Bat

Tri-colored bat (*Perimyotis subflavos*) is a small (typically 5-7 g), insectivorous bat. The fur is uniformly coloured on the ventral and dorsal sides, however, when parted fur shows three distinct colour bands. The base of the hair is blackish, with a blonde middle and brownish tip. The snout of the tri-coloured bat is also distinct, with swollen bulbous glands present (Fraser, MacKenzie & Davy, 2007).

In Canada, the tri-colored bat has only been recorded in southern parts of Nova Scotia, New Brunswick, Quebec and central Ontario. In Ontario, it occurs primarily from the southern edge of Lake Superior across to the Ontario-Quebec border and south (COSEWIC, 2013).

Tri-colored bat overwinter in caves or mines and have very rigid habitat requirements; they typically roost in the deepest parts where temperatures are the least variable and have the strongest correlation with humidity levels and warmer temperatures (COSEWIC, 2013). In the spring and summer, tri-colored bat utilizes trees, rock crevices and buildings for maternity colonies. Foraging is mainly done over watercourses and streamside vegetation (COSEWIC, 2013).

6.5.2.7 SAR Bat Impacts

Although the forest habitat on-site (ELC code: WODM5-1) is unlikely to meet the requirements to support bat maternity colonies, given the availability of habitat on-site and within the study area, there is a potential for all six SAR bats to occur on the property, primarily for foraging or non-maternal roosting. Impacts to SAR bats are not anticipated as a result of the proposed zoning amendment. Potential impacts associated with future development may include habitat loss, and increased night-lighting affecting normal foraging behaviour. Mitigation measures intended to protect SAR bats from potential future impacts of development are discussed in Section 7.

6.5.3 Blanding's Turtle

Blanding's turtles (*Emydoidea blandingii*) have a highly domed, smooth black carapace with small, irregular tan or yellow flecking. The most distinctive characteristic of this species is the bright yellow chin and throat. Their hinged plastron is yellow with a large dark blotch in the corner of each scute but may also be entirely black (Oldham and Weller, 2000). The Blanding's turtle is listed as threatened in Ontario.

In Canada, Blanding's turtles are found throughout southern and south-central Ontario from south of Manitoulin Island to western Quebec. In Ontario, Blanding's turtles are often observed utilizing eutrophic habitats with clear water (COSEWIC, 2016). This turtle species occurs primarily in shallow water; adults are generally found in open or partially vegetated sites, where as juveniles prefer areas that contain thick aquatic vegetation. Blanding's turtles are known to make large overland journeys between connected lakes, rivers, streams, marshes or ponds, upwards of 6 km

in a single active season. Overwintering occurs in permanent pools that average about one metre in depth, or slow flowing streams (COSEWIC, 2016).

Based on NHIC observation data, the species has been observed within 2 km of the subject property and are known to existing within the Carp River and Feedmill Creek watersheds.

As discussed in Section 3.5, the Carp River, an unnamed tributary, two stormwater management ponds, and local wetlands have been identified on-site or within the study area. While water depths were not measured during the field investigation, the Carp River within the study area may provide suitable conditions for *candidate* overwintering habitat, as well as general habitat for Blanding's turtle use. The tributary on-site is unlikely to provide suitable overwintering habitat given the lack of permanent water and insufficient water depths. As mentioned in Section 3.5, the banks were noted as a mosaic of vegetation and boulders; thus, nesting and basking habitat on-site and immediately adjacent to the site is not to be present. While the unnamed tributary does not provide overwintering, nesting, and basking turtle habitat, it may be present within the Carp River and off-site local wetlands within the study area.

On-site local wetlands within the Carp River Restoration Policy Area do not provide surface water on a regular basis and when present, is not of sufficient depth to provide over-wintering, foraging, basking habitat or protection for predators. Furthermore, the potential for the site to be used by transient Blanding's turtles migrating between seasonal habitats is low due to the absence of viable habitat to the east and south. Accordingly, it is GEMTEC's opinion that Blanding's turtle habitat is not present on-site.

Potential impacts associated with future development to off-site Blanding's turtle habitat within the Carp River and it's associated off-site wetlands may include long-term human disturbance such as noise generation, increase night-lighting and increased refuse/litter migration from the proposed development.

Avoidance and mitigation measures intended to prevent harm to Blanding's turtles who have the potential to occur on-site are present in Section 7.

6.5.4 Species at Risk Act (Canada, 2002)

SARA applies only to species listed on Schedule 1. Endangered and threatened species on Schedule 1 are protected automatically on federally owned lands. The Prohibitions of SARA do not apply to species of special concern. Under the general prohibitions of SARA, it is illegal to

- kill, harm, harass, capture, or take an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated;
- possess, collect, buy, sell or trade an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated; or

- damage or destroy the residence (e.g. nest or den) of one or more individuals of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated, if a recovery strategy has recommended the reintroduction of that extirpated species.

These prohibitions apply to:

- all endangered, threatened and extirpated species listed in Schedule 1 of SARA when found on federal lands in a province, or lands under the authority of the Minister of the Environment or the Parks Canada Agency in a territory;
- all endangered, threatened and extirpated migratory birds listed in Schedule 1 of SARA and protected by the Migratory Birds Convention Act, 1994, anywhere they occur, including private lands, provincial lands and lands within a territory; or
- all endangered, threatened and extirpated aquatic species listed in Schedule 1 of SARA, anywhere they occur, including private lands, provincial lands and lands within a territory.

In addition to the general prohibitions, SARA outlines Critical Habitat for listed species through the development of a recovery strategy or action plan. Critical habitat for SARA Schedule 1 species is automatically protected on federally owned lands. On non-federal lands, the critical habitat protections extend automatically to aquatic species. Critical habitat for non-aquatic Schedule 1 species is not automatically protected on provincially or privately owned lands.

6.5.5 Migratory Bird Schedule 1 Species

The following Schedule 1 threatened or endangered species are also listed under the MBCA, and have been identified as having a potential to occur on-site:

- Bobolink
- Eastern Meadowlark
- Least bittern

Under SARA regulations, individuals and their nests are protected by the general prohibitions. No critical habitat has been identified for any of the identified species.

6.5.6 Bobolink

Bobolink (*Dolichonyx oryzivorus*) breed primarily in hayfields and other grasslands with tall vegetation that provides cover for nests which are established on the ground (Cadman et al., 2007). The bobolink is generally sensitive to vegetation structure and composition within its habitat; its preferred habitat structure is generally found in old (> 8 years old) forage crops. Abundance and density are positively correlated with a moderate litter depth, high lateral litter cover, high grass-to-legume rations, an abundance of small shrubs and a high percentage of forb cover (COSEWIC, 2010). Bobolinks typically avoid nesting in habitats that are dominated by overly dense shrub vegetation with an overly deep litter layer or a high percentage of bare soil (COSEWIC, 2010).

The NHIC has identified an occurrence record for the species within the 1 km grid that encompasses the site. Bobolink were not observed during the site investigation, which occurred outside of the designated breeding survey window.

The on-site cultural meadow (ELC code: CUM) does not provide suitable vegetation composition to support nesting habitat. As such, no suitable grassland habitat occurs on-site to support bobolink nesting habitat; however, may be present within the greater study area. While no nesting habitat is present on-site, the on-site meadow may be used for foraging or transient individuals in between preferable habitat. As such, no impacts to bobolink and/or suitable grassland habitat are anticipated from the proposed zoning amendment or from future potential development.

6.5.7 Eastern Meadowlark

The eastern meadowlark (*Sturnella magna*) prefers native grassland, pasture and savannah habitat, however it is known to use a variety of anthropogenic grassland habitats including hayfields, weedy meadows, young orchards, grain fields and herbaceous fence rows (COSEWIC, 2011a). Preferred grassland habitat typically contains moderately tall (25 to 50 cm) grass species with abundant litter cover, with a high proportion of grass, moderate to high forb density a low percent of shrub cover (typically <5%) and low percent cover of bar ground (COSEWIC, 2011).

The NHIC has identified occurrence records for the species within the 1 km grid that encompasses the site. Eastern meadowlark were not observed during the site investigation, which occurred outside of the designated breeding survey window.

The on-site cultural meadow (ELC code: CUM) does not provide suitable vegetation composition to support nesting habitat. As such, no suitable grassland habitat occurs on-site to support eastern meadowlark nesting habitat; however, may be present within the greater study area. While no nesting habitat is present on-site, the on-site meadow may be used for foraging or transient individuals in between preferable habitat. As such, no impacts to eastern meadowlark and/or suitable grassland habitat are anticipated from the proposed zoning amendment or from future potential development.

6.5.8 Least Bittern

Least bittern (*Ixobrychus exilis*) is the smallest heron in the western hemisphere. The least bittern is a marsh obligate, and breeds strictly in marshes of emergent vegetation. These marshes have relatively stable water levels and interspersed areas of open water (COSEWIC, 2009). Although they typically breed and nest in cattail marshes, nests have also been found in bulrush, grasses, horsetail and willow (Cadman et al., 2007). It is most frequently found in marshes of at least 5 ha but has been observed in much smaller marshes (Cadman et al., 2007).

Based on NHIC observation data as well as eBird observations, the species has been observed within 1 km of the subject property, likely within the constructed and naturalized wetlands of the Carp River Restoration Policy Area. The nearest Least bittern critical habitat, as regulated by the

MECP and identified in the Recovery Strategy for Least Bittern (Canada, 2014) is located greater than 29 km north from the subject site within the Mississippi River Snye.

The on-site meadow marsh (ELC code: MAMM1-12) does not provide suitable vegetation composition (e.g., comprised entirely of phragmites) nor maintain sufficient water levels to support nesting and foraging habitat on-site. As such, no suitable wetland habitat occurs on-site to support least bittern nesting habitat; however, may be present within the greater study area. No direct impacts to least bittern and/or suitable wetland habitat are anticipated from the proposed zoning amendment.

Potential indirect impacts from future developments to least bittern associated with water quality are not anticipated as a result of the proposed stormwater management strategy for the development. Future potential indirect impacts to off-site least bittern habitat are likely to be limited to the potential effects associated with degradation of foraging habitat resulting from the off-site migration of refuse/litter generated by the development.

General mitigation measures provided in Section 7 are sufficient to protect transient least bittern and off-site foraging habitat from the proposed development.

6.6 Cumulative Impacts

No cumulative impacts are anticipated as a result of the proposed zoning amendment. Future potential cumulative impacts associated with development on-site may include an increase in stormwater generation, night-lighting and refuse/litter migration into adjacent natural areas, and the loss of woodland and cultural meadow habitat, primarily for urban and peri-urban avian species. Cumulative impacts to the natural environment from future developments due to increased human presence, increased wildlife and human interaction and increased noise, are expected to be negligible given the existing residential and agricultural land use in the surrounding project area.

Cumulative impacts such as those listed above can be mitigated by implementing the proposed setbacks and recommended mitigation measures outlined in Section 7 below.

7.0 RECOMMENDED AVOIDANCE AND MITIGATION MEASURES

The following avoidance and mitigation measures have been recommended by GEMTEC to minimize or eliminate potential environmental impacts identified in Section 6.

For the purpose of this report, a setback is defined as the minimum required distance between any structure, development, or disturbance and a specified line and a buffer is defined as the area located between a natural heritage feature and the prescribed setback. For the following subsections, buffers should be located between natural heritage features and lands subject to development or alteration, be permanently vegetated by native or non-invasive, self-sustaining vegetation, and protect the natural heritage feature against the impact of the adjacent land use.

Vegetated buffers, particularly buffers that are vegetated with a mix of grassy herbaceous vegetation and shrubby or woody vegetation are most effective in mitigating impacts associated with anthropogenic activities in adjacent lands (Beacon, 2012). In the subsections below, where possible, literature references for studies used as the basis of the recommended buffer widths are provided.

7.1 Significant Wildlife Habitat

7.1.1 *Candidate Amphibian Breeding Habitat*

The 10 m setback presented below to protect fish habitat within the unnamed tributary immediately north of the subject site, in combination with the proposed landscaping (e.g., tree plantings to provide canopy cover at maturity) and installation of fencing along the property boundary are sufficient to protect *candidate* amphibian breeding habitat.

To protect migrating amphibians associated with *candidate* breeding habitat during future developments, temporary exclusion fencing should be installed around the entire construction area prior to construction commencing to prohibit the movement of turtles and amphibians into the construction area.

7.1.2 Habitats of Special Concern and Rare Wildlife Species

7.1.2.1 Barn Swallow, Eastern Wood-Pewee, and Wood Thrush

To protect nesting and foraging barn swallow, eastern wood-pewee, and wood thrush that may occur on-site, vegetation removal should occur outside of March 31 to August 31 to avoid the key breeding bird period as identified by Environment Canada. If vegetation clearing activities must take place during the aforementioned timing window, then a nest survey shall be conducted by a qualified professional.

7.1.3 Snapping Turtle

As indicated in Section 6.3.2.4, snapping turtles have the potential to occur on-site, primarily in a transient nature.

To protect potential migrating reptiles, exclusion fencing should be installed around the entire construction area prior to any intrusive works associated with future developments to prohibit the movement of reptiles into the construction area. Exclusion fencing should follow the protocols outlined in the Species at Risk Branch: Best Practices Technical Note: Reptile and Amphibian Exclusion Fencing Version 1.1 (MNRF, July 2013). Following the installation of exclusion fencing, the construction area should be swept daily by a qualified professional to remove any reptiles which may be trapped within the exclusion fencing.

Additionally, all stockpiled material should be covered with a geotextile to prevent turtles from nesting in the material between May 1 and August 1 of any year.

7.2 Fish Habitat

As mentioned in Section 6.4, the Carp River is located, at minimum, 34 m west of the proposed development which is a greater distance than required by the City's Official Plan. No impacts to fish habitat within the Carp River are anticipated and a setback is not recommended.

No negative impacts on the function or integrity of the tributary are anticipated as a result of the proposed zoning amendment. Future development should consider the mitigation measures recommended below. In consideration of the limited ecological function of the on-site tributary, the intent of previous development approvals regarding the fate of the unnamed tributary and fact that it primarily serves as a stormwater discharge channel, a minimum 10 m setback from the tributary is recommended. A 10 m wide buffer created by this setback should be vegetated with native tree and shrub species capable of providing canopy cover of the tributary at maturity and screening of the development from the adjacent natural environment lands, as well as providing an overland flow energy dissipation function.

Prior to infilling of the on-site portions of the unnamed tributary, a Department of Fisheries and Oceans (DFO) request for Project Review (RfR) is required demonstrating that the proposed infilling will not result in the death of fish or a harmful alteration, disruption or destruction of fish habitat (HADD). Following receipt of approval by DFO, a fish salvage operation will be required to be completed under all application permits issued by the Ministry of Natural Resources (MNRF).

General mitigation measures recommended for the protection of water quality and local wetlands include:

- Buffers should be comprised of a mixture of native, self-sustaining trees, shrubs and tall grasses.
- No in-water work should occur between March 15 and June 30 of any year to protect spawning fish habitat adjacent to the development area. All in-water habitat features, including aquatic vegetation, natural woody debris and boulders should be left in their current locations.

- Silt fencing should be installed along all setbacks to provide visual demarcation of the setbacks to prevent machinery encroachment and sediment transport.
- When native soil is exposed, sediment and erosion control work in the form of heavy-duty sediment fencing shall be positioned along the down gradient edge of any construction envelopes adjacent to waterbodies.
- In order to protect fish habitat from contamination, it is recommended that all machinery be maintained in good working condition and that all machinery be fueled a minimum of 30 m from the high-water mark.
- Where technically feasible and appropriate, future development on-site should consider the use of low impact development (LIDs) design protocols for stormwater management.

7.3 Species at Risk

7.3.1 Blanding's Turtle

As discussed in Section 6.5.4, it is GEMTEC's opinion that the subject property does not provide habitat for Blanding's turtle. However, off-site wetlands within the Carp River Restoration Policy Area and the Carp River are likely to provide Blanding's turtle habitat. In consideration of the greater than 30 m separation distance from the Carp River to the subject property, no setback is required to protect Blanding's turtles occurring off-site within the Carp River. As no direct impacts to the local wetlands with Carp River Restoration Policy Area are anticipated, the proposed 10 m setback from the unnamed tributary is sufficient for the protection of individual Blanding's turtles. Furthermore, the installation of temporary exclusion fencing during future developments will protect individual Blanding's turtles during development while permanent fencing installed following site preparation will continue to ensure individual Blanding's turtles are excluded from being able to access the subject property.

The following best practice measures should be implemented to avoid impacts to transient Blanding's turtles:

- Prior to any site work, silt fencing should be installed around the entire construction area to prohibit the potential migration of Blanding's Turtles, and other wildlife into the construction area. Silt fencing should follow the protocols outlined in the Species at Risk Branch: Best Practices Technical Note: Reptile and Amphibian Exclusion Fencing Version 1.1 (MNRF, July 2013). Temporary fencing should be installed prior to the start of the active season and remain in place throughout the active season of each year of construction.
- Temporary exclusion fencing should be inspected by a designated staff member once per week between April 15 and October 15 of any year. The designated staff member should be trained by a Qualified Professional. Any damage to temporary fencing should be repaired by the end of the business day when the damage is observed.

- Each day of construction a daily pre-work sweep of the construction area should occur to ensure no SAR are present and to remove any wildlife from inside the construction area.
- All staff working on-site should be provided Species at Risk training to identify species at risk which a potential to occur on-site including: Blanding's turtle. Training will also outline the stop work procedures and MECP reporting/consultation prior to resuming work.
- During construction if any SAR is identified on-site all work should stop and a qualified professional and the MECP should be contacted for next steps. Sightings should be reported to the MECP and the NHIC.
- Heavy-duty silt fencing should be installed and maintained during construction and whenever soil is exposed.
- Tree clearing and vegetation removal will be undertaken outside of the active season (April 1 – October 31) for Blanding's turtles. Prior to vegetation removal a sweep will be completed to ensure Blanding's turtles are absent from the area.
- Cover all stockpiled material with a geotextile to prevent turtles from nesting in the material between May 1 and August 1 of any year.
- To protect aquatic habitat for Blanding's turtles, machinery should be maintained in good working condition, and all machinery should be fueled a minimum of 30 m from the high-water mark.

7.3.2 SAR Bats

As no critical habitat (i.e. overwintering caves or crevasses, or maternity roosts) were identified on-site, in accordance with MECP best management practices, to protect roosting and foraging bats, tree removal where required shall take place outside of the spring and summer active season (typically March 15 to November 30), when bats are more likely to be using forest habitat. If vegetation clearing cannot avoid the active season, then consultation with the MECP is needed to determine whether the project will require an authorization.

To further protect bat species during vegetation removal, trees, and vegetation (during the appropriate timing window) should be cleared in stages, working from the outer edge, in towards the centre, in order to provide wildlife in the forest time to migrate out.

Should any components of the proposed project require tree clearing between March 15 and November 30, further consultation with the MECP is required.

7.4 Wildlife

The following avoidance and mitigation measures are provided in effort to minimize impacts to on-site and off-site wildlife:

- Vegetation removal should occur outside of March 15 - November 30 to avoid the key breeding bird period and bat summer active season. The timing windows provides protection of migratory birds, roosting bats and avoids contravention of the Migratory Bird

Convention Act and Species Conservation Act. If vegetation clearing activities must take place during the timing window than a nest and roost survey shall be conducted by a qualified professional.

- Installation of silt fence barriers around the entire construction envelope to prohibit the emigration of wildlife into the construction area.
- Installation of permanent chain-link fence of adequate height to prevent wildlife from accessing the site.
- Cover all stockpiled material with a geotextile to prevent turtles from nesting in the material between May 1 and August 1 of any year.
- Perform daily pre-work sweeps of the construction area to ensure no SAR are present and to remove any wildlife from inside the construction area.
- Implementation of the “Lighting Design Guidelines” set out in the City of Ottawa Bird-Safe Design Guidelines (Ottawa, 2022a) to limit the disruption of normal migration and foraging habits.
- Should any SAR be discovered throughout the course of the proposed works, the species at risk biologist with the local MECP district should be contacted immediately and operations modified to avoid any negative impacts to SAR or their habitat until further direction is provided by the MECP.

7.5 Best Practice Measures for Mitigation of Cumulative Impacts

The following best practice measures are provided for the mitigation of cumulative impacts resulting from general construction and development activities;

- To protect trees identified to be retained during construction, the Critical Root Zone (CRZ) should be identified and fenced. The CRZ is defined as 10 cm from the base of the tree for every centimetre in diameter of the tree trunk measured at breast height.
- Maintain as much permeable surface as possible in future development plans to minimize the generation of stormwater runoff.
- Silt fencing should be installed along all setbacks to provide visual demarcation of the setbacks and to prevent machinery encroachment and sediment transport.
- Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized.
- In an effort to offset the effect of vegetation clearing, consideration should be given to landscape planting with native tree species indicative of the Great Lakes – St. Lawrence Forest Region, such as white cedar, white spruce, red maple, and red oak.

8.0 CONCLUSIONS

The proposed project supported by this EIS is a zoning amendment for the 7.33 ha property, municipally addressed as 375 Didsbury Road, in the City of Ottawa, Ontario. No impacts to natural heritage features on-site or within 120 m of the site are anticipated to be impacted by the proposed project.

Future developments, are likely to be able to avoid significant residual negative impacts if the mitigation measures provided in Section 7 are adhered to; however, future Site Plan Control measures should require an update to this EIS to ensure development-specific impacts and mitigations are considered.

Following review of the information pertaining to the natural heritage features of the site, the following general conclusions are provided by GEMTEC in regard to the Environmental Impact Statement.

- No significant negative impacts to natural heritage features identified on-site, including significant wildlife habitat, fish habitat, and species at risk are anticipated from future residential development.
- The proposed project complies with the natural heritage policies of the Provincial Planning Statement.
- The proposed development complies with the natural heritage policies of the City of Ottawa Official Plan.

9.0 LIMITATION OF LIABILITY

This report and the work referred to within it have been undertaken by GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) and prepared for FCRI Properties LP and is intended for the exclusive use of FCRI Properties LP. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC, or FCRI Properties LP. Nothing in this report is intended to provide a legal opinion.

The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This report has been prepared for the application noted and it is based, in part, on visual observations made at the site, all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions, or portions of the site that were unavailable for direct investigation.

Should new information become available during future work or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,



Emily Pentz, B.Sc.
Junior Biologist



Drew Paulusse, B.Sc.
Senior Biologist

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APPENDIX A

Report Figures

Figure A.1 – Site Location

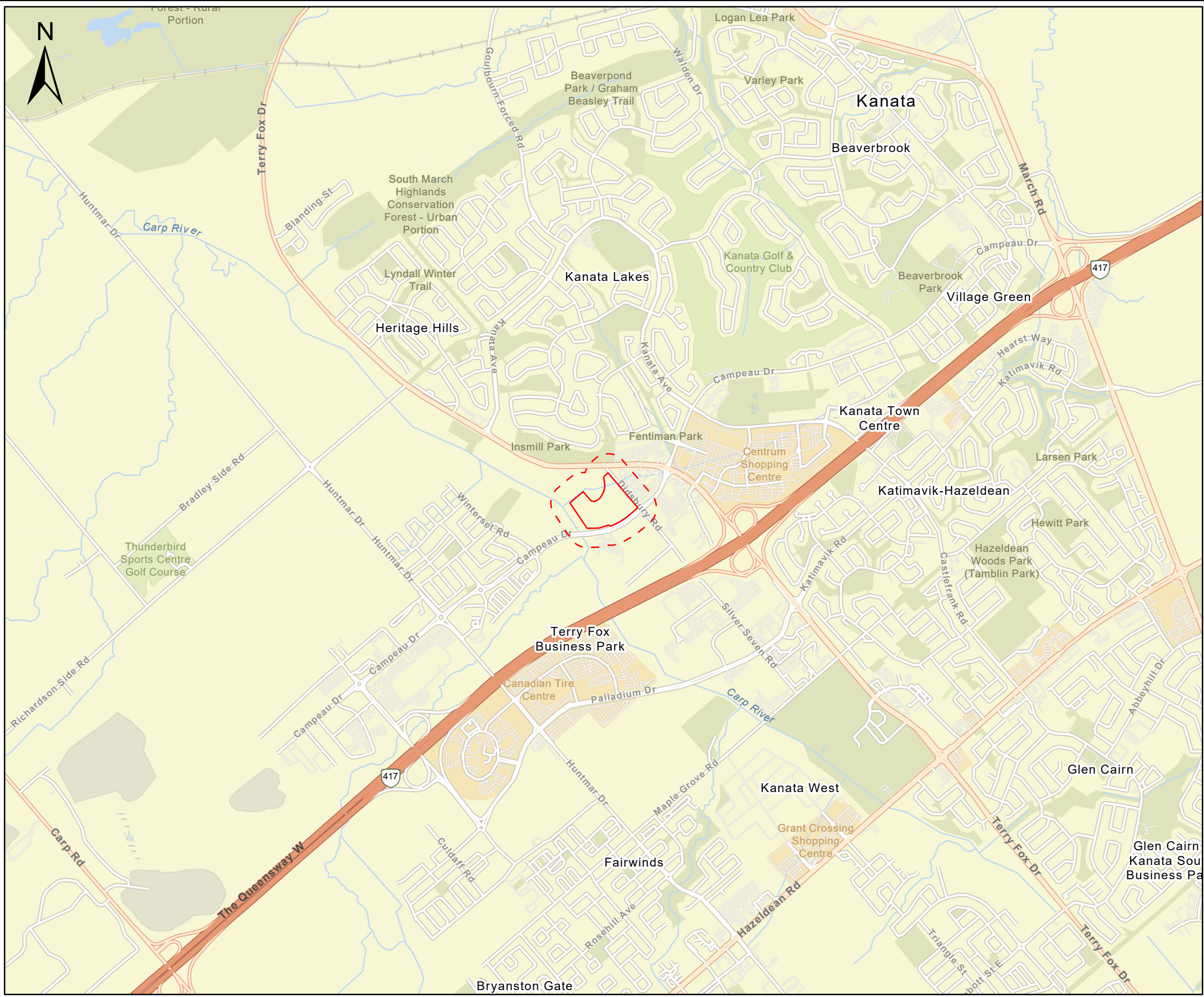
Figure A.2 – Site Layout

Figure A.3 – Vegetation Communities

Figure A.4 – Development Concept

Figure A.5 – Natural Heritage Features

Figure A.6 – Mitigation Measures



Legend

Property Boundary

Study Area

Inset Map

0 1.25 2.5 5 Kilometers

166 m

Scale

1:25,000

Meters

0 200 400 800 1,200 1,600



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Client:		FCRI Properties LP		Project:		102857.005	
Location							
375 Didsbury Road Ottawa, Ontario							
Drwn By:		Chkd By:		Site Location			
EP		DP					
Date: January 2026				Rev.			
© Queen's Printer for Ontario				0		Figure: A.1	

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Street Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Legend

Property Boundary

Study Area

Watercourse

Local Wetland (GeoOttawa, n.d.)

Local Wetland (GEMTEC, 2026)

Carp River Restoration Policy Area (MVCA, n.d.)

Scale

1:2,500

0

20

40

80

120

160

Meters

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Client:

FCRI Properties LP

Project:

102857.005

Location

375 Didsbury Road
Ottawa, Ontario

Drwn By:

EP

Chkd By:

DP

Site Layout

Date: January 2026

Rev.

0

Figure: A.2

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Legend

Property Boundary

Study Area

Watercourse

Local Wetland

Vegetation Community

CUM : Cultural Meadow
WODM5-1 : Fresh – Moist Poplar Deciduous Woodland
MAMM1-12 : Common Reed Graminoid Mineral Meadow Marsh

Scale

1:2,500

0

20

40

80

120

160

Meters

GEMTEC

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AND SCIENTISTS

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ottawa@gemtec.ca

Client:

FCRI Properties LP

Project:

102857.005

Location

375 Didsbury Road
Ottawa, Ontario

Drwn By:

EP

Chkd By:

DP

Vegetation Communities

Date: January 2026

Rev.

0

Figure: A.3

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Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Imagery: Microsoft, Vantor
Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Legend

- Property Boundary
- Study Area
- Watercourse
- Local Wetland
- 1:100 Year Floodplain (MVCA, n.d.)

Scale
1:2,500

0

20

40

80

120

160

Meters



GEMTEC
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Client:		FCRI Properties LP		Project:		102857.005	
Location 375 Didsbury Road Ottawa, Ontario							
Drwn By: EP		Chkd By: DP		Natural Heritage Features			
Date: July 2026				Rev. 1		Figure: A.4	
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Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Imagery: Microsoft, Vantor
Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Legend

- Property Boundary
- Study Area
- Watercourse
- Local Wetland
- 10 m Setback

Scale
1:2,500

0

20

40

80

120

160

Meters



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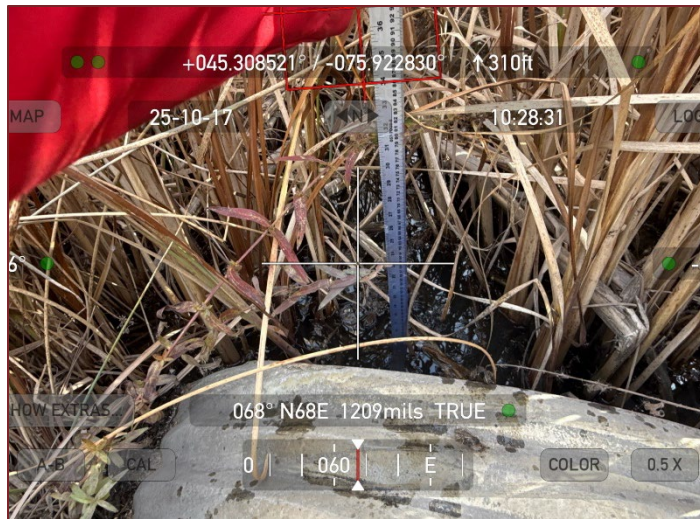
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Client:		FCRI Properties LP		Project:		102857.005	
Location 375 Didsbury Road Ottawa, Ontario							
Drwn By: EP		Chkd By: DP		Mitigation Measures			
Date: June 2026				Rev. 0		Figure: A.5	
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APPENDIX B

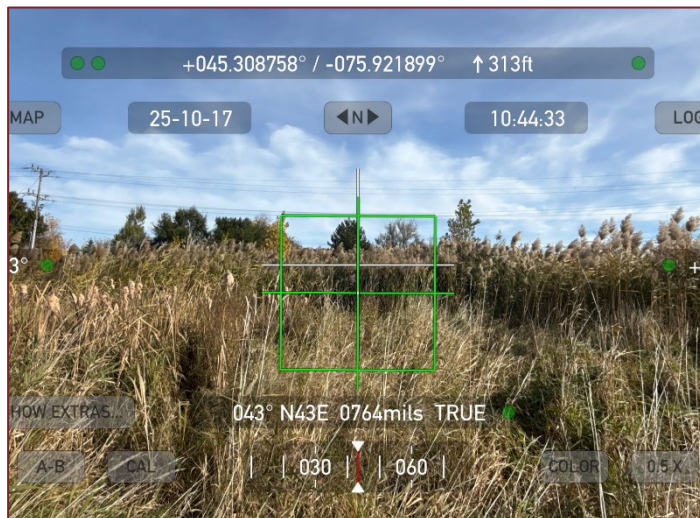
Site Photographs



Site Photograph 1: Standing water at culvert outlet on-site.



Site Photograph 2: Dry section of headwater drainage feature.



Site Photograph 3: Common Reed Graminoid Mineral Meadow Marsh (MAMM1-12).



Site Photograph 4: Cultural Meadow (CUM).



Site Photograph 5: Fresh-Moist Poplar Deciduous Forest (FODM8-1).



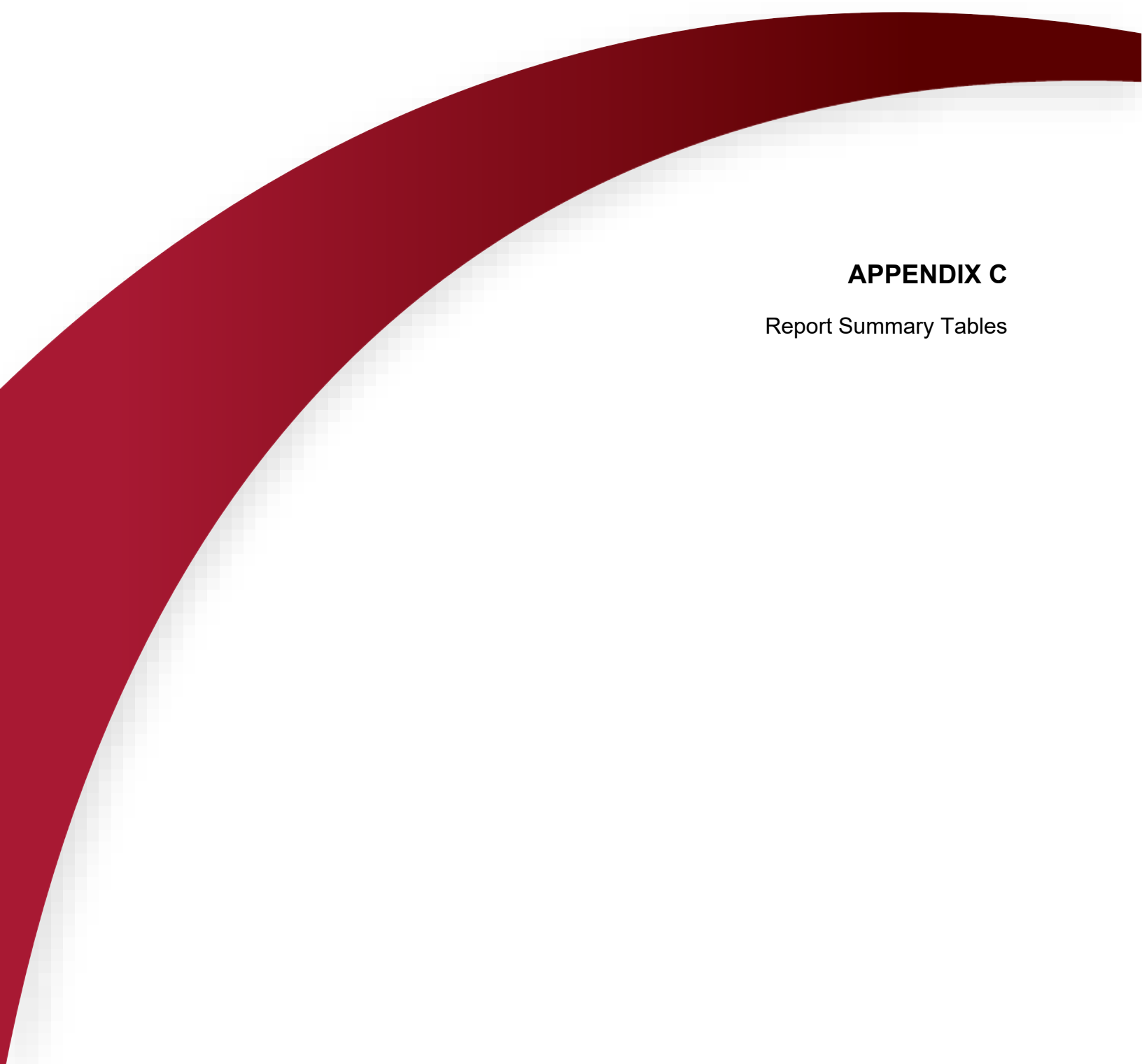
Site Photograph 6: Carp River Tributary immediately off-site.



Site Photograph 7: Barn swallow nest observed.



Site Photograph 8: Carp River within study area.



APPENDIX C

Report Summary Tables

TABLE C.1
SUMMARY OF WILDLIFE OBSERVED ON-SITE AND ADJACENT TO SITE

Common Name	Scientific Name	S-Rank	Evidence
Avian Species			
American goldfinch	<i>Spinus tristis</i>	S5	Heard calling
American tree sparrow	<i>Spizelloides arborea</i>	S5	Heard calling
Black-capped chickadee	<i>Poecile atricapillus</i>	S5	Heard calling
Canada goose	<i>Branta canadensis</i>	S5	Observed flyover
Double-crested cormorant	<i>Nannopterum auritum</i>	S5B,S4N	Observed flyover
Downy woodpecker	<i>Dryobates pubescens</i>	S5	Observed
European starling	<i>Sturnus vulgaris</i>	SNA	Heard calling
Mallard	<i>Anas platyrhynchos</i>	S5	Observed
Red-winged blackbird	<i>Agelaius phoeniceus</i>	S5	Heard calling
Ring-billed gull	<i>Larus delawarensis</i>	S5	Heard calling
White-throated sparrow	<i>Zonotrichia albicollis</i>	S5	Heard calling

Notes:

* Denotes a Species at Risk

Subnational Conservation Status Ranks:

S1 - Critically Imperilled, at very high risk of extirpation, very few populations or occurrences or very steep population decline

S2 - Imperiled, at high risk of extirpation, few populations or occurrences or steep population decline

S3 - Vulnerable, at moderate risk of extirpation, relatively few populations or occurrences, recent and widespread population decline

S4 - Apparently Secure, at a family low risk of extirpation, many populations or occurrences, some concern for local population decline

S5 - Secure, at very low or no risk of extirpation, abundant populations or occurrences, little to no concern for population decline

Qualifiers:

S#B - Conservation status refers to the breeding population of the species

S#N -Conservation status refers to the non-breeding population of the species

S#M - Migrant species, conservation status refers to the aggregating transient population of the species

TABLE C.2
SCREENING RATIONAL FOR SIGNIFICANT WOODLANDS

Woodland Criteria	Further Considered in EIS	Rationale
Woodland Size	No	Contiguous woodlands on-site do not meet the minimum size requirement for the planning area (> 50 ha).
Ecological Functions		
a) Woodland Interior	No	Interior woodlands on-site and within the study area do not meet the minimum size requirement for the planning area (> 8 ha).
b) Proximity	No	Woodlands on-site are not adjacent to other significant natural heritage features and fish habitat.
c) Linkages	No	Woodlands on-site do not meet the minimum size criteria for the planning area and may provide a connecting link between adjacent significant features.
d) Water Protection	No	Woodlands on-site are adjacent to surface water features; however, do not meet the minimum size requirement for the planning area (> 50 ha).
e) Diversity	No	Species composition within the on-site woodland is well represented on the landscape and no rare species communities were observed on-site.
Uncommon Characteristics	No	The woodlands on-site do not have a unique species composition, vegetation communities with a ranking of S1, S2 or S3, or a mature size structure.
Economical and Social Functional Values	No	The woodlands on-site do not contain high productivity in terms of economically valuable products, high social value such as recreational use, identified historical cultural or educational values.

TABLE C.3
SCREENING RATIONALE FOR HABITATS OF SEASONAL CONCENTRATION AREAS

Wildlife Habitat	Further Considered in EIS	Rationale
Waterfowl Stopover and Staging Areas	No	No suitable wetland habitat on-site to support waterfowl stopover and staging areas (aquatic). No habitat for terrestrial stopover and staging areas were present on-site.
Shorebird Migratory Stopover Area	No	Shorebird stopover sites are typically well-known and have a long history of use. The site does not contain suitable shoreline habitat for shorebird foraging.
Raptor Wintering Area	No	No suitable combination of woodlands and upland communities to support raptor wintering area habitat.
Bat Hibernacula	No	Cave and crevice habitat is not present on-site or within the study area.
Bat Maternity Colonies	No	Woodlands on-site unlikely to meet minimum snag density (>10 snags/hectare) requirements to be considered SWH for bat maternity colonies.
Turtle Wintering Area	No	No suitable wetland habitat located on-site to support turtle wintering areas.
Reptile Hibernaculum	No	No structures such as large rock piles, bedrock outcrops, cervices or other karstic features have been identified on-site.
Colonial Bird Nesting Habitat	No	No suitable habitat located on-site or within the study area to support colonial bird nesting.
Migratory Butterfly Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Landbird Migratory Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Deer Yarding Areas and Winter Congregation Areas	No	As outlined in the the Significant Wildlife Habitat Criteria Schedules (OMNRF, 2015) winter deer yards and deer management are an MNRF responsibility. Based on review of publically available data from the OMNRF on Land Information Ontario Geo-hub, no deer yards or winter congregation areas have been identified on-site or within the study area.

TABLE C.4
SCREENING RATIONALE FOR SPECIALIZED WILDLIFE HABITATS

Specialized Wildlife Habitat	Further Considered in EIS	Rationale
Waterfowl Nesting Area	No	No suitable wetland habitat present on-site to support waterfowl nesting area.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No	No suitable habitat is located on-site or within the study area to support foraging bald eagles or osprey. Nesting sites for these species are uncommon in Ecoregion 6E (MNRF, 2012). Nesting may occur in any ecosite and species preference is towards mature forest stands >30 ha with >10 ha of interior habitat with a 200 m buffer.
Woodland Nesting Raptor Habitat	No	Contiguous forest stands >30 ha with interior forest habitat >10 ha does not occur on-site.
Turtle Nesting Habitat	No	No suitable habitat (exposed mineral soil with minimal vegetation cover) is present on-site.
Seeps and Springs	No	No seeps or springs were identified on-site.
Woodland Amphibian Breeding Habitat	No	No suitable wetland habitat within or adjacent to a woodland on-site to support woodland amphibian breeding habitat.
Wetland Amphibian Breeding Habitat	Yes	Suitable wetland breeding habitat occurs off-site within local wetlands and the Carp River riparian zone.
Woodland Area-Sensitive Bird Breeding Habitat	No	Woodland area-sensitive birds require interior forest habitat located >200 m from the forest edge in large (>30 ha) forest stands. Woodlands on-site do not meet the defining size criteria.

TABLE C.5
SCREENING RATIONALE FOR HABITAT FOR SPECIES OF CONSERVATION CONCERN

General Habitats of Species of Conservation Concern	Further Considered in EIS	Rationale
Marsh Breeding Bird Habitat	No	Suitable habitat not present on-site to support marsh breeding birds.
Open Country Breeding Bird Habitat	No	Suitable habitat does occur on-site to support open country bird breeding habitat.
Shrub/Early Successional Breeding Bird Habitat	No	Candidate early successional breeding bird habitat typically includes fallow fields transitioning to early successional forest habitats that are >10 ha but have not been actively used for farming. No thicket habitat >10 ha on-site to support early succesional breeding bird habitat.
Terrestrial Crayfish Habitat	No	Terrestrial crayfish are only found within southwestern Ontario (MNRF, 2012).
Special Concern and Rare Wildlife Species	Yes	Based on site observations and occurrence data from the NHIC and Ontario Breeding Bird Atlas the following species of special concern have occurred on-site and/or within the surrounding area: barn swallow, eastern wood-pewee, wood thrush, and snapping turtle.

TABLE C.6
SCREENING RATIONALE FOR ANIMAL MOVEMENT CORRIDORS

Animal Movement Corridor	Further Considered in EIS	Rationale
Amphibian Movement Corridor	No	No confirmed amphibian movement corridors have been identified on-site.
Deer Movement Corridor	No	No winter deer yards have been identified on-site.

TABLE C.7
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On- Site and in Study Area	Rationale
Avian							
Bank Swallow	Not Protected	THR	Yes	THR	Colonial nester, burrows in eroding silt, to sand banks, sand pit walls, etc.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Barn Swallow	Not Protected	SC	Yes	THR	Nests in barns and other semi-open structures. Forages over open fields and meadows.	Moderate	Suitable habitat may be present on-site and/or within the greater study area. NHIC database indicates observations within 1 km of project area. Species not observed during field investigation.
Bobolink	Not Protected	THR	Yes	THR	Nests in dense tall grass fields and meadows, low tolerance for woody vegetation.	Moderate	Suitable habitat may be present on-site and/or within the greater study area. NHIC database indicates observations within 1 km of project area. Species not observed during field investigation.
Canada Warbler	Not Protected	SC	Yes	THR	Prefers wet forests with dense shrub layers	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Cerulean Warbler	Not Protected	THR	Yes	END	Prefers mature deciduous forest habitat.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Chimney Swift	Not Protected	THR	Yes	THR	Nests in traditional-style open brick chimneys.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Common Nighthawk	Not Protected	SC	Yes	SC	Nests in a variety of open sites: beaches, fields and gravel rooftops.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Eastern Meadowlark	Not Protected	THR	Yes	THR	Nests and forages in dense tall grass fields and meadows, higher tolerance to woody vegetation.	Moderate	Suitable habitat may be present on-site and/or within the greater study area. NHIC database indicates observations within 1 km of project area. Species not observed during field investigation.
Eastern Whip-poor-will	Not Protected	SC	Yes	THR	Nests on the ground in open deciduous or mixed woodlands with little underbrush, and bedrock outcrops.	Low	Greater study area may provide suitable habitat to support species. NHIC database indicates observations within 2 km of project area. Species not observed during field investigation.
Eastern Wood-Pewee	Not Protected	SC	Yes	SC	Woodland species, often found near clearings and edge habitat.	Moderate	Suitable habitat may be present on-site and/or within the greater study area. NHIC database indicates observations within 2 km of project area. Species not observed during field investigation.
Evening Grosbeak	Not Protected	SC	Yes	SC	Nests in trees or large shrubs, preference to large coniferous forests, will use deciduous. Overwinters in Ottawa.	Low	Study area may provide suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Golden Eagle	END	END	No	Not Listed	Nests on remote, bedrock cliffs, overlooking large burns, lakes or tundras	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Golden-winged Warbler	Not Protected	SC	Yes	THR	Ground nesting, edge species. Breeds in successional scrub habitats surrounded by forests.	Low	Greater study area may provide suitable habitat to support species. NHIC database indicates observations within 2 km of project area. Species not encountered during the field investigation.
Grasshopper Sparrow	Not Protected	SC	Yes	SC	Ground-nesting grassland species. Prefers fields with low sparse vegetation on sand, alvars or poor soils.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Henslow's Sparrow	Not Protected	END	Yes	END	Prefers open, moist, tallgrass fields.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.

TABLE C.7
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On- Site and in Study Area	Rationale
Least Bittern	Not Protected	THR	Yes	THR	Prefers marshes, shrub swamps, usually near cattails	Moderate	Suitable habitat may be present on-site and/or within the study area. NHIC database indicates observations within 1 km of project area. Species not encountered during the field investigation.
Lesser Yellowlegs	THR	THR	Yes	Not Listed	Ottawa Migrant. Breeding is limited to Alaska and northern Canada. During winter and migration uses coastal salt marshes, estuaries and ponds, lakes, freshwater wetlands, anthropogenic wetlands.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Loggerhead Shrike	Not Protected	END	Yes	END	Prefers grazed pastures with short grass and scattered shrubs, especially hawthorn.	Low	Greater study area may provide suitable habitat to support species; however, suitable habitat is not present on-site. NHIC database indicates observations within 2 km of project area. Species not encountered during the field investigation.
Olive-sided Flycatcher	Not Protected	SC	Yes	SC	Forest edge species, forages in open areas from high vantage points in trees.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Peregrine Falcon	Not Protected	SC	No	Not Listed	Nests on cliffs near water and on more anthropogenic structures such as tall buildings, bridges, and smokestacks.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Red-headed Woodpecker	Not Protected	END	Yes	END	Prefers open deciduous woodlands, particularly those dominated by oak and beech.	Low	Greater study area may provide suitable habitat to support species; however, suitable habitat is not present on-site. NHIC database indicates observations within 2 km of project area. Species not observed during field investigation.
Rusty Blackbird	Not Protected	SC	No	SC	Wet wooded or shrubby areas (nests at edges of Boreal wetlands)	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Short-eared Owl	THR	THR	No	SC	Ground nester, prefers open habitats, fields and marshes.	Low	Study area lacks suitable habitat to support species. No occurrence records within 1 km of project area. Species not encountered during the field investigation.
Wood Thrush	Not Protected	SC	Yes	SC	Prefers deciduous or mixed woodlands.	Moderate	Suitable habitat may be present on-site and/or within the greater study area. NHIC database indicates observations within 1 km of project area. Species not observed during field investigation.
Mammalian							
Eastern Red Bat	END	END	N/A	Not Listed	Roosts in tree foliage; overwinters in leaf litter. Do not roost in anthropogenic structures.	Moderate	Potentially suitable vegetation adjacent to site. Potential summer habitat present within study area.
Eastern small-footed Myotis	END	END	N/A	Not Listed	Roosts in rock crevices, barns and sheds. Overwinters in abandoned mines. Summer habitats are poorly understood in Ontario, elsewhere prefers to roost in open, sunny rocky habitat and occasionally in buildings (Humphrey, 2017).	Moderate	Potentially suitable vegetation and anthropogenic structures adjacent to site. Potential summer habitat present within study area.
Hoary Bat	END	END	N/A	Not Listed	Roosts in tree foliage; overwinters in leaf litter. Do not roost in anthropogenic structures.	Moderate	Potentially suitable vegetation and anthropogenic structures adjacent to site. Potential summer habitat present within study area.
Little Brown Myotis	END	END	N/A	END	Maternal colonies known to use buildings, may also roost in trees during summer. Affinity towards anthropogenic structures for summer roosting habitat and exhibit high site fidelity (Environment Canada, 2015).	Moderate	Potentially suitable vegetation and anthropogenic structures adjacent to site. Potential summer habitat present within study area.

TABLE C.7
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On- Site and in Study Area	Rationale
Northern myotis (Northern Long-eared Bat)	END	END	N/A	END	Occurs throughout eastern North America in associated with Boreal forests. Roosts mainly in trees, occasionally anthropogenic structures during summer (Environment Canada, 2015). Overwinters in caves and abandoned mines.	Low	Species affinity is for Boreal forests and species rarely roosts in anthropogenic structures.
Silver-haired Bat	END	END	N/A	Not Listed	Roosts in tree foliage. Overwinters in in mines, rock crevices, trees, and snags. May use anthropogenic structures for roosting.	Moderate	Potentially suitable vegetation and anthropogenic structures adjacent to site. Potential summer habitat present within study area.
Tri-colored Bat	END	END	N/A	END	Roosts in trees, rock crevices and occasionally buildings during summer. Overwinters in caves and mines.	Moderate	Potentially suitable vegetation and anthropogenic structures adjacent to site. Potential summer habitat present within study area.
Reptilian							
Blanding's Turtle	THR	THR	N/A	END	Inhabits quiet lakes, streams and wetlands with abundant emergent vegetation. Frequently occurs in adjacent upland forests.	Moderate	Project area and/or study area may provide suitable habitat. The NHIC provides observations within 2 km of project area. Species not observed during field investigation.
Eastern Musk Turtle	Not Protected	SC	N/A	SC	Wetlands. Highly aquatic habtiats.	Low	Study area not likely to provide suitable habitat. No recent observations within 1 km of project area. Species not observed during field investigation.
Eastern Ribbonsnake	Not Protected	SC	N/A	SC	Marshy edfes of wetlands and watercourses.	Low	Study area not likely to provide suitable habitat. No recent observations within 1 km of project area. Species not observed during field investigation.
Northern Map Turtle	Not Protected	SC	N/A	SC	Highly aquatic species, found only in lakes and large rivers.	Low	Study area not likely to provide suitable habitat. No recent observations within 1 km of project area. Species not observed during field investigation.
Snapping Turtle	Not Protected	SC	N/A	SC	Highly aquatic species, found in a wide variety of wetlands, water bodies and watercourses.	Moderate	Project area may provide suitable habitat. The NHIC provides observations within 1 km of project area. Species not observed during field investigation.
Spotted Turtle	END	END	N/A	END	Secretive wetland species.	Low	Study area not likely to provide suitable habitat. No recent observations within 1 km of project area. Species not observed during field investigation.
Wood Turtle	END	END	N/A	THR	Primarily terrestrial forest species. Associated with clear, gravelly streams.	Low	Study area not likely to provide suitable habitat. No recent observations within 1 km of project area. Species not observed during field investigation.
Plants							
American Ginseng	THR	THR	N/A	END	Rich, moist, relatively mature deciduous forests.	Low	Suitable habitat conditions are not present within study area. No recent occurrence records within 1 km of project area. Species was not observed during the field investigation.
Black Ash	END	END	N/A	Not Listed	Predominantly a wetland species, found in swamps, floodplains and fens.	Low	No recent occurrence records within 1 km of project area. Species was not observed during the field investigation.
Butternut	END	END	N/A	END	Inhabits a wide range of habitats including upland and lowland deciduous and mixed forests.	Low	NHIC provides recent occurrence records within 2 km of project area. Species was not observed during the field investigation.
Lichens							
Pale-bellied Frost Lichen	END	END	N/A	END	Grows on the bark of hardwood trees such as white ash, black walnut, American elm and ironwood. Can also be found growing on fence posts and boulders.	Low	Species believed to be extirpated from the study area.
Fish							

TABLE C.7
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On- Site and in Study Area	Rationale
American Eel	END	END	N/A	Not listed	Primarily nocturnal, hiding in soft substrate or submerged vegetation during the day.	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Bridle Shiner	Not Protected	SC	N/A	SC	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Cutlip Minnow	THR	THR	N/A	SC	Requires warmer river and creeks with clear, slow-moving water and rocky or gravel bottom.	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Channel Darter	Not Protected	SC	N/A	SC	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Lake Sturgeon	END	END	N/A	Not Listed	Large lakes and rivers. Forages in cool water, 4-9m deep over soft substrates. Spawns in shallower, fast-flowing areas over rocks or gravel.	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Northern Brook Lamprey	Not Protected	SC	N/A	SC	Prefers shallow areas with warm water. Larvae burrows in soft substrate for up to 7 years.	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Northern Sunfish	Not Protected	SC	N/A	SC	Records from Québec side of river, downstream of Gatineau River, prior to 1994. No recent records.	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
River Redhorse	Not Protected	SC	N/A	SC	Prefers fast-flowing, clear rivers over rocky substrate	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Silver Lamprey	Not Protected	SC	N/A	SC	Larvae live 4-7 years in burrows, preference to soft substrate.	Low	Surface water features are unlikely to provide suitable aquatic habitat. No historical occurrences are recorded for the species within the study area.
Insects							
American Bumble bee	Not Protected	SC	N/A	SC	Nests at or above ground level, often in mats of long grass but also in other available shelters.	Low	No suitable habitat within the project and/or study area to support species presence. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Bogbean Buckmoth	END	END	N/A	END	Preferred food plant is bog bean, present in a variety of wetlands including bogs, swamps and fens.	Low	No suitable wetland habitat within the study area. Preferred food species not observed. Species not observed during site investigations.
Gypsy Cuckoo Bumble Bee	END	END	N/A	END	Inhabits a wide range of habitats: open meadows, agricultural and urban areas, boreal forests and woodlands.	Low	Currently the only known population is in Pinery Provincial Park.
Monarch Butterfly	Not Protected	SC	N/A	END	Caterpillars require milkweed plants confined to meadow and open areas. Adult butterflies use more diverse habitat with a variety of wildflowers	Low	No suitable habitat within the project and/or study area to support species presence. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Mottled Duskywing	END	END	N/A	END	Larval food plant (New Jersey Tea) found in sandy areas and alvars.	Low	Sandy areas and alvars not present in the study area.
Nine-spotted Lady Beetle	END	END	N/A	END	Habitat generalist	Low	No recent occurrence reports in the area, thought to be locally extirpated
Rapids Clubtail	THR	THR	N/A	END	Occurs along Mississippi River in Blakeney/Pakenham area upstream of City.	Low	No suitable habitat within the project and/or study area to support species presence. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Rusty-patched Bumble Bee	END	END	N/A	END	Habitat generalist	Low	Currently the only known population is in Pinery Provincial Park.
Transverse Lady Beetle	END	END	N/A	SC	Habitat generalist	Low	No new records of Traverse Lady Beetle in Ontario, species thought to be absent in former habitats.

TABLE C.7
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On- Site and in Study Area	Rationale
West Virginia White Butterfly	Not Protected	SC	N/A	Not Listed	Requires mature moist deciduous woods with larval host plant toothwort.	Low	No suitable habitat within the project and/or study area to support species presence. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Yellow-banded Bumble Bee	Not Protected	SC	N/A	SC	Habitat generalist; mixed woodlands, variety of open habitat	Low	No suitable habitat within the project and/or study area to support species presence. No occurrence records for species within 1 km of site. Species was not observed during site investigations.

experience • knowledge • integrity



civil	civil
geotechnical	géotechnique
environmental	environnement
structural	structures
field services	surveillance de chantier
materials testing	service de laboratoire des matériaux

expérience • connaissance • intégrité

