

**Environmental Impact Study (EIS)
&
Tree Conservation Report**

**151-159 Wescar Lane,
Part of Lot 6, Concession 3,
City of Ottawa**

November 18, 2024

Prepared By:



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1.0. Introduction

As requested by Sunbelt Rentals Inc., an Environmental Impact Study (EIS) was completed to assess the environmental impacts of a proposed development at 151-159 Westcar Lane, Carp, City of Ottawa (Figure 1; Appendix F). The proponent is proposing to construct two industrial buildings over two phases for Sunbelt Rentals Inc, for the purposes of fleet maintenance, office space and loading bays/storage areas associated with the equipment rental company (Appendix F).

1.1. Site Context

The lands are located along the west side of Westcar Lane (Figure 1). The property parcel is approximately 4.3ha in size and the legal land description is part of Lot 6, Concession 3, City of Ottawa. As mentioned the proponent is proposing to develop the entire property (subject lands) to construct two industrial buildings over two phases, for the purposes of fleet maintenance, office space and loading bays/storage areas associated with the equipment rental company. Construction at the Site is proposed in two phases. Phase 1 will include construction of both entrances, the larger building, staff parking, a fenced compound for equipment storage, the underground water storage tanks, a stormwater management pond, and the septic field. Phase 2 will include the future construction of the detached service building, related office space, staff parking, and a fenced compound (Appendix F).

Within the city's Zoning By-law No. 2008-250 and the city's official plan (2022) the subject lands are designated as rural (zoning by-law) and rural industrial and logistics (schedule B9). Additionally, the proposed development is located in Ecoregion 6E.

The subject lands are located within the Mississippi Valley Conservation Authorities jurisdiction.

Potential environmental constraints for the subject lands have been identified as significant woodland, potential wetland and potential watercourse.

The Provincial Policy Statement (PPS) states that site development and alteration shall not be permitted in provincially significant wetlands in Ecoregion 6E. Additionally site development and alteration shall not be permitted in provincially significant woodlands and significant wildlife habitat in Ecoregion 6E unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Additionally, development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

2.0. Methodology

This report is prepared in accordance with the City of Ottawa Environmental Impact Statement Guidelines (City of Ottawa 2022) with guidance from the Natural Heritage Reference Manual (OMNR, 2010). This EIS includes an assessment of the identified environmental constraints and the potential for Species at Risk.

This EIS will provide the methodology to mitigate, as required, negative impacts on significant features and functions. Potential Species at Risk in the general area were identified from Ministry of Natural Resources and Forestry databases, the Department of Fisheries and Ocean databases, the Ontario

Breeding Bird Atlas, Ontario Reptile and Amphibian Atlas, iNaturalist and the Global Biodiversity Information Facility.

Colour aerial photography was used to assess the natural environment features in the general vicinity of the proposed building.

See Table 1 for a summary of field surveys of the site and adjacent lands. Staff qualifications are available in Appendix B.

TABLE 1: Summary of Field Surveys

DATE	TIME	AIR TEMP. (°C)	WIND (Beaufort Scale)	CLOUD COVER / PRECIPITATION	STAFF
May 18, 2023	0715h-0745h	8	Light Breeze	Clear Skies	C.Fontaine
June 2, 2023	0810h-1000h	22	Light to Gentle Breeze	40% Cloud Cover	S.St.Pierre C.Fontaine
June 18, 2023	0845h-0915h	16	Light Breeze	Overcast	C.Fontaine
February 27, 2024	1200h-1330h	6.6	Light Breeze	Overcast	C.Fontaine

The area was extensively walked and surveyed for significant natural areas, potential species at risk and their associated habitat.

Upland vegetation communities were described utilising the Ecological Land Classification Southern Manual (Lee et al. 1998), while wetland communities if present were described utilising the Ontario Wetland Evaluation System Southern Manual (MNR 2022).

Breeding bird surveys were completed to assess the potential for bird usage within the subject lands. These surveys followed the Ontario Breeding Bird Atlas protocol (OBBA 2020) and included both point counts and incidental observations.

Significant Wildlife Habitat was determined from the Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement (OMNR 2010).

All butternut were assessed utilising Butternut Assessment Guidelines (OMNR 2021) by Cody Fontaine. Cody has over 8 years of experience conducting butternut assessments. He is a butternut health assessor, a butternut health expert, and has aided for the Forest Gene Conservation Association of Ontario to assess the viability of Category butternut 3 trees).

Observed plants were recorded for each individual community, the plants utilized in the descriptions are the most abundant specimens observed. A complete observed species list is provided in Appendix A. Plants that could not be identified in the field were collected for a more detailed examination. Nomenclature used in this report follows the Southern Ontario Vascular Plant List (Bradley, 2013) which aligns with the Integrated Taxonomic Information System (ITIS).

3.0. Field Surveys

A butternut survey was conducted along with a search for cavity trees by systematically moving through the subject lands and adjacent lands (discussed in section 4.3 and 4.4). A breeding bird survey (section 3.2.) was completed. Vegetation communities are described in section 3.1.

FIGURE 1: SUBJECT LANDS

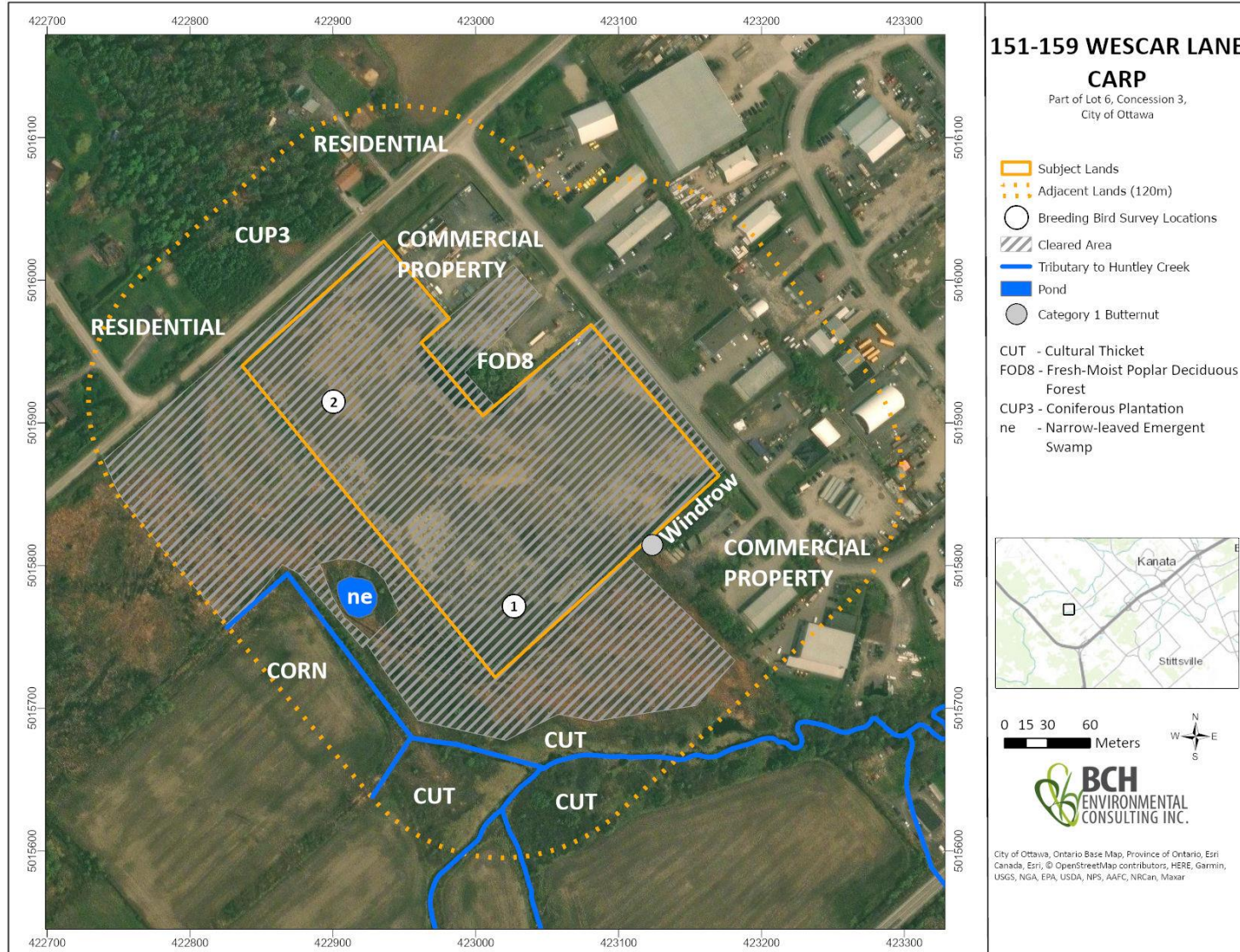
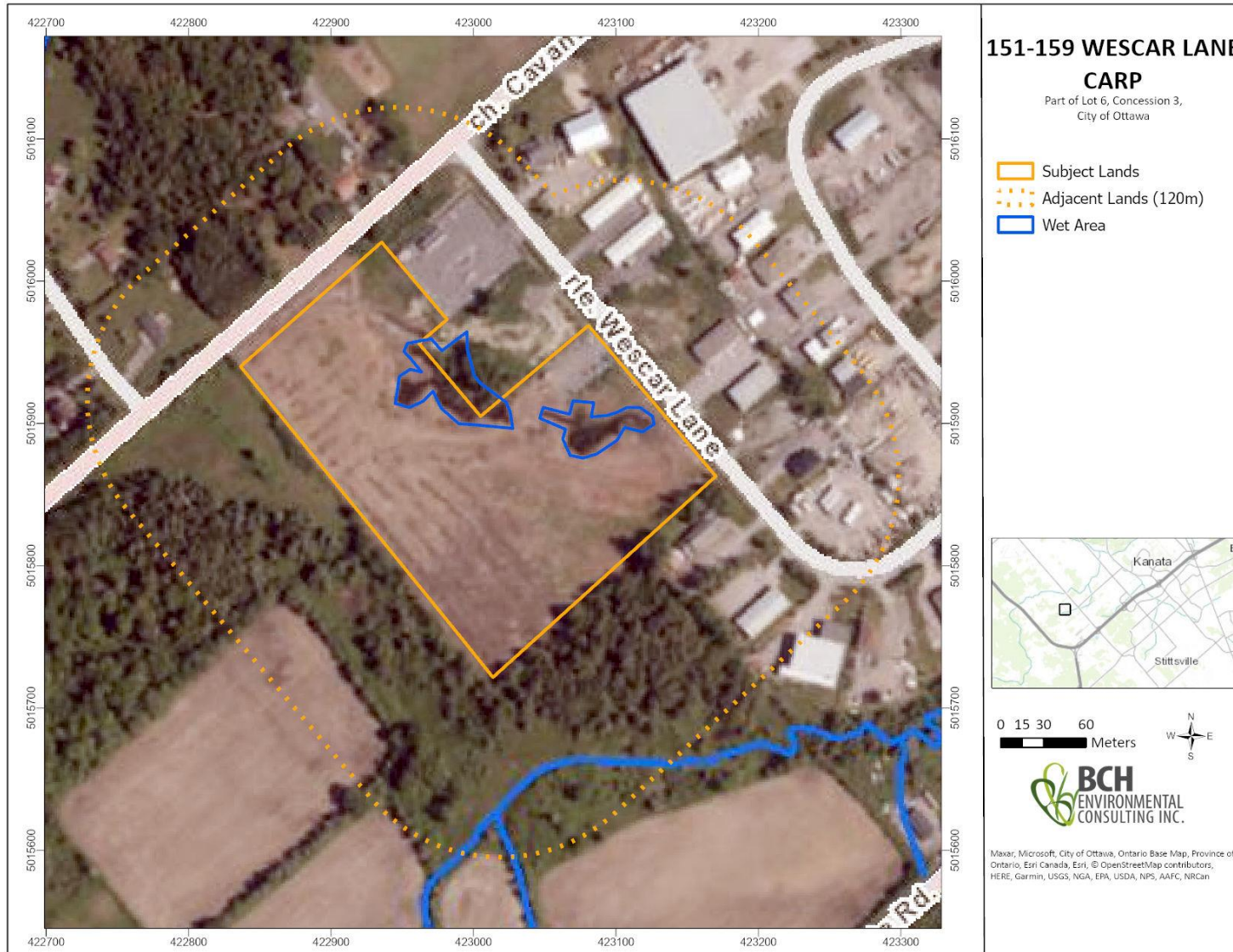


FIGURE 2: 2022 GEOTOPTA IMAGERY



3.1. Existing Conditions

The subject lands and much of the adjacent lands consisted of a previously cleared area. 2022 geoOttawa mapping (Figure 2: shows some of the extent of clearing, since the date of that imagery (2022) additional lands have been cleared which are depicted in Figure 1. Figure 1 reflects the current conditions and the current extent of clearing activities. Residential buildings and accessory building were present within the northern adjacent lands while commercial buildings were present within the eastern portion of the adjacent lands. A tributary to Huntley Creek was present within the south and western adjacent lands. A small isolated pond was present within the western adjacent land. The subject lands are flat and appear to drain to the west and south. Soils in the northern portion to be developed are of the Oka series which is described as very gravelly to very gravelly, coarse to moderately coarse textured marine beach materials which overly either Paleozoic bedrock, glacial till, or glaciofluvial ice contact deposits. The parent material is commonly grayish to dark grayish brown in color, and has coarse sandy loam, loamy coarse sand, or coarse sand textures (MAFRA 2023). Soils in the southern western portion to be developed are of the Dwyer Hill series which is described as very deep, excessively drained soils that formed in eolian sand (MAFRA 2023). Soils in the southern eastern portion to be developed are of the Osgood series which is described deep, well drained soils that formed in eolian sand (MAFRA 2023).

3.1.1. Clear Area

The entirety of the subject lands have been cleared which also extends into the adjacent lands (cleared prior to the site visit). Remnant patches of grasses, sedges, clovers, horsetail and bladder campion were present. Within the northern portion of the subject lands the area was cleared in a previous year and revegetation has commenced. This area had approximately 20% woody vegetation (1-2m tall) represented by trembling aspen and balsam poplar. Ground cover (90%) consisted of white sweet-clover, reed canary grass and common dandelion. Additionally, there is a small windrow running along the entirety of the subject lands western border. The windrow consisted of 30-50% woody vegetation (1-3m tall) dominated by trembling aspen followed by prickly-ash, wild red raspberry, hawthorn, American elm, and white spruce. Ground cover (60-90%) was dominated by grasses followed by grass-leaved goldenrod, sedges and wild carrot. Piles of logs were noted within the adjacent lands.



Photo 1: Cleared Area (June 2, 2023).



Photo 2: Northern Cleared Area (June 2, 2023).

3.1.2. Cultural Thicket

This community was present within the southern adjacent lands and was highly disturbed, evidence of cutting, previous farm activity and beaver dam removal. Woody vegetation provided 60-90% cover (1-3m tall) and was dominated by white ash followed by prickly-ash, tartarian honeysuckle, common buckthorn and glossy buckthorn. The occasional white spruce (5m tall) was dispersed throughout this community. Ground cover (100% cover) consisted of grasses, Canada anemone and goldenrods.



Photo 3: Cultural Thicket (June 2, 2023).

3.1.3. Fresh-Moist Poplar Deciduous Forest (FOD8)

This community is present within the northern adjacent lands between the current subject lands and the commercial development. This area consisted of a small clump of deciduous tree with an average tree diameter of 25cm. The canopy was the dominant layer. The canopy (12-14m tall; 80% cover) was dominated exclusively by trembling aspen. There was no sub-canopy. The understory (3-6m tall; 60-80% cover) consisted of common buckthorn, white spruce, trembling aspen and white ash. Ground cover (100% cover) consisted of grasses. A small portion within the western edge contained standing water (common buckthorn provided 60% cover in this area), this area was isolated and did not represent fish habitat. Frogs were noted within this area.



Photo 4: Fresh-Moist Poplar Deciduous Forest (June 2, 2023).

3.1.4. Coniferous Plantation (CUP3)

Within the northern adjacent lands north of Canamore Road there were coniferous plantations consisting of white pine and white spruce.



Photo 5: Coniferous Plantation (June 2, 2023).

3.1.5. Windrow

A small deciduous windrow was present within the south eastern subject lands/adjacent lands. The average tree diameter of 20cm. The canopy was the dominant layer. The canopy (10-12m tall; 70-80% cover) consisted of white pine, white birch, American elm, Freeman's maple and one butternut. There was no sub-canopy. The understory (2-4m tall; 50-70% cover) consisted of white ash, nannyberry, white spruce and American elm. Ground cover (70-90% cover) consisted of grasses, common dandelion, smooth bedstraw, field horsetail, and goldenrods.



Photo 6: Windrow (June 2, 2023).

3.1.6. Isolated Pond / Narrow-leaved Emergent Swamp (ne)

This community is present in the western adjacent lands. This small narrow-leaved cattail pond is isolated (not hydraulically connected to anything). This community consists entirely of robust emergent (narrowleaf cattail) and is bordered by a 1m buffer of speckled alder, tartarian honeysuckle, American elm, and green ash. Water was present. This area did not contain fish habitat and unlikely to be used by turtles due to size. Frogs were noted.



Photo 7: Isolated Pond / Narrow-leaved Emergent Swamp (June 2, 2023).

3.1.7. Tributaries to Huntley Creek

A tributary to Huntley Creek was present within the western and southern adjacent lands, this feature represented fish habitat. Bank vegetation was represented by prickly-ash, common buckthorn, speckled alder, tartarian honeysuckle and willows.



Photo 8: Tributaries to Huntley Creek (June 2, 2023).

3.1.8. Roadside Ditches

Roadside ditches were present along Westcar Lane and Cavanmore Road. During all field visits these ditches were dry. Channel width was 2m, some signs of erosion were noted. Vegetation was limited (due to clearing activities) and consisted of smooth bedstraw, grasses, water horsetail, purple loosestrife, trembling aspen and willows. These roadside ditches did not represent fish habitat.



Photo 9: Roadside Ditches (June 2, 2023).

3.2. Breeding Bird Survey

A breeding bird survey was completed to assess the potential for species of at risk and of species concern utilising the subject lands. The surveys consisted of two station along with walking through the area. Surveys were completed on May 18, 2023; June 2, 2023 and June 18, 2023. During the 3 visits. 2 listening stations were established (10 minutes at each station). No species at risk or of concern were heard or observed. Due to clearing activities within the subject lands the only species utilising these lands for nesting were killdeer (heard and observed). Additional species heard or observed within the subject lands include American robin, song sparrow, red-winged blackbird, common yellowthroat, blue jay, vespers sparrow, gray catbird, mallard, Canada geese, American crow, American goldfinch, turkey vulture, black-capped chickadee, European starling and common grackle.

4.0 Potential Species at Risk

The Make a Map: Natural Heritage online database (OMNRF) was reviewed on May 2, 2023. This database provides sightings of provincially tracked species including Threatened and Endangered species covered by the 2008 Endangered Species Act in 1 km squares across most of Ontario. A search was conducted on the site and adjacent lands (18VR2216, 18VR2316, 18VR2415 and 18VR2214) identified the following results:

- Butternut (Endangered)

- Snapping Turtle (Special Concern)

The Ontario Breeding Bird Atlas provides a searchable database in the form of a 10km square grid. A query revealed the following Species at Risk and species of special concern were identified within the 10km square that encompasses the site and adjacent lands (18VR21):

- Eastern Whip-Poor-Will (Threatened)
- Eastern Wood-Pewee (Special Concern)
- Barn Swallow (Special Concern)
- Bank Swallow (Threatened)
- Wood Thrush (Special Concern)
- Bobolink (Threatened)
- Eastern Meadowlark (Threatened)

Similar to the Ontario Breeding Bird Atlas, the Ontario Reptile and Amphibian Atlas provides a searchable database in the form of a 10km square grid. A query revealed the following species of special concern was identified within the 10km square that encompasses the subject lands and adjacent lands (18VR21):

- Snapping Turtle (Special Concern)
- Blanding's Turtle (Threatened)

iNaturalist and the Global Biodiversity Information Facility provides a searchable database. A query found no results within the vicinity of the site.

The Department of Fisheries and Oceans provide species at risk sightings via their online map tool. A query found no results in the vicinity of the site.

In addition to the above potential Species at Risk, many other endangered and threatened species may potentially occur in the general area:

- Little Brown Myotis (Endangered)
- Northern Myotis (Endangered)
- Eastern Small-footed Myotis (Endangered)
- Tri-coloured Bat (Endangered)
- Black Ash (Endangered)

4.1. Turtles and Reptiles

Snapping turtles are designated as special concern under the Ontario Endangered Species Act (ESA). The habitat of species of special concern is not regulated under the Ontario ESA.

Blanding's turtles are often observed within clear water eutrophic wetlands and have a strong site fidelity but may use several connected water bodies during the active season. Blanding's turtles were identified as occurring within the 10km search area (Ontario Reptile and Amphibian Atlas). Further investigation indicate that that Blanding's Turtle has been identified as occurring within 2km of the subject lands. The wetland (pond) habitat present within the adjacent lands does not represent turtle habitat, additionally all development will be greater than 30m from the pond. The watercourses are not likely to be utilised

by turtles as they do not link up to any viable wetlands that would be utilised by Blanding Turtles, additionally all development will be greater than 50m from the watercourse. Any indirect impacts can be mitigated providing all mitigation measures in this report are properly implemented.

No direct impacts on turtles are anticipated. All development will be more than 30m from the pond and watercourses. Indirect impacts on these species as a result of the proposed development can be mitigated provided the mitigation measures in this report are properly implemented.

4.2. Birds

Eastern wood-pewee, barn swallow, and wood thrush are designated special concern under the Ontario Endangered Species Act (ESA). The habitat of species of special concern is not regulated under the Ontario ESA. The eastern wood-pewee is mostly associated with the mid-canopy layer of forest clearings and edges of deciduous and mixed forests (COSEWIC 2012a). This habitat was not present. Barn swallow nest sites are commonly found along the interior or exterior of building structures, under bridges and wharves, and in road culverts (Heagy et al. 2014.). No barn swallow, or barn swallow nests were observed. The wood thrush nests mainly in second-growth and mature deciduous and mixed forests, with saplings and well-developed understory layers (COSEWIC 2012b). This type of habitat was not present.

Eastern whip-poor-will, bank swallow, bobolink, and eastern meadowlark are designated as threatened under the Ontario Endangered Species Act (ESA). Eastern whip-poor-will avoids both wide-open spaces and closed canopy forests. Semi-open forests or patchy forests with clearings, such as barrens or forests that are regenerating following major disturbances, are preferred. Areas with little ground cover are also preferred (COSEWIC 2009b). This habitat was not present. Bank swallow are generally associated with sand-silt vertical banks (COSEWIC 2013a). This habitat was not present. Bobolink and eastern meadowlark are associated with native and non-native larger grassland habitats such as hayfields (COSEWIC 2010, and COSEWIC 2011). No hayfields or other suitable habitat were identified in the area. The agricultural fields present within the adjacent lands were planted corn fields.

Breeding bird surveys were completed on May 18, 2023; June 2, 2023 and June 18, 2023. During the 3 visits 2 listening stations were established (10 minutes at each station). No species at risk or of concern were heard or observed.

Further to this, nesting migratory birds are protected under the Migratory Birds Convention Act (MBCA). No work is permitted that would result in the destruction of active nests (nests with eggs or young birds) or the wounding or killing of bird species protected under the MBCA and/or associated regulations.

4.3. Mammals

Little brown Myotis, northern Myotis, Eastern Small-footed Myotis, and tri-coloured bat are designated endangered under the Ontario Endangered Species Act (ESA). All four bats may forage in open areas on-site and may roost in trees or buildings on or adjacent to the Site. The Atlas of Mammals of Ontario (Dobbyn, 1994) suggests that the tri-colored bat is not present within this part of Ontario however, the NatureServe mapping in the COSSARO (2015) includes all of southeastern Ontario. Based on this information, this species is considered to have a very low potential of occurring. To prevent impacts to bats, no clearing of trees greater than 10cm on-site should take place between April 1 and September 30 (inclusive) without a qualified biologist first confirming the absence of bats (i.e., open work timing window

from October 1 to March 3). If tree clearing is conducted between October and April, no interactions with bats are anticipated, and therefore, significant negative impacts to SAR bats would be avoided.

Maternity colonies are established by females in the summer, often in buildings, or large-diameter trees with suitable cavities (COSEWIC 2013b). No caves, bedrock fissures, mining shafts, abandoned buildings, or other features which may function as bat hibernacula habitat were noted within the subject lands. No suitable cavity trees that may be used by bats were observed within the subject lands.

4.4. Vegetation

Butternut (designated as endangered by the ESA) tends to reach greatest abundance in rich well-drained mesic loams in floodplains, streambanks, terraces and ravine slopes, but can occur in a wide range of other situations (COSEWIC 2017). One butternut tree was observed during a survey conducted on June 2, 2023 (Figure 1). An assessment was completed on June 2, 2023. The butternut tree was determined to be a Category 1 tree. If you are planning to undertake an activity that may affect Butternut (within 50m), you may be eligible to follow the requirements set out in section 23.7 of Ontario Regulation 242/08 under the ESA or you may need to seek an authorization under the ESA (e.g., a permit). You are eligible to remove any Category 1 tree without registration or permitting but only after waiting 30 days after submitting the BHE report to MECP. The BHE report has been submitted to MECP on July 18, 2023 and the 30 day response period has elapsed with no comments received from MECP (see appendix H). Regarding MECP this tree can now be killed or harmed without any further action.

Black ash (designated as endangered by the ESA) occurs most frequently in floodplain forests, basin, seepage and lacustrine swamp forests, shoreline forest margins, and fens (COSEWIC 2017). The ministry temporarily suspended protections for Black Ash for a period of two years from the time the species was added to the Species at Risk in Ontario List (Ontario Regulation 230/08). During this time, proponents will not need to seek authorizations for activities that impact Black Ash and its habitat. No Black Ash were observed within the subject or adjacent lands.

4.5. Species at Risk Summary

In summary, based on the habitat present within the building envelope, subject lands, and the field visit, Butternut is the only Species at Risk anticipated to be present. One butternut (Category 1). A 50m setback from the Category 1 tree must be put in place until the BHE report has been submitted to MECP and the 30 day waiting period has elapsed.

Indirect impacts on this species as a result of the proposed development can be mitigated provided the mitigation measures in this report are properly implemented.

5.0 Natural Heritage Features

A Natural Heritage Features have been identified in accordance with the direction of the Provincial Policy Statement. Its intent is to reinforce the conservation, restoration, and enhancement of identified natural heritage features and areas and promote the overall diversity and interconnectivity of natural heritage features and areas.

A refined search identified the following potential Natural Heritage Features (discussion below):
Significant Woodland, Wetland and Watercourse.

5.1. Significant Woodland

There are no woodlands present within the subject lands.

5.2. Pond / Wetland / Tributaries to Huntley Creek

The pond (wetland) and tributaries to Huntley Creek have been taken into account, a 30m setback has been established. Potential impact may include habitat destructions, changes to downstream hydrology, and changes to water quality.

2022 geoOttawa imagery suggest that additional wet areas are present within the subject lands (Figure 2; outlined in blue). The south eastern area present in blue on figure 2, is no longer existing, leveling and site works that have occurred since the 2022 imagery was taken appear to have filled in this area. This is similar to the north area (outlined in blue) with a small wet portion still remaining on the adjacent lands (see section 3.1.3). This was an isolated pocket of standing water (no inflow or outflow). Although frogs were noted within this area, this area was approximately 300m² which is much less than the >500m² (about 25m diameter), for the designation of significance (MNRF 2015). Additionally, only a 3-5 individuals were ever observed within this area, far below the threshold for significance (MNRF 2015). 2 or more of the frog species with at least 20 individuals would be required for significance, which isn't very likely given the size of this area. It is highly unlikely that water is present within the late summer in this area.

5.3. Significant Wildlife Habitat

The potential for significant wildlife habitat was assessed using the guidance in OMNR (2010) and MNRF (2015). Potential components which may lead to a designation of significant wildlife habitat include seasonal concentration areas of animals, rare vegetation communities or specialized habitat for wildlife, habitat for species of conservation concern, and animal movement corridors. No rare vegetative communities, raptor overwintering sites, old growth forest, valley, or caves were located within the subject or adjacent lands. No habitat for species of conservation concern was present.

There was nothing regarding the characteristic within the subject lands to warrant significance.

6.0. Wildland Fire Risk Assessment

The wildland fire policy was introduced in the 2014 Provincial Policy Statement to ensure communities consider and plan for avoiding and mitigating losses to their communities due to wildland fire. As outlined in the Provincial Policy Statement, "Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire. Development may however be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and mitigation standards".

To assist planning city of Ottawa has identified potential hazardous forest types for wildland fire. The subject lands have been identified as being a Low risk for wildland fire.

6.1. Level 1 Site Assessment

Following review of the available information provided by the city the subject lands have been identified as having a low risk of wildland fires. Following the guidelines as outlined in the MNR Wildland Fire Risk Assessment and Mitigation Guidebook no further mitigation measures are required for the proposed development. Furthermore the subject lands area cleared of any woodland.

7.0. Tree Conservation Report

Under the Tree Protection By-law, the following protected trees cannot be injured or removed without a tree permit from the City:

- All City-owned trees throughout the urban and rural area
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are subject to a Planning Act application for Site Plan, Plan of Subdivision, or Plan of Condominium
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are over 1 hectare in size
- All distinctive trees on private properties 1 hectare or less in size, where distinctive trees are defined as:
 - o Trees measuring 30 cm or more in diameter at breast height within the inner urban area (urban lands inside the Greenbelt)
 - o Trees measuring 50 cm or more in diameter at breast height within the suburban area (urban lands outside the Greenbelt)

The properties in question is located at:

**151-159 Wescar Lane,
Part of Lot 6, Concession 3,
City of Ottawa.**

The property is currently owned by:

**Sunbelt Rentals Inc.
2489 Sheffield Road,
Ottawa, ON.
K1B 3V6.**

Sunbelt Rentals Inc. Contact Information:

**Mark Watson the District Manager Eastern Ontario
mark.watson@sunbeltrentals.com**

The subject lands are within the Rural Areas and this is private property. No city trees have been identified within the property. No trees greater than 50cm are within the subject lands or immediate adjacent lands. For a description of the onsite vegetation see section 3.1.

Tree removal will occur as needed within the subject lands, all remaining trees within the subject lands will be removed due necessary grading activities. Potential impacts during construction and associated removal of trees and other vegetation includes impacts on wildlife, increased erosion and release of sediments and other potential contaminants from truck traffic and construction activity, harm to wildlife remaining in the work area during construction, and impacts associated with an increase in noise, dust and light. Prescribed mitigation measures in section 9.0 will limit these impacts. Removal of tree cover within the subject lands is not anticipated to result in significant negative impacts to the environmental features and functions of the general area. Although there is no protection afforded to the trees present within the subject lands as demonstrated in the landscaping plan (Appendix G), multiple native trees will be planted to achieve 30% cover, this will not only compensate for the loss of trees but will add a greater amount of trees than currently present.

Although tree cover within the adjacent lands is very limited, there is still some ecological function provided such as local wildlife habitat and climate, air quality, wildlife, and nature appreciation benefits. All three within the adjacent lands will have their critical root zone protected by temporary fencing (snow fencing) to ensure it is not affected (Figure 3) with the exception of tree #58 and 59. All development will occur outside of their critical root zone, and these trees will not be impacted by this development, with the exception of tree #58 and 59. Tree #58 has a critical root zone of 186.27m² of which 5.31m² is found within the development area and will be disturbed. Tree #59 has a critical root zone of 232.35m² of which 1.60m² is found within the development area and will be disturbed. Although development activities (excavation and infilling) may affect the roots of tree #58 and 59, it is highly unlikely that any potential damage cause would cause the decline of the health of these trees. The development will occur at the outer limit of their critical root zone and additional mitigation measures present in section 9.3. for the specific protection of any exposed roots will mitigate any potential damage. There are no overall negative impacts to the overall health and vigour of these trees anticipated.

Prescribed mitigation measures in section 9.3 will limit the potential for direct and indirect impacts.

Trees present in table 2 (Figure 3), represent all the trees 10cm and over within the subject lands and surrounding lands.

Table 2: Tree Information

Tree ID	Species	DBH Average (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
1	White Birch	8	0.8	Good	Multistem	Proponent	Removed
2	White Spruce	13	1.3	Good	Single stem	Proponent	Removed
3	White Spruce	14	1.4	Good	Single stem	Proponent	Removed
4	White Pine	33	3.3	Good	Single stem	Proponent	Removed
5	White Pine	14	1.4	Good	Single stem	Proponent	Removed
6	Trembling Aspen	20	2	Good	Single stem	Proponent	Removed
7	White Pine	37	3.7	Good	Single stem	Proponent	Removed
8	Trembling Aspen	12	1.2	Good	Single stem	Proponent	Removed
9	White Birch	20	2	Poor	Multistem. DBH:19 is dead	Proponent	Removed
10	White Pine	24	2.4	Good	Single stem	Proponent	Removed
11	American Elm	21	2.1	Good	Single stem	Proponent	Removed
12	Butternut	35	3.5	Poor	Single stem. Poor, branch dieback	Proponent	Removed
13	Unknown	10	1	Dead	Single stem. No bark	Proponent	Removed
14	Red Maple	19	1.9	Good	Single stem	Proponent	Removed
15	Red Maple	24	2.4	Good	Single stem	Proponent	Removed
16	American Elm	11	1.1	Good	Single stem	Neighbour	Retained
17	White Pine	16	1.6	Dead	Single stem	Neighbour	Retained
18	White Pine	10	1	Good	Single stem	Proponent	Removed
19	Red Maple	28	2.8	Dead	Single stem. Broken @ 9m	Proponent	Removed
20	Trembling Aspen	11	1.1	Good	Single stem	Neighbour	Retained
21	Trembling Aspen	10	1	Good	Single stem	Neighbour	Retained
22	Trembling Aspen	10	1	Good	Single stem	Neighbour	Retained
23	Trembling Aspen	11	1.1	Good	Single stem	Neighbour	Retained
24	Trembling Aspen	13	1.3	Good	Single stem	Neighbour	Retained
25	Trembling Aspen	13	1.3	Good	Single stem	Neighbour	Retained
26	Trembling Aspen	10	1	Good	Single stem	Neighbour	Retained

Tree ID	Species	DBH Average (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
27	Trembling Aspen	40	4	Good	Single stem	Neighbour	Retained
28	Trembling Aspen	16	1.6	Good	Single stem	Neighbour	Retained
29	White Spruce	10	1	Good	Single stem	Neighbour	Retained
30	Trembling Aspen	30	3	Good	Single stem	Neighbour	Retained
31	Trembling Aspen	27	2.7	Good	Single stem	Neighbour	Retained
32	Trembling Aspen	35	3.5	Good	Single stem	Neighbour	Retained
33	Trembling Aspen	25	2.5	Good	Single stem	Neighbour	Retained
34	Trembling Aspen	34	3.4	Dead	Single stem. Broken @ 5m	Neighbour	Retained
35	Trembling Aspen	18	1.8	Good	Single stem	Neighbour	Retained
36	Trembling Aspen	20	2	Good	Single stem	Neighbour	Retained
37	Trembling Aspen	19	1.9	Dead	Single stem. Broken @ 7m	Neighbour	Retained
38	Trembling Aspen	29	2.9	Good	Single stem	Neighbour	Retained
39	Trembling Aspen	23.5	2.35	Good	Multistem	Neighbour	Retained
40	Trembling Aspen	26	2.6	Good	Single stem	Neighbour	Retained
41	Trembling Aspen	22	2.2	Good	Single stem	Neighbour	Retained
42	Trembling Aspen	11	1.1	Good	Single stem	Neighbour	Retained
43	Trembling Aspen	15	1.5	Dead	Single stem. Broken @ 3m	Neighbour	Retained
44	Trembling Aspen	24	2.4	Good	Single stem	Neighbour	Retained
45	Trembling Aspen	18	1.8	Good	Single stem	Neighbour	Retained
46	Trembling Aspen	24	2.4	Good	Single stem	Neighbour	Retained
47	Trembling Aspen	22	2.2	Good	Single stem	Neighbour	Retained
48	Trembling Aspen	19	1.9	Good	Single stem	Neighbour	Retained
49	Trembling Aspen	11	1.1	Good	Single stem. Broken @ 7m	Neighbour	Retained
50	Trembling Aspen	12	1.2	Good	Single stem. Leaning	Neighbour	Retained
51	Trembling Aspen	22	2.2	Good	Single stem. Leaning	Neighbour	Retained
52	Willow Species	24	2.4	Dead	Multistem. Bark falling off	Neighbour	Retained
53	Trembling Aspen	32	3.2	Good	Single stem	Neighbour	Retained

Tree ID	Species	DBH Average (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
54	White Pine	16	1.6	Good	Single stem	Proponent	Removed
55	White Pine	85	8.5	Good	Single stem	Neighbour	Retained
56	American Elm	17	1.7	Good	Single stem	Neighbour	Retained
57	Red Maple	13	1.3	Good	Multistem. Within fenced in area on adjacent lands	Neighbour	Retained
58	White Pine	77	7.7	Good	Single stem	Neighbour	Retained
59	White Pine	86	8.6	Good	Single stem	Neighbour	Retained
60	Red Maple	16	1.6	Good	Single stem	Neighbour	Retained
61	Red Maple	12	1.2	Poor	Single stem. Leaning	Neighbour	Retained
62	Red Maple	26	2.6	Good	Single stem	Neighbour	Retained
63	Red Maple	18	1.8	Good	Single stem	Neighbour	Retained
64	Red Maple	19	1.9	Good	Single stem	Neighbour	Retained
65	Red Maple	18	1.8	Good	Single stem	Neighbour	Retained
66	Red Maple	11	1.1	Good	Single stem	Neighbour	Retained
67	Red Maple	39	3.9	Good	Single stem	Neighbour	Retained
68	Red Maple	15	1.5	Good	Single stem	Neighbour	Retained
69	Red Maple	12	1.2	Good	Single stem	Neighbour	Retained
70	Red Maple	15	1.5	Good	Single stem	Neighbour	Retained
71	White Spruce	23	2.3	Good	Single stem	Neighbour	Retained
72	Balsam Fir	18	1.8	Good	Single stem	Neighbour	Retained
73	White Birch	13	1.3	Good	Single stem	Neighbour	Retained
74	White Pine	32	3.2	Good	Single stem	Neighbour	Retained
75	Trembling Aspen	25	2.5	Good	Single stem	Neighbour	Retained
76	Red Maple	13	1.3	Good	Single stem	Neighbour	Retained
77	Red Maple	24	2.4	Good	Single stem	Neighbour	Retained
78	White Pine	22	2.2	Good	Single stem	Neighbour	Retained
79	White Pine	19	1.9	Good	Single stem	Neighbour	Retained

Tree ID	Species	DBH Average (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
80	White Pine	17.5	1.75	Good	Multistem	Neighbour	Retained
81	Trembling Aspen	28	2.8	Good	Single stem	Neighbour	Retained
82	White Pine	27	2.7	Good	Single stem	Neighbour	Retained
83	White Spruce	21	2.1	Good	Single stem	Neighbour	Retained
84	Trembling Aspen	27	2.7	Good	Single stem	Neighbour	Retained
85	White Spruce	13	1.3	Good	Single stem	Neighbour	Retained
86	White Pine	11	1.1	Good	Multistem	Neighbour	Retained
87	White Pine	12	1.2	Good	Single stem	Neighbour	Retained
88	White Pine	10	1	Good	Single stem	Neighbour	Retained
89	White Pine	17.5	1.75	Good	Multistem	Neighbour	Retained
90	White Pine	29	2.9	Good	Single stem	Neighbour	Retained
91	Trembling Aspen	27	2.7	Good	Single stem	Neighbour	Retained
92	Trembling Aspen	21	2.1	Good	Single stem	Neighbour	Retained
93	White Spruce	14	1.4	Good	Single stem	Neighbour	Retained
94	Trembling Aspen	25	2.5	Good	Single stem	Neighbour	Retained
95	White Spruce	15	1.5	Good	Single stem	Neighbour	Retained
96	Trembling Aspen	26	2.6	Good	Single stem	Neighbour	Retained
97	Trembling Aspen	29	2.9	Good	Multistem	Neighbour	Retained
98	Trembling Aspen	30	3	Good	Single stem	Neighbour	Retained
99	Trembling Aspen	28	2.8	Good	Single stem	Neighbour	Retained
100	Gray Birch	29	2.9	Good	Single stem	Neighbour	Retained

FIGURE 3: TREE CONSERVATION



FIGURE 4: TREE CONSERVATION – ZOOMED IN (SOUTH EAST)

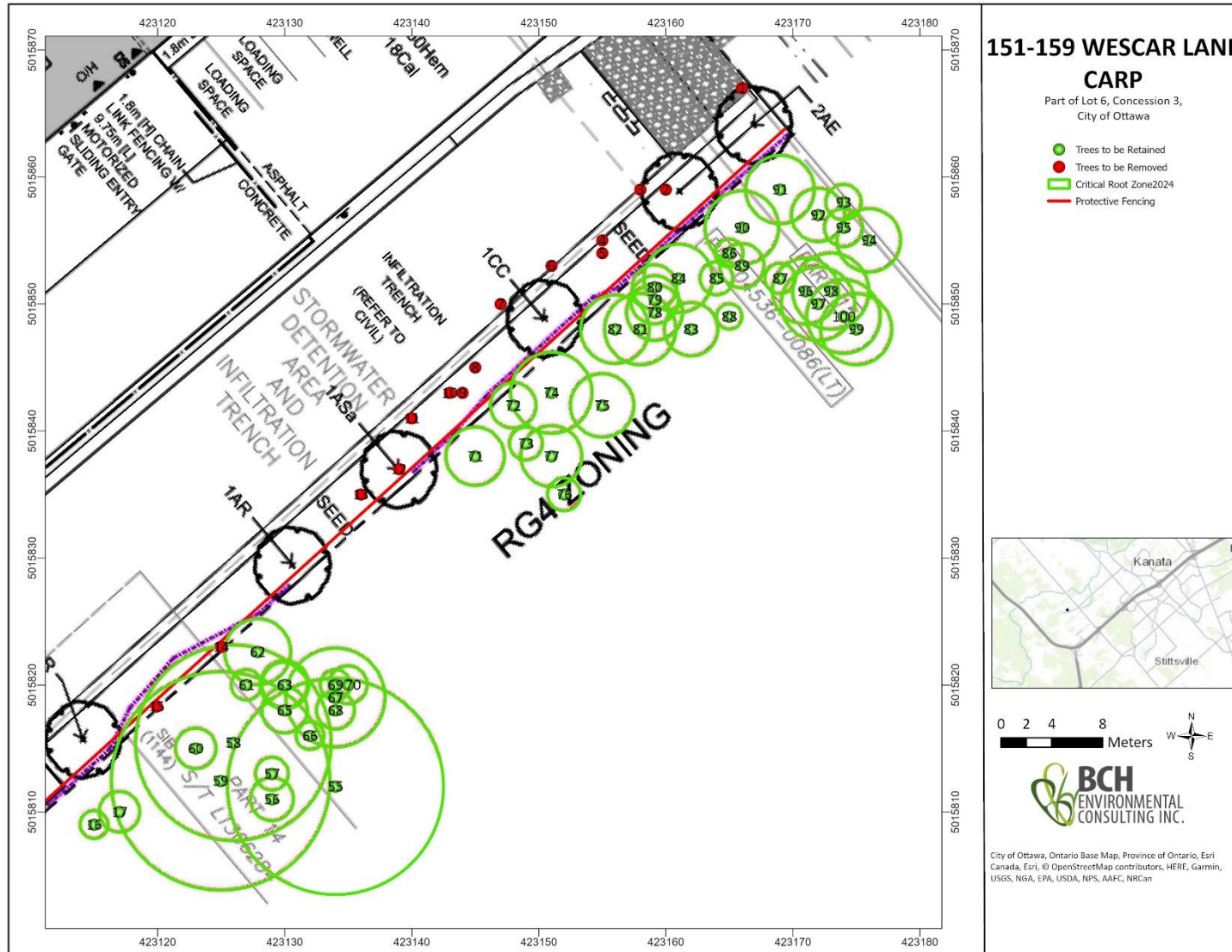


FIGURE 5: TREE CONSERVATION – ZOOMED IN (EAST CENTRAL)

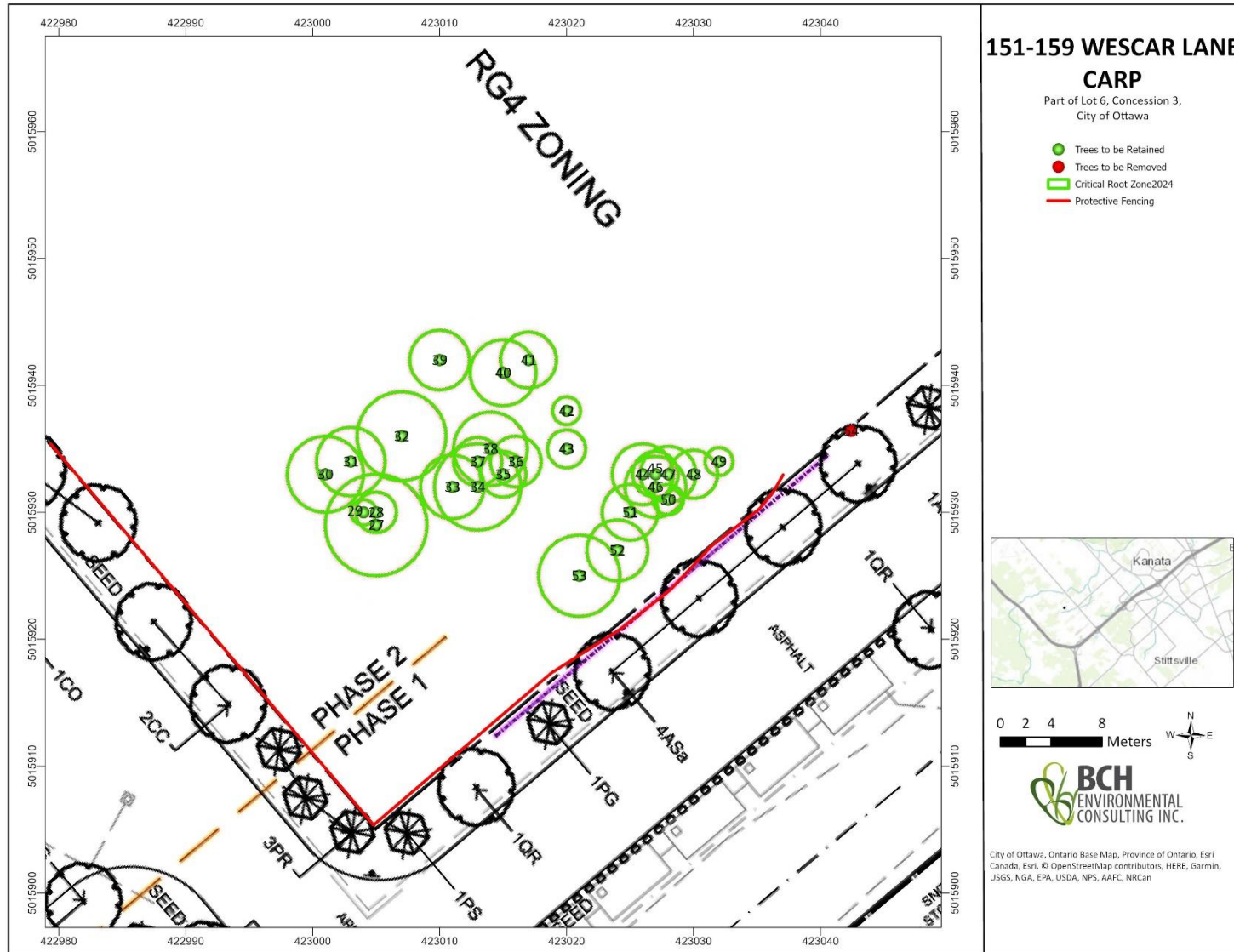
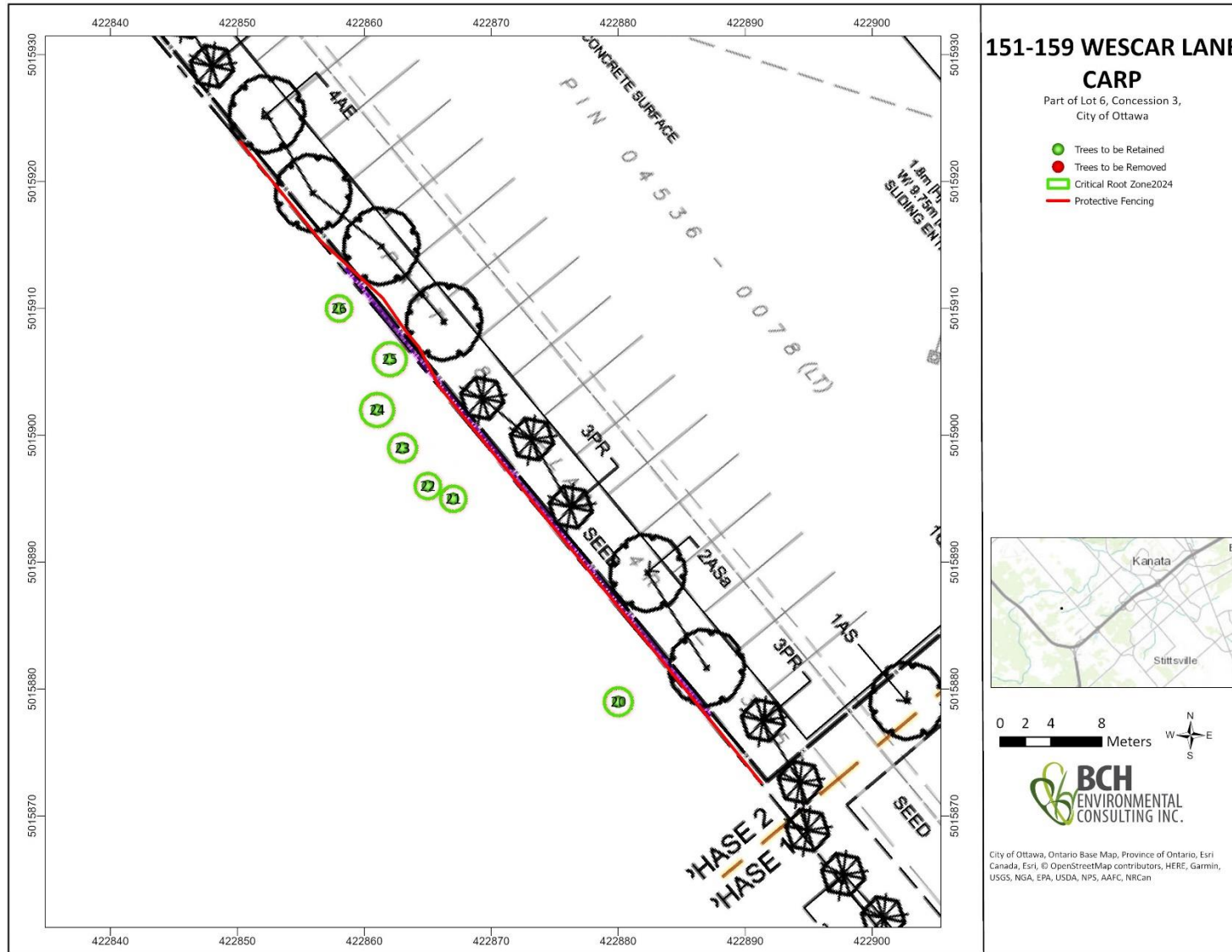


FIGURE 6: TREE CONSERVATION – ZOOMED IN (WEST)



8.0. Development Constraints, Cumulative Impacts and Climate Change

No significant constraints, regulatory requirements, or buffer requirements have been identified in relation to Significant Woodland. Development will be limited to the subject lands.

Watercourse/Pond/Wetland: All development will be located at a minimum 30m from these features.

The Canadian Environmental Assessment Agency (CEAA) defines cumulative effects as...“the effects on the environment caused by an action in combination with other past, present, and future human actions...” They occur when two or more project-related environmental effects, or two or more independent projects, combine to produce an augmented effect. These cumulative effects may be positive or negative.

There are no significant natural heritage features within the subject lands (site has been cleared). Given that the proposed location is bordered to the north and east by similar development the cumulative impacts will be the same, a slow chipping away at the natural landscape.

With proper implementation of the mitigation measures described in this report it is anticipated that the construction of the proposed residential building will not increase the potential for cumulative effects in the general landscape.

As per the EIS guidelines climate change should be taken into account when developing the property. The main concerns with climate change are the following: extreme heat and drought, changing seasons, rain and flooding and extreme weather events.

The subject lands currently consist of cleared lands with very little tree cover. To aid in mitigating the potential for extreme heat and drought were possible native trees should be considered for planting within remnant green spaces after development. The shade produced by these trees will aid in mitigating heat being produced by hardened surfaces. To aid in the mitigation of the increased risk of rain and flood, the design of the stormwater infrastructure should accommodate the potential increased flows. Additional measures such as designing building and infrastructure to be resilient in future climate conditions such as extreme weather, greater rainfall and higher temperatures should be considered.

For further information see the City of Ottawa Climate Resiliency webpage (<https://ottawa.ca/en/living-ottawa/environment-conservation-and-climate/climate-change-and-energy/climate-resiliency#section-a8783773-3a10-4998-b516-b4d9c5e73cf0>)

FIGURE 7: ENVIRONMENTAL CONSTRAINTS



FIGURE 8: ENVIRONMENTAL CONSTRAINTS WITH PLANS



9.0. Recommendations and Conclusion

This study's recommendations are intended to mitigate potential negative impacts due to the proposed development and should be implemented through a development agreement between the owners and the municipality in order to control development of the site. Properly implemented controls within this agreement are deemed sufficient to mitigate the potential impacts of the proposed development.

9.1. Mitigation for the Species at Risk and Migratory Birds

Convention Act

- 1- To protect breeding birds, no tree or shrub removal should occur between April 1th and August 30th, unless a breeding bird survey is completed by a qualified biologist within two days of the woody vegetation removal and identifies no nesting activity.
- 2- To prevent impacts to bats, no clearing of trees greater than 10cm on-site should take place between April 1 and September 30 (inclusive) without a qualified biologist first confirming the absence of bats (i.e., open work timing window from October 1 to March 3). If tree clearing is conducted between October and April, no interactions with bats are anticipated, and therefore, significant negative impacts to SAR bats would be avoided.
- 3- With regard to turtles, clearing of vegetation should be undertaken between October 15th and April 15th, which is outside of the more active season for turtles. Additionally exclusion fencing should be installed around the perimeter of the site to prevent turtles from entering work areas (properly installed sediment fencing can be utilised for exclusion fencing).
- 4- The contractor is to be aware of potential Species at Risk in the vicinity of the site. Appendix 1 of City of Ottawa Protocol for Wildlife Protection during Construction (2022) and Appendix E of this report for descriptions of these species. Any Species at Risk sightings are to be immediately reported to the project biologist and the MECP, and activities modified to avoid the potential for impacts until further direction is received by the Ministry.
- 5- You are eligible to remove any Category 1 tree without registration or permitting but only after waiting 30 days after submitting the BHA report to MECP. The BHE report has been submitted to MECP on July 18, 2023 and the 30 day response period has elapsed with no comments received from MECP.

9.2. Fish Habitat/Wetland (Pond) Recommendations and Mitigation Measures

- 1- The site's hydrology is not to be impacted.
- 2- A 30m setback from fish habitat/Wetland is recommended.
- 3- Storm water management facility will be designed in such a way as to not impact the quantity or quality of the water contributing to the pond and watercourses.
- 4- Should dust particles be created during construction they will be suppressed using the appropriate method (i.e. water spraying).

- 5- Install and maintain the erosion control measures during construction. No work will occur until the appropriate sediment and erosion control measures have been designed and implemented prior to any work. At a minimum these will include:
 - a. Provide regular maintenance to the sediment and erosion control measures during construction. Contractor shall be responsible for ensuring that the sediment and erosion control measures are maintained. No turbid water is permitted to leave the work area.
 - b. Additional materials (i.e. rip rap, filter cloth and silt fencing) will be readily available in case they are needed promptly for erosion and/or sediment control.
 - c. Any stock piles of soil or fill material will be stored as far as possible from the watercourse and wetland and protected by silt fencing.
 - d. Sediment fencing will be installed at the edge of the work area, and kept in good working condition. The sediment fencing will not be removed until the area has stabilized.

9.3. Recommendation and Mitigation for Tree Protection

- 1- Any tree in the vicinity of works but not slated for removal will have its critical roots zone protected by sturdy temporary fencing at least 1.3 metres in height installed from the tree trunk to a distance of ten times the retained tree's diameter where possible with the exception of tree #58 and 59. Tree #58 has a critical root zone of 186.27m² of which 5.31m² is found within the development area and will be disturbed. Tree #59 has a critical root zone of 232.35m² of which 1.60m² is found within the development area and will be disturbed. Mitigation measures 9.3.2, 9.3.3 and 9.3.4 will protect trees #58 and 59, ensuring no negative impacts and the trees survival. See figure 3 for protective fencing locations. Signs shall be posted on the protective fencing to clearly indicate that: a) the fencing is to protect the critical root zones of the retained trees; b) the fencing is not to be moved, and; c) fencing is to be maintained until the construction is complete.
- 2- No grading, heavy machinery traffic, stockpiling of material, machinery maintenance and refueling, or other activities that may cause soil compaction are to occur within three metres of the critical root zone of the trees to be protected.
- 3- The root system, trunk, and branches of the trees to be protected are to be protected and not damaged. If any roots of trees to be retained are exposed during site alterations, the roots shall be immediately reburied with soil or covered with filter cloth, burlap or woodchips and kept moist until the roots can be buried permanently. A covering of plastic should be used to retain moisture during an extended period when watering may not be possible. Any roots that must be cut are to be cut cleanly to facilitate healing and as far from the tree as possible. Overhanging branches from protected trees that may be damaged during construction are to be pruned by a qualified arborist prior to construction.
- 4- Exhaust fumes from all equipment during construction will not be directed towards the canopy of the adjacent protected trees.

9.4. Climate Change Recommendations

- 1- To aid in mitigating the potential for extreme heat and drought where possible native trees should be considered for planting within remnant green spaces after development. The shade produced by these trees will aid in mitigating heat being produced by hardened surfaces.

- 2- To aid in the mitigation of the increased risk of rain and flood, the design of the stormwater infrastructure should accommodate the potential increased flows.
- 3- Additional measures such as designing building and infrastructure to be resilient in future climate conditions such as extreme weather, greater rainfall and higher temperatures should be considered.

9.5. Additional Mitigation Measures

- 4- The extent of any vegetation removal within the development area is to be minimized where possible.
- 5- All rules governing septic systems and wells must be followed and be kept in good operational order.
- 6- There will be no use of herbicides in clearing of vegetation.
- 7- Municipal by-laws and provincial regulations for noise will be followed.
- 8- To discourage wildlife from entering the work areas during construction, the site should be kept clear of food wastes and other garbage. Proper drainage should be provided to avoid accumulation of standing water, which could attract amphibians, birds, and other wildlife to the work areas.
- 6- As recommended in City of Ottawa Protocol for Wildlife Protection during Construction (2022), prior to beginning work each day, wildlife is to be checked for by conducting a thorough visual inspection of the work space and immediate surroundings. See Section 2.0 of City of Ottawa Protocol for Wildlife Protection during Construction (2022) and Appendix C for additional recommendations on construction site management with respect to wildlife. It is the responsibility of the contractor to be familiar with all components of City of Ottawa Protocol for Wildlife Protection during Construction (2022). Any sensitive wildlife in the work area are to be relocated to the South-West the subject lands. Animals should be moved only far enough to ensure their immediate safety.

To conclude this EIS, it is the professional opinion of the authors that with proper implementation and maintenance of the mitigation measures (see above), the proposed development will not negatively impact any natural heritage feature, or any habitat of Species at Risk.

Thank you for the opportunity to work with you. If you have any questions or comments please do not hesitate to contact our office.



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Cody Fontaine, Wildlife Technologist

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APPENDIX A: OBSERVED SPECIES LIST

COMMON NAME	SCIENTIFIC NAME	SRANK	SARA STATUS	SARO STATUS	BRUNTON 2005
Field Horsetail	<i>Equisetum arvense</i>	S5			Common
Water Horsetail	<i>Equisetum fluviatile</i>	S5			Common
New England Aster	<i>Symphyotrichum novae-angliae</i>	S5			Common
Common Lady Fern	<i>Athyrium filix-femina</i>	S5			Common
Sensitive Fern	<i>Onoclea sensibilis</i>	S5			Common
Balsam Fir	<i>Abies balsamea</i>	S5			Common
White Spruce	<i>Picea glauca</i>	S5			Common
Eastern White Pine	<i>Pinus strobus</i>	S5			Common
Eastern White Cedar	<i>Thuja occidentalis</i>	S5			Common
Narrowleaf Cattail	<i>Typha angustifolia</i>	SNA			Common
Broad-leaved Cattail	<i>Typha latifolia</i>	S5			Common
Lake Sedge	<i>Carex lacustris</i>	S5			Uncommon
Redtop	<i>Agrostis gigantea</i>	SNA			Common
Smooth Brome	<i>Bromus inermis</i>	SNA			Common
Yellow Trout-lily	<i>Erythronium americanum</i>	S5			Common
Orchard Grass	<i>Dactylis glomerata</i>	SNA			Common
Large Barnyard Grass	<i>Echinochloa crus-galli</i>	SNA			Common
Reed Canary Grass	<i>Phalaris arundinacea</i>	S5			Common
Awl-fruited Sedge	<i>Carex stipata</i>	S5			Common
Dudley's Rush	<i>Juncus dudleyi</i>	S5			Uncommon
Path Rush	<i>Juncus tenuis</i>	S5			Common
Balsam Poplar	<i>Populus balsamifera</i>	S5			Common
Trembling Aspen	<i>Populus tremuloides</i>	S5			Common
Butternut	<i>Juglans cinerea</i>	S2?	END	END	Provincial Conservation Concern
Speckled Alder	<i>Alnus incana ssp. rugosa</i>	S5			Common
White Birch	<i>Betula papyrifera</i>	S5			Common
Bur Oak	<i>Quercus macrocarpa</i>	S5			Common
American Elm	<i>Ulmus americana</i>	S5			Common
White Goosefoot	<i>Chenopodium album</i>	SNA			Common
Bladder Champion	<i>Silene vulgaris</i>	SNA			Common
Canada Anemone	<i>Anemonastrum canadense</i>	S5			Common
Tall Buttercup	<i>Ranunculus acris</i>	SNA			Common
Field Mustard	<i>Brassica rapa</i>	SNA			Rare
Wild Black Currant	<i>Ribes americanum</i>	S5			Common
Common Strawberry	<i>Fragaria virginiana</i>	S5			Common

COMMON NAME	SCIENTIFIC NAME	SRANK	SARA STATUS	SARO STATUS	BRUNTON 2005
Common Blackberry	<i>Rubus allegheniensis</i>	S5			Common
Goldenrods	<i>Solidago sp.</i>				
Canada Goldenrod	<i>Solidago canadensis</i>	S5			Common
Wild Red Raspberry	<i>Rubus idaeus ssp. strigosus</i>	S5			Common
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	SNA			Common
Black Medic	<i>Medicago lupulina</i>	SNA			Common
White Sweet Clover	<i>Melilotus albus</i>	SNA			Common
Black Locust	<i>Robinia pseudoacacia</i>	SNA			Rare
Red Clover	<i>Trifolium pratense</i>	SNA			Common
White Clover	<i>Trifolium repens</i>	SNA			Common
Cow Vetch	<i>Vicia cracca</i>	SNA			Common
Upright Yellow Wood-sorrel	<i>Oxalis stricta</i>	S5			Common
Common Prickly-ash	<i>Zanthoxylum americanum</i>	S5			Common
Western Poison Ivy	<i>Toxicodendron radicans var. rydbergii</i>	S5			Common
Staghorn Sumac	<i>Rhus hirta</i>	S5			Common
Red Maple	<i>Acer rubrum</i>	S5			Common
(Acer rubrum X Acer saccharinum)	<i>Acer x freemanii</i>	SNA			Common
Spotted Jewelweed	<i>Impatiens capensis</i>	S5			Common
Common Buckthorn	<i>Rhamnus cathartica</i>	SNA			Common
Glossy Buckthorn	<i>Frangula alnus</i>	SNA			Common
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	S4?			Uncommon
Riverbank Grape	<i>Vitis riparia</i>	S5			Common
Wild Sarsaparilla	<i>Aralia nudicaulis</i>	S5			Common
Wild Carrot	<i>Daucus carota</i>	SNA			Common
Gray Dogwood	<i>Cornus racemosa</i>	S5			Uncommon
White Ash	<i>Fraxinus americana</i>	S4			Common
Green Ash	<i>Fraxinus pennsylvanica</i>	S4			Common
Spreading Dogbane	<i>Apocynum androsaemifolium</i>	S5			Common
Common Milkweed	<i>Asclepias syriaca</i>	S5			Common
Field Bindweed	<i>Convolvulus arvensis</i>	SNA			Common
Common Mullein	<i>Verbascum thapsus</i>	SNA			Common
Common Elderberry	<i>Sambucus canadensis</i>	S5			Uncommon
Common Plantain	<i>Plantago major</i>	SNA			Common
Smooth Bedstraw	<i>Galium mollugo</i>	SNA			Common
Tatarian Honeysuckle	<i>Lonicera tatarica</i>	SNA			Common
Nannyberry	<i>Viburnum lentago</i>	S5			Common
Wild Mock-cucumber	<i>Echinocystis lobata</i>	S5			Common

COMMON NAME	SCIENTIFIC NAME	SRANK	SARA STATUS	SARO STATUS	BRUNTON 2005
Common Yarrow	<i>Achillea millefolium</i>	SNA			Common
Common Ragweed	<i>Ambrosia artemisiifolia</i>	S5			Common
Bull Thistle	<i>Cirsium vulgare</i>	SNA			Common
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	S5			Common
Early Goldenrod	<i>Solidago juncea</i>	S5			Common
Rough-stemmed Goldenrod	<i>Solidago rugosa</i>	S5			Common
Common Sow-thistle	<i>Sonchus oleraceus</i>	SNA			Uncommon
Common Dandelion	<i>Taraxacum officinale</i>	SNA			Common
Tall Goldenrod	<i>Solidago altissima</i> spp. <i>Altissima</i>	S5			Common
Hawthorn sp.	<i>Crataegus</i> sp.				
Fescue	<i>Festuca</i>				
Sedges					
Willows	<i>Salix</i> sp.				
Wild Lily-of-the-valley	<i>Maianthemum canadense</i> ssp. <i>canadense</i>	S5			Common
Common Mullein	<i>Verbascum thapsus</i> ssp. <i>thapsus</i>	SNA			Common
Grasses					
Common Juniper	<i>Juniperus communis</i> var. <i>communis</i>	SNA			Common
Turkey Vulture	<i>Cathartes aura</i>	S5B			
Canada Goose	<i>Branta canadensis</i>	S5			
Mallard	<i>Anas platyrhynchos</i>	S5			
Common Merganser	<i>Mergus merganser</i>	S5B, S5N			7
Wild Turkey	<i>Meleagris gallopava</i>	S5			
Killdeer	<i>Charadrius vociferus</i>	S5B, S5N			
Ring-billed Gull	<i>Larus delawarensis</i>	S5B, S4N			
Pileated Woodpecker	<i>Dryocopus pileatus</i>	S5			
Eastern Kingbird	<i>Tyrannus tyrannus</i>	S4B			
Blue Jay	<i>Cyanocitta cristata</i>	S5			
Black-capped Chickadee	<i>Poecile atricapilla</i>	S5			
American Robin	<i>Turdus migratorius</i>	S5B			
Gray Catbird	<i>Dumetella carolinensis</i>	S4B			
European Starling	<i>Sturnus vulgaris</i>	SNA			
Common Yellowthroat	<i>Geothlypis trichas</i>	S5B			
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	S4B			
Field Sparrow	<i>Spizella pusilla</i>	S4B			

COMMON NAME	SCIENTIFIC NAME	SRANK	SARA STATUS	SARO STATUS	BRUNTON 2005
Vesper Sparrow	<i>Pooecetes gramineus</i>	S4B			
Song Sparrow	<i>Melospiza melodia</i>	S5B			
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	S4			
Common Grackle	<i>Quiscalus quiscula</i>	S5B			
American Goldfinch	<i>Carduelis tristis</i>	S5B			
White-tailed Deer	<i>Odocoileus virginianus</i>	S5			



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APPENDIX B: QUALIFICATIONS

SHAUN M. ST.PIERRE, B.Sc. Biology

EDUCATION

B.Sc. Biology, Trent University 2007

Fisheries and Wildlife Technology, Frost Campus, Sir Sandford Fleming College, 2005

Fisheries and Wildlife Technician, Frost Campus, Sir Sandford Fleming College, 2004

LANGUAGES

Fluent in French and English

POSITIONS HELD

2018 - : BCH Environmental Consulting Inc., Biologist / Owner

2006-2017: Bowfin Environmental Consulting Inc., Biologist / GIS Specialist / Environmental Site Inspector

2005: St. Lawrence River Institute of Environmental Sciences, Field Research Assistant

2004: MNR Kawartha Lakes, Field Research Assistant

2003: DFO- Experimental Lake Area, Field Research Assistant

2001: Resource Stewardship S, D &G, Stewardship Ranger

CERTIFICATIONS / PROFESSIONAL AFFILIATIONS

MTO/DFO/OMNR Fisheries Protocol, Ecological Land Classification, Certified in Inventory and Identification Methods for Ontario's Reptiles and Amphibians, North American Benthological Society (NABS) Certified Family Level Taxonomist, Ontario Benthos Biomonitoring Network (OBBN), Ontario Stream Assessment Protocol (OSAP), Certified Ontario Wetland Evaluator (OWES), Butternut Health Assessor (BHA), first aid, CPR, Pleasure Craft Operator Card, Marine Radio Operator, WHMIS, WHSA, Hazard Identification, Assessment and Control, All Terrain Vehicle Riders Course (issued by the Manitoba Safety Council), Water Safety Training (Bronze Cross), Possession / Acquisition Firearms Licence, Ontario Hunter Education Course Certificate, Ontario Trapper Education Course Certificate, Wildlife Chemical Immobilization, Vaccination, and Euthanasia- Certificate of Knowledge, South Lancaster Fish and Game Club (SLFGC; president 2012 and 2013; executive member 2014-2018), Ontario class G driver's license, and Snowmobile License.

EXPERIENCE

Experience in environmental impact assessments, environmental monitoring, environmental assessments, terrestrial habitat assessment, species at risk surveys, amphibian surveys, avian surveys, freshwater habitat assessment, collection and identification of plants, collection and identification of aquatic invertebrate, collection and identification of fish, fish salvage, fish behavioral studies, winter bat hibernaculum inventories and fisheries inventories including habitat mapping, electroshocking, FWIN and RIN. Other experience include GIS mapping.

Environmental and Fisheries Inspections

- Provided environmental and fisheries inspections for the construction of the Cataraqui Crossing HWY 401-MTO (Kingston, ON).
- Provided environmental and fisheries inspections for the construction of the Three Nations Bridge including surveys for nesting species at risk (Cornwall, ON).
- Provided environmental and fisheries inspections for construction (Ottawa, ON).
- Conducted nest surveys (Kemptonville, ON.; Stittsville, ON.; Cornwall, ON.)
- Conducted environmental inspections for the construction of the Clarkson WWTP outfall, Lake Ontario.
- Conducted environmental inspections for the construction of a new bridge crossing Bearbrook Creek along the 417.

- Provided environmental and fisheries inspections for the blasting and drilling operation for the Burloak Water Purification Tunnel project (Burlington, ON).
- Provided environmental and fisheries inspections for the construction of the Poole Creek Re-alignment/Huntmar Drive Crossing.

Species at Risk Inventories / Monitoring

- Butternut survey and assessment for proposed developments (Brockville, Carleton Place, Carp, Clarence-Rockland, Cornwall, Munster, Hawkesbury, Kemptville, Ottawa, South Lancaster, Smith Falls, Stittsville, Prospect, Vars, Moose Creek, Prescott, Westminster, Renfrew, Battersea, Jones Falls, and Millbrook).
- American Eel surveys using the boat electrofisher on the Mississippi River (Almonte, ON), South Nation River (Casselman, ON) and Ottawa River (Renfrew, ON; Ottawa, ON: Shawville, QC)
- American Eel collection on the St. Lawrence River for the St. Lawrence River Institute (Cornwall, ON)
- American Ginseng survey for proposed development (Kanata, South Lancaster and Renfrew).
- Whip-poor-will survey for proposed development (Navan, ON; Kemptville, ON; Stittsville, ON; Prescott, ON; Alexandria, ON) and quarries (Avonmore, Moosecreek, Prospect, Stittsville, Kanata, Ottawa)
- Assisted in a Least Bittern survey (Avonmore, ON)
- Conducted turtle surveys: Blanding's turtle, Eastern musk turtle (Carleton Place, ON; Ottawa, ON; Stittsville, ON; Kanata, ON, Prospect, ON)
- Conducted rapid clubtail surveys (Almonte, ON)
- Bat maternal nesting site surveys (Prescott, ON; Battersea, ON; Prescott, ON; Hawkesbury, ON; Russell, ON)

Aquatic Inventories

- Boat electrofishing along the shoreline of the Ottawa River (Chat Falls, ON) along the shoreline of the Cataraqui River (Kingston, ON), downstream of the Carillion Dam (Pointe-Fortune, QC), Lake St. Francis (South Lancaster, ON), South Nation River (Casselman, ON), Raisin River (Lancaster, ON), and the St. Lawrence River (Cornwall, ON)
- Collecting and data entry for benthic macroinvertebrate community surveys on several watercourses within Ontario including: Bonnechere River (Renfrew, ON), Montreal River (Latchford, ON), Jock River (Ottawa, ON), tributaries of the Bonnechere River (Renfrew, ON), tributaries to Feedmill Creek (Ottawa, ON), tributary to Chippewa Creek (North Bay, ON) and tributary to the Beaudette River (Alexandria, ON).
- Collecting and data entry for several fish community surveys including: Black Creek (Westminster, ON), Bonnechere River (Renfrew and Douglas, ON), Butler's Creek (Brockville, ON), East Branch of Little Cataraqui Creek (Kingston, ON), Kehoe Ditch (Greely, ON), Lac Opemisca (Ouje-Bougoumou, QC), Marshall Seguin Municipal Drain (Vars, ON), Montreal River (Latchford, ON), tributaries of Lavelle Creek (Carleton Place), tributaries to Feedmill Creek (Ottawa, ON), tributaries to Lafontaine Creek (Clarence-Rockland), tributaries to Shirley's Brook (Kanata, ON), tributaries to the Beaudette River (Alexandria, ON), tributaries to the Bonnechere River (Renfrew, ON), tributaries to the Ottawa River (Carp, ON; Ottawa, ON; Wendover, ON; Clarence-Rockland, ON), tributaries to the South Nation River (Casselman, ON), tributaries to the South Nation River (Jessup Falls, ON), tributary to Hawkesbury Creek (Hawkesbury, ON), Hawkesbury Creek (Hawkesbury, ON), tributary to the St. Lawrence River (Prescott, ON) and tributary to the North Castor River (Greely, ON).
- Mapped fish habitat in many watercourses including: Black Creek (Westminster, ON), Bonnechere River (Renfrew and Douglas, ON), Butler's Creek (Brockville, ON), Kehoe Ditch (Greely, ON), Lac Opemisca/Lac Barlow Bypass channel (Ouje-Bougoumou, QC), Marshall Seguin Municipal Drain (Vars, ON), McKinnons Creek (Navan, ON), Montreal River (Latchford, ON), tributaries of Lavelle Creek (Carleton Place), tributaries of the Bonnechere River (Renfrew, ON), tributaries to Lafontaine Creek (Clarence-Rockland), tributaries to McKinnons Creek (Navan, ON), tributaries to Shirley's Brook (Kanata, ON), tributaries to the North Castor River (Greely, ON), tributaries to the Ottawa River (Ottawa, ON; Wendover, ON), tributaries to the South Nation River (Casselman, ON), tributaries to the South Nation River (Jessup Falls, ON), tributary to the St. Lawrence River (Prescott, ON) and tributary to Hawkesbury Creek (Hawkesbury, ON).
- Assisted in YOY sampling on the Raisin River (Lancaster, ON).
- Conducted riverine index netting on the Bonnechere River (Renfrew, ON).

- Assisted in gill netting on Bonnechere River (Renfrew, ON), Lac Barlow (Ouje-Bougoumou, QC), Lac Opemisca (Ouje-Bougoumou, QC), Montreal River (Latchford, ON), and Raisin River (Lancaster, ON).
- Assisted in conducting larvae surveys on Bonnechere River, Hoople Creek, Montreal River and Raisin River,
- Collected walleye eggs from the spawning grounds on the Bonnechere River, Montreal River, Raisin River and Hoople Creek.
- Assisted in the monitoring of a new wetland channel created in the Little Cataraqui River.
- Marsh monitoring program breeding amphibian survey at Stittsville, ON; Cornwall, ON; Kanata, ON; Hoople Creek and the Bonnechere River.
- Assisted in conducting fall walleye index netting for the MNR in Kawartha Lakes
- Conducted turtle surveys (Carleton Place, ON; Ottawa, ON)
- Conducted headwater waters assessment (Kanata, ON; Navan, ON, Ottawa, ON)

Terrestrial Inventories

- Multiple Environmental Impact Assessments across Ontario
- Tree Inventory for construction of the light rail (LRT; Ottawa, ON)
- Winter white-tailed deer survey (Edwardsburgh, ON)
- Plant community inventories for proposed developments, quarries, sand pits and road extensions (Brockville, Carleton Place, Carp, Casselman, Elgin, Griffith, Hamilton, Jessup Falls, Navan, Ottawa, Stittsville, Rockland, Simcoe, Cornwall, Kemptville, Hawkesbury, Smith Falls, Wendover, Moosecreek, Westminster, Prescott, Renfrew, Jones Falls, Michipicoten Island and in Ouje-Bougoumou in QC)

Aquatic Habitat Mapping for Municipal, City Roads and Provincial Highways

- Conducted MTO habitat assessments at Galetta Side Road, Torbolton Road, Kinburn Side Road (Ottawa, ON)
- Conducted MTO habitat assessments at Prince of Wales, Fernbank Road, Fallowfield Road, HWY 115, Arbuckle drain, the Carp river, tributaries to the Carp river and tributaries to Mud creek (Ottawa, ON)
- Conducted MTO habitat assessments at Innes Road, Ottawa, ON.
- Conducted MTO habitat assessments at MacLaren Side Road, Ottawa, ON.

Other

- Fish salvage: Mississippi River (Almonte, ON), Monaghan Drain (Ottawa, ON), tributary to the Rideau Canal (Kemptville, ON), and tributary to Feedmill Creek (Ottawa ON), Bonnechere River (Renfrew, ON)
- Assisted in conducting a winter bat hibernaculum inventory (Plantagenet, ON)
- Field research assistant for the Metalicuous study and EDC study (Experimental Lakes Area, ON)
- Captured, pit tagged, telemetry tagged and tracked Northern Pike (Experimental Lakes Area, ON)
- Construction and maintenance of nature trail (the Cornwall Outdoor Recreational Area, ON)
- Conducted frog deformities surveys (Glengarry, ON)
- Organized youth fishing derbies through SLFGC (2011-2013; South Lancaster)
- Organized the St. Francis Walleye Tournament through SLFGC (2012-2013; South Lancaster)



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CODY J.C FONTAINE, Fisheries and Wildlife Technologist

EDUCATION

Fisheries and Wildlife Technology, Frost Campus, Sir Sandford Fleming College, 2012
Fisheries and Wildlife Technician, Frost Campus, Sir Sandford Fleming College, 2011

LANGUAGES

Fluent in English

POSITIONS HELD

2022: BCH Environmental Consulting Inc., Fisheries and Wildlife Technologist
2014: Bowfin Environmental Consulting Inc., Fisheries and Wildlife Technologist
2009: Raisin Region Conservation Authority, Field Research Assistant

CERTIFICATIONS / PROFESSIONAL AFFILIATIONS

MTO/DFO/OMNR Fisheries Protocol, Environmental Monitoring For Construction Projects Practitioner (EMCPP), Ontario Stream Assessment Protocol (OSAP), Class 2 Electroshocking, first aid, CPR, Pleasure Craft Operator Card, WHMIS, WHSA, Hazard Identification, Assessment and Control, Ice Safety Training, Possession / Acquisition Firearms License, Fish Identification Certificate, Radio Telemetry Certificate, Fish Hatchery Operations Certificate, Ontario Hunter Education Course Certificate, Ontario trapper Education Course Certificate, Ontario class G driver's license.

EXPERIENCE

Experience in environmental monitoring, environmental assessments, terrestrial habitat assessment, species at risk surveys, amphibian surveys, freshwater habitat assessment, collection and identification of plants, collection and identification of fish, fish salvage, bat hibernaculum inventories and fisheries inventories including netting and electroshocking. Other experiences include GIS mapping.

Aquatic Inventories

- Assisted with boat electrofishing along the shoreline of the Ottawa River (Chat Falls and Ottawa, ON), Lake St. Francis (South Lancaster, ON), Bonnechere (Renfrew, ON), Raisin River (Lancaster, ON), Buckhorn Lake (Peterborough, ON) and the St. Lawrence River (Cornwall, ON)
- Assisted in collecting and data entry for several fish community surveys including: Bonnechere River (Renfrew, ON), tributaries to Feedmill Creek (Ottawa, ON), tributaries to Shirley's Brook (Kanata, ON), tributaries to the Ottawa River (Ottawa, ON), tributaries to the Rideau River (Manotick, ON), tributaries to the Castor River (Vars, ON), tributaries to the Otonabee River (Lakefield, ON), tributary to the Madawaska River (Arnprior, ON), tributaries to Kemptville Creek (Kemptville, ON), tributary to Blairs Creek (Clarence Creek, ON), tributaries to South Indian Creek River (Russell, ON) tributaries to the South Nation River (Casselton, ON), tributaries to Fraser Clarke Drain (Nepean, ON), tributaries to the Raisin River (Long Sault, ON), Oliver-Magee drain (South Glengarry, ON) and tributary to Hawkesbury Creek (Hawkesbury, ON).
- Assisted in collecting walleye eggs from the spawning grounds on the Raisin River.
- Marsh monitoring program breeding amphibian surveys (Stittsville, Lakefield, Cornwall, Long Sault, South Glengarry, Bourget, Manotick and Kanata, ON).
- Conducted turtle surveys (Carleton Place, Ottawa, Cornwall and Lancaster, ON)
- Conducted Headwater Assessments (Ottawa, Stittsville and Manotick, ON)
- Invasive Species Survey (Ottawa, ON)

Species at Risk Inventories / Monitoring

- Assisted in butternut surveys, inventories and assessments for proposed developments (Carleton Place, Casselman, Cornwall, South Glengarry, Long Sault, Kemptville, Smiths Falls, Ottawa, Stittsville, Peterborough, Lakefield, Brockville, Alfred, Orleans, Kanata and Prescott, ON).
- American Eel surveys using the boat electrofisher on the Ottawa River (Ottawa, ON)
- American Eel collection on the St. Lawrence River for the St. Lawrence River Institute (Cornwall, ON)
- Conducted tailrace surveys for hydro facilities regarding American eel and lake sturgeon fatalities (Almonte, Renfrew, Ottawa and Fitzroy Harbour, ON)
- Whip-poor-will survey for proposed development (Ottawa, Kemptville, Bourget, Stittsville, Alfred, South Glengarry and Alexandria, ON) and quarries (Ottawa and Cornwall, ON)
- Surveyor for Little Brown bat, Eastern Small Footed Bat and Northern Long Eared Bat surveys at Ernestown Windpark (Ernestown, ON)
- Gray Ratsnake Survey (Smiths Falls and Lakefield, ON)
- Bat Cavity Survey (Lakefield, Smiths Falls, Bourget, Clarence Creek, Casselman, Orleans, Kanata, South Glengarry and Embrun, ON)
- Conducted Least Bittern surveys (Prospect, Alexandria, and Lancaster, ON)
- Conducted Black Tern nest surveys (Alexandria, and Cornwall, ON)
- Conducted turtle surveys: Blanding's turtle, Musk turtle and Northern Map turtle, Painted turtle and Snapping turtle (Carleton Place, Ottawa, Stittsville, Kanata, Rockland, Cornwall, Lakefield, Alfred, Clarence Creek and Lancaster, ON)
- Conducted American Ginseng Survey (Alfred, ON)
- Conducted rapid clubtail surveys (Almonte, ON)
- Conducted Osprey nest surveys (Cornwall, ON)

Terrestrial Inventories

- Assisted plant community inventories for proposed developments (Ottawa, Cornwall and Prescott, ON)
- Assisted in ELC inventories (Ottawa, Lakefield, Alfred, Kanata, Long Sault, South Glengarry and Peterborough ON)
- Nesting Bird Survey (Stittsville and Brockville ON)
- Large Tree Survey (Carp, Kanata and Orleans, ON)
- Deer and Moose Overwintering Survey (Alfred, ON)

Environmental and Fisheries Inspections

- Assisted in providing environmental and fisheries inspections for construction (Ottawa, ON)
- Assisted in turtle salvage during construction at the Cavanagh Snow Dump (Kanata, ON)

Fish Salvage

- Highway 401 Fish Salvage – Brockville, ON and Prescott, ON (Cruikshank, MTO Contract)
- Other fish salvages: Cardinal Creek (Ottawa, ON), Monaghan Drain (Ottawa, ON), tributary to the Rideau Canal (Kemptville, ON), tributary to Feedmill Creek (Ottawa ON), Bonnechere River (Renfrew, ON), Mississippi River (Almonte, ON), Ottawa River (Ottawa, ON), Tributary to Fraser Clarke Drain (Nepean, ON), tributary to St.Lawrence River (Newington, ON), Davidson Pond (Ottawa, ON),. Hazeldean tributary (Ottawa, ON), tributary to Jock River (Richmond, ON), culvert on Thunder Road (Gloucester, ON), culvert on Dunning Road (Cumberland, ON)

Other

- Organized fishing derby through RRCA (2008-2012; Cornwall, ON)
- Conducted environmental education presentations to many school groups (Cornwall, and Lancaster, ON)
- Tree Planting (2008-2012; Cornwall, ON)

APPENDIX C: On-site Reference Handout

General Provisions:

- Watch out for wildlife while driving, and avoid hitting them, provided that it is safe to do so.
- Ensure sediment and erosion control measures (i.e., silt fencing) and other protective measures are in place prior to beginning work. Inspect them regularly, and particularly after storm events, to ensure their continued effectiveness.
- Prior to beginning work each day, check for wildlife by conducting a thorough visual inspection of the work space and immediate surroundings.
- Restrict all activities, vehicles and materials to the designated work space. Do not disturb areas identified for retention.
- Secure stockpiled materials, vehicles and structures against wildlife entry.
- Litter and other waste materials must be appropriately contained and promptly disposed of.
- Do not feed any wildlife or leave food out where it could attract them.





For health and safety reasons, and for protection of animals, removal and relocation of mammals must only be done by qualified and properly equipped personnel. Call the wildlife service provider [BCH ENVIRONMENTAL CONSULTING INC.] at (613) 571-8883 for assistance.

Scratches and bites from animals, whether domestic or wild, can result in serious infections and/or transmit diseases. Seek medical treatment immediately for any person injured by an animal.

Wildlife Encounters:

- **Do not harm any wildlife.** Many species are protected under provincial and/or federal legislation. Legal protection of egg-laying species applies to their eggs as well. Penalties for contravening these Acts can be severe.
- **Stand back** and allow the animal to leave the site. Wildlife may be encouraged to move away from the work area by shouting, waving of arms, clapping of hands or gentle redirection using a push broom. Contact project biologist / wildlife service provider for assistance if needed (e.g., if young animals are found). Do not unnecessarily harass any wildlife.
- **Turtles** may need to be helped to safety. Our most common species, Painted and Snapping Turtles, are protected under the Fish and Wildlife Conservation Act, 1997. If one of these turtles is found in the work area, it can be gently removed to a safe location nearby. Wear gloves, or use a broom to steer the turtle into a bucket or other container. Handle with care to avoid injury to the turtle or yourself, particularly when dealing with Snapping Turtles, which may bite or scratch. Turtles may also wet themselves when handled.
- Most of Ottawa's **snakes** are protected under the Fish and Wildlife Conservation Act, 1997. None of them are venomous, but bites may cause infections. Some produce a foul-smelling musk when handled, instead of biting. Snakes will usually try to escape or hide when disturbed, and only defend themselves when trapped. If a snake is found in the work area, it should be gently herded out to a safe location.
- **Stop work immediately** if any species protected under the Endangered Species Act, 2007 are seen in or near the work site (see attached sheet for tips on identifying some commonly encountered species). Take a photograph if possible, to confirm the sighting, and contact the project biologist at (613) 571-8883 and the Ministry of Environment, Conservation and Parks at SAROntario@ontario.ca. Additional measures to avoid impacts may be required by the Ministry before work can restart.

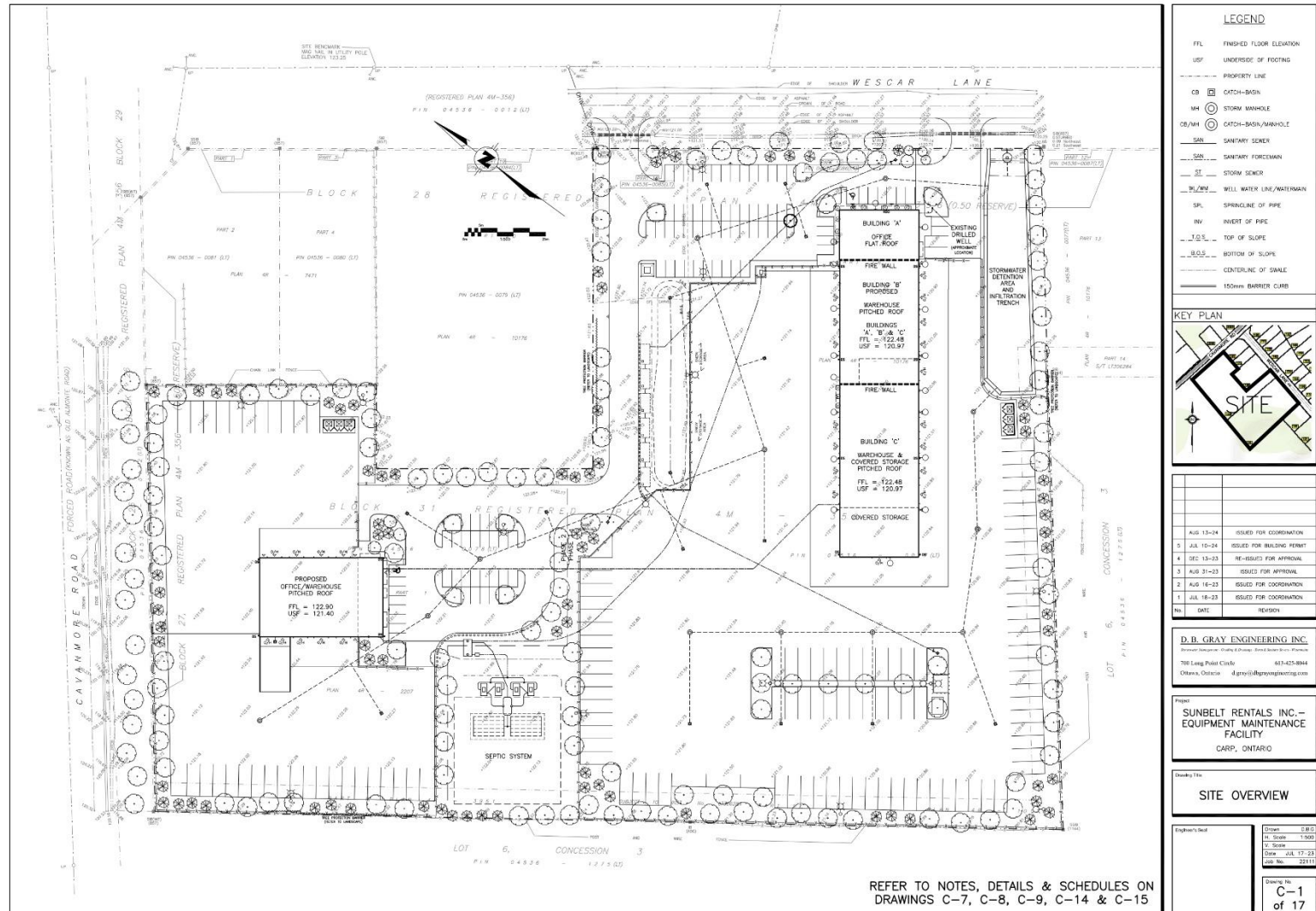
APPENDIX D: Commonly Encountered Species Protected under the Endangered Species Act,
2007

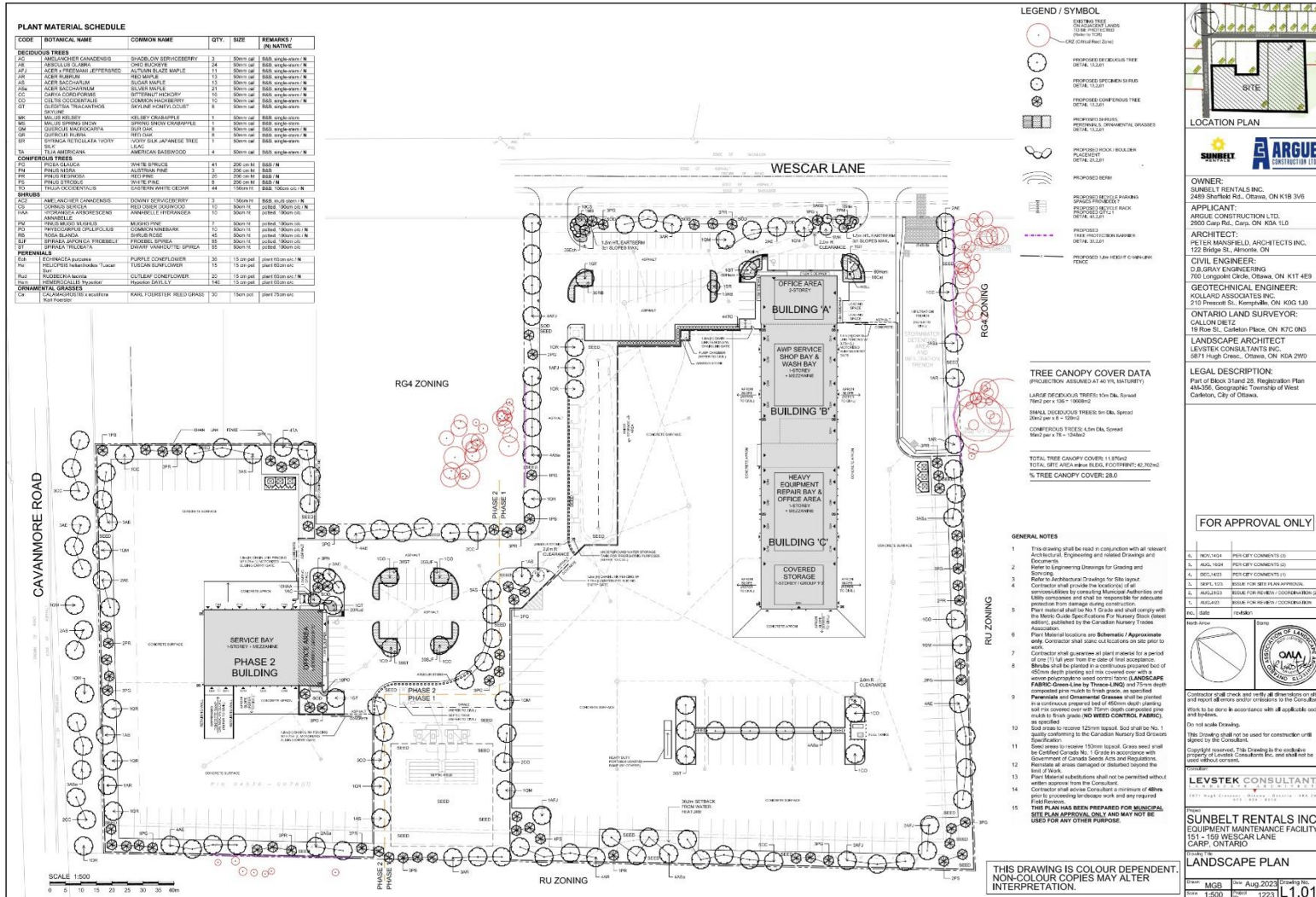
<p>Blanding's Turtle</p> <p>Bright yellow chin and throat. Highly domed, speckled shell up to 28 cm (11 in) in length.</p> <p>Eggs small, oval and white. Usually less than 12 eggs per nest.</p>	 <p>Photo courtesy of R. van de Lande</p>
<p>Bobolink</p> <p>Males black with white back and cream hood during spring and summer breeding season. Females and non-breeding males streaky brown. Nests on the ground in open grasslands and hayfields.</p>	 <p>Photo courtesy of A. MacPherson</p>
<p>Eastern Meadowlark</p> <p>Streaky grayish-brown bird with bright yellow front marked by black "V." Short tail has white edges on each side. Nests on the ground in open grassy areas; often seen perching on fence posts or shrubs.</p>	 <p>Photo courtesy of A. MacPherson</p>
<p>Butternut</p> <p>Each leaf has several pairs of leaflets on either side of the main stalk, and one leaflet at the tip. Leaves and twigs grow in an alternating pattern along the branches. The nuts resemble limes or lemons in shape, and have greenish-yellow fuzzy rinds covering a hard, brown, ridged shell. The closely related Black Walnut. Its leaves are very similar to Butternut's leaves, but the terminal leaflet at the tip of each leaf is often much smaller than the other leaflets, or missing entirely.</p>	 <p>Photo courtesy of A. MacPherson</p>

APPENDIX E: Agency Contact

Agency	Staff Contact(s)	Telephone	Information/Authority on:
City of Ottawa	Planner	(613) 580-2424	Development application review process
	Environmental Planner	(613) 580-2424	EIS and other municipal environmental policies
	Forester-Planning	(613) 580-2424	Tree Conservation Report and urban tree removal
Conservation Authority – usually only one will be involved in any given application	Mississippi Valley Rideau Valley South Nation	(613) 253-0006 (613) 692-3571 (613) 984-2948	Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation
Fisheries and Oceans Canada	Fish and Fish Habitat Protection Program (Ontario)	1-855-852-8320 FisheriesProtection@dfo-mpo.gc.ca	Fish and fish habitat issues
Ministry of Environment, Conservation and Parks	Management Biologist	SAROntario@ontario.ca	Provincially protected species at risk (occurrence data, habitat information, advice and applications for permits under the <i>Endangered Species Act, 2007</i>).
Ministry of Natural Resources and Forestry (Kemptville District office)	Management Biologist	(613) 258-8204 (main office)	Wetlands; Areas of Natural and Scientific Interest; significant wildlife habitat.

APPENDIX F: PLANS





LEGEND / SYMBOL

EXISTING TREE (TO BE PRESERVED - SEE PLAN FOR LOCATION)

PROPOSED DECEADUOUS TREE (DETAIL - 1:50)

PROPOSED CONIFEROUS TREE (DETAIL - 1:50)

PROPOSED SHRUBS, PERENNIALS & ORNAMENTAL GRASSES (DETAIL - 1:50)

PROPOSED FLOOR COVERINGS (DETAIL - 1:50)

PROPOSED DRIVE

PROPOSED DRIVE PAVING (DETAIL - 1:50)

PROPOSED SEWER BACK (DETAIL - 1:50)

PROPOSED FIRE PROTECTION (DETAIL - 1:50)

PROPOSED 1/2" REINFORCING IRON-PIPE (DETAIL - 1:50)

TREE CANOPY COVER DATA
(PROJECTION ASSUMED AT 40° N/LATITUDE)

LARGE DECIDUOUS TREES: 10x DBL Spread
2nd year - 150cm²

SMALL DECIDUOUS TREES: 5m DBL Spread
2nd year - 8 - 10m²

CONIFEROUS TREES: 5m DBL Spread
2nd year - 8 - 12m²

TOTAL TREE CANOPY COVER: 11,970m²

TOTAL SITE AREA (incl BLDG, FOOTPRINT): 42,700m²

% TREE CANOPY COVER: 28.0%

GENERAL NOTES

- This drawing shall be read in conjunction with all relevant Architectural, Engineering and related Drawings and Documents.
- Refer to Architectural Drawings for Grading and Slopes.
- Contractor shall provide the location of all responsibilities for existing Municipal Authorities and their respective streets shall be indicated by the Municipality.
- Contractor shall provide the location of all responsibilities for existing Municipal Authorities and their respective streets shall be indicated by the Municipality.
- Contractor shall provide the location of all responsibilities for existing Municipal Authorities and their respective streets shall be indicated by the Municipality.
- Plant Material locations are Schematic / Approximate only. Contractor shall stake out locations on site prior to installation.
- Contractor shall provide all plant materials for a period of one (1) full year from the date of final acceptance. Batches shall be planted in a timely manner prior to 45cm depth planting and shall be covered over with a minimum of 5cm depth mulch. NO WEED CONTROL FABRICS, as specified.
- Soil analysis to occur 120mm depth. Soil shall be No. 1 Substrate meeting the Canadian Nursery Stock Grading and Certification Specification.
- Contractor shall provide 150mm liquid Green seed shall be Certified Co-Grade No. 1 Grade in accordance with Government of Canada Seeds Act and Regulations. Replenish at areas damaged or disturbed beyond the limit of work.
- Plant Material substitutions shall not be permitted without written approval from the Consultant.
- Contractor shall provide Certified maintenance of 40cm per 100m² for the duration of the project.
- THIS PLAN HAS BEEN PREPARED FOR MUNICIPAL SETS IN AN ORIGINAL ONLY AND MAY NOT BE USED FOR ANY OTHER PURPOSE.

LOCATION PLAN

OWNER: SUNBELT RENTALS INC.
2455 SHEPPARD RD. OTTAWA, ON K1B 3W6

APPLICANT: ARGUE CONSTRUCTION LTD.
2500 CARP RD. CARP, ON K0A 1L0

ARCHITECT: PETER MANSFIELD ARCHITECTS INC.
122 BRIDGE ST. ALMONTA, ON

CIVIL ENGINEER: D & S ENGINEERING INC.
700 LONGSTREET CIRCLE, OTTAWA, ON K1T 4E9

GEOTECHNICAL ENGINEER: KOLLAND ASSOCIATES INC.
210 PRESWELL ST. KEMPSTON, ON K0G 1J3

ONTARIO LAND SURVEYOR: CALLOW DUEZ
19 RISE ST., COLLATER PLACE, ON K7C 0N3

LANDSCAPE ARCHITECT: LEVSTEK CONSULTANTS INC.
5871 HUGH CRESC. OTTAWA, ON K0A 2Y0

LEGAL DESCRIPTION:
Part of Block 3 and 2B, Registration Plan 40336, Geographic Township of West Carleton, City of Ottawa.

FOR APPROVAL ONLY

NO. DATE DESCRIPTION

LEVSTEK CONSULTANTS
1481 EAST GERRARD ST. EAST, OTTAWA, ON K1R 7S7
(613) 983-4444

SUNBELT RENTALS INC.
EQUIPMENT MAINTENANCE FACILITY
151 - 155 WESCAR LANE
CARP, ONTARIO
T5L 2E6

LANDSCAPE PLAN

Sheet: MD3 Date: Aug 2023 Drawing No: 11.01
Scale: 1:500 Rev: 1223 L1.01



20373 Bethune Street
South Lancaster, On
K0C 2C0
613.571.8883
shaun@bchenviro.ca

APPENDIX H: COMMUNICATION WITH MECP



Shaun St.Pierre <shaun@bchenviro.ca>

BHE Report Number: FON108 –151-159 Wescar Lane, Part of Lot 6, Concession 3, City of Ottawa

Species at Risk (MECP) <SAROntario@ontario.ca>

Wed, Jul 19, 2023 at 9:43 AM

To: "Shaun St.Pierre" <shaun@bchenviro.ca>

Cc: Mark Watson <MARK.WATSON@sunbeltrentals.com>, Keith Riley <keith@argueconstruction.ca>, Kelly Basinger <Kelly.Basinger@sunbeltrentals.com>

Hi Shaun

Thank you for submitting your Butternut Health Assessment to the Species at Risk Branch (SARB).

Please use this email as receipt of your submission.

If you are proposing to rely on [Part 5 of the Ontario Regulation 830/21](#) for the trees identified in the BHA, then you are eligible to do so 30-days following the date that the BHA was submitted to the Species at Risk Branch.

Thank you,
SAROntario

From: Shaun St.Pierre <shaun@bchenviro.ca>

Sent: July 18, 2023 2:20 PM

To: Species at Risk (MECP) <SAROntario@ontario.ca>

Cc: Mark Watson <MARK.WATSON@sunbeltrentals.com>; Keith Riley <keith@argueconstruction.ca>; Kelly Basinger <Kelly.Basinger@sunbeltrentals.com>

Subject: BHE Report Number: FON108 –151-159 Wescar Lane, Part of Lot 6, Concession 3, City of Ottawa

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