

ENVIRONMENTAL IMPACT STATEMENT



273 & 275 Russ Bradley Road, Carp, Ontario
Project No.: CCO-22-1643

Prepared for:

Trevor Watkins
273 & 275 Russ Bradley Road
Carp, Ontario
K0A 1L0

Prepared by:

McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, Ontario
K0A 1L0

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Version 002

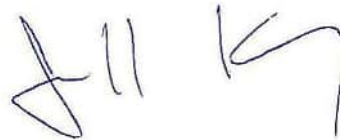
December 23, 2022



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1.0 PROPERTY INFORMATION AND INTRODUCTION

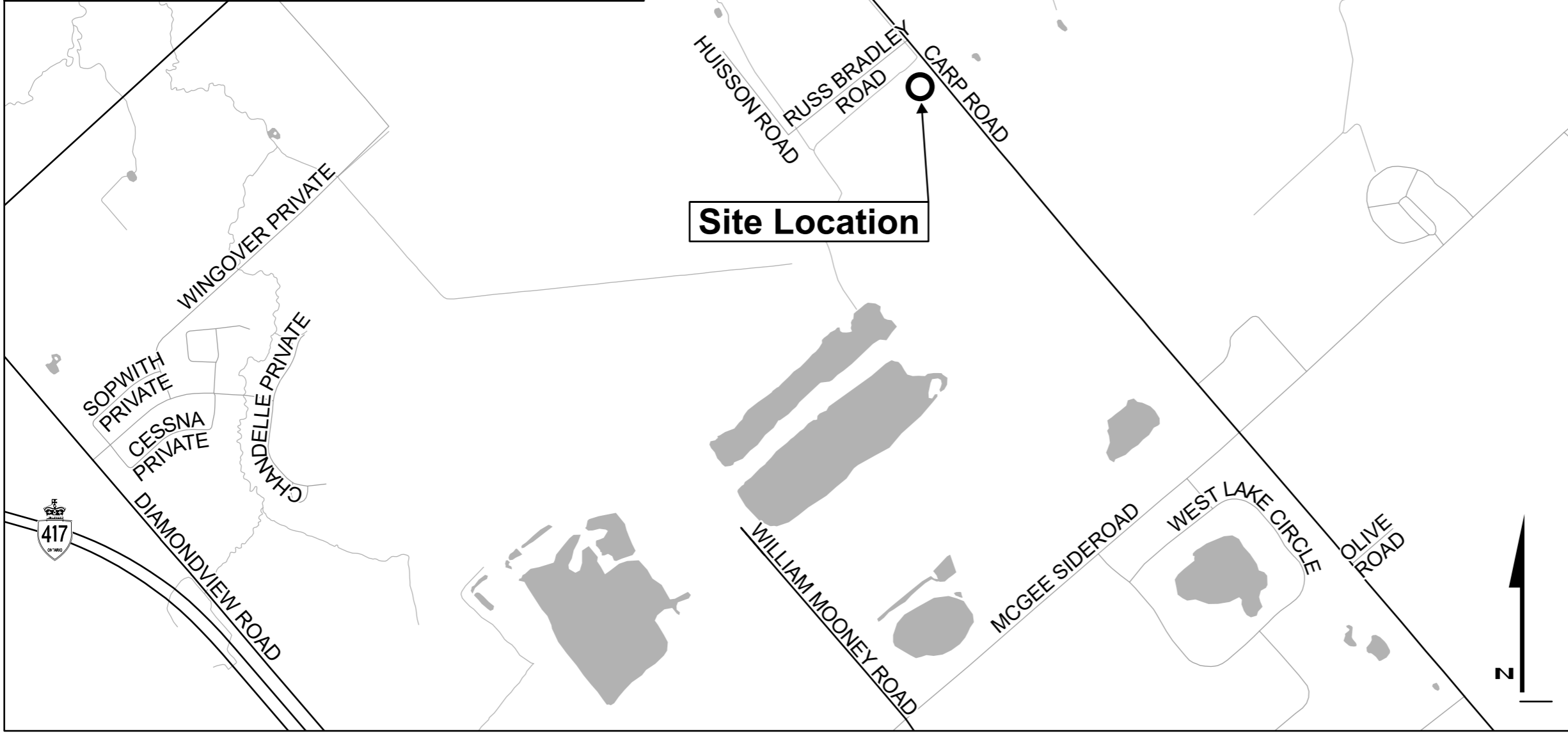
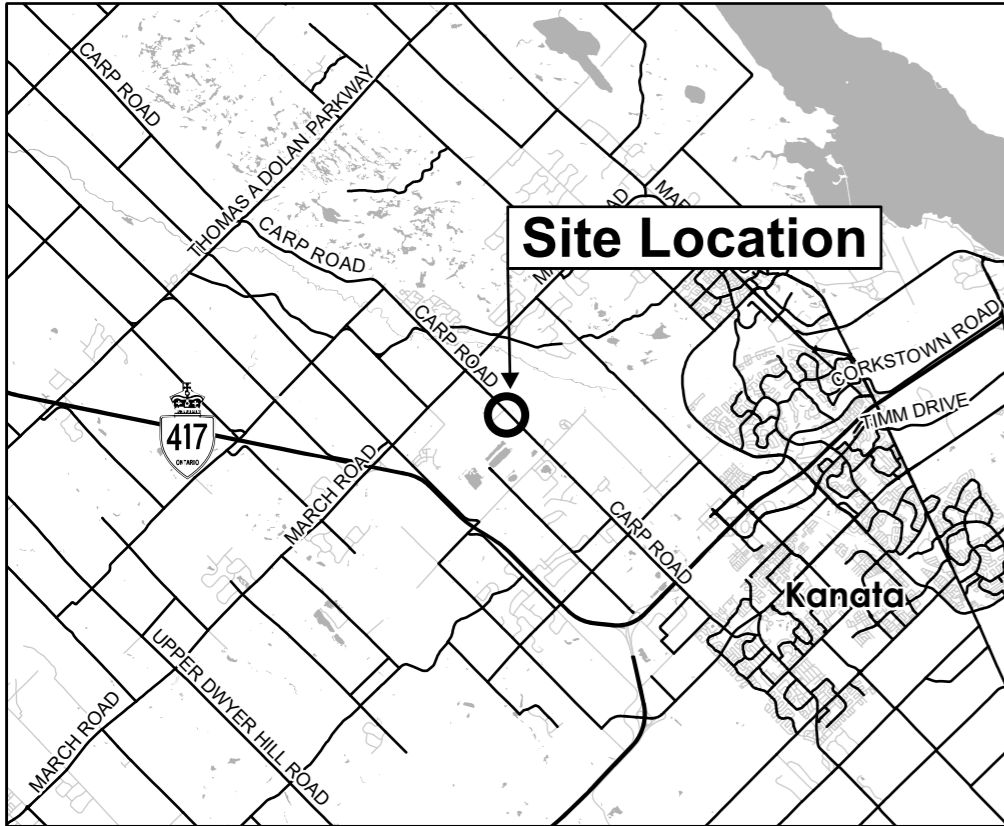
The subject property for this *Environmental Impact Statement* (EIS) is a 2.5-hectare (ha) parcel of land located at 273 & 275 Russ Bradley Road, Carp (City of Ottawa), and is legally known as Part of Lot 13, Concession 3 in the Geographic Township of Huntley. The subject property is located within the northwest end of the City of Ottawa, with approximately 275 metres (m) of frontage on the west side of Carp Road and approximately 100 m of frontage on the south side of Russ Bradley Road (**Figure 1**).

The subject property is designated as T1 - Air Transportation Facility Zone, Subzone B under the City of Ottawa's *Comprehensive Zoning By-law* (By-law No. 2008-250) (City of Ottawa, 2021a). The owner of the subject property is proposing to develop a self storage facility complex and associated gravel parking areas throughout the extent of the subject property. The development will also include associated landscaped areas. Details on the proposed development are provided in **Section 4.0** of this report.

The subject property is located within the jurisdiction of the Ministry of Natural Resources and Forestry's (MNRF) - Kemptville District and the Ministry of Environment, Conservation and Parks (MECP) – Ottawa Area.

The City of Ottawa (the City) requires an EIS to be carried out for the study area due to the presence of Natural Heritage Features within 120 m of the proposed works, as outlined in the City's *Official Plan* (2021b). This EIS report assesses the potential impacts that the development may have upon the existing woodlands, natural heritage features, including Significant Woodlands and Wetlands and species at risk (SAR), and their habitat. This EIS focuses on the entirety of the subject property proposed for future development. A *Tree Conservation Report*, appended to this EIS, has been prepared in accordance with the City's *Tree Protection* (By-law No. 2020-340) (2021c). The report outlines the condition of all existing vegetation on site, any impacts of the proposed development on the vegetation, and the associated mitigation measures recommended to minimize impacts and protect retained trees (**Appendix A**).

McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) was retained by the property owner, Trevor Watkins, to carry out an EIS to assess the existing natural heritage features as required under the City's *Official Plan* (City of Ottawa, 2021b) and the *Provincial Policy Statement, 2020* (PPS). This EIS summarizes the findings of the surveys, outlines potential impacts as a result of the proposed development, and provides recommendations in order to mitigate anticipated impacts on natural heritage features. Statements within this EIS specific to the legal boundary, 273 & 275 Russ Bradley Road, will be referred to as the 'subject property' while reference to the 'study area' includes the area of proposed works and adjacent lands within 120 m of that area. The information contained in this report is based on field investigations undertaken in the summer of 2021 and spring of 2022.

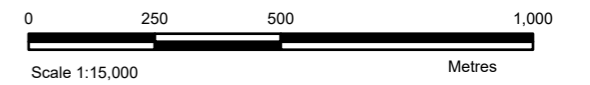


LEGEND

○ Site Location

REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2022.



CLIENT:	TREVOR WATKINS
PROJECT:	1500 THOMAS ARGUE ROAD EIS
TITLE:	KEY MAP

McINTOSH PERRY <small>115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742 www.mcintoshperry.com</small>	PROJECT NO: CCO-22-2620	FIGURE:
	Date	Jul., 15, 2022
	GIS	MG
	Checked By	EP

2.0 METHODOLOGY

Field investigations were conducted in the study area by McIntosh Perry in order to satisfy survey requirements outlined under Section 4.7.8 in the City's *Official Plan* (City of Ottawa, 2021b) which indicates that "An *Environmental Impact Statement is required for development and site alteration proposed within and adjacent to natural heritage features designated as Rural Natural Features and adjacent to land designated as Urban Natural Feature, Significant Wetland, and Natural Environment Area. It is also required for development and site alteration within or adjacent to other elements of the natural heritage system...*" A field investigation was carried out in the study area where development is proposed, as well as directly adjacent areas. The field investigation was conducted to provide an inventory and assessment of the natural heritage features of the study area. The field investigation included the identification of the following features within the study area:

- Existing vegetation communities;
- Significant woody vegetation including a tree inventory;
- Areas of critical or significant habitat (i.e., Significant Valleylands, Significant Woodlands, Significant Wildlife Habitat, Provincially Significant Wetlands [PSWs], etc.);
- Soil types;
- Areas of groundwater recharge and discharge, drainage patterns, watercourses, wetland habitat, other areas of surface water;
- Watercourse morphology, habitat features, water quality parameters, specialized fish habitat, and migration barriers;
- Species at Risk (SAR) and their habitat; and
- Resident or migratory birds and other wildlife species.

Targeted surveys were subsequently conducted based on the initial field investigation to determine the presence of SAR during appropriate timing windows.

2.1 Background Information

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

- Consultation with MECP – Ottawa District (**Appendix B**);
- Consultation with Mississippi Valley Conservation Authority (MVCA) (**Appendix B**);
- The Natural Heritage Information Centre (NHIC) database accessed via the MNRF's Make a Map: Natural Heritage Areas; this search tool allows areas to be searched at up to 1 km² grid resolution and provides reports concerning rare species tracked by the NHIC. Information for each 1 km² square within the study area was reviewed for occurrences of rare species tracked by NHIC (MNRF, 2022a);
- The MNRF's Land Information Ontario (LIO) Metadata Management Tool; this tool contains information (e.g., location of PSWs, SAR element occurrences, etc.) as well as Aquatic Resource Area (ARA) licensed under the Open Government Licence for Ontario (MNRF, 2022b);
- Fish – ON-Line sport fish and stocking resource (MNRF, 2022c);

- Fisheries and Oceans Canada (DFO) Aquatic SAR Mapping (DFO, 2022);
- Data from the Ontario Breeding Bird Atlas Database (OBBA) was accessed from the data summaries page of the Atlas of the Breeding Birds of Ontario website. Information for each 10 km² grid square was reviewed for the study area (Bird Studies Canada et al., 2006);
- Ontario Reptile and Amphibian Atlas was accessed for the data summaries. Information for each 10 km² grid square was reviewed for the study area (Ontario Nature, 2020);
- Ontario Butterfly Atlas was accessed for data summaries. Information for each 10 km² grid square was reviewed for the study area (Toronto Entomologists' Association, 2020);
- Information from the *2018 Watershed report Card* by Mississippi Valley Conservation Authority (MVCA) (2017); and
- Habitat in the study area was evaluated by use of aerial photography accessed through Google Earth aeriels and StreetView mapping (Maxar Technologies, 2022).

2.2 Field Investigations

A field investigation was undertaken by E. Pohanka of McIntosh Perry on August 11, 2021 to determine general environmental concerns with development of the subject property. Targeted surveys were undertaken by E. Pohanka of McIntosh Perry in April of 2022 to determine the presence of Western Chorus Frogs (*Pseudacris triseriata*) within the study area, as potentially suitable habitat was identified during the initial field investigation. The field investigations conducted within the study area are outlined in **Table 1**.

Table 1: Summary of Field Investigation Activities				
Date	Personnel Involved	Time on Property	Weather Conditions	Purpose of Visit
August 11, 2021	E. Pohanka	07:20 – 16:40	23 °C, overcast, humid, slight breeze, recent showers	Existing environmental conditions survey (including identification of vegetation and wildlife species present and determining vegetation community boundaries), species at risk habitat screening, and tree inventory.
April 6, 2022	E. Pohanka	13:38 – 13:43	14 °C, mostly sunny, windy (Beaufort scale 3), precipitation 0, noise level 3	Targeted survey for Western Chorus Frogs.
April 12, 2022	E. Pohanka	10:46 – 10:51	12 °C, sunny, windy (Beaufort scale 3), precipitation 0, noise level 4	Targeted survey for Western Chorus Frogs.
April 22, 2022	E. Pohanka	14:27 – 14:32	13 °C, mostly sunny, windy (Beaufort scale 3), precipitation 0, noise level 3	Targeted survey for Western Chorus Frogs.

The vegetation communities observed within the subject property were characterized using the Ecological Land Classification (ELC) protocol (Lee et al., 1998), and delineated on an aerial photograph.

Wildlife species noted during the field investigation were identified by signs, visual observations, and vocalizations. For the purpose of this assessment, all wildlife observed within the study were recorded and considered to be residents or visitors of the area.

Targeted surveys were conducted following the guidelines in the *Survey Protocol for 2022 Western Chorus Frog Long-Term Monitoring Program* by Blazing Star Environmental (2022) who partnered with Canadian Wildlife Service and Trent University to develop the protocol. The surveys were conducted during the active calling and spawning period for Western Chorus Frogs in the Ottawa region (i.e., April 7 to May 9, 2022) which was determined by Blazing Star Environmental based on real-time weather conditions across the Ontario range of the species. These surveys were conducted for 5 minutes within a daily timing window of 10:00 to 18:00. When possible, the surveys were conducted during days with a temperature of 10 °C or higher, light or no wind (Beaufort Scale of 0-3), and light or no precipitation. The surveyor listened for Western Chorus Frog calls for the 5 minutes of the surveys directly adjacent to appropriate spawning habitat.

Photographs were taken during the field investigation depicting natural heritage features, flora and fauna, ELC communities, etc. observed within the study area. This photographic record can be found in **Appendix C** of this report (**Photos 1 to 21**).

3.0 DESCRIPTION OF THE SITE AND THE NATURAL ENVIRONMENT

3.1 Existing Land Use

At the time of the field investigations, the subject property was undeveloped (**Photos 1 to 21**). The subject property consists of a managed (mowed) field, vegetated areas, and a reconstructed watercourse.

Schedule A – Transect Policy Areas of the City's *Official Plan* (City of Ottawa, 2021b), identifies the subject property as being within Area D: Rural Area labelled as 'Carp Airport.' The study area does not contain 'regulated areas' under MVCA regulation limits based on the MVCA Regulation Public Mapping Browser (MVCA, 2022); however, based on correspondence with MVCA (**Appendix B**), the reconstructed watercourse along the northwest side of the subject property was determined to be regulated. Land uses adjacent to the study area includes the Carp Airport and a woodlot to the west, agricultural fields to the north and south, and recreational/commercial properties to the east.

The study area is located within the 'Carp Road Corridor' for which the City has developed a *Carp Road Corridor Community Design Plan* (CRCCDP) (2004) which outlines objectives for rural employment in the area. The CRCCDP identifies the study area as 'Highway Commercial Area' under *Schedule 1 – Land Use Designation* which defines these lands as "... lands most suited for highway commercial uses.". The study area was also identified as being located in a 'Moderate Recharge Area' under *Schedule 2 – Environmental Features*. Moderate Recharge Areas contain sensitive features regarding groundwater resources; therefore, the City's *Official Plan* (City of Ottawa, 2021b) includes policies under Section 4.7.5 regarding these areas. Groundwater resources were discussed below in **Section 3.4**.

3.2 Natural Heritage System Components

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

- LIO data from the MNRF (2022b) identified the following natural features within 2 km of the study area:
 - Unevaluated wetlands (swamp) are present approximately 440 m east and 580 m southwest of the study area.

The *City of Ottawa Official Plan* (City of Ottawa, 2021b) defines wetlands as "...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. The four major categories of wetlands are swamps, marshes, bogs and fens". It also defines significant natural features and functions as "...ecologically important in terms of natural features and functions, representation or amount, and contributing to the quality and diversity of a defined natural area or system. In regard to wetlands identified as provincially significant or Areas of Natural and Scientific Interest, significance is established using evaluation procedures established by the province, as amended from time to time. In regard to other areas and features, significance is determined through application of criteria or assessment methods in the context of systematic studies such as those described in Section 2.4.3 (*Watershed and Subwatershed Plans*) and Section 3.2.2 (*Natural Environment Areas*), Section 3.2.3 (*Urban Natural Features*) and Section 3.2.4 (*Rural Natural Features*)". No natural heritage system features identified in the background information are present in the study area. An unnamed

tributary of the Carp River is present within the study area which drains into the Carp River approximately 2.1 km north of the study area.

3.3 Landforms, Soils and Geology

The general topography of the study area was nearly level. According to the Ontario Geological Survey (2010), the soils identified in the study area are from the Verulam formation, which consists of fine-to medium-grained sand, calcareous and commonly fossiliferous; nearshore sand which generally occurs as a sheet or as bars or spits associated with glaciofluvial materials. The rock geology is composed of limestone and shale (Ontario Geological Survey, 2010).

3.4 Surface Water, Fish Habitat, and Groundwater

Background information indicated that a watercourse, a tributary of the Carp River, is present in the north end of the subject property (**Figure 2**). Based on the City's *Official Plan* (City of Ottawa, 2021b), geoOttawa (City of Ottawa, 2022) interactive mapping, and MVCA Regulation Public Mapping Browser (MVCA, 2022), the tributary of Carp River within the subject property originates in a pond approximately 965 m upstream (south) of the study area. The watercourse flows northeast through the subject property parallel with the south side of Russ Bradley Road. The watercourse continues northwest at the west side of Carp Road, enters a culvert under Russ Bradley Road at the intersection with Carp Road, and continues in a general north direction for approximately 2.1 km where it enters the Carp River. A ditch line on the west side of Carp Road flows northward through the subject property and enters the tributary approximately 5 m upstream of where the tributary enters the Russ Bradley Road culvert. Another ditch line is present between the south side of Russ Bradley Road and the watercourse which drains into the watercourse at the Russ Bradley Road culvert. Based on information provided by the client, as well as the 2021 field investigation, the watercourse has been realigned and reconstructed in recent years. The banks have been graded to be parallel with the south side of Russ Bradley Road, as well as a constructed low-flow channel with meanders throughout the subject property. Riparian plantings (herbaceous, trees, and shrubs) are present along the banks and riparian zone of the watercourse throughout the subject property. Based on the sources mentioned above, the watercourse was previously aligned approximately 45 m south of its current alignment. A new entrance with culverts crosses the watercourse from Russ Bradley Road within the subject property. An entrance culvert is also present on the ditch line on the west side of Carp Road, approximately 55 m upstream of the Russ Bradley Road culvert within the subject property (**Photos 4 to 8**).

No information on thermal regime is available for the tributary of the Carp River or Carp River. The tributary of the Carp River is known to contain the following fish species: Brook Stickleback (*Culaea inconstans*), Central Mudminnow (*Umbra limi*), Common Shiner (*Luxilus cornutus*), Creek Chub (*Semotilus atromaculatus*), Fathead Minnow (*Pimephales promelas*), Finescale Dace (*Chrosomus neogaeus*), Longnose Dace (*Rhinichthys cataractae*), Northern Redbelly Dace (*Chrosomus eos*), Western Blacknose Dace (*Rhinichthys obtusus*), and White Sucker (*Catostomus commersonii*) (MNRF, 2022b). The Carp River is known to contain the following fish species: Banded Killifish (*Fundulus diaphanus*), Blackchin Shiner (*Notropis heterodon*), Blacknose Shiner (*Notropis heterolepis*), Bluntnose Minnow (*Pimephales notatus*), Brassy Minnow (*Hybognathus hankinsoni*), Brook Stickleback, Brown Bullhead (*Ameiurus nebulosus*), Burbot (*Lota lota*), Central Mudminnow, Common Carp (*Cyprinus carpio*), Common

Shiner, Creek Chub, Emerald Shiner (*Notropis atherinoides*), Fathead Minnow, Finescale Dace, Golden Shiner (*Notemigonus crysoleucas*), Iowa Darter (*Etheostoma exile*), Johnny Darter (*Etheostoma nigrum*), Largemouth Bass (*Micropterus salmoides*), Logperch (*Percina caprodes*), Longnose Dace, Mimic Shiner (*Notropis volucellus*), Mottled Sculpin (*Cottus bairdii*), Muskellunge (*Esox masquinongy*), Northern Hog Sucker (*Hypentelium nigricans*), Northern Pike (*Esox lucius*), Northern Redbelly Dace, Pumpkinseed (*Lepomis gibbosus*), Rock Bass (*Ambloplites rupestris*), Smallmouth Bass (*Micropterus dolomieu*), Tessellated Darter (*Etheostoma olmstedii*), Walleye (*Sander vitreus*), Western Blacknose Dace, White Sucker and Yellow Perch (*Perca flavescens*) (MNRF, 2022b and 2022c).

During the August 11, 2021 field investigation, a fisheries survey was not conducted by McIntosh Perry staff on the tributary of Carp River within the subject property. However, a visual survey of the watercourse was conducted within the subject property. Runs were dominant throughout the watercourse with riffles for approximately 10 m upstream of the Russ Bradley Road culvert. A geotextile fence was present within riffles, creating a drop in elevation and a potential migratory barrier to fish. The watercourse has an average width of 1 m and average depth of 0.15 m. The substrate is dominated by sand with some silt and clay present. Aquatic vegetation was common throughout the watercourse which included abundant narrow-leaved emergents such as grasses (*Poaceae* sp.), dark green bulrushes (*Scirpus atrovirens*), broad-leaved cattails (*Typha latifolia*), broad-leaved emergents such as blue water speedwell (*Veronica anagallis-aquatica*), and floating vegetation such as pondweed (*Potamogeton* spp.), and non-filamentous algae.

No fish were observed within the watercourse in the study area during the 2021 field investigation. However, potential specialized forage fish spawning habitat is present throughout the watercourse in the study area. Abundant shells of Chalky Macoma (*Macoma calcaria*) were observed within the watercourse in the study area (**Photo 6**). These are likely remnants of populations during the Champlain Sea prehistoric inlet. The geotextile fence is a potential permanent barrier to fish migration which may inhibit access or alter the spawning habitat. The ditch lines along the west side of Carp Road and south side of Russ Bradley Road are considered fish-bearing, with potential specialized forage fish spawning habitat.

During the 2021 field investigation, depressions within the woodlot on the west side of the study area were observed. These depressions included distinct water marks approximately 0.5 m high along the slopes and tree trunks, indicating seasonal (vernal) pools. These pools were dry at the time of the 2021 field investigation and are not identified as floodplain areas or waterbodies according to the MVCA Regulation Public Mapping Browser (MVCA, 2022). During the targeted surveys for Western Chorus Frogs in April of 2022, these depressions were inundated with water. The water was frozen during the April 6, 2022 targeted survey. These areas are not considered fish-bearing.

Groundwater was not observed during the 2021 field investigations. Well records identified two (2) wells within the study area which ranged from depths of 45 m to 61 m. All the wells within the study area were domestic water supplies. A total of 34 wells are located within 500 m of the study area. Although the study area was identified as 'Moderate Recharge Area' under the CRCCDP (City of Ottawa, 2004), no significant groundwater resources or sensitive groundwater areas were identified in the study area.

3.5 Vegetation Cover

A vegetation survey was completed during the 2021 field investigation. Habitat observed during the field investigation included several vegetation communities. The following section outlines the existing vegetation communities identified within the study area. For a detailed map of vegetation communities present within the subject property, refer to **Figure 2**. Photographs of the vegetation communities can be found in **Appendix C**. A complete listing of vegetation species observed within the study area during the field investigation is found in **Appendix D**. No Butternuts (*Juglans cinerea*) were observed within or adjacent to the study area. Two species of ‘regional significance’ as defined in the *Urban Natural Areas Environmental Evaluation Study: Appendix A – Vascular Plants of the City of Ottawa, with the Identification of Significant Species* (Brunton, 2005) were identified within the study area: blue water speedwell (*Veronica anagallis-aquatica*) and Canada rush (*Juncus canadensis*). Both of these species were observed growing in the wet soils of the watercourse corridor as well as directly within the watercourse. No nationally or provincially rare species based on the Subnational Rank (S-RANK) system under MNRF, or SAR plant species were observed within the study area during the 2021 field investigation.

The adjacent land north and south of the study area consists of agricultural fields. The adjacent land east of the study area consists of commercial properties while land west of the study area consists of a deciduous woodlot which extends into the west end of the subject property.

3.5.1 Vegetation Community 1: Forb Meadow (MEF)

Vegetation community 1 was classified through ELC as a Forb Meadow (MEF). This community makes up the northwest portion of the subject property, present along the tributary of the Carp River (**Photo 1**). This area is represented primarily by a constructed meadow dominated by non-native forbs and herbaceous ground cover such as coltsfoot (*Tussilago farfara*), Queen Anne’s lace (*Daucus carota*), and white sweet-clover (*Melilotus alba*), as well as sparse planted shrubs and trees such as silver maple (*Acer saccharinum*). This area shows evidence of recent disturbance and transitions into the Mixed Meadow southward.

3.5.2 Vegetation Community 2: Mixed Meadow (MEM)

Vegetation community 2 was classified through ELC as a Mixed Meadow (MEM). This community is the largest of the vegetation communities within the subject property and extends from the north portion of the subject property down along the eastern half of the subject property (**Photo 10**). This community is represented primarily by managed grasses and a mix of forbs such as common milkweed (*Asclepias syriaca*). This community is actively managed (i.e., mowed) at intervals throughout the year as evidenced by the cut vegetation.

3.5.3 Vegetation Community 3: Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3)

Vegetation community 3 was classified through ELC as a Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3). This community is present in the west side of the subject property and extends westward beyond the subject property (**Photo 13**). This community is represented primarily by mature hybrid white willow (*Salix alba x fragilis*) and Manitoba maple (*Acer negundo*), with subdominant balsam poplar (*Populus balsamifera*). A vernal pool is present within this vegetation community which dries up seasonally and leaves unvegetated depressions. This pool was dry during the 2021 field investigation but inundated with water during the April 2022 targeted

surveys (**Photos 19 to 21**).

3.5.4 Significant Woodlands

The PPS defines Significant Woodlands as “...treed areas that provide environmental and economic benefits such as erosion prevention, water retention, provision of habitat, recreation and the sustainable harvest of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance”.

The PPS defines a Significant Woodland 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...”.

The City’s *Official Plan* (City of Ottawa, 2021b) identified that Significant Woodlands are defined in Appendix 8 of the City of Ottawa *Environmental Impact Statement Guidelines* (2015a) “...as woodlands that combine all three features listed below in a contiguous (canopy appears unbroken on an aerial photograph), forested area:

- *Mature stands of trees 80 years of age or older;*
- *Interior forest habitat located more than 100 m inside the edge of a forest patch; and*
- *Woodland adjacent to a surface water feature such as a river, stream, drain, pond, or wetland, or any groundwater feature including springs, seepage areas, or areas of groundwater upwelling”.*

In 2016, the City of Ottawa published *Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment* (2016) intended to “...supplement and form part of the City’s broader Environmental Impact Statement Guidelines”. These guidelines define significant woodlands as:

- *“i. Any treed area meeting the definition of woodlands in the Forestry Act, R.S.O. 1990, c. F.26 or forest in the Ecological Land Classification for Southern Ontario; and*
- *ii. In the rural area, meeting any one of the criteria in the Natural Heritage Reference Manual, as assessed in a subwatershed planning context and applied in accordance with Council-approved guidelines, where such guidelines exist; or*
- *iii. In the urban area, any area 0.8 hectares in size or larger, supporting woodland 60 years of age and older at the time of evaluation”.*

The City’s *Official Plan* (City of Ottawa, 2021b) did not identify any Significant Woodlands within or adjacent to the study area. The *Tree Conservation Report (Appendix A)* provides information on tree species composition, size, health, etc. found in the study area and the potential impacts to trees based on the proposed project works.

3.5.5 Invasive and Noxious Plant Species

No plant species listed as ‘Restricted’ or ‘Prohibited’ under the *Invasive Species Act*, 2015, were observed within the study area during the 2021/2022 field investigations.

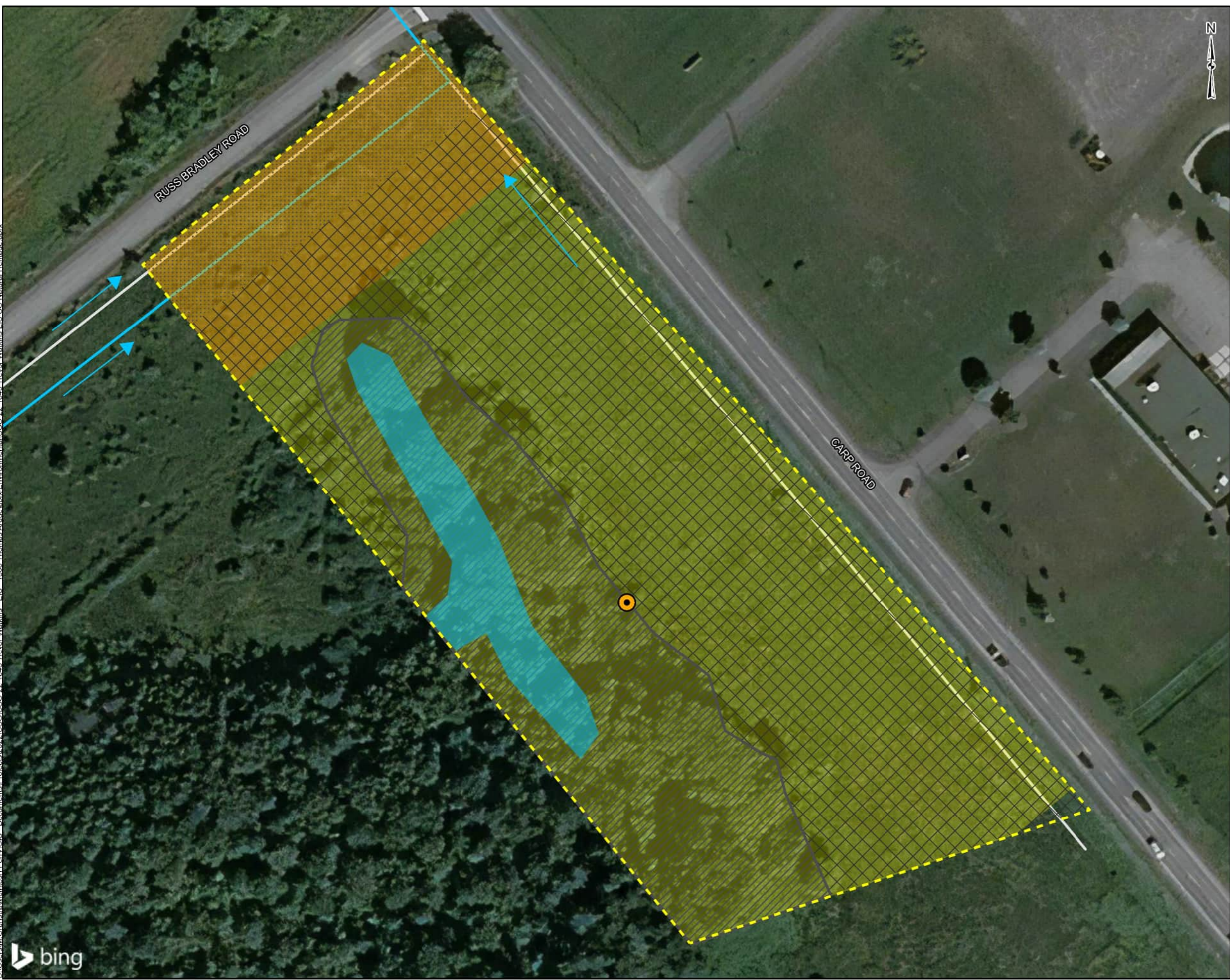
The following plant species listed as ‘Noxious Weeds’ under the *Weed Control Act*, 1990, were observed within the

study area during the 2021/2022 field investigations:

- bull thistle (*Cirsium vulgare*);
- Canada thistle (*Cirsium arvense*);
- coltsfoot (*Tussilago farfara*);
- common buckthorn (*Rhamnus cathartica*);
- common ragweed (*Ambrosia artemisiifolia*);
- common sow-thistle (*Sonchus oleraceus*);
- knapweed (*Centaurea* spp.);
- leafy spurge (*Euphorbia esula*);
- smooth bedstraw (*Galium mollugo*); and
- wild parsnip (*Pastinaca sativa*).

The 'Noxious Weed' species are either considered widespread or do not exist in large numbers within the study area (i.e., no stands of the species, but rather sporadic occurrences of individuals within the larger study area).

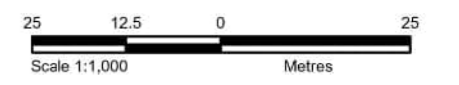
C:\Users\McIntosh\Perry\GIS - Documents\Projects\2022\CCO\CCO-22-1643 Trevor Watkins EIS - EIS - 1500 Thomas Argue\arcx\Environmental\CCO-22-1643 Trevor Watkins EIS CO Natural Heritage.aprx



LEGEND

- Study Area
- Monarch Butterfly
- Forb Meadow (MEF)
- Fresh - Moist Willow Lowland Deciduous Forest Type (FODM7-3)
- Mixed Meadow (MEM)
- Vernal Pool/Potential Amphibian Breeding Habitat
- Category 2 Blandings Turtle Habitat
- Category 3 Blandings Turtle Habitat
- Watercourse
- Ditch line
- ← Direction of watercourse flow

REFERENCE
 GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2022.



CLIENT:	TREVOR WATKINS		
PROJECT:	1500 THOMAS ARGUE ROAD EIS		
TITLE:	NATURAL HERITAGE FEATURES MAP		
McINTOSH PERRY <small>115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 813-836-2184 Fax: 813-836-3742 www.mcintoshperry.com</small>	PROJECT NO: CCO-22-2620	FIGURE:	2
	Date	Dec., 23, 2022	
	GIS	MG	
	Checked By	EP	



3.6 Habitat for Species at Risk

Background information obtained from the sources listed in **Section 2.0** of this report, indicated that SAR and their habitat were potentially present within the study area. The MECP did not provide site-specific information regarding SAR in the study area (**Appendix B**). The following background information was obtained from various sources:

- NHIC data from the MNRF (2022a) identified the following SAR within the general vicinity of the study area (within 10 km): Blanding's Turtle (*Emydoidea blandingii*), Bobolink (*Dolichonyx oryzivorus*), Common Snapping Turtle (*Chelydra serpentina*), and Eastern Meadowlark (*Sturnella magna*);
- LIO data from the MNRF (2022b) identified the following SAR within the vicinity of the study area:
 - The study area is located within a 1 km by 1 km square in which Blanding's Turtles have been recorded;
- The following SAR birds (Bird Studies Canada, et. al., 2006) are known to occur within a 10 km by 10 km square in the general vicinity of the study area:
 - Bank Swallow (*Riparia riparia*);
 - Barn Swallow (*Hirundo rustica*);
 - Bobolink (*Dolichonyx oryzivorus*);
 - Common Nighthawk (*Chordeiles minor*);
 - Eastern Meadowlark (*Sturnella magna*);
 - Eastern Whip-poor-will (*Antrostomus vociferus*);
 - Eastern Wood-Pewee (*Contopus virens*);
 - Evening Grosbeak (*Hesperiphona vespertina*);
 - Least Bittern (*Ixobrychus exilis*);
 - Wood Thrush (*Hylocichla mustelina*);
- The following SAR herptiles (Ontario Nature, 2020) are known to occur within a 10 km by 10 km square in the general vicinity of the study area:
 - Blanding's Turtle;
 - Common Snapping Turtle;
 - Midland Painted Turtle (*Chrysemys picta marginata*);
 - Eastern Milksnake (*Lampropeltis triangulum triangulum*);
 - Western Chorus Frog;
- The following SAR butterflies (Toronto Entomologists' Association, 2020) are known to occur within a 10 km by 10 km square in the general vicinity of the study area:
 - Monarch (*Danaus plexippus*);
- There is potential for the following additional SAR to be present within the general vicinity of the study area based on general ranges of the species and habitat suitability:
 - Black Ash (*Fraxinus nigra*);
 - Butternut (*Juglans cinerea*);
 - Eastern Ribbonsnake (*Thamnophis sauritus sauritus*);
 - Little Brown Myotis (*Myotis lucifugus*);
 - Northern Myotis (*Myotis septentrionalis*); and
 - Tri-colored Bat (*Perimyotis subflavus*).

SAR habitat in the study area is outlined in **Table 2** based on background information sources, habitat availability,

and the results of targeted surveys for SAR in 2022. The status of each species under the provincial *Endangered Species Act, 2007* (ESA) and federal *Species at Risk Act, 2002* (SARA) are also listed in **Table 2**. Additional protection afforded to species under the provincial *Fish and Wildlife Conservation Act, 1994* (FWCA) and federal *Migratory Birds Convention Act, 1997* (MBCA) are noted as well.

Table 2: Species at Risk Potentially Present within the Study Area

Species Name	Scientific Name	Provincial Status under the ESA	Provincial Habitat Protection	Federal Status under the SARA	Federal Protection of Individual and Residence outside of Federal lands	Source	Other Applicable Legislation	Potential/Unconfirmed or Confirmed Habitat Present in the Study Area and Adjacent Lands
Plants								
Black Ash	<i>Fraxinus nigra</i>	Endangered	No	No Status	No	General Range	N/A	No
Butternut	<i>Juglans cinerea</i>	Endangered	Yes	Endangered	Yes	MECP, General Range	N/A	No
Insects								
Monarch	<i>Danaus plexippus</i>	Special Concern	No	Special Concern	No	OBA, General Range	FWCA	Confirmed
Amphibians								
Western Chorus Frog	<i>Pseudacris triseriata</i>	No Status	No	Threatened	Yes	ORAA, General Range	N/A	No; confirmed through targeted surveys
Turtles								
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened	Yes	Threatened	Yes	LIO, NHIC, ORAA	FWCA	Confirmed Category 2 and 3 habitat
Common Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern	No	Special Concern	No	NHIC, ORAA	FWCA	No
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	No Status	No	Special Concern	No	ORAA, General Range	FWCA	No
Snakes and Lizards								
Eastern Milksnake	<i>Lampropeltis triangulum triangulum</i>	No Status	No	Special Concern	No	General range	FWCA	No
Eastern Ribbonsnake	<i>Thamnophis sauritus sauritus</i>	Special Concern	No	Special Concern	No	General range	N/A	No

Table 2: Species at Risk Potentially Present within the Study Area

Species Name	Scientific Name	Provincial Status under the ESA	Provincial Habitat Protection	Federal Status under the SARA	Federal Protection of Individual and Residence outside of Federal lands	Source	Other Applicable Legislation	Potential/Unconfirmed or Confirmed Habitat Present in the Study Area and Adjacent Lands
Birds								
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Special Concern	No	Special Concern	No	General Range	FWCA	No
Bank Swallow	<i>Riparia riparia</i>	Threatened	Yes	Threatened	No	OBBA, General Range	MBCA	No
Barn Swallow	<i>Hirundo rustica</i>	Threatened	Yes	Threatened	No	OBBA, General Range	MBCA	No
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened	Yes	Threatened	No	OBBA, General Range	MBCA	No
Canada Warbler	<i>Cardellina canadensis</i>	Special Concern	No	Threatened	No	General Range	MBCA	No
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern	No	Threatened	No	OBBA, General Range	MBCA	No
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened	Yes	Threatened	No	OBBA, General Range	MBCA	No
Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	Threatened	Yes	Threatened	Yes	OBBA	MBCA	No
Eastern Wood-Pewee	<i>Contopus virens</i>	Special Concern	No	Special Concern	No	OBBA, General Range	MBCA	No
Evening Grosbeak	<i>Hesperiphona vespertina</i>	Special Concern	No	Special Concern	No	OBBA	MBCA	No
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Special Concern	No	Special Concern	No	General Range	MBCA	No

Table 2: Species at Risk Potentially Present within the Study Area

Species Name	Scientific Name	Provincial Status under the ESA	Provincial Habitat Protection	Federal Status under the SARA	Federal Protection of Individual and Residence outside of Federal lands	Source	Other Applicable Legislation	Potential/Unconfirmed or Confirmed Habitat Present in the Study Area and Adjacent Lands
Least Bittern	<i>Ixobrychus exilis</i>	Threatened	Yes	Threatened	Yes	OBBA, General Range	MBCA	No
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Endangered	Yes	No Status	No	General Range	MBCA	No
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Special Concern	No	Endangered	Yes	General Range	MBCA	No
Short-eared Owl	<i>Asio flammeus</i>	Special Concern	No	Special Concern	No	General Range	FWCA	No
Wood Thrush	<i>Hylocichla mustelina</i>	Special Concern	No	Threatened	No	OBBA, General Range	MBCA	No
Mammals								
Little Brown Myotis	<i>Myotis lucifugus</i>	Endangered	Yes	Endangered	No	General Range	FWCA	No
Northern Myotis	<i>Myotis septentrionalis</i>	Endangered	Yes	Endangered	No	General Range	FWCA	No
Tri-colored Bat	<i>Perimyotis subflavus</i>	Endangered	Yes	Endangered	No	General Range	FWCA	No

Of the SAR identified by background information as potentially present within the vicinity of the study area, habitat observed during the field investigation within the study area does not appear to be suitable for the life processes of the following SAR: Black Ash, Butternut Common Snapping Turtle, Midland Painted Turtle, Eastern Milksnake, Eastern Ribbonsnake, Bald Eagle, Bank Swallow, Barn Swallow, Bobolink, Canada Warbler, Common Nighthawk, Eastern Meadowlark, Eastern Whip-poor-will, Eastern Wood-Pewee, Evening Grosbeak, Grasshopper Sparrow, Least Bittern, Loggerhead Shrike, Red-headed Woodpecker, Rusty Blackbird, Short-eared owl, Wood Thrush, Little Myotis, Northern Myotis, and Tri-colored Bat. These species will not be discussed further in this report.

Suitable habitat for the following species was deemed to be present within the study area or adjacent to the study area, based on the background information and results of the 2021 field investigation and 2022 targeted surveys: Butternut and Monarch.

3.6.1 Amphibians

Western Chorus Frog is designated as ‘Threatened’ under the SARA. Habitat for this species and individuals of this species are afforded protection. During the 2021 field investigation, the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) showed signs of a vernal pool which was dry and left unvegetated depressions (**Photo 19**). This pool was determined to potentially provide suitable Western Chorus Frog habitat. Targeted surveys for this species were conducted in April 2022 during appropriate timing windows and conditions when the pool was inundated (**Photos 20 and 21**). No Western Chorus Frogs were detected during the targeted surveys.

3.6.2 Insects

A Monarch was observed during the 2021 field investigation within the study area (**Photo 14**). The individual was observed along the forested edge between the mixed meadow and Fresh – Moist Willow Lowland Deciduous Forest Type (**Figure 2**). Adult Monarchs forage on a variety of wildflowers including milkweed (*Asclepias* spp.) on which they rely for several life processes. Common milkweed was identified within the study area in the forb meadow and mixed meadow. This species is designated as ‘Special Concern’ under ESA and SARA and does not receive habitat protection.

3.6.3 SAR Turtles

The Blanding’s Turtle is listed as ‘Threatened’ under the ESA and ‘Endangered’ under the SARA and is afforded habitat protection. An elemental occurrence of Blanding’s Turtle was identified in the vicinity of the study area as the study area was located in a 1 km by 1 km grid square in which Blanding’s Turtles have been recorded (MNR, 2022a). Based on the *General Habitat Description for the Blanding’s Turtle* (*Emydoidea blandingii*) by the MNR (2013), Category 2 habitat for Blanding’s Turtle is available in any connected wetland and waterbody complex extending up to 2 km from the Blanding’s Turtle occurrences as well as 30 m around these suitable wetlands/waterbodies. Category 3 Blanding’s Turtle habitat is any area from 30 m to 250 m around Category 2 habitat. These habitats are present within the study area based on the watercourse identified on the north side of the subject property. It is unlikely that the Blanding’s Turtles exists in high densities within the study area due to limited habitat available and functions the habitat provides (no overwintering habitat). Additionally, the study area has been fragmented from the Blanding’s Turtle habitat located in the elemental occurrence due to the channelization of watercourses and airfield infrastructure. There is a potential for Blanding’s Turtles to be found

within the study area due to the watercourse; however, it is unlikely this species would use the study area for significant life processes such as overwintering, foraging, thermoregulation, protection from predators, etc. Many SAR turtles require soft substrates with water overtop to protect them from freezing as would occur on the surface of water. It is not anticipated that Blanding's Turtles utilize the study area for any significant life process based on the lack of suitable habitat and if present, would only utilize the area for movement between suitable habitats outside of the study area.

3.7 Wildlife & Significant Wildlife Habitat

The study area is located in the Pembroke Ecodistrict (6E-16) of the Lake Simcoe-Rideau (6E) Ecoregion within the Mixedwood Plains Ecozone (Ecological Stratification Working Group, 1996). Characteristic wildlife present within this Ecoregion includes: American Bullfrog (*Lithobates catesbeianus*), Eastern Newt (*Notophthalmus viridescens*), Northern Leopard Frog (*Lithobates pipiens*), Spring Peeper (*Pseudacris crucifer*), Common Snapping Turtle, Eastern Gartersnake (*Thamnophis sirtalis sirtalis*), Northern Watersnake (*Nerodia sipedon sipedon*), groundhog (*Marmota monax*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and white-tailed deer (*Odocoileus virginianus*). Representative bird species include the Great Blue Heron (*Ardea herodias*), Hairy Woodpecker (*Leuconotopicus villosus*), Rose-breasted Grosbeak (*Pheucticus ludovicianus*), Scarlet Tanager (*Piranga olivacea*), Wilson's Snipe (*Gallinago delicata*), Wood Duck (*Aix sponsa*), and Wood Thrush (Crins et al., 2009).

The following section outlines the existing wildlife habitat within the study area. **Table 3** lists the species observed, heard, and/or recorded during the 2021/2022 field investigations.

Table 3: Wildlife Species Observed Within and Adjacent to the Study Area				
Common Name	Scientific Name	Resident/ Visitor	Evidence	Applicable Legislative Protection
Molluscs				
Chalky Macoma	<i>Macoma calcareo</i>	Resident (historical remnants)	Visual observation	<i>Fisheries Act</i>
Insects				
Canada Darner	<i>Aeshna canadensis</i>	Resident	Visual observation	n/a
Clouded Sulphur	<i>Colias philodice</i>	Resident	Visual observation	n/a
Spongy Moth	<i>Lymantria dispar</i>	Resident	Visual observation	n/a
Monarch	<i>Danaus plexippus</i>	Visitor	Visual observation	ESA, SARA, FWCA
Northern Azure	<i>Ogyris zosine</i>	Resident	Visual observation	n/a
Northern Crescent	<i>Phyciodes coccyta</i>	Resident	Visual observation	n/a
Amphibians				
Gray Treefrog	<i>Hyla versicolor</i>	Resident	Visual observation	FWCA

Table 3: Wildlife Species Observed Within and Adjacent to the Study Area

Common Name	Scientific Name	Resident/ Visitor	Evidence	Applicable Legislative Protection
Green Frog	<i>Lithobates clamitans</i>	Resident	Visual observation	N/A
Northern Leopard Frog	<i>Lithobates pipiens</i>	Resident	Visual observation	N/A
Birds				
American Crow	<i>Corvus brachyrhynchos</i>	Resident	Visual observation; Calling, within appropriate breeding habitat, during appropriate breeding season	N/A
American Goldfinch	<i>Spinus tristis</i>	Resident	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
American Redstart	<i>Setophaga ruticilla</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
American Robin	<i>Turdus migratorius</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Black-and-white Warbler	<i>Mniotilta varia</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Black-capped Chickadee	<i>Poecile atricapillus</i>	Resident	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Blue Jay	<i>Cyanocitta cristata</i>	Resident	Visual observation; Calling, within appropriate breeding habitat, during appropriate breeding season	FWCA
Canada Goose	<i>Branta canadensis</i>	Visitor	Visual observation	MBCA
Cedar Waxwing	<i>Bombycilla cedrorum</i>	Visitor	Visual observation; Calling, within appropriate breeding habitat, during appropriate breeding season	MBCA

Table 3: Wildlife Species Observed Within and Adjacent to the Study Area

Common Name	Scientific Name	Resident/ Visitor	Evidence	Applicable Legislative Protection
Common Raven	<i>Corvus corax</i>	Resident	Calling (flyover)	FWCA
Common Yellowthroat	<i>Geothlypis trichas</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Downy Woodpecker	<i>Picoides pubescens</i>	Resident	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
European Starling	<i>Sturnus vulgaris</i>	Resident	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	N/A
Gray Catbird	<i>Dumatella carolinensis</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
House Wren	<i>Troglodytes aedon</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Killdeer	<i>Charadrius vociferus</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Least Flycatcher	<i>Empidonax minimus</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Northern Flicker	<i>Colaptes auratus</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Pine Warbler	<i>Setophaga pinus</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA

Table 3: Wildlife Species Observed Within and Adjacent to the Study Area

Common Name	Scientific Name	Resident/ Visitor	Evidence	Applicable Legislative Protection
Red-eyed Vireo	<i>Vireo olivaceus</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Ring-billed Gull	<i>Larus delawarensis</i>	Visitor	Visual observation; Calling	MBCA
Song Sparrow	<i>Melospiza melodia</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
White-breasted Nuthatch	<i>Sitta carolinensis</i>	Resident	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA
Yellow Warbler	<i>Setophaga petechia</i>	Visitor	Visual observation; Singing male, within appropriate breeding habitat, during appropriate breeding season	MBCA

For those observations of male birds singing, within appropriate breeding habitat, during the appropriate breeding season, this quality of breeding evidence represents “possible breeder,” under the Ontario Breeding Bird Atlas’ *Breeding Evidence Codes* (Bird Studies Canada, 2020). The bird species listed in **Table 3** with applicable legislative protection from the MBCA are afforded protection to individuals, their nests, eggs, and fledglings. This same protection is afforded to bird species with applicable legislative protection from the FWCA. Bird species observed flying over the study area are not considered to be resident breeders within the study area.

A den entrance of an unidentified mammal was also observed within the study area (**Photo 18**).

Spongy Moth egg cases were observed on several of the trees within the study area (**Photo 16**). The Spongy Moth is a non-native/invasive species of insect native to Europe that is known to have cycles of population fluctuation over a period of several years. During highly productive years this species is known to cause significant destruction of deciduous forests and some coniferous forests by consuming leaves in their larval stage and causing widespread defoliation (MNR, 2022d).

The study area was examined under the *Significant Wildlife Habitat Technical Guide* (Ministry of Natural Resources [MNR], 2000) and its supporting document *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNR, 2015) to determine if significant wildlife habitat is present within the existing study area. **Table 4** outlines the various significant wildlife habitat (SWH) categories and rationale on their designation within the study area.

Table 4: Significant Wildlife Habitat within the Study Area		
Specialized Wildlife Habitat Category	Candidate Significant Wildlife Habitat (Y/N)	Confirmed Significant Wildlife Habitat (Y/N)
Waterfowl Stopover and Staging Areas (Terrestrial)	No	No
Waterfowl Stopover and Staging Areas (Aquatic)	No	No
Shorebird Migratory Stopover Area	No	No
Raptor Wintering Area	No	No
Bat Hibernacula	No	No
Bat Maternity Colonies	No	No
Turtle Wintering Area	No	No
Reptile Hibernaculum	No	No
Colonially-Nesting Bird Breeding Habitat (Bank and Cliff)	No	No
Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs)	No	No
Colonially-Nesting Bird Breeding Habitat (Ground)	No	No
Migratory Butterfly Stopover Areas	No	No
Landbird Migratory Stopover Areas	No	No
Deer Yarding Areas	No	No
Deer Winter Congregation Areas	No	No
Cliffs and Talus Slopes	No	No
Sand Barren	No	No
Alvar	No	No
Old Growth Forest	No	No
Savannah	No	No
Tallgrass Prairie	No	No
Other Rare Vegetation Communities	No	No
Waterfowl Nesting Area	No	No
Bald Eagle and Osprey Nesting, Foraging, and Perching Habitat	No	No
Woodland Raptor Nesting Habitat	No	No
Turtle Nesting Area	No	No
Seeps and Springs	No	No
Amphibian Breeding Habitat (Woodland)	No	No
Amphibian Breeding Habitat (Wetlands)	No	No

Table 4: Significant Wildlife Habitat within the Study Area		
Specialized Wildlife Habitat Category	Candidate Significant Wildlife Habitat (Y/N)	Confirmed Significant Wildlife Habitat (Y/N)
Woodland Area-Sensitive Bird Breeding Habitat	No	No
Marsh Bird Breeding Habitat	No	No
Open Country Bird Breeding Habitat	No	No
Shrub/Early Successional Bird Breeding Habitat	No	No
Terrestrial Crayfish	No	No
Special Concern and Rare Wildlife Species	No	No
Amphibian Movement Corridors	No	No
Deer Movement Corridors	No	No

Based on the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015), no Candidate or Confirmed SWH habitat was determined to be present within the study area. During the 2021 field investigation, conditions appeared suitable for Candidate Amphibian Breeding Habitat (Woodland) in the forested area of the subject property based on indications that a vernal pool is present at certain times of the year. Targeted Western Chorus Frog surveys were conducted in April 2022. No early emergent species such as Western Chorus Frog, Wood Frog (*Lithobates sylvaticus*), or Spring Peeper (*Pseudacris crucifer*) were detected. Gray Treefrog was detected as present during the 2022 field investigation; however, Confirmed SWH would require more than one indicator frog species to be present (i.e., early emergent species that were not present). Therefore, it was confirmed that this area was not SWH.

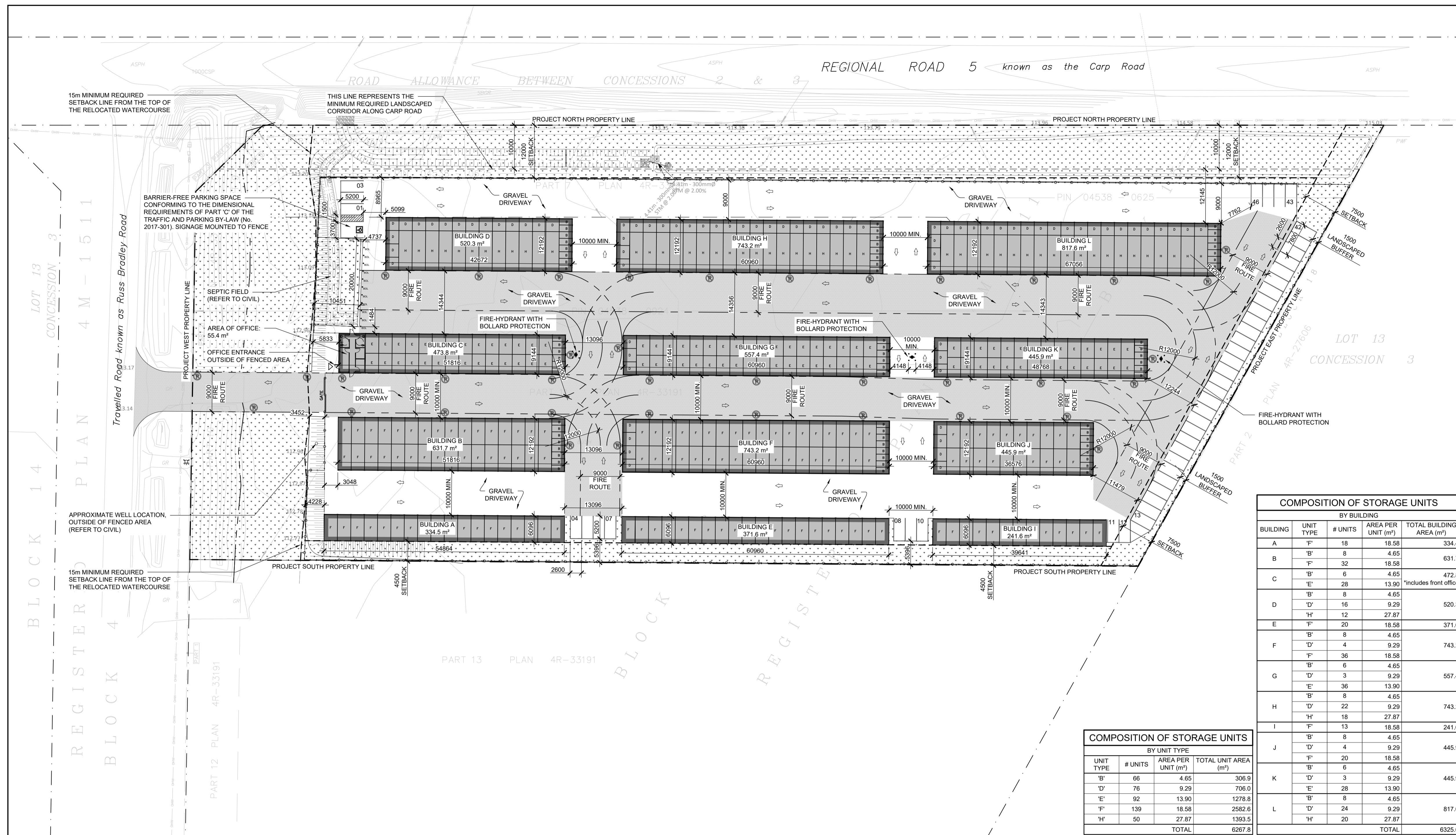
4.0 DESCRIPTION OF THE PROPOSED PROJECT

As per the PPS, development is defined as “...the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act...”. The proposed development within the subject property involves the following:

- Clearing of approximately 2.4 ha of the subject property to construct a self storage facility. The self storage facility will include twelve (12) single-storey self storage buildings (including a total of 423 individual storage units) with a total footprint of 6,326 m² and a septic field and associated swale in the northeast end of the developable envelope;
- Surface hardening (i.e., gravel) of 11,024 m² of the subject property where the storage units will be located. This will include 46 parking spaces as well as fire routes; and
- Landscaping of 6,901 m² around the boundaries of the subject property to provide setbacks from the tributary of Carp River, Carp Road, and the Fresh – Moist Willow Lowland Deciduous Forest Type remaining directly southwest of the subject property.

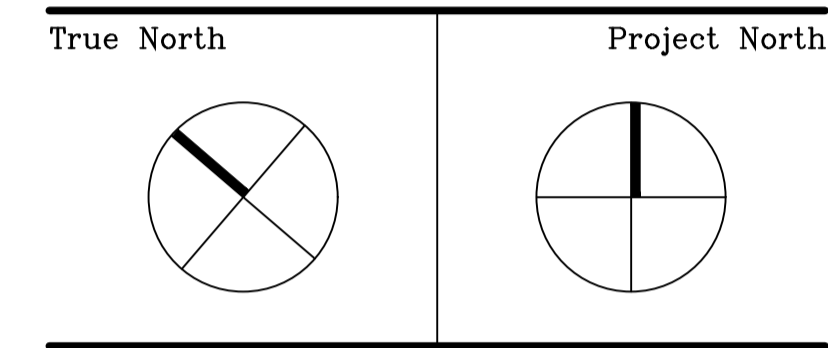
Refer to **Figure 3** for an outline of the proposed development.

THIS SITE PLAN HAS BEEN BASED ON THE SURVEYOR'S TOPOGRAPHY SKETCH PREPARED BY MCINTOSH PERRY SURVEYING INC. DATED OCTOBER 26th, 2021.

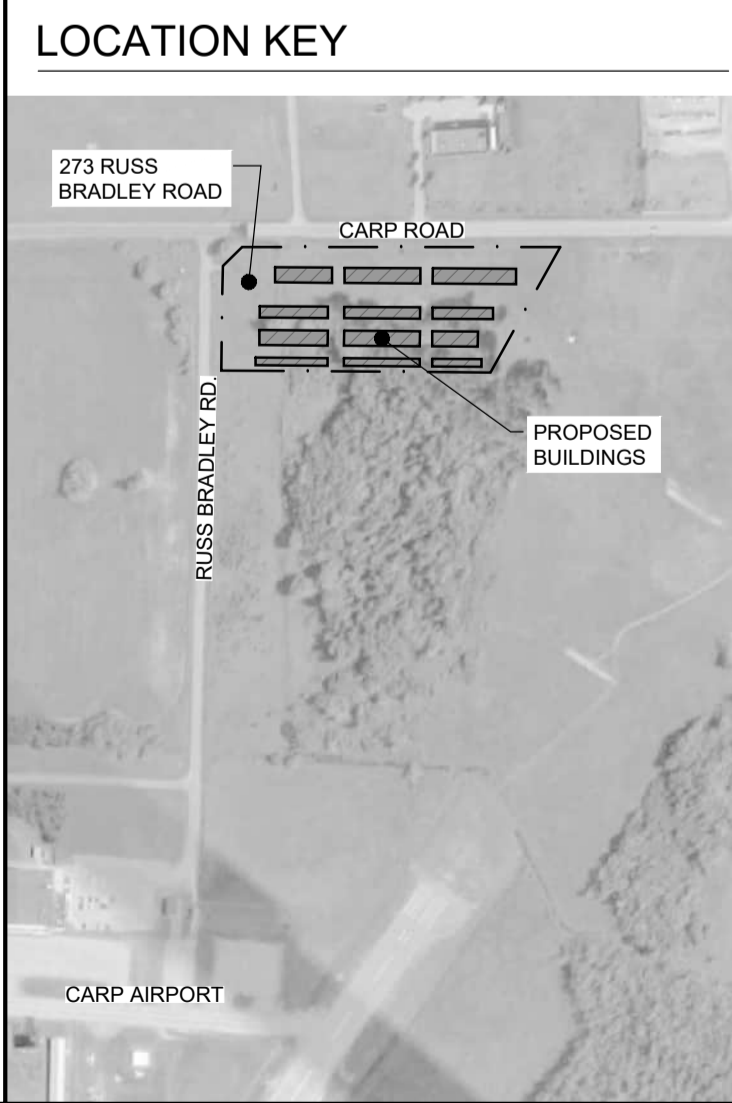
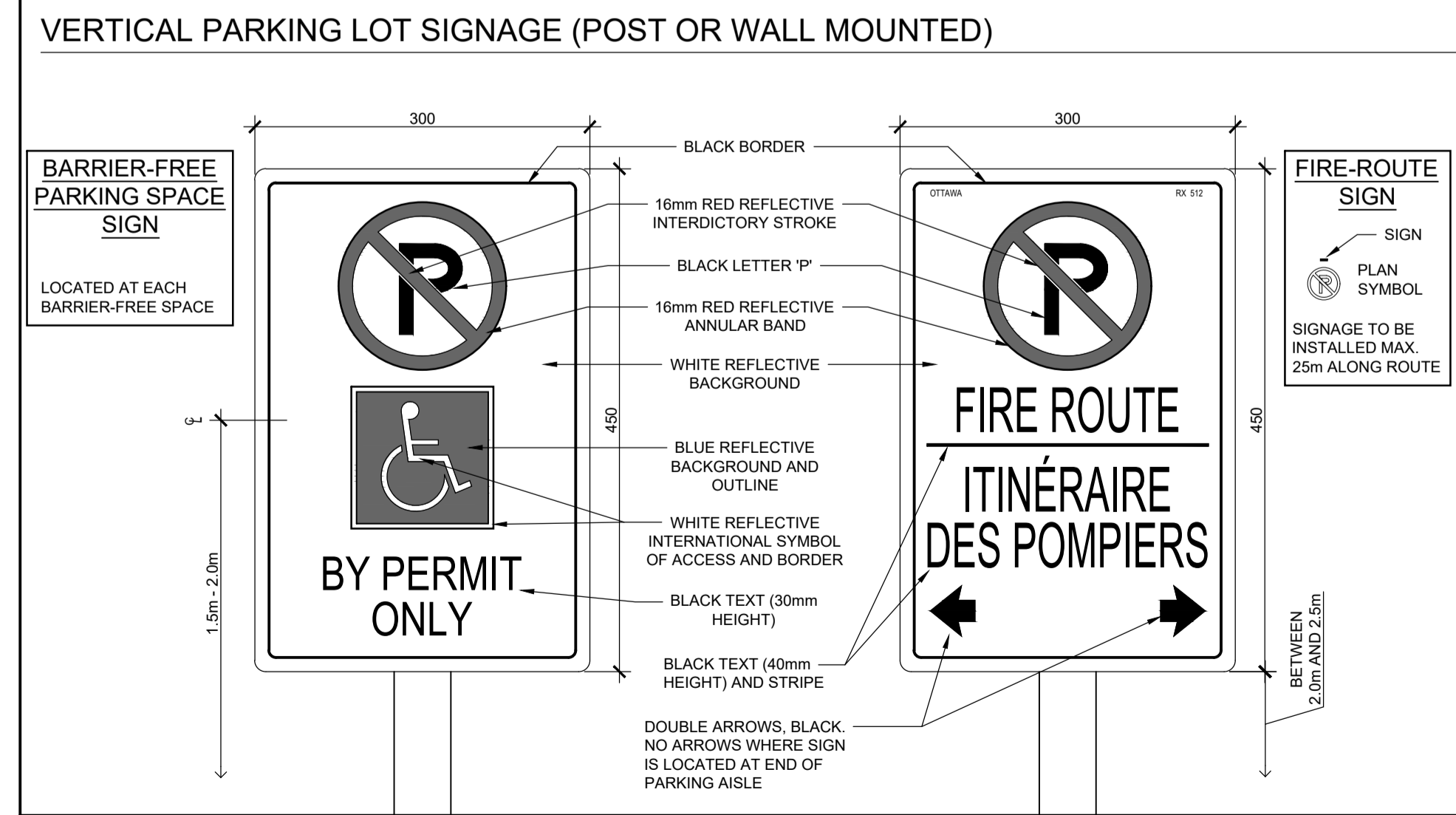


COMPOSITION OF STORAGE UNITS				
BY BUILDING				
BUILDING	UNIT TYPE	# UNITS	AREA PER UNIT (m²)	TOTAL BUILDING AREA (m²)
A	'F'	18	18.58	334.4
B	'B'	8	4.65	631.7
	'F'	32	18.58	
C	'B'	6	4.65	472.8
	'E'	28	13.90	*includes front office
D	'B'	8	4.65	520.3
	'D'	16	9.29	
E	'B'	8	4.65	371.6
	'D'	4	9.29	
F	'B'	6	4.65	743.2
	'D'	3	9.29	
G	'B'	8	4.65	557.4
	'E'	36	13.90	
H	'B'	6	4.65	445.9
	'D'	3	9.29	
I	'B'	8	4.65	557.4
	'E'	36	13.90	
J	'B'	8	4.65	445.9
	'D'	4	9.29	
K	'B'	6	4.65	445.9
	'D'	3	9.29	
L	'B'	8	4.65	817.6
	'D'	24	9.29	
		'H'	20	27.87
		TOTAL		6325.6

COMPOSITION OF STORAGE UNITS			
BY UNIT TYPE			
UNIT TYPE	# UNITS	AREA PER UNIT (m²)	TOTAL UNIT AREA (m²)
'B'	66	4.65	306.9
'D'	76	9.29	706.0
'E'	92	13.90	1278.8
'F'	139	18.58	2582.6
'H'	50	27.87	1393.5
		TOTAL	6267.8



Revisions			
No.	By	Description	Date
05	JF	ISSUED FOR SITE PLAN CONTROL	16 DEC 2022
04	JF	ISSUED FOR COORDINATION	13 DEC 2022
03	JF	ISSUED FOR COORDINATION	27 SEP 2022
02	JF	ISSUED FOR REVIEW	17 JUN 2022
01	JF	ISSUED FOR CLIENT REVIEW	11 JAN 2022



ZONING INFORMATION

PER THE CITY OF OTTAWA ZONING BY-LAW 2008-250 CONSOLIDATION

LEGAL DESCRIPTION: PORTIONS OF PARCEL 04538-0625, PARCEL 04538-0924 AND ABUTTING LANDS. PARTS 8 THROUGH 11, PLAN 4R-33191 BEING PART OF BLOCKS 15 AND 16, REGISTERED PLAN 4M-1511, CITY OF OTTAWA

PROPOSAL: NEW GROSS 6,328 m² [68,093 ft²] SINGLE STOREY SELF STORAGE UNITS OVER 12 BUILDINGS. AN OFFICE, UTILITIES ROOM, AND WASHROOMS WILL BE PROVIDED IN THE BUILDING NEAREST THE MAIN DRIVEWAY ACCESS.

ZONING: DESIGNATION: (T1B) AIR TRANSPORTATION FACILITY SUBZONE (PART 12)

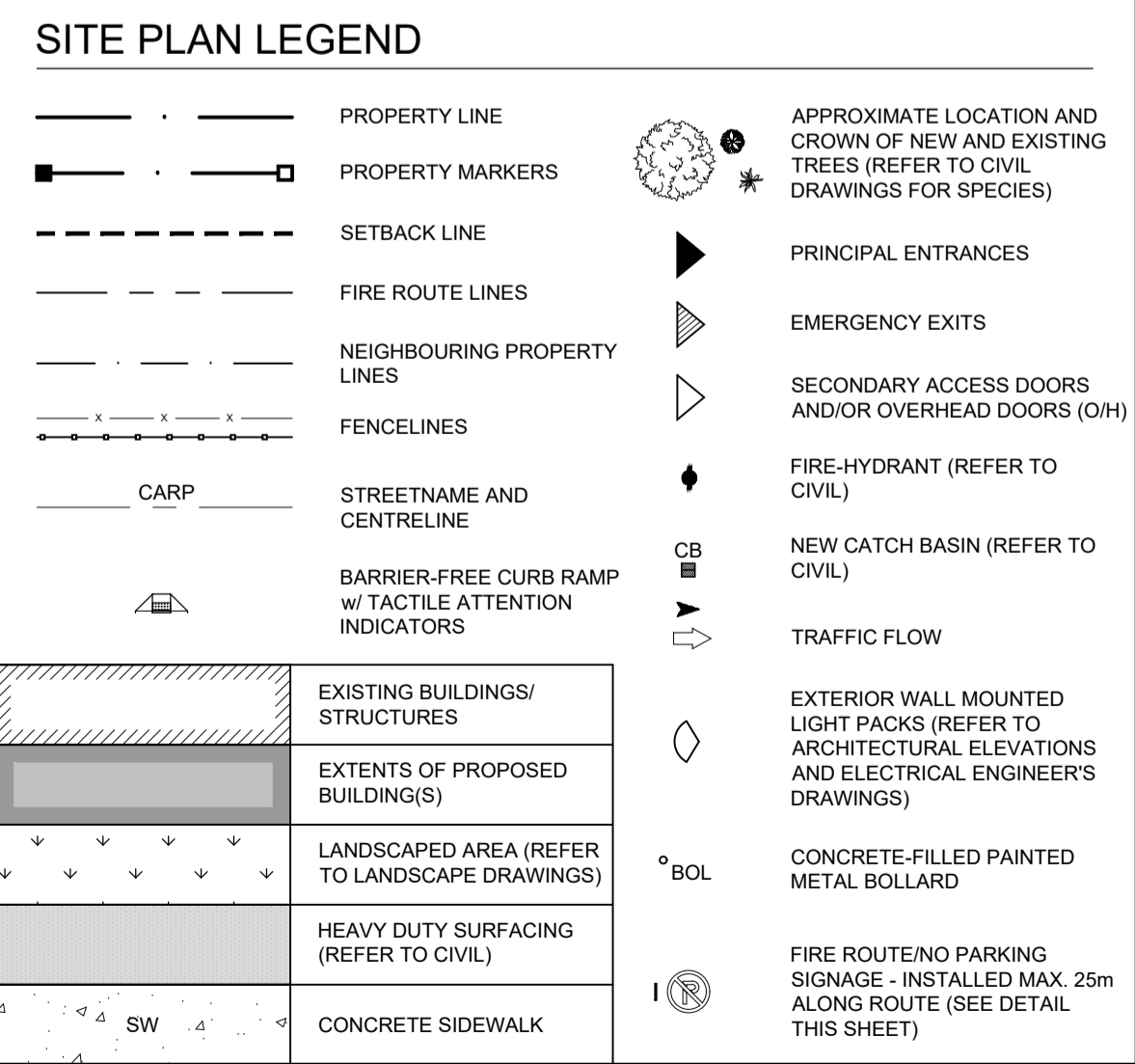
ZONING PROVISIONS (PER TABLES 207 & 208):

- LOT AREA (MIN.) = NO MINIMUM
- ACTUAL LOT AREA = 24,247 m²
- LOT FRONTAGE (MIN.) = NO MINIMUM
- ACTUAL FRONTAGE = 99.1 m
- SETBACKS (MIN.):
 - FRONT = 12.0 m
 - CORNER SIDE = 12.0 m
 - INTERIOR SIDE = 4.5 m
 - REAR = 7.5 m
- MINIMUM SETBACK FROM WATERCOURSE: 15.0 m FROM THE TOP OF BANK, PER SCHEDULE H OF SUBDIVISION AGREEMENT
- MINIMUM LANDSCAPED BUFFER ABUTTING CARP ROAD = 10.0 m
- MIN. % OF PARKING PROVIDED AS LANDSCAPED AREA = 15% MIN.
 - REQUIRED: = 93.15 m²
 - ACTUAL: = 6,140.4 m²

LOADING REQUIREMENTS: (PER TABLE 113A UNDER PART 4) BASED ON THE GROSS FLOOR AREA OF THE BUILDING, A MINIMUM OF 1 STANDARD PLUS 1 OVERSIZED LOADING SPACES ARE REQUIRED.

PARKING: (PER TABLE 101 UNDER PART 4) REQUIRED: 46 SPACES PROVIDED: 46 SPACES

RESERVED BARRIER-FREE PARKING SPACES: REQUIRED: 1 SPACES PROVIDED: 1 SPACES



Project
SELF STORAGE SITE PLAN REVIEW

273 & 275 RUSS BRADLEY RD., CARP, ON

Drawing
PROPOSED SITE PLAN

Scale AS NOTED

Drawn J.F.

Checked J.F. / C.D.

Project No. 21-170

Date DECEMBER 2021

Drawing No. SP-A01

Stamp
ONTARIO ASSOCIATION OF ARCHITECTS
CHRISTOPHER LEE DEIMLING
LICENCE 6239

5.0 IMPACT ASSESSMENT & RECOMMENDATIONS

The following section outlines and assesses any potential impacts that are expected as a result of the proposed development. Recommendations for mitigation measures to avoid these impacts are outlined in **Section 6.0** of this report.

5.1 Natural Heritage System Components

No Natural Heritage Systems are present directly within the study area. Unevaluated wetlands are present 440 m east and 580 m southwest of the study area. No wetlands were identified within or adjacent to the study area during the field investigations. The vernal pool in the forested community of the subject property is ephemeral and does not exhibit wetland conditions. The MVCA regulation limits do not apply to this area; however, they do apply to the reconstructed watercourse in the north end of the subject property. No work is proposed within these Natural Heritage Systems. It is not anticipated that the proposed development will negatively impact the unevaluated wetlands.

5.2 Landforms, Soils, and Geology

The property contains minimal landform types according to the City's *Official Plan* (City of Ottawa, 2021b). MVCA Regulation Limits for the tributary of Carp River that contributes headwater drainage is located within the north end of the subject property. Impacts to this feature will be further discussed in **Section 5.3**. No other significant landforms or geology were noted within or adjacent to the study area.

5.3 Surface Water, Fish Habitat, and Groundwater

The tributary of the Carp River is considered fish habitat and is protected under the *Fisheries Act* (1985). At the time of the 2021/2022 field investigations, the watercourse was noted to have been realigned prior to the field investigations. The realignment appeared to include meanders, low-flow channels, installation of streambed materials, riparian planting, and the construction of an entrance (with associated twin culverts) from Russ Bradley Road. This realignment was approved by MVCA and a 15 m setback is required for the proposed development (**Appendix B**). As such, the proposed development of the storage facility will be set back 15 m from the watercourse along the south side of Russ Bradley Road. No in-water works are proposed as part of the development and the setback will allow the current riparian planting and future landscaping to vegetate the banks of the watercourse. This will contribute to watercourse stability, water quality through filtration and sedimentation control, and biota diversity. Landscaping and a 10 m setback will also occur along the ditch line adjacent to Carp Road which is a contributing ditch line flowing into the watercourse. Vegetation plantings that will take place are expected to potentially improve habitat function. Stormwater flow will be directed into the ditch line and will ensure 80% total suspended solid removal. This could result in additional flow to the watercourse during rainfall. The 15 m buffer that is to be maintained adjacent to the watercourse should remain natural and not be manicured or mowed. It is not anticipated that the proposed development will negatively impact the existing watercourse.

As no significant groundwater resources were identified within the study area, it is not anticipated that the proposed development will negatively impact the Moderate Recharge area identified in the CRCCDP (City of Ottawa, 2004).

5.4 Vegetation Cover

The majority of the vegetation present in the property consists of non-native regenerative growth from previous disturbance (see **Figure 2**). The majority of the study area consists of a managed mixed meadow and a landscaped forb meadow. The wooded area in the west end of the subject property also indicates historical clearing as the majority of the trees consist of non-native species such as Manitoba maple and hybrid white willow or balsam poplars (*Populus balsamifera*) which are considered pioneer species (typically one of the first tree species to colonize a recently cleared area). The vegetation communities on the property indicate characteristics of a historically disturbed area with abundant clearing and evidence of frequent management (i.e., mowed meadows). No significant woodlands or other vegetation communities were identified within or adjacent to the study area. The vernal pool was determined to not support SAR amphibians (i.e., Western Chorus Frogs) and is ephemeral. Vegetation was scarce within the vernal pool area due to the seasonal inundation. Therefore, it is not anticipated that the clearing of the property will have significant impacts to any vegetation or vegetation communities.

Many species of plants considered ‘Noxious Weeds’ are present in the study area. To prevent further degradation and colonization by noxious or invasive species (based on the colonization of the property by invasive plant species), it is advised during development that workers follow the *Clean Equipment Protocol for Industry* (Halloran, Anderson, and Tassie, 2013).

5.5 Habitat for Species at Risk

5.5.1 Amphibians

During the targeted surveys in April 2022, no Western Chorus Frogs were detected. It was determined that this species was not present and due to their limited movement, it is not likely that this species relies on this vernal pool for important life processes. Therefore, this species will not be discussed any further.

5.5.2 Insects

Monarchs were observed within the study area in the open meadow where common milkweed and other wildflowers are present. Due to their status as ‘Special Concern’ under the ESA and SARA, Monarchs are not afforded habitat protection. The development of this area is anticipated to remove Monarch habitat from the study area. Therefore, the proposed development is anticipated to have a negative impact on Monarchs. Mitigation measures and recommendations for reinstating some of the habitat removed as part of the proposed development are discussed in **Section 6.0**.

5.5.3 Turtles

Category 2 and 3 Blanding’s Turtle habitat is present throughout the study area based on an elemental occurrence of Blanding’s Turtle identified within the vicinity of the study area (MNRF, 2022b). Category 2 and 3 Blanding’s Turtle habitats are defined by any wetland or waterbody complex that extends up to 2 km from an elemental occurrence. The watercourse in the north side of the subject property, as well as 30 m from this feature is considered Category 2 Blanding’s Turtle habitat. The areas 220 m beyond Category 2 habitat, which covers the remainder of the study area, are considered Category 3 Blanding’s Turtle habitat. It is not anticipated that Blanding’s Turtles utilize the study area for any critical life processes. The vernal pool in the study area is ephemeral.

inundated (i.e., temporary) surrounded by dominant non-native vegetation which does not provide adequate habitat for overwintering, foraging, migration, thermoregulation, or nesting. No nesting habitat is present within the subject property. The watercourse within the north end of the subject property is potentially suitable for turtles travelling through the subject property. They may be present in constructed ponds south of the study area and travel through the subject property to the Carp River corridor. The potential to encounter turtles with the study area is low, but possible due to the watercourse. No individuals or evidence of nesting activity (i.e., predated nests, etc.) were observed within the study area limits during 2021/2022 field investigations; however, the field investigations were conducted outside of the core nesting period for turtles. The clearing of approximately 2.4 ha of the subject property is not likely to impact Category 2 and 3 Blanding's Turtle habitat as there is no functional habitat for this species in the areas to be developed. Potential impacts to Blanding's Turtles during construction may be avoided with effective implementation of mitigation measures as outlined in **Section 6.0** below.

Based on the MECP guidance document *Categorizing and Protecting Habitat under the ESA* (<https://www.ontario.ca/page/categorizing-and-protecting-habitat-under-endangered-species-act>), key terms and principles associated with the damage or destruction of habitat include:

Damaging habitat

An activity that damages the habitat of a species is one that alters the habitat in ways that impair the function (usefulness) of the habitat for supporting one or more of the specie'' life processes.

Destroying habitat

An activity that destroys the habitat of a species is one that alters the habitat in ways that eliminate the function (usefulness) of the habitat for supporting one or more of the specie'' life processes.

In some cases, the anticipated alteration that a proposed activity will have on habitat may be so minor that the function of the habitat for supporting the specie'' life processes will not become impaired or eliminated. In such cases, the activity would not contravene subsection 10(1) of the ESA and would not require authorization under the Act with respect to this provision

Based on these principles and considerations, and the existing function of terrestrial Category Blanding's Turtle habitat, the proposed disturbance of Category 2 Blanding's Turtle habitat is not anticipated to impair or eliminate the function that Category 2 habitat provides. Primary functions associated with Category 2 habitat and the anticipated impact to these functions include:

- **Feeding:** The terrestrial habitat associated with the subject property may does not provide specific or critical feeding opportunities for the Blanding's Turtle. Regular seasonal usage by the Blanding's Turtle is not anticipated (i.e., lack of suitable overwintering habitat). The Blanding's Turtle is known to be highly mobile and may utilize this area for feeding from time to time (i.e., within a 10-year period), but it is not anticipated that Blanding's Turtles rely on the watercourse in the study area for critical or important feeding areas. The proposed project works will not result in permanent alterations to the watercourse feature of Category 2 habitat;

- **Mating:** Blanding's Turtles are known to mate directly after (and in some cases directly prior to) overwintering. Habitat for mating occurs within the direct vicinity of overwintering habitat in water. This typically occurs in permanent and ephemeral wetlands with adequate water depths during winter. The study area does not contain any wetland habitats; therefore, no mating habitat is present within the study area. No impact on functional mating habitat is anticipated;
- **Thermoregulation:** It is unlikely that this species would utilize the Category 2 habitat within the study area for the purposes of thermoregulation. This area consists of a small, channelized watercourse with no adequate depth of water. Although these conditions may provide adequate sunlight for basking, basking sites typically require adequate depth of water for escape from predation. No adequate cover for cooling is present. It is not anticipated that this area provides important functional thermoregulation habitat. It is not anticipated that the proposed development would impact thermoregulation habitat for Blanding's Turtles;
- **Movement:** The species is likely to utilize the study area for travel in a limited capacity to travel from between suitable habitats in the wider landscape. Connectivity of suitable habitat features are fragmented adjacent to the study area, and it is possible that this species uses the watercourse as a travel corridor to seek summer refugia or other suitable habitats. However, it is anticipated that there is a low number of turtles that would utilize the watercourse as a travel corridor as adequate cover or depths of water are present. No alterations to the watercourse are to occur as part of the proposed development and as such, it is not anticipated that Blanding's Turtles movement areas will be negatively impacted, and
- **Protection from Predators:** Vegetation existing within and adjacent to the watercourse provides little to no opportunities for refuge from predators. Although vegetation is present along the watercourse corridor, it was sparse in some areas. Blanding's Turtles require cover in water with adequate depth in which to dive from supposed threats due to their slow mobility on land. The watercourse does not provide this type of cover. As such, it is not anticipated that the proposed development would negatively impact cover for Blanding's Turtles.

As discussed above, the function of overland movement within the study area is likely to be minimal within Category 3 habitats given the adjacent land use (i.e., aircraft infrastructure, etc.) and it is not anticipated that the study area is used as movement areas for Blanding's Turtles in a significant capacity. Although the 2.4 ha of the subject property is proposed to be developed, it is not anticipated that the functions of the Category 3 habitat for Blanding's Turtles within the study area will be altered (i.e., movement).

If proper mitigation measures are implemented to protect individual turtles during construction (i.e., turtle exclusionary measures), the proposed construction is not anticipated to cause negative residual impacts to SAR turtles. Temporary exclusionary fencing must be installed to deter turtles from entering the work areas and attempting nesting activities in exposed or stockpiled soils which could harm individual turtles and their eggs. According to the *Reptile and amphibian exclusion fencing* (MECP, 2021), recommendations include setting up turtle exclusionary fencing by preventing turtles from accessing and nesting within the work zone. Additionally, temporary turtle exclusion barriers should be installed by May 1, prior to the turtle nesting season, at the work locations directly adjacent to the watercourse. Temporary turtle exclusion measures should be maintained until July 15 (i.e., the end of the period when turtles lay their eggs). All temporary turtle exclusion measures must be removed after the work has been completed. With these practices followed, the works are not anticipated to negatively impact SAR turtles within the study area.

5.6 Wildlife & Significant Wildlife Habitat

5.6.1 Migratory and Non-migratory Birds

A total of 20 species of migratory birds (protected under the MBCA), two (2) species of birds specially protected under the FWCA, and two (2) non-migratory birds were observed within or adjacent to the study area during the 2021/2022 field investigations (Table 3). As detailed information on the bird species (migratory birds, provincially protected birds, and birds not afforded protection) is available for the study area based on the findings of the 2021/2022 field investigations, a nesting window reflective of the species known to occur within the study area has been recommended for this location. The Birds Canada *Nesting Calendar Query Tool* (Hussell and Lepage, 2015) was used to determine the most appropriate nesting period based on the individual bird species known to utilize the study area for the purposes of nesting (Figure 4). The nesting calendar query tool utilizes a very large data set collected over decades by the Canadian Wildlife Service, Birds Canada, and other agencies to calculate the dates when individual species are most likely to be actively nesting within a given geographic area. The core nesting period for birds within the study area is approximately April 15 to September 15 (i.e., the period when most birds are anticipated to be actively nesting). It is important to note that several species (i.e., Ring-billed Gull, etc.) were not included in the nesting query as they do not nest within or directly adjacent to the study area (i.e., colonial breeders requiring isolated open rock islands, etc.) or are not anticipated to be encountered (i.e., specific habitat wetland is required for the American Bittern) during vegetation removals based on observations made during the 2021/2022 field investigations.

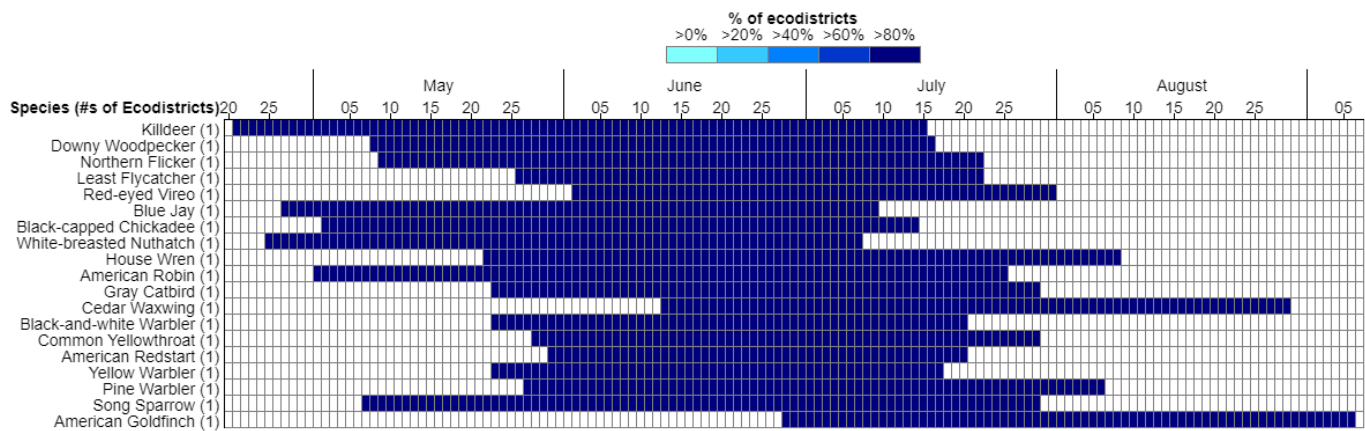


Figure 4: Bird Nesting Period by Species for the Study Area (Hussell and Lepage, 2015)

Vegetation removal should be completed prior to or after the bird nesting period of April 15 to September 15 of any given year to ensure migratory birds or their nests are not adversely impacted. In the event that vegetation removal will be required prior to September 15, but later than April 15, a visual inspection of the areas to be cleared should be conducted by a qualified avian specialist before disturbance to ensure that no birds are using the area for the purposes of nesting. If migratory bird breeding and/or nesting activity is encountered at any time of year within the study area, an appropriate setback distance should be maintained from the nest/nesting birds. Works should not continue in the location of the nest until after it has been determined by an avian specialist that the young have fledged and vacated the nest and work areas. This is recommended in order to prevent negative impacts to migratory birds and other bird species, their nests, and eggs, which are protected under the MBCA or the FWCA.

Provided that the appropriate mitigation measures are implemented during construction, it is not anticipated that the proposed works will negatively impact migratory birds or other wildlife species.

5.6.2 Invasive Species

Egg cases of the Spongy Moth was observed on trees within the study area. This species is highly invasive and causes defoliation and damage to forests on a landscape scale. Although this species is present, it is unlikely that effective management of this species is possible on a landscape scale as part of the proposed development. However, if deciduous trees are planted as part of recommendations for the landscape design, recommendations for protecting them against damage from Spongy Moth should be implemented (see **Section 6.4**).

5.6.3 Significant Wildlife Habitat

No Candidate or Confirmed SWH habitat is present within the study area.

5.7 Wildland Fire Risk Assessment

According to Section 3.1.8 of the *Provincial Policy Statement, 2014*, “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.”

Wildland fire assessment is necessary to determine the presence or absence of forest types associated with the risk of high to extreme wildland fire. Recommended mitigation techniques are designed to disrupt that principle of combustion by eliminating one or more of the three necessary elements of fire (heat, oxygen and fuel). They do so by minimizing the opportunity for ignition of new fires from embers; reducing the potential for direct flame contact from approaching wildland fires; and reducing the effects of radiant heat from an approaching wildland fire by reducing the opportunity for crown fire potential (Ministry of Natural Resources and Forestry [MNR], 2016).

The woody species composition (refer to **Section 3.6**), condition (i.e., deciduous forest, etc.), and health (i.e., low occurrence of insect or diseased trees), within the study area, characterizes the woodland within the study area as not a hazardous forest type. Therefore, further risk assessment and mitigation measures are not required.

5.8 Identifying Cumulative Impacts

Based on the proposed development, there will be a net loss of trees within the study area. These trees are not deemed as high value or form significant vegetation communities, wildlife habitat, or other significant natural heritage features. Net loss to meadow habitat for Monarch is anticipated to occur as well; however, the meadow habitats are primarily composed of non-native forb and grass species. It is recommended that the current site plan include compensation tree planting and native wildflower seeding as part of the landscape design in order to partially mitigate cumulative impacts at a local site level through the loss of native tree species. It is not anticipated that cumulative negative impacts on a wider landscape context will occur as part of the development if the mitigation measures are followed.

6.0 RECOMMENDATIONS

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

6.1 Surface Water, Fish Habitat, and Groundwater

Due to alterations within adjacent to a watercourse regulated by MVCA, the following mitigation measures are proposed to reduce impacts to fish and fish habitat.

- An erosion and sediment control (ESC) plan should be developed and all applicable measures to mitigate erosion and sediment transport to the tributary of the Carp River, should be implemented and maintained until disturbed soils are stabilized by successful revegetation or other permanent means of soil stabilization;
- ESC measures shall be inspected for effectiveness regularly during construction and deficiencies must be corrected promptly;
- All stockpiles of erodible construction materials and excess or surplus materials must be placed more than 30 m from any fish-bearing waterbody;
- Plan access points to minimize the amount of riparian vegetation lost or disturbed;
- Develop a Spill Response Plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance. All spills of deleterious substances (as defined by the *Fisheries Act*) must be reported to the Ontario Spills Action Center (<https://www.ontario.ca/page/report-pollution-and-spills>) AND DFO (FisheriesProtection@dfo-mpo.gc.ca) if the spill results in the Harmful Alteration, Disruption or Destruction (HADD) fish habitat or death of fish. An emergency spill kit shall be kept on-site at all times;
- All lands cleared as part of future developments should be revegetated as soon as practicable to stabilize disturbed soils and prevent the mobilization of sediment-laden surface runoff into the tributary of the Carp River;
- A 15 m setback from the watercourse in the north end of the subject property will be maintained where no development will occur, and no alterations of the watercourse will occur (except for enhancements due to plantings as part of the Landscape Plan). A 10 m setback from the ditch line along Carp Road will also be maintained as contributing flow. These areas are to be maintained a natural state as part of the watercourse reconstruction efforts; and
- A Landscape Plan (**Appendix E**) has been prepared which includes proposed planting beds along the watercourse banks consisting of a variety of native deciduous tree and shrub species. These planting beds will also extend on the east side of the development and include the Retention Basin Seed Mix (No. 8220 from OSC) on the east side of the development to stabilize soils and promote herbaceous growth. Rural Ontario Roadside Seed Mix (No. 8145 from OSC) will be used on the west and north sides of the development and will be maintained as a 'No Mow Zone'; and
- If the scope of work changes and are anticipated to cause impacts to fish and fish habitat or if the activities within 30 m of fish habitat are to change, a *Request for Review* (RFR) will likely be required to be submitted to the DFO prior to the commencement of the activities.

6.2 Vegetation Cover

To mitigate the cumulative and long-term impacts to the study area and adjacent areas, the following principles should be implemented during the proposed development.

- Natural areas to be retained are to be isolated by sturdy construction fencing or similar barriers at least 1 m in height during any future construction in order to ensure their retention;
- To prevent the introduction and spread of invasive plant species into the site, equipment utilized during any future construction should be inspected and cleaned in accordance with the *Clean Equipment Protocol for Industry* (Halloran, Anderson, and Tassie, 2013) which can be found here: https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/Clean-Equipment-Protocol_June2016_D3_WEB-1.pdf;
- Replace vegetative cover with topsoil and seed. It is recommended that a permanent seed mix comprised of primarily native species be utilized for all re-vegetation activities within the study area, watercourses, and riparian areas. This may include but is not necessarily limited to:
 - The Northern Ontario Mix offers similar qualities for re-establishment within a roadside environment (and reduced long-term maintenance). This mix contains mostly native species, with some non-native legumes included to help with the establishment of the planting;
 - Alternatively, a seed mix such as the OSC Rural Ontario Roadside Native Seed Mixture 8145 (<https://www.oscseeds.com/product/rural-ontario-roadside-native-mixture-8145/>) may also be utilized, as this seed mix contains a variety of native plant species able to establish and grow within a roadside environment;
- If there is insufficient time in the growing season for the seed to sprout, the site shall be stabilized with temporary erosion and sediment control measures and seeded in the following spring. It is important to note that many of the seed mixes outlined above are best established through fall seeding to allow normal dormancy and then germination the following spring as these species are adapted to the Ontario environment;
- It is recommended that cover be utilized for areas where seeding is required, given the sensitivities associated with the study area. Recommended covers include:
 - Straw mulch (where conditions permit);
 - Bonded Fiber Matrix or Fiber Reinforced Matrix (where conditions permit);
 - Erosion control blankets made of natural fiber (i.e., with no nylon or synthetic netting/materials etc.);
- Herbicides will not be used unless to control noxious and/or invasive plants such as common buckthorn;
- It is recommended that only locally appropriate native species be used for landscaping within the subject property. This would contribute to re-establishing native plants within the wider landscape and potentially have a positive impact for biodiversity (i.e., using native species for pollinators such as Monarchs and bees). Disturbed areas should be replanted with locally grown native species. Use of non-native plant material should be discouraged. Locally appropriate, native species are proposed to be planted as part of the Landscape Plan (details included in **Appendix E**).

- Due to the presence of Spongy Moth, it is recommended that protections are implemented to any deciduous trees planted as part of the landscape design. Due to the limited number of trees that would be planted and their size (i.e., small enough to access entire plant), hand removal of egg masses could be an effective practice to preventing defoliation of the planted trees. Burlap wraps around the trunk of the trees may also be effective in trapping the larvae (caterpillars) of the species (Invasive Species Centre, 2022).

6.3 Habitat for Species at Risk

Due to the presence of Monarchs within the study area, the seed mixes suggested in **Section 6.2** for seeding disturbed areas should include a variety of native wildflowers, including milkweed, to promote suitable habitat for the life processes of Monarchs

6.4 Wildlife and Significant Wildlife Habitat

To mitigate the cumulative and long-term impacts to the study area and adjacent areas, the following mitigation measures for wildlife should be implemented during the proposed development.

- In accordance with Appendix 10 of the *Environmental Impact Statement Guidelines* (City of Ottawa, 2015a) for the City of Ottawa and the MBCA, any required removal of vegetation should be completed prior to or after the bird nesting period of April 15 to September 15 of any given year to ensure migratory birds or their nests are not adversely impacted. In the event that vegetation removal will be required prior to September 15, but later than April 15, a visual inspection of the areas to be cleared should be conducted by a qualified avian specialist before disturbance to ensure that no birds are using the area for the purposes of nesting. Note: The *Canadian Wildlife Service does not support relying on inspections for migratory bird nests in such habitats due to the difficulty of locating all nests and risk to birds*; therefore, it is always a better option to clear vegetation outside of the breeding bird period. If migratory bird breeding and/or nesting activity is encountered at any time of year within the study area, an appropriate setback distance should be maintained from the nest/nesting birds. Works should not continue in the location of the nest until after it has been determined by an avian specialist that the young have fledged and vacated the nest and work areas. This is recommended in order to prevent negative impacts to migratory birds and other bird species, their nests, and eggs, which are protected under the MBCA or the FWCA; and
- In accordance with Table 1 of the City of Ottawa's *Protocol for Wildlife Protection during Construction* (2015b), thickets or woodlands should not be removed during sensitive times of year (i.e., mid-October through March for overwintering wildlife) until a biologist is retained to inspect the habitat for active nests or dens. If none are determined to be present, removal should occur within a few days of the inspection (the same day, if possible, during sensitive periods).

7.0 CONCLUSION

This EIS supports the proposed development of a self storage facility on the property at 273 & 275 Russ Bradley Road, Carp (City of Ottawa), legally known as “Part of Lot 13, Concession 3, Geographic Township of Huntley” given the condition that the mitigation measures recommended in this report are followed as part of the development. The design of the development will incorporate considerations that will help mitigate or offset impacts to habitat for fish, birds, and SAR insects. The development is not anticipated to result in negative impacts to natural heritage features within or adjacent to the study area including *significant wildlife habitat* as per *Section 2.1.5* and *habitat for endangered species and threatened species* as per *Section 2.1.7* of the PPS.

8.0 LIMITATIONS

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

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

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

9.0 REFERENCES

- Bird Studies Canada, Environment Canada's Canadian Wildlife Service, Ontario Nature, Ontario Field Ornithologists, and Ontario Ministry of Natural Resources (OBBA). 2006. *Atlas Data Summary*. Ontario Breeding Bird Atlas (OBBA) Website. 31 January 2008. <http://www.birdsontario.org/atlas/index.jsp>. Accessed 12 July 2022.
- Bird Studies Canada, Environment Canada's Canadian Wildlife Service, Ontario Nature, Ontario Field Ornithologists, and Ontario Ministry of Natural Resources. 2020. *Breeding Evidence Codes*. Ontario Breeding Bird Atlas (OBBA) Website. <https://www.bsc-eoc.org/dataentry/codes.jsp?page=breeding>. Accessed 12 July 2022.
- Blazing Star Environmental. 2022. *Survey Protocol for 2022 Western Chorus Frog Long-Term Monitoring Program*. Blazing Star Environmental. 13 p.
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- City of Ottawa. 2004. *Carp Road Corridor Community Development Plan*. City of Ottawa. 24 p.
- City of Ottawa. 2015a. *Environmental Impact Statements Guidelines*. City of Ottawa: Policy Development and Urban Design Branch. 79 p.
- City of Ottawa. 2015b. *Protocol for Wildlife Protection during Construction*. City of Ottawa: Planning and Growth Management. 17 p.
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APPENDIX A: TREE CONSERVATION REPORT

TREE CONSERVATION REPORT



273 & 275 Russ Bradley Road, Carp, Ontario
MP Project No.: CCO-22-1643

Prepared for:

Trevor Watkins
273 & 275 Russ Bradley Road
Carp, Ontario
K0A 1L0

Prepared by:

McINTOSH PERRY

McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R. 3
Carp, Ontario
K0A 1L0

TREE CONSERVATION REPORT

273 & 275 Russ Bradley Road

Prepared for:

Trevor Watkins
273 & 275 Russ Bradley Road
Carp, Ontario
K0A 1L0

Prepared by:

McINTOSH PERRY

McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R. 3
Carp, Ontario
K0A 1L0

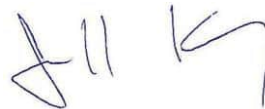
December 23, 2022



Written by: Erik Pohanka, B. Sc.
Biologist
McIntosh Perry Consulting Engineers Ltd.



Reviewed by: Christian Lyon
Environmental Project Manager
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Reviewed by: Jeff King
Vice President (Environmental)
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Appendices

Appendix A: Subject Property Photographs

1.0 INTRODUCTION

McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) has been retained by the property owner, Trevor Watkins, to complete a *Tree Conservation Report* in support of development of the subject property. The subject property is located at 273 & 275 Russ Bradley Road, Carp (City of Ottawa), and is legally known as Part of Lot 13, Concession 3 in the Geographic Township of Huntley. The subject property is a 2.5-hectare (ha) parcel of land with approximately 275 metres (m) of frontage on the west side of Carp Road and approximately 100 m of frontage on the south side of Russ Bradley Road.

This *Tree Conservation Report* has been prepared in accordance with the City of Ottawa's *Tree Protection* (By-law No. 2020-340). The report outlines the condition of all existing vegetation on-site, any impacts of the proposed development on the vegetation, and the associated mitigation measures recommended to minimize impacts and preserve conserved trees.

A tree inventory of the subject property was conducted on August 11, 2021, by McIntosh Perry staff (E. Pohanka, Terrestrial Biologist) to review trees within the subject property (where access permitted), including documenting conditions of the vegetation growing in the subject property.

The objectives of the *Tree Conservation Report* include the following:

- To describe the existing trees that are ≥ 10 cm diameter at breast height (DBH) growing on-site, including species composition, size (DBH), age, and condition and health of the trees;
- To identify vegetation that will be retained and the rationale to support this decision;
- To assess the impact of the development on the conserved portions of vegetation;
- To describe mitigation measures that will be used to promote the long-term survival of retained trees, and any other measures as required based on the site conditions;
- To describe protection measures being implemented on-site; and
- To provide a planting and/or compensation overview of the impacted tree(s).

2.0 EXISTING VEGETATION

A tree inventory and assessment were conducted by McIntosh Perry staff, (E. Pohanka) on August 11, 2021. The tree inventory and assessment included all trees located within the subject property. Access onto private adjacent properties prevented the trees from being assessed, but they were generally in good condition.. Photos of the tree investigation areas can be found in Appendix A.

The subject property is undeveloped in its entirety, consisting of vegetated areas in forested conditions. The subject property contains one (1) natural vegetation community that consists of a wooded area: Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) dominated by hybrid white willow (*Salix alba x fragilis*) and Manitoba maple (*Acer negundo*) in the west end of the study area.

The inventory data included tree species identification, a general health condition assessment, and data on tree DBH measurements. All specimens with a DBH of 10 cm or greater were included in the inventory. DBH measurements were taken at approximately 1.4 m above the ground surface at the base of each tree.

The tree health assessment was graded on a scale including Dead, Poor, Fair and Good based on characteristics such as trunk integrity, canopy structure and canopy vigour. Outlined below are the detailed guidelines utilized for the classification/condition rating:

Good: (Healthy)

No major branch mortality: the crown is reasonably normal with less than 25% branch or twig mortality; little to no evidence of decay.

Fair: (Light – Moderate Decline)

Branch mortality, twig dieback in 26-50% of the crown: broken branches or crown missing based on presence of old snags is 50% or less; decay evident.

Poor: (Severe Decline)

Branch mortality, 50% or more of the crown dead: broken branches or crown area missing based on presence of old snags in more than 50%; decay resulting in potential hazard.

Dead:

Tree is dead, standing and is considered a potential hazard to public health and safety.

3.0 TREE RESOURCE DESCRIPTION

The subject property consists of a forest of mature hybrid white willows and Manitoba maples in the west end of the study area. Subdominant species of trees included balsam poplar (*Populus balsamifera*). The species composition of the wooded area indicates historical clearing as the majority of the trees consist of non-native species such as Manitoba maple and hybrid white willow or balsam poplars (*Populus balsamifera*) which are considered pioneer species (typically one of the first tree species to colonize a recently cleared area). Table 1 outlines the inventoried trees that are within the subject property. The tree inventory included 107 trees within the subject property. The majority of the trees are native deciduous trees (63%), with some native deciduous trees such as balsam poplar and very few white ashes (*Fraxinus americana*) and white elm (*Ulmus americana*) (Figure 1).

Table 1: Tree Resource Composition

Tree No. ¹	Common Name	Scientific Name	Status	DBH (cm)	Ownership	Condition	Action
1	Manitoba Maple	<i>Acer negundo</i>	Non-Native	59	On-site	Good	Remove
2	Manitoba Maple	<i>Acer negundo</i>	Non-Native	47	On-site	Good	Remove
3	Balsam Poplar	<i>Populus balsamifera</i>	Native	23	On-site	Good	Remove
4	Balsam Poplar	<i>Populus balsamifera</i>	Native	33	On-site	Good	Remove
5	Balsam Poplar	<i>Populus balsamifera</i>	Native	17	On-site	Good	Remove
6	Balsam Poplar	<i>Populus balsamifera</i>	Native	34	On-site	Good	Remove
7	Balsam Poplar	<i>Populus balsamifera</i>	Native	38	On-site	Good	Remove
8	Balsam Poplar	<i>Populus balsamifera</i>	Native	26	On-site	Good	Remove
9	Balsam Poplar	<i>Populus balsamifera</i>	Native	25	On-site	Good	Remove
10	Balsam Poplar	<i>Populus balsamifera</i>	Native	41	On-site	Good	Remove
11	Balsam Poplar	<i>Populus balsamifera</i>	Native	30	On-site	Poor	Remove
12	Balsam Poplar	<i>Populus balsamifera</i>	Native	30	On-site	Good	Remove
13	Balsam Poplar	<i>Populus balsamifera</i>	Native	29	On-site	Good	Remove
14	Manitoba Maple	<i>Acer negundo</i>	Non-Native	34	On-site	Good	Remove
15	Manitoba Maple	<i>Acer negundo</i>	Non-Native	52	On-site	Good	Remove
16	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	77	On-site	Good	Remove
17	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	51	On-site	Good	Remove
18	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	55	On-site	Good	Remove
19	Balsam Poplar	<i>Populus balsamifera</i>	Native	21	On-site	Good	Remove
20	White Ash	<i>Fraxinus americana</i>	Native	27	On-site	Good	Remove
21	Balsam Poplar	<i>Populus balsamifera</i>	Native	58	On-site	Good	Remove
22	Balsam Poplar	<i>Populus balsamifera</i>	Native	57	On-site	Good	Remove
23	Balsam Poplar	<i>Populus balsamifera</i>	Native	23	On-site	Good	Remove
24	Balsam Poplar	<i>Populus balsamifera</i>	Native	18	On-site	Good	Remove
25	Balsam Poplar	<i>Populus balsamifera</i>	Native	17	On-site	Poor	Remove
26	Balsam Poplar	<i>Populus balsamifera</i>	Native	19	On-site	Good	Remove

Table 1: Tree Resource Composition

Tree No. ¹	Common Name	Scientific Name	Status	DBH (cm)	Ownership	Condition	Action
27	Balsam Poplar	<i>Populus balsamifera</i>	Native	18	On-site	Good	Remove
28	Balsam Poplar	<i>Populus balsamifera</i>	Native	21	On-site	Good	Remove
29	Balsam Poplar	<i>Populus balsamifera</i>	Native	28	On-site	Good	Remove
30	Balsam Poplar	<i>Populus balsamifera</i>	Native	32	On-site	Good	Remove
31	Balsam Poplar	<i>Populus balsamifera</i>	Native	19	On-site	Good	Remove
32	Balsam Poplar	<i>Populus balsamifera</i>	Native	18	On-site	Good	Remove
33	Balsam Poplar	<i>Populus balsamifera</i>	Native	24	On-site	Good	Remove
34	White Ash	<i>Fraxinus americana</i>	Native	17	On-site	Good	Remove
35	Balsam Poplar	<i>Populus balsamifera</i>	Native	23	On-site	Good	Remove
36	Balsam Poplar	<i>Populus balsamifera</i>	Native	16	On-site	Good	Remove
37	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	18	On-site	Good	Remove
38	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	15	On-site	Dead	Remove
39	Balsam Poplar	<i>Populus balsamifera</i>	Native	24	On-site	Good	Remove
40	Balsam Poplar	<i>Populus balsamifera</i>	Native	21	On-site	Good	Remove
41	Balsam Poplar	<i>Populus balsamifera</i>	Native	23	On-site	Good	Remove
42	Balsam Poplar	<i>Populus balsamifera</i>	Native	19	On-site	Good	Remove
43	White Ash	<i>Fraxinus americana</i>	Native	39	On-site	Dead	Remove
44	Manitoba Maple	<i>Acer negundo</i>	Non-Native	32	On-site	Good	Remove
45	Balsam Poplar	<i>Populus balsamifera</i>	Native	18	On-site	Good	Remove
46	Balsam Poplar	<i>Populus balsamifera</i>	Native	21	On-site	Good	Remove
47	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	25	On-site	Good	Remove
48	Manitoba Maple	<i>Acer negundo</i>	Non-Native	18	On-site	Good	Remove
49	Manitoba Maple	<i>Acer negundo</i>	Non-Native	36	On-site	Good	Remove
50	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	78	On-site	Good	Remove
51	Manitoba Maple	<i>Acer negundo</i>	Non-Native	23	On-site	Good	Remove
52	Manitoba Maple	<i>Acer negundo</i>	Non-Native	16	On-site	Good	Remove
53	Manitoba Maple	<i>Acer negundo</i>	Non-Native	30	On-site	Good	Remove
54	Manitoba Maple	<i>Acer negundo</i>	Non-Native	21	On-site	Good	Remove
55	Manitoba Maple	<i>Acer negundo</i>	Non-Native	21	On-site	Good	Remove
56	White Ash	<i>Fraxinus americana</i>	Native	14	On-site	Dead	Remove
57	Manitoba Maple	<i>Acer negundo</i>	Non-Native	13	On-site	Poor	Remove
58	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	137	On-site	Good	Remove
59	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	138	On-site	Good	Remove
60	Manitoba Maple	<i>Acer negundo</i>	Non-Native	18	On-site	Good	Remove
61	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	147	On-site	Good	Remove
62	Manitoba Maple	<i>Acer negundo</i>	Non-Native	20	On-site	Good	Remove

Table 1: Tree Resource Composition

Tree No. ¹	Common Name	Scientific Name	Status	DBH (cm)	Ownership	Condition	Action
63	Manitoba Maple	<i>Acer negundo</i>	Non-Native	30	On-site	Good	Remove
64	Manitoba Maple	<i>Acer negundo</i>	Non-Native	20	On-site	Good	Remove
65	Manitoba Maple	<i>Acer negundo</i>	Non-Native	34	On-site	Good	Remove
66	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	28	On-site	Poor	Remove
67	Manitoba Maple	<i>Acer negundo</i>	Non-Native	23	On-site	Good	Remove
68	White Elm	<i>Ulmus americana</i>	Native	32	On-site	Good	Remove
69	Manitoba Maple	<i>Acer negundo</i>	Non-Native	14	On-site	Good	Remove
70	Manitoba Maple	<i>Acer negundo</i>	Non-Native	11	On-site	Good	Remove
71	Manitoba Maple	<i>Acer negundo</i>	Non-Native	38	On-site	Good	Remove
72	Manitoba Maple	<i>Acer negundo</i>	Non-Native	13	On-site	Dead	Remove
73	Manitoba Maple	<i>Acer negundo</i>	Non-Native	25	On-site	Good	Remove
74	Manitoba Maple	<i>Acer negundo</i>	Non-Native	23	On-site	Good	Remove
75	Manitoba Maple	<i>Acer negundo</i>	Non-Native	38	On-site	Good	Remove
76	Manitoba Maple	<i>Acer negundo</i>	Non-Native	59	On-site	Good	Remove
77	Manitoba Maple	<i>Acer negundo</i>	Non-Native	24	On-site	Good	Remove
78	Manitoba Maple	<i>Acer negundo</i>	Non-Native	26	On-site	Good	Remove
79	Manitoba Maple	<i>Acer negundo</i>	Non-Native	15	On-site	Good	Remove
80	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	25	On-site	Good	Remove
81	Manitoba Maple	<i>Acer negundo</i>	Non-Native	15	On-site	Poor	Remove
82	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	21	On-site	Good	Remove
83	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	35	On-site	Good	Remove
84	Manitoba Maple	<i>Acer negundo</i>	Non-Native	14	On-site	Good	Remove
85	Manitoba Maple	<i>Acer negundo</i>	Non-Native	32	On-site	Good	Remove
86	Manitoba Maple	<i>Acer negundo</i>	Non-Native	15	On-site	Good	Remove
87	Manitoba Maple	<i>Acer negundo</i>	Non-Native	11	On-site	Good	Remove
88	Manitoba Maple	<i>Acer negundo</i>	Non-Native	13	On-site	Good	Remove
89	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	82	On-site	Good	Remove
90	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	83	On-site	Good	Remove
91	Manitoba Maple	<i>Acer negundo</i>	Non-Native	15	On-site	Good	Remove
92	White Elm	<i>Ulmus americana</i>	Native	15	On-site	Good	Remove
93	Manitoba Maple	<i>Acer negundo</i>	Non-Native	27	On-site	Good	Remove
94	Manitoba Maple	<i>Acer negundo</i>	Non-Native	14	On-site	Good	Remove
95	Manitoba Maple	<i>Acer negundo</i>	Non-Native	11	On-site	Good	Remove
96	Manitoba Maple	<i>Acer negundo</i>	Non-Native	16	On-site	Good	Remove
97	Manitoba Maple	<i>Acer negundo</i>	Non-Native	15	On-site	Good	Remove
98	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	85	On-site	Poor	Remove

Table 1: Tree Resource Composition

Tree No. ¹	Common Name	Scientific Name	Status	DBH (cm)	Ownership	Condition	Action
99	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	22	On-site	Good	Remove
100	Manitoba Maple	<i>Acer negundo</i>	Non-Native	18	On-site	Good	Remove
101	Manitoba Maple	<i>Acer negundo</i>	Non-Native	13	On-site	Good	Remove
102	Manitoba Maple	<i>Acer negundo</i>	Non-Native	23	On-site	Good	Remove
103	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	110	On-site	Good	Remove
104	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	101	On-site	Good	Remove
105	Manitoba Maple	<i>Acer negundo</i>	Non-Native	11	On-site	Good	Remove
106	Manitoba Maple	<i>Acer negundo</i>	Non-Native	18	On-site	Good	Remove
107	Hybrid White Willow	<i>Salix abla x fragilis</i>	Non-Native	28	On-site	Good	Remove

¹refer to Figure 1 for an overview of tree locations

The health status of the majority of the inventoried trees was Good (97). Very few were Poor (6) or Dead (4). Approximately 37% of the trees were native. The trees were composed primarily of tall, mature Manitoba maples and hybrid white willows (approximately 63%) with mature balsam polar as the subdominant canopy (approximately 31 %). White ash (approximately 4%) and white elm (approximately 2%) were very minor in the species composition of the wooded area.

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LEGEND

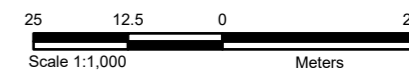
Study Area

Tree inventory

- Balsam Poplar
- Hybrid White Willow
- Manitoba Maple
- White Ash
- White Elm

REFERENCE

GIS data provided by the Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry, 2022.



CLIENT:	TREVOR WATKINS		
PROJECT:	TREE CONSERVATION REPORT		
TITLE:	TREE INVENTORY		
McINTOSH PERRY <small>115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742 www.mcintoshperry.com</small>	PROJECT NO: CCO-22-1643	FIGURE:	1
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	GIS	MG	
	Checked By	EP	

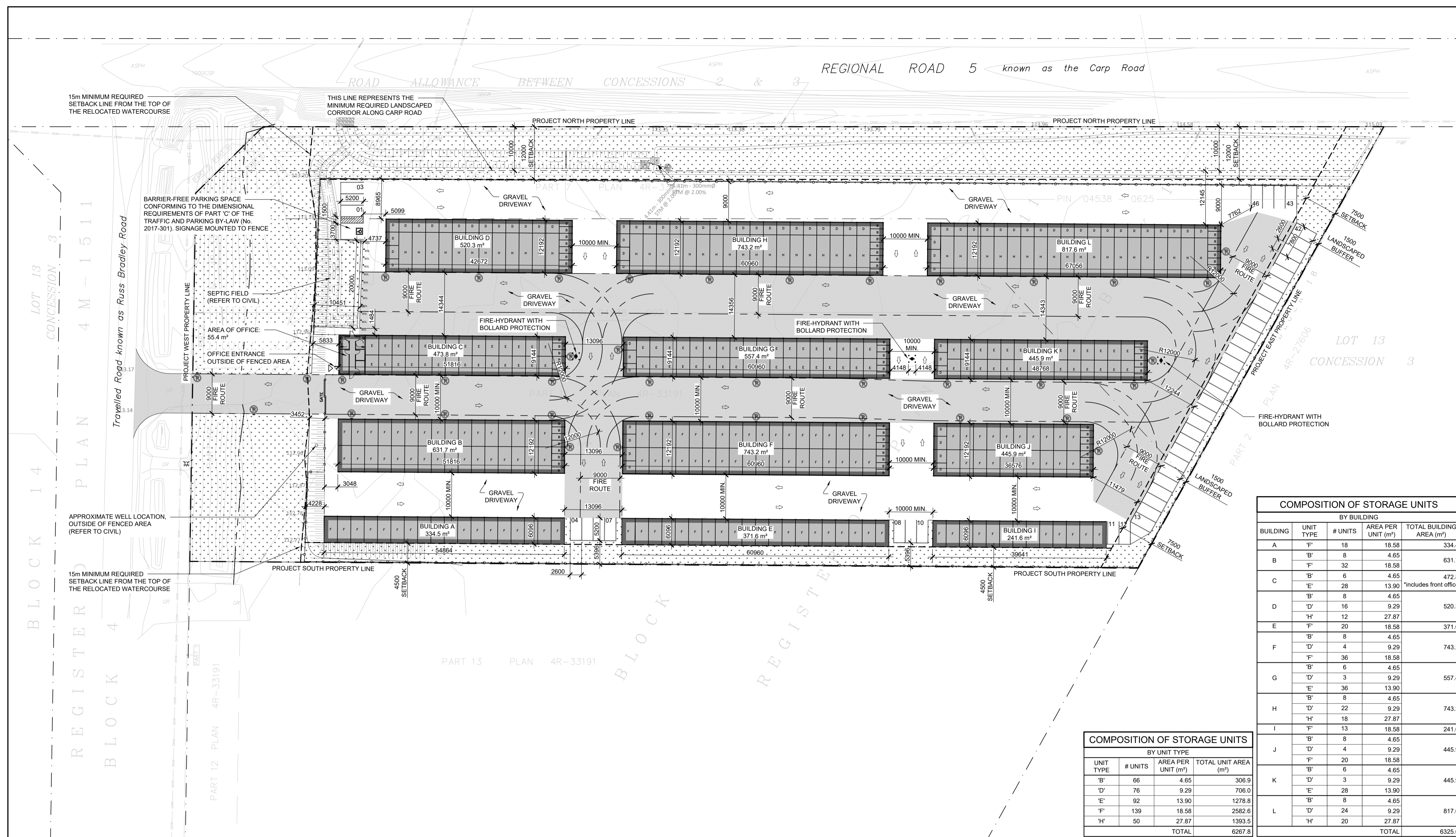
4.0 PROPOSED DEVELOPMENT AND CONSERVED VEGETATION

The proponent is proposing to develop the study area into a self storage facility complex and associated gravel areas throughout the extent of the study area. Approximately 2.4 ha of the study area is proposed to be cleared as part of the development, including all 107 trees inventoried. The proposed development within the study area involves the following:

- Clearing of approximately 2.4 ha of the subject property to construct a self storage facility. The self storage facility will include twelve (12) single-storey self storage buildings (including a total of 423 individual storage units) with a total footprint of 6,326 m² and a septic field and associated swale in the northeast end of the developable envelope;
- Surface hardening (i.e., gravel) of 11,024 m² of the subject property where the storage units will be located. This will include 46 parking spaces as well as fire routes; and
- Landscaping of 6,901 m² around the boundaries of the subject property to provide setbacks from the tributary of Carp River, Carp Road, and the Fresh – Moist Willow Lowland Deciduous Forest Type remaining directly southwest of the subject property.

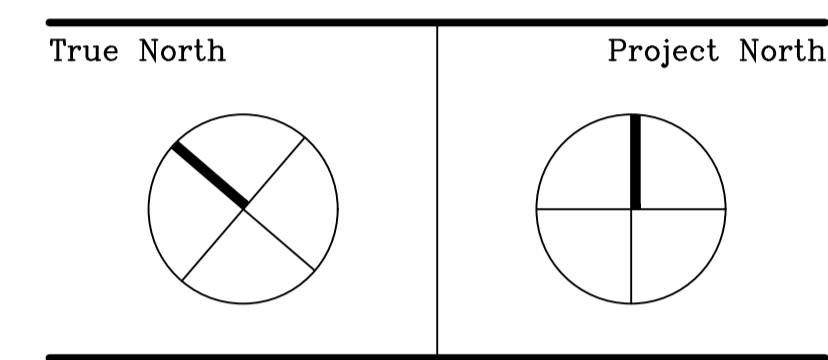
The work is proposed to be conducted in 2023. Figure 2 was provided by the proponent which outlines the site plan of the self storage facility.

THIS SITE PLAN HAS BEEN BASED ON THE SURVEYOR'S TOPOGRAPHY SKETCH PREPARED BY MCINTOSH PERRY SURVEYING INC. DATED OCTOBER 26th, 2021.

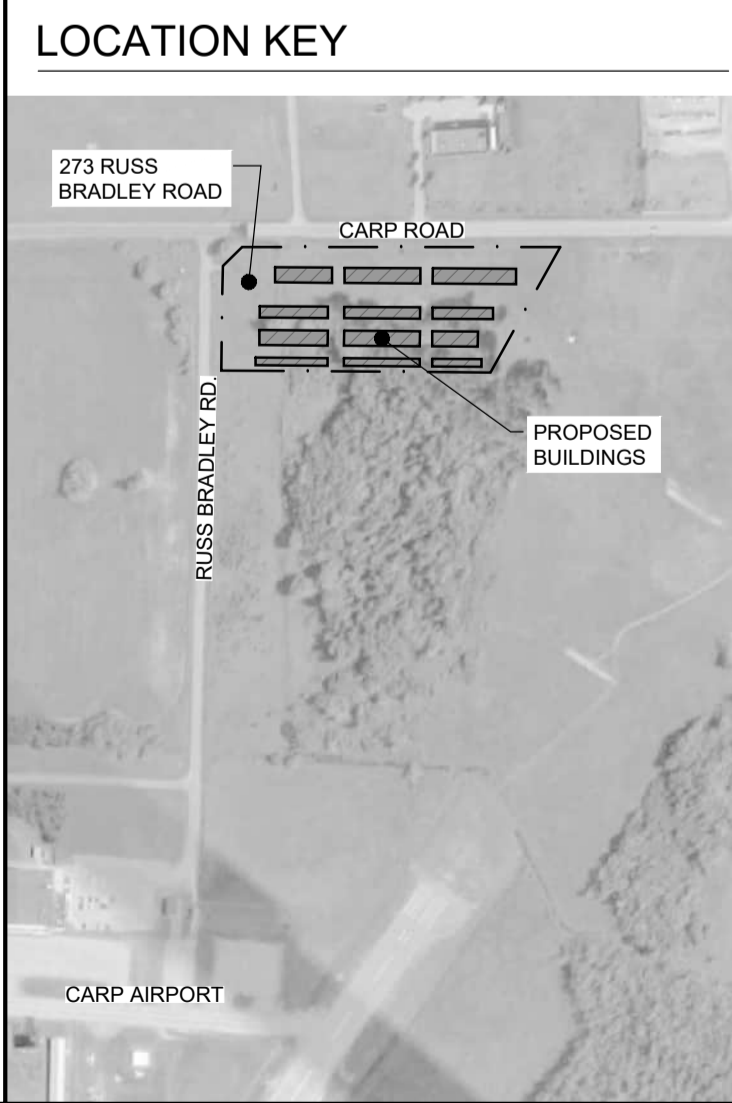
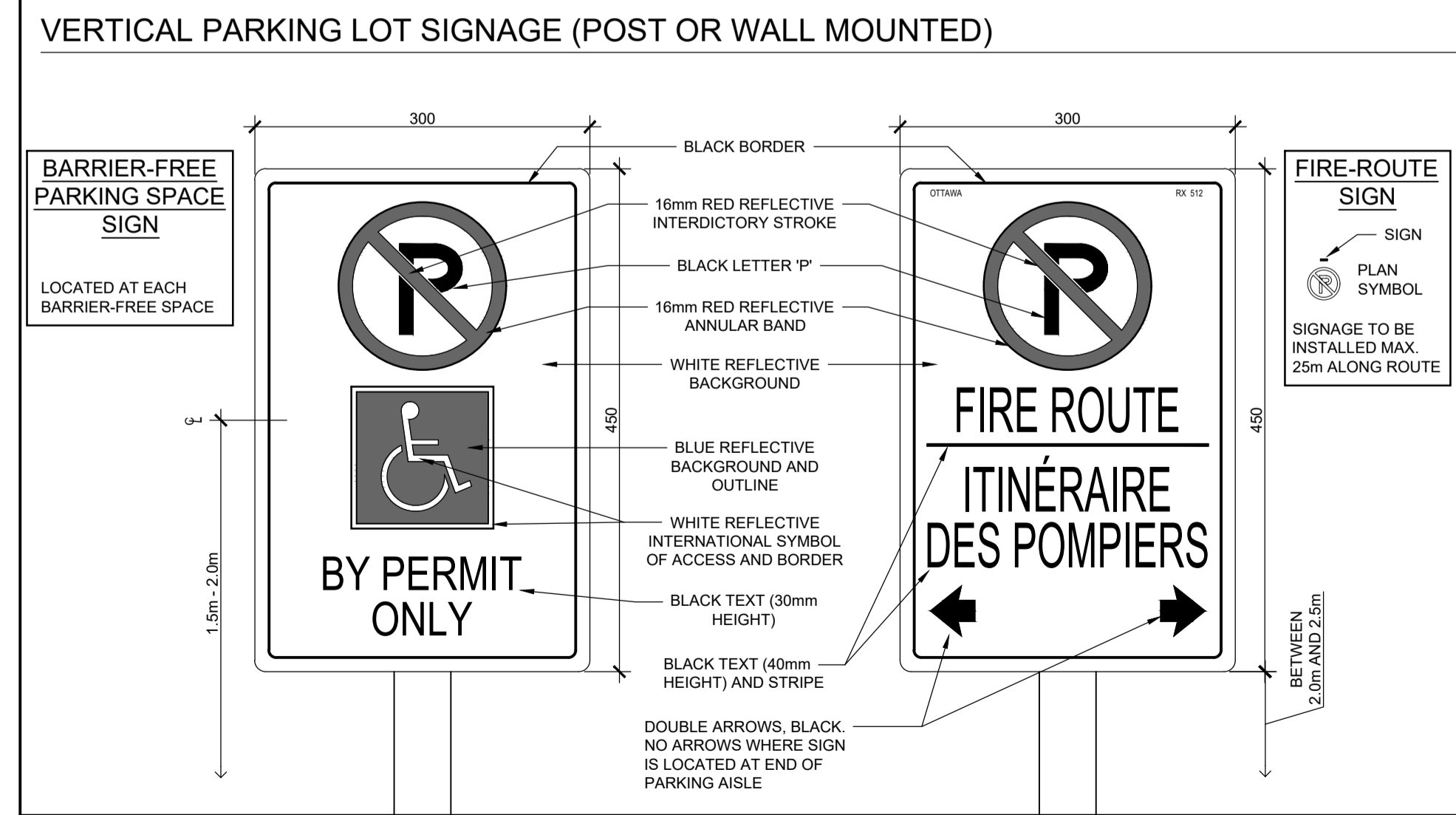


COMPOSITION OF STORAGE UNITS				
BY BUILDING				
BUILDING	UNIT TYPE	# UNITS	AREA PER UNIT (m²)	TOTAL BUILDING AREA (m²)
A	'F'	18	18.58	334.4
B	'B'	8	4.65	631.7
	'F'	32	18.58	
C	'B'	6	4.65	472.8
	'E'	28	13.90	*includes front office
D	'B'	8	4.65	520.3
	'D'	16	9.29	
E	'H'	12	27.87	371.6
	'F'	20	18.58	
F	'B'	8	4.65	743.2
	'D'	4	9.29	
G	'F'	36	18.58	557.4
	'B'	6	4.65	
H	'D'	3	9.29	557.4
	'E'	36	13.90	
I	'B'	8	4.65	743.2
	'D'	22	9.29	
J	'H'	18	27.87	241.6
	'F'	13	18.58	
K	'B'	8	4.65	445.9
	'D'	4	9.29	
L	'F'	20	18.58	445.9
	'B'	6	4.65	
M	'D'	3	9.29	445.9
	'E'	28	13.90	
N	'B'	8	4.65	817.6
	'D'	24	9.29	
O	'H'	20	27.87	817.6
	'F'	24	9.29	
TOTAL				6325.6

COMPOSITION OF STORAGE UNITS			
BY UNIT TYPE			
UNIT TYPE	# UNITS	AREA PER UNIT (m²)	TOTAL UNIT AREA (m²)
'B'	66	4.65	306.9
'D'	76	9.29	706.0
'E'	92	13.90	1278.8
'F'	139	18.58	2582.6
'H'	50	27.87	1393.5
TOTAL			6267.8



Revisions			
No.	By	Description	Date
05	JF	ISSUED FOR SITE PLAN CONTROL	16 DEC 2022
04	JF	ISSUED FOR COORDINATION	13 DEC 2022
03	JF	ISSUED FOR COORDINATION	27 SEP 2022
02	JF	ISSUED FOR REVIEW	17 JUN 2022
01	JF	ISSUED FOR CLIENT REVIEW	11 JAN 2022



ZONING INFORMATION

PER THE CITY OF OTTAWA ZONING BY-LAW 2008-250 CONSOLIDATION

LEGAL DESCRIPTION: PORTIONS OF PARCEL 04538-0625, PARCEL 04538-0924 AND ABUTTING LANDS. PARTS 8 THROUGH 11, PLAN 4R-33191 BEING PART OF BLOCKS 15 AND 16, REGISTERED PLAN 4M-1511, CITY OF OTTAWA

PROPOSAL: NEW GROSS: 6,328 m² [68,093 ft²] SINGLE STOREY SELF STORAGE UNITS OVER 12 BUILDINGS. AN OFFICE, UTILITIES ROOM, AND WASHROOMS WILL BE PROVIDED IN THE BUILDING NEAREST THE MAIN DRIVEWAY ACCESS.

ZONING: DESIGNATION: (T1B) AIR TRANSPORTATION FACILITY SUBZONE (PART 12)

ZONING PROVISIONS (PER TABLES 207 & 208):

- LOT AREA (MIN.) = NO MINIMUM
- ACTUAL LOT AREA = 24,247 m²
- LOT FRONTAGE (MIN.) = NO MINIMUM
- ACTUAL FRONTAGE = 99.1 m
- SETBACKS (MIN.):
 - FRONT = 12.0 m
 - CORNER SIDE = 12.0 m
 - INTERIOR SIDE = 4.5 m
 - REAR = 7.5 m
- MINIMUM SETBACK FROM WATERCOURSE: 15.0 m FROM THE TOP OF BANK, PER SCHEDULE H OF SUBDIVISION AGREEMENT
- MINIMUM LANDSCAPED BUFFER ABUTTING CARP ROAD = 10.0 m
- MIN. % OF PARKING PROVIDED AS LANDSCAPED AREA = 15% MIN.
 - REQUIRED: = 93.15 m²
 - ACTUAL: = 6,140.4 m²

LOADING REQUIREMENTS: (PER TABLE 113A UNDER PART 4)

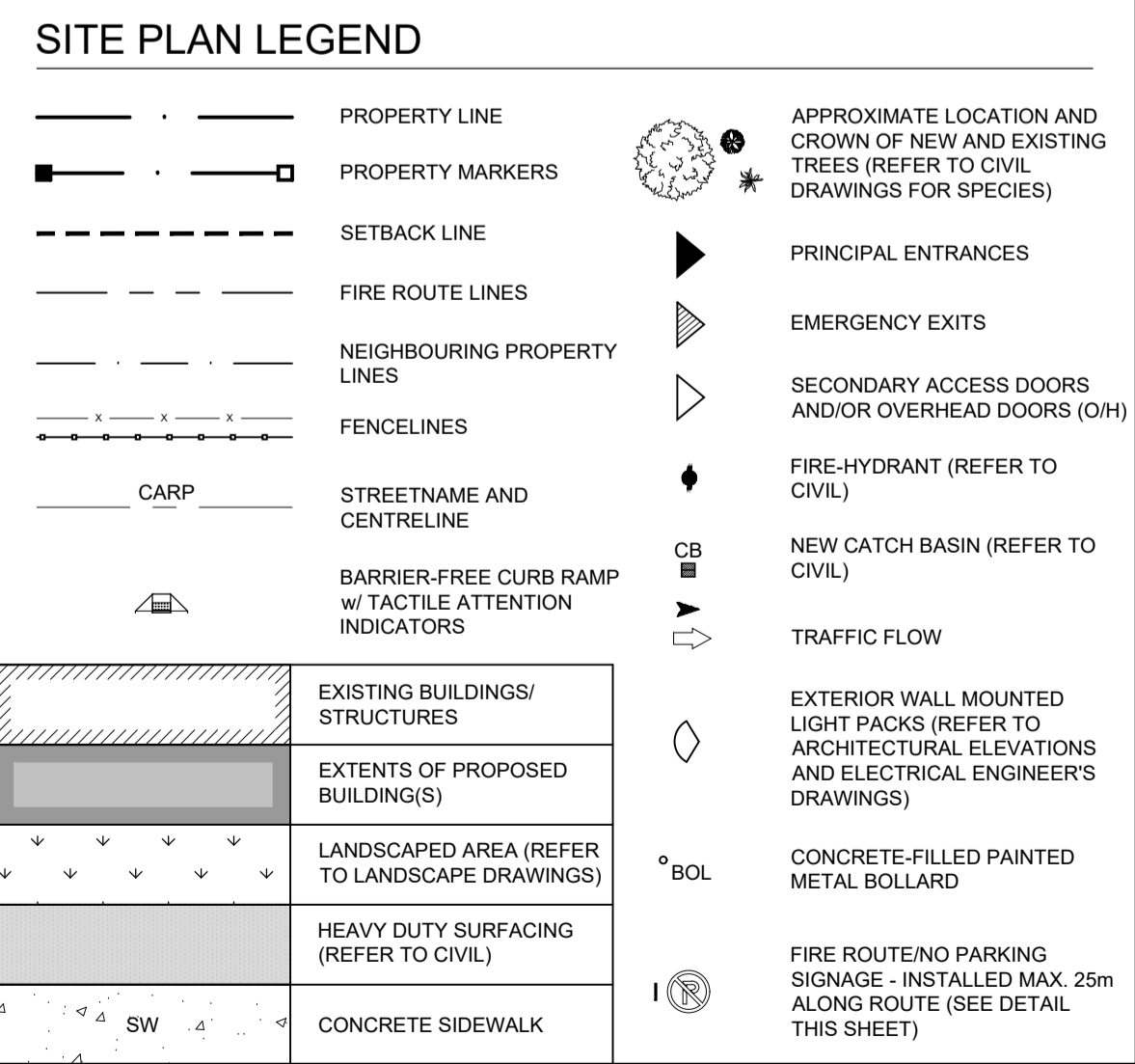
BASED ON THE GROSS FLOOR AREA OF THE BUILDING, A MINIMUM OF 1 STANDARD PLUS 1 OVERSIZED LOADING SPACES ARE REQUIRED.

PARKING: (PER TABLE 101 UNDER PART 4)

REQUIRED: 46 SPACES
PROVIDED: 46 SPACES

RESERVED BARRIER-FREE PARKING SPACES:

REQUIRED: 1 SPACES
PROVIDED: 1 SPACES



Project
SELF STORAGE SITE PLAN REVIEW

273 & 275 RUSS BRADLEY RD., CARP, ON

Drawing
PROPOSED SITE PLAN

Scale AS NOTED

Drawn J.F.

Checked J.F. / C.D.

Project No. 21-170

Date DECEMBER 2021

Drawing No. SP-A01

Stamp: ONTARIO ASSOCIATION OF ARCHITECTS, CHRISTOPHER LEE DEIMLING LICENCE 6239

5.0 TREE PROTECTION MEASURES

Tree protection measures described in this section are provided not only to ensure tree survival during the construction period, but also to ensure that trees will continue to grow and remain healthy. The tree protection strategy is to create a safe environment during the construction period while also preserving the trees and ensuring that they do not become a hazard in the long-term. Trees can be damaged in a number of ways during construction. It is recommended that the contractor take every precaution necessary to prevent damage to the trees to be retained/conserved.

5.1 Temporary Tree Protection Fencing

The most common injury to a tree is to the crown or trunk. These injuries are visible and permanent and, in some cases, can be fatal to the tree. The roots are susceptible to physical injury resulting from cutting of the roots, soil compaction and/or smothering of the roots.

To ensure the protection of the root system of trees to be retained outside of the limits of development, temporary tree protection fencing should be erected at the critical root zone (CRZ) of trees located inside or adjacent to the construction area. The CRZ is defined under the City of Ottawa's *Tree Protection* (By-law No. 2020-340) as "... the area of land within a radius of ten (10) cm from the trunk of a tree for every one (1) cm of trunk diameter." Temporary fencing is proposed surrounding the perimeter of the study area which will sufficiently protect the retained trees that are adjacent to the limits of development.

5.2 Tree Pruning

Prior to construction, any trees that have branches in the way of the proposed development should be pruned by a Certified Arborist. Pruning should not occur until after the leaves have come out in the spring. At this time, dead wood and hazardous limbs should also be removed; however, pruning of live branches should be avoided unless necessary.

Similarly, any roots that are partially exposed, due to earthworks, should be pruned by hand if possible, following standard arboricultural practices. Roots that are exposed due to earthworks should be covered with native topsoil immediately to ensure that the roots do not dry out or have further damage occur to them. Root pruning should be completed by a Certified Arborist.

5.3 Tree Monitoring

Trees located adjacent to construction works will experience a change in their immediate environment. As a result, tree health should be monitored. However, adjacent trees that may experience changes in health conditions are located on adjacent property. Monitoring of these trees will only be feasible from the subject property.

5.4 Wildlife Protection

The nests and eggs of many species of birds are protected under federal and/or provincial legislation (i.e., *Migratory Bird Convention Act*, *Fish and Wildlife Conservation Act*). Due to the presence of several migratory and non-

migratory birds that receive protection under federal and provincial legislation within the wooded area, vegetation clearing must occur outside of the bird nesting window of April 15 to September 15 to avoid contravention of the *Migratory Bird Convention Act, 1994* (MBCA) and *Fish and Wildlife Conservation Act, 1997* (FWCA). Once vegetation clearing has occurred outside of this timing window, the remaining work (which will be relatively short in duration and low intensity) can proceed within the timing window with a low likelihood of negative impacts to birds.

6.0 RECOMMENDATIONS

The subject property is zoned as 'T1 - Air Transportation Facility Zone, Subzone B' and has no 'Identified Natural Heritage System Features' under the *Comprehensive Zoning By-law* (By-law No. 2008-250) (City of Ottawa, 2021). The City of Ottawa *Tree Protection By-law* (No. 2020-340) does not indicate that tree removal on private property in rural areas requires compensation planting or cash-in-lieu. Although no compensation plantings or cash-in-lieu is required for the tree removals in the subject area, the following measures are recommended:

- Natural areas to be retained are to be isolated by sturdy construction fencing or similar barriers at least 1 m in height during any future construction in order to ensure their retention;
- Replace vegetative cover with topsoil and seed. It is recommended that a permanent seed mix comprised of primarily native species be utilized for all re-vegetation activities within the study area, watercourses, and riparian areas. This may include but is not necessarily limited to:
 - The Northern Ontario Mix offers similar qualities for re-establishment within a roadside environment (and reduced long-term maintenance). This mix contains mostly native species, with some non-native legumes included to help with the establishment of the planting;
 - Alternatively, a seed mix such as the OSC Rural Ontario Roadside Native Seed Mixture 8145 (<https://www.oscseeds.com/product/rural-ontario-roadside-native-mixture-8145/>) may also be utilized, as this seed mix contains a variety of native plant species able to establish and grow within a roadside environment;
- If there is insufficient time in the growing season for the seed to sprout, the site shall be stabilized with temporary erosion and sediment control measures and seeded in the following spring. It is important to note that many of the seed mixes outlined above are best established through fall seeding to allow normal dormancy and then germination the following spring as these species are adapted to the Ontario environment;
- It is recommended that cover be utilized for areas where seeding is required, given the sensitivities associated with the study area. Recommended covers include:
 - Straw mulch (where conditions permit);
 - Bonded Fibre Matrix or Fibre Reinforced Matrix (where conditions permit);
 - Erosion control blankets made of natural fibre (i.e., with no nylon or synthetic netting/materials etc.);
- A Landscape Plan has been prepared which includes proposed planting beds along the watercourse banks consisting of a variety of native deciduous and coniferous tree and shrub species. These planting beds will also extend on the east side of the development and include the Retention Basin Seed Mix (No. 8220 from OSC) on the east side of the development to stabilize soils and promote herbaceous growth. Rural Ontario Roadside Seed Mix (No. 8145 from OSC) will be used on the west and north sides of the development and will be maintained as a 'No Mow Zone'. The Landscape Plan proposes to plant the following native trees and shrubs:

- A total of ten (10) ball and burlap (60 mm calibre) deciduous trees including the following species: 'Autumn Blaze' Freeman maple (*Acer x freemanii* 'Autumn Blazed'), bur oak (*Quercus macrocarpa*), common hackberry (*Celtis occidentalis*), Kentucky Coffee-Tree (*Gymnocladus dioica*), red oak (*Quercus rubra*), and sugar maple (*Acer saccharum*);
- A total of 750 plugs (30 cm height) of staghorn sumac (*Rhus typhina*);
- A total of 200 potted deciduous and coniferous trees and shrubs (varying from 30 cm to 100 cm in height) including the following species: alternate-leaved dogwood (*Cornus alternifolia*); balsam fir (*Abies balsamea*); bitternut hickory (*Carya cordiformis*); black cherry (*Prunus serotina*); black spruce (*Picea mariana*); bur oak; Canada serviceberry (*Amelanchier canadensis*); common hackberry; eastern hemlock (*Tsuga canadensis*); eastern red-cedar (*Juniperus virginiana*); eastern white pine (*Pinus strobus*); gray dogwood (*Cornus racemosa*); ironwood (*Ostrya virginiana*); nannyberry (*Viburnum lentago*); paper birch (*Betula papyrifera*); pin cherry (*Prunus pensylvanica*); red maple (*Acer rubrum*); red oak; shagbark hickory (*Carya ovata*); staghorn sumac; striped maple (*Acer pensylvanicum*); sugar maple; swamp white oak (*Quercus bicolor*); tamarack (*Larix laricina*); white oak (*Quercus alba*); white spruce (*Picea glauca*);
- Due to the presence of Spongy Moth, it is recommended that protection is implemented to any deciduous trees planted as part of the landscape design. Due to the limited number of trees that would be planted and their size (i.e., small enough to access entire plant), hand removal of egg masses could be an effective practice to preventing defoliation of the planted trees. Burlap wraps around the trunk of the trees may also be effective in trapping the larvae (caterpillars) of the species (Invasive Species Centre, 2022).

7.0 LIMITING TERMS AND CONDITIONS

The assessment of the trees presented within this report have been made using a visual examination of the above-ground parts of each tree for structural defects, external indications of decay, evidence of insect presence, and discoloured foliage. None of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour are constantly changing. They are not immune to changes in site conditions or seasonal variations in the weather.

While reasonable efforts have been made to ensure the trees recommended for retention are healthy, no guarantees are offered or implied, that these trees or any part of them will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviours of a single tree or group of trees in all circumstances. Every effort has been made to ensure that this assessment is reasonably accurate; however, trees should be re-assessed periodically.

APPENDIX A: SUBJECT PROPERTY PHOTOGRAPHS



Photo 1: View of the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) dominated by Manitoba maples and hybrid white willows. 11 August 2021.



*Photo 2: View of a hybrid white willow (*Salix alba* x *fragilis*) which was part of the dominant canopy in the study area. 11 August 2021.*

APPENDIX B: REGULATORY AGENCY CORRESPONDENCE

Erik Pohanka

From: Christian Lyon
Sent: July 12, 2022 2:26 PM
To: Erik Pohanka
Subject: FW: Information Request Trevor Watkins EIS and TCR
Attachments: 1500 Thomas Argue Road Pre-con Meeting Minutes June 3, 2021.pdf

From: Kelly Stiles <kstiles@mvc.on.ca>
Sent: August 31, 2021 3:08 PM
To: Riley Rutherford <r.rutherford@mcintoshperry.com>
Cc: Christian Lyon <C.Lyon@McIntoshPerry.com>; Erica Ogden <eogden@mvc.on.ca>
Subject: RE: Information Request Trevor Watkins EIS and TCR

Thank you Riley, the map helps confirm that it is the Russ Bradley area I was thinking about. We do not have any in-house fish data for the watercourse that is parallel to the south side of Russ Bradley Road but it is assumed to be fish habitat. In 2020 we issued a permit for the relocation and enhancement of the watercourse.

Our planner, Erica Ogden (cc'd), has participated in pre-consultation for this site. See attached for meeting notes regarding MVCA and City environmental planning requirements. Below is an excerpt from the MVCA comments for your review and incorporation when preparing the EIS:

- The watercourse on the property is regulated by the Mississippi Valley Conservation Authority (MVCA) under Ontario Regulation 153/06, *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*. Under Ontario Regulation 153/06, written permission is required from the MVCA prior to the initiation of development (which includes construction, site grading and the placement or removal of fill) within an area regulated by the Conservation Authority as well as straightening, changing, diverting or interfering in any way with the existing channel or the shoreline of a watercourse.
- MVCA has issued a permit (W19/283, expiry February 5, 2022) for the watercourse realignment along Russ Bradley Road. With the permit a development setback was established from the realigned watercourse. The crossing location for access to Russ Bradley Road was also established. Should any further alteration to the watercourse be required (e.g. culvert installation, stormwater outlet), an additional permit from the Conservation Authority would be required.
- The development setbacks from the watercourse must be met and the plantings required through the watercourse realignment maintained.
- A stormwater management report will be required with the site plan submission:
 - o The water quality requirement is an enhanced level of protection, 80 % total suspended solids removal
 - o The property is within the Carp River Watershed Subwatershed Study area which has annual infiltration targets as outlined below. Existing infiltration rates on site should be assessed and maintained post development.
 - High groundwater recharge area 262mm/year infiltration

If you have any further questions please let me know.

Have a nice day,

Kelly Stiles | Aquatic Biologist | Mississippi Valley Conservation Authority
10970 Highway 7, Carleton Place, Ontario K7C 3P1
www.mvc.on.ca | t. 613 253 0006 ext. 234 | f. 613 253 0122 | kstiles@mvc.on.ca

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From: Riley Rutherford <r.rutherford@mcintoshperry.com>
Sent: Tuesday, August 31, 2021 11:31 AM
To: Kelly Stiles <kstiles@mvc.on.ca>
Cc: Christian Lyon <C.Lyon@McIntoshPerry.com>
Subject: RE: Information Request Trevor Watkins EIS and TCR

Hi Kelly,

Please see the below image for reference. The proposed works is within the orange outlined area and is not associated with the Carp Airport property development. Please let me know if you have any more questions.



Riley Rutherford

Junior Biologist
2010 Winston Park Drive, Suite 400, Oakville, ON, L6H 5R7
T. 289.351.3058 | C. 647.210.4413
r.rutherford@mcintoshperry.com | www.mcintoshperry.com



From: Kelly Stiles <kstiles@mvc.on.ca>
Sent: August 31, 2021 9:17 AM
To: Riley Rutherford <r.rutherford@mcintoshperry.com>
Subject: RE: Information Request Trevor Watkins EIS and TCR

Thank you Riley, Is this associated with the parcels south of Russ Bradley Rd or is this another component of the Carp Airport property development?

Kelly Stiles | Aquatic Biologist | Mississippi Valley Conservation Authority
10970 Highway 7, Carleton Place, Ontario K7C 3P1
www.mvc.on.ca | t. 613 253 0006 ext. 234 | f. 613 253 0122 | kstiles@mvc.on.ca



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From: Riley Rutherford <r.rutherford@mcintoshperry.com>
Sent: Monday, August 30, 2021 7:45 AM
To: Kelly Stiles <kstiles@mvc.on.ca>
Subject: Re: Information Request Trevor Watkins EIS and TCR

Good morning Kelly,

The property is located at 1500 Thomas Argue road, and we are completing an Environmental Impact Statement (EIS), and a Tree Conservation Report (TCR). For this project the applicant (Trevor Watkins) proposes to build in phases, and operate a fully automated indoor/outdoor self-storage facility for vehicles, boats, recreational vehicles and other personal items.

Sorry I didn't get a chance to respond on Friday, I was in the field for the day.

Please reach out if you need any more information

Riley Rutherford

Junior Biologist
2010 Winston Park Drive, Suite 400, Oakville, ON, L6H 5R7
T. 289.351.3058 | **C.** 647.210.4413
r.rutherford@mcintoshperry.com | www.mcintoshperry.com



From: Kelly Stiles <kstiles@mvc.on.ca>
Sent: Friday, August 27, 2021, 8:27 a.m.
To: Riley Rutherford
Subject: RE: Information Request Trevor Watkins EIS and TCR

Good morning Riley,
Could you please send me an address for the property you are discussing below?
Also, what type of project is this work for?

Thank you,

Kelly Stiles | Aquatic Biologist | Mississippi Valley Conservation Authority
10970 Highway 7, Carleton Place, Ontario K7C 3P1
www.mvc.on.ca | t. 613 253 0006 ext. 234 | f. 613 253 0122 | kstiles@mvc.on.ca



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From: Info
Sent: Tuesday, August 24, 2021 12:01 PM
To: Kelly Stiles <kstiles@mvc.on.ca>
Subject: FW: Information Request Trevor Watkins EIS and TCR

From: Riley Rutherford <r.rutherford@mcintoshperry.com>
Sent: Tuesday, August 24, 2021 11:59 AM
To: Info <info@mvc.on.ca>
Cc: Christian Lyon <C.Lyon@McIntoshPerry.com>; Chris Heffernan <c.heffernan@mcintoshperry.com>; Erik Pohanka <e.pohanka@mcintoshperry.com>
Subject: Information Request Trevor Watkins EIS and TCR

McIntosh Perry Consulting Engineers Ltd (McIntosh Perry) would like to request information from the Mississippi Valley Conservation Authority (MVCA). The proponent has retained the services of McIntosh Perry to undertake an Environmental Impact Statement (EIS), and a Tree Conservation Report (TCR) as per the requirements of the *Provincial Policy Statement* (PPS). Please see the attached background information table regarding the Trevor Watkins EIS and TCR

McIntosh Perry has conducted a preliminary review of publicly available environmental background information for the study area using various resources such as the Land Information of Ontario database, MVCA mapping tool, Aquatic Resource Area data, etc.. Publicly available information has been summarized into the attached request.

McIntosh Perry is requesting confirmation of the attached natural heritage features, species at risk, identification of 'restricted species' and any further site-specific environmental information from MVCA regarding the proposed development.

We look forward to the MVCA's response and appreciate any assistance you can provide with this project. Feel free to contact the undersigned if you require any additional information.

Thank you,

Riley Rutherford

Junior Biologist
2010 Winston Park Drive, Suite 400, Oakville, ON, L6H 5R7
T. 289.351.3058 | C. 647.210.4413
r.rutherford@mcintoshperry.com | www.mcintoshperry.com



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Site Plan Pre-consultation

Meeting Date: June 3, 2021

1500 Thomas Argue Road

Applicant: Trevor Watkins

Consultant: N/A

Ward 5

Councillor Eli El-Chantiry

Proposal Summary: The applicant proposes to build in phases and operate a fully automated indoor/outdoor self-storage facility.

Attendees: Trevor Watkins, Applicant/Owner
Harry Alvey, Project Manager, PIEDD, City of Ottawa
Seana Turkington, Planner, PIEDD, City of Ottawa
Mark Gordon, Planner, PIEDD, City of Ottawa
Sean Harrigan, Planner, PIEDD, City of Ottawa
Sami Rehman, Environmental Planner, PIEDD, City of Ottawa
Alexandra Labuda, Planning Assistant, PIEDD, City of Ottawa
Erica Ogden, Environmental Planner, MVCA

Comments and Meeting Notes

Proposal Details

- Proposed site plan control application to construct a fully automated indoor/outdoor self-storage facility for vehicles, boats, recreational vehicles, and other personal items. The outdoor storage will also include a section for a boat lift/dock inventory. The property will be fenced with chain-link and barbed wire for increased security. There will also be an electronic vehicle control gate and the property will have 24-hour video security. The buildings will not be heated and will be sized to eliminate the need for fire suppression. No staff are expected to be on site. Access will be provided off Russ Bradley Road.

Technical Comments - City Staff

Planning (Provided by Seana Turkington)

Official Plan and Zoning By-law

- As per Schedule A of the Official Plan, the site is designated 'Carp Airport' and is Zoned 'Air Transportation Facility Zone' (T1B) as per the City's Zoning By-law.

3.10.2 – Carp Airport

- The Carp Airport is designated on Schedule A with the intent of providing airport facilities that serve the general aviation needs in Ottawa.
- The land uses permitted in the designation are aviation and other land uses associated with an airport including an aerospace business park and an accessory residential fly-in community consistent with the Carp Airport master land use and servicing plan.
- The purpose of the T1-Air Transportation Facility Zone is to:
 - permit air transportation facilities and aviation-related uses in areas designated as **Ottawa Macdonald-Cartier International Airport** and **Carp Airport** in the Official Plan, and
 - permit a range of employment uses and airport-related commercial and industrial uses at the Ottawa Macdonald-Cartier International Airport.

Air Transportation Facility Zone (T1B)

- The following uses are permitted in the general T1 Zone: airport and related facilities, light industrial uses, parking garage, parking lot, truck transport terminal, warehouse.
- In the T1B Subzone, the following uses are also permitted: convenience store, heavy equipment and vehicle sales (rental and servicing), hotel, instructional facility, office, one dwelling unit for a caretaker or security guard, park, personal service business, place of assembly, post secondary educational institution, research and development centre, restaurant (full service), restaurant (take-out), retail store (limited to a factory outlet store), service and repair shop, storage yard.

In the T1B Subzone, the provisions of the table below apply:

Zoning Mechanisms	Zone Provisions
Minimum setback from a lot line for a dwelling unit (m)	12
Minimum setback from a lot line for an accessory building (m)	12
Minimum setback for buildings other than a dwelling unit or an accessory building	(i) Rear Yard 7.5 (ii) Front Yard 12 (iii) Corner Side Yard 12 (iv) Interior Side Yard 4.5
Maximum lot coverage (%)	50
Minimum Distance Between Buildings on the same lot (m)	10
Minimum Landscaped Buffer abutting Carp Road, an RR zone or any other non-industrial or non-transportation zone (m)	10
Minimum setback for a gasoline pump island or storage tank from an RR zone (m)	150

Site Plan

- The final site plan must show parking, storage, and fire routes as well as watercourse setbacks (regulated under Section 69 of the Zoning By-law). For additional information on preparing studies and plans, please click on the following hyperlink: [Guide to Preparing Studies and Plans](#).
- Landscaping should be provided on site, in accordance with the Carp Road Community Design Plan (to act as a screening measure) and also to provide some vegetation on site. It is recommended that vegetation on site be species native to the Ottawa area. Take a look at: <https://ottawa.ca/en/living-ottawa/environment-conservation-and-climate/wildlife-and-plants/plants>

Parking

- As per the City's Zoning by-law, isles to reach self-storage units are not permitted to be used as parking spaces. The applicant should refer to the layout of other self-storage centres in the city to see the site operation and determine the site configuration required. Parking requirements are detailed in Part 4 of the Zoning By-law.
- The drive aisle proposed on site must also meet the Private Approach By-law: <https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/law-z/private-approach-law-no-2003-447>

Carp Road Corridor Rural Employment Area

- The Carp Road Corridor Rural Employment Area plays an important role in the development and well-being of the local economy. The diversity and the ability to attract a range of traditional and high technology industries

as well as environmental services, some value-added processing, wood and metal fabrication and commercial uses has been one of the strengths of the Corridor. The vision for this area is contained in the Carp Road Corridor Community Design Plan. New development applications will conform to the policies in the approved community design plan.

- The community design plan for the Carp Road Corridor shall provide direction to the Zoning By-law for future land uses. [Amendment #180, November 8, 2017]
- The subject property falls within the [Carp Road Corridor Community Design Plan](#), which provides and action plan for future development in the corridor. It considers land use, environmental protection, and servicing, visual appearance and land use compatibility amongst other strategies for achieving community objectives.
- The CDP provides design guidelines for industrial and business parks (see section 7.3). Please identify how these guidelines have been met in your planning rationale and site plan.
 - Locate parking at the rear or side of buildings. Where this is not possible and parking is required at the front or side of the building a greater setback from the property line should be required to permit planting to mitigate the effects of the parking area (e.g. parking screened from view).
 - Locate storage and service areas at the rear of buildings except on sites where the property backs onto Carp Road or the main entry road.
 - Preserve as many trees as possible on the site. Compensate for removal of existing trees by extensive planting in the open space corridor, entry features “gateways” and on-site landscape areas. Plant trees along the corridor – an informal mix of trees and shrubs is preferable, with more coniferous than deciduous species.
 - Provide landscaping at the front of buildings. Use landscaping, decorative fences to screen unsightly uses.
 - Create entry feature (“gateways”) for new subdivisions/parks. This should include a sign and landscaping with the name of the development and the park occupants and enhanced lighting for visibility at night.
 - Provide for turning lanes where warranted.

Development Submission & Additional Info

- This site is within the Carp Airport subdivision. For further information on the subdivision as a whole, as well as any pertinent agreements, please speak with the Owner of the subdivision.
- Prior to submitting a site plan control application, the applicant should speak with the ward Councillor about the proposal and contact Building Code Services. Development Charges associated with Building Permits may also apply.
- It is advised that the applicant contact the Carp Airport Authority.
- Given the studies and plans this proposal will require, it is recommended that a Consultant for Engineering and Planning be hired.
- Please note that a draft of the New Official Plan was released publicly in November 2020. The New Official Plan is scheduled to go to Council this Fall for a decision. If a formal application is submitted, depending on timing, the policy regime may change. If a formal application is submitted prior to September 2021, the required planning rationale should speak to compliance with policies in the New Official Plan.

Engineering (Provided by Harry Alvey)

- The applicant will need to provide SWM management for this site. Given that this is a commercial site, it will probably need an ECA for the SWM. The MECP is taking approximately 9 to 11 months to process these permits. Design is to be based on Post- to Pre- storm events. If the airport will allow a SWM Pond the SWM ponds are required to have 300mm freeboard above the 100-yr storage elevation. If an OGS is proposed for Quality Control a ETV Protocol is required.
- SWM discharge is required to have an enhanced level of water quality of 80% TSS removal.
- There is a stormwater course which provide stormwater runoff from the airport to the Carp river located along the south side of Russ Bradley Rd. that should have capacity for the SWM discharge from your site. This should be confirmed by your engineer at time of engineering submission. The water course(s) must be

maintained at or better than the current level of flow & service. In addition, this might be fish habitat. It is suggested you contact MVCA regarding any proposed work with these water courses.

- The applicant should contact Allen Even at OFD regarding fire protection requirements and possible need for storage tanks for fire fighting.
- The applicant should contact the Carp Airport Authority regarding any flight operations restrictions on the site.
- If in the future it is decided to create an onsite office space, then a Hydro-G will be required prior to a building permit. Note: there are a number of issues with the ground water quality in the area.
- Please provide 'flattened' *.pdf versions of documents that include no 'comments' or 'edits' and represent what final printed version will look like.
- Contacts for the following are: OFD: Allan Evans, P.Eng Fire Services engineer - allen.evans@ottawa.ca

Environmental Planning (Provided by Sami Rehman)

- The proposal triggers an Environmental Impact Statement (EIS), which should cover the following:
 - a. Potential significant wildlife habitat, as part of the natural heritage system (OP 2.4.2)
 - b. Potential significant habitat for threatened or endangered species (OP 4.7.4)
 - c. The appropriate setbacks from the watercourse (OP 4.7.3)
 - d. Potential impacts of short and long-term outdoor vehicle and machinery storage on the natural features, and surface and groundwater features
 - e. Opportunities for energy conservation and shading with the site's design and landscaping (OP 4.9)
- Further details of the EIS requirement can be found in OP section 4.7.8 or the EIS guidelines: https://documents.ottawa.ca/sites/documents/files/documents/eis_guidelines2015_en.pdf
- Furthermore, the subject property has been identified as a high recharge area according to the Carp Road Community Design Plan. As such, the environmental policies of the CDP require a groundwater impact study to be completed. <https://documents.ottawa.ca/sites/documents/files/documents/con021202.pdf>
- A tree conservation report (TCR) will also be required for this submission (OP 4.7.2). The City encourages as much tree retention as possible and tree compensation for trees removed. The TCR can be combined with the EIS to avoid duplications. Further details of the TCR requirements can be found in the TCR guidelines. <https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/law-z/tree-protection-law-no-2020-340#schedule-tree-conservation-report-guidelines>
- I would also encourage the applicant to consult with the MVCA to determine if any permits or approvals are required under their regulations.

Conservation Authority (MCVA)

Environmental Planning (Provided by Erica Ogden)

- The watercourse on the property is regulated by the Mississippi Valley Conservation Authority (MVCA) under Ontario Regulation 153/06, *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*. Under Ontario Regulation 153/06, written permission is required from the MVCA prior to the initiation of development (which includes construction, site grading and the placement or removal of fill) within an area regulated by the Conservation Authority as well as straightening, changing, diverting or interfering in any way with the existing channel or the shoreline of a watercourse.
- MVCA has issued a permit (W19/283, expiry February 5, 2022) for the watercourse realignment along Russ Bradley Road. With the permit a development setback was established from the realigned watercourse. The crossing location for access to Russ Bradley Road was also established. Should any further alteration to the watercourse be required (e.g. culvert installation, stormwater outlet), an additional permit from the Conservation Authority would be required.
- The development setbacks from the watercourse must be met and the plantings required through the watercourse realignment maintained.
- A stormwater management report will be required with the site plan submission:
 - The water quality requirement is an enhanced level of protection, 80 % total suspended solids removal

- The property is within the Carp River Watershed Subwatershed Study area which has annual infiltration targets as outlined below. Existing infiltration rates on site should be assessed and maintained post development.
 - High groundwater recharge area 262mm/year infiltration

Application Submission Information

Application Type: **Site Plan Control, (type of application to be confirmed prior application submission)**

For more information on the Official Plan designation, please visit: <https://ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan/volume-1-official-plan/section-3-designations-and-land-use#3-7-5-rural-employment-area>

For more information and related Zoning By-law provisions, please visit: <https://ottawa.ca/en/zoning-law-no-2008-250/zoning-law-2008-250-consolidation#pdf-version>

For information on Site Plan Control Applications, including fees, please visit: <https://ottawa.ca/en/city-hall/planning-and-development/information-developers/development-application-review-process/development-application-submission/fees-and-funding-programs/development-application-fees>

The application processing timeline generally depends on the quality of the submission. For more information on standard processing timelines, please visit: <https://ottawa.ca/en/city-hall/planning-and-development/information-developers/development-application-review-process/development-application-submission/development-application-forms#site-plan-control>

[Prior to submitting a formal application, it is recommended that you pre-consult with the Ward Councillor.](#)

Application Submission Requirements

For information on the preparation of Studies and Plans and the City's requirements, please visit: <https://ottawa.ca/en/city-hall/planning-and-development/information-developers/development-application-review-process/development-application-submission/guide-preparing-studies-and-plans>

Please provide electronic copy (PDF) of all plans and studies required.

All plans and drawings must be produced on A1-sized paper and folded to 21.6 cm x 27.9 cm (8½" x 11").

Note that many of the plans and studies collected with this application must be signed, sealed and dated by a qualified engineer, architect, surveyor, planner or designated specialist.

APPENDIX C: STUDY AREA PHOTOGRAPHS



Photo 1: View of the Forb Meadow (FEM) as part of the tributary of Carp River realignment. 11 August 2021.



Photo 2: View of a planted silver maple (*Acer saccharinum*) within the Forb Meadow (FEM). 11 August 2021.



Photo 3: Common milkweed (*Asclepias syriaca*) identified in the Forb Meadow (FEM). 11 August 2021.



Photo 4: Upstream view of the tributary of Carp River (looking southwest) which was realigned parallel to the south side of Russ Bradley Road (to the right of the photo). 11 August 2021.



Photo 5: Constructed entrance with twin culverts from Russ Bradley Road over the realigned tributary of Carp River in the west end of the Forb Meadow. 11 August 2021.



Photo 6: Abundant Striated Fingernailclams (*Sphaerium striatinum*) present within the tributary of Carp River in the study area. 11 August 2021.



Photo 7: Ditch line flowing northwest along the west side of Carp Road (right) draining into the tributary of Carp River flowing northeast along the south side of Russ Bradley Road (left). The confluence then flows northwest under Russ Bradley Road (top). 11 August 2021.



Photo 8: View of inlet of the culvert under Russ Bradley Road which conveys the tributary of Carp River from inside the study area to outside the study area. 11 August 2021.



Photo 9: View of a Green Frog (*Lithobates clamitans*) observed within the tributary of Carp River in the study area. 11 August 2021.



Photo 10: View of the Mixed Meadow (MEM) in the east end of the study area which is actively managed (i.e., mowed). 11 August 2021.



Photo 11: Northern Comma (*Phyciodes cocyta*) observed within the Mixed Meadow (MEM) of the study area. 11 August 2021.



Photo 12: View of Canada Geese (*Branta canadensis*) in the Mixed Meadow within the study area. 06 April 2022.



Photo 13: View of the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) in the west end of the study area. 11 August 2021.



Photo 14: View of a Monarch (*Danaus plexippus*) observed at the edge of the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3). The Monarch is a Species at Risk. 11 August 2021.



Photo 15: View of a Yellow Warbler (*Setophaga petechia*) observed within the study area. This species is an example of a migratory bird that is protected under the Migratory Birds Convention Act. 11 August 2021.



Photo 16: View of Spongy Moth (*Lymantria dispar dispar*) egg cases observed on a tree in the study area. This species is an invasive insect. 11 August 2021.



Photo 17: View of a Canada Darner (*Aeshna canadensis*) in the study area. 11 August 2021.



Photo 18: View of a mammal den observed within the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) of the study area. 11 August 2021.



Photo 19: View of the vernal pool present in the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) during dry conditions in the summer. 11 August 2021.



Photo 20: View of the vernal pool present in the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) during partially frozen conditions in the early spring. 06 April 2022.



Photo 21: View of the vernal pool present in the Fresh – Moist Willow Lowland Deciduous Forest Type (FODM7-3) during open conditions in the spring. 12 April 2022.

APPENDIX D: VEGETATION INVENTORY

Vegetation Species Observed within the Study Area			
Common Name	Scientific Name	Common Name	Scientific Name
Woody Species			
balsam poplar	<i>Populus balsamifera</i>	round-leaved dogwood	<i>Cornus rugosa</i>
choke cherry	<i>Prunus virginiana</i>	shrub willow	<i>Salix</i> spp.
common buckthorn	<i>Rhamnus cathartica</i>	silky dogwood	<i>Cornus amomum</i>
common ninebark	<i>Physocarpus opulifolius</i>	silver maple	<i>Acer saccharinum</i>
dwarf raspberry	<i>Rubus pubescens</i>	speckled alder	<i>Alnus incana</i>
European white poplar	<i>Populus alba</i>	Tatarian honeysuckle	<i>Lonicera tatarica</i>
glossy buckthorn	<i>Frangula alnus</i>	thicket creeper	<i>Parthenocissus inserta</i>
high-bush cranberry	<i>Viburnum trilobum</i>	trembling aspen	<i>Populus tremuloides</i>
hybrid white willow	<i>Salix alba x fragilis</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
Manitoba maple	<i>Acer negundo</i>	virgin's bower	<i>Clematis virginiana</i>
nannyberry	<i>Virburnum lentago</i>	white ash	<i>Fraxinus americana</i>
narrow-leaved meadowsweet	<i>Spiraea alba</i>	white elm	<i>Ulmus americana</i>
red elderberry	<i>Sambucus racemosa</i>	wild black currant	<i>Ribes americanum</i>
red-osier dogwood	<i>Cornus sericea</i>	wild prickly gooseberry	<i>Ribes cynosbati</i>
riverbank grape	<i>Vitis riparia</i>	wild red raspberry	<i>Rubus strigosus</i>
Herbaceous Species			
alfalfa	<i>Medicago sativa</i>	hawkweed	<i>Hieracium</i> spp.
American water horehound	<i>Lycopus americanus</i>	jointed rush	<i>Juncus articulatus</i>
biennial wormwood	<i>Artemisia biennis</i>	knapweed	<i>Centaurea</i> spp.
bittersweet nightshade	<i>Solanum dulcamara</i>	large hop clover	<i>Triflorum aureum</i>
blue vervain	<i>Verbena</i>	late goldenrod	<i>Solidago altissima</i>
blue water speedwell (RS)	<i>Veronica anagallis-aquatica</i>	leafy spurge	<i>Euphorbia virgata</i>
boneset	<i>Eupatorium perfoliatum</i>	nodding beggarticks	<i>Bidens cernua</i>
bouncing-bet	<i>Saponaria officinalis</i>	pale smartweed	<i>Persicaria lapathifolia</i>
broad-leaved arrowhead	<i>Sagittaria latifolia</i>	Philadelphia fleabane	<i>Erigeron philadelphicus</i>
broad-leaved cattail	<i>Typha latifolia</i>	pondweed	<i>Potamogeton</i> spp.
broad-leaved helleborine	<i>Epipactis helleborine</i>	purple loosestrife	<i>Lythrum salicaria</i>

Vegetation Species Observed within the Study Area			
Common Name	Scientific Name	Common Name	Scientific Name
bull thistle	<i>Cirsium vulgare</i>	quack grass	<i>Elymus repens</i>
Canada fleabane	<i>Erigeron canadensis</i>	Queen Anne's lace	<i>Daucus carota</i>
Canada rush (RS)	<i>Juncus canadensis</i>	red clover	<i>Trifolium pratense</i>
Canada thistle	<i>Cirsium arvense</i>	sensitive fern	<i>Onoclea sensibilis</i>
Canada wild lettuce	<i>Lactuca canadensis</i>	showy tick-trefoil	<i>Desmodium canadense</i>
clammy groundcherry	<i>Physalis heterophylla</i>	slender path rush	<i>Juncus tenuis</i>
coltsfoot	<i>Tussilago farfara</i>	smooth bedstraw	<i>Galium mollugo</i>
common barnyard grass	<i>Echinochloa crus-galli</i>	smooth brome	<i>Bromus inermis</i>
common burdock	<i>Arctium minus</i>	spotted jewelweed	<i>Impatiens capensis</i>
common dandelion	<i>Taraxacum officinale</i>	spotted Joe-pyeweed	<i>Eutrochium maculatum</i>
common evening-primrose	<i>Oenothera biennis</i>	stinging nettle	<i>Urtica dioica</i>
common milkweed	<i>Asclepias syriaca</i>	sulphur cinquefoil	<i>Potentilla recta</i>
common mugwort	<i>Artemisia vulgaris</i>	Timothy	<i>Phleum pratense</i>
common mullein	<i>Verbascum thapsus</i>	viper's bugloss	<i>Echium vulgare</i>
common plantain	<i>Plantago major</i>	white clover	<i>Trifolium repens</i>
common ragweed	<i>Ambrosia artemisiifolia</i>	white goosefoot	<i>Chenopodium album</i>
common sow-thistle	<i>Sonchus oleraceus</i>	white sweet-clover	<i>Melilotus alba</i>
common yellow wood-sorrel	<i>Oxalis stricta</i>	wild basil	<i>Clinopodium vulgare</i>
cow vetch	<i>Vicia cracca</i>	wild cucumber	<i>Echinocystis lobata</i>
curled dock	<i>Rumex crispus</i>	wild geranium	<i>Geranium maculatum</i>
dark green bulrush	<i>Scirpus atrovirens</i>	wild mint	<i>Mentha arvensis</i>
eastern enchanter's nightshade	<i>Circaea canadensis</i>	wild parsnip	<i>Pastinaca sativa</i>
dame's-rocket	<i>Hesperis matronalis</i>	wild strawberry	<i>Fragaria virginiana</i>
field horsetail	<i>Equisetum arvense</i>	witch grass	<i>Panicum capillare</i>
foxtail barley	<i>Hordeum jubatum</i>	wood avens	<i>Geum urbanum</i>
fringed sedge	<i>Carex crinite</i>	woolgrass	<i>Scirpus cyperinus</i>
great water dock	<i>Rumex hydrolapathum</i>	yellow rocket	<i>Barbarea vulgaris</i>
hairy willow-herb	<i>Epilobium hirsutum</i>		

The following annotations found in the table are defined below based on the *Urban Natural Areas Environmental Evaluation Study: Appendix A* –

Vascular Plants of the City of Ottawa, with the Identification of Significant Species (Brunton, 2005).

S1 - Extremely rare in Ontario; usually 5 or fewer occurrences

S2 - Very rare in Ontario; usually between 6 and 20 occurrences or with many individuals in fewer occurrences

S3 - Rare in Ontario; usually between 21 and 100 occurrences

S4 - Uncommon to locally common in Ontario and apparently secure; usually between 101 and 1000 occurrences

RS - Regionally Significant (known from 10 or fewer *contemporary* populations [post-1969] in the City of Ottawa)

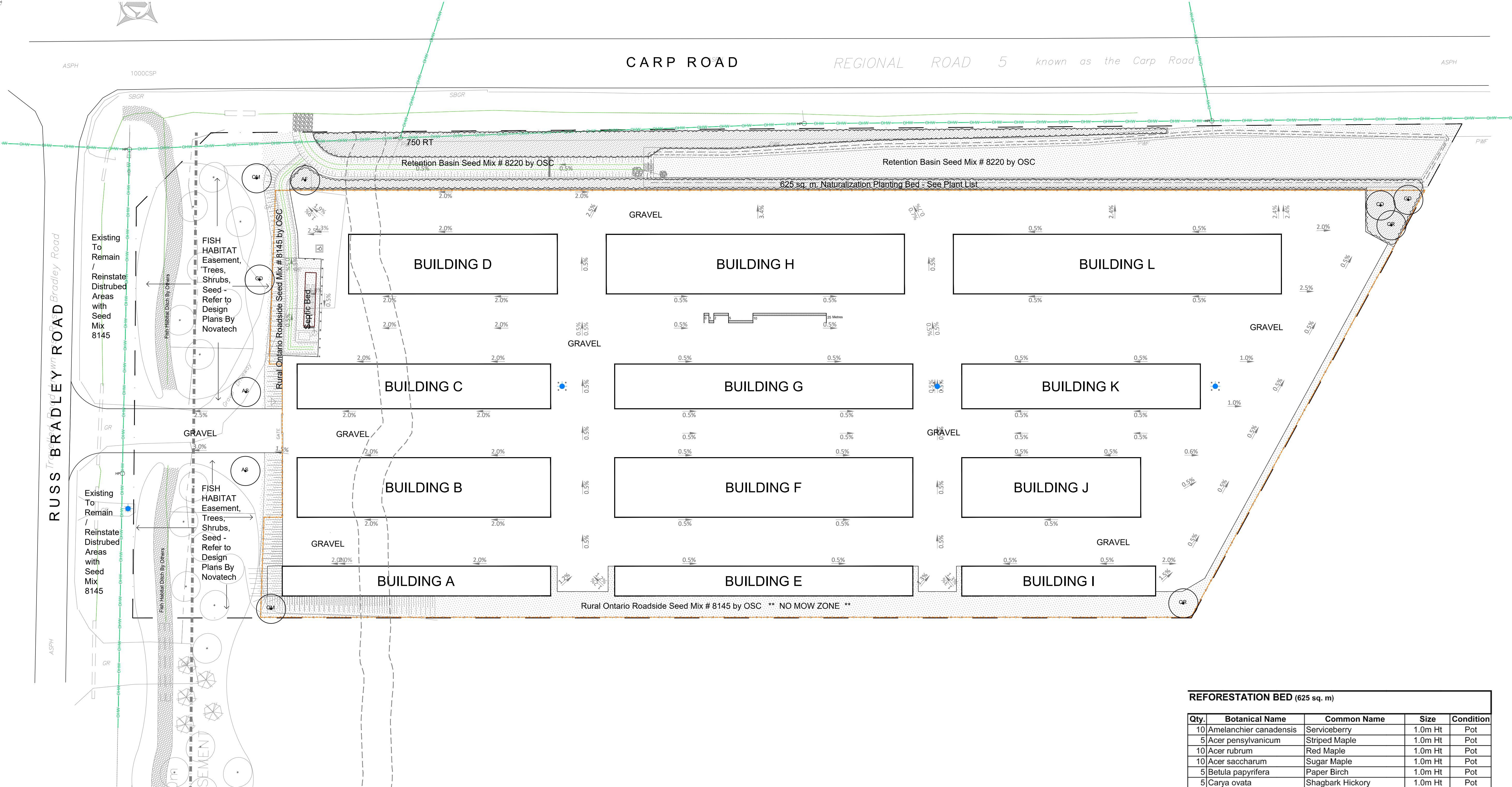
APPENDIX E: LANDSCAPE PLAN

Drawing Remains the Property of/Copyright Reserved by GJA INC. Do Not Use or Reproduce Without Approval of GJA INC. NOT To Be Used For Construction Unless Indicated by Revision: **FOR LANDSCAPE CONSTRUCTION**. Contractor is Responsible for Verification of Site Locations of all Utilities. Report any Discrepancies Between Site and Drawing Immediately to GJA INC. Do NOT Proceed Until Clarified.

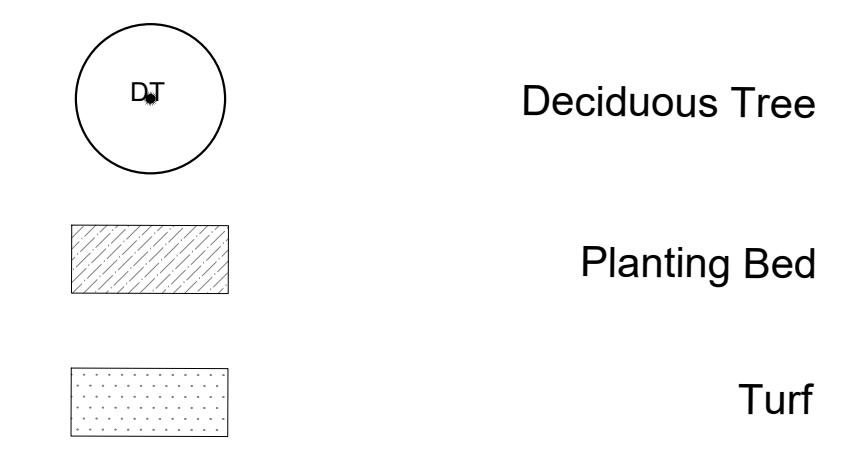
TURF AREAS TO BE SEED as Specified CW 150MM DEPTH TOPSOIL ON APPROVED SUBGRADE | PLANTING MIX TO BE APPROVED BY LANDSCAPE ARCHITECT | PLANT MATERIAL TO MEET CNLA STANDARDS/BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING | ALL MATERIALS & WORK TO BE MAINTAINED UNTIL FINAL ACCEPTANCE. (MOWING TURF, WEEDING BEDS, WATERING TURF & PLANTS) & INCLUDE 1 YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE | PROVIDE WATERING OF ALL PLANT MATERIAL AS REQUIRED FOR PROPER ESTABLISHMENT UNTIL END OF WARRANTY PERIOD | REFER TO CIVIL ENGINEER'S DRAWING FOR ELEVATIONS / GRADING |

The Landscape Plan is to be read in conjunction with the grading, servicing, site and survey plan | Bare root material to be planted in season only | All plant material locations to be staked on site by the landscape contractor and checked by the landscape architect prior to planting | All trees to be preserved on or directly adjacent to the site will be protected | Plant material are to be installed a minimum of 3.0m away from any part of any hydro transformer, 3.0m corridor between a fire hydrant and the curb, a 2.5m radius beside or behind a fire hydrant, 2.0m from any servicing/utility line or structure |

CARP ROAD REGIONAL ROAD 5 known as the Carp Road



LANDSCAPE PLAN LEGEND



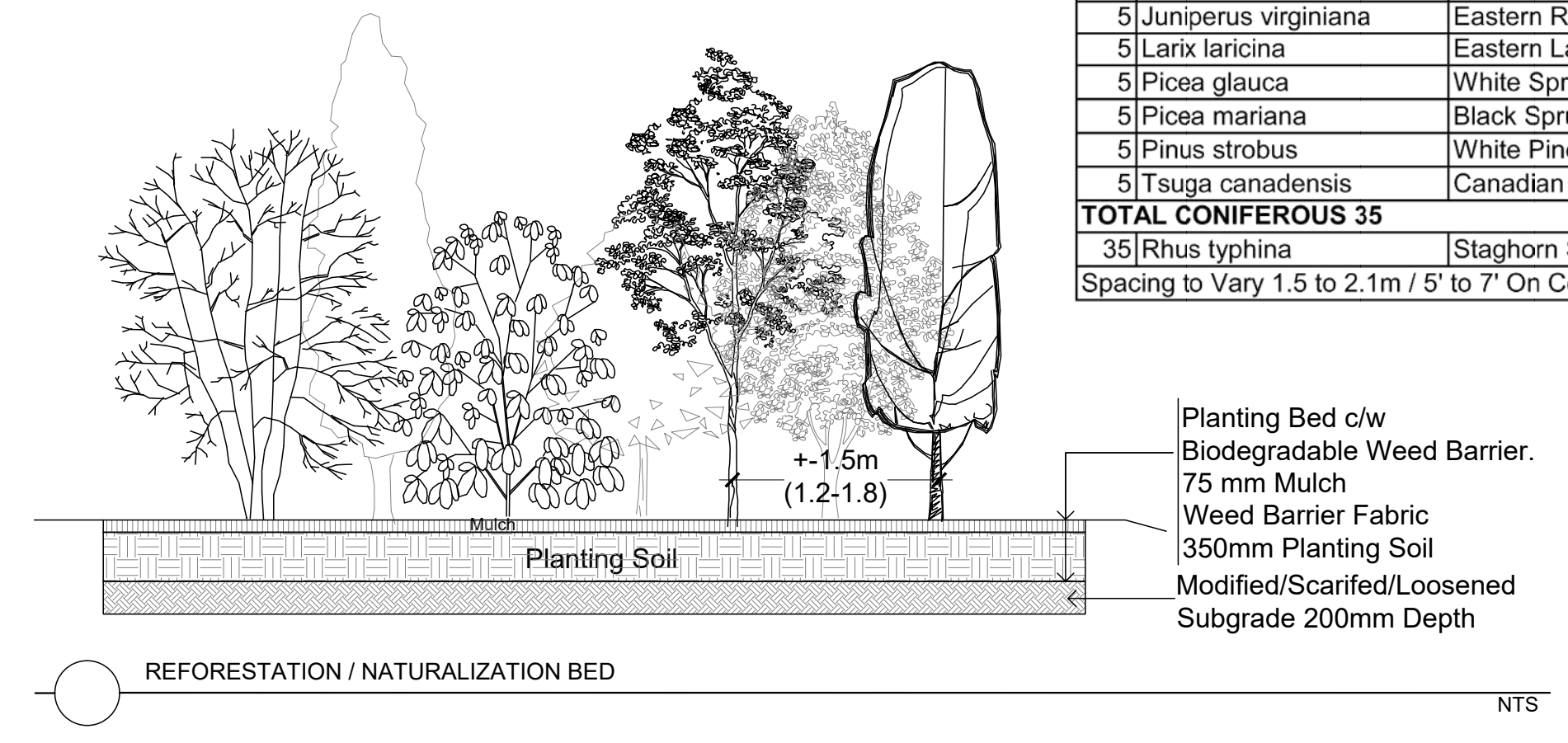
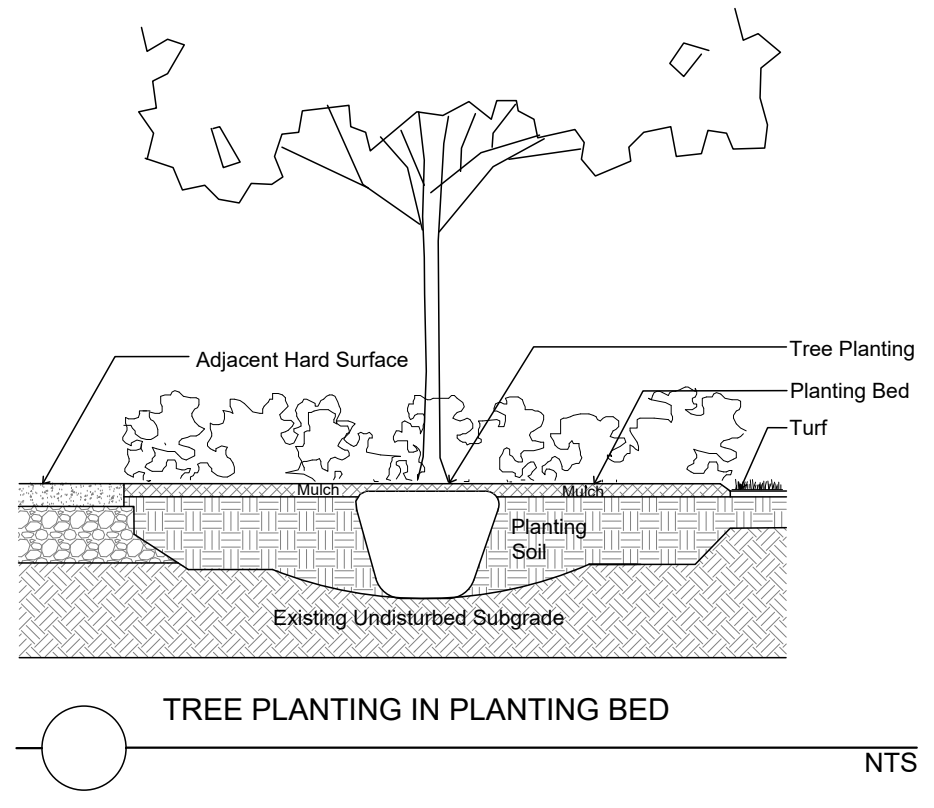
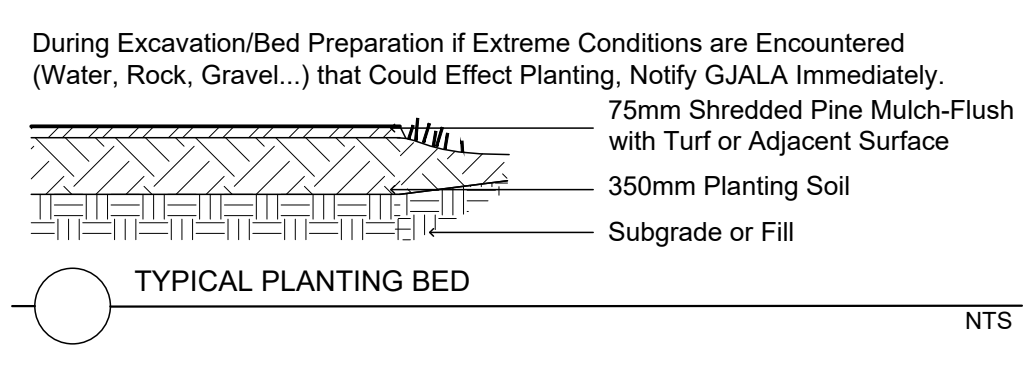
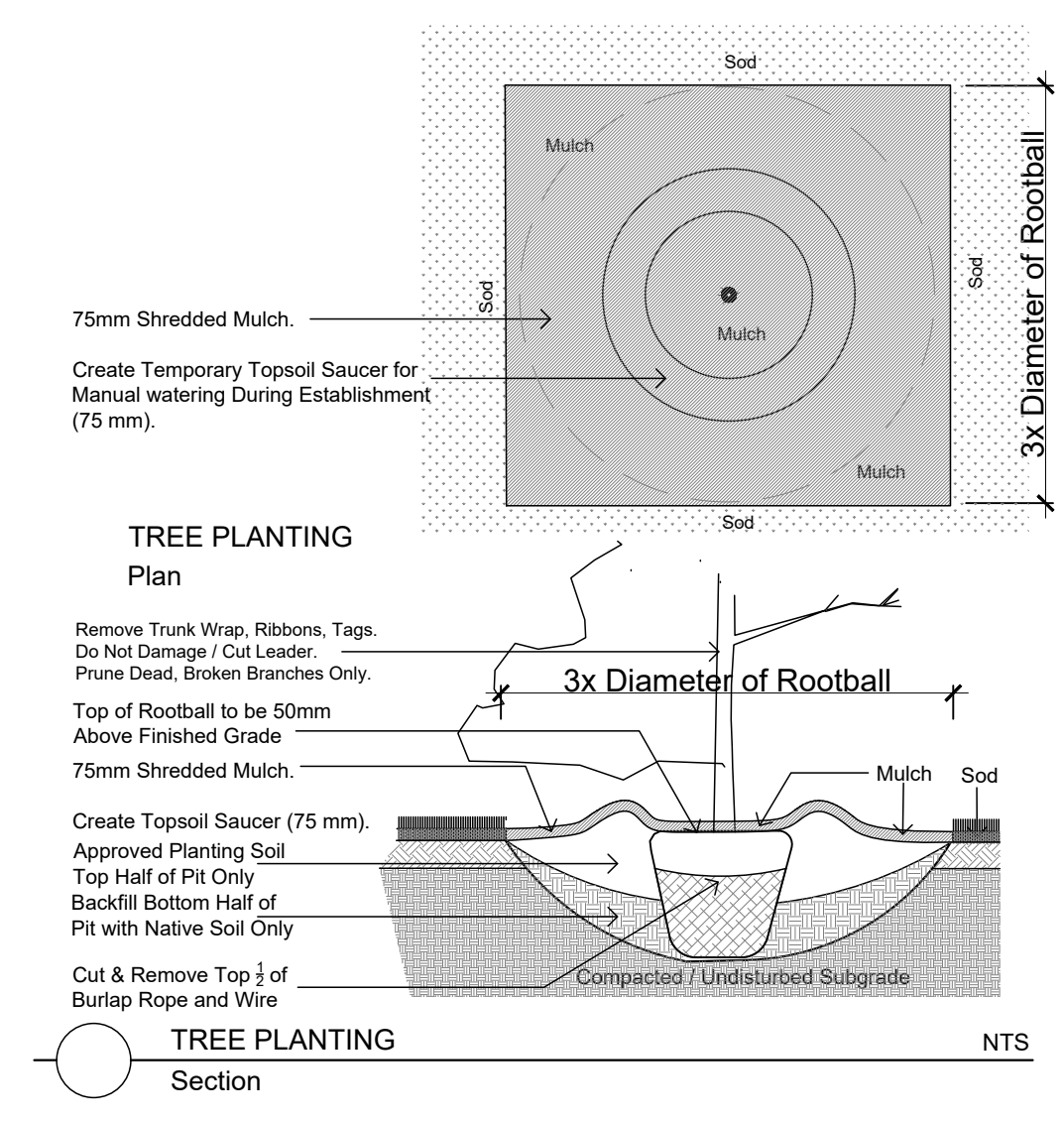
CALIPER B AND B TREES -273 275 RUSS BRADLEY CARP

Code	Qty.	Botanical Name	Common Name	Size	Condition
AF	1	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	60mm cal	B + B specimen
AS	2	Acer saccharum	Sugar Maple	60mm cal	B + B specimen
CO	1	Celtis occidentalis	Common Hackberry	60mm cal	B + B specimen
GD	2	Gymnocladus dioicus	Kentucky Coffee Tree	60mm cal	B + B specimen
QM	2	Quercus macrocarpa	Burr Oak	70mm cal	B + B specimen
QR	2	Quercus rubra	Red Oak	60mm cal	B + B specimen
RT	750	Rhus typhina	Staghorn Sumac	30cm Plug	

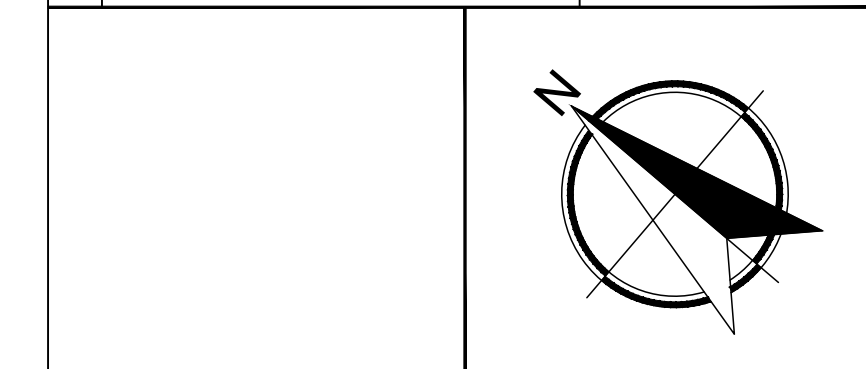
REFORESTATION BED (625 sq. m)

Qty.	Botanical Name	Common Name	Size	Condition
10	Amelanchier canadensis	Serviceberry	1.0m Ht	Pot
5	Acer pensylvanicum	Striped Maple	1.0m Ht	Pot
10	Acer rubrum	Red Maple	1.0m Ht	Pot
10	Acer saccharum	Sugar Maple	1.0m Ht	Pot
5	Betula papyrifera	Paper Birch	1.0m Ht	Pot
5	Carya ovata	Shagbark Hickory	1.0m Ht	Pot
5	Carya cordiformis	Bitternut Hickory	1.0m Ht	Pot
15	Celtis occidentalis	Common Hackberry	1.0m Ht	Pot
5	Cornus alternifolia	Pagoda Dogwood	1.0m Ht	Pot
5	Cornus racemosa	Grey Dogwood	1.0m Ht	Pot
10	Ostrya virginiana	Hophornbeam Ironwood	1.0m Ht	Pot
10	Prunus pensylvanica	Pin Cherry	1.0m Ht	Pot
10	Prunus serotina	Black Cherry	1.0m Ht	Pot
5	Quercus alba	White Oak	1.0m Ht	Pot
5	Quercus bicolor	Swamp White Oak	1.0m Ht	Pot
5	Quercus macrocarpa	Bur Oak	1.0m Ht	Pot
5	Quercus rubra	Red Oak	1.0m Ht	Pot
5	Viburnum lentago	Nannyberry	1.0m Ht	Pot
TOTAL DECIDUOUS 130				
5	Abies balsamea	Balsam Fir	50cm Ht.	Pot
5	Juniperus virginiana	Eastern Red Cedar	50cm Ht.	Pot
5	Larix laricina	Eastern Larch / Tamarack	50cm Ht.	Pot
5	Picea glauca	White Spruce	50cm Ht.	Pot
5	Picea mariana	Black Spruce	50cm Ht.	Pot
5	Pinus strobus	White Pine	50cm Ht.	Pot
5	Tsuga canadensis	Canadian Hemlock	50cm Ht.	Pot
TOTAL CONIFEROUS 35				
35	Rhus typhina	Staghorn Sumac	30cm Ht.	Pot

Spacing to Vary 1.5 to 2.1m / 5' to 7' On Centre



#	REVISION	DATE
1	FIRST SUBMISSION SPC	DECEMBER 22 2022
0	REVIEW/COORDINATION	DECEMBER 2022



2852569 Ontario Inc. c/o Trevor Watkins
971 Melrose Road
Shannonville, Ontario
K0K 3A0

Property Owner
Gino J. Aiello | landscape architect
GJA Inc.

Project
WAREHOUSE/STORAGE FACILITY
273 & 275 RUSS BRADLEY ROAD,
CARP, ON

LANDSCAPE PLAN

Scale: 1:400

L1

D07-xx-xx-xxxx