# Stillwater Station Ltd.

# **Environmental Impact Statement**

Proposed Site Redevelopment – Stillwater Station, 1987 Robertson Road, Ottawa, Ontario



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Prepared by:

Jamieson-Lee Scott, B.A. Anth.

**Technologist** 

Prepared by:

Casey Little, DipEM

Biologist

Reviewed by:

Kai Markvorsen, B.Sc.

Project Manager



600-1400 Blair Towers Place, Ottawa, ON K1J 9B8 CANADA

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## 1. Introduction

CIMA+ was retained by *Stillwater Station Ltd.* (Stillwater) to complete an Environmental Impact Statement (EIS) report. The purpose of the assessment was to review the potential impacts of the project on existing natural environmental features and to recommend mitigation measures in support a Secondary Plan submission to the City of Ottawa for the development of a property located at 1987 Robertson Road in Ottawa, Ontario, Canada.

This version of the EIS has been updated to incorporate design changes from the June 2, 2022, report. These changes are reflected in **Appendix A – Figures 1** through **6**, and **Appendix B – Preliminary Design**.

Additional communication with the National Capital Commission (NCC) and the Ministry of Environment, Conservation, and Parks (MECP) has also been reflected in this update. Refer to Section 3.1.10., and **Appendix C**.

# 1.1 Property Identification

The property is located at 1987 Robertson Road in Ottawa, Ontario, Canada. The discrete legal and property description information follows in the **Table 1** below. This property is irregularly shaped and has an approximate surface area of 95,830 m<sup>2</sup>.

Table 1: Property Information

Owner	Stillwater Station Ltd.			
Municipal Address	1987 Robertson Road			
Legal Description	Lot 11, Concession 2 of Nepean Geographic Township			
Land Use Designation/Zoning	IP2 (Business Park Industrial Zone)			

# 1.2 Project Site

The Project Site is defined as the area where changes or disturbances will occur related to the project (e.g., construction, operation, and maintenance) hereinafter referred to as the "Site". The Site consists of the 1987 Robertson Road property and has an approximate area of 95,830 m². The Site is bounded by the Bellwood Estates community to the south and west, Beachburg Rail Corridor to the north, Moodie Drive to the west, and the General Dynamics Mission Systems campus to the east. The "Study Area" consists of the adjacent (i.e., within 120 meters (m)) land around the perimeter of the Site.

The adjacent lands consist of the following:

North: North of the railroad corridor is agricultural land;

South: Bellwood Estates residential community with retail properties beyond;

East: The General Dynamics Mission Systems headquarters; and

West: Bellwood Estates residential community with retail and business parks beyond.

The Site and the features described above are presented on Figure 1 provided in **Appendix A**.



# 1.3 Existing and Past Land Use

The 1987 Robertson Road property is currently occupied by an equipment rental service. At present, there is a one-storey warehouse building, paved and gravelled surfaces for parking and access, and grass covered areas.

A review of available air photo imagery from the GeoOttawa web mapping application indicates that the Study Area has been in its current configuration since 1976. At that time, three (3) additional warehouses were located on the Site; as of 1999, only the southern warehouse remained. Prior to construction of the warehouses from at least until 1958 to 1965, the property and surrounding environment were active agricultural areas. (City of Ottawa, 2017).

The Site is zoned IP2 – Business Park Industrial Zone with subzone uses listed in Section 205 (2) of the Ottawa Zoning By-law 2008-250 (City of Ottawa, 2017)

# 1.4 Description of Proposed Project

Based on the conceptual Site plans provided by RLA Architecture, the proposed mixed-use development will consist of five (5) seven-storey buildings, one (1) twelve-storey building, one (1) sixteen-storey building, one (1) twenty-four-storey building and one (1) twenty-eight storey building. Details of underground parking and basement levels were not known at the time of preparation of this report. Access lanes, parking areas, parkland and landscaped areas are also anticipated at the subject Site. The proposed development has been setback from Stillwater Creek beyond the top of slope and limit of hazard lands. It is further anticipated that the proposed development will be municipally serviced. A new road access is being proposed that will have the effect of extending Timm Drive east of Moodie Drive, crossing the greenbelt and extending over the abandoned railway corridor to the north of the Site. Access road improvements will involve the extension of the existing Stillwater Creek culvert running under the rail line.

The preliminary Site plan is provided in **Appendix B**.

# 1.5 Purpose

The purpose of the EIS is to identify and describe the natural features which are present on the Site or adjacent lands; and to identify and assess whether the proposed development will result in potential impacts to the natural features and propose measures to avoid or mitigate impacts so that the development can proceed. Specifically, this EIS has been prepared to fulfil the requirements of City of Ottawa Official Plan in support of a Secondary Plan submission.

# 2. Methods for Data Gathering and Analysis

The Site and adjacent natural heritage features were examined and analyzed by the review of available information from desktop research, consultation with the applicable authorities and on-Site ecological surveys.

# 2.1 Background Information

The following publicly available sources were reviewed and analyzed for Site specific applicable information as part of the desktop research process:



#### 2.1.1 Federal Sources

- + Natural Resources Canada (NRC) Topographic Map 031G05 (NRC, 2021);
- National Capital Commission (NCC) Greenbelt Master Plan (NCC, 2013);
- + Environment Canada (EC) Federal Policy on Wetland Conservation (EC, 1991);
- + Fisheries and Oceans (DFO) Aquatic Species at Risk Mapping (DFO, 2020).

#### 2.1.2 Provincial Sources

- + Geographic information from Land Information Ontario (LIO, 2021);
- Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Center (NHIC) database for squares #18VR3419, #18VR3519 #18VR3420, and #18VR3520 search completed August 17th, 2021, (NHIC, 2019);
- + MNRF Fish ON-Line (MNRF, 2019);
- + Atlas of Breeding Birds of Ontario square #18VR31 (Cadman et al., 2007);
- Herps of Ontario Project square #18VR31 (iNaturalist, 2020);
- + Ontario Butterfly Atlas Online square #18VR31 (Toronto Entomologists' Association, 2020);
- + Atlas of the Mammals of Ontario (Dobbyn, 1994);
- Ecosystems of Ontario, Part 1 Ecozones and Ecoregions (MNRF, 2009);
- + Ecological Land Classification for Southern Ontario (MNRF, 1998);
- Significant Wildlife Habitat Technical Guide (MNRF, 2000);
- Ontario Geological Survey Map MRD128 (OGS, 2010).

#### 2.1.3 Municipal Sources

- + City of Ottawa Official Plan (City of Ottawa, 2017);
- + GeoOttawa online mapping data for the city of Ottawa (City of Ottawa, 2021);
- Environmental Impact Statement Guidelines (City of Ottawa, 2015).

#### 2.1.4 Other Sources

- + Aerial/Satellite imagery (Google Earth Pro, 2021);
- + RCVA geoportal online mapping data (RVCA, 2021).

#### 2.2 Consultation

Information requests for the Site and adjacent properties were submitted to the Kemptville District of the Ministry of Northern Development, Mines, Natural Resources and Forestry's (NDMMNRF, formerly Ministry of Natural Resources and Forestry, MNRF), the Ontario Ministry of Environment, Conservation and Parks (MECP), the City of Ottawa, National Capital Commission (NCC), and the Rideau Valley Conservation Authority (RVCA) on August 25<sup>th</sup> and 30<sup>th</sup>, 2021 (**Appendix C**).

Additional communication with MECP and NCC took place in 2022. These updates are described in Section 3.1.10. below, as well as presented in **Appendix C**.



#### 2.3 Site Characterization

The on-Site and adjacent characterization of the natural features was conducted by a qualified CIMA+ biologist by visual assessment of the terrestrial and aquatic components on and adjacent to the Site during five (5) site visits. **Table 2** presents the details of the visits in terms of date, times, survey focus and weather conditions.

Table 2: Site Investigations

Table 2. Site Investigations						
Date	Start/End Time	Field Surveys	Weather Conditions	Investigators		
2021/07/23	0800 - 1530	<ul> <li>Vegetation</li> <li>General wildlife</li> <li>SAR</li></ul>	Temperature: 23*C Wind (Beaufort scale): 1-2 Cloud cover: 0%	Casey Little, biologist		
2022/04/05	1356 – 1435	Western chorus frog and SAR habitat survey #1	Temperature: 12*C Wind (Beaufort scale): 2 Cloud cover: 30%			
2022/04/12	1325 – 1410	Western chorus frog and SAR habitat survey #2	Temperature: 17*C Wind (Beaufort scale): 2 Cloud cover: 40%			
2022/04/22	1230 – 1300	Western chorus frog and SAR habitat survey #3	Temperature: 12*C Wind (Beaufort scale): 3 Cloud cover: 30%			
2022/05/10	1348 – 1600	Wetland     Delineation	Temperature: 25*C Wind (Beaufort scale): 2 Cloud cover: 10%			

#### 2.3.1 Ecological Lands Classification, and Vegetation Survey

Ecological community characterization was completed in general accordance with the MNRF Ecological Land Classification (ELC) for Southern Ontario (Lee et al. 1998). During the field investigations, vegetation was characterized using ELC to classify and map ecological communities to the vegetation level. The ecological community boundaries were generally defined through the review of aerial photography and further refined during field investigations. The protocol recommends that a vegetation community be a minimum of 0.5 hectares (ha) in size before it is defined. Based on the composition of vegetation communities within the Study Area, patches of vegetation less than 0.5 ha or disturbed/planted vegetation were described (if required), provided they clearly fit within an ELC vegetation type. The information was documented and classified according to species and locational data was gathered using a handheld GPS.



#### 2.3.2 Aquatic Habitat

A general survey of aquatic habitat was completed along Stillwater Creek in proximity to the rail crossing, which included the collection of aquatic habitat information such as substrate type, watercourse morphology and aquatic vegetation, as well as an overall determination of the presence/absence and quality of fish habitat. The assessment also included a general assessment of fish passage and any incidental observations of fish and other aquatic species.

#### 2.3.3 Wetland Boundary Delineation

On May 10, 2022, the outer boundaries of the unevaluated wetland north of the abandoned railway corridor within the Study Area was delineated and mapped using the principles outlined in the Ontario Wetland Evaluation System - Southern Manual 3rd Edition, Version 3.2, (MNRF, 2013). The "50% wetland vegetation rule" was applied to estimate the relative abundance of wetland and upland plant species within the feature. Our CIMA+ OWES qualified professional walked the outer limits of the wetland, using a high-precision GPS, to create a "contour line" that follows a series of points where relative plant species cover consists mostly of wetland species.

## 2.3.4 Wildlife and Species at Risk Survey

Incidental wildlife and wildlife habitat observations (auditory, visual, tracks, scat, burrows, nests, etc.) were conducted within the Site boundaries on July 23<sup>rd</sup>, 2021, to determine presence/absence. Bird, insect, herpetofauna, and mammal data was compiled for the general area. The Site visit included the collection of bird data through incidental observations following the Ontario Breeding Bird Atlas survey protocol (OBBS, 2001). Identification and general classification of wildlife habitat was identified following the Significant Wildlife Habitat Technical Guide (MNRF, 2000) and supporting documentation. SAR and/or potential habitats on and adjacent to the Site was considered and analyzed in relation to the background information review in comparison with on-Site visual observations.

#### 2.3.4.1 Western Chorus Frog Survey

Targeted surveys followed the methods outlined in the Draft Western Chorus Frog Detection Survey Protocol for Ontario (Blazing Star Environmental, no date). Three (3) surveys were conducted on April 5, 12, and 22, 2022, when air temperatures were at least 10°C, with light to no wind and/or rain when frog calls are most likely to be detected. A proxy site, approximately 3 km from the Study Area with a known western chorus frog population, was visited prior to each survey to confirm adequate survey conditions and breeding vocalizations.

Specifically, surveys were completed at one (1) point count station (Figure 5), generally conducted during the day between 10 am and 6 pm, to establish quantitative estimates of abundance within the wetland north of the abandoned railway corridor. If evidence of breeding behaviour was observed, it was recorded to measure the intensity and number of individuals calling using the Call Level Code and Abundance Counts.



# 3. Site Description and Existing Natural Heritage Components

## 3.1 Background Review and Consultation Results

#### 3.1.1 Urban Natural Features

As per Schedule K and L3 of the City's Official Plan, several Natural Heritage System Features are present on or adjacent to the Site (City of Ottawa, 2017). Schedule K – Environmental Constraints, illustrates 'Unstable Slopes' associated with the Stillwater Creek feature. Schedule L3 - Natural Heritage System Overlay (West), depicts a Natural Heritage System Feature buffer surrounding Stillwater Creek in this location believed or proven to meet the definitions established in Section 2.4.2 of the Plan. Upon communication with the City Planner, it was determined that this feature was identified as "valleyland" associated with Stillwater Creek.

#### 3.1.2 Valleylands

Schedule L3 - Natural Heritage System Overlay (West), of the City's Plan indicates a valleyland associated with Stillwater Creek within the Study Area.

#### 3.1.3 Significant Woodlands

There are no significant woodlands present on or adjacent to the Site (City of Ottawa, 2021). However, there are wooded areas within the Site and the Study Area falls within the City's Inner Urban Area Distinctive Tree Protection Bylaw for all trees ≥30 cm.

#### 3.1.4 Significant and Unevaluated Wetlands

There are no Provincially Significant Wetlands (PSWs) on or adjacent to the Site. The closest PSW to the Site is the Stony Swamp wetland complex, approximately 1.5 kilometers (km) west.

A review of the MNRF's Provincial Mapping Unit (MNRF, 2019) identifies an unevaluated wetland community currently mapped as "Swamp", within the Study Area, located north of the abandoned rail line spur within the proposed access road alignment.

#### 3.1.5 Areas of Natural and Scientific Interest

There is no Area of Natural and Scientific Interest (ANSI) on or adjacent to the Site. The closest to the Site are the Campbells Quarry Earth Science ANSI, Stony Swamp Candidate Life Science ANSI, and the Queensway Roadcut Earth Science ANSI, all approximately 1.5 km west.

#### 3.1.6 Geology and Topography

The overburden consists of fine-textured glaciomarine deposits – silt and clay, minor sand and gravel extending to the bedrock surface.

Underlying bedrock geology for the area consists of dolostone and sandstone of the Beekmantown Group (OGS, 2010).

The Site is relatively flat with an elevation of approximately 90 meters above sea level (masl) (NRC, 2020). Topographic, Bedrock and Surficial geology mapping is provided in **Appendix A**.



The City of Ottawa responded in consultation (**Appendix C**) that Schedule K of the Official Plan identifies the ravine on Site as an unstable slope.

#### 3.1.7 Vegetation

The Site and adjacent properties are located within Ecoregion 6E (Lake Simcoe-Rideau Ontario), the second most densely populated ecoregion in Ontario. More than 57% of the ecoregion exists as cropland (44.4%), and pasture and abandoned fields (12.8%). Forest cover includes deciduous (16.0%), coniferous (5.3%), and mixed forest (8.8%). Water covers 4% of the ecoregion. The vegetation is relatively diverse across the region and include hardwood forests dominated by Sugar Maple (*Acer saccharum*), American Beech (*Fagus grandifolia*), White Ash (*Fraxinus americana*), Eastern Hemlock (*Tsuga canadensis*), and numerous other species are found where substrates are well developed on upland sites. Lowlands, including rich floodplain forests, are often established with Green Ash (*Fraxinus pennsylvanica*), Silver Maple (*Acer saccharinum*), Red Maple (*Acer rubrum*), Eastern White Cedar (*Thuja occidentalis*), Yellow Birch (*Betula alleghaniensis*), Balsam Fir (*Abies balsamea*), and Black Ash (*Fraxinus nigra*). Peatlands (including fens, rarely bogs), often established with Black Spruce (*Picea mariana*) and Tamarack (*Larix laricina*), occur along the northern edge and in the eastern portion of the ecoregion. This ecoregion is part of the Mixed wood Plains Ecozone of Southern Ontario, characterized by relatively diverse vegetation (Crins, 2009).

#### 3.1.8 Surface Water and Fish Habitat

Stillwater Creek is situated within the Site boundaries and lands associated with this feature are defined as a Natural Heritage Feature (City of Ottawa, 2017).

The Site and adjacent properties are within the Stillwater Creek catchment, which represents 0.55% of the Rideau Valley watershed. The headwaters of Stillwater Creek begin in the National Capital Commission's (NCC) Stony Swamp. From Stony Swamp, Stillwater Creek runs through a heavily channelized and impacted area adjacent to Roberston Road. The creek returns to its natural morphology downstream of Robertson Road until the Highway 417 crossing (RVCA, 2015).

Stillwater Creek provides fish habitat to 41 fish species and the thermal classification is cool water with a cool-warm water reach towards Robertson Road. Grasses, shrubs, and trees all contribute towards shading the stream, and in areas where trees and shrubs are not present, tall overhanging grasses serve to shade the sections of Stillwater Creek with narrow stream width. (RVCA, 2015).

The RVCA's City Steam Watch Stillwater Creek 2015 Summary Report notes the known locations of migratory obstructions within the watershed because these features can prevent fish from accessing important spawning and rearing habitat. Fish migration is currently being impacted by the perched culvert identified on the main channel of the creek at the tributary east of Moodie Drive at the Beachburg railway. Refer to **Photo 2** below to view the perched culvert directly north of the Study Area.





Photo 2: Perched culvert that conveys flow of Stillwater Creek under the Beachburg railway (RVCA, 2015)

The Department of Fisheries and Oceans' (DFO) aquatic species at risk (ASAR) map indicated no known ASAR or associated critical habitat within a 1 km buffer of the Study Area.

#### 3.1.9 Species at Risk

The Ontario *Endangered Species Act, 2007* (ESA) prohibits killing or damaging the habitat of species that are listed on the SAR in Ontario list. The background information review resulted in a list of 19 SAR that have been previously documented to have potential to occur within the Study Area. **Appendix D** provides this list of potential SAR including their common and scientific name, status under federal *Species at Risk Act* (SARA) and provincial ESA, and a general description of their preferred habitat based on federal/provincial SAR Registry Species Profiles.

#### 3.1.10 Consultation Results

The Kemptville District MNRF responded on August 31, 2021, providing a standard response. At this time, no further response has been received from the MNRF.

The MECP responded on August 31, 2021, providing a standard response. At this time, no further response has been received from the MECP.

The RVCA responded on September 1, 2021, providing a copy of RVCA's mapping for the property parcel at 1987 Robertson Road to indicate that the property/Site is outside of both RVCA's Regulation Limit, as well as any identified 1:100-year floodplain. However, all watercourses – whether in a regulated area or not – are subject to the alteration to waterways component of Ontario Regulation 174/06.



The City of Ottawa responded to the request for information on August 25, 2021, by providing the pre-consultation notes regarding the Study Area.

During pre-consultation with the City of Ottawa regarding the Site plan application, the City identified the need to complete an EIS as the development is within an Identified Natural Heritage System Feature as per Schedules K and L3 of the City's Official Plan. The City identified the following specific concerns:

- Proximity of the development to the Stillwater Creek and associated setbacks;
- + Proximity of the development to the Natural Heritage System feature the valleyland associated with the watercourse:
- + Hazard lands including floodplains, unstable slopes, and geotechnical; and
- Potential for Species at Risk (SAR) to be present.

Comments on the Draft EIS were received from the City of Ottawa, and NCC, on January 4, 2022. The June 2, 2022, EIS included additional information to address the comments received from the City of Ottawa requesting further consultation with MECP with respect to potential impacts on SAR. **Appendix C** of this EIS update includes the memo sent to MECP outlining SAR potential, including a list of mitigation measures proposed to minimize impact to them and their habitat.

Comments were also provided by the NCC on January 28, 2022. The June 2, 2022, updated EIS addresses those comments as well. **Appendix C** of this EIS update includes the memo sent to NCC outlining the results of the targeted western chorus frog surveys completed within the Stillwater Station project area in April 2022, habitat verification surveys for at-risk herpetofauna, as well as the results of the updated unevaluated wetland boundaries observed north of the abandoned railway corridor.

Correspondence is included in Appendix C.

#### 3.2 Field Observations

#### 3.2.1 Ecological Land Classification

The Ontario ELC system enables planners and ecologists to organize ecological information into logical integrated units to enable landscape planning and monitoring. The Site was classified and mapped to the vegetation level in accordance with the ELC for Southern Ontario (Lee et al. 1998).



The Site is dominated by tree and shrub species associated with disturbance and regeneration. Upon entry of the Site from Moodie Road, a dry Mixed Meadow ecosite is present adjacent to the abandoned railway which consists of Wild Carrot (Daucus carota), Chicory (Cichorium intybus), Bird's-foot Trefoil (Lotus corniculatus), Viper's-bugloss (Echium vulgare), and Goldenrod (Solidago sp.). This community transitions into a Deciduous Shrub Thicket dominated by Staghorn Sumac (Rhus typhina) and Red-osier Dogwood (Cornus sericea). A Coniferous Naturalized Plantation dominated by Scots Pine (Pinus sylvestris) lines the railway east of the thicket. This community also contained Manitoba Maple (Acer negundo), American Elm (Ulmus americana), and Green Ash. A small Mixed Meadow Marsh community consisting of Reed canary grass (Phalaris arundinacea), Jewelweed (Impatiens capensis), Narrow-leaved Cattail (Typha angustifolia), and Purple Loosestrife (Lythrum salicaria), is present just north of the naturalized plantation. A Red-Osier Dogwood Mineral Deciduous Thicket Swamp is present east of the marsh and adjacent to Stillwater Creek. A narrow Cattail Marsh is situated along the ditch line south of the abandoned rail line and a wooded hedgerow consisting of Manitoba Maple, Green Ash, Common Buckthorn (Rhamnus cathartica), and honeysuckle species (Lonicera sp.) borders the southern extent of the abandoned railway in this location. Commercial businesses are present south of the wooded hedgerow. A steep slope covered in Creeping Thistle (Cirsium arvense) dominates the landscape into the valleyland of Stillwater Creek. A Mixed Meadow Marsh comprised of Joe Pye weed (Eutrochium purpureum), Reed canary grass, and Narrow-leaved Cattail border the creek on both sides. Thickets of various Willow (Salix) species were observed further upstream. A Deciduous Forest continues along the east side of the creek, both north and south of the railway comprised of Manitoba Maple, Green Ash, Common Buckthorn and Trembling Aspen (Populus tremuloides). A Mixed Meadow covers the eastern portion of the Site containing various grass species, Wild Carrot, Bird's-foot Trefoil, Goldenrod, Common Mugwort (Artemisia vulgaris), and Yarrow (Achillea millefolium). The Mixed Meadow habitat is situated within a commercial business yard. Pockets of Trembling Aspen, Eastern Cottonwood (Populus deltoides), and Staghorn Sumac are scattered amongst the meadow ecosite.

Eleven (11) ELC community classes were identified within the Site. A summary of community class findings is outlined in **Table 3**, and the locations of the various vegetation communities present within the Site are outlined in **Appendix A – Figure 5**. No rare vegetation species or SAR plants were observed within the Study Area. Refer to **Appendix E** for the full vascular plant inventory and **Appendix F** for a photographic log of the ELC communities on Site.



Table 3: ELC Communities

Table 3: ELC Communities						
ELC Community	Dominant Vegetation Species	Approximate Area Onsite (m²)				
CVI_1 - Transportation	This community is comprised of the railway and road networks throughout the Site.	2,393				
CVC_1 - Business Sector	There is one commercial business within the Site, and two slivers of the businesses west of the Site within the larger Study Area.	39,828				
FOCM6-3 – Dry-Fresh Scots Pine Naturalized Coniferous Plantation	This forest community is situated north of the rail line and was dominated by naturalized Scots Pine. Other species noted in this ecosite were Manitoba Maple, American Elm, Green Ash, Common Buckthorn and Honeysuckle. A Mixed Meadow Marsh community is present just north of this naturalized plantation which lined the creek in this location.	4,441				
Maple Deciduous Forest	This forest community within the Study Area is dominated by Manitoba Maple, American Elm, Green Ash, Common Buckthorn and Honeysuckle. The wooded strip east of Stillwater Creek also contained Trembling Aspen in the canopy as well as the other species noted above.	16,434				
FODM11 - Naturalized Deciduous Hedgerow	There are two Naturalized Hedgerows in the Study Area. One (1) is located south of the rail tracks and is comprised of Manitoba Maple, Green Ash, Common Buckthorn, and Honeysuckle. The other separates the commercial business from the trailer park and includes Manitoba Maple, Trembling Aspen, and White Poplar.	7,086				
MAMM1-2 – Cattail Graminoid Mineral Meadow Marsh	The two (2) Cattail Marsh communities are located south of the rail line within a narrow ditch. The eastern-most polygon also contained Phragmites ( <i>Phragmites australis subsp. australis</i> ).	679				
MAMM3 – Mixed Mineral Meadow Marsh	The Mixed Meadow Marsh communities within the Site are dominated by Joe Pye weed, Narrow-leaved Cattail, and Reed Canary Grass. This community is situated along Stillwater Creek, both north and south of the railway, as well as north of the naturalized Scots Pine plantation where the entrance to the Site is planned.	2,124				
MEMM3 – Dry-Fresh Mixed Meadow	The Mixed Meadow communities within the Site are comprised of a mix of common grass-like and broadleaf species dominated by Smooth Brome, Wild Carrot, Bird's-foot trefoil, Common Mugwort, Goldenrod, vetch, dandelion, and bedstraws.	32,836				
Red-Osier	A Thicket Swamp dominated by Red-osier Dogwood is present east of the meadow marsh and adjacent to Stillwater Creek north of the railway.	311				
SWTM3-6 -	The Mixed Meadow Marsh community located south of the railway and adjacent to Stillwater Creek transitions into a Mixed Willow Thicket Swamp along the eastern banks of the creek.	315				
THDM2 – Dry-Fresh Deciduous Shrub Thicket	This Deciduous Shrub Thicket is located east of Moodie Drive, along the north side of the rail line. It is dominated by Red-osier Dogwood ( <i>Cornus sericea</i> ) and Staghorn Sumac.	422				



#### 3.2.2 Surface Water, Watercourse, Wetlands, and Waterways

Stillwater Creek flows north through a narrow channel within the Study Area. Surface drainage is managed by a large CSP culvert that extends under the abandoned railway. The water was slow moving and clear at the time of the Site visit, and no aquatic vegetation was observed within the channel. There were no visible signs of bank erosion along the Stillwater Creek both north and south of the railway however erosion was observed at points along the western side of the valley associated with stormwater runoff channels from parking lots, etc. Passage through the culvert running under the abandoned rail line was unobstructed; however, the culvert running under the active Beachburg Rail line to the north of the Site was observed to be perched on its north side by approximately 1 meter which presents a major barrier to upstream passage (Refer to **Figure 1** above).

There are three (3) wetland communities within the Site; two (2) MAMM3 – Mixed Mineral Meadow Marsh ecosites, a SWTM2-1 – Red-Osier Dogwood Mineral Deciduous Thicket Swamp ecosite, and a SWTM3-6 – Mixed Willow Mineral Deciduous Thicket Swamp ecosite. All ecosites are situated adjacent to Stillwater Creek; one (1) MAMM3 ecosite and the SWTM3-6 ecosite are located south of the rail line, and one (1) MAMM3 ecosite and the SWTM2-1 are situated northeast of the naturalized Scots Pine plantation where the entrance to the Site is planned. It should be noted that according to MNRFs provincial mapping unit (MNRF, 2019) this unevaluated wetland is currently mapped as a 6,462 m² "Swamp"; however, upon review during the 2021 and 2022 field investigations, the only wetland feature observed in this area are the MAMM3 – Mixed Meadow Marsh and SWTM2-1 – Red-Osier Dogwood Mineral Deciduous Thicket Swamp ecosites noted above, that when combined, measures approximately 824 m².

#### 3.2.3 Significant Wildlife Habitat

Areas of potential Significant Wildlife Habitat (SWH) within the Study Area were identified based on the SWH Criteria Schedules for Ecoregion 6E (MNRF, 2015a). MNRF (2015) uses ELC communities found in southern Ontario to assess the presence/absence of candidate SWH. We used the ELC information for the Study Area, species observations made during the 2021 field investigations, and historic species observation records (**Appendix D**) to determine the potential presence of candidate SWH. Based on this assessment, the following candidate significant wildlife habitat may be present within the Study Area.

#### Seasonal Concentration Areas

Some species of animals gather from geographically wide areas at certain times of the year. This could be to hibernate or to bask (e.g., some reptiles and bats), over-winter (e.g., deer yards), or to breed (e.g., Bullfrog breeding and nursery areas, bird breeding colonies). Maintenance of the habitat features that result in these concentrations can be critical in sustaining local or even regional populations of wildlife. Based on information collected during field investigations, the following candidate seasonal concentration areas may be present:

- + Bat Maternity Colonies Maternity colonies located in mature deciduous or mixed forest stands with >10/ha large diameter (>25 cm dbh) wildlife trees:
  - Features meeting these criteria were observed within the FODM4-5 Dry-Fresh Manitoba Maple Deciduous Forest ecosite within the Study Area.



#### Specialized Habitat for Wildlife

Specialized Habitat for Wildlife can include old-growth forests, calving areas for moose, cliffs, and habitat for bird species requiring large blocks of habitat (generally greater than 25 ha in size). Based on information collected during field investigations, the following candidate specialized habitat for wildlife areas is present:

- Amphibian Breeding Habitat (Wetlands) Wetlands >500 m² (about 25 meters diameter) supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNRF mapping and could be important amphibian breeding habitats. Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators;
  - Features meeting these criteria were observed within the MAMM3 Mixed Mineral Meadow Marsh and SWTM3-6 – Mixed Willow Mineral Deciduous Thicket Swamp ecosites south of the railway.

#### Habitat for Species of Conservation Concern

Endangered and Threatened species which are protected by the provincial ESA and/or federal SARA are discussed in detail in **Section 3.2.4**. Species of Conservation Concern includes species that may be locally rare or in decline, but that have not yet reached the level of rarity that is normally associated with "Endangered" or "Threatened" designations under these Acts. Rare wildlife status is based on species listed as Special Concern under the ESA, Global Rank (Grank) or Provincial Rank (S-rank) status, identified through the NHIC. *The Significant Wildlife Habitat Technical Guide* (MNRF 2000) suggests that the highest priority for protection should be provided to habitats of the rarest species (on a scale of global through to local municipality); it also states that habitats that support large populations of a species of concern should be considered significant. Based on information collected during field investigations, the following candidate specialized habitat for species of conservation concern are present:

- Special Concern and Rare Wildlife Species All plant and animal element occurrences within a 1 or 10 km grid.
  - The only species of Special Concern that was observed within the Study Area was Monarch (*Danaus plexippus*); however, as the MEMM3 Dry-Fresh Mixed Meadow ecosite is frequently disturbed due to the on-going commercial heavy equipment business operations, combined with a low quantity of breeding habitat (i.e., Milkweed plants), the Site is not suitable to be considered significant habitat for this species.

#### **Animal Movement Corridors**

According to the guidelines for Ecoregion 6E, migration corridors are areas that are traditionally used by wildlife to move from one habitat to another, often in response to different seasonal habitat requirements. The following movement corridors were identified within the study area:

- + Amphibian Movement Corridors Movement corridors between breeding habitat and summer habitat. Movement corridors must be determined when Amphibian breeding habitat is confirmed.
  - Features meeting these criteria were observed within MAMM3 Mixed Mineral Meadow Marsh, and SWTM3-6 – Mixed Willow Mineral Deciduous Thicket Swamp ecosites, south of the railway, within the Site.



#### 3.2.4 Wildlife

Wildlife habitat observed within the Site was typical of a disturbed setting and based on field observation common species are expected to be present within these habitat features all with secure habitats in Ontario.

#### Insects

Three (3) insects were observed during the 2021 field investigations: Monarch, Cabbage White (*Pieris rapae*), and Northern Crescent (*Phyciodes cocyta*). All insects were observed within the MEMM3 – Dry-Fresh Mixed Meadow ecosite.

#### Amphibians and Reptiles

Due to the timing of the 2021 field investigations, Green Frog (*Lithobates clamitans*) was the only amphibian confirmed to be present on Site.

No turtle species were observed on Site during the 2021/2022 field investigations. Stillwater Creek provides suitable habitat for turtle foraging, mating, thermoregulation, summer inactivity, and movement. Stillwater Creek may provide suitable conditions to support overwintering turtles.

It is assumed that the perched culvert directly north of the Site likely poses migratory obstructions for any turtles attempting to move upstream (**Figure 1**).

#### **Mammals**

Three (3) incidental observations of mammal species or associated scat and/or tracks were made during the wildlife survey, including American Red Squirrel (*Tamiasciurus hudsonicus*), Eastern Gray Squirrel (*Sciurus carolinensis*), and White-tailed Deer (*Odocoileus virginianus*). All mammal species were observed along the railway tracks adjacent to the FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest and FOCM6-3 – Dry-Fresh Scots Pine Naturalized Coniferous Plantation ecosites.

The FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest ecosite adjacent Stillwater Creek may provide habitat suitable for bat maternity roosting.

#### **Birds**

Seventeen (17) common bird species were identified within the Study Area by sight and/or sound and are presented in **Appendix E**. No bird nests were observed during the survey.

#### 3.2.5 Species at Risk

No endangered or threatened SAR were observed on or adjacent to the Site during the 2021/2022 field investigations.

As mentioned in Section 3.2.3, the only SAR listed as special concern observed within the Study Area was Monarch. As the MEMM3 – Dry-Fresh Mixed Meadow ecosite is frequently disturbed due to the on-going commercial heavy equipment business currently in operation, combined with a low quantity of breeding habitat (i.e., Milkweed plants), conditions within the Site are not suitable to provide significant habitat for this species.



Stillwater Creek provides suitable habitat for SAR turtle foraging, mating, thermoregulation, summer inactivity, and movement. There was no suitable nesting habitat observed for at-risk herpetofauna within the creek as it is comprised of an abundance of vegetation cover and lacks the presence of loose soils (COSEWIC, 2016). The railway embankment may provide suitable nesting habitat for at-risk turtles, but the steep slopes in this area may reduce the likelihood of nesting suitability. It is assumed that the perched culvert under the active Beachburg rail line, directly north of the Site (Figure 1), likely poses migratory obstructions for any turtles attempting to move upstream. In addition, the large CSP culvert that extends under the abandoned railway and the CSP culvert that conveys flow of the creek at the south end of the Site under Vanier Road are over 40 m long. Based on the Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile SAR in Ontario (MNRF, 2016), the recommended tunnel length for adequate SAR amphibian and reptile passage is less than 25 meters. Therefore, it is assumed that SAR turtle passage through this structure is unlikely. Although the marsh north of the railway is ephemeral, which is often used by Blanding's Turtles (Emydoidea blandingii) as foraging sites during spring, the feature does not provide suitable foraging habitat as it lacks rich sources of amphibian and insect eggs and larvae (COSEWIC, 2016).

No frog species were heard calling in the mixed marsh north of the abandoned railway corridor during the 2022 targeted western chorus frog surveys. As western chorus frogs were heard calling at the proxy site prior to all three (3) surveys, it is concluded that this wetland feature does not support breeding habitat for western chorus frog, or any other frog species, at this location. As Stillwater Creek supports fish habitat, it is anticipated that this feature does not support breeding habitat for this species.

The FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest ecosite within the Study Area may provide breeding habitat for SAR birds and maternity roosting habitat for SAR bats.

Additionally, the structures within the CVC\_1 community may provide suitable Barn Swallow nesting habitat, though no birds or evidence of nesting was noted during the field investigations.

Upon completion of the 2021/2022 field investigations, the list of the 19 SAR identified during the background review (**Appendix D**) was assessed and updated to determine which SAR have the potential to occur on or adjacent to the Site. The outcome of this assessment determined that there is potential for five (5) SAR and/or their habitat within the Study Area. Refer to **Table 4** below for a summary of the SAR and associated habitat that may be impacted by this Project.

Table 4: Assessment of Potential SAR **Species** Suitable **Potential Common Name** Observed Habitat in for Impact **Scientific Name** in Study Study as a Result Comments **Status** Area Area of Project (Y/N) (Y/N) (Y/N)

Ν

No Butternut were observed on Site.

significant habitat for

available on Site;

There were patches of Common Milkweed

(Asclepias syriaca) plants observed in the

MEMM3 - Dry - Fresh Mixed Meadow ecosite

but due to frequent disturbance in this area,

were observed and may be using the Site.

Monarch

Regardless,



Butternut

Monarch

Juglans cinereal

*Danaus plexippus* Federal – **SC** 

Provincial – SC

Federal – **END** Provincial – **END**  Ν

not

is

individuals

	Species	Suitable	Potential	
Common Name	Observed		for Impact	
Scientific Name	in Study	Study	as a Result	
Status	Area	Area	of Project	
	(Y/N)	(Y/N)	(Y/N)	
Blanding's Turtle				No Blanding's Turtle were observed on Site;
Emydoidea blandingii				however, Stillwater Creek and the associated
Federal – <b>THR</b>	N	Υ	Y	wetland provide adequate habitat for the
Provincial – <b>THR</b>	`			species to use for mating, foraging,
				thermoregulation, summer inactivity,
				and/or movement.
Eastern Milksnake				There are no suitable microhabitats (i.e.,
Lampropeltis triangulum				barns, sheds, or houses in rural
Federal – SC	N	N	N	landscapes) for specific activities such as egg
Provincial – <b>SC</b>				laying or thermoregulation for Eastern Milksnake on Site.
Midland Painted Turtle				No Midland Painted Turtle were observed on
Chrysemys picta				Site; however, Stillwater Creek and the
marginate				associated wetland provide adequate habitat
Federal – <b>SC</b>	N	Υ	Υ	for the species to use for mating, foraging,
Provincial – Not Listed				thermoregulation, summer inactivity, and/or
Tovilloidi Not Listed				movement.
Snapping Turtle				No Snapping Turtle were observed on Site;
Chelydra serpentina				however, Stillwater Creek and the associated
Federal – SC	l.			wetland provide adequate habitat for the
Provincial – <b>SC</b>	N	Υ	Y	species to use for mating, foraging,
				thermoregulation, summer inactivity, and/or
				movement.
Western Chorus Frog				As the creek is fish bearing it is not considered
(Great Lakes – St.				suitable for Western Chorus Frog critical
Lawrence Population	N	N	N	habitat.
Pseudacris triseriata	[`			
Federal – THR				
Provincial – Not listed				N. Bart O alla calada a constant
Bank Swallow				No Bank Swallow colonies were observed on
<i>Riparia riparia</i> Federal – <b>THR</b>	N	N	N	Site.
Provincial – THR				
Barn Swallow				No Barn Swallow were observed on Site;
Hirundo rustica				however, buildings within the CVC_1
Federal – <b>THR</b>	N	Υ	Υ	community may provide suitable breeding
Provincial – <b>THR</b>				habitat for the species.
Bobolink				No suitable habitat for Bobolink is
Dolichonyx oryzivorus	N	N	N.	present on Site.
Federal – THR	l'N	IN .	N	
Provincial – <b>THR</b>				
Evening Grosbeak				Although this species was not observed
Coccothraustes				during the 2021 field investigations habitat is
vespertinus	N	Υ	N	available within the Study Area; however, no
Federal – SC		]	•	impacts are expected to occur to the FODM4-
Provincial – <b>SC</b>				5 ecosite, therefore impacts to this species are
Costorn Mossleyder!				not anticipated.
Eastern Meadowlark				No suitable habitat for Eastern Meadowlark is
Sturnella magna Federal – <b>THR</b>	N	N	N	present on Site.
Provincial – THR				
i Tovillolai – ITIK	<u> </u>	1	1	



Common Name Scientific Name Status	Species Observed in Study Area (Y/N)	Suitable Habitat in Study Area (Y/N)	Potential for Impact as a Result of Project (Y/N)	
Eastern Wood-Pewee Contopus virens Federal – SC Provincial – SC	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Grasshopper Sparrow Ammodramus savannarum Federal – SC Provincial – SC	N	N	N	No suitable habitat for Grasshopper Sparrow is present on Site.
Wood Thrush Hylocichla mustelina Federal – SC Provincial – THR	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Eastern Small-footed Bat Myotis leibii Federal – Not listed Provincial – END	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Little Brown Myotis Myotis lucifugus Federal - END Provincial - END	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Northern Myotis Myotis septentrionalis Federal – END Provincial – END	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Tri-colored Bat Perimyotis subflavus Federal - END Provincial - END  END - Endangered	N THR – Threa	Y	N SC – Specia	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.

END – Endangered THR – Threatened SC – Special Concern

Based on results of the SAR screening assessment through background data review coupled with on-Site investigations, there is potential for five (5) SAR and/or their habitat within the Study Area to be impacted by construction activities; Monarch, Blanding's Turtle, Midland Painted Turtle, Snapping Turtle, and Barn Swallow. Avoidance and mitigative strategies to address potential impacts to these SAR are identified in **Section 5.5**.



# 4. Regulatory Requirements

#### 4.1 Federal

#### **Fisheries Act**

The Fisheries Act is administered by the Department of Fisheries and Oceans Canada (DFO) and is intended to provide a framework for the management of threats to fish and fish habitat, including the prevention of pollution, regardless of their attachment to a fishery. Section 34.4 of the Act prohibits the carrying on of any work, undertaking or activity, that results in the death of fish or the "harmful alteration, disruption or destruction of fish habitat" (HADD). Fish habitat is defined as spawning grounds and any other areas frequented by fish, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly to carry out their life processes (Government of Canada, 1985).

The proposed development is setback > 30 m from the eastern edge of Stillwater Creek and it is associated valleyland sufficiently that no impacts to the Creek are anticipated along most of its length. However, the construction of the access road and associated culvert extension may result in impacts to fish habitat in immediate proximity to the culvert on both the north and south side. Stillwater Creek supports fish habitat; therefore, it is anticipated that a Project Review will be required under the *Fisheries Act*.

#### **Migratory Birds Convention Act**

The Migratory Birds Convention Act, 1994 (MBCA) regulates the protection and conservation of migratory birds as populations and individuals and protects their nests. The Act applies to any areas that provide potential for nesting habitat of migratory birds. Section 6 of the Migratory Bird Regulations (2020) prohibits the disturbance, destruction of nests, eggs of migratory birds (Government of Canada, 1994). To comply with MBCA requirements, vegetation clearing activities will be recommended to adhere to established timing windows to prevent impacts to breeding birds.

#### **Species at Risk Act**

Federally protected species are listed in 'Schedule 1' of SARA. SARA protects habitat and individuals of wildlife species designated as endangered, threatened, or extirpated in Canada. SARA is applicable on lands under federal jurisdiction, and within areas defined as 'critical habitat' on lands under provincial jurisdiction. Where it is deemed that protection measures under a provincial law fail to adequately protect a species, the federal government may issue an emergency order.

Based on results of the 2021/2022 field investigations there is potential for five (5) federally listed SAR and their habitat within the Study Area: Monarch (listed as special concern under SARA), Blanding's Turtle (listed as threatened under SARA), Midland Painted Turtle (not listed under the ESA, listed as special concern under SARA), Snapping Turtle (listed as special concern under SARA), and Barn Swallow (listed as threatened under SARA).

It is anticipated that implementation of standard best management practices and mitigations measures prior to and during construction will prevent impacts to these five (5) SAR because of the Project. Impacts, mitigation measures and approval requirements related to SAR are discussed further in Section 5.4 below.



**Federal Policy on Wetland Conservation** In 1986 and early 1987 Environment Canada developed a national statement and fact sheet on wetland issues in Canada summarizing management problems and identifying the major obstacles to wetland conservation. The Department subsequently developed a series of recommendations directed to all governments in Canada concerning the need for wetland policy (Environment Canada, 1991).

The objective of the Federal Government with respect to wetland conservation is to: promote the conservation of Canada's wetlands to sustain their ecological and socio-economic functions, now and in the future. The *Federal Policy on Wetland Conservation* was adopted in 1991 and outlines strategies to provide for the use and management of wetlands so that they can continue to provide a broad range of functions on a sustainable basis (Environment Canada, 1991).

This policy commits all federal departments to the goal of no net loss of wetland functions (i) on federal lands and waters, (ii) in areas affected by the implementation of federal programs where the continuing loss or degradation of wetlands has reached critical levels, and (iii) where federal activities affect wetlands designated as ecologically or socio-economically important to a region. Due to local circumstances where wetland losses have been severe, in some areas no further loss of any remaining wetland area may be deemed essential (Environment Canada, 1991).

As the proposed access road is planned on federal lands owned by the National Capital Commission (NCC) where a small MAMM3 – Mixed Mineral Marsh and SWTM2-1 – Red-Osier Dogwood Mineral Deciduous Thicket Swamp are located north of the abandoned railway, this policy applies. Based on the 2022 field verification of the wetland boundaries in this area, the limits of construction can maintain a 15 m buffer from the wetland extent, and no impacts to this feature are anticipated resulting from the Project.

#### **The Greenbelt Master Plan**

The Greenbelt Master Plan was adopted in 2013 and guides the preservation and use of Canada's Capital Greenbelt. The plan describes the purpose of the Greenbelt and its role at a national and a regional level. It outlines the values that should inform any decisions made pertaining to the Greenbelt. The Plan provides context and directions for the Greenbelt's management starting at a high level, strategic perspective and moving through more detailed levels of information, ultimately arriving at site specific directions for each of the Greenbelt geographic sectors (NCC, 2013).

The proposed access road is planned on federal lands owned by the NCC where a small MAMM3 – Mixed Mineral Marsh and SWTM2-1 – Red-Osier Dogwood Mineral Deciduous Thicket Swamp are located north of the abandoned railway; therefore, the policy applies in this area. Under the Land Designations (Figure 5.2) of this plan, this parcel of land is designated as 'Agriculture'.

Section 6.7 – Transportation of the plan acknowledges NCC's objective to find alternatives and ways to reduce the environmental impacts of existing and proposed transportation infrastructure. The NCC will promote and give preference to sustainable, safe, and active transportation infrastructure projects that apply the ecological principle of "No net loss" through identification and implementation of appropriate mitigation measures. Where on-site restoration cannot achieve a no-net-loss environmental condition, seek off-site restoration of other ecosystems and/or compensation to achieve ecosystem restoration elsewhere at a minimum at a comparable level, and preferably at a net gain (NCC, 2013).



#### 4.2 Provincial

#### **Provincial Policy Statement**

The Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act (1990). The current PPS came into effect on May 1, 2020, and provides overall policy direction on matters of provincial interest related to land use planning and development in Ontario. Natural features are afforded protections under Section 2.1 - Natural Heritage, of the PPS. These protections restrict development and site alteration in significant natural areas (e.g., woodlands, wetlands, wildlife habitat) unless it can be demonstrated that there will be no negative effects on the features and ecological functions of those natural areas. Technical guidance for implementing the natural heritage policies of the PPS is found within the second edition of the Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. This manual recommends the approach and technical criteria for protecting natural heritage features and areas in Ontario.

As no work is planned to occur within the Stillwater Creek corridor where valleylands and wildlife habitat is present, it is anticipated that no negative effects on the features and ecological functions of those natural areas will occur because of this Project. Refer to Section 5 below.

#### Rideau Valley Conservation Authority (RVCA)

The Ontario *Conservation Authorities Act* gives individual conservation authorities the power to regulate development and activities in or adjacent to river or stream valleys, Great Lakes and large inland lakes and shorelines, watercourses, hazardous lands, and wetlands. Regulations made under the Act specify the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations managed by individual Conservation Authorities. These regulations apply to lands within river or stream valleys, flood plains, wetlands, watercourses, lakes, hazardous lands, or lands within 120 meters of a PSW or wetlands greater than 2 hectares, or lands within 30 meters of non-provincially significant wetlands. Development or site alteration within these regulated areas may be permitted provided development is conducted in accordance with existing policies (Government of Ontario, 1990).

For this project, the RVCA is required to review development and alteration applications under the *Conservation Authorities Act* (O. Reg. 174/06) as the project Site contains a watercourse. As the project involves alteration, disturbance, diverting, etc. of the identified watercourse development, a permit will be required from the RVCA prior to any work commencing.



#### **Endangered Species Act**

The Ontario ESA prohibits killing or damaging the habitat of species that are listed on the SAR in Ontario list. Endangered indicates that the species lives in the wild in Ontario but is facing imminent extinction or extirpation. Threatened indicates the species lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it. Special Concern means the species lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats. (MNRF, 2019). Only species which are considered endangered or threatened receive specific protections under the ESA. Some exemptions exist under O. Reg. 242/08 of the Act, related to species and activities. If a proposed undertaking is covered under one of the exemptions, a streamlined notification process applies. If none of the exemptions apply, a permit under section 17(1) of the Act is required.

Although no SAR were observed on Site, habitat for several SAR is present. Due to the Projects proximity to Stillwater Creek, it is anticipated that implementation of appropriate setbacks, standard best management practices, and mitigations measures prior to and during construction will reduce any potential impacts to SAR because of the Project. Project impacts, avoidance and mitigation measures related to the protection of SAR are discussed further in Section 5.4 below.

# 4.3 Regional

#### City of Ottawa Official Plan

The Official Plan (City of Ottawa, 2017) was drafted, reviewed, and adopted in conformity with the requirements of the *Planning Act* and the content of the Plan is consistent with the PPS. The City's Official Plan states that development within or adjacent to woodlands, wetlands, and other natural features has potential to impact the feature and its functions by removing vegetation, increasing the amount of paved or other impermeable surfaces, changing the grading of the site, or making other changes. The Environmental Impact Statement serves to identify the natural features of a site early in the development process and consider ways to avoid or mitigate these impacts and enhance natural functions.

Section 4.7.3 – Erosion Prevention and Protection of Surface Water discusses the requirements to preserve and enhance the environmental quality of stream and river corridors and their aquatic habitat, as well as reducing risks from natural hazards associated with watercourses.

Ensuring that development is set back an appropriate distance from watercourses helps serve these purposes by ensuring a healthy, natural riparian zone and providing a margin of safety from hazards associated with flooding and unstable slopes (City of Ottawa, 2017). For this Project, a combination of the geotechnical limit of the hazard lands and 15 m from the existing top of slope will be the required setback.

Section 4.7.4 – Protection of Endangered and Threatened Species states that development and site alteration will not be permitted within 120m of the boundary of identified significant habitat of endangered and threatened species unless the ecological function of the adjacent lands has been evaluated and the Environmental Impact Statement demonstrates that there will be no negative impact (as defined in Section 4.7.8) on the significant habitat of endangered and threatened species or on its ecological functions.

Project impacts, avoidance and mitigation measures related to the protection of SAR are discussed further in Section 5.4 below.



# 5. Potential Impacts, Environmental Constraints and Mitigation Measures

This section analyzes the results of the Site description and existing natural heritage components identified from the desktop review (i.e., background information and consultation) and field observation. The analysis is to determine where the Project interacts with those components, what environmental constraints are applicable, and recommend appropriate avoidance techniques and mitigation measure to eliminate, avoid or reduce those impacts.

The proposed residential development is not within the footprint of any natural heritage features or the 15 m setback from the existing top of slope, although the construction of the residential development has the potential to cause ecological impacts. As a result, it is anticipated that most impacts will be associated with site preparation, demolition, and construction activities.

# **5.1 Vegetation Cover and Tree Conservation**

The new development is being planned to respect setbacks from the geotechnical limit of the hazard lands, the watercourse (30 m), and top of slope (15 m), and no vegetation will be removed within these buffers as required by the City of Ottawa (Official Plan, 2017; See **Appendix A** – **Figure 5**, and **Appendix B**). However, tree and vegetation removal are anticipated to occur on Site to construct access roads and the residential development which would consist of construction activities such as staging areas, and grading, etc. within the buildable area (north and east of top of slope). No impacts or affects are anticipated to vegetation adjacent to Site. Since the design is preliminary in nature the exact extent of the tree and vegetation removal is unknown. However, preliminary analysis suggests that impacts to approximately 10,832 m² of the Scots pine coniferous plantation, deciduous hedge-row, Manitoba maple deciduous forest, and mixed meadow communities will be permanently removed because of the access road construction, and approximately 124,644 m² of deciduous hedge-row, Manitoba maple deciduous forest, mixed meadow, transportation and business sector communities will be permanently removed because of the proposed development east of Stillwater Creek.

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

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

Although the preliminary design shows many trees and vegetation features to be included in the design, it is recommended that a Tree Conservation Report be developed to demonstrate how tree cover will be retained on the Site, including mature trees, stands of trees, and hedgerows, using a design with nature approach to planning and engineering.



The following general mitigation measures are proposed to mitigate potential impacts to vegetation which consider the City of Ottawa's Tree Conservation Report Guidelines (City of Ottawa, 2019):

- Clearing of vegetation in adjacent areas should be kept to a minimum whenever possible, and existing trails, roads or cut lines should be used to avoid disturbance to vegetation and prevent soil compaction;
- + Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain;
- + The trees along the east edge of the Stillwater Creek should be retained as much as the grading and other site constraints will permit;
- + Vegetation removal will be minimized and clearly delineated on construction drawings;
- + Develop a Tree Protection Plan which identifies locations to be preserved;
- + The root system, trunk or branches of any tree not designated for removal will be protected from damage, as per the City's Tree Protection Specification;
- + In the event of accidental damage to trees, or unexpected vegetation removal, vegetation shall be replaced / restored with native species;
- Seeding of the disturbed temporary work areas and the permanent easement should be done with a native seed mix approved by RVCA. Replaced soils should contain native seed bank, facilitating successful revegetation.
  - One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced.
- + Material or equipment will not be placed within the critical root zone of the tree;
- + The existing grade will not be raised/lowered within the critical root zone without approval;
- + Signs, notices, or posters will not be attached to any tree;
- + Exhaust fumes from equipment will not be directed towards any tree's canopy;
- Construction vehicles will have designated access routes from and to the construction area.
  - To satisfy the requirement of the ecological principle of "No net loss" as per the Greenbelt Master Plan the implementation of the following mitigation measures will be considered:
- + Restore disturbed areas immediately following completion of work to pre-existing or better condition and seed to establish vegetative cover.
- Implementation of a naturalization strategy that includes the planting of mixed native trees, shrubs, and shrub seedlings.



# 5.2 Drainage, Erosion, and Fish Habitat

New development is being planned to respect setbacks from the geotechnical limit of the hazard lands, the watercourse (30 m), and top of slope (15 m), and no new structures will be constructed within these buffers as required by the City of Ottawa (Official Plan, 2017; See **Appendix A** – **Figure 5**, and **Appendix B**). As a result, it is anticipated that no negative impacts to the natural features associated with the riparian habitat adjacent Stillwater Creek will occur because of this Project.

Stillwater Creek provides fish habitat, and the thermal classification is cool water with a cool-warm water reach towards Robertson Road. The proposed development will maintain vegetated buffers, revegetate disturbed slopes as part of the construction of the access road and consider thermal impacts as part of design and stormwater management and discharge to ensure that there is no impact to the Creek's thermal regime. The design of the access road and culvert replacement will also be required to maintain or improve fish passage.

However, it is anticipated that due to the construction of an access road for the proposed development over an existing abandoned rail line, alteration to Stillwater Creek will occur to extend the existing culvert. Due to the potential for impacts to fish and fish habitat associated with this construction, it is anticipated that a project review by DFO will be required.

For this project, the RVCA is required to review development and alteration applications under the *Conservation Authorities Act* (O. Reg. 174/06) as the Project involves alteration, disturbance, diverting, etc. of the identified watercourse development due to the extended culvert required to construct the access road. As a result, a permit from RVCA will be required. Additionally, a slope/soil stability hazard has been identified on the Site, which will require demonstrating that the proposed development meets geotechnical requirements.

It anticipated that any impacts to water quality and fish habitat in the adjacent Stillwater Creek which may occur will be because of site preparation, demolition and construction activities (e.g., accidental spills and malfunctions) which may result in impacts to site drainage, erosion and sedimentation if improperly managed. The following mitigation measures are proposed to avoid or mitigate impacts:

- No in-water work will occur during in-water work timing restrictions. Timing restrictions to be confirmed with NDMNRF;
- + Construction activities will be suspended during periods of heavy rains;
- Machinery will arrive at the site clean and free of leaks;
- + If blasting activities are required, they will follow Measures to Avoid Causing harm to Fish and Fish Habitat for explosives;
- + An erosion and sediment control (ESC) plan will be developed by the contractor with the goal of controlling erosion and the movement of sediment laden water offsite;
- + The contractor will be responsible to ensure that the ESC measures chosen are appropriate for the site and are functioning as intended;
- + The contractor will maintain and monitor ESC measures, provide the results of monitoring, and ensure adjustments as needed are made on a continuous basis;
- No work will occur in or within 30 m of the water until the appropriate ESC measures have been properly implemented. These will be designed to prevent the movement of suspended sediments and concrete outside of the site preparation and construction work areas;



- Work will stop if sedimentation issues occur outside of work areas until the cause of sedimentation is identified and addressed:
- + Dust particles created during concrete crushing, demolition, excavation, stockpiling etc. will be suppressed using the appropriate method (i.e., tarps);
- + The existing vegetated buffer will be maintained along Stillwater Creek. Any removal of riparian vegetation for the access road will be minimized, and removal will be completed using small machinery;
- + Where possible, vehicle traffic will be restricted to access roads;
- + The sediment fencing will not be removed until the terrestrial vegetation has become reestablished:
- + If required, wash-out stations for concrete trucks will be indicated by signage, located in an area where all precautions have been taken to contain wastewater and leftover concrete;
- + Erosion control structures will be installed. These structures are to be left in place until vegetation is re-established and/or all exposed soils are stabilized;
- + There will be no use of herbicides in clearing of vegetation;
- Refueling of equipment and maintenance shall be conducted off slopes and away from water bodies on impermeable pads (drip tray) or buried liners to allow full containment of spills;
- + Emergency spill kits will be located on site;
- + The contractor crew will be fully trained on the use of clean-up materials to minimize impacts of any accidental spills;
- The area will be monitored for leaks and spills. In the unlikely event of a minor spillage, the contractor will halt the activity and corrective measures will be implemented. Any spills will be immediately reported to the MECP Spills Action Centre (1-800-268-6060) and RVCA.

#### 5.3 Wetlands

Three (3) wetland communities were identified within the Site; two (2) MAMM3 – Mixed Mineral Meadow Marsh ecosites, a SWTM2-1 – Red-Osier Dogwood Mineral Deciduous Thicket Swamp, and a SWTM3-6 – Mixed Willow Mineral Deciduous Thicket Swamp ecosite. All features are situated adjacent to Stillwater Creek.

During the 2022 field investigations, the outer boundary of the wetland feature north of the abandoned railway corridor was delineated based on the presence and relative abundance of wetland plant species. The boundary observed during this site visit differs from the limits identified in the provincial unevaluated wetland layer (MNRF, 2019). The MNRF mapping identifies the feature as a 6,398 m² 'Swamp', however based on site visits completed in 2021, and 2022, the wetland feature observed in this area consists of a MAMM3 – Mixed Meadow Marsh comprised of Reed-canary Grass, and Narrow-leaved Cattail, and a SWTM2-1 – Red-Osier Dogwood Mineral Deciduous Thicket Swamp community that when combined, measures approximately 824 m². Based on a review of historic imagery for the Site (GeoOttawa, 2022), it appears that the wetland feature in this area has reduced in size due to the construction of several rail lines between the years of 1958 and 1976. Majority of the ecosite that is currently mapped as 'swamp' is a FOCM6-3 – Dry-Fresh Scots Pine Naturalized Coniferous Plantation ecosite dominated by naturalized Scots pine. Other species noted in this ecosite were Manitoba maple, American elm, green ash, common buckthorn, and honeysuckle species.



The Federal Policy on Wetland Conservation commits all federal departments to the goal of no net loss of wetland functions on federal lands and waters. As the proposed access road is planned on federal lands owned by the NCC, this policy applies. Based on the updated conceptual design, the limits of construction can maintain a 15 m buffer from the wetland extent, and no impacts to this feature are anticipated because of the Project. In 2022, the project design team further refined the boundaries of the access road to ensure all grading limits associated with the road were outside of the 15 m buffer of the wetland. Refer to **Appendix A – Figure 5** to view the previous proposed access road location in relation to the 2022 design update.

Recommended mitigation measures to reduce impacts to this wetland within the Study Area include:

- + A screening field program of wetlands and riparian areas should be undertaken prior to construction, to determine where precautionary measures (ex. equipment washing before site access) may be necessary to mitigate for the spread of non-native species;
- + Ensure that machinery arrives on Site in a clean condition and is maintained free of fluid leaks, invasive species, and noxious weeds for the duration of construction;
- + Wash, refuel and service machinery and store fuel and other materials for the machinery a minimum of 30 m from any surface water features to prevent any deleterious substances from entering the water;
- + To reduce the impact of potential contaminant spills, the contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan;
- + Work should be limited or stopped during and immediately following significant precipitation events (i.e., 100-year storm event), at the discretion of on-site environmental personnel;
- + Restore disturbed areas immediately following completion of work to pre-existing or better condition and seed to establish vegetative cover; and
- + Implementation of a naturalization strategy that includes the planting of mixed native shrubs, shrub seedlings, and wetland plugs.

# 5.4 Wildlife, Significant Wildlife Habitat and Migratory Birds

Several wildlife species were documented through background data review and have been confirmed through field investigations. Wildlife and associated habitat observed within the Site was typical of a disturbed setting and based on field observation common species are expected to be present within these habitat features all with secure habitats in Ontario.

Features in the Study Area may provide candidate significant wildlife habitat in the form of Bat Maternity Colonies, Amphibian Breeding habitat (Wetlands), and Amphibian Movement Corridors. As there will be no impacts to the wetlands adjacent to Stillwater Creek (within the valleyland) where candidate amphibian breeding and movement corridors are identified, it is anticipated that these features will continue to provide habitat for amphibians during and after Project completion. Similarly, it is expected that the FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest ecosite adjacent to Stillwater Creek will continue to provide candidate Bat Maternity Colonies habitat after construction is complete.



Based on the conceptual design approximately 10,832 m<sup>2</sup> of the Scots pine coniferous plantation, deciduous hedgerow, Manitoba maple deciduous forest, and mixed meadow communities will be permanently removed to construct the access road. Candidate significant wildlife habitat has not been identified in these areas although habitat is available for wildlife typical of urban settings.

Many bird species were observed, and the Site provides suitable breeding bird habitat. Construction activities have the potential to damage nests and/or disturb breeding birds within the Study Area. Direct impacts to individuals, nests and/or nestlings may occur within four (4) ELC vegetation communities (FOCM6-3 – Dry-Fresh Scots Pine Naturalized Coniferous Plantation, FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest, MEMM3 – Dry-Fresh Mixed Meadow, and THDM2 – Dry-Fresh Deciduous Shrub Thicket,) because of vegetation and tree removals during Site preparation.

Vegetation clearing, use of heavy machinery, increased human presence, noise and light pollution, soil compaction, stockpiled earth, and sedimentation of existing terrestrial habitat has the potential to indirectly impact a variety of wildlife.

The City of Ottawa's *Protocol for Wildlife Protection during Construction* (2015) was developed as part of the City's Wildlife Strategy. The protocol is a compilation of best practices that serves as a guide and a common frame of reference for the city and the development industry in addressing wildlife protection during construction (City of Ottawa, 2015). This protocol is intended to help reduce the direct impacts of development on wildlife that occur during construction (ibid). The protocol promotes best management practices relating to sensitive timing windows for clearing, pre-stressing, site clearing, construction site management, wildlife encounters, wildlife-proofing, and owner awareness (ibid).

General habitat for several wildlife species were observed within the Site, therefore, it is recommended that this protocol be included in the Contract Documents to guide wildlife protection prior to and during construction. Several best practices from this protocol have been recommended below. Refer to the City of Ottawa's *Protocol for Wildlife Protection during Construction* (2015) for further information. The following mitigation measures are also proposed to avoid or mitigate impacts:



- + Removal of natural vegetation will be minimized and clearly delineated on construction drawings;
- Workforce will be educated on potential wildlife which could occur in the vicinity of the work area and measures to avoid wildlife (as per City of Ottawa, 2015);
- + Removal of woody vegetation will not occur during the breeding bird season from April 15<sup>th</sup> August 31<sup>st</sup> inclusive, unless a qualified biologist has searched the Site for nests and concluded that no nests are present, no more than 2 days prior to clearing. If nests are found, a protective buffer around the nest location will be required until such time that the nest is abandoned;
- If work must occur during the peak activity period for reptiles and amphibians, exclusion fencing shall be installed prior to the peak activity period (April 1) and shall be properly maintained and monitored for the duration of construction. The goal of exclusion fencing is to prevent or minimize the risk of harm to herpetofauna and their nests and/or eggs by physically preventing them from entering the work areas at any time prior to and during construction:
  - Fence installation shall be consistent with the methods prescribed in the Pembroke District MNRF's Turtle Mitigation for Road and Highway Projects (MNRF, 2014);
  - Inspect protective exclusion measures daily and after each rain event to ensure their integrity and continued function.
- Harassment and/or harm to wildlife during construction is prohibited (as per City of Ottawa, 2015);
- + When possible, work will be completed during daylight hours. If nighttime lights are used, they will be installed to illuminate the work area only to minimize impacts to nighttime activities of wildlife;
- + Existing access roads will be used as much as possible and speed limits will be clearly posted on site access and construction roads to minimize the potential for turtle road mortality;
- + Stockpiled materials will be surrounded by sediment control fencing to prevent nesting by birds, turtles, and snakes (as per City of Ottawa, 2015);
- Vehicles and equipment will have the appropriate mufflers installed;
- Vehicle and equipment engine idling will be minimized;
- + Construction vehicles will have designated access routes from and to the construction area;
- + If a wildlife species individual is encountered at the Site, work will be stopped until the individual either moves off the site or can be relocated by trained personnel;
- + Design of structures should consider City of Ottawa Bird Safe Design Guidelines for components such as windows and window treatments, landscaping, etc.
  - To satisfy the requirement of the ecological principle of "No net loss" as per the Greenbelt Master Plan the implementation of the following mitigation measures will be considered:
- + Restore disturbed areas immediately following completion of work to pre-existing or better condition and seed to establish vegetative cover;
- + Implementation of a naturalization strategy that includes the planting of mixed native trees, shrubs, and shrub seedlings.



## 5.5 Species at Risk

At this time, no endangered or threatened SAR have been identified within the buildable area on-Site; however, the Project has the potential to directly impact five (5) SAR and/or their habitat: Monarch, Blanding's Turtle, Midland Painted Turtle, Snapping Turtle, and Barn Swallow. A summary of these potential adverse effects is listed below.

Habitat is present for Monarch, identified during background review and confirmed during field investigations. It is anticipated that approximately 29,806 m² of MEMM3 – Dry-Fresh Mixed Meadow habitat will be permanently removed because of the proposed development. These open areas are predominately comprised of ground cover, wildflowers, and other herbaceous flowering plants, with patches of regenerating tree and shrub species. Although these areas provide general nectaring habitat for Monarch, due the frequently disturbed nature of these lands because of the on-going commercial heavy equipment business currently in operation, high quality breeding habitat required by this species will not be adversely affected because of this project. Regardless, avoidance techniques are recommended below to protect impacts to individuals.

Habitat for SAR turtles (i.e., Blanding's Turtle, Midland Painted Turtle, and Snapping Turtle) is present within Stillwater Creek and the adjacent wetlands. Although impacts to the creek are not anticipated, impacts to these species may occur during Site clearing and during construction activities if turtles occasionally move through the Site.

Approximately 10,832 m<sup>2</sup> of the Scots pine coniferous plantation, deciduous hedgerow, Manitoba maple deciduous forest, and mixed meadow communities will be permanently removed because of the access road construction. Based on the significant wildlife habitat assessment completed in this area, habitat is not suitable for SAR birds and/or SAR bats although habitat is available for wildlife typical of urban settings.

No nests created by Barn Swallow were observed within the Study Area during the 2021 field investigations, however, existing structures located in the CVC-1 community may provide suitable nesting habitat for this species.

With proper implementation of avoidance and mitigations such as Site clearing outside of the active season, and proper isolation of the construction areas, these impacts are anticipated to be temporary and methods to restore the disturbed areas post-construction should be implemented.

Refer to **Section 5.3** above to review the recommended avoidance and mitigations measures proposed to protect general wildlife including birds, bats and herpetofauna. To ensure compliance under Section 9 and/or Section 10 of the ESA, and to protect SAR and SAR habitat during development and operations of the proposed Project activities, the following general mitigation measures are recommended:

- + A worker awareness program shall be provided to all on-site personnel that includes species at risk identification and habitat characteristics, such as the Ottawa Species at Risk Handbook (OSC, 2014), and provides general species-specific guidance with respect to appropriate actions to be taken whenever these species are encountered;
- + A daily pre-construction search of the machinery and the work area shall be implemented to identify presence of species at risk, as animals may be found hiding or basking around equipment, rocks, debris piles etc;
- If endangered or threatened species are observed in or near the study area, work shall stop immediately, a photograph shall be taken of the species (if possible) and the SAR shall be allowed to move out of the work area on its own. The MECP shall be notified (as required).



#### 5.5.1 SAR Specific Mitigations

#### Monarch

As marginal Monarch habitat is present in the MEMM3 – Dry-Fresh Mixed Meadow of the Site, the following recommendations are provided for insect SAR:

- Limit vegetation clearing, especially in areas with wildflowers and/or milkweed, to outside the active plant growing season when possible (i.e., May to September);
- If vegetation clearing must occur during the active plant growing season, clearing should start at the edge of the habitat and move in to allow for insects to flee towards suitable habitat;
- Limit the use of pesticides at the Site.

#### **SAR Herpetofauna**

Suitable foraging, mating, thermoregulation, summer inactivity, and movement habitat was identified for Blanding's Turtle, Midland Painted Turtle, and Snapping Turtle at the Site. The active season for herptiles is March 15 through October 31 and if construction activities are scheduled to occur during the active season the following mitigation measures may be required:

- Installation of exclusion fencing shall be implemented as per recommendations provided in Section 5.3;
- Complete daily sweeps of the isolated construction areas to determine if any herptiles have entered the construction limits;
- If a herptile is observed in the active construction area, an appropriate buffer should be established by a qualified individual, within which construction activities cease and the herptile allowed to leave the work area on its own accord.

#### **Barn Swallow**

Although no Barn Swallows or sign of nesting by the species was observed during the 2021 field investigations, suitable habitat is present within the CVC\_1 community. Therefore, one (1) year prior to demolition it is recommended that surveys of the buildings be completed in search of Barn Swallow nests to determine presence/absence. If active Barn Swallow nests are observed during the survey, the rules set forth under the ESA for altering a structure that is habitat for Barn Swallow (MECP, 2021b) must be followed, including registering the activity and compensating for removed habitat. This includes:

- Registering the work and the affected species (Barn Swallow) with the MECP before work begins;
- Minimizing the effects of development activities on Barn Swallow;
- Creating, maintaining, and monitoring new habitat for Barn Swallow;
- Preparing and maintaining records that relate to the activity and the habitat.

To protect individuals because of construction activities, refer to **Section 5.3** above to view the timing windows recommended to protect migratory bird species.



#### 5.6 Related General Considerations

Construction activities may impact air quality because of noise, fugitive dust or vehicle/equipment exhaust. This potential impact could affect all ecological terrestrial and aquatic species and features and water quality within Stillwater Creek. The following mitigation measures are proposed to avoid or mitigate impacts:

- + Dust Management Plan will be developed by the contractor prior to construction;
- All equipment and vehicles will be equipped with dust collectors and mufflers as appropriate;
- + During concrete removal, tarps will be used to contain airborne dust particles;
- + Water will be applied, at a minimum, daily, to all inactive disturbed surface areas. Water will be applied more frequently if required to prevent the visible emissions of fugitive dust;
- + Water will be applied to all unpaved roads used for vehicular traffic at a frequency enough to prevent the visible emissions of fugitive dust;
- Clean gravel with low fines content will be chosen as material to top unpaved roads. Unpaved roads will be regularly graded and maintained to avoid wash boarding and rutting that can increase fugitive dust emissions;
- + All loads on haul trucks will be covered:
- During very windy conditions, material handling/transfer activity that generates fugitive dust will be avoided or reduced. If it is not possible to reschedule the activity, increased application of water for dust suppression may be used;
- + A sprinkler or spray system will be considered for areas requiring frequent wetting;
- Water will be applied to all open stockpiles daily when there is evidence of wind driven fugitive dust;
- + Wetted stockpiles will be surrounded with sediment and erosion control measures (i.e., fencing);
- Materials with the potential to generate dust will be sprayed with water 15 minutes prior to handling and/or at points of transfer;
- Disturbed areas will be re-vegetated following a re-vegetation plan which will utilize native shrubs and trees, based on local conditions, to promote the quick re-growth of a natural habitat and minimize fugitive dust.

# 6. Summary and Recommendations/Conclusions

This EIS provides an analysis of the potential impacts to the natural features that may result from the proposed development of the Site located at 1987 Robertson Road in Ottawa, Ontario, Canada.

The development of the Site may result in impacts which could affect natural features largely because of construction activities and the permanent removal of existing vegetation. Although the Study Area has been previously disturbed due to the on-going commercial heavy equipment business currently in operation, new disturbances to the natural environment will occur.



With proper implementation of avoidance and mitigations measures as outlined within this EIS, the works associated with the Project are not likely to result in long term adverse effects to adjacent vegetation communities, Stillwater Creek and its associated wetlands, and wildlife habitat. Impacts to habitat function in adjoining habitats, are anticipated to be temporary so long as proper environmental protection measures are implemented, monitored, and applied effectively during construction.

The ecological features and functions identified within and adjacent to the Site which may be impacted by this development include the following:

- + Increased potential sediment and erosion into the Stillwater Creek as a result of construction activities;
- Damage or loss of trees during construction;
- + The loss of migratory bird nest, eggs and nestling due to tree cutting, vegetation clearing or building demolition activities;
- + Loss of wildlife habitat due to the proposed access road construction;
- + Temporary disruption to wildlife within and adjacent to Site during construction activities;
- + Changes in air quality including of noise, fugitive dust or vehicle/equipment exhaust.

Due to the potential limited impacts to fish and fish habitat associated with the construction of the access road, a request for Project Review under the *Fisheries Act* will be submitted to DFO.

As the project involves alteration, disturbance, diverting, etc. of the identified watercourse development, a permit will be required from the RVCA prior to any work commencing.

Although a loss of wildlife habitat is expected because of the Project, with proper implementation of the avoidance and mitigation measures recommended in this EIS, it is anticipated that impacts to wildlife individuals will be avoided, and breeding/roosting habitat will remain available in adjacent lands after Project completion.

Further consultation with regulatory authorities (i.e., MECP, City of Ottawa, NCC) is recommended as the project advances and more detailed design and staging information becomes available to ensure that impacts are appropriately considered and addressed.

### **6.1 Study Limitations and Constraints**

**CIMA+** completed diligent and reasonable research in the conduct of this evaluation, with respect to the recognized laws and standards of practice.

The facts presented in this report are strictly limited to the period of investigation. The conclusions presented in this report are based on the available information and documents, the observations made during the Site visit and the information obtained from communications with various contacts. The interpretation presented in this report is limited to this data.

**CIMA+** is not responsible for erroneous conclusions due to voluntary abstention or the non-availability of pertinent information. Any opinion expressed in relation to legal or regulatory conformity is technical and should not be, in any case, considered as legal advice.



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Site boundary

120 m - Study Area

0 0.420.85 1.7 F/F

Spatial Reference: PCS: NAD 1983 CSRS MTM 9

GCS: GCS North American 1983 CSRS

Datum: North American 1983 CSRS

Scale: 1:3,518

Sources:
- Terrestrial Survey, 2021
- Basemap : City of Ottawa, Province of Ontario, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, AAFC, NRCan, Google

### **General Notes:**

Dimensions on the plan should be read and not measured. Any errors or omissions should be reported to CIMA +. The boundaries, areas, and title deeds must be verified by a surveyor.

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Survey by : C. Little Figure by : J. Scott Concept by : J. Scott Verified by : K. Markvorsen



Environmental Impact Statement - Proposed Site Redevelopment Stillwater Station, 1987 Robertson Rd, Ottawa, Ontario Stillwater Station Ltd.

Figure 1 - Site Location

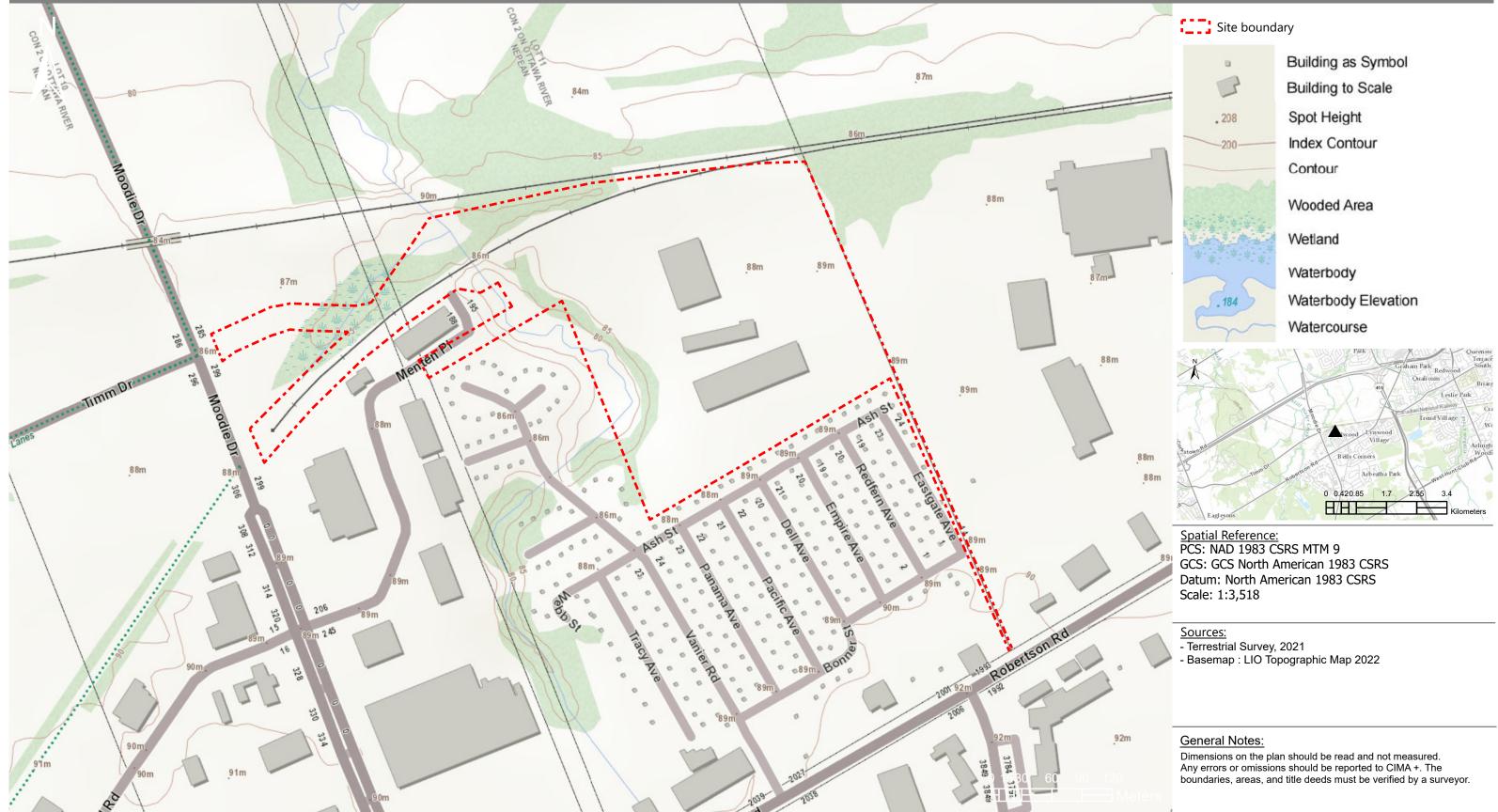
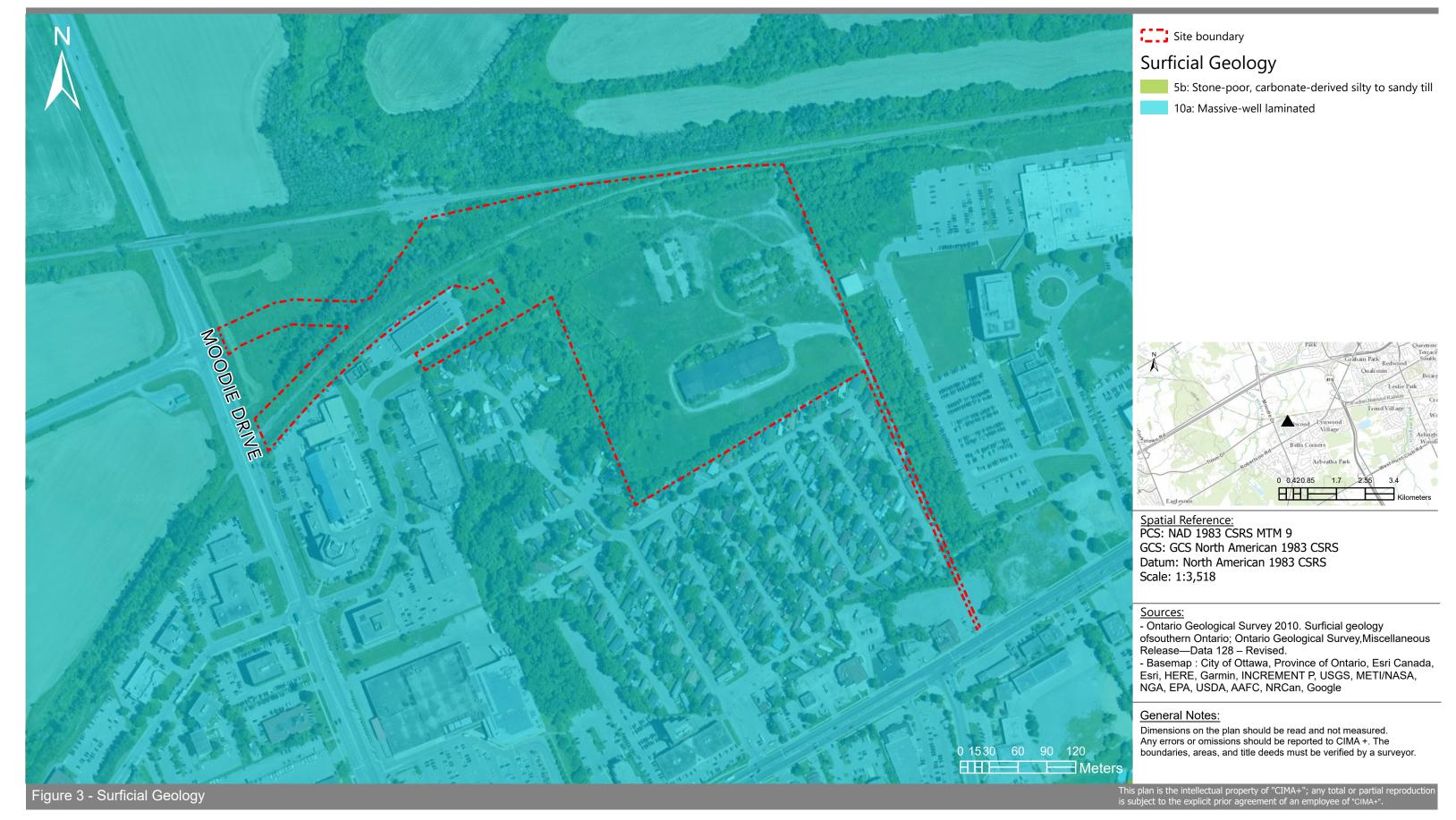


Figure 2 - Topography Map

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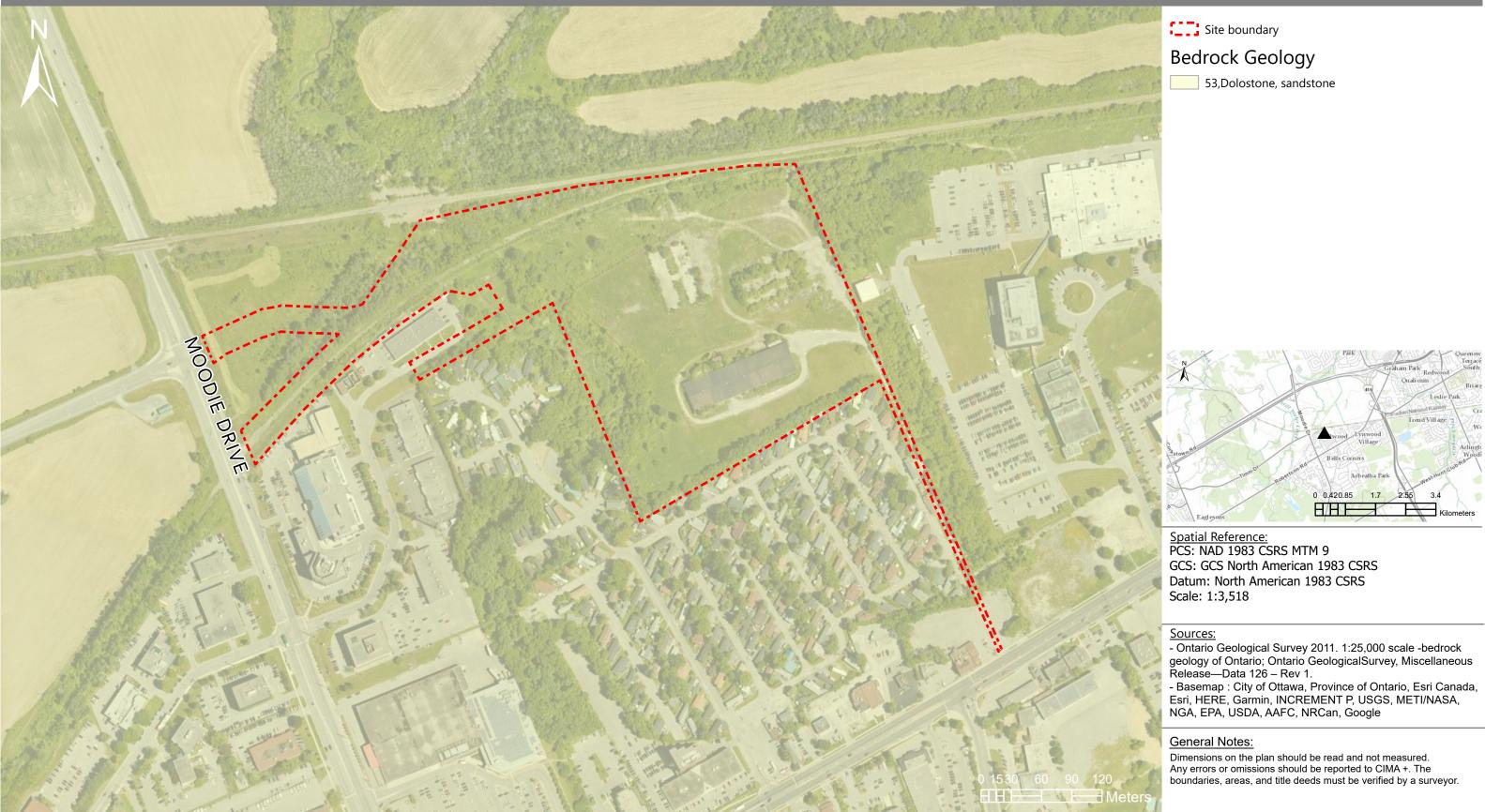


Figure 4 - Bedrock Geology

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Survey by : C. Little Figure by : J. Scott Concept by : J. Scott

Verified by: K. Markvorsen

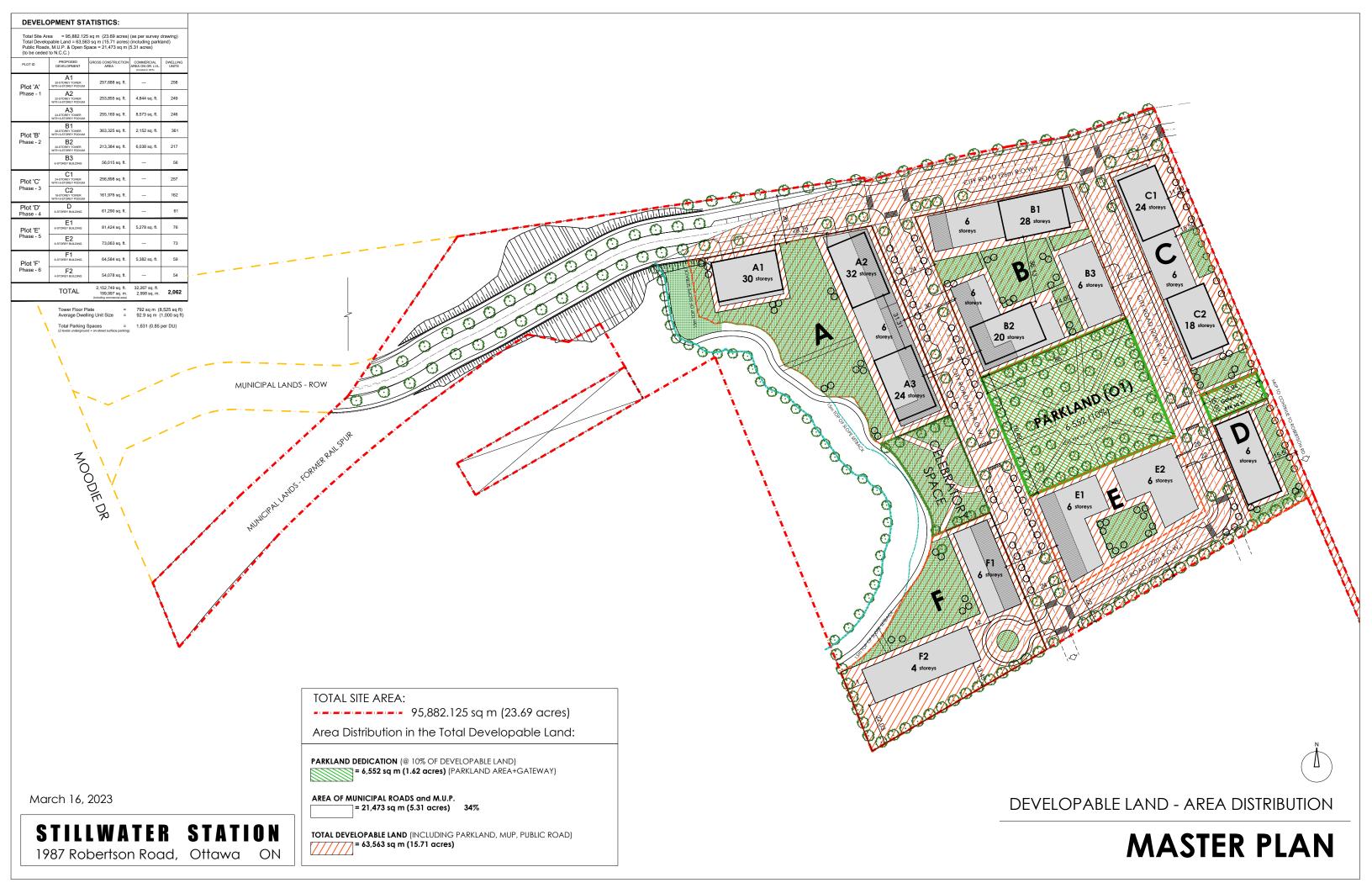
CIMA

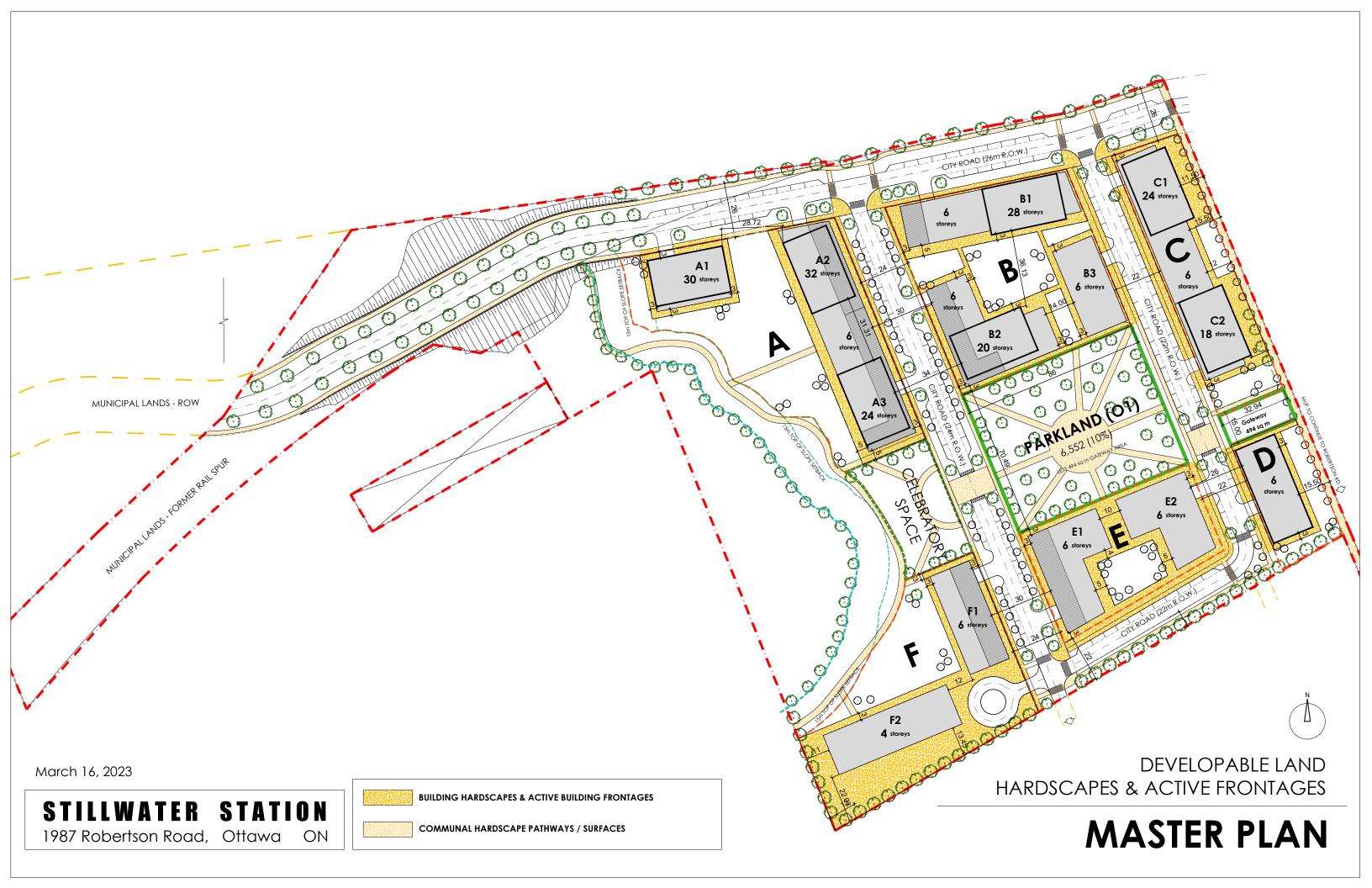
## B

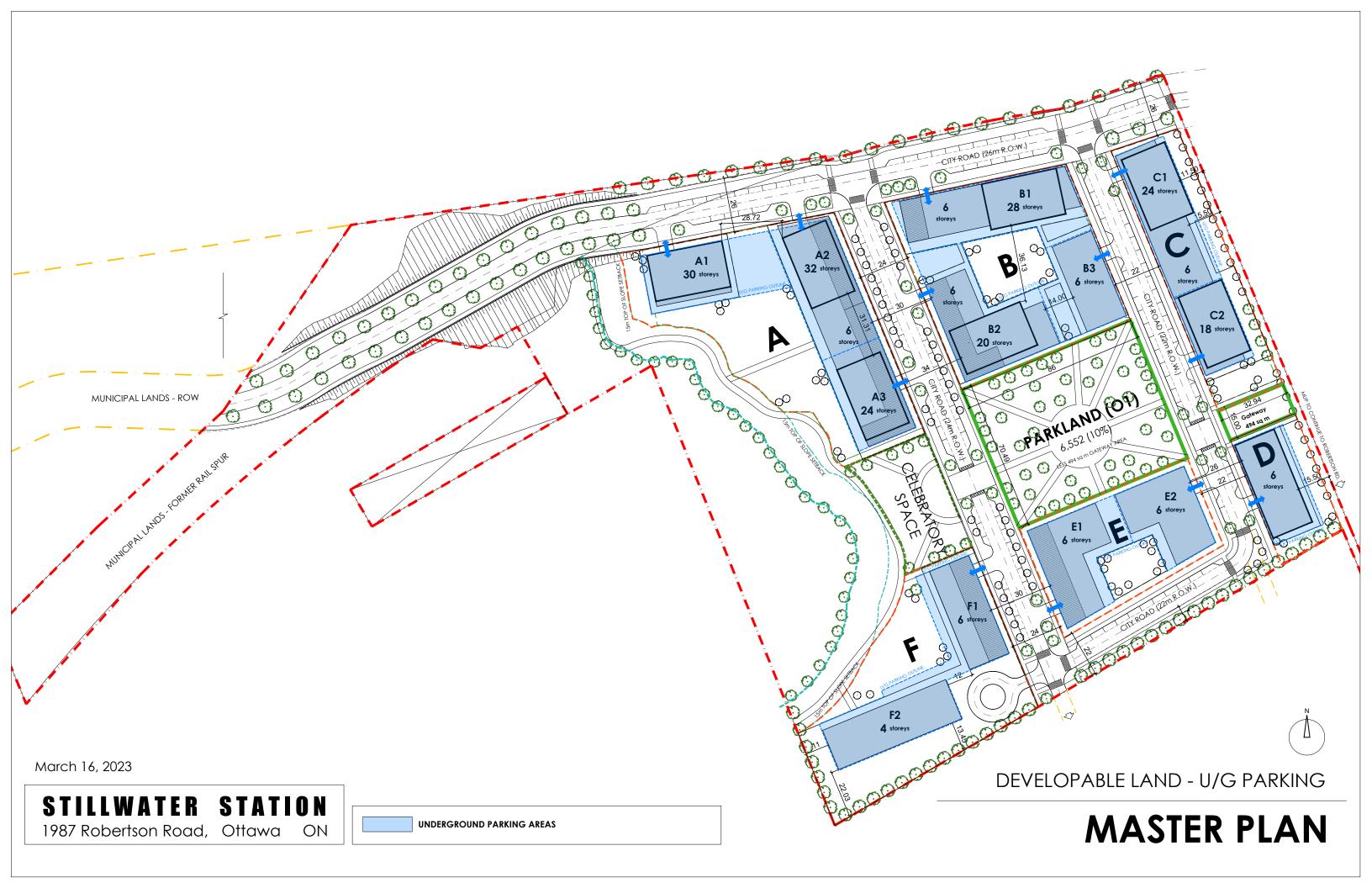
Appendix B Preliminary Design

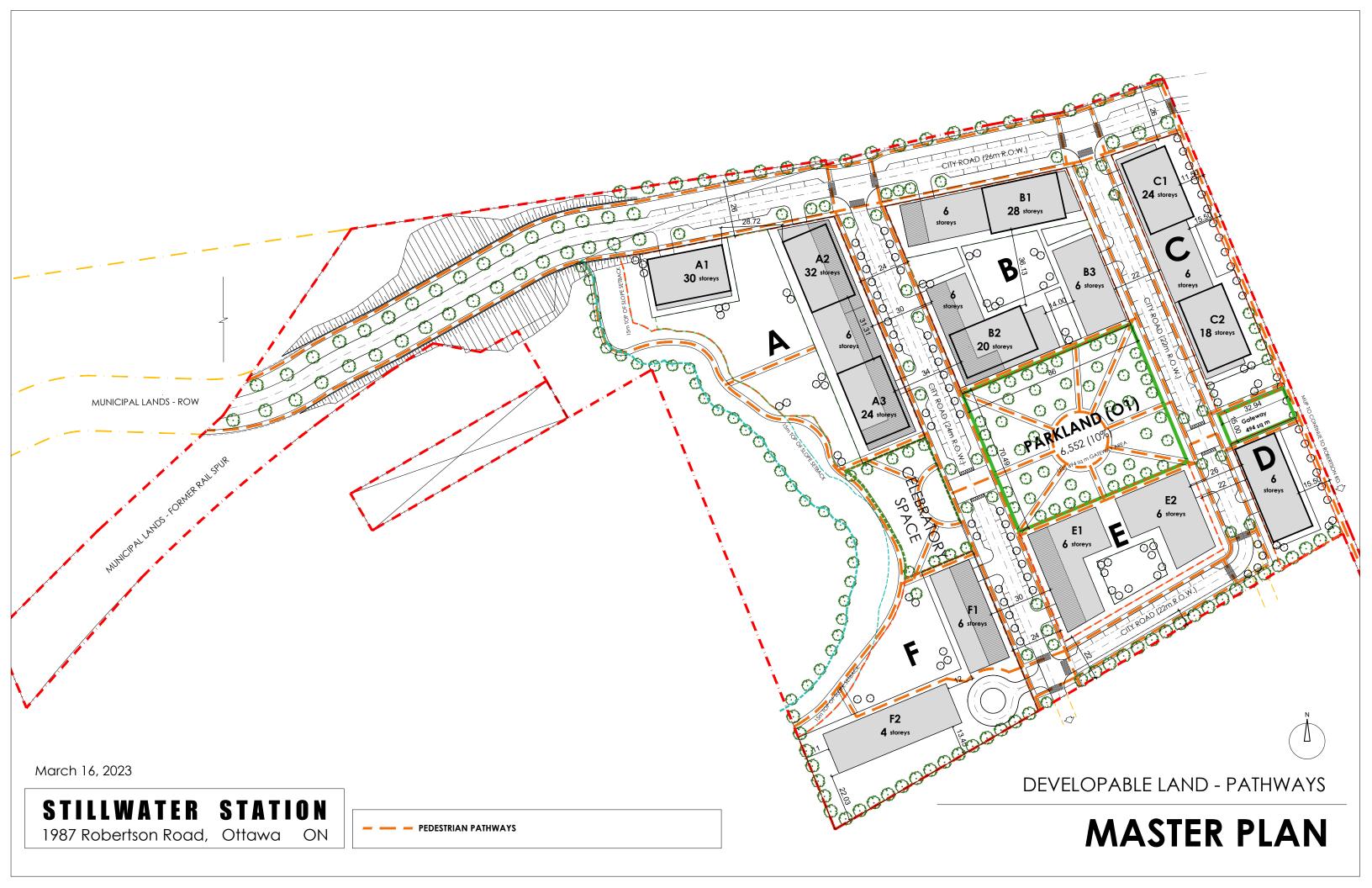












C

Appendix C
Consultation & Correspondance



### **Casey Little**

From: Casey Little

**Sent:** January 25, 2022 3:40 PM

To: McCreight, Laurel; sami.rehman@ottawa.ca
Cc: aglass@prpgrp.com; Kai Markvorsen
Subject: RE: Stillwater Station - EIS Comments

Good afternoon Laurel and Sami,

We have received and reviewed the City's 1<sup>st</sup> round of comments (Jan 4, 2022) on the Draft EIS for the proposed Stillwater Station project in Nepean, ON. and would like the opportunity to schedule a brief call to discuss them in greater detail. Specifically, we would like to discuss comments 57 – 65 regarding the Environmental Planning aspects of the project.

Would you be available for a call in the near future? If so, please provide a time and date that suit your schedules.

Thank you in advance.

Regards,

Casey

### **CASEY LITTLE**

Biologist / Urban Planning and Environment

T 613-860-2462 M 343-575-0098 F 613-860-1870 110–240 Catherine Street, Ottawa, ON K2P 2G8 CANADA 415 Baseline Road West, 2nd Floor, Bowmanville, ON L1C 5M2 CANADA









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From: McCreight, Laurel < Laurel. McCreight@ottawa.ca>

Sent: August 25, 2021 3:06 PM

To: Casey Little < Casey.Little@cima.ca>

Cc: aglass@prpgrp.com; Kai Markvorsen <Kai.Markvorsen@cima.ca>

Subject: RE: Stillwater Station - EIS Request for Information



### Hi Casey,

Thank you for reaching out. As per the pre-consultation notes, I can provide the following:

### **Environment**

- The Subject property has a watercourse and part of the Natural Heritage System. As such, an EIS will be required which should cover the following,
  - o Natural Heritage System feature- the valleyland associated with the watercourse is part of this feature
  - Species at Risk
  - Watercourse setbacks (OP 4.7.3)
  - o Further details of EIS requirements can be found in OP 4.7.8 or the EIS guidelines
- There is an unevaluated wetland in the greenbelt lands adjacent to the trail in the passive open space area.
- Stillwater creek watercourse runs through the property and a 30 metre setback is required from the normal high-water mark or 15 metres to top of bank, whichever is greater and with the recommendations from the geotechnical report.
- The City may look at the dedication of Stillwater Creek lands through the subdivision process.
- Schedule K of the Official Plan identifies the ravine as an unstable slope.
- Please consult with the RVCA- permits may be required.
- There is potential for butternut where trees are present

Please contact Environmental Planner, <u>Sami Rehman</u> for follow-up questions.

Regards, Laurel

From: Casey Little < <a href="mailto:Casey.Little@cima.ca">Casey.Little@cima.ca</a>>

Sent: August 25, 2021 2:05 PM

To: McCreight, Laurel < Laurel. McCreight@ottawa.ca>

Cc: aglass@prpgrp.com; Kai Markvorsen < Kai.Markvorsen@cima.ca>

Subject: Stillwater Station - EIS Request for Information

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ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Good afternoon Ms. McCreight,

CIMA+ has been contracted by The Properties Group Management Ltd. to prepare an Environmental Impact Study (EIS) in support of the Secondary Plan for the proposed residential development of the property referred to Stillwater Station, located at 1987 Robertson Rd, Ottawa, ON.

The proposed development will involve a combination of commercial and residential buildings located 1987 Robertson Rd, Ottawa, ON, part of Lot 11, Concession 2 of Nepean Geographic Township. The Study Area is approximately 23.68 acres, in the neighbourhood of Bells Corners and is situated south of the Beachburg Rail Corridor and Carleton Place Rail Corridor. The site can be accessed from Robertson Road to the south and Moodie Drive to the west.

Refer to the included map for the Study Area boundaries.

We have reviewed relevant background data and have determined the following natural heritage constraints within or adjacent to the site:

- Stillwater Creek;
- RVCA regulatory limit;
- Unevaluated wetlands;
- Woodlands; and
- SAR habitat.

We are contacting you to obtain any further information on environmental features and/or conditions for and adjacent (within 120 meters) to the site prior to us drafting the EIS for this project.

Do not hesitate to contact me should you want to discuss this request or require further information.

Respectfully,

### **CASEY LITTLE**

Biologist / Urban Planning and Environment

T 613-860-2462 M 343-575-0098 F 613-860-1870 110–240 Catherine Street, Ottawa, ON K2P 2G8 CANADA 415 Baseline Road West, 2nd Floor, Bowmanville, ON L1C 5M2 CANADA



Engineering for people





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3

## **Jamieson-Lee Scott**

From: Sent: To: Subject:	NCCInfoCCN <info@ncc-ccn.ca> August 31, 2021 2:59 PM Jamieson-Lee Scott Re: Stillwater Station - EIS Request for Information CRM:000015495</info@ncc-ccn.ca>	
EXTERNAL EMAIL		
Hello,		
Thank you for contacting Clien has been created to track your	at Services at the National Capital Commission. The case CC-193992-F3R3J0 r request.	
We are currently receiving a high volume of e-mails, therefore our response time may be longer than usual. Please rest assured that we are working diligently to respond to your request as quickly as possible.		
Thank you for your patience.		
Kindly note that our office hours are Monday to Friday, from 8:30 am to 5 pm.		
Regards,		
NCC Client Services		
*********	*********	
Bonjour,		
	ec le Service à la clientèle de la Commission de la capitale nationale. Nous as CC-193992-F3R3J0 à votre requête.	
Comme nous recevons actuellement un volume élevé de courriels, notre temps de réponse peut être plus long que d'habitude. Soyez assurés que nous travaillons avec diligence afin de répondre à votre demande le plus rapidement possible.		
Nous vous remercions de votre patience.		
Veuillez noter que nos heures de bureau sont du lundi au vendredi, de 8 h 30 à 17 h.		
Cordialement,		
Service à la clientèle de la CCN	N	

 From:
 Stone, Alexander

 To:
 Casey Little

 Cc:
 Kai Markvorsen

Subject: RE: Robertson/Timm Discussion

Date: February 2, 2022 3:33:41 PM

Attachments: image001.jpg

image002.priq

### EXTERNAL EMAIL

Hi Casey,

As per our conversation today, I would like to suggest some recommendations to the EIS based on my review. I have concerns regarding the loss of potential terrestrial habitat for Blanding's Turtle + other turtle species-atrisk and eastern milksnake. I would like to have a clearer indication of the (potential) loss of habitat for at-risk herpetofauna. Unevaluated wetlands are subject to the Federal Policy on Wetland Compensation. A more detailed wetland delineation is requested so that there no loss of ecological function per the Greenbelt Master Plan. Should the wetland be impacted, a compensation plan will be needed.

Please note that due to the presence of suitable habitat of western chorus frog as per the EIS, chorus frog surveys should be done following the Blazing Star protocol or equivalent. As per the Federal Species-at-Risk Act, federal lands that have confirmed presence of protected species or critical habitat cannot be transferred unless permitted by the responsible agency (ECCC) ex. SARA Permit. This is especially true for western chorus frog.

All the best,

Alex

From: Casey Little < Casey.Little@cima.ca> Sent: Monday, January 31, 2022 11:40 AM

**To:** Stone, Alexander <Alexander.Stone@ncc-ccn.ca>

Cc: Andrew Glass <aglass@prpgrp.com>; Kai Markvorsen <Kai.Markvorsen@cima.ca>

Subject: RE: Robertson/Timm Discussion

Good morning Alex,

I am free to chat on Wednesday at 2 pm – do you use Microsoft Teams? If so, shall I set up a call through this app?

Regards,

Casey

### **CASEY LITTLE**

Biologist / Urban Planning and Environment

110–240 Catherine Street, Ottawa, ON K2P 2G8 CANADA 415 Baseline Road West, 2nd Floor, Bowmanville, ON L1C 5M2 CANADA

	2	

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From: Stone, Alexander < <u>Alexander.Stone@ncc-ccn.ca</u>>

Sent: January 28, 2022 3:39 PM

**To:** Casey Little < <u>Casey.Little@cima.ca</u>> **Subject:** RE: Robertson/Timm Discussion

### EXTERNAL EMAIL

Hi Casey,

I look forward to sharing the BLTU results with you. I do have some concerns to raise with you about the report. I wrote a few notes regarding western chorus frog, mixed mineral marshes, and the Federal Policy on Wetland Conservation, as well as the no net loss of ecological function as per the Greenbelt Master Plan (2013).

I thought that it would be best to discuss, are you available on Wednesday at 2pm?

Thanks,

Alex

From: Casey Little < <u>Casey.Little@cima.ca</u>>
Sent: Friday, January 28, 2022 3:01 PM

**To:** Stone, Alexander <<u>Alexander.Stone@ncc-ccn.ca</u>>

Subject: RE: Robertson/Timm Discussion

Good afternoon Alex,

No targeted surveys for SAR were completed under our scope of work for this project.

I would be interested to discuss your knowledge of Blanding's turtle in relation to the Study Area for sure. Please let me know when you are available to discuss.

Thank you for reaching out.	
Casey	
CASEY LITTLE	

Biologist / Urban Planning and Environment

T 613-860-2462 **M** 343-575-0098 **F** 613-860-1870 110–240 Catherine Street, Ottawa, ON K2P 2G8 CANADA 415 Baseline Road West, 2nd Floor, Bowmanville, ON L1C 5M2 CANADA



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CONFIDENTIALITY WARNING This email is confidential. If you are not the intended recipient, please notify the sender immediately and delete it in its entirety.

From: Stone, Alexander < <u>Alexander.Stone@ncc-ccn.ca</u>>

Sent: January 28, 2022 2:30 PM

**To:** Casey Little < <u>Casey.Little@cima.ca</u>> **Subject:** Robertson/Timm Discussion

### EXTERNAL EMAIL

Hi Casey,

I'm looking through this report as it affects NCC lands. I'm looking for more information on your western chorus frog surveys that were completed as part of the EIS. Were they done during the best timing window for WCF? I see that the pictures are from July.

I never got the request from the information center but we have some additional information on Blanding's turtle. Happy to go over it in an informal way.

All\_Image Referencing\_Zoning Bylaw Amendment Application\_Image Reference\_2021-10-13 - Environmental Impact Statement - D02-02-21-0120.PDF (ottawa.ca)

Thanks,

Alexander Stone M.Sc., CISEC

Pronoun(s): he/him Pronom(s): il/lui

Environmental Program Officer: Greenbelt and Natural Resources



### **TECHNICAL NOTE**

**RECIPIENT:** Alex Stone / NCC

SENDER: Casey Little, CIMA+

**DATE:** August 12, 2022

**SUBJECT:** Stillwater Station – 2022 SAR Surveys and Wetland Delineation.

CIMA+ file number: A001177

### CONTEXT

CIMA+ was retained by Stillwater Station Ltd. (Stillwater) to complete an Environmental Impact Statement (EIS) report. The purpose of the assessment was to review the potential impacts of the project on existing natural environmental features and to recommend mitigation measures in support of a Secondary Plan submission to the City of Ottawa for the development of a property located at 1987 Robertson Road in Ottawa, Ontario, Canada.

The draft EIS was submitted to the City and NCC in October 2021. The first round of comments provided by the City and NCC were received on January 4, 2022, with aditional comments received by NCC (Alex Stone) on January 28, 2022. Mr. Stone noted the presence of suitable habitat for western chorus frog (Pseudacris triseriata) on federal land owned by NCC within the project area, and recommended that targeted surveys for this species be completed as federal lands that have confirmed presence of protected species or critical habitat cannot be transferred unless permitted by Environment and Climage Change Canada (ECCC) via permit issued under the federal Species at Risk Act. He also noted concerns regarding the loss of potential terrestrial habitat for Blanding's Turtle (Emydoidea blandingii) as well as other turtle species-at-risk and eastern milksnake (Lampropeltis triangulum), requesting to have a clearer indication of the (potential) loss of habitat for at-risk herpetofauna. Mr. Stone also noted that unevaluated wetlands are subject to the Federal Policy on Wetland Compensation and requested a more detailed wetland delineation north of the abandoned railway corridor so that the project can commit to a no loss of ecological function per the Greenbelt Master Plan, and should the wetland be impacted, a compensation plan would be needed.

This memo presents the results of the targeted western chorus frog surveys completed within the Stillwater Station project area in April 2022, habitat verification surveys for at-risk herpetofauna, as well as the results of the updated unevaluated wetland boundaries observed north of the abandoned railway corridor.

### **METHODS**

### **Western Chorus Frog Survey**

Targeted surveys followed the methods outlined in the *Draft Western Chorus Frog Detection Survey Protocol for Ontario* (Blazing Star Environmental, no date). Three (3) surveys were conducted on April 5, 12, and 22, 2022, when air temperatures were at least 10°C, with light to no wind and/or rain when frog calls are most likely to be detected. A proxy site, approximatley 3 km from the project area with a known western chorus frog population, was visited prior to each survey to confirm adequate survey conditions and breeding vocalizations.

Specifically, surveys were completed at one (1) point count station, generally conducted during the day between 10 am and 6 pm, to establish quantitative estimates of abundance within the wetland north of the abandoned railway corridor (Figure 1). If evidence of breeding behaviour was observed, it was recorded to measure the intensity and number of individuals calling using the Call Level Code and Abundance Counts.

### **Herpetofauna Habitat Verification Survey**

Based on the historical records of Blanding's Turtle within 1km of the project area (NHIC - Canadian Museum of Nature, 1964-04-27), surveys of the wetland feature north of the abandoned railway corridor were completed to assess the quality of habitat that may be used by at-risk herpetofauna in this area. This survey consisted of one observer walking slowly through the marsh habitat assessing the presence and extent of suitable habitat, including nesting, hibernation, feeding, mating, thermoregulation, movement, and protection from predators.

### **Unevaluated Wetland Delineation**

On May 10, 2022, the outer boundaries of the unevaluated wetland north of the abandoned railway corridor within the project area was delineated and mapped using the principles outlined in the *Ontario Wetland Evaluation System - Southern Manual 3rd Edition, Version 3.2,* (MNRF, 2013). The "50% wetland vegetation rule" was applied to estimate the relative abundance of wetland and upland plant species within the feature. Our CIMA+ OWES qualified professional walked the outer limits of the wetland, using a high-precision GPS, to create a "contour line" that follows a series of points where relative plant species cover consists mostly of wetland species.



### SURVEY RESULTS

The western chorus frog surveys, SAR habitat verification, and wetland delineation were conducted by a qualified CIMA+ employee (Casey Little, OWES certified) during four (4) site visits in 2022. Table 1 presents the details of those visits in terms of date, times, survey focus, weather conditions and site description.

Table 1: 2022 Survey Conditions

Tamera in a case of the first o			
Start/End Time	Field Surveys	Weather Conditions	Site Description
			•
1356 – 1435	Western chorus	Temperature: 12*C	Cattail marsh
	frog and SAR	Wind (Beaufort scale): 2	with snow cover
	habitat survey #1	Cloud cover: 30%	in low areas
1325 – 1410	Western chorus	Temperature: 17*C	Cattail marsh
	frog and SAR	Wind (Beaufort scale): 2	with saturated
	habitat survey #2	Cloud cover: 40%	soils – no
1230 – 1300	Western chorus	Temperature: 12*C	standing water
	frog and SAR	Wind (Beaufort scale): 3	present
	habitat survey #3	Cloud cover: 30%	
1348 – 1600	\\/	Temperature: 25*C	
	vvetiand	Wind (Beaufort scale): 2	
	Delineation	Cloud cover: 10%	
	Time  1356 - 1435  1325 - 1410  1230 - 1300	Time  1356 – 1435 Western chorus frog and SAR habitat survey #1  1325 – 1410 Western chorus frog and SAR habitat survey #2  1230 – 1300 Western chorus frog and SAR habitat survey #3  1348 – 1600 Wetland	Time  1356 – 1435 Western chorus frog and SAR habitat survey #1  1325 – 1410 Western chorus frog and SAR habitat survey #2  1230 – 1300 Western chorus frog and SAR habitat survey #3  1348 – 1600 Wetland  Western chorus frog and SAR habitat survey #3  Temperature: 12*C Wind (Beaufort scale): 3 Cloud cover: 30%  Temperature: 25*C Wind (Beaufort scale): 2  Wetland  Wetland  Temperature: 25*C Wind (Beaufort scale): 2

### **Western Chorus Frog Survey**

No frog species were heard calling in the unevaluated wetland north of the abandoned railway corridor during the April 2022 targeted western chorus frog surveys. As western chorus frogs were heard calling at the proxy site prior to all three (3) surveys it is concluded that the wetland feature does not support breeding habitat for western chorus frog, or any other frog species, at this location.

Refer to Attachment A for photographs of the western chorus frog point count station within the project area.

### Herpetofauna Habitat Verification Survey

No endangered, threatened, or at-risk herpetofauna were observed during the surveys. There is no suitable nesting habitat for Blanding's Turtle within the marsh as the feature is comprised of an abundance of vegetation cover and lacks the presence of loose soils (COSEWIC, 2016). The railway embankment may provide suitable nesting habitat for at risk turtles, but the steep slopes in this area may reduce the likelihood of nesting suitability.

Although the marsh is ephemeral, which is often used by Blanding's Turtles as foraging sites during spring, the feature north of the abandoned railway does not provide suitable foraging habitat as it lacks rich sources of amphibian and insect eggs and larvae (COSEWIC, 2016).



It is assumed that the perched culvert directly north of the CN rail line likely poses migratory obstructions for any turtles attempting to move upstream (Figure 1). In addition, the large CSP culvert that extends under the abandoned railway is over 40 m long. Based on the Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile SAR in Ontario (MNRF, 2016), the recommended tunnel length for adequate SAR amphibian and reptile passage is less than 25 m. Therefore, it is assumed that SAR turtle passage through this structure is unlikely.



Figure 1: Photo of perched culvert that conveys flow of Stillwater Creek under the Beachburg Rail line (RVCA, 2015)

Eastern Milksnake (*Lampropeltis triangulum*) are habitat generalists, however is best known from rural areas where it is most often reported in and around buildings such as barns, sheds, houses, and especially old structures where it has access to foundations of these structures in search of food or shelter (COSEWIC, 2014). As the area between the two (2) rail lines lacks old building foundations or rock crevices, suitable hibernation habitat in this area is unlikely.

Given the extent of historic anthropogenic disturbance in the area surrounding the marsh north of the abandoned railway, combined with the lack of species presence during the 2022 targeted surveys, the probability of this feature supporting at-risk herpetofauna is low.

Refer to Attachment A for photographs of the habitat features observed within the project area.



### **Unevaluated Wetland Delineation**

During the May 10, 2022 site visit, the outer boundary of the wetland feature north of the abandoned railway corridor was delineated based on the presence and relative abundance of wetland plant species. The boundary observed during this site visit differs from the limits identified in the provincial unevaluated wetland layer (MNRF 2019, Figure 2). The MNRF mapping identifies the feature as a 6,398 m² 'swamp', however based on site visits completed in 2021, and this evaluation completed in 2022, the wetland feature observed in this area consists of a MAMM3 – Mixed Meadow Marsh comprised of Reed-canary Grass (*Phalaris arundinacea*), and Narrow-leaved Cattail (*Typha angustifolia*), and a SWTM2-1 – Red-Osier Dogwood (*Cornus sericea*) Mineral Deciduous Thicket Swamp community that when combined, measures approximately 824 m².

The unevaluated wetland layer within the project area (MNRF, 2019) was likely confirmed as wetland habitat and mapped using interpretations of remote-sensed imagery (MNRF, 2013) and has yet to be ground-truthed. Majority of the ecosite that is currently mapped as 'swamp' is actually a FOCM6-3 – Dry-Fresh Scots Pine (*Pinus sylvestris*) Naturalized Coniferous Plantation ecosite dominated by naturalized Scots pine. Other species noted in this ecosite were Manitoba maple (*Acer negundo*), American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvanica*), common buckthorn (*Rhamnus cathartica*), and honeysuckle species (*Lonicera* sp.).

A review of historic aerial imagery (geoOttawa, 1958 - 2019) was completed to understand the evolution of the site in relation to the wetland feature currently mapped as 'swamp'. The earliest imagery of the site was recorded in 1958 which displays the active Beachburg rail spur lined with planted conifers on the northwest side (i.e. Scots Pine, Figure 3). By 1976, the conifers have matured and appear to have established on the southeast side of the now abandoned rail spur (Figure 4). The image generated in 2007 exhibits a mature Scotts Pine plantation both northwest and southeast of the abandoned rail spur (Figure 5).

Scots pine was among the first European tree species introduced to North America. In Ontario, it was used in an effort to control soil erosion by reforesting abandoned agricultural lands. It gained recognition for its ability to survive and help stabilize sites with drier soil and erosion issues. Scots pine can tolerate a wide variety of soil types, however, it grows best on light, well-drained and sandy soils. It is intolerant of shade, therefore thrives in open disturbed areas near cities and suburbs, roadsides, meadows and open fields (Ontario Invasive Plant Council, 2017).

Based on a review of available imagry, it is anticipated that the wetland feature was impacted and reduced in size over the years due to the construction and modification of the railway line and bridge.





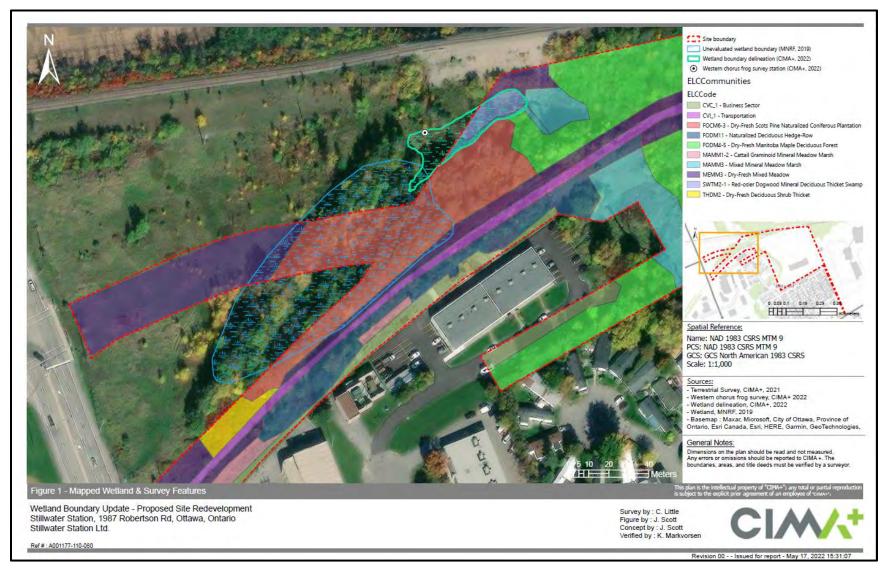


Figure 2: Mapped Wetland Boundary and 2022 SAR Survey Features





Figure 3: GeoOttawa 1958 image of the project area with conifers planted along the northwest side of the rail.

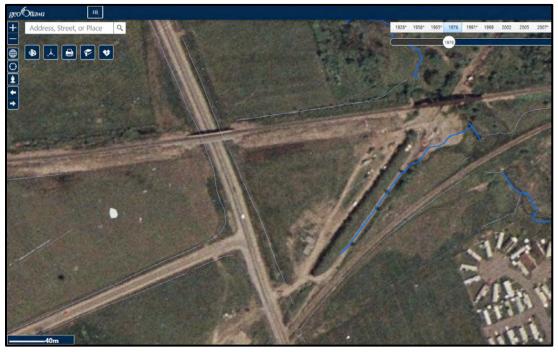


Figure 4: GeoOttawa 1976 image of the project area with conifers establishing along the southeast side of the rail.

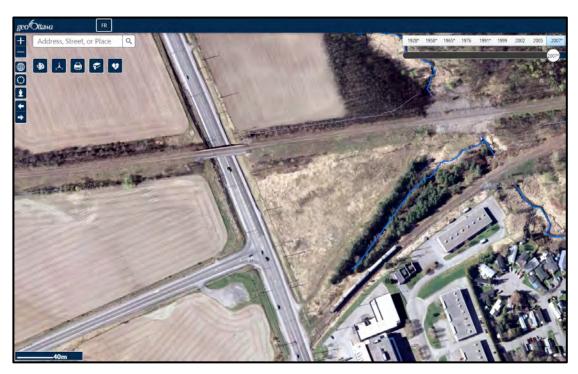


Figure 5: GeoOttawa 2007 image of the project area displaying mature conifers on both sides of the rail.

As a result of the field surveys completed in 2022 to verify the unevaluated wetland boundary north of the abandoned railway corridor, it is determined that the wetland boundary differs from the boundary mapped by the MNRF (2019). Field surveys determined that the wetland is a mix of marsh and thicket swamp communities and is approximately 5,574 m<sup>2</sup> smaller than that of the provincial mapping of the feature (Figure 2).

Refer to Attachment A for photographs of the wetland delineation completed within the project area.

### SUMMARY

CIMA+ was retained by Stillwater Station Ltd. to complete targeted western chorus frog surveys within the Stillwater Station project area, habitat verification surveys to determine atrisk herpetofauna presence, as well as a wetland boundary delineation to verify the extent of the unevaluated wetland present north of the abandoned railway corridor in response to NCC comments.

The results of the western chorus frog surveys determined that no frog species, including western chorus frog, are using the wetland feature as breeding habitat. Based on the results of the 2022 surveys completed at the proposed Stillwater Station project area, it is conldued that no impacts to western chorus frog or its critical habitat will occur as a result of this project.



Results of the 2021 surveys determined that suitable habitat for at-risk herpetofauna is present within the stretch of Stillwater Creek between the south end of the abandoned railway corridor and where the CSP culvert that conveys flow of the creek at the south end of the Site under Vanier Road. Areas both north and south of this stretch of the creek are unsuitable and unaccessable to herpetofauna as a result of the perched culvert directly north of the CN rail line, lack of critical habitat features, and the >25 m CSP culvert length impeding adequate passage.

As a result of the lack of herprtofauna presence within the marsh north of the abandoned railway, coupled with the migratory obstruction due to the perched culvert directly north of the CN rail line, it is concluded that the probability of this feature supporting at-risk herpetofauna is low.

Field surveys also determined that the unevaluated wetland located north of the abandoned railway corridor, is approximatley 5,574 m² smaller than that of the provincial mapping (MNFR, 2019) of the feature, and was observed to be a mix of marsh and thicket swamp communities.

Based on the proposed design of the project, the limits of construction will be able to maintain a 15 m buffer from the wetland and commit to a no net loss of ecological function per the Greenbelt Master Plan. It is also concluded that impacts to the wetland feature north of the abandoned railway corridor will not occur.

Although a loss of wildlife habitat is anticipated because of the proposed project, with proper implementation of the avoidance and mitigation measures as recommended in the EIS (CIMA+, 2021), it is anticipated that impacts to wildlife individuals will be avoided during construction, and habitat will remain available within Stillwater Creek and its adjacent lands after project completion.

We trust that this memo report satisfies NCC comments received on January 28, 2022. Should there be any further questions or concerns regarding the project please feel free to contact the undersigned.

Regards,

Casey Little Biologist

casey.little@cima.ca

C PIXA

Office: 613-860-2462 Cell: 343-575-0098



### **REFERENCES**

Blazing Star Environmental. No Date. Draft Western Chorus Frog Detection Survey Protocol for Ontario.

City of Ottawa. 2022. Retrieved May 2022, from GeoOttawa: http://maps.ottawa.ca/geoottawa/

COSEWIC. 2014. COSEWIC assessment and status report on the Eastern Milksnake Lampropeltis triangulum in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 61 pp. (www.registrelep-sararegistry.gc.ca/default\_e.cfm).

COSEWIC. 2016. COSEWIC assessment and status report on the Blanding's Turtle Emydoidea blandingii, Nova Scotia population and Great Lakes/St. Lawrence population, in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xix + 110 pp. (http://www.registrelepsararegistry.gc.ca/default.asp?lang=en&n=24F7211B-1).

Ministry of Environment, Conservation and Parks. 2013. Blanding's Turtle General Habitat Description. (https://www.ontario.ca/page/blandings-turtle-general-habitat-description)

Ministry of Natural Resources and Forestry - Natural Heritage Information Centre. 2022. Received May 4, 2022.

Ontario Ministry of Natural Resources and Forestry. April 2016. Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario. Queen's Printer for Ontario. 112 pp.

Ontario Ministry of Natural Resources and Forestry - Provincial Mapping Unit. 2019. Wetlands Feature Layer. Retrieved from Ontario Geohub: https://geohub.lio.gov.on.ca/datasets/mnrf::wetlands/



# Attachment A Photographic Log







### APPENDIX A: Stillwater Station Western Chorus Frog Survey and Wetland Boundary Photographic Log

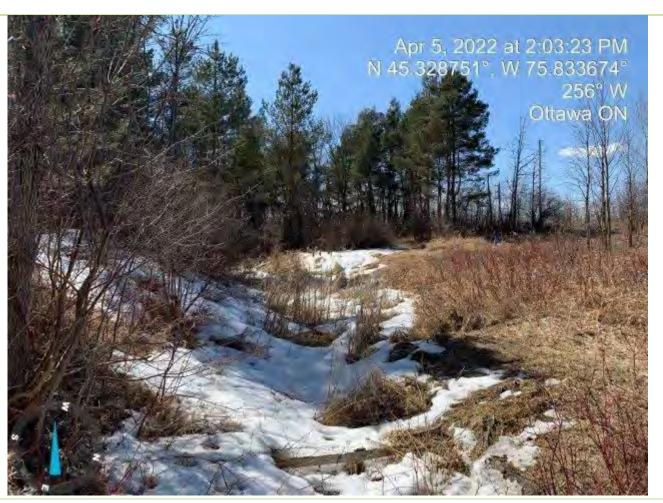
### Site Location

Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
1	2022/04/05	West

### Description

View of the Mixed Meadow Marsh ecosite during Round #1 of the western chorus frog surveys.





### **Site Location**

Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
2	2022/04/05	East

### Description

View of the Mixed Meadow Marsh ecosite during Round #1 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
3	2022/04/12	West

# Description

View of the Mixed Meadow Marsh ecosite during Round #2 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
4	2022/04/12	East

## Description

View of the Mixed Meadow Marsh ecosite during Round #2 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Pho #	to	Date	Cardinal Direction
5		2022/04/22	West

## Description

View of the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
6	2022/04/22	East

## Description

View of the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
7	2022/04/22	Southwest

## Description

View of zero standing water within the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
8	2021/07/23	East

## Description

View of the Mixed Meadow ecosite along the abandoned railway off Moodie Drive during the 2021 field investigations.



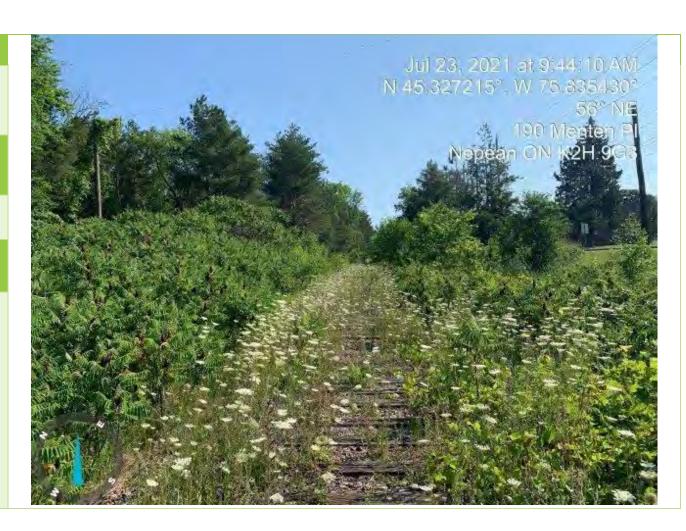


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
9	2021/07/23	Northeast

## Description

View of the Mixed Meadow, and Shrub Thicket ecosites along the abandoned railway during the 2021 field investigations.



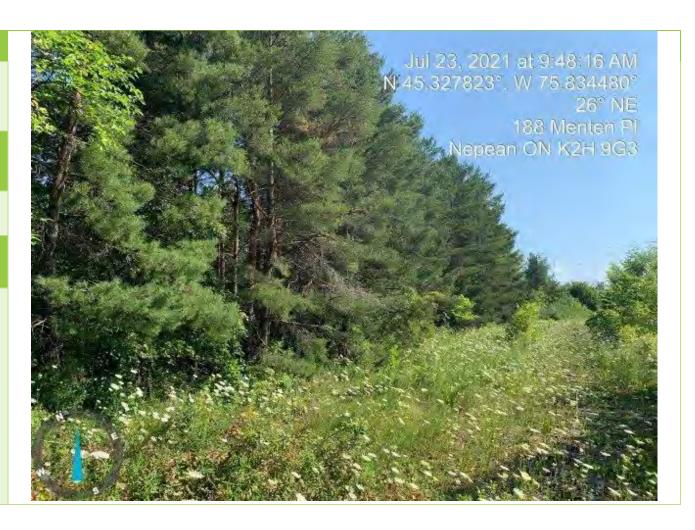


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
10	2021/07/23	Northeast

## Description

View of the Mixed Meadow, and Scots Pine Naturalized Coniferous Plantation ecosites along the abandoned railway during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
11	2021/07/23	SE

### Description

A view from the understory of the Scots Pine Naturalized Coniferous Plantation north of the abandoned railyway ecosite during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
12	2021/07/23	Northeast

#### Description

A view from the understory of the Scots Pine Naturalized Coniferous Plantation north of the abandoned railyway ecosite during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
13	2021/07/23	Southwest

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
14	2022/05/10	Southwest

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
15	2021/07/23	Northeast

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
16	2022/05/10	Northeast

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
17	2022/05/10	East

## Description

View from within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
18	2021/07/23	East

# Description

View from within the Mixed Meadow Marsh ecosite outsite of the Site boundaries during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
19	2021/07/23	Southwest

## Description

View from within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
20	2022/05/10	East

## Description

View from within the Mixed Meadow Marsh ecosite displaying the Red-osier Dogwood Thicket Swamp on the northern edge during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
21	2022/05/10	Northeast

## Description

View of the Mixed Meadow
Marsh ecosite narrowing along
the southern edge displaying the
Red-osier Dogwood Thicket
Swamp on the northern edge
during the 2022 assessment.



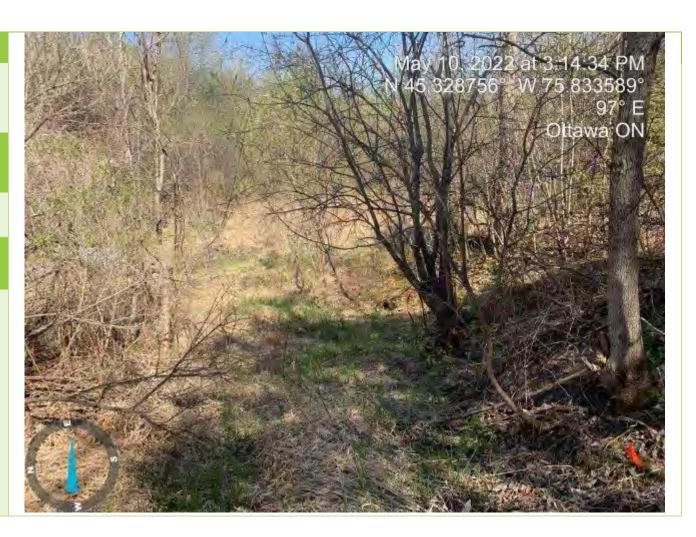


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
22	2022/05/10	East

# Description

View of the eastern extent of the Mixed Meadow Marsh ecosite where it narrows into Stillwater Creek during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
23	2022/05/10	South

## Description

View of the culvert outlet along the eastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
24	2022/05/10	North

## Description

View of the culvert inlet along the eastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
25	2022/05/10	Northwest

## Description

View of the eastern extent of the wetland boundary displaying the Red-osier Dogwood Thicket Swamp during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
26	2022/05/10	West

# Description

View of the northeastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
27	2022/05/10	East

# Description

View of the northeastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
28	2022/05/10	West

## Description

View of the northern extent of the wetland along the Red-osier Dogwood Thicket Swamp boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
29	2022/05/10	West

## Description

View of the northern extent of the wetland along the Red-osier Dogwood Thicket Swamp boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
30	2022/05/10	West

## Description

View of the northern extent of the wetland along the Mixed Meadow Marsh ecosite boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
31	2022/05/10	South

#### Description

View of the wetland boundary within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
32	2022/05/10	Southwest

#### Description

View of the wetland boundary within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
33	2022/05/10	Southwest

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.



#### **Suzanne Cousineau**

**De:** Casey Little

**Envoyé:** 8 septembre 2021 09:46

À: Casey Little

**Objet:** FW: Stillwater Station - EIS Request for Information - Background Report

**Pièces jointes:** NCC\_Stillwater\_Report2013\_Final.pdf

#### **CASEY LITTLE**

Biologist / Urban Planning and Environment

T 613-860-2462 M 343-575-0098 F 613-860-1870

110–240 Catherine Street, Ottawa, ON K2P 2G8 CANADA 415 Baseline Road West, 2nd Floor, Bowmanville, ON L1C 5M2 CANADA



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From: Jamieson-Lee Scott < Jamieson-Lee. Scott@cima.ca>

**Sent:** September 2, 2021 9:23 AM **To:** Casey Little < Casey.Little@cima.ca>

Subject: FW: Stillwater Station - EIS Request for Information

From: Jennifer Lamoureux < jennifer.lamoureux@rvca.ca >

Sent: September 2, 2021 8:39 AM

To: Jamieson-Lee Scott < <u>Jamieson-Lee.Scott@cima.ca</u>>

Cc: Eric Lalande < <a href="mailto:eric.lalande@rvca.ca">eric.lalande@rvca.ca</a>>; Matt Jokiel < <a href="mailto:matt.jokiel@rvca.ca">matt.jokiel@rvca.ca</a>>

**Subject:** RE: Stillwater Station - EIS Request for Information

#### **EXTERNAL EMAIL**

Good Morning Jaimeson,

I have attached a detailed report for the Stillwater Creek catchment.

Also I have included a link below to our latest City Stream Watch program.

#### https://www.rvca.ca/media/k2/attachments/CSW2015 Stillwater FINAL.pdf

Both reports should provide important background information for an EIS. If you have any questions about the reports please let me know.

Jennifer Lamoureux Aquatic and Fish Habitat Biologist Ext. 1108



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From: Matt Jokiel < matt.jokiel@rvca.ca >

Sent: Wednesday, September 1, 2021 2:42 PM

To: 'Jamieson-Lee Scott' < <u>Jamieson-Lee.Scott@cima.ca</u>>

Cc: Eric Lalande < <a href="mailto:criticalande@rvca.ca">cric.lalande@rvca.ca</a>; Jennifer Lamoureux < <a href="mailto:jennifer.lamoureux@rvca.ca">jennifer.lamoureux@rvca.ca</a>>

Subject: RE: Stillwater Station - EIS Request for Information

Hi again Jaimeson,

Yes, my apologies – the below information and mapping is related to 1987 Robertson Rd., Nepean. Apologies for the confusion. I have re-circulated the mapping and email below with the **corrected address**.

---

Thank you for your email regarding the property noted as **1987 Robertson Rd.**, **Nepean**. Please note that I have attached a copy of RVCA's mapping highlighting the subject property. Please advise if the highlighted parcel does not represent the correct lot. For additional circulation and comment, if necessary, I have cc'ed additional RVCA staff who may have additional input regarding your inquiry.

With this said, please note the following information regarding this particular lot:

- The RVCA administers development regulations (Conservation Authorities Act Ontario Regulation 174/06 "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses") in areas subject to natural hazards (flooding, erosion, and unstable slopes) and in environmentally sensitive areas (wetlands, shorelines, and waterways). The RVCA also reviews development proposals (Municipal Planning applications) within or adjacent to natural areas in an effort to conserve and protect natural resources in the Rideau River valley.
- Our mapping, attached, indicates the property is located within the jurisdiction of the Rideau Valley Conservation Authority (RVCA) but is <u>outside</u> of both RVCA's Regulation Limit, as well as any

identified 1:100 year floodplain. The Regulation Limit is the area to which the Conservation Authority is required to review development and alteration applications under the Conservation Authorities Act (O.Reg. 174/06). A permit is required from our office for development proposals within the Regulation Limit. Development outside of the Regulation Limit does not require approval from our office.

- Development includes, but is not limited to; construction, reconstruction, pools, decks, foundations, additions, auxiliary buildings, sewage systems, placing fill, shoreline works, regrading of any type, etc.
- Altering, straightening, diverting, or interfering with the channel of any watercourse within RVCA's jurisdiction must also receive prior approval (whether in a regulated area or not) and the proposal must meet the below policies.
- To note, for Species at Risk inquiries, it is recommend to direct these to <a href="mailto:sarontario@ontario.ca">sarontario@ontario.ca</a>

Applications submitted to the RVCA must demonstrate that the development proposal meets RVCA policies. The applicable policies and application requirements are found at the following links:

- Development Policies: <a href="https://www.rvca.ca/media/k2/attachments/Development">https://www.rvca.ca/media/k2/attachments/Development</a> Interference Regs MASTER policy doc F
   <a href="https://www.rvca.ca/media/k2/attachments/Development">https://www.rvca.ca/media/k2/attachments/Development</a></a>
- Application documents can be found at: <a href="https://www.rvca.ca/regulations-planning/rvca-permits-section-28/forms-fees-resources">https://www.rvca.ca/regulations-planning/rvca-permits-section-28/forms-fees-resources</a>

I trust this information is helpful. Please let me know if you have any further questions.

Regards,

Matt Jokiel
Resource Specialist
matt.jokiel@rvca.ca, ext. 1193

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From: Jamieson-Lee Scott < Jamieson-Lee.Scott@cima.ca>

Sent: Wednesday, September 1, 2021 2:30 PM

To: Matt Jokiel <matt.jokiel@rvca.ca>

Subject: RE: Stillwater Station - EIS Request for Information

Good afternoon Mr. Jokiel,

Could I confirm that the address is showing up as 1987 Robertson Rd, Ottawa, ON for your search? The RVCA map is showing the correct property boundary, but the address you provided doesn't match our records.

JAMIESON-LEE SCOTT, B.A. Anth.

Technologist / Environnement et urbanisme Technologiste / Environnement et urbanisme

T 613-860-2462 ext. 6662 **M** 343-961-3309 **F** 613-860-1870 110-240 Catherine Street, Ottawa, ON K2P 2G8 CANADA



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AVERTISSEMENT CONCERNANT LA CONFIDENTIALITÉ Ce message est confidentiel. S'il ne vous est pas destiné, veuillez en informer l'émetteur immédiatement et le détruire intégralement.

From: Matt Jokiel < <a href="matt.jokiel@rvca.ca">matt.jokiel@rvca.ca</a>>
Sent: September 1, 2021 1:58 PM

To: Jamieson-Lee Scott < Jamieson-Lee.Scott@cima.ca >

Cc: Eric Lalande < eric.lalande@rvca.ca >; Jennifer Lamoureux < jennifer.lamoureux@rvca.ca >

Subject: RE: Stillwater Station - EIS Request for Information

#### **EXTERNAL EMAIL**

#### Good afternoon,

Thank you for your email regarding the property noted as 126 Sutcliffe Lane, North Elmsley. Please note that I have attached a copy of RVCA's mapping highlighting the subject property. Please advise if the highlighted parcel does not represent the correct lot. For additional circulation and comment, if necessary, I have cc'ed additional RVCA staff who may have additional input regarding your inquiry.

With this said, please note the following information regarding this particular lot:

- The RVCA administers development regulations (Conservation Authorities Act Ontario Regulation 174/06 "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses") in areas subject to natural hazards (flooding, erosion, and unstable slopes) and in environmentally sensitive areas (wetlands, shorelines, and waterways). The RVCA also reviews development proposals (Municipal Planning applications) within or adjacent to natural areas in an effort to conserve and protect natural resources in the Rideau River valley.
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- Development includes, but is not limited to; construction, reconstruction, pools, decks, foundations, additions, auxiliary buildings, sewage systems, placing fill, shoreline works, regrading of any type, etc.
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- To note, for Species at Risk inquiries, it is recommend to direct these to <a href="mailto:sarontario@ontario.ca">sarontario@ontario.ca</a>

Applications submitted to the RVCA must demonstrate that the development proposal meets RVCA policies. The applicable policies and application requirements are found at the following links:

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I trust this information is helpful. Please let me know if you have any further questions.

Regards,

Matt Jokiel
Resource Specialist
matt.jokiel@rvca.ca, ext. 1193

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From: LRC Info <info@lrconline.com>
Sent: Tuesday, August 31, 2021 4:27 PM
To: Matt Jokiel <matt.jokiel@rvca.ca>

Subject: FW: Stillwater Station - EIS Request for Information

From: RVCA Info <info@rvca.ca>

Sent: Tuesday, August 31, 2021 2:32 PM

To: LRC Info < info@Irconline.com>

Subject: Fw: Stillwater Station - EIS Request for Information

From: Jamieson-Lee Scott < Jamieson-Lee. Scott@cima.ca>

**Sent:** August 31, 2021 2:07 PM **To:** RVCA Info < info@rvca.ca>

Subject: Stillwater Station - EIS Request for Information

Good day,

CIMA+ has been contracted by The Properties Group Management Ltd. to prepare an Environmental Impact Study (EIS) in support of the Secondary Plan for the proposed residential development of the property referred to Stillwater Station, located at 1987 Robertson Rd, Ottawa, ON.

The proposed development will involve a combination of commercial and residential buildings located 1987 Robertson Rd, Ottawa, ON, part of Lot 11, Concession 2 of Nepean Geographic Township. The Study Area is approximately 23.68 acres, in the neighbourhood of Bells Corners and is situated south of the Beachburg Rail Corridor and Carleton Place Rail Corridor. The site can be accessed from Robertson Road to the south and Moodie Drive to the west.

Refer to the included map for the Study Area boundaries.

We have reviewed relevant background data and have determined the following natural heritage constraints within or adjacent to the site:

- Stillwater Creek;
- RVCA regulatory limit;
- Unevaluated wetlands;
- Woodlands; and
- SAR habitat.

We are contacting you to obtain any further information on environmental features and/or conditions for and adjacent (within 120 meters) to the site prior to us drafting the EIS for this project.

Do not hesitate to contact me should you want to discuss this request or require further information.

Respectfully,

JAMIESON-LEE SCOTT, B.A. Anth.

Technologist / Environnement et urbanisme Technologiste / Environnement et urbanisme

#### **Jamieson-Lee Scott**

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

**Sent:** August 31, 2021 2:05 PM **To:** Jamieson-Lee Scott

**Subject:** Automatic reply: Stillwater Station - EIS Request for Information

**EXTERNAL EMAIL** 

Thank you for your inquiry to the Permissions and Compliance team, Species at Risk Branch, Ministry of the Environment, Conservation and Parks.

#### What's New?

The Ministry of the Environment, Conservation and Parks (MECP) has responsibility for the
administration of the Ontario Endangered Species Act (ESA). In MECP, work associated with
ESA authorizations has been centralized from Ministry of Natural Resources and Forestry
district offices into one Permissions and Compliance team within the new Species at Risk
Branch in MECP.

#### What Next?

- Your email is being reviewed by branch staff to determine the nature of your inquiry or submission. Your inquiry or submission will then be actioned to someone from our team for follow up as required.
- We strive to follow up with a response to your inquiry within 15 business days to confirm that your submission has been actioned out and to provide contact information.

# Do you think you may need an ESA permit or authorization?

- Please visit https://www.ontario.ca/page/species-risk to learn more about protecting and recovering species at risk, then navigate to the Resources and Permits section, including <u>Register or Get a Permit</u> for more information about permits and authorizations under the ESA.
- You only need an authorization under the ESA (e.g. a permit or other type of authorization) if your work is going to contravene the ESA (e.g. if the activity you are proposing is going to kill, harm or harass a species at risk or damage or destroy their habitat). If you are able to undertake your work in a manner that does not contravene the ESA, that is what we call "avoidance" of impacts to species at risk or their habitat and it is the ideal scenario for clients and the species-the species aren't adversely impacted, and you don't need an authorization.

# Do you want to know if any species at risk are at, or near, your project site? Do you need help determining if you need an ESA permit or authorization?

• We have developed a guide to help clients work through the preliminary screening process, including providing advice to clients on how they can gather information you have requested

from publicly available information sources. The guide provides advice on how you can determine if any species at risk are likely to exist at your site. If you are seeking information regarding species at risk likely to occur at or near your site, please send an email to <a href="mailto:sarontario@ontario.ca">sarontario@ontario.ca</a> and include "request for preliminary screening guide" in the subject line. To provide the most efficient service, it is recommended clients read this guide and explore applicable information sources prior to contacting <a href="mailto:sarontario@ontario.ca">sarontario@ontario.ca</a> to begin discussions with the Permissions and Compliance team about your proposed project.

## Do you want to report a suspected violation of the ESA?

• Please call the MECP Tips/Pollution Hotline at 1-866-663-8477 and provide the details requested. Someone may follow up with you directly to request additional information. We may not be able to follow up with you to provide you an update on the status of your tip as the status of any ongoing inspections or investigations is confidential until resolved.

We also receive a high volume of inquiries related to Butternut (an endangered tree) to this email address. The following information can assist you if you have some of the more common questions regarding the ESA and impacts to Butternut.

# Do you think you may need an ESA permit or authorization to cut down a Butternut tree?

- If a Butternut tree has been identified, a Butternut Health Assessment will need to be completed to assess the health of the tree in accordance with the document titled <u>Butternut Assessment Guidelines</u>: <u>Assessment of Butternut Tree Health for the Purposes of the Endangered Species Act, 2007</u>. This will determine if the tree is Category 1, 2 or 3.
- 2. Please note that Section 4.2 (Timing of Assessment) on page 10 of the Butternut Assessment Guidelines states that "A complete and accurate assessment of a Butternut tree can only be conducted during the leaf-on season." It also notes that "For the purposes of the ESA, an assessment will be considered to have been conducted during the leaf-on season if it was conducted between the dates of May 15 and August 31." For this reason, a Butternut Health Assessment should not be conducted until May 15 in order to get an accurate assessment of the live crown.
- 3. Once a Butternut Health Assessment has been completed and submitted to the MECP and 30 days have elapsed, ESA requirements can be identified as per below:
  - 1. If a BHA identifies a tree as a hybrid, no authorization under the ESA is required to remove the tree, as it is not a pure Butternut and not protected under the ESA.
  - 2. If a BHA identifies a tree as a Category 1 tree, no authorization under the ESA is required to remove the tree, as it is affected by Butternut canker (a fungal disease) to such an advanced degree that retaining the tree would not support the protection or recovery of Butternuts in the area.
  - 3. If a BHA identifies a tree as a Category 2 tree, Registration is enabled under <u>section</u> 23.7 of the Ontario Regulation 242/08 so long as all requirements of the Regulation are met.
  - 4. If a BHA identifies a tree as a Category 3 tree, then a 17(2)(c) Permit is likely required.

If you are proposing to rely on section 23.7 of the Regulation 242/08 for the removal of Category 1 trees or hybrids, please note that you are eligible to do so 30 days after you have submitted your BHA to MECP at <a href="mailto:SAROntario@ontario.ca">SAROntario@ontario.ca</a> unless the MECP has indicated otherwise prior to the end of the 30 day period.

If you are proposing to rely on section 23.7 of the Regulation 242/08 for the removal of a maximum of 10 Category 2 (retainable) trees, after the 30 days you must register a Notice of Impact with the <u>ESA Registry</u>, and follow additional rules. Once you have registered and received a reply in regards to your Notice of Impact, you may remove up to 10 Category 2 trees.

# Are you submitting a Butternut Health Assessment?

1. Please submit your Butternut Health Assessment Forms to <a href="mailto:sarontario@ontario.ca">sarontario@ontario.ca</a>. In the subject line, clearly indicate that the email contains a BHA and the municipality within which the BHA was conducted. Once received, the submission will be triaged and actioned.

# Did you submit a BHA assessment where Category 1, 2 or hybrid trees are impacted?

2. If after the 30 days, you have not received a response from MECP, you may remove Category 1, 2 or hybrid trees so long as all requirements of the Regulation in regards to Category 2 trees are met.

# Did you recently see a species at risk?

• Please visit https://www.ontario.ca/page/report-rare-species-animals-and-plants for information on how to report a species at risk sighting.

## Would you like to learn more about species at risk and the ESA and its related policies?

- Please visit https://www.ontario.ca/page/species-risk.
- Policies under the ESA, ministry-endorsed survey protocols and a number of bestmanagement practices related to how you can avoid or minimize impacts to species at risk can be found online at https://www.ontario.ca/page/species-risk-guides-and-resources.
- General inquires related to the ESA or species at risk can be directed to SAROntario@ontario.ca

## **Jamieson-Lee Scott**

Subject:

FW: Stillwater Station - EIS Request for Information

From: Inforequest, Kemptville (NDMNRF) < Kemptville.Inforequest@ontario.ca>

Sent: August 31, 2021 2:30 PM

To: Jamieson-Lee Scott < Jamieson-Lee. Scott@cima.ca>

**Subject:** Automatic reply: Stillwater Station - EIS Request for Information

#### **EXTERNAL EMAIL**

Thank you for your request / Merci pour votre demande: (le français suit)

Please note: The Ministry of the Environment, Conservation and Parks (MECP) has assumed responsibility for the Endangered Species Act (ESA), including species at risk (SAR) in Ontario. All correspondence related to ESA or SAR should be sent to SAROntario@ontario.ca to reach the MECP directly.

NDMNRF is still responsible for all other Natural Heritage features associated with your information request. Please reply directly to this email to request an electronic copy of the Information Request Guide with Request Form, the Response Letter, Work in Water Timing Guidelines, and Species at Risk Lists by Township.

Note: Our working team is divided by Township location. We ask that you submit your requests by appropriate township (ex: not City of Ottawa as there are many townships within the City of Ottawa, therefore Nepean, Goulbourn, Osgoode etc.)

All other inquiries will be redirected to the appropriate staff member who will respond within 15 days.

If you have any further questions, please contact <a href="mailto:Kemptville.Inforequest@ontario.ca">Kemptville.Inforequest@ontario.ca</a>

# **Kemptville District Inforequest Services Team**

Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry

Le ministère de l'Environnement, de la Protection de la nature et des Parcs (MEPNP) est maintenant responsable de l'application de la loi sur les espèces en voie de disparition (LEVD), incluant tous les espèces en péril (EEP) en Ontario. Toute correspondance reliée à cette loi ou à ces espèces doit être envoyée à: <a href="mailto:SAROntario@ontario.ca">SAROntario@ontario.ca</a> afin de rejoindre le MEPNP directement.

Le DNMRNF est toujours responsable pour tous les autres éléments du patrimoine naturel associés avec votre demande d'information.

Afin de fournir le service le plus efficace possible, nous avons développé un Guide de Demande d'Informations sur le Patrimoine Naturel.

Le Guide explique où et comment accéder aux informations pour caractériser une zone d'étude avant de consulter les ministères.

Vous pouvez répondre à ce courriel pour demander une copie électronique du guide.

NB: Notre équipe de travail est divisée par canton. Nous vous demandons de soumettre vos demandes par canton approprié (ex: pas Ville d'Ottawa car il y a plusieurs cantons dans la Ville d'Ottawa, donc Nepean, Goulbourn, Osgoode etc).

Toutes les autres demandes seront redirigées vers le membre du personnel approprié qui vous répondra dans les 15 jours.

Si vous avez d'autres questions, veuillez contacter Kemptville.Inforequest@ontario.ca

# l'Équipe du district de Kemptville Inforequest

Ontario minstère du Développement du Nord, des Mines, des Richesses naturelles et des Forêts



# **TECHNICAL NOTE**

RECIPIENT: To whom it may concern / MECP

**SENDER:** Casey Little, CIMA+

**DATE:** June 16, 2022

**SUBJECT:** Stillwater Station Ltd. Proposed Site Redevelopment – Information Request

CIMA+ file number: A001177

## 1. Introduction

CIMA+ was retained by Stillwater Station Ltd. (Stillwater) to complete an Environmental Impact Statement (EIS) report. The purpose of the assessment was to review the potential impacts of the project on existing natural environmental features and to recommend mitigation measures in support a Secondary Plan submission to the City of Ottawa for the development of a property located at 1987 Robertson Road in Ottawa, Ontario, Canada.

# 2. Contact Information

Table 1: Proponent Contact Information

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Legal Last Name	Glass
Legal First Name	Andrew
Full Mailing Address	236 Metcalfe Street, Ottawa, Ontario K2P 1R3
Telephone No.	613-369-5495
Email Address	aglass@prpgrp.com
Primary Contact for Proponent	No

Table 2: Primary Contact for Proponent

Legal Last Name	Little	
Legal First Name	Casey	
Full Mailing Address	110 – 240 Catherine Street, Ottawa, ON, K2P 2G8	
Telephone No.	343-575-0098	
Email Address	casey.little@cima.ca	

A species at risk (SAR) screening was completed in July 2021, and three (3) rounds of western chorus frog surveys were completed in April 2022.

# 3. Activity Summary

# 3.1 Brief Description

Based on the conceptual Site plans provided by RLA Architecture, the proposed mixed-use development will consist of five (5) seven-storey buildings, one (1) twelve-storey building, one (1) sixteen-storey building, one (1) twenty-storey building, one (1) twenty-four-storey building and one (1) twenty-eight storey building. Details of underground parking and basement levels were not known at the time of preparation of this report. Access lanes, parking areas, parkland and landscaped areas are also anticipated at the subject Site. The proposed development has been setback from Stillwater Creek beyond the top of slope and limit of hazard lands. It is further anticipated that the proposed development will be municipally serviced. A new road access is being proposed that will have the effect of extending Timm Drive east of Moodie Drive, crossing the greenbelt and extending over the abandoned railway corridor to the north of the Site. Access road improvements will involve the extension of the existing Stillwater Creek culvert running under the rail line.

#### 3.2 General Location

The Project Site is defined as the area where changes or disturbances will occur related to the project (e.g., construction, operation, and maintenance) hereinafter referred to as the "Site" (Figure 1). The Site consists of the 1987 Robertson Road property and has an approximate area of 95,830 m². The Site is bounded by the Bellwood Estates community to the south and west, Beachburg Rail Corridor to the north, Moodie Drive to the west, and the General Dynamics Mission Systems campus to the east. The "Study Area" consists of the adjacent (i.e., within 120 meters (m)) land around the perimeter of the Site. The discrete legal and property description information follows in the **Table 3** below.

Table 3: Property Information

Owner	Stillwater Station Ltd.
Municipal Address	1987 Robertson Road
Legal Description	Lot 11, Concession 2 of Nepean Geographic Township
Land Use Designation/Zoning	IP2 (Business Park Industrial Zone)

#### 3.3 Current Land Uses

The 1987 Robertson Road property is currently occupied by an equipment rental service. At present, there is a one-storey warehouse building, paved and gravelled surfaces for parking and access, and grass covered areas.

The northern portion of the site also encompases an old rail spur which has been decomissioned.



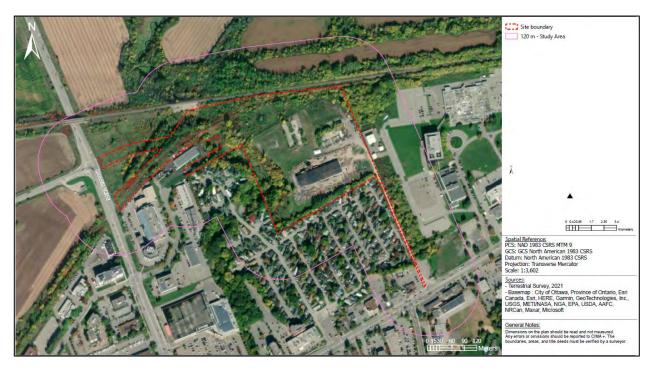


Figure 1: Site Location Map

# 3.4 Duration of Proposed Activity

As this project is currently in the planning stages, detailed components of the activities are not currently available.

# 3.5 Environmental Assessment

The information provided as part of this information requrest was collected as part of an Environmental Impact Statement (EIS) prepared to fulfil the requirements of City of Ottawa Official Plan in support of a Secondary Plan submission.



# 4. Activity Details

#### 4.1 Location

The geographic coordinates of the activity location are as follows:

Latitude: 45.328107 Longitude: -75.829581

# 4.2 Land Ownership

The proposed activity is located on a mix of private property and federal lands owned and operated by the National Capital Commission.

# 4.3 Identify the Ecological Communities

Eleven (11) ELC community classes were identified within the Site. A summary of community class findings is outlined below in **Table 4**, and the locations of the various vegetation communities present within the Site are displayed in **Figure 2**. No rare vegetation species or SAR plants were observed within the Study Area.

Table 4: ELC Communities within the Stillwater Station Site

Table 4: ELC Communities within the Stillwater Station Site			
ELC Community	Dominant Vegetation Species	Approximate Area Onsite (m²)	
CVI_1 – Transportation	This community is comprised of the railway and road networks throughout the Site.	2,393	
CVC_1 – Business Sector	There is one commercial business within the Site, and two slivers of the businesses west of the Site within the larger Study Area.	39,828	
FOCM6-3 – Dry-Fresh Scots Pine Naturalized Coniferous Plantation	This forest community is situated north of the rail line and was dominated by naturalized Scots Pine. Other species noted in this ecosite were Manitoba Maple, American Elm, Green Ash, Common Buckthorn and Honeysuckle. A Mixed Meadow Marsh community is present just north of this naturalized plantation which lined the creek in this location.	·	
FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest	This forest community within the Study Area is dominated by Manitoba Maple, American Elm, Green Ash, Common Buckthorn and Honeysuckle. The wooded strip east of Stillwater Creek also contained Trembling Aspen in the canopy as well as the other species noted above.		
FODM11 – Naturalized Deciduous Hedgerow	There are two Naturalized Hedgerows in the Study Area. One (1) is located south of the rail tracks and is comprised of Manitoba Maple, Green Ash, Common Buckthorn, and Honeysuckle. The other separates the commercial business from the trailer park and includes Manitoba Maple, Trembling Aspen, and White Poplar.		
MAMM1-2 – Cattail Graminoid Mineral Meadow Marsh	The two (2) Cattail Marsh communities are located south of the rail line within a narrow ditch. The eastern-most polygon also contained Phragmites ( <i>Phragmites australis subsp. australis</i> ).		



ELC Community	Dominant Vegetation Species	Approximate Area Onsite (m²)
Meadow Marsh	The Mixed Meadow Marsh communities within the Site are dominated by Joe Pye weed, Narrow-leaved Cattail, and Reed Canary Grass. This community is situated along Stillwater Creek, both north and south of the railway, as well as north of the naturalized Scots Pine plantation where the entrance to the Site is planned.	
MEMM3 - Dry-Fresh Mixed Meadow	The Mixed Meadow communities within the Site are comprised of a mix of common grass-like and broadleaf species dominated by Smooth Brome, Wild Carrot, Bird's-foot trefoil, Common Mugwort, Goldenrod, vetch, dandelion, and bedstraws.	
	A Thicket Swamp dominated by Red-osier Dogwood is present east of the meadow marsh and adjacent to Stillwater Creek north of the railway.	311
	The Mixed Meadow Marsh community located south of the railway and adjacent to Stillwater Creek transitions into a Mixed Willow Thicket Swamp along the eastern banks of the creek.	
THDM2 – Dry-Fresh Deciduous Shrub Thicket	This Deciduous Shrub Thicket is located east of Moodie Drive, along the north side of the rail line. It is dominated by Red-osier Dogwood ( <i>Cornus sericea</i> ) and Staghorn Sumac.	





Figure 2: Ecological Land Classification of the Stillwater Station Site

# 4.4 Detailed Description of the Various Components/Stages of the Proposed Activity

As this project is currently in the planning stages, detailed components of the activities are not currently available.

# 5. Indication of Species at Risk and Habitat Found at or near the Activity Location

# 5.1 Wildlife and Species at Risk Habitat Screening

Incidental wildlife and wildlife habitat observations (auditory, visual, tracks, scat, burrows, nests, etc.) were conducted within the Site boundaries on July 23rd, 2021, to determine presence/absence. Bird, insect, herpetofauna, and mammal data was compiled for the general area. The Site visit included the collection of bird data through incidental observations following the Ontario Breeding Bird Atlas survey protocol (OBBS, 2001). Identification and general classification of wildlife habitat was identified following the Significant Wildlife Habitat Technical Guide (MNRF, 2000) and supporting documentation. SAR and/or potential habitats on and adjacent to the Site was considered and analyzed in relation to the background information review in comparison with on-Site visual observations.

# 5.2 Western Chorus Frog Survey



Targeted surveys followed the methods outlined in the Draft Western Chorus Frog Detection Survey Protocol for Ontario (Blazing Star Environmental, no date). Three (3) surveys were conducted on April 5, 12, and 22, 2022, when air temperatures were at least 10°C, with light to no wind and/or rain when frog calls are most likely to be detected. A proxy site, approximately 3 km from the Study Area with a known western chorus frog population, was visited prior to each survey to confirm adequate survey conditions and breeding vocalizations.

Specifically, surveys were completed at one (1) point count station (**Figure 4**), generally conducted during the day between 10 am and 6 pm, to establish quantitative estimates of abundance within the wetland north of the abandoned railway corridor. If evidence of breeding behaviour was observed, it was recorded to measure the intensity and number of individuals calling using the Call Level Code and Abundance Counts.

# 5.3 Survey Results

No endangered or threatened SAR were observed on or adjacent to the Site during the 2021/2022 field investigations.

The only SAR listed as special concern observed within the Study Area was Monarch. As the MEMM3 – Dry-Fresh Mixed Meadow ecosite is frequently disturbed due to the on-going commercial heavy equipment business currently in operation, combined with a low quantity of breeding habitat (i.e., Milkweed plants), conditions within the Site are not suitable to provide significant habitat for this species.

Stillwater Creek provides suitable habitat for SAR turtle foraging, mating, thermoregulation, summer inactivity, and movement. There was no suitable nesting habitat observed for at-risk herpetofauna within the creek as it is comprised of an abundance of vegetation cover and lacks the presence of loose soils (COSEWIC, 2016). The railway embankment may provide suitable nesting habitat for at-risk turtles, but the steep slopes in this area may reduce the likelihood of nesting suitability. It is assumed that the perched culvert under the active Beachburg railline, directly north of the Site (**Figure 3**), likely poses migratory obstructions for any turtles attempting to move upstream.





Figure 3: Photo of perched culvert that conveys flow of Stillwater Creek under the Beachburg railway (RVCA, 2015)

In addition, the large CSP culvert that extends under the abandoned railway and the CSP culvert that conveys flow of the creek at the south end of the Site under Vanier Road are over 40 m long. Based on the Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile SAR in Ontario (MNRF, 2016), the recommended tunnel length for adequate SAR amphibian and reptile passage is less than 25 m. Therefore, it is assumed that SAR turtle passage through this structure is unlikely. Although the marsh north of the railway is ephemeral, which is often used by Blanding's Turtles (Emydoidea blandingii) as foraging sites during spring, the feature does not provide suitable foraging habitat as it lacks rich sources of amphibian and insect eggs and larvae (COSEWIC, 2016).

No frog species were heard calling in the mixed marsh north of the abandoned railway corridor during the 2022 targeted western chorus frog surveys. As western chorus frogs were heard calling at the proxy site prior to all three (3) surveys, it is concluded that this wetland feature does not support breeding habitat for western chorus frog, or any other frog species, at this location. As Stillwater Creek supports fish habitat, it is anticipated that this feature does not support breeding habitat for this species.

The FODM4-5 – Dry-Fresh Manitoba Maple Deciduous Forest ecosite within the Study Area may provide breeding habitat for SAR birds and maternity roosting habitat for SAR bats.

Additionally, the structures within the CVC\_1 community may provide suitable Barn Swallow nesting habitat, though no birds or evidence of nesting was noted during the field investigations.



Upon completion of the 2021/2022 field investigations, the list of the 19 SAR identified during the background review was assessed and updated to determine which SAR have the potential to occur on or adjacent to the Site. The outcome of this assessment determined that there is potential for five (5) SAR and/or their habitat within the Study Area. Refer to **Table 5** below for a summary of the SAR and associated habitat that may be impacted by this Project.

Table 5: Assessment of Potential SAR within the Stillwater Station Site

Table 5: Assess	Table 5: Assessment of Potential SAR within the Stillwater Station Site				
Common Name Scientific Name Status	Species Observed in Study Area (Y/N)		Potential for Impact as a Result of Project (Y/N)	Comments	
Butternut Juglans cinereal Federal – END Provincial – END	N	Y	N	No Butternut were observed on Site.	
<b>Monarch</b> Danaus plexippus  Federal – <b>SC</b> Provincial – <b>SC</b>	Y	Y	Y	There were patches of Common Milkweed (Asclepias syriaca) plants observed in the MEMM3 – Dry - Fresh Mixed Meadow ecosite but due to frequent disturbance in this area, significant habitat for Monarch is not available on Site; Regardless, individuals were observed and may be using the Site.	
Blanding's Turtle Emydoidea blandingii Federal – THR Provincial – THR	N	Υ	Y	No Blanding's Turtle were observed on Site; however, Stillwater Creek and the associated wetland provide adequate habitat for the species to use for mating, foraging, thermoregulation, summer inactivity, and/or movement.	
Eastern Milksnake Lampropeltis triangulum Federal – SC Provincial – SC	N	N	N	There are no suitable microhabitats (i.e., barns, sheds, or houses in rural landscapes) for specific activities such as egg laying or thermoregulation for Eastern Milksnake on Site.	
Midland Painted Turtle Chrysemys picta marginate Federal – SC Provincial – Not Listed	N	Y	Y	No Midland Painted Turtle were observed on Site; however, Stillwater Creek and the associated wetland provide adequate habitat for the species to use for mating, foraging, thermoregulation, summer inactivity, and/or movement.	
Provincial – SC	N	Υ	Y	No Snapping Turtle were observed on Site; however, Stillwater Creek and the associated wetland provide adequate habitat for the species to use for mating, foraging, thermoregulation, summer inactivity, and/or movement.	
Western Chorus Frog (Great Lakes – St. Lawrence Population Pseudacris triseriata Federal – THR Provincial – Not listed		Ν	Z	As the creek is fish bearing it is not considered suitable for Western Chorus Frog critical habitat.	



Common Name Scientific Name Status	Species Observed in Study Area (Y/N)		Potential for Impact as a Result of Project (Y/N)	Comments
Bank Swallow Riparia riparia Federal – THR Provincial – THR	N	N	N	No Bank Swallow colonies were observed on Site.
Barn Swallow Hirundo rustica Federal – THR Provincial – THR	N	Y	Y	No Barn Swallow were observed on Site; however, buildings within the CVC_1 community may provide suitable breeding habitat for the species.
Bobolink Dolichonyx oryzivorus Federal – THR Provincial – THR	N	N	N	No suitable habitat for Bobolink is present on Site.
Evening Grosbeak Coccothraustes vespertinus Federal – SC Provincial – SC	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Eastern Meadowlark Sturnella magna Federal – THR Provincial – THR	N	N	N	No suitable habitat for Eastern Meadowlark is present on Site.
Eastern Wood-Pewee Contopus virens Federal – SC Provincial – SC	N	Υ	Ν	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Grasshopper Sparrow Ammodramus savannarum Federal – SC Provincial – SC	N	N	N	No suitable habitat for Grasshopper Sparrow is present on Site.
Wood Thrush Hylocichla mustelina Federal – SC Provincial – THR	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Eastern Small-footed Bat Myotis leibii Federal – Not listed Provincial – END	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.



Common Name Scientific Name Status	Species Observed in Study Area (Y/N)		Potential for Impact as a Result of Project (Y/N)	Comments
Little Brown Myotis Myotis lucifugus Federal - END Provincial - END	N	Y		Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
Northern Myotis Myotis septentrionalis Federal – END Provincial – END	N	Y	N	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.
<b>Tri-colored Bat</b> Perimyotis subflavus  Federal - <b>END</b> Provincial - <b>END</b>	N	Y	Ν	Although this species was not observed during the 2021 field investigations habitat is available within the Study Area; however, no impacts are expected to occur to the FODM4-5 ecosite, therefore impacts to this species are not anticipated.

END – Endangered THR – Threatened SC – Special Concern

Based on results of the SAR screening assessment through background data review coupled with on-Site investigations, there is potential for five (5) SAR and/or their habitat within the Study Area to be impacted by construction activities; Monarch, Blanding's Turtle, Midland Painted Turtle, Snapping Turtle, and Barn Swallow. Avoidance and mitigative strategies to address potential impacts to these SAR are identified in Section 6.

Refer to **Appendix A** to view the Photographic Record of the Study Area.

# 6. SAR and Habitat that may be Affected by the Activity

No endangered or threatened SAR have been identified within the buildable area on-Site; however, the Project has the potential to directly impact five (5) SAR and/or their habitat: Monarch, Blanding's Turtle, Midland Painted Turtle, Snapping Turtle, and Barn Swallow. A summary of these potential adverse effects is listed below.

Habitat is present for Monarch, identified during background review and confirmed during field investigations. It is anticipated that approximately 29,806 m² of MEMM3 – Dry-Fresh Mixed Meadow habitat will be permanently removed because of the proposed development. These open areas are predominately comprised of ground cover, wildflowers, and other herbaceous flowering plants, with patches of regenerating tree and shrub species. Although these areas provide general nectaring habitat for Monarch, due the frequently disturbed nature of these lands because of the on-going commercial heavy equipment business currently in operation, high quality breeding habitat required by this species will not be adversely affected because of this project. Regardless, avoidance techniques are recommended below to protect impacts to individuals.



Habitat for SAR turtles (i.e., Blanding's Turtle, Midland Painted Turtle, and Snapping Turtle) is present within Stillwater Creek and the adjacent wetlands. Although impacts to the creek are not anticipated, impacts to these species may occur during Site clearing and during construction activities if turtles occasionally move through the Site.

Approximately 10,832 m<sup>2</sup> of the Scots pine coniferous plantation, deciduous hedgerow, Manitoba maple deciduous forest, and mixed meadow communities will be permanently removed because of the access road construction. Based on the significant wildlife habitat assessment completed in this area, habitat is not suitable for SAR birds and/or SAR bats although habitat is available for wildlife typical of urban settings.

No nests created by Barn Swallow were observed within the Study Area during the 2021 field investigations, however, existing structures located in the CVC-1 community may provide suitable nesting habitat for this species.

Refer to Figure 4 below for a view of the mapped natural heritage features within the Site.



Figure 4: Mapped Natural Heritage Features within the Stillwater Station Site

With proper implementation of avoidance and mitigations such as Site clearing outside of the active season, and proper isolation of the construction areas, these impacts are anticipated to be temporary and methods to restore the disturbed areas post-construction should be implemented.

The following mitigation measures are proposed to avoid or mitigate impacts to wildlife and SAR as a result of the project:

- + Removal of natural vegetation will be minimized and clearly delineated on construction drawings;
- Workforce will be educated on potential wildlife which could occur in the vicinity of the work area and measures to avoid wildlife (as per City of Ottawa, 2015);



- + Removal of woody vegetation will not occur during the breeding bird season from April 15th August 31st inclusive, unless a qualified biologist has searched the Site for nests and concluded that no nests are present, no more than 2 days prior to clearing. If nests are found, a protective buffer around the nest location will be required until such time that the nest is abandoned:
- + If work must occur during the peak activity period for reptiles and amphibians, exclusion fencing shall be installed prior to the peak activity period (April 1) and shall be properly maintained and monitored for the duration of construction. The goal of exclusion fencing is to prevent or minimize the risk of harm to herpetofauna and their nests and/or eggs by physically preventing them from entering the work areas at any time prior to and during construction.
  - Fence installation shall be consistent with the methods prescribed in the Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile SAR in Ontario (MNRF, 2016).
  - Inspect protective exclusion measures daily and after each rain event to ensure their integrity and continued function.
- + Harassment and/or harm to wildlife during construction is prohibited (as per City of Ottawa, 2015);
- + When possible, work will be completed during daylight hours. If nighttime lights are used, they will be installed to illuminate the work area only to minimize impacts to nighttime activities of wildlife;
- Existing access roads will be used as much as possible and speed limits will be clearly
  posted on site access and construction roads to minimize the potential for turtle road
  mortality.
- + Stockpiled materials will be surrounded by sediment control fencing to prevent nesting by birds, turtles, and snakes (as per City of Ottawa, 2015);
- Vehicles and equipment will have the appropriate mufflers installed;
- + Vehicle and equipment engine idling will be minimized;
- Construction vehicles will have designated access routes from and to the construction area;
- + If a wildlife species individual is encountered at the Site, work will be stopped until the individual either moves off the site or can be relocated by trained personnel;
- + Design of structures should consider *City of Ottawa Bird Safe Design Guidelines* for components such as windows and window treatments, landscaping, etc.

To ensure compliance under Section 9 and/or Section 10 of the ESA, and to protect SAR and SAR habitat during development and operations of the proposed Project activities, the following general mitigation measures are recommended:

+ A worker awareness program shall be provided to all on-site personnel that includes species at risk identification and habitat characteristics, such as the Ottawa Species at Risk Handbook (OSC, 2014), and provides general species-specific guidance with respect to appropriate actions to be taken whenever these species are encountered;



- A daily pre-construction search of the machinery and the work area shall be implemented to identify presence of species at risk, as animals may be found hiding or basking around equipment, rocks, debris piles etc;
- + If endangered or threatened species are observed in or near the study area, work shall stop immediately, a photograph shall be taken of the species (if possible) and the SAR shall be allowed to move out of the work area on its own. The MECP shall be notified (as required).

# 6.1 SAR Specific Mitigations

#### 6.1.1 Monarch

As marginal Monarch habitat is present in the MEMM3 – Dry-Fresh Mixed Meadow of the Site, the following recommendations are provided for insect SAR:

- + Limit vegetation clearing, especially in areas with wildflowers and/or milkweed, to outside the active plant growing season when possible (i.e., May to September);
- + If vegetation clearing must occur during the active plant growing season, clearing should start at the edge of the habitat and move in to allow for insects to flee towards suitable habitat:
- + Limit the use of pesticides at the Site.

# 6.1.2 SAR Herpetofauna

Suitable foraging, mating, thermoregulation, summer inactivity, and movement habitat was identified for Blanding's Turtle, Midland Painted Turtle, and Snapping Turtle at the Site. The active season for herptiles is March 15 through October 31 and if construction activities are scheduled to occur during the active season the following mitigation measures may be required:

- Installation of exclusion fencing shall be implemented as per recommendations provided above;
- Complete daily sweeps of the isolated construction areas to determine if any herptiles have entered the construction limits;
- If a herptile is observed in the active construction area, an appropriate buffer should be established by a qualified individual, within which construction activities cease and the herptile allowed to leave the work area on its own accord.



#### 6.1.3 Barn Swallow

Although no Barn Swallows or sign of nesting by the species was observed during the 2021 field investigations, suitable habitat is present within the CVC\_1 community. Therefore, one (1) year prior to demolition it is recommended that surveys of the buildings be completed in search of Barn Swallow nests to determine presence/absence. If active Barn Swallow nests are observed during the survey, the rules set forth under the ESA for altering a structure that is habitat for Barn Swallow (MECP, 2021b) must be followed, including registering the activity and compensating for removed habitat. This includes:

- Registering the work and the affected species (Barn Swallow) with the MECP before work begins.
- Minimizing the effects of development activities on Barn Swallow.
- + Creating, maintaining, and monitoring new habitat for Barn Swallow.
- Preparing and maintaining records that relate to the activity and the habitat.

To protect individuals because of construction activities, refer to sections above to view the timing windows recommended to protect migratory bird species.

## 7. SUMMARY AND NEXT STEPS

Although the Study Area has been previously disturbed due to the on-going commercial heavy equipment business currently in operation, new disturbances to the natural environment will occur as a result of this project.

The proposed residential development is not within the footprint of any natural heritage features, including SAR habitat, and is is able to honor the required 15 m setback from the existing top of slope where natural heritage features and SAR habitat have been identified. However, the construction of the residential development has the potential to cause ecological impacts. As a result, it is anticipated that most impacts will be short-term in nature and associated with site preparation, demolition, and construction activities.

With proper implementation of avoidance and mitigations measures as outlined within this memo, the works associated with the project are not likely to result in long term adverse effects to adjacent vegetation communities, Stillwater Creek and its associated wetlands, and SAR/wildlife habitat. Impacts to habitat function in adjoining habitats, are anticipated to be temporary so long as proper environmental protection measures are implemented, monitored, and applied effectively during construction.

We trust that the information contained within this memo satisfies the requirements of the project to be considered by MECP when assessing and determining whether the proposed activity is likely to contravene subsections 9(1) or 10(1) of the ESA, and thus whether it is advisable for the proponent to apply for and obtain an overall benefit permit under clause 17(2)(c) of the ESA prior to proceeding with the proposed activity to avoid contravening the Act.

I look forward to your review of this submission. Please feel free to contact me if further information is required.



Regards,

Casey Little, Biologist

casey.little@cima.ca

Office: 613-860-2462 Cell: 343-996-4951





# **APPENDIX F: Stillwater Station EIS Photographic Log**

# Site Location

Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
1	2021/07/23	East

# Description

View of the Mixed Meadow ecosite along the abandoned railway off Moodie Drive.



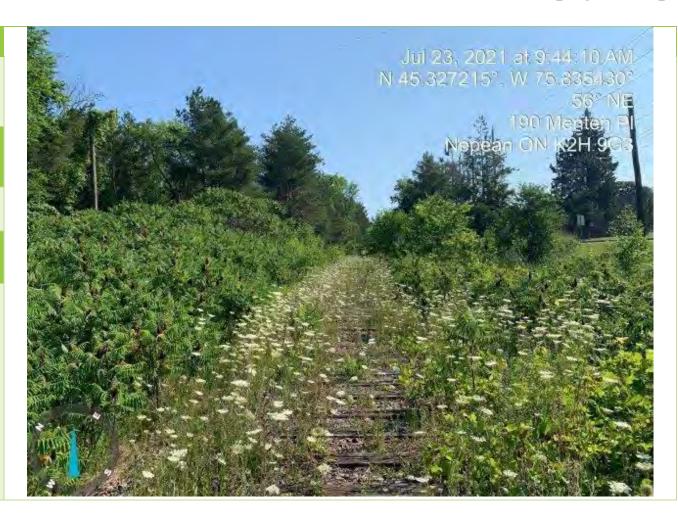


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
2	2021/07/23	Northeast

## Description

View of the Mixed Meadow, and Shrub Thicket ecosites along the abandoned railway off Moodie Drive.



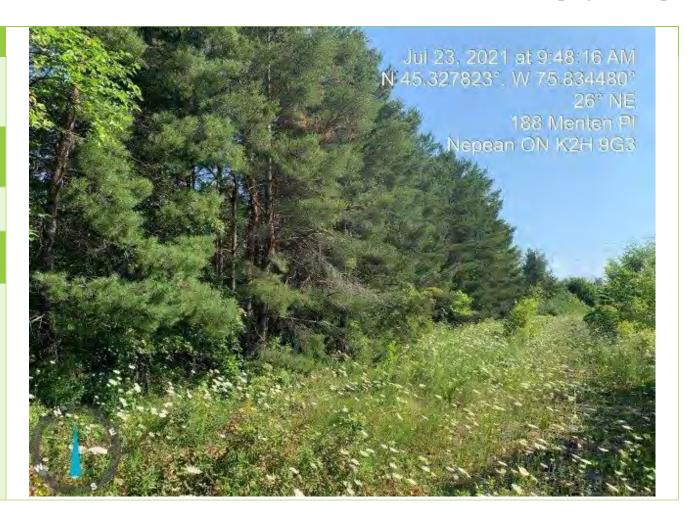


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
3	2021/07/23	Northeast

## Description

View of the Mixed Meadow, and Scots Pine Naturalized Coniferous Plantation ecosites along the abandoned railway off Moodie Drive.



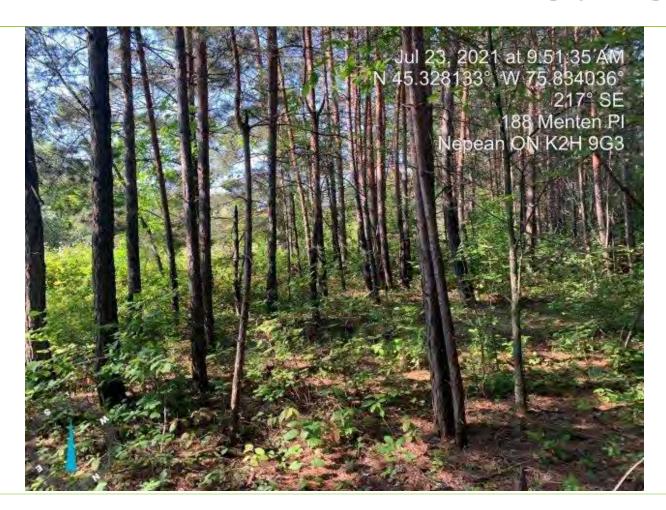


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
4	2021/07/23	SE

## Description

A view from the understory of the Scots Pine Naturalized Coniferous Plantation north of the abandoned railyway ecosite.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
5	2021/07/23	Northeast

## Description

View from the western extent of the Mixed Meadow Marsh ecosite north of the Scots Pine Naturalized Coniferous Plantation outsite of the Site boundaries.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
6	2021/07/23	East

## Description

View from within the Mixed Meadow Marsh ecosite outsite of the Site boundaries.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
7	2021/07/23	West

## Description

View of the Commercial Businesses located along Menten Place, south of the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
8	2021/07/23	West

# Description

View of the Commercial Businesses located along Menten Place, south of the abandoned railway.



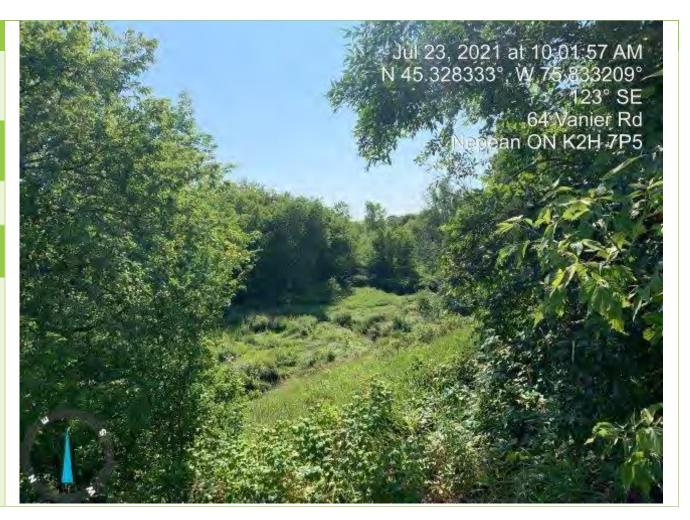


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
9	2021/07/23	Southeast

## Description

View of the valleyland associated with Stillwater Creek from the parking lot of the Commercial Businesses located along Menten Place, south of the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
10	2021/07/23	South

# Description

View of the valleyland associated with Stillwater Creek from the top of the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
11	2021/07/23	West

# Description

View of the CSP culvert conveying flow of Stillwater Creek under the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
12	2021/07/23	South

# Description

View of the upstream reach of Stillwater Creek lined with a Mixed Meadow Marsh on either side.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
13	2021/07/23	South

# Description

View of the clear water within the upstream reach of Stillwater Creek.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
14	2021/07/23	North

# Description

View of the downstream reach of Stillwater Creek through the CSP culvert that conveys flow under the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
15	2021/07/23	East

## Description

View of the Naturalized
Deciduous Hedge-row along
the abandoned railway, east of
Stillwater Creek.



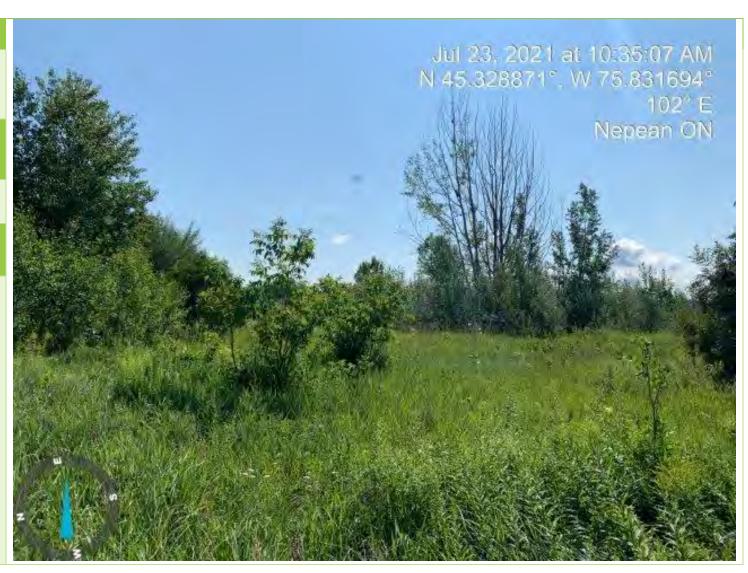


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
16	2021/07/23	East

## Description

View of the Mixed Meadow ecosite east of Stillwater Creek.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
17	2021/07/23	South

## Description

View of the Mixed Meadow ecosite north of the Commercial Business within the Site.



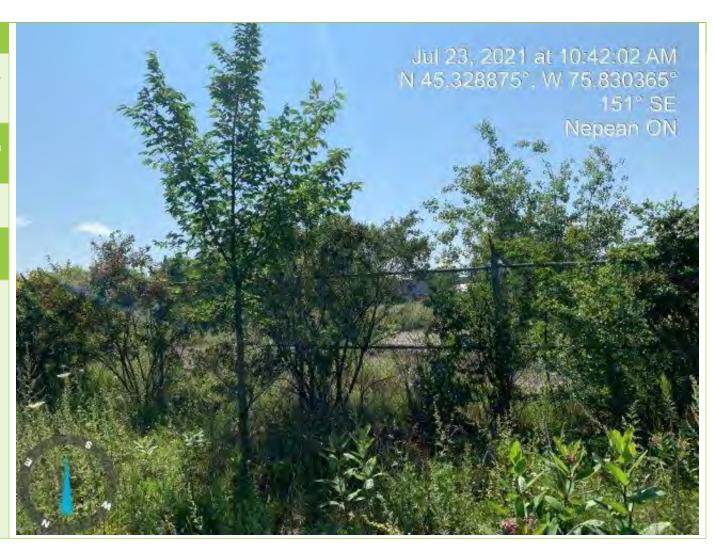


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
18	2021/07/23	Southeast

## Description

View of the northern extent of the Commercial Business through the fence.



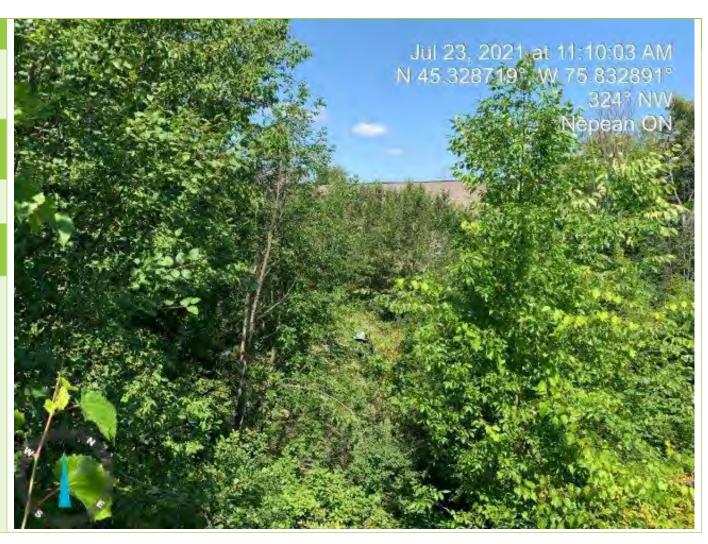


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
19	2021/07/23	Northwest

## Description

View of the culvert inlet which conveys flow of Stillwater Creek under the 2<sup>nd</sup> railway north of the Site, from the 1<sup>st</sup> abandoned railway tracks.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
20	2021/07/23	Southeast

## Description

View of the culvert outlet which conveys flow of Stillwater
Creek northwards under the 1st abandoned railway tracks.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
21	2021/07/23	North

## Description

View of the downstream reach of Stillwater Creek flowing north towards the 2<sup>nd</sup> railway north of the Site.



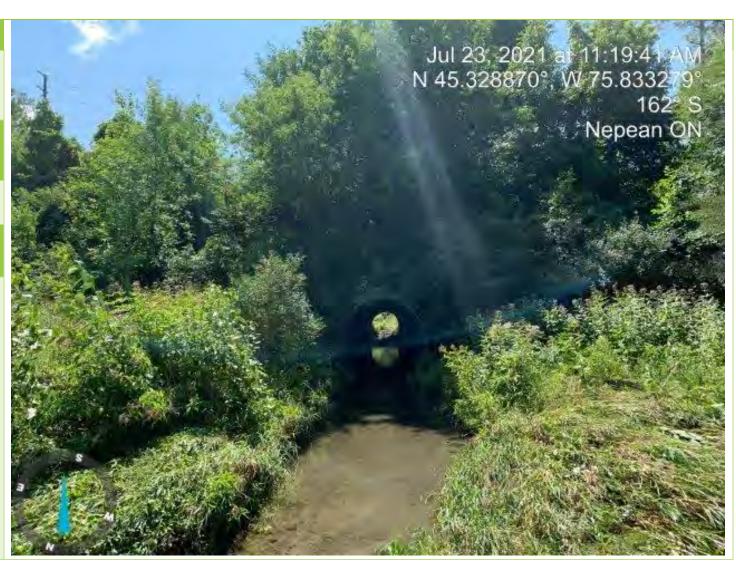


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
22	2021/07/23	South

## Description

View of the culvert outlet conveying flow of Stillwater Creek northwards under the 1<sup>st</sup> abandoned railway tracks, lined with a Mixed Meadow Marsh on either side.



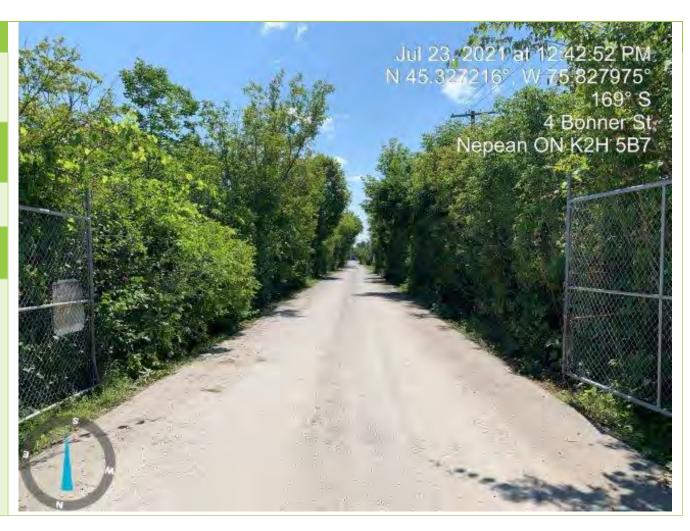


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
23	2021/07/23	South

## Description

View of the tree-lined driveway of the Commercial Business' entrance-way.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
24	2021/07/23	North

## Description

View of the Commercial Business' entrance-way within the Site.



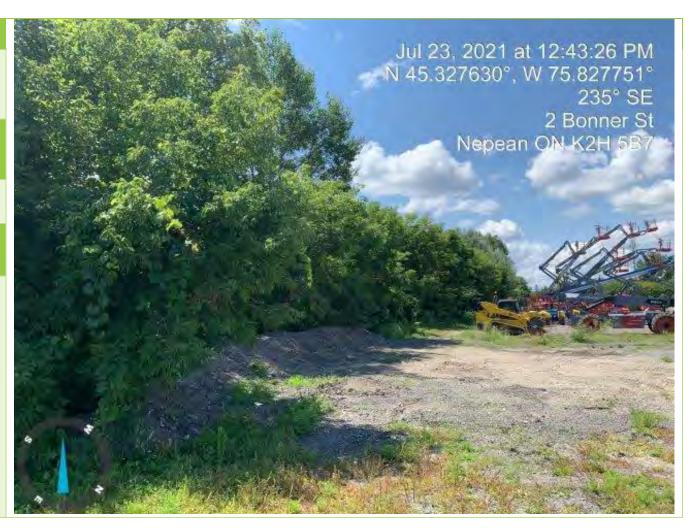


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
25	2021/07/23	Southwest

## Description

View of the Commercial Business' entrance-way, with a Naturalized Deciduous Hedgerow separating it from the trailer park to the south.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
26	2021/07/23	Southwest

## Description

View of the Naturalized
Deciduous Hedge-row
separating the Commercial
Business from the trailer park
to the south.



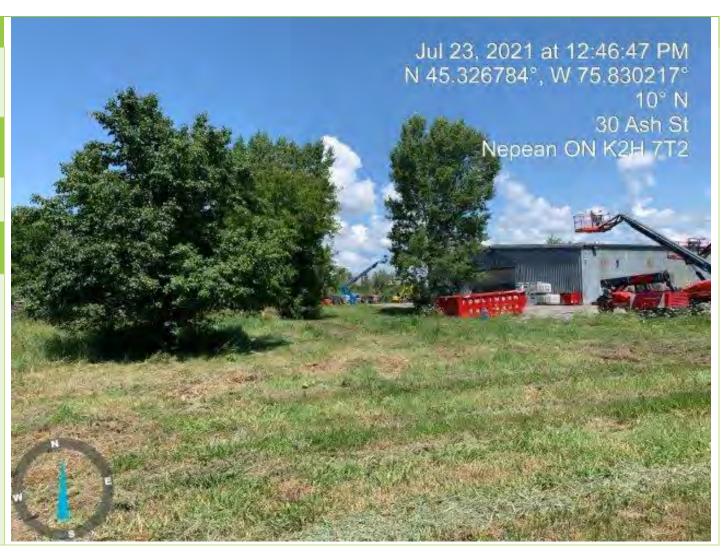


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
27	2021/07/23	North

## Description

View of the Commercial Business within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
28	2021/07/23	North

### Description

View of the Manitoba Maple Deciduous Forest ecosite along the western edge of the Commercial Business within the Site.



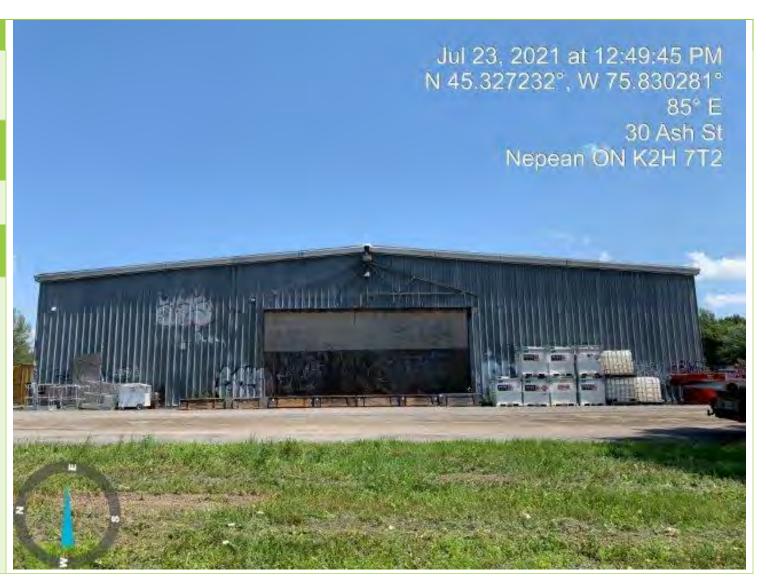


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
29	2021/07/23	East

## Description

View of the Commercial Business within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
30	2021/07/23	North

## Description

View of the Mixed Meadow from the northern extents of the Commercial Business property.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
31	2021/07/23	South

## Description

View of the Commercial Business within the Site.



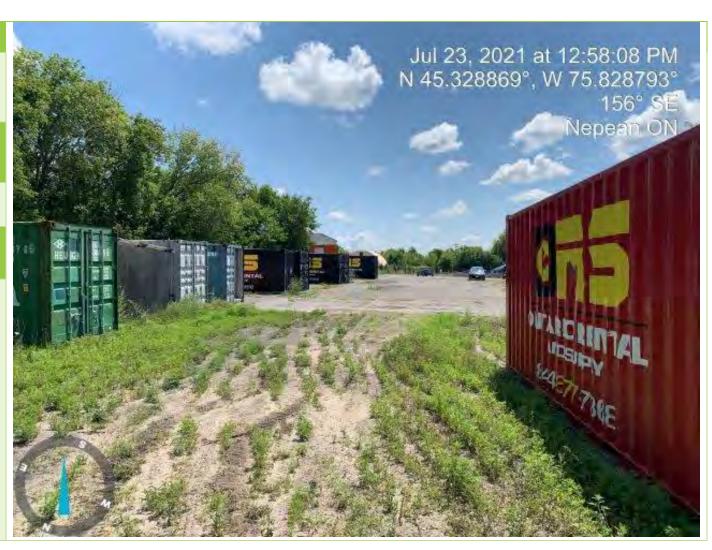


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
32	2021/07/23	Southeast

## Description

View of the Commercial Business within the Site from the northeastern extent of the property.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
33	2021/07/23	Southeast

## Description

View of the Commercial Business property within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
34	2021/07/23	West

### Description

View of the Commercial Business property within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
35	2021/07/23	South

## Description

View of the entrance-way of the Commercial Business from within the property.



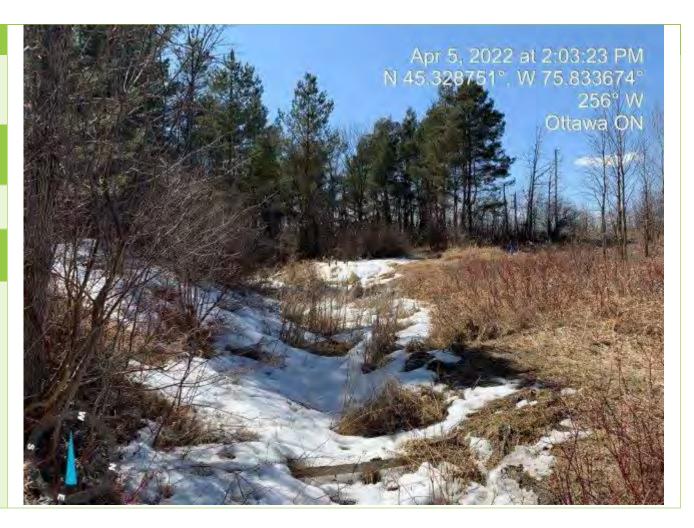


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
36	2022/04/05	West

### Description

View of the Mixed Meadow Marsh ecosite during Round #1 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
37	2022/04/05	East

### Description

View of the Mixed Meadow Marsh ecosite during Round #1 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
38	2022/04/12	West

# Description

View of the Mixed Meadow Marsh ecosite during Round #2 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
39	2022/04/12	East

# Description

View of the Mixed Meadow Marsh ecosite during Round #2 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
40	2022/04/22	West

## Description

View of the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
41	2022/04/22	East

## Description

View of the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
42	2022/04/22	Southwest

## Description

View of zero standing water within the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
43	2021/07/23	Southwest

# Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
44	2022/05/10	Southwest

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.



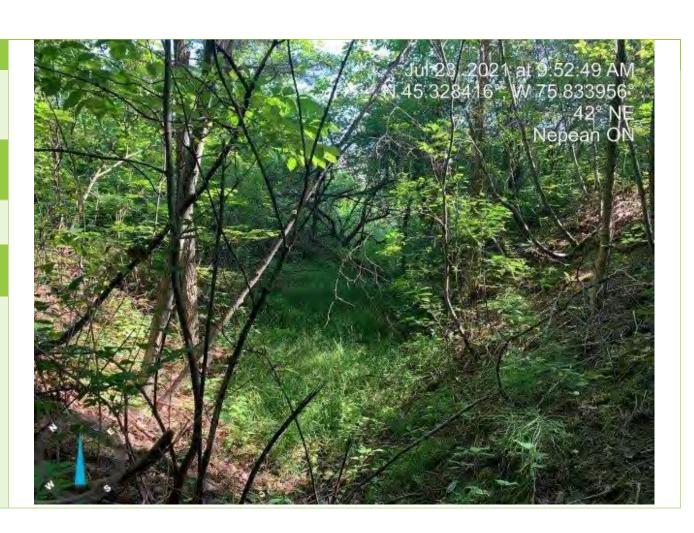


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
45	2021/07/23	Northeast

# Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
46	2022/05/10	Northeast

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
47	2022/05/10	East

## Description

View from within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
48	2021/07/23	East

# Description

View from within the Mixed Meadow Marsh ecosite outsite of the Site boundaries during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
49	2021/07/23	Southwest

## Description

View from within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
50	2022/05/10	East

## Description

View from within the Mixed Meadow Marsh ecosite displaying the Red-osier Dogwood Thicket Swamp on the northern edge during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
51	2022/05/10	Northeast

## Description

View of the Mixed Meadow
Marsh ecosite narrowing along
the southern edge displaying the
Red-osier Dogwood Thicket
Swamp on the northern edge
during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
52	2022/05/10	East

# Description

View of the eastern extent of the Mixed Meadow Marsh ecosite where it narrows into Stillwater Creek during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
53	2022/05/10	South

# Description

View of the culvert outlet along the eastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
54	2022/05/10	North

# Description

View of the culvert inlet along the eastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
55	2022/05/10	Northwest

# Description

View of the eastern extent of the wetland boundary displaying the Red-osier Dogwood Thicket Swamp during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
56	2022/05/10	West

### Description

View of the northeastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
57	2022/05/10	East

### Description

View of the northeastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
58	2022/05/10	West

# Description

View of the northern extent of the wetland along the Red-osier Dogwood Thicket Swamp boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
59	2022/05/10	West

## Description

View of the northern extent of the wetland along the Red-osier Dogwood Thicket Swamp boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
60	2022/05/10	West

# Description

View of the northern extent of the wetland along the Mixed Meadow Marsh ecosite boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
61	2022/05/10	South

# Description

View of the wetland boundary within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
62	2022/05/10	Southwest

### Description

View of the wetland boundary within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
63	2022/05/10	Southwest

## Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.



Appendix D Potential Species at Risk





# APPENDIX D: Potential SAR within the Stillwater Station EIS Study Area

Common Name Scientific Name Status <sup>i</sup>	Information Source <sup>ii</sup>	Species Specific Information
Butternut Juglans cinereal Federal – END Provincial – END	NHIC Square 18VR3520	Butternut is a medium-sized tree that can reach up to 30 m in height and is easily recognized by its compound leaves, which are made up of 11 to 17 leaflets (each nine to 15 centimetres long) arranged in a feather-like pattern. Butternut usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams.
Monarch Danaus plexippus Federal – SC Provincial – SC	OBA Square 18VR31	The Monarch is a showy orange and black butterfly with small white spots, with a relatively large wingspan reaching 93-105 millimeters. The Monarch's caterpillar has black, white and yellow stripes and can be found feeding on milkweed plants. Throughout their life cycle, Monarchs use three different types of habitats. Only the caterpillars feed on milkweed plants and are confined to meadows and open areas where milkweed grows. Adult butterflies can be found in more diverse habitats where they feed on nectar from a variety of wildflowers.
Blanding's Turtle Emydoidea blandingii Federal – THR Provincial – THR	NHIC Squares 18VR3419 18VR3519 18VR3420 18VR3520 ORAA Square 18VR31	The Blanding's Turtle is a medium-sized turtle easily identified by its bright yellow throat and chin. They have a domed shell that resembles an army helmet. The Blanding's Turtle is a semi-aquatic species. They use aquatic habitats for overwintering, mating, foraging, thermoregulation, summer inactivity, and movement. They favour relatively shallow water, soft highly organic substrates, and abundant vegetation such as wetlands, slow flowing rivers, and creeks as well as artificial channels. Terrestrial habitat and especially upland forest, is important for many activities of the Blanding's Turtle during the active season, including nesting, thermoregulation, summer inactivity, and movement. Blanding's Turtles can also use or move through human-altered habitats, generally open areas, such as agricultural fields, road shoulders, and quarries.
Eastern Milksnake Lampropeltis triangulum Federal – SC Provincial – SC	ORAA Square 18VR31	Eastern Milksnake are habitat generalists but prefer open habitats, including rock outcrops and meadows. They require suitable microhabitats for specific activities such as egg laying or thermoregulation. Eastern Milksnakes are well known for occupying barns, sheds and houses in rural landscapes. Eastern Milksnake habitat in portions of southwestern Ontario and parts of southwestern Quebec (e.g. urban regions and areas subject to intensive agriculture) is fragmented and consists of relatively small, natural areas.
Midland Painted Turtle Chrysemys picta marginate Federal – SC Provincial – Not Listed	ORAA Square 18VR31	Midland Painted Turtles have a smooth, gently rounded carapace (upper shell) that is dark green to black in colour with red markings on the sides. The plastron (lower shell) is usually tan to yellow and often has a dark, irregularly shaped blotch in the center. Painted Turtles prefer shallow aquatic habitats with slow-moving water, soft bottoms, aquatic vegetation, and abundant basking sites. Typical habitats include swamps, marshes, permanent or temporary ponds, creeks, rivers and lakes. Females nest in sandy or gravelly soils in open-canopy habitats with high sun exposure, such as in forest clearings, meadows, shorelines, rock outcrops, agricultural fields and the shoulders of roads. The nest sites are typically within 200 m of a water body. They overwinter at the bottom of water bodies or under submerged undercut banks.

Common Name Scientific Name Status <sup>i</sup>	Information Source <sup>ii</sup>	Species Specific Information
Snapping Turtle Chelydra serpentina Federal – SC Provincial – SC	ORAA Square 18VR31	Canada's largest freshwater turtle, Snapping Turtles have large black, olive or brown shells. They typically inhabit shallow waters and hide under the soft mud and leaf litter. From early to mid-summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams but they will also nest in manmade structures including the gravel shoulders of roads, dams and aggregate pits.
Western Chorus Frog (Great Lakes – St. Lawrence Population Pseudacris triseriata Federal – THR Provincial – Not listed	ORAA Square 18VR31	The Western Chorus Frog is primarily a terrestrial species. In marshes or wooded wetland areas, it is found on the ground or in low shrubs and grass and very rarely in permanent ponds. The Western Chorus Frog requires both terrestrial and aquatic habitats in proximity and it requires seasonally dry temporary ponds devoid of predators, particularly fish for breeding and tadpole development.
Bank Swallow Riparia riparia Federal – THR Provincial – THR	OBBA Square 18VR31	The Bank Swallow is a small songbird with brown upperparts, white underparts and a distinctive dark breast band. It averages 12 cm long and weighs between 10 and 18 grams. Males and females are similar in size and colour. Bank swallows' nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable.
Barn Swallow Hirundo rustica Federal – THR Provincial – THR	OBBA Square 18VR31	The Barn Swallow is a medium-sized songbird (about 15 to 18 centimeters long). Males have a glossy steel-blue back and upper wings, a rusty-red forehead and throat, a short bill and a broad blue breast band above its tawny underbelly. The male has long tail feathers which form a distinctive, deep fork and a line of white spots across the outer end of the upper tail. Barn Swallows often live-in close association with humans, building their cup-shaped mud nests almost exclusively on human-made structures such as open barns, under bridges and in culverts.
Bobolink Dolichonyx oryzivorus Federal – THR Provincial – THR	NHIC Squares 18VR3419 18VR3420 18VR3520 OBBA Square 18VR31	The Bobolink is a medium sized songbird found in grasslands and hayfields. In their summer breeding season, male Bobolinks are black with a white back and yellow collar. By late summer, males lose their breeding plumage to resemble the female's tan colour with black stripes. Bobolinks often build their small nests on the ground in dense grasses. Bobolinks spend much of their time out of sight on the ground feeding on insects and seeds.
Evening Grosbeak Coccothraustes vespertinus Federal – SC Provincial – SC	OBBA Square 18VR31	The Evening Grosbeak is a large, stocky finch with a thick greenish-yellow bill. Adult males are yellow and black in colour with a prominent white patch on the wings and a brown head. During the breeding season, the Evening Grosbeak is generally found in open, mature mixed-wood forests dominated by fir species, spruce and/or aspen.

Common Name Scientific Name Status <sup>i</sup>	Information Source <sup>ii</sup>	Species Specific Information
Eastern Meadowlark Sturnella magna Federal – THR Provincial – THR	NHIC Squares 18VR3419 18VR3420 18VR3520 OBBA Square 18VR31	The Eastern Meadowlark is a medium-sized, migratory songbird (about 22 to 28 cm long) with a bright yellow throat and belly, a black "V" on its breast and white flanks with black streaks. They are most common in native grasslands and prairies, but they also occur in pastures, hayfields, agricultural fields, airports, and other grassy areas.
Eastern Wood-Pewee Contopus virens Federal – SC Provincial – SC	OBBA Square 18VR31	The Eastern Wood-Pewee is a small forest bird that grows to about 15 cm long. Adults are generally greyish-olive on their upper parts and pale on the under parts with pale bars on their wings. They live in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation.
Grasshopper Sparrow Ammodramus savannarum Federal – SC Provincial – SC	OBBA Square 18VR31	The Grasshopper Sparrow is a small brown songbird with a streaked back and buffy white underparts. It has a white stripe down the centre of its crown and a flat look to the top of its head. It lives in open grassland areas with well-drained, sandy soil. It will also nest in hayfields and pasture, as well as alvars, prairies and occasionally grain crops such as barley. It prefers areas that are sparsely vegetated.
Wood Thrush Hylocichla mustelina Federal – THR Provincial – SC	OBBA Square 18VR31	The Wood Thrush is a medium-sized songbird, about 20 cm long – slightly smaller than the American robin and similar in shape. These birds are generally rusty brown on the upper parts with white under parts and large blackish spots on the breast and sides. The Wood Thrush lives in deciduous and mixed forests. They seek moist stands of trees with well-developed undergrowth and tall trees for singing perches. They prefer large mature forests but will also use smaller stands of trees. They build their nests in living saplings, trees, or shrubs, usually in sugar maple or American beech.
Eastern Small-footed Bat Myotis leibii Federal – Not listed Provincial – END	AMO	The Eastern Small-footed Bat is about 8 cm long and weighs just 4-5 grams. Their wing span is 21-25 cm. This bat's fur has black roots and shiny light brown tips, giving it a yellowish-brown appearance. Its face mask, ears and wings are black, and its underside is grayish-brown. Males and females are similar in color and size. In the spring and summer, Eastern Small-footed Bats will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. In the winter, these bats hibernate, most often in caves and abandoned mines. They seem to choose colder and drier sites than similar bats and will return to the same spot each year.

Common Name Scientific Name Status <sup>i</sup>	Information Source <sup>ii</sup>	Species Specific Information
Little Brown Myotis Myotis lucifugus Federal – END Provincial – END	AMO	Little Brown Myotis have glossy brown fur and usually weigh between four and 11 grams – about as much as a Canadian loonie or toonie. Little Brown Myotis inhabit forested lands near water but may also be found in dry climates where water is not readily available. They prefer to roost in buildings, trees, under rocks, and in piles of wood.
Northern Myotis Myotis septentrionalis Federal – END Provincial – END	AMO	Northern Long-eared Bats have dull yellow-brown fur with pale grey bellies. They are typically about eight cm long, with a wingspan of about 25 cm. Northern Long-eared Bats usually weigh between six and nine grams. They have long (rounded) ears and look similar to the more common Little Brown Myotis. They can be distinguished by the fleshy projection that covers the entrance to the ear, which is long and thin, with a pointed tip.
Tri-colored Bat Perimyotis subflavus Federal – END Provincial – END	AMO	The Tri-colored Bat is a small pale brown bat that weighs about 7 gm (the weight of a two-dollar coin) and has a wingspan of 23 cm. They are named for the hairs on its back which are black, yellow and brown. The Tri-colored Bat is found in a variety of forested habitats with day roosts and maternity colonies in older forest and occasionally in barns or other structures. They forage over water and along streams in the forest. At the end of the summer, they swarm, generally near the cave or underground location where they will overwinter.

<sup>&</sup>lt;sup>1</sup> Status under the federal Species at Risk Act, and provincial Endangered Species Act, 2007 – END = Endangered, THR = Threatened, SC = Special Concern

<sup>&</sup>quot;OBA = Ontario Butterfly Atlas (Toronto Entomologists' Association, 2021), NHIC = Natural Heritage Information Center (Ministry of Natural Resources and Forestry), ORAA = Ontario Reptile and Amphibian Atlas (iNaturalist), OBBA = Ontario Breeding Bird Atlas (Cadman et al., 2007), AMO = Atlas of the Mammals of Ontario (Dobbyn, 1994)

Appendix E Inventory Results





## 1987 Robertson Road Stillwater Station Ltd. EIS Inventory Results Bird Records

Common Name	Scientific Name	Origin	SARA	ESA	G Rank	N Rank	S Rank	Recent Observation	Historical Observation	Data Sources
Wild Turkey	Meleagris gallopavo				G5	N5	S5	Х		
Ring-billed Gull	Larus delawarensis				G5	N5B,N5N	S5B,S4N	Х		
Rock Pigeon	Columba livia				G5	NNA	SNA	X		
Mourning Dove	Zenaida macroura				G5	N5	S5	Х		
Red-eyed Vireo	Vireo olivaceus				G5	N5B	S5B	X		
Blue Jay	Cyanocitta cristata				G5	N5	S5	Х		
American Crow	Corvus brachyrhynchos				G5	N5B,N5N	S5B	X		
Black-capped Chickadee	Poecile atricapillus				G5	N5	S5	X		
Gray Catbird	Dumetella carolinensis				G5	N5B	S4B	Х		
European Starling	Sturnus vulgaris				G5	NNA	SNA	X		
American Robin	Turdus migratorius				G5	N5B,N5N	S5B	X		
American Goldfinch	Spinus tristis				G5	N5B,N5N	S5B	Х		
Common Yellowthroat	Geothlypis trichas				G5	N5B	S5B	Х		
Red-winged Blackbird	Agelaius phoeniceus				G5	N5B,N5N	S4	Х		
Common Grackle	Quiscalus quiscula				G5	N5B	S5B	Х		
Song Sparrow	Melospiza melodia				G5	N5B,N5N	S5B	Х		
Northern Cardinal	Cardinalis cardinalis				G5	N5	S5	Х		

1987 Robertson Road Stillwater Station Ltd. EIS Inventory Results Amphibian Records

Common Name	Scientific Name	Origin	SARA	ESA	G Rank	N Rank	S Rank	Recent Observation	Historical Observation	Data Sources
Green Frog	Lithobates clamitans				G5	N5	S5	X		

1987 Robertson Road Stillwater Station Ltd. EIS Inventory Results Mammal Records

Common Name	Scientific Name	Origin	SARA	ESA	G Rank	N Rank	S Rank	Historical Observations	Recent Observations	Data Sources
Eastern Gray Squirrel	Sciurus carolinensis				G5	N5	S5		X	
Red Squirrel	Tamiasciurus hudsonicus				G5	N5	S5		X	
White-tailed Deer	Odocoileus virginianus				G5	N5	S5		х	

### 1987 Robertson Road Stillwater Station Ltd. EIS Inventory Results Plant Records

Common Name	Scientific Name	Origin	SARA	ESA	G Rank	N Rank	S Rank	Recent Observations	Historical Observations	Data Sources
Wild Carrot	Daucus carota	E			GNR	NNA	SNA	Х		
Common Yarrow	Achillea millefolium	E			G5	N5	SNA	X		
Annual Ragweed	Ambrosia artemisiifolia	N			G5	N5	S5	X		
Common Burdock	Arctium minus	E			GNR	NNA	SNA	X		
Common Wormwood	Artemisia vulgaris				GU	NNA	SNA	X		
Chicory	Cichorium intybus	E			GNR	NNA	SNA	X		
Canada Thistle	Cirsium arvense	N			GNR	NNA	SNA	X		
Bull Thistle	Cirsium vulgare				GNR	NNA	SNA	X		
Daisy Fleabane	Erigeron hyssopifolius				G5	N5	S5	X		
Spotted Joe-Pye Weed	Eupatorium maculatum ssp. maculatum				- 00	140	- 55	X		
Grass-leaved Goldenrod	Euthamia graminifolia	N			G5	N5	S5	X		
Black-eyed Susan	Rudbeckia hirta	IN .			G5	N5	S5	X		
Common Dandelion	Taraxacum officinale	E			G5	N5	SNA	X X		
Bladder Campion	Silene vulgaris	<u>L</u>			GNR	NNA	SNA	X		
Red-osier Dogwood	Cornus stolonifera	N			GIVIN G5	N5	SINA S5			
Northern Bush-honeysuckle	Diervilla lonicera	IN			G5	N5	S5	X		
Common Valerian	Valeriana officinalis				GNR	NNA	SNA	X		
Garden Bird's-foot Trefoil		E			GNR	NNA	SNA	X		
	Lotus corniculatus	E			GNR	NNA	SNA	X		
Black Medic Hairy Vetch	Medicago lupulina	<u></u>						Χ		
	Vicia hirsuta	N.I.			GNR	NNA	SNA	X		
Common Milkweed	Asclepias syriaca	N			G5	N5	S5	X		
Spotted Jewelweed	Impatiens capensis	N			G5	N5	S5	X		
Common Viper's-bugloss	Echium vulgare	E			GNR	NNA	SNA	X		
Field Basil	Clinopodium vulgare	_			G5	N5	S5	X		
Self-heal	Prunella vulgaris ssp. vulgaris	E			G5TU	NNA	SNA	X		
Purple Loosestrife	Lythrum salicaria	E			G5	NNA	SNA	X		
Japanese Knotweed	Reynoutria japonica				GNR	NNA	SNA	X		
Common Buckthorn	Rhamnus cathartica	E			GNR	NNA	SNA	X		
Virginia Creeper	Parthenocissus quinquefolia	N			G5	N4N5	S4?	X		
Riverbank Grape	Vitis riparia	N			G5	N5	S5	X		
Wild Strawberry	Fragaria virginiana ssp. virginiana	N			G5T5	N5	SU	X		
Common Apple	Malus pumila				G5	NNA	SNA	X		
Black Raspberry	Rubus occidentalis				G5	N5	S5	X		
Smooth Bedstraw	Galium mollugo	E			GNR	NNA	SNA	X		
White Poplar	Populus alba	E			G5	NNA	SNA	X		
Eastern Cottonwood	Populus deltoides ssp. deltoides	N			G5T5	NNR	S5	X		
Trembling Aspen	Populus tremuloides	N			G5	N5	S5	X		
Manitoba Maple	Acer negundo	E			G5	N5	S5	X		
Norway Maple	Acer platanoides				GNR	NNA	SNA	X		
Staghorn Sumac	Rhus typhina	N			G5	N5	S5	X		
Green Ash	Fraxinus pennsylvanica				G5	N5	S4	X		
Common St. John's-wort	Hypericum perforatum				GNR	NNA	SNA	X		
American Elm	Ulmus americana				G5	N5	S5	X		
Smooth Brome	Bromus inermis	E			G5TNR	NNA	SNA	Х		
Reed Canary Grass	Phalaris arundinacea var. arundinacea	E			GNR	NNR	S5	x		
European Reed	Phragmites australis ssp. australis	E			G5T5	NNA	SNA	x		
Narrow-leaved Cattail	Typha angustifolia				G5	N5	SNA	Х		
Eastern White Pine	Pinus strobus				G5	N5	S5	Х		
Scots Pine	Pinus sylvestris				GNR	NNA	SNA	X		

1987 Robertson Road Stillwater Station Ltd. EIS Inventory Results Insect Records

Common Name	Scientific Name	Origin	SARA	ESA	<b>Historical Observations</b>	Recent Observations	Data Sources
Monarch	Danaus plexippus		SC	SC		x	
Northern Crescent	Phyciodes cocyta					х	
Cabbage White	Pieris rapae					x	

Appendix F
Photographic Log







### **APPENDIX F: Stillwater Station EIS Photographic Log**

### Site Location

Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
1	2021/07/23	East

## Description

View of the Mixed Meadow ecosite along the abandoned railway off Moodie Drive.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
2	2021/07/23	Northeast

### Description

View of the Mixed Meadow, and Shrub Thicket ecosites along the abandoned railway off Moodie Drive.



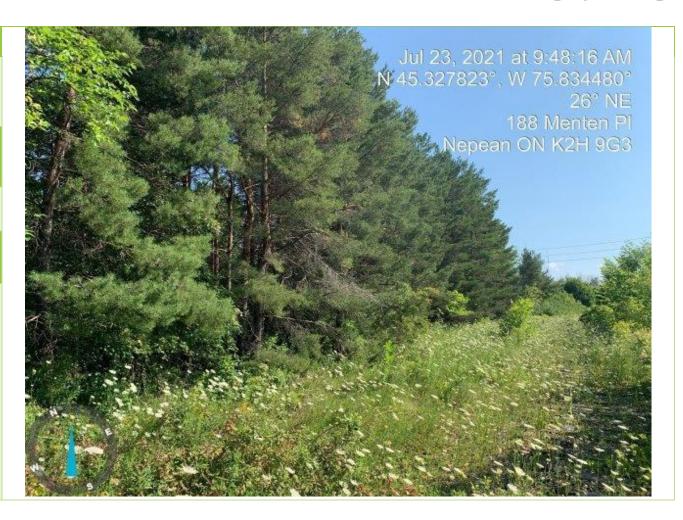


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
3	2021/07/23	Northeast

### Description

View of the Mixed Meadow, and Scots Pine Naturalized Coniferous Plantation ecosites along the abandoned railway off Moodie Drive.



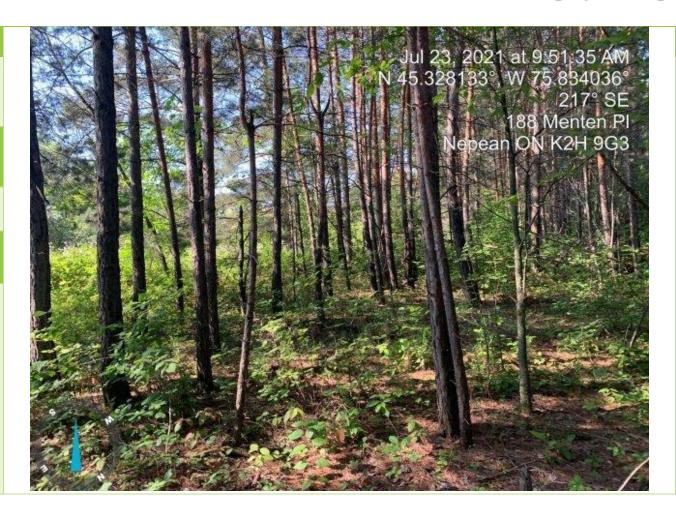


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
4	2021/07/23	SE

### Description

A view from the understory of the Scots Pine Naturalized Coniferous Plantation north of the abandoned railyway ecosite.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
5	2021/07/23	Northeast

### Description

View from the western extent of the Mixed Meadow Marsh ecosite north of the Scots Pine Naturalized Coniferous Plantation outsite of the Site boundaries.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
6	2021/07/23	East

### Description

View from within the Mixed Meadow Marsh ecosite outsite of the Site boundaries.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
7	2021/07/23	West

### Description

View of the Commercial Businesses located along Menten Place, south of the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
8	2021/07/23	West

### Description

View of the Commercial Businesses located along Menten Place, south of the abandoned railway.



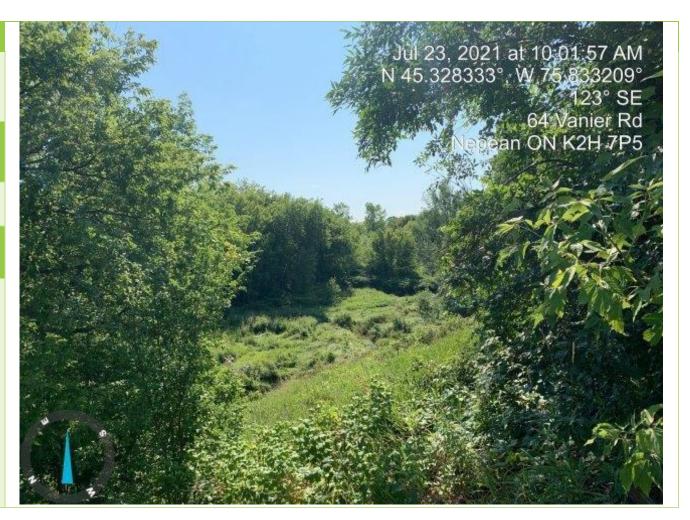


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
9	2021/07/23	Southeast

### Description

View of the valleyland associated with Stillwater Creek from the parking lot of the Commercial Businesses located along Menten Place, south of the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
10	2021/07/23	South

### Description

View of the valleyland associated with Stillwater Creek from the top of the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
11	2021/07/23	West

# Description

View of the CSP culvert conveying flow of Stillwater Creek under the abandoned railway.



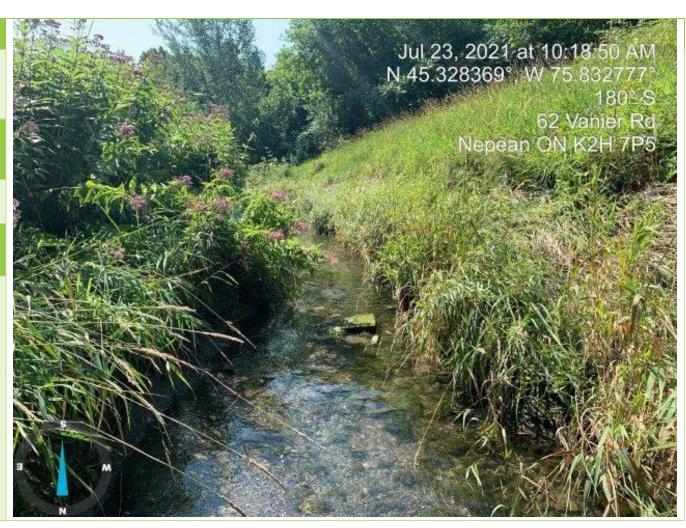


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
12	2021/07/23	South

# Description

View of the upstream reach of Stillwater Creek lined with a Mixed Meadow Marsh on either side.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
13	2021/07/23	South

# Description

View of the clear water within the upstream reach of Stillwater Creek.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
14	2021/07/23	North

# Description

View of the downstream reach of Stillwater Creek through the CSP culvert that conveys flow under the abandoned railway.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
15	2021/07/23	East

# Description

View of the Naturalized
Deciduous Hedge-row along
the abandoned railway, east of
Stillwater Creek.



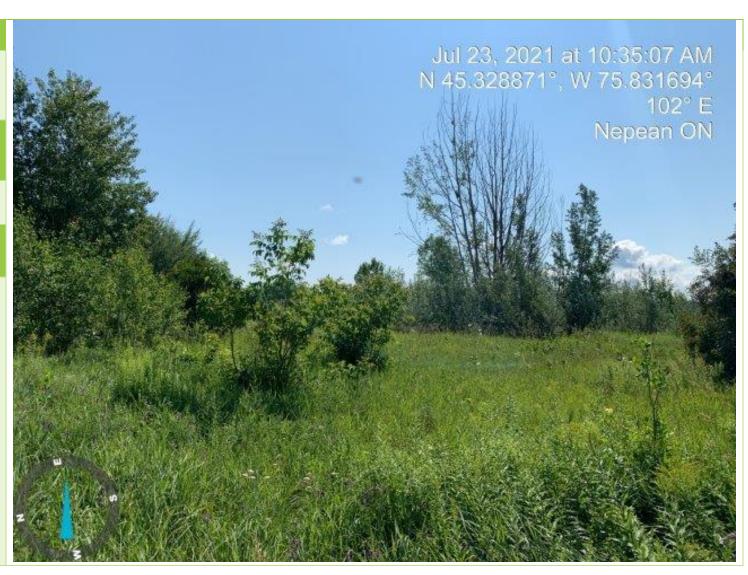


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
16	2021/07/23	East

# Description

View of the Mixed Meadow ecosite east of Stillwater Creek.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
17	2021/07/23	South

# Description

View of the Mixed Meadow ecosite north of the Commercial Business within the Site.



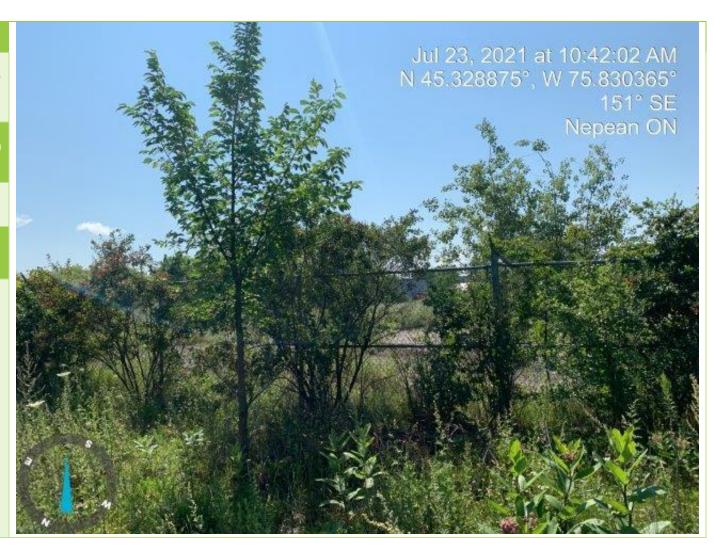


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
18	2021/07/23	Southeast

# Description

View of the northern extent of the Commercial Business through the fence.



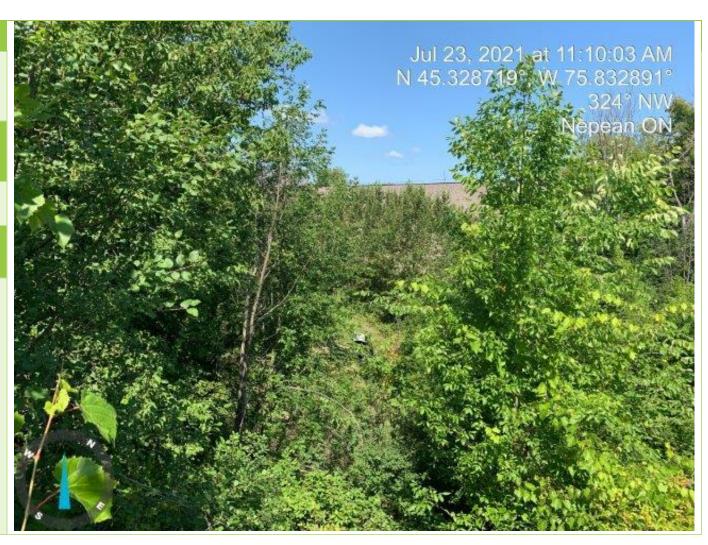


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
19	2021/07/23	Northwest

# Description

View of the culvert inlet which conveys flow of Stillwater Creek under the 2<sup>nd</sup> railway north of the Site, from the 1<sup>st</sup> abandoned railway tracks.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
20	2021/07/23	Southeast

# Description

View of the culvert outlet which conveys flow of Stillwater
Creek northwards under the 1st abandoned railway tracks.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
21	2021/07/23	North

# Description

View of the downstream reach of Stillwater Creek flowing north towards the 2<sup>nd</sup> railway north of the Site.



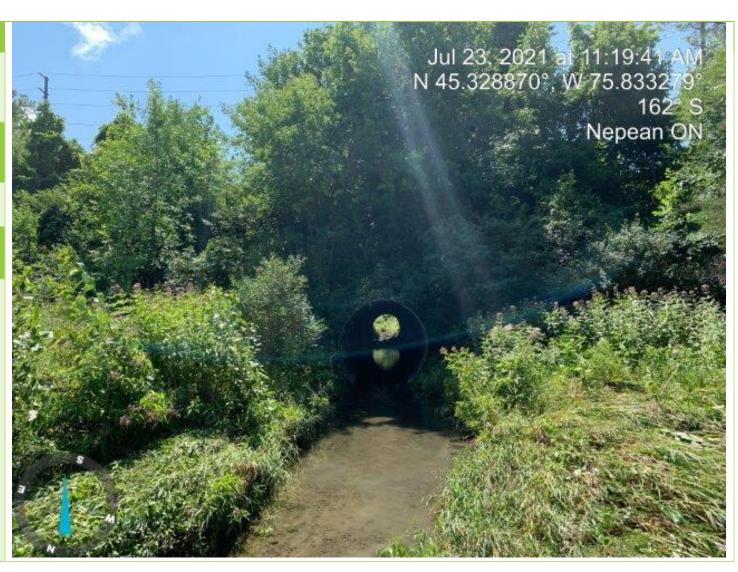


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
22	2021/07/23	South

# Description

View of the culvert outlet conveying flow of Stillwater Creek northwards under the 1<sup>st</sup> abandoned railway tracks, lined with a Mixed Meadow Marsh on either side.



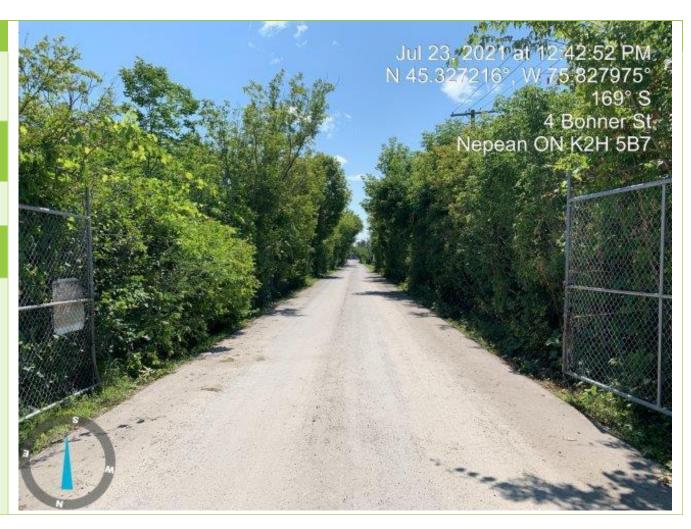


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
23	2021/07/23	South

# Description

View of the tree-lined driveway of the Commercial Business' entrance-way.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
24	2021/07/23	North

# Description

View of the Commercial Business' entrance-way within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
25	2021/07/23	Southwest

# Description

View of the Commercial Business' entrance-way, with a Naturalized Deciduous Hedgerow separating it from the trailer park to the south.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
26	2021/07/23	Southwest

# Description

View of the Naturalized
Deciduous Hedge-row
separating the Commercial
Business from the trailer park
to the south.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
27	2021/07/23	North

# Description

View of the Commercial Business within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
28	2021/07/23	North

#### Description

View of the Manitoba Maple Deciduous Forest ecosite along the western edge of the Commercial Business within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
29	2021/07/23	East

#### Description

View of the Commercial Business within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
30	2021/07/23	North

# Description

View of the Mixed Meadow from the northern extents of the Commercial Business property.



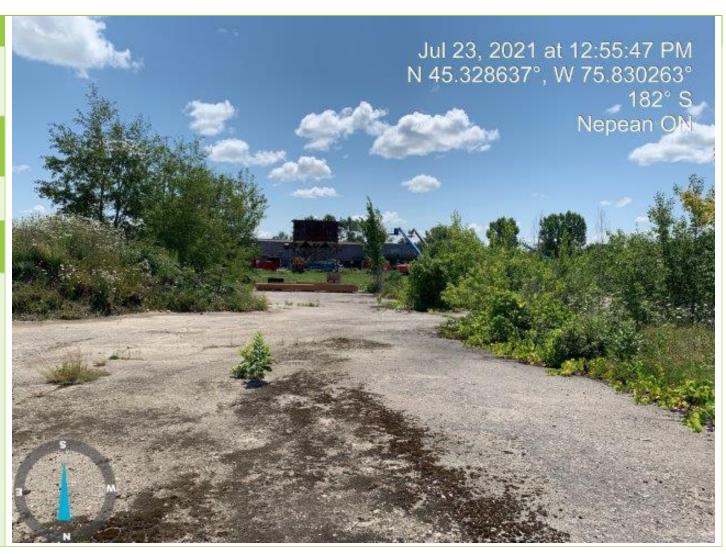


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
31	2021/07/23	South

# Description

View of the Commercial Business within the Site.



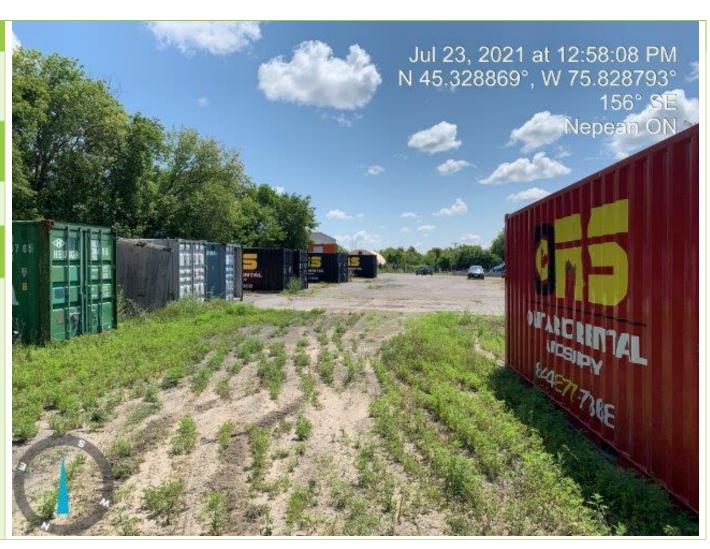


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
32	2021/07/23	Southeast

# Description

View of the Commercial Business within the Site from the northeastern extent of the property.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
33	2021/07/23	Southeast

# Description

View of the Commercial Business property within the Site.



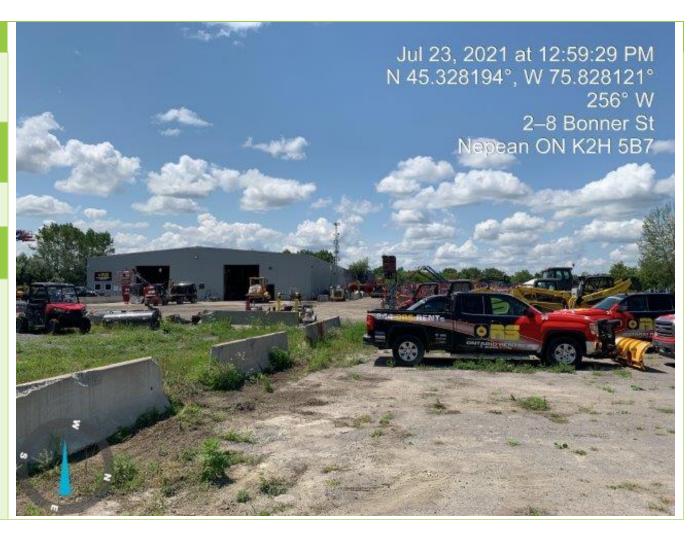


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
34	2021/07/23	West

#### Description

View of the Commercial Business property within the Site.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
35	2021/07/23	South

# Description

View of the entrance-way of the Commercial Business from within the property.



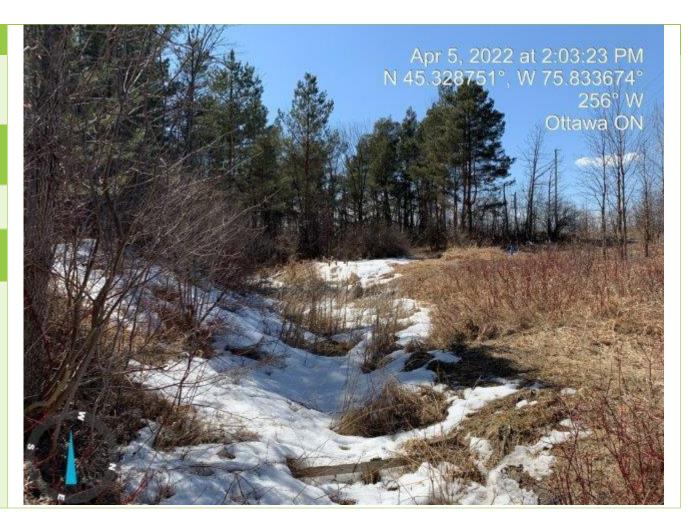


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
36	2022/04/05	West

#### Description

View of the Mixed Meadow Marsh ecosite during Round #1 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
37	2022/04/05	East

#### Description

View of the Mixed Meadow Marsh ecosite during Round #1 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
38	2022/04/12	West

# Description

View of the Mixed Meadow Marsh ecosite during Round #2 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
39	2022/04/12	East

# Description

View of the Mixed Meadow Marsh ecosite during Round #2 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
40	2022/04/22	West

# Description

View of the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
41	2022/04/22	East

#### Description

View of the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
42	2022/04/22	Southwest

# Description

View of zero standing water within the Mixed Meadow Marsh ecosite during Round #3 of the western chorus frog surveys.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
43	2021/07/23	Southwest

# Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
44	2022/05/10	Southwest

# Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
45	2021/07/23	Northeast

# Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
46	2022/05/10	Northeast

# Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
47	2022/05/10	East

# Description

View from within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
48	2021/07/23	East

## Description

View from within the Mixed Meadow Marsh ecosite outsite of the Site boundaries during the 2021 field investigations.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
49	2021/07/23	Southwest

## Description

View from within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
50	2022/05/10	East

# Description

View from within the Mixed Meadow Marsh ecosite displaying the Red-osier Dogwood Thicket Swamp on the northern edge during the 2022 assessment.



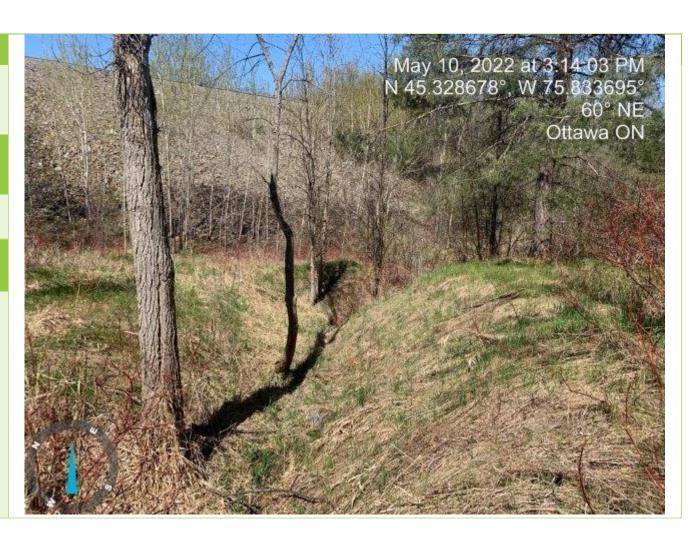


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
51	2022/05/10	Northeast

## Description

View of the Mixed Meadow
Marsh ecosite narrowing along
the southern edge displaying the
Red-osier Dogwood Thicket
Swamp on the northern edge
during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
52	2022/05/10	East

# Description

View of the eastern extent of the Mixed Meadow Marsh ecosite where it narrows into Stillwater Creek during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
53	2022/05/10	South

# Description

View of the culvert outlet along the eastern extent of the wetland boundary during the 2022 assessment.



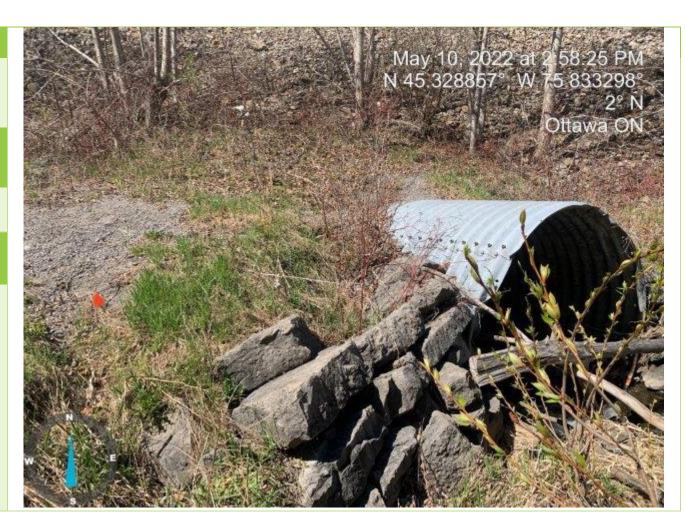


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
54	2022/05/10	North

# Description

View of the culvert inlet along the eastern extent of the wetland boundary during the 2022 assessment.



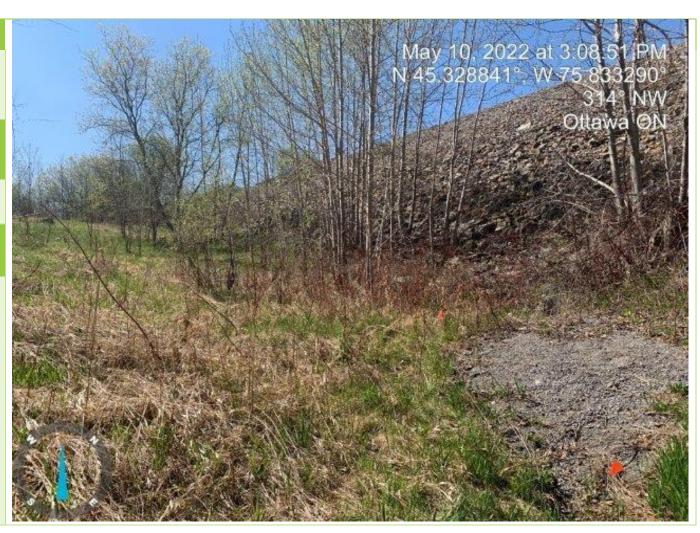


Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
55	2022/05/10	Northwest

# Description

View of the eastern extent of the wetland boundary displaying the Red-osier Dogwood Thicket Swamp during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
56	2022/05/10	West

### Description

View of the northeastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
57	2022/05/10	East

### Description

View of the northeastern extent of the wetland boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
58	2022/05/10	West

# Description

View of the northern extent of the wetland along the Red-osier Dogwood Thicket Swamp boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
59	2022/05/10	West

# Description

View of the northern extent of the wetland along the Red-osier Dogwood Thicket Swamp boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
60	2022/05/10	West

# Description

View of the northern extent of the wetland along the Mixed Meadow Marsh ecosite boundary during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
61	2022/05/10	South

### Description

View of the wetland boundary within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
62	2022/05/10	Southwest

### Description

View of the wetland boundary within the Mixed Meadow Marsh ecosite during the 2022 assessment.





Stillwater Station Ltd – 1987 Robertson Road, Nepean, Ontario

Photo #	Date	Cardinal Direction
63	2022/05/10	Southwest

### Description

View from the western extent of the Mixed Meadow Marsh ecosite east of the Scots Pine Naturalized Coniferous Plantation during the 2022 assessment.

