Stantec

Memo

To:	Pierre Wilder	From:	Lindsay Bennett Josh Mansell
	Ottawa ON Office		Ottawa ON Office
File:	163401646	Date:	January 13, 2022

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Introduction

Stantec Consulting Ltd. (Stantec) was retained by The Town of Carleton Place (the Town) to complete a species at risk (SAR) screening in support of the Town's water and wastewater master plan which includes the proposed expansion of three (3) sites in Carleton Place, Ontario:

- Site 1 – Water Treatment Plant (18T 409633E, 4998505N)
- Site 2 – Water Reservoir Site (18T 409391E, 5000313N)
- Site 3 – Wastewater Treatment Plant (18T 410551E, 4999762N)

Attachment A provides on overview figure of the three sites and **Attachment B** provides individual, detailed figures of each site.

The SAR screening for the three sites included a desktop review of potential SAR occurrences and/or habitat accompanied by a single site visit.

This memorandum presents the results of background data collected and Stantec's site visit, as well as identifies potential environmental constraints (e.g., Significant Woodlands) and recommendations with respect to SAR and their potential habitat at each site, as well as adjacent lands within 120 meters (m) of each site; herein referred to collectively as the Study Area.

Methods

Sources Of Background Data Collection

As part of this SAR screening, the following background documentation and related information sources were reviewed to identify natural heritage features and constraints in the Study Area:

- Town of Carleton Place Official Plan (Carleton Place 2013)

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

- Ontario's Natural Heritage Information Centre (NHIC; Ministry of Northern Development, Mines, Forestry and Natural Resources (NDMNRF) 2021a)
- Land Information Ontario (LIO; NDMNRF 2021b)
- Agricultural Information Atlas (Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) (OMAFRA 2020)
- Satellite imagery (Google Earth Pro 2020)
- Mississippi Valley Conservation Authority (MVCA) Regulation Public Mapping Browser (MVCA 2021)

Natural heritage information gathered during the literature review was used to identify potentially significant natural heritage features (e.g., SAR) in the Study Area.

A list of SAR with potential to occur in the Study Area was developed by reviewing the following sources:

- Ontario's NHIC (NHIC 2021)
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Mapping (DFO 2021b)
- Ontario Breeding Bird Atlas (OBBA; Cadman et al. 2007)
- Atlas of Mammals in Ontario (AMO; Dobbyn 1994)
- Ontario Reptile and Amphibian Atlas (ORAA; Toronto Entomologists' Association 2021a)
- Ontario Butterfly Atlas Online (OBAO; Toronto Entomologists' Association 2021b)
- iNaturalist Canada (iNaturalist 2021)
- eBird Canada (eBird 2021)

Some of the sources above provide data at a scale as large as 10 km X 10 km. Results were screened to assess their relevance to the Study Area and species were removed from consideration if no suitable habitat was observed in the satellite imagery of the Study Area (e.g., grassland species). Only recent observations (i.e., at least one recorded observation since 2000) were carried forward throughout this memo.

Definitions For Species at Risk and Species of Conservation Concern

The *Endangered Species Act, 2007* (ESA) was created to protect SAR and their habitats in Ontario. Work on public or private land (excluding federal lands) that may harm or harass designated species (e.g., threatened, or endangered) or impact their habitat requires approval from the Ministry of Environment, Conservation, and Parks (MECP). The *Species at Risk Act* (SARA) provides a framework across Canada to prevent the extinction of

wildlife species and support actions for their recovery. Tenants on federal lands are responsible for preventing the disappearance of endangered or threatened species on their properties and to implement management plans to comply with the SARA.

For the purpose of this screening, SAR are defined as:

- Endangered and threatened species that are listed on Schedule 1 of the federal SARA and protected by the SARA
- Endangered and threatened species that are on the Species at Risk in Ontario (SARO) list and protected by the provincial ESA

Agency Consultation

Agency consultation with the MECP related to species at risk has largely moved to a proponent driven process as proponents are directed to review the background documentation and related information sources outlined below.

Agencies have also placed relevant data regarding natural heritage features and constraints on publicly accessible geoportals or web viewers and encourage proponents to complete their own background data reviews.

Field Investigations

A single site visit was completed on August 19th 2021 to assess the three sites for SAR occurrences and/or potential habitat(s) as well as to confirm the natural heritage features in the Study Area that were identified through the background data collection process (e.g., Mississippi River, Significant Ecological Area). Environmental conditions at the time were warm and sunny (16°C) with zero cloud cover. The SAR assessment at each Site was conducted on foot by employing meandering transects. Areas within the Study Area of each site, where access was not permitted, were observed using binoculars. SAR habitat observations were recorded and mapped in the field using a camera and hand-held global positioning system (GPS).

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Results

Background Data Collection

Natural Heritage Policies

Using the provincial NHIC (2021a) and LIO (2021b) databases as well as the Town's Official Plan (2013) and MVCA's web-based screening portal (MVCA 2021), the following natural heritage features have been identified as occurring in the Study Area of each site:

Site 1

- Significant Ecological Area (NDMNRF 2021a, 2021b)
- Waterbody – Mississippi River (NDMNRF 2021a, 2021b; MVCA 2021, Carleton Place 2013)
- Wooded Area (NDMNRF 2021a, 2021b)
- Mississippi River Floodplain (MVCA 2021)
- MVCA Regulation Limits (MVCA 2021)

Site 2

- Significant Ecological Area (NDMNRF 2021a, 2021b)
- Waterbody – Mississippi River (NDMNRF 2021a, 2021b; MVCA 2021, Carleton Place 2013)
- Wooded Area (NDMNRF 2021a, 2021b)
- Mississippi River Floodplain (MVCA 2021)
- MVCA Regulation Limits (MVCA 2021)
- Unevaluated Wetland (MVCA 2021)
- Natural Environment District (Carleton Place 2013)

Site 3

- Significant Ecological Area (NDMNRF 2021a, 2021b)
- Wooded Area (NDMNRF 2021a, 2021b)

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Species at Risk

A search of the NHIC's database identified the following three 1x 1 km squares as overlapping the three Study areas. The following SAR species, protected under the ESA, were identified as potentially occurring:

Site 1 – Water Treatment Plant (18VQ0998)

- Eastern Meadowlark (*Sturnella Magna*)
- Bobolink (*Dolichonyx oryzivorus)*
- Butternut (*Juglans cinerea*)

Further desktop background review resulted in a total of 12 SAR, summarized in **Table 1.1**, that have been previously documented as historically occurring or have the potential to occur within the Study Area. Five of these species have been considered to have suitable habitat within the Site and no additional species have been considered to have suitable habitat within 120 m of the Site (Study Area).

Table 1.1: Species at Risk with potential to occur within the Water treatment Plant Site

Species	Status		Suitable Habitat present on-Site? (Y/N)	Suitable Habitat present within 120 m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Plants				
Butternut (*Juglans cinerea*)[1,5]	Endangered	Endangered	N	N
Arthropods				
Rusty- patched Bumble Bee (*Bombus affinis*)[1]	Endangered	Endangered	N	N
Reptiles				
Blanding's Turtle (*Emydoidea blandingii)*[1,2]	Threatened	Threatened	Y	Y
Birds				
King Rail (*Rallus elegans*) [3]	Endangered	Endangered	N	N
Least Bittern (*Ixobrychus exilis*)[1,3]	Threatened	Threatened	N	N

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Species	Status		Suitable Habitat present on-Site? (Y/N)	Suitable Habitat present within 120 m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Red- headed Woodpecker (*Melanerpes erythrocephalus)*[1,3]	Special Concern	Threatened	N	N
Wood Thrush (*Hylocichla mustelina*)[1,3,6]	Special Concern	Threatened	N	N
Canada Warbler (*Cardellina canadensis*)[1,3]	Special Concern	Threatened	N	N
Mammals				
Small-footed myotis (*Myotis leibii)*[1,4]	Endangered	No Status, No Schedule	Y	Y
Little Brown myotis (*Myotis lucifugus)*[1,4]	Endangered	Endangered	Y	Y
Northern myotis *(Myotis septentrionalis*)[1,4]	Endangered	Endangered	Y	Y
Tri-colored bat (*Perimyotis subflavus*)[1,4]	Endangered	Endangered	Y	Y

Notes:
[1] NHIC
[2] Ontario Nature
[3] Ontario Breeding Bird Atlas (2001-2005)
[4] Dobbyn, 1994
[5] iNaturalist
[6] eBird

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Site 2 – Water Reservoir Site (18VR0900)

- Eastern Meadowlark (*Sturnella Magna*)
- Bobolink (*Dolichonyx oryzivorus)*

Further desktop background review resulted in a total of 14 SAR, summarized in **Table 1.2**, that have been previously documented as historically occurring or have the potential to occur within the Study Area. Five of these species have been considered to have suitable habitat within the Site and two additional species has been considered to have suitable habitat within 120 m of the Site (Study Area).

Table 1.2: Species at Risk with potential to occur within the Water Reservoir Site

Species	Status		Suitable Habitat present on-Site? (Y/N)	Suitable Habitat present within 120 m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Plants				
American Ginseng (*Panax quinquefolius*)[1]	Endangered	Endangered	N	Y
Butternut (*Juglans cinerea*)[1,5]	Endangered	Endangered	N	N
Arthropods				
Rusty- patched Bumble Bee (*Bombus affinis*)[1]	Endangered	Endangered	N	N
Birds				
Common Nighthawk (*Chordeiles minor)*[1,3]	Special Concern	Threatened	N	N
Eastern whip-poor-will (*Antrostomus vociferus)*[1,3]	Special Concern	Threatened	N	N
Red- headed Woodpecker (*Melanerpes erythrocephalus)*[1,3]	Special Concern	Threatened	N	N
Olive- sided Flycatcher (*Contopus borealis)*[1,3]	Special Concern	Threatened	N	N
Wood Thrush (Hylocichla mustelina)[1,3,6]	Special Concern	Threatened	Y	Y
Golden-winged Warbler (*Vermivora chrysoptera)* [1,3]	Special Concern	Threatened	N	Y

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Species	Status		Suitable Habitat present on-Site? (Y/N)	Suitable Habitat present within 120 m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Canada Warbler (*Cardellina canadensis*)[1,3]	Special Concern	Threatened	N	Y
Mammals				
Small-footed myotis (*Myotis leibii)*[1,4]	Endangered	No Status, No Schedule	Y	Y
Little Brown myotis (*Myotis lucifugus)*[1,4]	Endangered	Endangered	Y	Y
Northern myotis (*Myotis septentrionalis*)[1,4]	Endangered	Endangered	Y	Y
Tri-colored bat (*Perimyotis subflavus*)[1,4]	Endangered	Endangered	Y	Y

Notes:
[1] NHIC
[2] Ontario Nature
[3] Ontario Breeding Bird Atlas (2001-2005)
[4] Dobbyn, 1994
[5] iNaturalist
[6] eBird

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Site 3 – Wastewater Treatment Plant (18VQ1099)

- Eastern Meadowlark (*Sturnella Magna*)
- Bobolink (*Dolichonyx oryzivorus)*
- Butternut (*Juglans cinerea*)
- Blanding's Turtle (*Emydoidea blandingii*)

Further desktop background review resulted in a total of 15 SAR, summarized in **Table 1.3**, that have been previously documented as historically occurring or have the potential to occur within the Study Area. Five of these species have been considered to have suitable habitat within the Site and no additional species have been considered to have suitable habitat within 120 m of the Site (Study Area).

Table 1.3: Species at Risk with potential to occur within the Study Area (s)

Species	Status		Suitable Habitat present on- Site? (Y/N)	Suitable Habitat present within 120 m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Plants				
Butternut (*Juglans cinerea*)[1,5]	Endangered	Endangered	N	N
Reptiles				
Blanding's Turtle (*Emydoidea blandingii)*[1,2]	Threatened	Threatened	Y	Y
Birds				
Common Nighthawk (*Chordeiles minor)*[1,3]	Special Concern	Threatened	N	N
Eastern whip-poor-will (*Antrostomus vociferus)*[1,3]	Special Concern	Threatened	N	N
Chimney Swift (*Chaetura pelagica)*[1,3]	Threatened	Threatened	N	N
Least Bittern (*Ixobrychus exilis)*[1,3]	Threatened	Threatened	N	N
Red- headed Woodpecker (*Melanerpes erythrocephalus)*[1,3]	Special Concern	Threatened	N	N

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Species	Status		Suitable Habitat present on- Site? (Y/N)	Suitable Habitat present within 120 m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Olive- sided Flycatcher (*Contopus borealis)*[1,3]	Special Concern	Threatened	N	N
Wood Thrush (Hylocichla mustelina)[1,3,6]	Special Concern	Threatened	N	N
Golden-winged Warbler (*Vermivora chrysoptera)* [1,3]	Special Concern	Threatened	N	N
Canada Warbler (*Cardellina canadensis*)[1,3]	Special Concern	Threatened	N	N
Mammals				
Small-footed myotis (*Myotis leibii)*[1,4]	Endangered	No Status, No Schedule	Y	Y
Little Brown myotis (*Myotis lucifugus)*[1,4]	Endangered	Endangered	Y	Y
Northern myotis (Myotis *septentrionalis*)[1,4]	Endangered	Endangered	Y	Y
Tri-colored bat (*Perimyotis subflavus*)[1,4]	Endangered	Endangered	Y	Y

Notes
[1] NHIC
[2] Ontario Nature
[3] Ontario Breeding Bird Atlas (2001-2005)
[4] Dobbyn, 1994
[5] iNaturalist
[6] eBird

Field Investigations

The prescribed site visit yielded no SAR observations. However, potentially suitable habitat for a handful of SAR was identified both within the three Sites and/or Study areas. Potentially suitable maternity roosting habitat for SAR bats in the form of large trees with cavities and peeling bark were observed (**Attachment C; Photo 4**). All three sites also have historical records of Blanding's Turtle being found in 2019, with siting's reported on iNaturalist.

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Species at risk that were outlined above in **Table 1-1, 1-2, and 1-3** as having potentially suitable habitat within the three (3) Sites have the respective habitat listed below:

Blanding's Turtle - Inhabits shallow lakes, ponds, and wetlands (<2m) with soft organic substrates with abundant submergent vegetation. Blanding's Turtles will nest in open sand and/or gravel substrate above the waterline in natural (e.g., eroded shorelines, beaches) and developed habitats (e.g., gravel shoulders, gravel parking lots). They can migrate several kilometers (km) between summer habitat, nesting sites, and overwintering habitat (COSEWIC 2016) Though no individuals were observed during the Site visit, suitable habitat was observed within Site 1 and Site 3 (**Attachment B; Figure 1**).

Site 1 – Water Treatment Plant

Site 1 is immediately adjacent to the Mississippi River, which is known to contain Blanding's Turtle, with Ontario Nature observations from 2019 (18VQ09). The Mississippi River is deep enough to provide suitable overwintering habitat and can also serve as a migration corridor. This Site's Study Area also includes an unevaluated wetland that could provide suitable habitat for Blanding's Turtle (**Attachment B; Figure 2**).

Site 3 – Wastewater Treatment Plant

Site 3 is immediately adjacent to the Mississippi River (**Attachment B; Figure 4**, which is known to contain Blanding's Turtle, with Ontario Nature observations from 2019 (18VQ10). The Mississippi River is deep enough to provide suitable overwintering habitat and can also serve as a migration corridor. In addition to this, the riverbank substrate was observed to have loose sandy soil which is suitable for Blanding's Turtle to nest in (**Attachment C; Photo 16**).

Wood Thrush - Wood thrush breed in deciduous or mixed upland forest habitat with a moderate subcanopy and open forest floor. Wood Thrush are sensitive to habitat fragmentation but will nest in forest patches as small as 3 ha. Nests are constructed in young trees or shrubs and adults primarily forage for invertebrates on the ground (COSEWIC 2012). During the Site (s) visit no Wood Thrush were seen or heard, however Site 2 contains Significant Ecological Areas as identified by NHIC.

Site 2 - Water Reservoir Site

Site 2 is surrounded by Significant Ecological Area that is wooded (**Attachment B; Figure 4**), which could provide suitable nesting and foraging habitat for the wood thrush. In addition to this, there have been reporting sightings of wood thrush on eBird.

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

***Small-footed Myotis, Little Brown Myotis, Northern Myotis, and Tri-colored Bat* (SAR bats)** – These bat species share similar habitat preferences during their active season and are described together. These species will use trees as small as 10 cm diameter at breast height (DBH) with cavities, loose bark, and leaves to nest and day roost as well as for maternity roosting purposes, usually >10 m high on trees exhibiting early stages of decay (COSEWIC 2013, ECCC 2018). Additionally, these species are known to use anthropogenic structures for roosting as well. There were suitable maternity roosting trees to be present within Site 1 **(Attachment C; Photo 4)**. There were no observed overwintering features (e.g., caves, abandoned mines) for SAR bats observed within the Site (s) or Study Area (s).

Site 1 – Water Treatment Plant

Site 1 is immediately adjacent to the Mississippi River where there is a public walking trail with large, mature planted trees. In addition to this, the Site has greenspace that also contains large, mature planted trees that were identified during the Site visit as being potential bat maternity roosting trees (**Attachment C; Photo 3-4**). Given the proximity of the river it is also likely suitable foraging habitat for SAR bats as well.

Site 2- Water Reservoir Site

Site 2 is surrounded by Significant Ecological Area that is wooded (**Attachment C; Photo 5-10**), with several large mature trees that could potentially provide suitable SAR bat maternity roosting habitat.

Site 3 – Wastewater Treatment Plant

Site 3 is immediately adjacent to the Mississippi River (**Attachment C; Photo 13-14)** where there is a public walking trail and mature trees along the river, several of which would provide potentially suitable SAR bat maternity roosting trees. In addition to this, the proximity of the river is likely suitable foraging habitat for SAR bats.

General Site Constraints and Recommendations

Protection Of Migratory Birds

The Migratory Birds Convention Act, 1994 (MBCA) provides legal protection of migratory birds and their active nests in Canada. The loss of migratory bird nests, eggs and or nestlings due to tree cutting or other vegetation impacts can be avoided by limiting impacts to vegetation to occur outside of the general nesting period for forest nesting migratory birds in this region (C2) as identified by Environment and Climate Change Canada (ECCC)

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

(i.e., between April 1 and August 31) (ECCC 2020). If work must be performed within this window, a pre-clearing survey for active nests or breeding activity should be conducted by a qualified biologist before work commences and additional mitigation measures (e.g., implementation of avoidance distances during construction) implemented, if required.

Protection of Species at Risk

Blanding's Turtle

There is potential for reptile and species at risk (Blanding's turtle) to be encountered within the Mississippi River. Potential nesting habitat was also observed along the Mississippi Riverwalk Trail that bisects the Study Area. Therefore, there is a high potential for them to be encountered.
Prior to any site alterations the following mitigation measures are recommended to protect turtles:

- Erect exclusion fencing (e.g., silt fence) prior to activities occurring in areas of suitable habitat (e.g., Mississippi River) to minimize the risk of turtles entering the work area
- Install exclusion fencing prior to the sensitive nesting season if activities are anticipated to occur throughout this period to prevent turtles from entering and/or nesting (NDMNRF 2014)
  - Prior to 15 March if activities are occurring within or adjacent to overwintering habitat
  - Prior to 1 June if activities are occurring within or adjacent to nesting habitat
- If erecting exclusion fencing, use a type that will last the duration of the project (NDMNRF 2016). Check that stakes are securely driven into the ground on the inside of the working area. Place stakes 2 m apart and drive them to a depth of 30 cm, with the fabric pulled tight to reduce sagging, and the bottom of the fabric buried 10-20 cm down within an additional fabric lip extending outwards 90 degrees.
  - Backfill and compact the fabric lip (NDMNRF 2014)
  - Inspect any fenced off areas daily to identify compromises in the fence and to remove any turtles that may be trapped in the fence (NDMNRF 2016)
  - Install fencing so that it prevents construction sediment from entering into wetlands (NDMNRF 2016)
- Have a qualified person conduct a pre-construction sweep and monitor the work area for active turtle nests during the turtle nesting season (May-July).
- Implement a worker awareness program for construction staff that that includes species at risk identification and habitat characteristics

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

- Conduct a daily pre-construction search of the work area to identify presence of species at risk
- If threatened or endangered species are seen in or near the work area, stop work immediately
- Take photographs if possible, but do not interact with the animal

If turtles have established nests within construction areas of each site, stop work immediately and notify the MECP or NDMNRF, depending on the species encountered, of the occurrence and ask for further direction. The nests are to be protected from disturbance until the nestlings have hatched and dispersed, approximately in late September, and a permit from the MECP or NDMNRF, depending on the species encountered, will most likely be required.

SAR Bats

There is potential for SAR bats to be encountered within the Study Area, immediately adjacent to/ or on all three Site properties. To reduce the likelihood of harm to bats, it is recommended that trees ≥ 10 cm DBH be removed outside the bat maternity roost season. Myotis species typically give birth in late-May to early-June, and females fly with newborn young attached until they become excessively heavy. Young begin to fly in mid- to late-June, at age three to four weeks. Rearing is completed by August and bats move to hibernacula features in August or September (Broders et al. 2006, Cagle and Cockrum 1943, Gerson 1984). Therefore, tree removal is not recommended between April 1 to November 1 (MECP correspondence).

Tree and Vegetation Protection

Where adjacent trees and naturalized areas are to be retained, the following best management practices should be followed when construction activities occur near trees:

- Erect a fence at the minimum critical root zone (CRZ) of trees
- Do not place any material or equipment within the CRZ of the tree
- Do not raise or lower the existing grade within the CRZ
- Tunnel or bore when digging within the CRZ of any tree
- Do not damage the root system, trunk or branches of any tree
- Ensure that exhaust fumes from all equipment are not directed towards any tree's canopy

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

Species at Risk Permitting Considerations

Ministry Of Environment, Conservation and Parks

Endangered Species Act, 2007

Potential turtle nesting habitat was observed adjacent to the Mississippi River, as well as overwintering and migrating habitat within the river itself. Blanding's turtle have been identified as potentially occurring within the Study Area (s) and are afforded protection under the ESA. If it is determined at any point that Blanding's turtle are using the site (e.g., nesting in grass on properties), it is recommended that the Town engage in correspondence with the MECP to determine potential permitting considerations under the ESA, if required.

Candidate SAR bat maternity roost habitat and features have been observed at all three of the Sites. If required, it is recommended to remove these trees outside of the SAR bat maternity roost
season. If the trees need to be removed during this season, additional survey efforts and/or correspondence with the MECP may be required.

Conclusion

Natural heritage features and potentially suitable habitat for species at risk were observed and/or identified as occurring within the Study Areas of the Water Treatment Plant (Site 1) (e.g., SAR bats) and Wastewater Treatment Plant (Site 2) (e.g., wood thrush) as well as the Water Reservoir Site (Site 3) (e.g., Blanding's turtle).

Additionally, the mature trees within the boundaries of the Water Treatment Plant and Water Reservoir Site (Site 1 and Site 3, respectively) potentially provide suitable maternity roost habitat for SAR bats. If required, it is recommended to remove these trees outside of the SAR bat maternity roost season. If the trees need to be removed during this season, additional survey efforts (e.g., exit surveys or acoustic monitoring) and/or correspondence with the MECP may be required through the development of an Information Gathering Form.

Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

The mitigation measures provided above are to be considered during the design and construction stages of the project and are not considered static and should be reviewed prior to implementation.

Stantec Consulting Ltd.

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Attachment: Attachment A: Figure 1 – Background Data
Attachment B: Figure 2-4 Site Specific Natural Environment Existing Conditions and Background Data
Attachment C: Photographic Record of Site Conditions

References

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Reference: Town of Carleton Place – Water & Wastewater Master Plan – Species at Risk Screening Report

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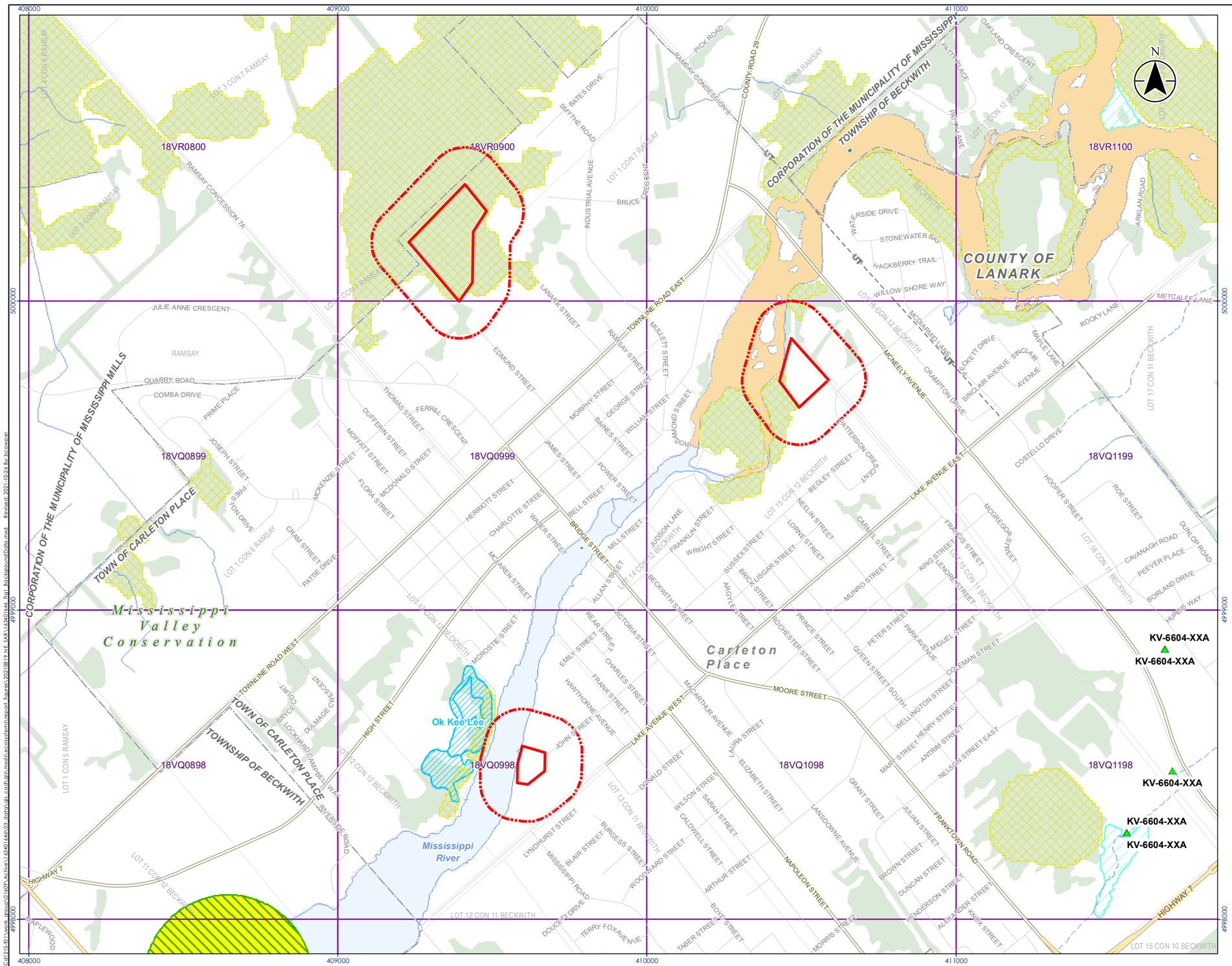
ATTATCHMENT A

Figure 1: Background Data



Stantec

Notes

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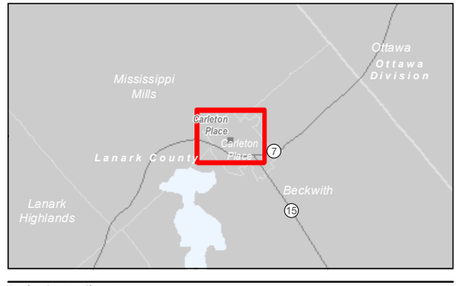
3. RVCA regulated area Copyright © Rideau ValleyConservation Authority, 2021.



Project Location
Municipality of

163401646 REV4
Prepared by BCC on 2021-10-26
Technical Review by ABC on yyyy-mm-dd
Independent Review by ABC on yyyy-mm-dd

Client/Project
CORPORATION OF THE TOWN OF CARLETON PLACE
SAR SCREENING

Figure No.
1

Title
Background Data

ATTATCHMENT B

Figures 2-4: Site Specific Natural Environment Existing Conditions and Background Data

Stantec

Legend

- Project Area
- Study Area
- Significant Ecological Area
- Waterbody
- Wetland, Other Evaluated
- Wooded Area
- Lot

0 — 0.1 km

1:1,750 (At original document size of 11x17)

Notes
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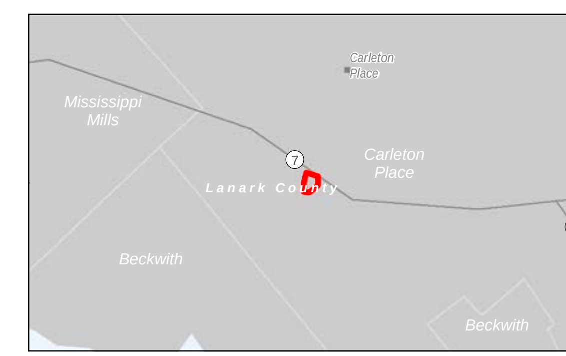

Project Location
Municipality of

163401646 REV4
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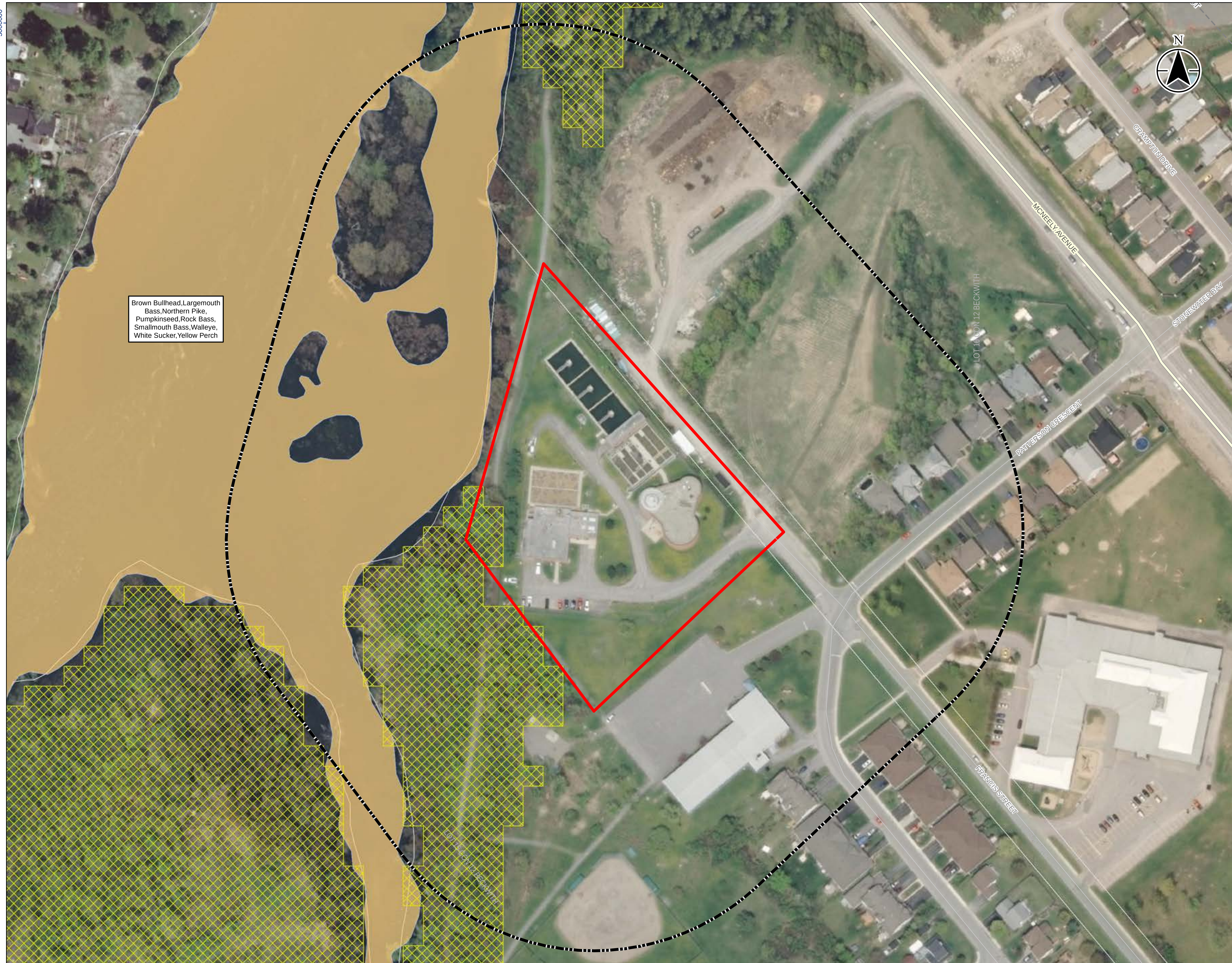
Independent Review by ABC on yyyy-mm-dd

Client/Project
CORPORATION OF THE TOWN OF CARLETON PLACE
SAR SCREENING

Figure No.
2

Title
Natural Environment Existing Conditions and Background Data - Water Treatment Plant



Stantec

Legend

- Project Area
- Study Area
- UT Unknown Transmission Line
- Significant Ecological Area
- Thermal Regime, Warm
- Waterbody
- Wooded Area
- Lot

0 0.1 km

1:2,000 (At original document size of 11x17)

Notes
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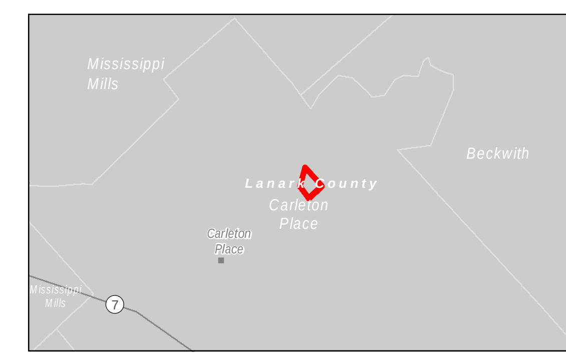

Project Location
Municipality of

163401646 REV4
Prepared by BCC on 2021-10-26
Technical Review by ABC on yyyy-mm-dd
Independent Review by ABC on yyyy-mm-dd

Client/Project
CORPORATION OF THE TOWN OF CARLETON PLACE
SAR SCREENING

Figure No.
3

Title
Natural Environment Existing Conditions and Background Data - Wastewater Treatment Plant

409000

5000000

LOT 2 CON 7 RAMSAY

N

RAMSAY CONCESSION 7A

THOMAS STREET

LOT 2 CON 7 RAMSAY

LANARK STREET

EDMUND STREET

5000000

409000

Stantec

Legend

- Project Area
- Study Area
- Significant Ecological Area
- Wooded Area
- Lot

0 0.15 km

1:2,750 (At original document size of 11x17)

Notes

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Municipality of

163401646 REV4
Prepared by BCC on 2021-10-26
Technical Review by ABC on yyyy-mm-dd
Independent Review by ABC on yyyy-mm-dd

Client/Project
CORPORATION OF THE TOWN OF CARLETON PLACE
SAR SCREENING

Figure No.
4

Title
Natural Environment Existing Conditions and Background Data - Water Reservoir Site

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ATTATCHMENT C

Photographic Record of Site Conditions

Photo 1: Site conditions of Water Treatment Plant (Site 1). Facing Northwest

Photo 2: Site conditions of Water Treatment Plant (Site 1)

Photo 3: Site conditions of Water Treatment Plant (Site 1). Facing South

Photo 4: Site conditions of Water Treatment Plant, illustrating suitable SAR bat roosting habitat

Photo 5: Site conditions of Water Reservoir Site (Site 2). Facing East.

Photo 6: Site conditions of Water Reservoir Site. Facing West.

Photo 7: Site conditions of Site 2

Photo 8: Site conditions of Site 2, illustrating potential Monarch Butterfly habitat

Photo 9: Site conditions of Site 2, illustrating a small cattail water feature.

Photo 10: Site conditions of Site 2, illustrating a forested area surrounding the Site.

Photo 11: Site conditions of Wastewater Treatment Plant (Site 3). Facing West.

Photo 12: Site conditions of Site 3. Facing Northeast.

Photo 13: Site conditions of Mississippi Riverwalk Trail that runs immediately behind Site 3. Facing North.

Photo 14: Site conditions of Mississippi Riverwalk Trail alongside Site 3 property line. Facing East.

Photo 15: Site conditions of Mississippi River, which backs on to Site 3, known habitat of Blanding Turtle. Facing West.

Photo 16: Site conditions of Mississippi River, illustrating suitable substrate for SOCC and SAR turtle nesting. Facing West.