

**Environmental Impact Study for
4380 Trail Road, Ottawa, Ontario**

Updated EIS Report

July 11, 2022

Submitted To:

Chris Kimmerly
EXP Services Inc.

KILGOUR & ASSOCIATES LTD.
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REPORT UPDATE

The *Environmental Impact Study for 4380 Trail Road, Ottawa, Ontario*, by Kilgour & Associates Ltd. and dated June 9, 2022, reviewed a proposed rezoning of 4380 Trail Road (“the Site”). The EIS supported the rezoning of the Site from Parks and Open Space (O1) and Mineral Aggregate Reserve - exception 7 (MR[7r]) to a Rural Industrial (RI) based in part on the absence of species at risk (SAR) and/or their habitat identified during the initial site review. That site review, however, had been conducted outside of the normal bird nesting window for Ottawa (April 15 – August 15). The EIS thus recommended a follow-up survey specifically to identify whether Barn Swallows and/or Bank Swallows were present on the Site during the bird nesting window. The results of the follow-up study were to be appended to the initial report, confirming or updating the report conclusions as required.

Neither SAR bird was observed during the follow-up survey. The report conclusions remain as initially presented.

Appended are:

Appendix 1 - Environmental Impact Study for 4380 Trail Road, Ottawa, Ontario. Report Date:
June 9, 2022

Appendix 2 – EIS Update Memo. Report Date: July 11, 2022.



**Appendix 1 - Environmental Impact Study
for 4380 Trail Road, Ottawa,
Ontario. Report Date: June
9, 2022**



**Environmental Impact Study for
4380 Trail Road, Ottawa, Ontario**

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1.0 INTRODUCTION

This report is an initial Environmental Impact Study (EIS) prepared by Kilgour & Associates Ltd. (KAL; Appendix A) in support of a proposed rezoning of 4380 Trail Road in Ottawa, Ontario (“the Site”; Figure 1). The site is currently zoned as Parks and Open Space (O1) and Mineral Aggregate Reserve - exception 7 (MR[7r]). The Site was previously operated as an aggregate extraction pit but has been depleted of viable sand and gravel aggregate resources. As the site no longer contains aggregate resources, Drain-All Ltd. (the Site owners) are seeking it to be rezoned to a Rural Industrial (RI).

In the Site Plan and Zoning By-law Amendment Pre-Application Consultation with the City of Ottawa (the City) on November 2, 2021, Matthew Hayley (Environmental Planner – City of Ottawa) require that the zoning by-law amendment would need to be supported by an EIS that addresses species at risk (SAR). The scope of the report is focused on the potential of the occurrence of SAR and/or their habitat on the Site, which could be impacted by future site-development completed in accordance with the proposed new zoning.

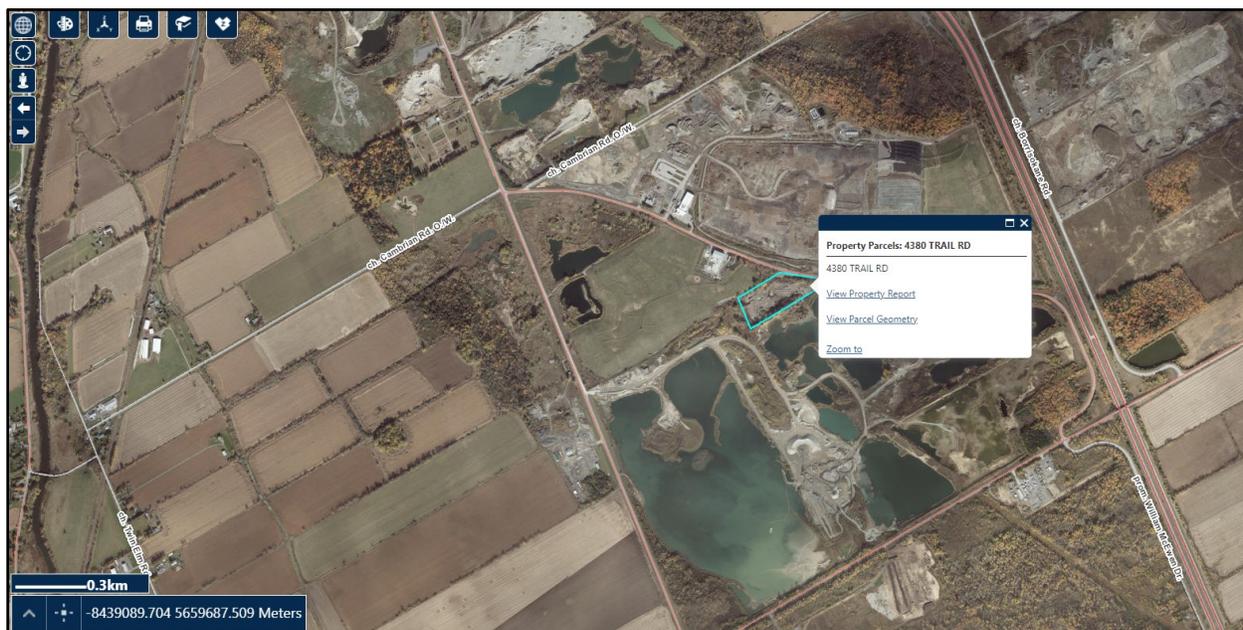


Figure 1. Location of the Site

2.0 ENVIRONMENTAL POLICY CONTEXT

Natural heritage policies and legislation relevant to this EIS are outlined below.

2.1 The Provincial Policy Statement, 2020

The Provincial Policy Statement (PPS) was issued under Section 3 of the *Planning Act* (Government of Ontario, 1990). The current PPS came into effect May 1, 2020 (Government of Ontario, 2020). Natural



features are afforded protections under Section 2.1 of the PPS. Protections may include maintenance, restoration, and improved function of diversity, connectivity, ecological function, and biodiversity of natural heritage systems. 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* (NHRM: Ministry of Natural Resources (MNR), 2010). This manual recommends the approach and technical criteria for protecting natural heritage features and areas in Ontario.

2.2 City of Ottawa Official Plan, 2021

The City of Ottawa Official Plan (2021) provides direction for future growth in the City and is a policy framework to guide physical development to 2031. The Official Plan was first approved in 2003 and is updated every five years.

2.3 Species at Risk Act, 2002

The federal *Species at Risk Act* (SARA; Government of Canada, 2002) is administered by Environment and Climate Change Canada (ECCC) and provides direction to protect and ensure the survival of wildlife species in Canada. The purpose of the SARA is to prevent populations of wildlife from becoming Extirpated, Endangered, or Threatened, to provide recovery for Endangered or Threatened species, and to manage other species to prevent them from becoming Endangered or Threatened.

All species listed on Schedule 1 of SARA are afforded protection on federal lands. Aquatic species and species of migratory birds protected by the *Migratory Birds Convention Act* (MBCA; 1994) and listed as Endangered, Threatened, or Extirpated under Schedule 1 of SARA are protected wherever they occur in Canada, regardless of land ownership.

2.4 Endangered Species Act, 2007

The provincial *Endangered Species Act* (ESA; Government of Ontario, 2007) is administered by the Ministry of Environment, Conservation, and Parks (MECP) and provides protection for species at risk (SAR) and their habitat. The ESA states that it is illegal to harm the habitat of species listed as Extirpated, Endangered, and Threatened. It is also illegal to kill, harm, harass, possess, transport, buy or sell Extirpated, Endangered, and Threatened species, whether it is living or dead. Species listed as Endangered, Threatened, or Extirpated and their habitats (e.g., areas essential for breeding, rearing, feeding, hibernation, and migration) are automatically afforded legal protection under the ESA.

2.5 Migratory Birds Convention Act, 1994

Nesting migratory birds are protected under the MBCA (Government of Canada, 1994). No work is permitted that would result in the destruction of active nests (nests with eggs or young birds) or the wounding or killing of bird species protected under the MBCA and/or associated regulations (e.g., SARA). The “incidental take” of migratory birds and the disturbance, destruction, or taking of the nest of a migratory bird is prohibited. “Incidental take” is the killing or harming of migratory birds due to actions



that are not primarily focused on taking migratory birds (e.g., economic development) and no permits exist for the incidental take of migratory birds or their nest/eggs as a result of activities that are not focused on taking migratory birds. These prohibitions apply throughout the year. The Government of Canada has compiled nesting calendars that apply across Canada that can be used to greatly reduce the risk of harming/destroying active nests by ensuring works that may impact nests are performing outside of the nesting period.

2.6 *Fish and Wildlife Conservation Act, 1997*

The provincial *Fish and Wildlife Conservation Act* (FWCA; Government of Ontario, 1997) governs the hunting and trapping of a variety of wildlife including mammals, birds, reptiles, amphibians, and fish in Ontario, thereby facilitating the protection of wildlife and their habitat. The FWCA outlines the prohibition of hunting or trapping specially protected species and the requirement for provincially issued licenses for the hunting or trapping of “furbearing” or “game” animals. Examples of specifically protected animals include, for example, Southern Flying Squirrel (*Glaucomys volans*), Northern Harrier (*Circus cyaneus*), American Kestrel (*Falco sparverius*), Blue Jay (*Cyanocitta cristata*), Midland Painted Turtle (*Chrysemus picta marginata*), Northern Watersnake (*Nerodia sipedon*) and Gray Treefrog (*Hyla versicolor*). In particular, raptors that are not protected under the MBCA (including Peregrine Falcon) are protected under the FWCA.

3.0 PROPERTY IDENTIFICATION

The Site is located at 4380 Trail Road in the west end of Ottawa. The Site is approximately 4.3 hectares (ha) in size. The Site consists of a former aggregate pit currently owned by Drain-All Ltd. The Site is bordered by:

- The City’s Trail Road Waste Facility to the north – an active landfill site;
- Lands associated with the City’s Trail Road Depot to the west; and
- Aggregate extraction lands to the south and east.

4.0 METHODOLOGY

4.1 Agency Consultation and Background Data Review

4.1.1 Agency Consultation

The Study Area is located within the jurisdictions of MECP Kemptville district and the Rideau Valley Conservation Authority (RVCA). A request for confirmation of SAR related to the Study Area was submitted to the MECP (Appendix B). MECP staff have not yet responded to the request.

No request for information was submitted to either the RVCA or Fisheries and Oceans Canada (DFO) for this specific project as the project does not include fish habitat or other aquatic features.



4.1.2 Records Review

On-line databases queried for SAR, provincially rare species, and natural heritage features included the following:

- DFO SAR Mapping (DFO, 2020)
- Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) Drainage Classification Mapping (OMAFRA 2020)
- Ontario MNRF
 - Natural Heritage Information Centre (NHIC 2020a)
 - Land Information Ontario (LIO) Provincially Tracked Species Grid Detail (MNRF 2020b)
 - Species at Risk in Ontario (SARO) List (MNRF 2020c)
- SARA, Schedule 1 (Government of Canada 2020)
- Ontario Breeding Bird Atlas (OBBA; Cadman et. al. 2007; Ontario Nature 2020a))
- Ontario Reptile and Amphibian Atlas (ORAA; Ontario Nature 2020b)
- Atlas of the Mammals of Ontario (AMO; Dobbyn 1994)

4.2 Field Survey

KAL Biologist Anthony Francis conducted an initial site review on May 6, 2022. The intent of the survey was to note:

- any presence of Butternut (*Juglans cinerea*) on the site;
- evidence of previous nesting there by either Barn Swallows (*Hirundo rustica*; i.e. mud nest cups on site structures) or Bank Swallows (*Riparia riparia*; i.e. nest holes within the adjacent vertical sandbanks); and/or
- the presence of habitat likely to support other SAR.

Incidental observations of wildlife species observed on the Site will be recorded during the site visit.



5.0 DESCRIPTION OF THE SITE AND THE NATURAL ENVIRONMENT

5.1 Vegetation Cover

The site consists of a central pit ~15 m in depth (Figure 2). The floor of the pit and the steep banks surrounding it are mix of unvegetated sand and gravel. The rim of the pit is tree with Manitoba Maple (*Acer negundo*) and Trembling Aspen (*Populus tremuloides*) with occasional White Pine (*Pinus glauca*) and small willow species. No Butternuts were evident within or adjacent to the pit.



Figure 2. Views of sand/gravel banks around the pit (A, B and C) and of the concrete structure in the center (D)

The eastern end of the pit opened to a wide plain of other quarry lands that had areas of shallow flooding interspersed with ridges of tall grass species (Figure 2). The substrate of the flooded areas appeared be parent mineral material with no organic accumulation.





Figure 3. Flooded aggregate extraction areas to the south east of the site.

5.2 Species at Risk

Based on our records review, 14 listed SAR were identified as having some potential for occurrence within the broader vicinity of site (Table 1). Of these, only two (Bank Swallow and Barn Swallow) were identified as having some potential to potential for interactions with future site development that could be newly permitted under the proposed site rezoning.



Table 1. Species at Risk

Species Name	Provincial (ESA) Status	Federal (SARA) Status	Habitat Preferences/Requirements	Habitat on/near the Site Potential of Occurrence	Potential for Interaction with Future Land Uses Under Rezoning
Birds					
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Special Concern	No Status	Nest in mature forests near open water in large trees such as Pine and Poplar.	The site is not adjacent to open water features that could be expected to include a fish community capable of supporting eagle foraging. The likelihood of presence is negligible.	Negligible
Bank Swallow (<i>Riparia riparia</i>)	Threatened	Threatened	Colonial nester; burrows in eroding silt or sand banks found on banks of watercourses. Can also be found nesting in human-made sand piles.	Areas to the south and east of the site provide highly suitable feeding habitat. The site, in its current state, provides potential high quality nesting habitat for the species within the adjacent sand/gravel banks. However, there is no evidence of previous nesting on the site. Species presence is possible. A further site review during breeding season will be required to confirm presence or absence.	If the species is confirmed to be absent, there will no species-related restrictions on site regrading. If the site is regraded, its potential to support the species will be negligible. If the species is present, future site work would require a net benefit permit ("C Permit") to be negotiate with the MECP prior to any site work.
Barn Swallow (<i>Hirundo rustica</i>)	Threatened	Threatened	Terrestrial open and anthropogenic structures for nesting; near open areas for feeding.	Areas to the south and east of the site provide highly suitable feeding habitat, but the site itself has limited potential to support nesting birds, and there is no evidence of previous nesting. Species presence is unlikely. A further site review during breeding season will be required to confirm presence or absence.	If the species is confirmed to be absent, there will no species-related restrictions on future site work. If the species is confirmed to be present, proposed future works on the site could proceed with and the filing of a Notice of Activity with the MECP. Please note, however, that the species' status will be down-listed to Special Concern in January 2023, at which point the, requirement for a Notice of Activity will be removed.
Bobolink (<i>Dolichonyx oryzivorus</i>)	Threatened	Threatened	Periodically mown, dry meadow for nesting. Habitat (meadow) should be > 10 ha, and preferably > 30 ha before Bobolink are attracted to a site. Not near tall trees.	No areas on or adjacent to the site constitute open meadow habitat. The likelihood of presence is negligible.	Negligible
Chimney Swift (<i>Cardellina canadensis</i>)	Threatened	Threatened	Nests in traditional-style open brick chimneys (and rarely in hollow trees).	There are no chimneys near by. Trees in the vicinity are generally smaller than 35 cm DBH and are thus unlikely to provide nesting potential. The likelihood of presence is negligible.	Negligible
Eastern Meadowlark	Threatened	Threatened	Periodically mown, dry meadow for nesting. Habitat (meadow) should be > 10 ha, and	No areas on or adjacent to the site constitute open meadow habitat.	Negligible



Species Name	Provincial (ESA) Status	Federal (SARA) Status	Habitat Preferences/Requirements	Habitat on/near the Site Potential of Occurrence	Potential for Interaction with Future Land Uses Under Rezoning
<i>(Sturnella magna)</i>			preferably > 30 ha before Eastern Meadowlark are attracted to a site. Not near tall trees.	The likelihood of presence is negligible.	
Eastern Wood-Pewee (<i>Contopus virens</i>)	Special Concern	Special Concern	Woodland species, often found near clearings and edges.	Trees around the site are limited to a narrow hedgerow band surrounding the pit and do not constitute a woodland. The likelihood of presence is very low.	The surrounding band of trees do not constitute habitat. If present, required protections under future site alteration would be limited to the refraining from cutting during nesting season. This restriction is already in place per the MBCA for all migratory birds. The (very limited) potential for presence thus does not change impact potential future site usage under the new proposed zoning.
Peregrine Falcon (<i>Falco peregrinus</i>)	Special Concern	Decision pending for delisting - Not at Risk.	Nest on tall, steep cliff ledges close to large bodies of water. Urban peregrines raise their young on ledges of tall buildings, even in busy downtown areas.	Trees around the site are limited to a narrow hedgerow band surrounding the pit and do not constitute a woodland. The likelihood of presence is negligible.	Negligible
Wood Thrush (<i>Hylocichla mustelina</i>)	Special Concern	Threatened	Mature deciduous or mixed woodlands. They seek moist stands of tall trees with well-developed undergrowth.	Trees around the site are limited to a narrow hedgerow band surrounding the pit and do not constitute a woodland. The likelihood of presence is negligible.	Negligible
Mammals					
Little Brown Myotis (<i>Myotis lucifugus</i>)	Endangered	Endangered	Widespread, day-roosting in trees and buildings. Hibernate in caves or abandoned mines.	Trees around the site are limited to a narrow hedgerow band surrounding the pit and do not constitute a woodland. The likelihood of presence is low.	The surrounding band of trees do not constitute habitat. If present, required protections under future site alteration would be limited to the refraining from cutting during roosting, which generally corresponds with bird nesting season. This restriction is already in place per the MBCA for all migratory birds. The (very limited) potential for presence thus does not change impact potential future site usage under the new proposed zoning.
Tri-coloured Bat / Eastern Pipistrelle (<i>Perimyotis subflavus</i>)	Endangered	Endangered	Roosts mainly in trees during summer. Forages over water and along stream in the forest. Overwinters in caves and mines.	Trees around the site are limited to a narrow hedgerow band surrounding the pit and do not constitute a woodland. The likelihood of presence is low.	The surrounding band of trees do not constitute habitat. If present, required protections under future site alteration would be limited to the refraining from cutting during roosting, which generally corresponds with bird nesting season. This restriction is already in place per



Species Name	Provincial (ESA) Status	Federal (SARA) Status	Habitat Preferences/Requirements	Habitat on/near the Site Potential of Occurrence	Potential for Interaction with Future Land Uses Under Rezoning
					the MBCA for all migratory birds. The (very limited) potential for presence thus does not change impact potential future site usage under the new proposed zoning.
Amphibians					
Western Chorus Frog (<i>Pseudacris triseriata</i>)	No Status	Threatened	Inhabits forest openings around woodland ponds but can also be found in or near damp meadows, marshes, bottomland swamps and temporary ponds in open country, or even urban areas.	The likelihood of presence is negligible.	Negligible
Reptiles					
Blanding's Turtle (<i>Emydoidea blandingii</i>)	Threatened	Threatened	Quiet lakes, streams, and wetlands with abundant emergent vegetation. May occur in adjacent upland forests.	Adjacent aquatic areas are flooded areas within aggregate pits with parent mineral substrate lacking organic material and/or vegetation. As such they are unlikely to support the species. The site itself, as and active pit since prior to 1976 is unlikely to have been capable of supporting nesting. The likelihood of presence is negligible.	Negligible
Snapping Turtle (<i>Chelydra serpentina</i>)	Special Concern	Special Concern	Shallow water, usually in large wetlands and shallow lakes with lots of aquatic vegetation.	Adjacent aquatic areas are flooded areas within aggregate pits with parent mineral substrate lacking organic material and/or vegetation. As such they are unlikely to support the species. The site itself, as and active pit since prior to 1976 is unlikely to have been capable of supporting nesting. The likelihood of presence is negligible.	Negligible
Butternut (<i>Juglans cinerea</i>)	Endangered	Endangered	Variable but typically on well-drained soils.	Butternut was not specifically noted in the SAR records search but is sufficiently common around Ottawa to warrant consideration. The site has some potential to support the species but none were observed. The likelihood of presence is negligible.	Negligible

■ - indicates species with potential for interactions with future site alterations that would be impacted by the proposed rezoning



5.3 Species/Habitat Observations

Bird presence at the pit was limited. Birds in and around the rim of the pit include American Crow (*Corvus brachyrhynchos*), American Goldfinch (*Spinus tristis*) with fly overs by Ring-billed Gull (*Larus delawarensis*; to and from the adjacent landfill). Near the open eastern end of the pit, Killdeer (*Charadrius vociferus*) were observed on the sandy plain and Red-winged Blackbirds (*Agelaius phoeniceus*) occurred in small numbers in tall-grass patches. Several Canada Geese (*Branta canadensis*) were present on waters of the flooded areas.

No Barn or Bank Swallows were observed around the site. A small loading structure was located in the center of the pit that included concrete walls and a shipping container (Figure 2). This was the only structure noted with potential to support Barn Swallow nests. None of the vertical surfaces here, however, include any sort of overhanging elements under which Barn Swallows would typically situate a nest, greatly limiting the suitability of the structures to support nests. There was no evidence of previous nesting. The surrounding vertical sand/gravel banks appeared to provide optimal potential as nesting sites for Bank Swallows, but none of the vertical surfaces had any sign of previous nest holes (Figure 2).

6.0 DESCRIPTION OF THE PROPOSED PROJECT

As the proposed project is rezoning, there are no physical changes necessarily required on the site (Figure 4). Future site development following the rezoning, however, would likely entail filling and/or re-grading the area, which would remove/alter the existing vertical sand/gravel faces and/or necessitate the removal of trees.



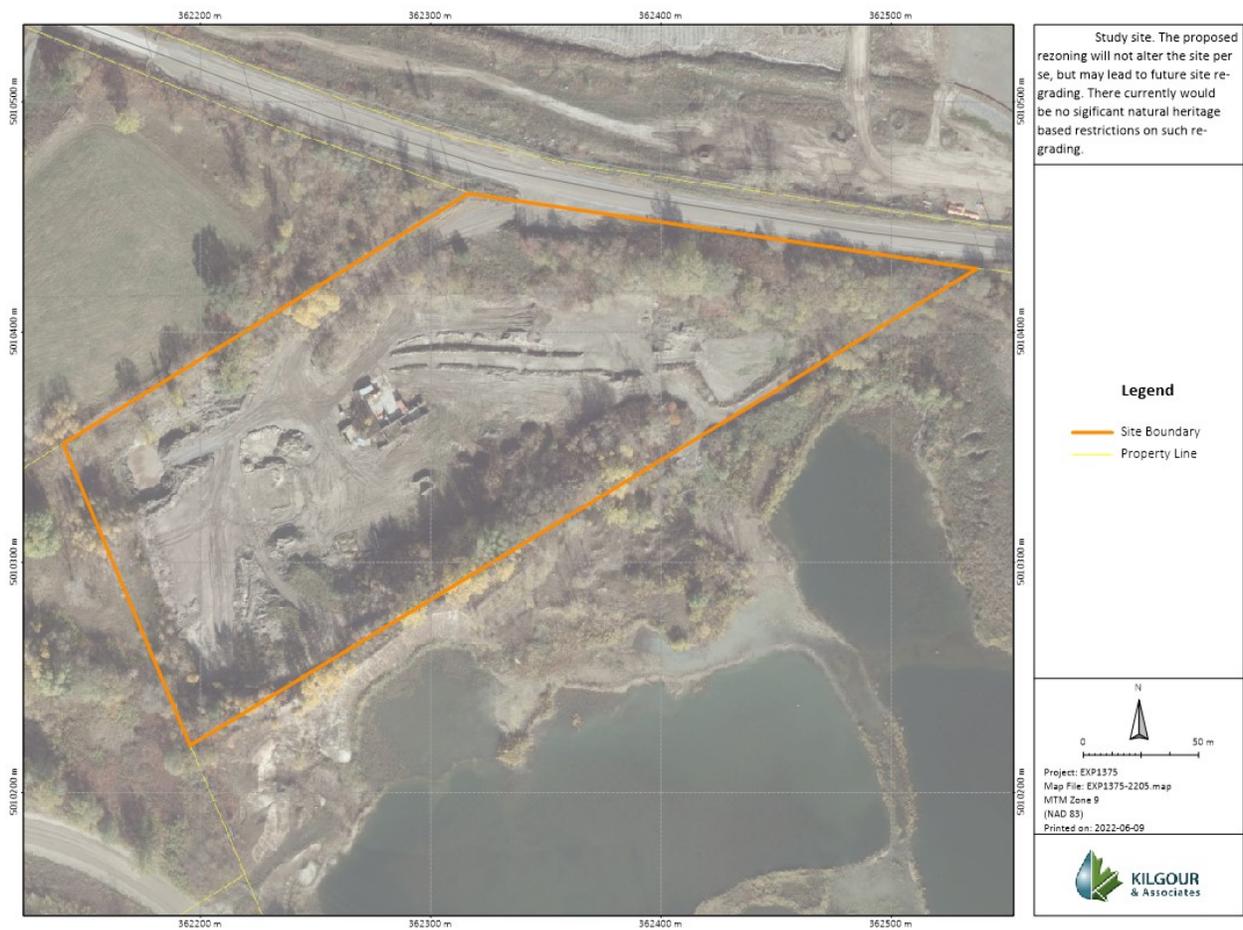


Figure 4. Study site.



7.0 IMPACT ASSESSMENT AND MITIGATION

7.1 Vegetation / Trees

Trees on the site are limited to common species around the perimeter boundary. The interior of the site is unvegetated. The site trees do not constitute specific habitat for species at risk, but may support other bird species during nesting season and could be used transiently by SAR bats. Accordingly, no tree removal on the site should be permitted during between April 1 and August 31 of any given year. Future site planning should aim to preserve trees to the extent possible, though it is recognized that the proximity of site trees to the existing pit edge may limit opportunities to do so. For trees to be preserved under future site development:

- Erect a fence beyond the critical root zone (CRZ; i.e., 10x the DBH) of trees. The fence should be highly visible (orange construction fence) and paired with erosion control fencing. Pruning of branches is recommended in areas of potential conflict with construction equipment;
- Do not place any material or equipment within the CRZ of trees;
- Do not attach any signs, notices, or posters to any trees;
- Do not raise or lower the existing grade within the CRZ of trees without approval;
- Tunnel or bore when digging within the CRZ of a tree;
- Do not damage the root system, trunk, or branches of any remaining trees; and
- Ensure that exhaust fumes from all equipment are not directed towards any tree's canopy.

7.2 Species at Risk

While the steep sand/gravel banks of the site provide potential as nesting colony locations for Bank Swallows, the absence of these precludes them constituting protected habitat. The banks are of anthropogenic origin (a byproduct of the previous pit operations). There is no obligation or requirement under the ESA to maintain the banks in their current form (i.e., as suitable for habitat). Accordingly, the banks may be removed without impact to Bank Swallows at any time of year, so long as Bank Swallows are not using the feature and did not use the feature during previous nesting seasons.

Prior to site alteration, the Site must be (re)inspected during mid-nesting season (between June 1 and July 15) to ensure swallows have not begun using the site. If the birds continue to be absent, site works could begin any time. Please note, however, that works affecting site trees would still be limited to the timing windows indicated in Section 7.1.

Should future site inspections observe Bank Swallow presence, future site works would require the negotiation of a Net Benefit Permit for the species with the MECPC. Current site conditions (i.e. the absence of Bank Swallows) may be considered supportive of the proposed rezoning. A follow-up site inspection is required in 2022 to confirm both absence of the species and this recommendation as provided. The results of that inspection must be appended to this report.



Similarly, the absence of evidence of usage of the site by Barn Swallows may be considered supportive of the proposed rezoning. The follow-up site inspection required in 2022 must also confirm absence of this species. Should Barn Swallows be observed on site, works planned prior to January 2023 would then need to be completed in accordance with a Notice of Activity to be filed with the MECP.

7.3 General Wildlife Mitigation

The following mitigation measures shall be implemented during future construction to generally protect wildlife:

- Tree and vegetation clearing should not take place during sensitive times of the year for wildlife (breeding season; early spring throughout summer) unless mitigation measures are implemented and/or the habitat has been inspected by a qualified biologist.
 - The MBCA protects migratory birds and the nests and young of migratory birds in Canada. No clearing of vegetation shall occur during the breeding bird window (between April 15 and August 15; City of Ottawa, 2015) to prevent impacts to birds.
- Do not harm, feed, or unnecessarily harass wildlife.
- Manage waste to prevent attracting wildlife to the work site. Effective mitigation measures include litter prevention and keeping all trash secured in wildlife-proof containers and promptly removing it from the work site, especially during warm weather.
- Manage stockpiles and equipment at the work site to prevent wildlife from being attracted to artificial habitat. Cover and contain any piles of soil, fill, brush, rocks and other loose materials and cap ends of pipes where necessary to keep wildlife out. Ensure that trailers, bins, boxes and vacant buildings are secured at the end of each workday to prevent access by wildlife.
- Check the entire work site for wildlife prior to beginning work each day.
- Inspect erosion and sediment control measures and protective fence and/or other installed wildlife exclusion measures daily and after each rain event to ensure their integrity and continued function.
- Monitor construction activities to ensure compliance with the project specific protocol (where applicable) or any other requirements.
- Construction and maintenance of buildings shall follow the City's Bird-Safe Design Guidelines (City of Ottawa, 2020).

8.0 CONCLUSION

Based on our professional opinion, we expect the recommended measures provided in this report to be sufficient to mitigate negative impacts to SAR. Per the recommendations, a follow-up inspection of the



site is required in June or early July of 2022 to confirm the findings of this report. The findings of the next inspection must be appended to this report.

9.0 CLOSURE

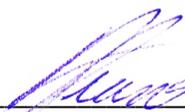
This report was prepared for exclusive use by Drain-All Ltd. and/or their authorized agents. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.



Nick Moore, BSc
Biologist



Anthony Francis, PhD
Senior Review



10.0 LITERATURE CITED

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Appendix A Qualifications of Report Authors



Nick Moore, BSc

Nick is a Field Ecologist with a background in Aquatic Biology. He graduated from Sir Sandford Fleming in 2018 with two Technical Diplomas for Environmental Technician and Environmental Technologist, as well as completing his Bachelor of Science with Honors in Biology and Environmental and Resource Studies at Trent University. Nick has spent two summers with the Ontario Ministry of Natural Resources and Forestry gaining valuable aquatic biology experience by assisting in research projects and long-term monitoring projects. He has performed various fish collection methods such as seine, trap, gill, and fyke netting techniques as well as backpack and boat electrofishing. Since graduating, Nick has joined Kilgour & Associates Ltd. and during that time he has been exposed to a variety of the work that we conduct such as collecting and processing samples (i.e. fish dissections) in support of Environmental Effects Monitoring, Ecological Land Classification (ELC), and species at risk (SAR) monitoring, erosion and sediment control inspections, water quality monitoring, stormwater management (SWM) Pond Inspections, breeding bird surveys and fish habitat characterization surveys.

Anthony Francis, PhD

Dr. Francis is a Senior Ecologist with 20 years' consulting experience to both government agencies and private industry. He has worked on a diversity of projects relating to species at risk, invasive species, terrestrial and aquatic habitat, environmental effects monitoring and mitigation, and fate/effects of contaminants. Within each of these subject areas, Dr. Francis has completed projects addressing specific site concerns and broader policy initiatives. In the Ottawa area Dr. Francis helps clients work their way through the land development process by producing key supporting studies such Environmental Impact Statements, Integrated Environmental Reviews, and by obtaining various permits and approvals from local regulatory agencies including the conservation authorities and Ministries of Environment and Natural Resources. Dr. Francis is our local in-house geomatics specialist, capable of carrying out detailed and complex analyses of geospatial data of plant and animal distribution. He often utilizes his skills to carry out constraint studies prior to a client purchasing or planning a development for a property.



Appendix B MECP Species at Risk Correspondence



June 1, 2022

Our File: EXP1375

Management Biologist
Permissions and Compliance Section
Ontario Ministry of Environment, Conservation and Parks
10-1 Campus Drive
Kemptville, ON
K0G 1J0

Reference: Species at risk information request for 4380 Trail Road

Ms. MECP:

1.0 INTRODUCTION

This letter is a request for information relating to the potential presence of species at risk (SAR) for at 4380 Trail Road. This letter includes a desktop review of SAR occurrence records using the resources and guidelines outlined in the draft document, *Client's Guide to Preliminary Screening for Species at Risk* (Ministry of the Environment, Conservation and Parks (MECP), 2019). We (Kilgour & Associates Ltd.; KAL) are seeking confirmation from MECP regarding the list of SAR that may occur on or near the project site. Potential impacts to SAR will be assessed via an Environmental Impact Study (EIS) for a proposed site rezoning that we will be preparing for our client. If impacts to SAR are anticipated, we will recommend that our client notifies MECP and engages in consultation to further consider potential impacts, avoidance and/or mitigation measures, and whether the project may require authorization under the *Endangered Species Act* (ESA).

1.1 Site Overview

The site is 4.3 ha in size and is located at 4380 Trail Road (Figure 1). The site is a recently depleted aggregate extraction pit.

The site is bordered by:

- The City of Ottawa's Trail Road Waste Facility to the north – an active landfill site;
- Lands associated with the City's Trail Road Depot to the west; and
- Aggregate extraction lands to the south and east.

The floor of the former pit is devoid of vegetation. The upper rim of the pit includes a relatively narrow band of Manitoba Maple and Trembling Aspen trees. There is/has been no evidence of the use the pit walls by Bank Swallows to date.

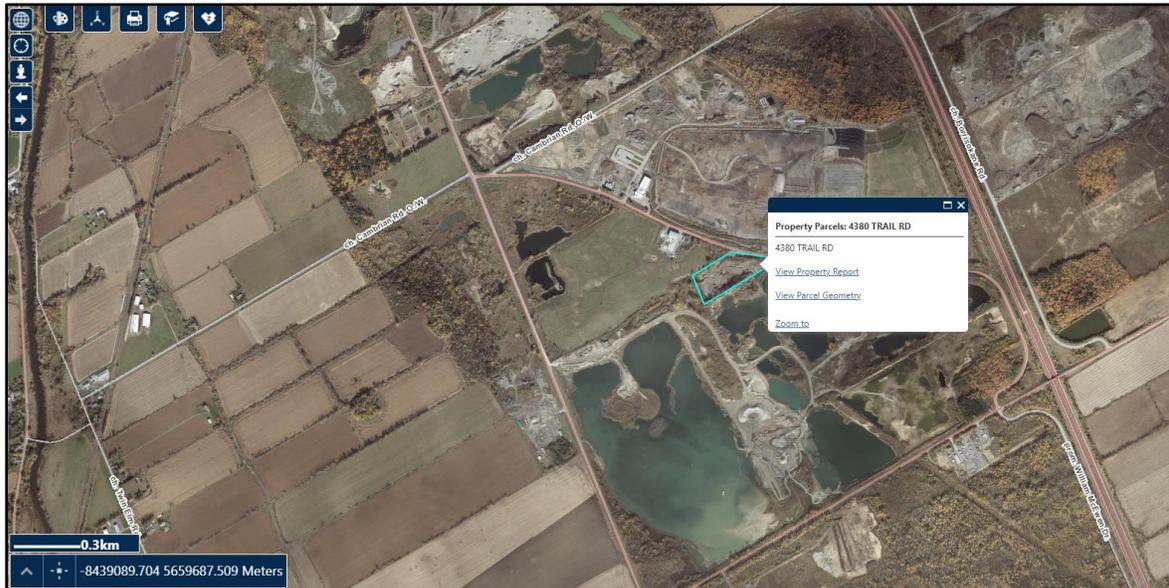


Figure 1 Location of the site

2.0 SPECIES AT RISK RESOURCES REVIEW AND RESULTS

We reviewed the following online resources to determine SAR occurrences on and/or nearby the site.

- Aquatic Species at Risk Map (DFO, 2022)
- Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNR)
 - Natural Heritage Information Centre (MNDMNR, 2022a)
 - Land Information Ontario Provincially Tracked Species Grid Detail (MNDMNR, 2022b)
 - Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Ontario (Humphrey and Fotherby, 2019)
 - Recovery Strategy for the Eastern Small-footed Myotis (*Myotis leibii*) in Ontario (Humphrey, 2018)



- Species at Risk in Ontario (MECP, 2022)
- Species at Risk Public Registry (Government of Canada, 2022)
- Atlas of the Breeding Birds of Ontario 2001-2005 (Birds Canada et al., 2009)
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019)
- iNaturalist (California Academy of Sciences and National Geographic Society, 2022)
- eBird (Cornell Lab of Ornithology, 2022)
- Bumble Bee Watch (Wildlife Preservation Canada et al., 2022)
- Ontario Butterfly Atlas (Toronto Entomologists' Association, 2022)

The results of the SAR desktop review are indicated in Table 1. Note that occurrence data in Table 1 from the Natural Heritage Information Centre (MNDMNRF, 2022a), Land Information Ontario (MNRF, 2022b), eBird (Cornell Lab of Ornithology, 2022), and iNaturalist (California Academy of Sciences and National Geographic Society, 2022) are occurrences within ~5 km of the site. SAR occurrence data from the Atlas of the Breeding Birds of Ontario (Birds Canada et al., 2009) and the Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019) are based on the 10 x 10 km Atlas square that the site falls in (18VR30).

Table 1 List of species at risk with potential to occur on or near the project site based on our desktop review

Species Name (<i>Latin name</i>)	Information Source
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	
Bank Swallow (<i>Riparia riparia</i>)	Birds Canada et al., 2009; MNDMNRF, 2022b
Barn Swallow (<i>Hirundo rustica</i>)	Birds Canada et al., 2009; MNDMNRF, 2022b
Bobolink (<i>Dolichonyx oryzivorus</i>)	California Academy of Sciences and National Geographic Society, 2022; Birds Canada et al., 2009; MNDMNRF, 2022a & 2022b
Chimney Swift (<i>Cardellina canadensis</i>)	Cornell Lab of Ornithology, 2022;
Eastern Meadowlark (<i>Sturnella magna</i>)	Birds Canada et al., 2009; MNDMNRF, 2022b
Eastern Wood-Pewee (<i>Contopus virens</i>)	Birds Canada et al., 2009
Peregrine Falcon (<i>Falco peregrinus</i>)	Cornell Lab of Ornithology, 2022



Wood Thrush (<i>Hylocichla mustelina</i>)	Birds Canada et al., 2009; MNDMNRF, 2022a; Cornell Lab of Ornithology, 2022
Little Brown Myotis (<i>Myotis lucifugus</i>)	Humphrey and Fotherby, 2019
Tri-coloured Bat (<i>Perimyotis subflavus</i>)	Humphrey and Fotherby, 2019
Western Chorus Frog (<i>Pseudacris triseriata</i>)	Ontario Nature, 2019
Blanding's Turtle (<i>Emydoidea blandingii</i>)	Ontario Nature, 2019
Snapping Turtle (<i>Chelydra serpentina</i>)	Ontario Nature, 2019; MNDMNRF, 2022b

The local conservation authority (Rideau Valley Conservation Authority) does not have a SAR geodatabase.

We note that observation records on eBird (Cornell Lab of Ornithology, 2022) and iNaturalist (California Academy of Sciences and National Geographic Society, 2022) are crowd-sourced and rely heavily on data submitted by volunteer citizen scientists that are not necessarily vetted by experts. As such, observation records from these sources are considered non-confirmed by KAL, but are included in this preliminary SAR screening based on guidelines set forth by MECP (2019).

One additional species we will consider is Butternut (*Juglans cinerea*). While no specific existing records were noted in proximity to the subject site, this species is known to occur throughout; reviews of the site will thus include this species.

3.0 CLOSURE

Thank you for considering this SAR information request for EXP1375. We look forward to any comments you may have. Questions relating to the contents of this letter can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.



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4.0 LITERATURE CITED

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Toronto Entomologists' Association. 2022. Ontario Butterfly Atlas. Available online at: <https://www.ontarioinsects.org/atlas/>

Wildlife Preservation Canada et al. 2022. Bumble Bee Watch: Bumble Sightings Map. Available online at: https://www.bumblebeewatch.org/app/#/bees/map?filters=%7B%22sightingstatus_id%22:%5B%5D,%22species_id%22:%5B%2237%22%5D,%22province_id%22:%5B%5D%7D



**Appendix 2 – EIS Update Memo. Report
Date: July 11, 2022.**



July 11, 2022

Our File: EXP 1375

Chris Kimmerly
EXP Services Inc
2650 Queensview Drive
Ottawa, Ontario

Dear Mr. Kimmerly

Subject: 4380 Trail Road Site Visit # 2

1.0 INTRODUCTION

An Environmental Impact Study (EIS) prepared on June 9, 2022, by Kilgour & Associates Ltd. supported a proposed rezoning of 4380 Trail Road in Ottawa, Ontario (“the Site”). As part of the support for the initial conclusion, the EIS had found no evidence of previous Barn Swallow (*Hirundo rusitca*) or Bank Swallow (*Riparia riparia*) nesting on the Site, based on the absence of nest cups (from Barn Swallows) and/or nest cavities (for Bank Swallows). The initial site inspection, however, was completed outside of the active nesting season for the two species. The EIS thus indicated the requirement for a follow-up inspection during the bird nesting period of 2022 to confirm the absence of individuals and the continued lack of signs of nesting. This technical memorandum details the results of the follow-up inspection of 4380 Trail Road.

KAL biologist Nick Moore visited the Site on Friday, June 24, 2022. Several common bird species were observed (Appendix A); however, no SAR birds or evidence of nesting birds including Barn Swallow and Bank Swallow were observed during the inspection (Figure 1). The recommendation of the EIS remains unchanged due to the results of this second Site visit.

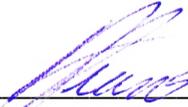


Figure 1 Photographs of the concrete structure in the center of the Site (A) and of a sandbank in the pit (B).

Respectfully submitted,
KILGOUR & ASSOCIATES LTD.



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Chris Kimmerly
2022 07 11
EXP 1375

Appendix A Incidental Observations



Species Name	Latin Name
Yellow Warbler	<i>Setophaga petechia</i>
Song Sparrow	<i>Melospiza melodia</i>
Brown-headed Catbird	<i>Molothrus ater</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Ring-billed Gull	<i>Larus delawarensis</i>
American Robin	<i>Turdus migratorius</i>
Common Grackle	<i>Quiscalus quiscula</i>
American Crow	<i>Corvus brachyrhynchos</i>
Gray-crested Flycatcher	<i>Myiarchus crinitus</i>

