FOTENN



3252 Navan Road - Spring Valley Trails, Phase 5 & 6

ENVIRONMENTAL IMPACT STUDY & TREE CONSERVATION REPORT

Submitted to: Claridge Homes
Prepared for: Victoria St Pierre
Land Development Manager
505 Preston Street, Ottawa, ON, K1S 4N7

October 19th, 2026

Prepared for Claridge Homes

Prepared by Fotenn Planning + Design

420 O'Connor Street,

Ottawa, ON, K2P 1W4

October 2026

© Fotenn

October 19, 2026

Victoria St Pierre
Junior Planner and Administrator
Claridge Homes
505 Preston Street
Ottawa, ON, K1S 4N7

RE: 3252 Navan Road – Spring Valley Trails Phase 5 & 6

Environmental Impact Study & Tree Conservation Report

Dear Ms. St Pierre,

Fotenn is pleased to submit this revised *Environmental Impact Study (EIS)* and Tree Conservation Report (TCR) for the proposed development of the Spring Valley Trails Phase 5 & 6, located at 3252 Navan Road in the City of Ottawa. This assessment documents the existing natural heritage conditions within the Study Area and evaluates the potential impacts associated with the planned residential development and supporting infrastructure.

The report identifies natural heritage features present on the Site, including headwater drainage and wetland features within and adjacent to the proposed development area. It provides an analysis of how the proposed construction and long-term development activities may interact with these features and applies a structured impact assessment to establish potential effects. Consistent with provincial and municipal policy requirements, the EIS outlines appropriate avoidance, minimization, and mitigation approaches informed by the mitigation hierarchy and current City of Ottawa guidelines.

We trust that this report provides the necessary information to support the ongoing development review process. Should you have any questions or require clarification, please do not hesitate to contact the undersigned.

Sincerely,

Alex Zeller

Principal, Natural Systems

FOTENN

Ottawa
420 O'Connor Street
Ottawa, ON K2P 1W4
613.730.5709

fotenn.com

Executive Summary

Claridge Homes is proposing the development of the Spring Valley Trails Phase 5 residential community located at 3252 Navan Road in the City of Ottawa. The Subject Property comprises approximately 12.9 hectares and represents a remnant parcel within the broader Spring Valley Trails development area in eastern Ottawa. This Environmental Impact Study (EIS) has been prepared in accordance with the City of Ottawa's EIS Guidelines to characterize existing natural heritage conditions within the Site and Study Area, assess potential environmental impacts associated with the proposed development, and identify appropriate mitigation, restoration, and enhancement measures.

Natural Heritage Features and Existing Conditions

Field investigations and environmental assessments previously completed by WSP (2020) and IBI Group (2022) form the basis of the existing conditions analysis. A confirmatory site visit conducted on March 26, 2026 indicated that vegetation communities, wildlife habitat, drainage features, and overall site conditions remain largely unchanged from those documented in previous studies. Accordingly, the findings and conclusions of the earlier assessments remain representative.

Natural heritage features within and adjacent to the Site include disturbed meadow, thicket, deciduous swamp, and wetland communities, as well as a linear drainage feature extending along the eastern and southern portions of the Subject Property. The Site is located immediately north of the Mer Bleue Provincially Significant Wetland (PSW); however, the PSW and associated ANSI lands are located outside the development footprint and will not be directly affected.

Headwater Drainage Feature Assessment

A key component of this EIS is the updated Headwater Drainage Feature (HDF) assessment. While the on-site drainage feature exhibits a defined bed and banks, the headwaters north of Navan Road have been largely developed, with flows diverted to municipal stormwater infrastructure; only the property immediately north of Navan Road continues to drain to the feature, which is insufficient to generate regular flows. As confirmed during the 2026 site visit, the feature no longer meets the provincial definition of a regulated watercourse.

Based on current conditions, the drainage feature was assigned "Conservation" and "Maintain / Replicate Terrestrial Linkage" management recommendations. These recommendations recognize the feature's continuing value for terrestrial connectivity and localized ecological function, rather than aquatic habitat. The HDF recommendations directly inform the proposed realignment and enhancement strategy, which is designed to maintain ecological linkage while accommodating the residential development.

Restoration and Enhancement Strategy

The proposed development incorporates a comprehensive Habitat Restoration and Monitoring Plan, including the restoration and enhancement of approximately 2.4 hectares within the southern portion of the Site. Restoration measures will focus on improving wetland-associated and terrestrial habitat quality through invasive species management, native vegetation planting, and enhancement of habitat structure. While the realignment of the drainage feature itself does not require permitting under the Conservation Authorities Act, the restoration and monitoring works occur within the Rideau Valley Conservation Authority (RVCA) regulated area associated with the Mer Bleue PSW and will therefore require RVCA approval.

Implementation of the restoration strategy is expected to improve habitat quality and connectivity within the Study Area and to complement adjacent natural features associated with the Mer Bleue Bog.

Trees, Wildlife, and Additional Survey Requirements

Tree resources on the Site were documented through earlier Environmental Impact Studies and Tree Conservation Reports. Although no new tree inventory has been completed since 2020, the March 26, 2026 site visit indicated

that tree cover remains largely unchanged. **An updated Tree Conservation Report (TCR) will be required following detailed design, or prior to any tree removals required for early servicing, whichever occurs first,** to document boundary trees, confirm tree retention opportunities, assess grading-related impacts, and identify mitigation and compensation measures. The updated TCR must be submitted to the City of Ottawa for approval prior to commencement of on-site works.

Additional species-specific requirements identified through this EIS include:

- **Seasonal survey for Pileated Woodpecker cavity use**, to confirm whether existing cavities within large trees (notably White Willows) are being used for nesting or foraging, with management in accordance with the Migratory Birds Convention Act if active nests are confirmed.
- **Targeted Black Ash (*Fraxinus nigra*) surveys**, as suitable habitat is present within swamp and wetland communities in the southern portion of the Site. These surveys are required during detailed design, prior to site clearing, to confirm presence or absence, and will be completed in conjunction with the updated Tree Conservation Report and reported in the EIS addendum; if Black Ash is identified and cannot be avoided, permitting under the Species Conservation Act may be required.

No impacts are anticipated to Bobolink, Eastern Meadowlark, Butternut, or other Species at Risk for which suitable habitat or individuals were not identified.

Conclusion

With implementation of the proposed mitigation, restoration, and enhancement measures, and completion of the required additional surveys and approvals, the proposed Spring Valley Trails development is not expected to result in significant negative effects on natural heritage features or ecological functions. Vegetation removal associated with the development is consistent with residential land development, while the retention of the ecological corridor and wetland restoration measures are expected to result in a net long-term benefit to biodiversity, complementing adjacent habitat associated with the Mer Bleue Bog. From an environmental perspective, the Subject Property is considered suitable for the proposed development, subject to implementation of the recommendations outlined in this EIS.

Table of Contents

1. Introduction 1
   1.1. Study Area 1
   1.2. Background and Purpose 1
   1.3. Additional Context 1
   1.4. Property Information 2
   1.5. First Nations Land Acknowledgement 3
   1.6. Environmental Impact Study Approach 3
   1.7. Tree Conservation Report Approach 3
2. Relevant Policy and Legislative Framework 6
   2.1. Federal Policies and Legislation 8
      2.1.1. Migratory Birds Convention Act, 1994 (MBCA) 8
      2.1.2. Species at Risk Act, 2002 (SARA) 8
      2.1.3. Fisheries Act, 1985 9
   2.2. Provincial Policies and Legislation 9
      2.2.1. Fish and Wildlife Conservation Act, 1997 (FWCA) 9
      2.2.2. Species Conservation Act, 2025 (SCA) 10
      2.2.3. Planning Act, 1990 11
      2.2.4. *Provincial Planning Statement, 2024* (PPS) 11
      2.2.5. Conservation Authorities Act, 1990 12
   2.3. Municipal Policies and Legislation 13
      2.3.1. City of Ottawa Official Plan 13
      2.3.2. Tree Protection By-law No. 2020-340 14
      2.3.3. Zoning By-law No. 2026-50: Setback from Surface Water Features 15
3. Background Review 16
   3.1. Historic Land Use 17
   3.2. Landform, Geology, and Soils 18
   3.3. Aquatic Environment 18
      3.3.1. Surface Water 18
      3.3.2. Floodplain and Regulated Limit 19
      3.3.3. Fish and Fish Habitat 19
      3.3.4. Wetlands 19
   3.4. Terrestrial Environment 20
      3.4.1. Woodlands 20

3.4.2. Valleylands 20
3.4.3. Area of Natural and Scientific Interest (ANSI) 20
3.4.4. Significant Wildlife Habitat (SWH) 20
3.5. Species at Risk and Species at Risk Habitat 22
3.6. Wildlife and Wildlife Habitat 23
3.7. Trees 23
3.8. Summary of Natural Heritage Features 23
4. Methodology 26
4.1. Aquatic Environment 28
4.1.1. Surface Water Assessment 28
4.1.2. Headwater Drainage Feature Assessment 28
4.1.3. Wetland Verification / Delineation 29
4.2. Terrestrial Environment 29
4.2.1. Vegetation Communities / Ecological Land Classification (ELC) 29
4.2.2. Woodlands 29
4.2.3. Amphibian Surveys 30
4.2.4. Breeding Bird Surveys 30
4.2.5. Habitat for Species of Conservation Concern 31
4.3. Species at Risk 31
4.4. Incidental Wildlife 32
4.5. Trees 32
4.6. Impact Assessment Approach 33
5. Field Investigation Results 35
5.1. Aquatic Habitat Assessment 35
5.1.1. Surface Water Assessment 35
5.1.2. Headwater Drainage Feature Assessment 35
5.1.3. Wetlands 39
5.2. Terrestrial Environment 42
5.2.1. Terrestrial Vegetation Communities 42
5.2.2. Botanical Inventory 42
5.2.3. Woodlands 47
5.2.4. Significant Wildlife Habitat 47
5.3. Species at Risk and Species at Risk Habitat 50
5.3.1. Bobolink and Eastern Meadowlark 50
5.3.2. SAR Bats 51

5.3.3. Butternut 51
5.3.4. Black Ash 51
5.4. Incidental Wildlife and Wildlife Habitat 51
5.5. Trees 52
5.6. Summary of Natural Heritage Features 52
6. Description of Development Proposal 55
6.1. Construction Activities 55
7. Impact Assessment and Mitigation 58
7.1. Aquatic Environment 58
7.1.1. Aquatic Environment Management Recommendations 59
7.1.2. Aquatic Environment Mitigation 61
7.1.3. Fishes and Fish Habitat 63
7.1.4. Wetland Habitat 63
7.2. Terrestrial Environment 66
7.2.1. Terrestrial Vegetation Communities 66
7.2.2. Woodlands 67
7.2.3. Significant Wildlife Habitat 68
7.3. Species at Risk and Species at Risk Habitat 73
7.3.1. Bobolink and Eastern Meadowlark 73
7.3.2. SAR Bats 73
7.3.3. Butternut 74
7.3.4. Black Ash 74
7.4. Incidental Wildlife and Wildlife Habitat 75
7.5. Trees 76
7.6. Indirect Impacts 77
7.7. Cumulative Impacts 77
8. Summary and Conclusion 81
8.1. Policy Conformity and Next Steps 85
8.2. Standard of Care and Limitations 87

Tables

Table 1: Subject Site Property Information 2
Table 2: Study approach 4
Table 3: Relevant environmental policies and legislation 6
Table 4: Species at Risk with Occurrence Records and Suitable Habitat within the Study Area 22
Table 5: Summary of Natural Heritage Features within the Study Area 24
Table 6: Fieldwork Summary 26
Table 7: Headwater Drainage Feature Management Recommendations 40
Table 8: Summary of Ecological Land Classification for the Study Area 44
Table 9: Amphibian Survey Results 48
Table 10: Summary of Potential Impacts, Mitigation, Monitoring, and Residual Effects 83

Figures

Figure 1: Study Area 5
Figure 2: Aerial Imagery Showing Land Use Changes Over Time 17
Figure 3: Natural Heritage Screening 25
Figure 4: Field Survey Locations 34
Figure 5: Ecological Land Classification 46
Figure 6: Field Survey Results 54
Figure 7: Concept Plan 57
Figure 8: Constraints and Opportunities Assessment 80

Appendices

Appendix A Tree Conservation Report
Appendix B Aquatic Background Data
Appendix C Terrestrial Background Data
Appendix D Species at Risk Screening
Appendix E On-Site Species Observations
Appendix F Significant Wildlife Habitat Assessment

Acronyms and Abbreviations

City	The City of Ottawa
DBH	Diameter at breast height
DFO	The Department of Fisheries and Oceans Canada
EASR	Environmental Activity and Sector Registry
ECCC	Environment and Climate Change Canada
ECR	*Existing Conditions Report*
ELC	Ecological Land Classification
SCA	*Species Conservation Act, 2025*
ESA	*Endangered Species Act, 2007* (repealed March 30, 2026)
FWCA	*Fish and Wildlife Conservation Act, 1997*
HDF	Headwater Drainage Feature
ISA	International Society of Arboriculture
MBCA	*Migratory Birds Convention Act, 1994*
MBR	*Migratory Birds Regulations, 2022*
MNR	Ministry of Natural Resources
NHIC	Natural Heritage Information Centre
NHRM	*Natural Heritage Reference Manual* (MNR 2010)
NHS	Natural Heritage System
PPS	*Provincial Planning Statement, 2024*
PTTW	Permit To Take Water
RVCA	Rideau Valley Conservation Authority
SAR	Species at Risk
SARA	*Species at Risk Act, 2002*
SARO	Species at Risk in Ontario
Study Area	The Site and the area within 120 m of the Site
SWG	“Significant Woodlands Guidelines” (City of Ottawa 2022d)
SWH	Significant Wildlife Habitat
SWMP	Stormwater Management Pond

1. Introduction

Fotenn was retained by Claridge Homes to finalize this Environmental Impact Study (EIS) for the proposed 'Spring Valley Trails' Development (the "Project"), located at 3252 Navan Road, in the City of Ottawa (the "Site").

The Subject Site is approximately 12.9 hectares and located south of Navan Road, approximately 110 metres east of the Navan Road and Spring Valley Drive intersection and is situated north of the Mer Bleue Provincially Significant Wetland (PSW) and the Mer Bleue Bog Area of Natural and Scientific Interest (ANSI) (Figure 1).

The Subject Site property is within the City of Ottawa's Suburban Transect, and designated Neighbourhood in Schedule B6 of the Official Plan (OP). The Subject Site is located within the Rideau Valley Conservation Authority Regulation Limit and features a watercourse and an unevaluated wetland on the southern extent of the Subject Site.

1.1. Study Area

This report describes the natural heritage features within the Subject Site (3252 Navan Road) and the area within 120 metres of the Subject Site (collectively referred to as the Study Area), to account for policy requirements and setback distances outlined in the Provincial Planning Statement (2024) and the accompanying Natural Heritage Reference Manual (MNR 2010). As necessary, consideration has been given to wildlife occurrences (including SAR) reported up to 10 kilometres away, due to the nature of desktop resources (i.e., online databases and atlases) with data presented in a 10-kilometre grid.

1.2. Background and Purpose

Claridge Homes is submitting a Zoning By-law Amendment and Plan of Subdivision application for the proposed development at 3252 Navan Road in Orleans, Ottawa. The project will include a mix of single-detached homes, townhouses, multi-unit residential buildings, and parkland.

This updated Environmental Impact Study (EIS) and Tree Conservation Report (TCR) has been prepared to reflect changes in Species at Risk policy and environmental legislation since the original submissions in 2020 and 2022. The purpose of the EIS is to compile and assess all relevant information needed to understand the boundaries, attributes, connectivity, and ecological functions of natural heritage features within the Study Area (the Site plus a 120-metre buffer).

The assessment draws on a review of background documentation and a site visit completed by a qualified ecologist on March 26, 2026. The site visit was undertaken to confirm existing conditions documented in previous submissions (2020 and 2022). Using this information, the EIS evaluates natural heritage features on the Site and adjacent lands in accordance with municipal, provincial, and federal policy frameworks, and provides recommendations for avoidance and mitigation measures to minimize environmental impacts.

1.3. Additional Context

In addition to the comments provided by the City on the 2022 IBI EIS, this version of the EIS is influenced by two key changes in context, including: a change to the Conservation Authorities Act in 2025 and the implementation of the approved stormwater management designs change within the community north of this proposed development that fundamentally altered flow entering the site from the north.

Recent changes to the Conservation Authorities Act, including the introduction of *O. Reg. 41/24* (Prohibited Activities, Exemptions and Permits), have updated how conservation authorities regulate watercourses and wetlands. Under the revised framework, only features that meet the new provincial definitions of a "watercourse" or "wetland," or that present a natural hazard risk, require permitting. As a result, the classification and management expectations for several drainage and wetland features within the Study Area have shifted. This report incorporates these regulatory updates and provides management recommendations consistent with the current provincial

framework and RVCA's updated regulatory role. Section 28, Part VI of the Conservation Authorities Act further outlines the regulation of areas under conservation authority jurisdiction, including restrictions on development in areas that may be unsafe due to flooding or erosion, as well as prohibitions on interference with or alteration of watercourses, wetlands, or shorelines. The updated Act now defines a "watercourse" as:

> *"Watercourse (means a) defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs."*

The implications of this change directly affect the approach of this EIS and the management recommendations and approval requirements herein.

In addition, construction of the approved stormwater management system, as described in the East Urban Community Phase 2 EMP (2013) and subsequently summarized in the East Urban Community Phase 2 Community Design Plan (CDP), is now largely complete and has substantially altered the hydrology entering the Site. Only the property immediately north of Navan Road continues to contribute flows to the drainage features and wetlands within the Study Area, which is insufficient to generate regular flows.

The 2020 and 2022 EIS submissions prepared by WSP and IBI were developed at a time when upstream hydrology still contributed flows into the on-site Headwater Drainage Feature (HDF). Those earlier studies relied on management recommendations established through consultation with the Rideau Valley Conservation Authority (RVCA), including direction on maintaining drainage alignment and evaluating the function of wetland features under the then-current regulatory framework. At that time, RVCA supported retaining a parallel drainage alignment and identified opportunities to maintain localized storage and conveyance for portions of the development.

As the surrounding area has continued to develop, it is now understood that approved upstream servicing works to the north have diverted the majority of contributing flows away from the on-site HDF, with only the property immediately north of Navan Road continuing to drain to the feature. While the feature still exhibits a defined bed and banks, it no longer meets the revised provincial definition of a "watercourse," as regular or continuous flow is no longer present. ***As a result, RVCA no longer holds regulatory authority over this feature (or the unevaluated wetlands) within the Study Area.***

Nevertheless, the HDF and the downstream wetland continue to perform ecological functions that fall under the City of Ottawa's jurisdiction and are assessed through the EIS process. Accordingly, this EIS adopts the position that municipal policy—not RVCA permitting—guides the management of these features going forward.

1.4. Property Information

The following table summarizes the key property information relevant to the Subject Site.

Table 1: Subject Site Property Information

Owner:	Claridge Homes
Address:	3252 Navan Road, City of Ottawa, Ontario, Canada
Lot and Concession:	Part of Lot 4, Concession 4 & Part of Lots 5 and 6, Concession 4
Property Identification Number(s):	043522512, 043520307
Official Plan Designation:	Suburban
Zoning:	DR – Development Reserve
Existing Land Use:	Industrial/Commercial, Forested Land, Meadow

Traditional Territory:	Anishinabewaki and Omàmìwininìwag (Algonquin)

1.5. First Nations Land Acknowledgement

Fotenn acknowledges that the Subject Site is located on the unceded traditional territory of the Anishinabewaki and Omàmìwininìwag (Algonquin). The Algonquin peoples have lived on this land since time immemorial, and their culture and presence have nurtured—and continue to nurture—the lands and waters of this region. We extend our respect to the Algonquin Nation and to all First Nations, Inuit, and Métis peoples for their valuable past and present contributions to this territory.

1.6. Environmental Impact Study Approach

The following approach provides a clear methodology for characterizing the natural environment within the Study Area and assessing the potential presence of significant species and habitats. It also identifies potential impacts to natural heritage features and outlines appropriate avoidance, mitigation, and, where necessary, compensation measures.

This EIS and TCR provide an update to, and validation of, the previous environmental work completed by WSP (2020) and IBI (2022). As the March submission of this EIS preceded the growing season in this calendar year, new fieldwork was limited to a brief site visit to confirm the existing conditions described in earlier studies. As a result, this assessment primarily relies on the comprehensive field investigations previously completed, and has been updated to reflect current policies, legislation, and regulatory guidance.

Where uncertainties arise due to evolving policy direction or the age of existing data, supplementary field studies may be recommended on an as-needed basis to support future stages of design and permitting.

1.7. Tree Conservation Report Approach

In accordance with the City of Ottawa's Environmental Impact Study (EIS) Guidelines, tree-related constraints, impacts, and mitigation requirements have been summarized throughout this EIS where relevant to the assessment of natural heritage features and development impacts. A detailed Tree Conservation Report (TCR) has been prepared to support this assessment, with the survey findings, evaluation, retention analysis, and compensation details provided in Appendix A. The TCR will inform detailed design and implementation and will be updated as required to reflect site-specific conditions and finalized development plans and support expedited project timelines (early servicing).

Table 2: Study approach

Relevant Policy and Legislative Framework:	This section outlines the policies and legislation that apply to the protection of natural heritage features within the Study Area as it relates to the Project.
Natural Heritage Screening / Background Review	This section provides detailed background information collected from a variety of publicly accessible resource databases to describe the natural heritage features and significant features that may occur within the Study Area.
Field Methodology	This section provides a summary of the specific protocols and methods used to evaluate potential natural heritage features and species identified within the natural heritage screening.
Field Survey Results	This section provides the results from the field surveys. This also includes any incidental observations or notable observations made by the field ecologists.
Summary of Natural Features	This section summarizes the natural heritage features confirmed present with respect to the relevant policies and legislation.
Description of the Proposed Development	This section provides a summary of the Project, including the activities which may impact the natural environment.
Development Constraints and Opportunities Analysis	This section identifies areas or features that are ecologically sensitive, protected, or otherwise unsuitable for development, and portions of the site where low-impact development or restoration may be appropriate.
Impact Assessment and Mitigation Measures:	This section provides the assessment of the Project's potential impacts on the natural heritage system, including the natural heritage features and species confirmed present through this study.
Summary and Conclusions:	The mitigation measures proposed in this section are aimed at reducing or eliminating potential impacts to natural heritage features. Where mitigation may not be possible, compensation may be proposed.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Subject Site
- Study Area 120m
- Mer Bleue Bog (Provincially Significant Wetland, MNR 2013)

Project:
Claridge Homes
Spring Valley Trails

Title:
Phase 5 & 6 - Subject Site and Study Area

Prepared By:
FOTENN

Date:
3/31/2026

Figure: 1

2. Relevant Policy and Legislative Framework

This EIS references the regulatory agencies and legislative authorities mandated to protect different elements of natural heritage features and functions within Canada, Ontario, and the City of Ottawa, as applicable. The scope of this report evaluates the natural heritage features and SAR governed by the policies outlined in Table 3 below. The following subsections provide a high-level summary of the policies and legislation, noting their most recent date of amendment (at the time of preparation of this report). Each subsection also contains a short description of the policy's / legislation's applicability to this specific Project.

Table 3: Relevant environmental policies and legislation

Federal Government of Canada	
Environment and Climate Change Canada (ECCC)	
Migratory Birds Convention Act, 1994 (S.C. 1994, c. 22) (MBCA)	/ Guidelines to Avoid Harm to Migratory Birds (ECCC 2023a) / Migratory Birds Regulations, 2022 / Fact sheet: Nest Protection under the Migratory Birds Regulations, 2022 (ECCC 2023b) / Nesting Calendars (ECCC 2023c)
Species at Risk Act, 2002 (S.C. 2002, c. 29) (SARA)	/ Federal Species at Risk Public Registry / Distribution of aquatic Species at Risk mapping (DFO 2024) / ECCC Open Data: Range Map Extents, and Critical Habitat for Aquatic SAR, / Provincial SAR, and National SAR (ECCC 2022)
Department of Fisheries and Oceans Canada (DFO)	
Fisheries Act, 1985 (R.S.C., 1985, c. F-14)	/ Projects Near Water online resources (DFO 2022) / The Fish and Fish Habitat Protection Program (FFHPP) Regulatory Review Process Map (DFO 2020)
Provincial Government of Ontario	
Ministry of Natural Resources (MNR)	
Fish and Wildlife Conservation Act, 1997 (S.O. 1997, c. 41) (FWCA)	/ Wildlife Schedules (*O. Reg. 669/98*)

Rideau Valley Conservation Authority (RVCA)	
Conservation Authorities Act, 1990 (R.S.O. 1990, c. C.27)	/ Prohibited Activities, Exemptions and Permits (O. Reg. 41/24) / RVCA Geoportal (RVCA 2026) / Ontario Stream Assessment Protocol (Stanfield 2017)
Ministry of the Environment, Conservation and Parks (MECP)	
Species Conservation Act, 2025 (S.O. 2025, c. 4, Sched. 10)	/ Protected Species in Ontario List (O. Reg. 60/26)
Ministry of Municipal Affairs and Housing (MMAH)	
Planning Act, R.S.O. 1990, c. P.13	/ Provincial Planning Statement, 2024
Local Municipalities	
City of Ottawa	
City of Ottawa Official Plan	/ Environmental Impact Study Guidelines (City of Ottawa 2026) / Bird-Safe Design Guidelines (City of Ottawa 2022a) / Official Plan 2022, adopted by By-law 2021-386 (City of Ottawa 2022b) / Protocol for Wildlife Protection during Construction (City of Ottawa 2022c); / Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment (SWG; City of Ottawa 2022d) / East Urban Community EMP (City of Ottawa, 2013a)
Zoning By-law 2008-250	/ Section 69: Setback from watercourses and waterbodies
Zoning By-law 2026-50	/ Section 404 - Setback from Surface Water Features
Tree Protection By-Law 2020-340	/ *By-law 2020-340* (City of Ottawa 2021)

2.1. Federal Policies and Legislation

This section summarizes the federal legislation and policy frameworks that govern the protection of wildlife, species at risk, and aquatic resources in Canada, outlining how these requirements apply to the proposed Project.

2.1.1. Migratory Birds Convention Act, 1994 (MBCA)

The federal MBCA was originally adopted in 1916, updated in June 1994 to strengthen the enforcement provisions and significantly increase the penalties. The MBCA was last amended in December 2017 and the associated *Migratory Birds Regulations* (MBR) were most recently updated in July 2022. Together the MBCA and the MBR protect migratory bird populations and individuals by regulating potentially harmful anthropogenic activities which may cause harm to the nests, eggs, and any part of a listed bird species.

Under the MBCA, protected species are listed under Article I. In general, birds not falling under federal jurisdiction within Canada include grouse, quail, pheasants, ptarmigan, hawks, owls, eagles, falcons, cormorants, pelicans, crows, jays, kingfishers, and some species of blackbirds. However, if the species identified is protected under Ontario's *Species Conservation Act, 2025* or Canada's *Species at Risk Act, 2002*, additional restrictions may apply.

The changes in the *MBR* altered the protection for nests of MBCA-listed birds. With the exception of 18 species listed under Schedule 1 of the MBR, which have year-round protection, instead of safeguarding *all* nests of MBCA-listed birds at *all* times, the new MBR protect *most* nests only when they are "active"; i.e., when they contain a live bird or a viable egg - generally during the breeding window (late March – late August with some regional variation, in the southern half of Ontario).

The changes to the MBR support conservation benefits, as the nests of most MBCA-listed birds only have conservation value when they are active. The changes also provide flexibility and predictability for stakeholders to manage their compliance requirements as they undertake activities on the landscape that may affect migratory birds and/or their nests.

MBCA - Applicability to the Project

Within Canada, the MBCA applies to activities conducted by the public and all levels of government. The killing or harming of an MBCA-listed bird or destruction / disturbance of a nest and eggs is unlawful regardless of intent. Therefore, if a protected species or their nest is encountered during Project activities, the Project must comply with the prohibitions of the MBCA. All impacts to natural habitat (e.g., ground cover, trees, or any structure with a nest) should follow appropriate timing windows and Best Management Practices specified by ECCC.

With respect to species listed under Schedule 1, targeted surveys and mitigation measures may be required to ensure nests are not impacted. Regardless of the time of year, nests of these species may only be removed with a permit from the ECCC.

2.1.2. Species at Risk Act, 2002 (SARA)

The federal SARA was adopted in 2002 and last amended in February 2023. The purposes of SARA are to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are Extirpated, Endangered, or Threatened because of human activity, and to manage species of Special Concern to prevent them from becoming Endangered or Threatened. Those species listed as Threatened, Endangered, or Extirpated under Schedule 1 are afforded both individual and habitat protection under SARA on federal lands. Additionally, outside of federal land, Section 58 of SARA affords protection to critical habitat of:

- Species of migratory birds protected by the MBCA that fall under Schedule 1 of SARA; and
- Aquatic species that fall under Schedule 1 of SARA.

A permit, or authorization, for activities that would otherwise not be allowable under SARA can be obtained from ECCC.

SARA - Applicability to the Project

The Study Area is not on federal land. As such, SARA only applies to the protection of federal SAR critical habitat, as per Section 58 of SARA. No such habitat exists within the Study Area.

2.1.3. Fisheries Act, 1985

The federal Fisheries Act was established in 1985. On August 28, 2019, provisions of the new Fisheries Act came into force including new protections for fish and fish habitat in the form of standards, codes of practice, and guidelines for projects near water. The Fisheries Act provides protection to fish and fish habitat such that:

> "No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat" (Section 35 (1)).

Fish habitat is defined by the *Fisheries Act* as:

> *"Water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas" (Section 2 (1)).*

The *Fisheries Act* requires that any work, undertaking, or activity avoid harmful alteration, disruption, or destruction of fish habitat unless authorized.

Fisheries Act - Applicability to the Project

The Fisheries Act governs all fish habitat (as defined above) within Canada. The Fisheries Act applies to the Site and Study Area where watercourses / drainage features provide fish habitat (as defined above).

2.2. Provincial Policies and Legislation

2.2.1. Fish and Wildlife Conservation Act, 1997 (FWCA)

The Ontario *Fish and Wildlife Conservation Act* (FWCA) was established in 1997 and most recently amended in June 2023. The FWCA is managed by the MNR and applies to 'wildlife' which is defined as:

> *"An animal that belongs to a species that is wild by nature and includes game wildlife and specially protected wildlife" (Section 1 (1)).*

Those species considered "specially protected wildlife" include those specially protected amphibians, birds, invertebrates, mammals, and reptiles, as identified within Schedules 6 to 11 under the FWCA.

Under the FWCA, it is also illegal to destroy, take, or possess the nests, eggs, or young of most native bird species in Ontario without a permit. This includes stick nests constructed by birds such as hawks, owls, ospreys, eagles, and herons.

A permit, or authorization, for activities that would otherwise not be allowable under the FWCA can be obtained from MNR.

FWCA - Applicability to the Project

During the wildlife active period (typically spring through autumn), the probability of wildlife being found in the Site and not leaving on their own accord is low. In the case that wildlife relocation is required, consultation with MNR would be required to obtain the necessary permits and approvals under the FWCA.

2.2.2. Species Conservation Act, 2025 (SCA)

Ontario's *Species Conservation Act, 2025* (SCA) (*S.O. 2025, c. 4, Sched. 10*) came into force on March 30, 2026, and replaced the former *Endangered Species Act, 2007* (ESA). The SCA establishes Ontario's current framework for conserving species at risk and regulating activities that may affect protected species or protected habitat, and is administered by the Ministry of the Environment, Conservation and Parks (MECP). The SCA reflects changes introduced through Bill 5 (*Protect Ontario by Unleashing Our Economy Act, 2025*), including a greater emphasis on registrations for certain activities, updated compliance tools, and revised approaches to habitat protection.

Under the SCA, protected species are identified through regulation (i.e., the *Protected Species in Ontario List – O.Reg. 60/26*), and the Act and supporting regulations set out prohibitions and conditions related to activities that may kill, harm, harass, capture, or take protected species, as well as activities that may damage or destroy protected habitat. Depending on the species, location, and activity, proponents may be required to proceed through a registry-based process (where eligible) and comply with prescribed rules or obtain a permit from MECP prior to undertaking work.

For the purposes of this EIS, Species at Risk screening and the initial field surveys were completed while the former *Endangered Species Act, 2007* (ESA) was in force. This draft has been updated to ensure consideration of the *Species Conservation Act, 2025* (SCA), including new policies, regulations, and current protected species listing and guidance available at the time of report preparation. Any project activities with the potential to affect protected species or protected habitat must be reviewed against the SCA requirements and applicable regulations at the time of detailed design and prior to commencement of on-site works, including confirmation of whether a registration pathway applies or whether a permit is required. Where protected species are identified and impacts cannot be avoided, early consultation with MECP is recommended to confirm requirements, timing, and documentation expectations.

ESA - Applicability to the Project

Within Ontario, the SCA applies to activities conducted by the public and all levels of government. Where a protected species or protected habitat may be present, project activities must comply with the SCA and its supporting regulations. If protected species or protected habitat are confirmed and impacts cannot be avoided, the proponent must determine whether the activity is eligible to proceed by registration (and comply with all prescribed rules) or whether a permit from MECP is required prior to proceeding.

2.2.3. Planning Act, 1990

The *Planning Act* was passed into law in 1990 and was recently amended in April 2022 by the *More Homes for Everyone Act*, with the most recent amendment in 2023. The *Planning Act* is provincial legislation that sets out the ground rules for land use planning in Ontario. It describes how land uses may be controlled and who may control them.

The *Planning Act* is the foundation for creating plans that guide development at both regional and municipal levels.

Planning Act - Applicability to the Project

The Planning Act applies across the province to all projects outside of federal land. Project activities must be in compliance with and conducted under the appropriate permit(s) of, the Planning Act.

2.2.4. *Provincial Planning Statement, 2024* (PPS)

The *Provincial Planning Statement* (PPS) was issued under Section 3 of the *Planning Act* (1990). The current PPS came into effect on October 20, 2024. It replaces the *Provincial Policy Statement* that 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 4.1- Natural Heritage, 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*. This manual recommends the approach and technical criteria for protecting natural heritage features and areas in Ontario.

The PPS identifies seven natural heritage features and provides planning policies for each. These features are:

- Significant wetlands (including coastal wetlands);
- Significant woodlands;
- Significant valleylands;
- Significant wildlife habitat (SWH);
- Significant areas of natural and scientific interest;
- Significant habitat of Endangered and Threatened species; and
- Fish habitat (detailed above).

Each of these features is afforded varying levels of protection subject to guidelines and/or regulations. Municipalities are the primary lead for implementing provincial policies, such as the PPS and other planning-related policies, through their official plans. Generally, special buffers and studies are prescribed based on the natural heritage features present and the land use proposed.

PPS - Applicability to the Project

The PPS, issued under Section 3 of the Planning Act by the Ministry of Municipal Affairs and Housing (MMAH), applies across the province to all projects outside of federal land.

The PPS 2024 continues to encourage municipalities to undertake watershed planning, especially in large, fast-growing areas, to manage water and wastewater services more effectively.

2.2.5. Conservation Authorities Act, 1990

The Conservation Authorities Act was originally legislated in 1946 but has undergone many amendments since. Approved changes came into effect on April 1, 2024. These changes revoked the existing 36 conservation authority-specific regulations and the regulation governing their contents and replaced them with one new minister's regulation governing prohibited activities, exemptions, and permits under the Conservation Authorities Act (Ontario Regulation 41/24, Prohibited Activities, Exemptions and Permits). This minister's regulation applies to all conservation authorities resulting in a clear and streamlined permitting process that protects people and property from natural hazards across Ontario (Government of Ontario 2024).

Section 28 Part VI of the Conservation Authorities Act identifies the regulation of areas over which authorities have jurisdiction. These regulations include prohibited activities in watercourses, wetlands, etc. such as development in areas that could be unsafe due to natural processes associated with flooding or erosion, and interference with, or alterations to, watercourses, wetlands, or shorelines.

The Conservation Authorities Act defines watercourses as:

> *"Watercourse (means a) defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs."*

The *Conservation Authorities Act* defines wetlands as:

> *"Wetland means land that, (a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface, (b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse, (c) has hydric soils, the formation of which have been caused by the presence of abundant water, and (d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which have been favoured by the presence of abundant water."*

Conservation Authorities Act - Applicability to the Project

The Study Area is under the jurisdiction of the Rideau Valley Conservation Authority (RVCA) under which the Conservation Authorities Act is applied through O. Reg. 41/24 (Prohibited Activities, Exemptions and Permits) Regulation. Proposed Project activities within an RVCA regulated area will require authorization from RVCA.

2.3. Municipal Policies and Legislation

This section outlines the municipal policies, by-laws, and planning documents that guide the protection and management of natural heritage features within the City of Ottawa. These local frameworks provide the specific requirements that must be considered as part of the proposed development.

2.3.1. City of Ottawa Official Plan

An Official Plan is a land use planning document that guides and shapes development by identifying where and under what circumstances specific types of land uses can be located. It is used to ensure that future planning development appropriately balances social, economic, and environmental interests of the community. As per the City of Ottawa Official Plan, 2022 (City OP), a natural heritage assessment is required to determine if significant natural features are present in or adjacent to the Site, followed by an assessment of the potential impacts to any identified natural environment feature from the proposed development.

The City's natural heritage features are listed in the City OP Subsection 4.8.1 Policy 3. Natural heritage features that are within a Natural Heritage System (NHS) are assessed by the City as having greater significance compared to features that are outside of the NHS. The NHS includes both Core Natural Areas and Natural Linkage Areas, both of which are found on Schedule C11. It is important to note that, as per 5.6.4.1 Policy 2, the edge of the NHS boundary would need to be verified on-site, as the City OP only displays to a certain level of detail. Where identified, the boundaries of any significant natural heritage features are to be noted and the potential for the proposed development to cause negative impacts is assessed.

City of Ottawa Official Plan - Applicability to the Project

The City's OP requires assessment of multiple natural heritage features, some of which may be present within or adjacent to the Site and may be potentially impacted by this proposed development. The Natural Heritage Features identified in the City's OP include the following:

- Significant wetlands
- Habitat for Endangered and Threatened Species (SAR)
- Significant woodlands
- Significant valleylands
- Significant wildlife habitat
- Areas of Natural and Scientific Interest (ANSI)
- Urban natural features
- Natural Environment Areas
- Natural linkage features and corridors
- Groundwater Features
- Surface water features, including Fish Habitat; and
- Landform Features

2.3.2. Tree Protection By-law No. 2020-340

This City of Ottawa *Tree Protection By-law* is a by-law that is set out to respect the protection of municipal trees and municipal natural areas in the City of Ottawa and trees on private property in the urban area of the City of Ottawa. City approval is required to permit the injury or destruction of any tree protected under the by-law.

By-law No. 2020-340 – Applicability to the Project

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

- All City-owned trees throughout the urban and rural area.
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are subject to a Planning Act application for Site Plan, Plan of Subdivision, or Plan of Condominium.
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are over 1 hectare in size.
- All distinctive trees, which are trees 30 cm or more in diameter at breast height on private properties within the urban area that are 1 hectare or less in size.

2.3.3. Zoning By-law No. 2026-50: Setback from Surface Water Features

City of Ottawa *Zoning By-law No. 2026-50* regulates development standards across the City, including minimum setbacks from surface water features to support the protection of surface water resources and related ecological and hydrologic functions. Section 404 (*Setback from Surface Water Features*) establishes setback requirements from applicable surface water features and identifies circumstances where development, site alteration, and associated grading or structures may be restricted within the setback area.

Zoning By-law No. 2026-50 – Applicability to the Project

For the purposes of this EIS, Zoning By-law No. 2026-50 (Section 404) is relevant because surface water features (including the on-site drainage feature and associated wetland communities) are present within the Study Area and are considered in the site design and impact assessment. The Project will be designed to maintain the required setback from applicable surface water features, and any works proposed within or near the setback area (e.g., grading, drainage realignment, servicing, or crossings) will be confirmed for compliance at detailed design.

- Setback distances and the basis of measurement (e.g., from the limit of the surface water feature/top of bank, as applicable) will be confirmed through detailed design drawings and, where required, field verification.
- Where the Project proposes works that could encroach into a required setback, the proponent will review applicable Zoning By-law provisions and pursue the appropriate approvals (e.g., redesign to avoid encroachment or relief/permissions where available and justified).
- Mitigation measures (e.g., erosion and sediment controls, construction limits, and restoration planting) will be implemented to protect the surface water feature and maintain ecological functions during construction and long-term operation.

3. Background Review

A desktop review of the existing natural heritage features identified within the Study Area was completed during preparation of this EIS to inform the studies required. Natural heritage features identified to require consideration in the City OP (as designated in City OP Schedules) were the primary focus. Further information collected from external sources was used to help inform of the functions of these features and to identify those not depicted on the City OP Schedules (e.g., endangered and threatened species habitat).

Information gathered from government websites / resources, site-specific reports produced by other professionals and consulting firms, and professional knowledge / interpretation has been incorporated, as appropriate. Furthermore, consideration has been given to wildlife occurrences (including SAR) reported up to 10 km away, due to the nature of desktop resources (i.e., online databases and atlases) with data presented in a 10 km x 10 km grid.

Overall, a variety of secondary sources were reviewed, the primary of which included the following:

Reports pertaining to the Study Area and immediate surroundings

- Spring Valley Trails: Phase 5 & 6 Environmental Impact Study and Tree Conservation Report (IBI, December 2022)

City of Ottawa Resources

- City of Ottawa Official Plan (City of Ottawa 2022b);
- geoOttawa interactive mapping tool (City of Ottawa 2025);
- City of Ottawa Environmental Impact Statement Guidelines (City of Ottawa 2023);
- Zoning By-law 2008-250 (Reference)
- Zoning By-law 2026-50 (City of Ottawa 2025);
- Tree Protection By-law No. 2020-340 (City of Ottawa 2021); and
- Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment (SWG; City of Ottawa 2022d).

Ontario wildlife atlases and observation records:

- Natural Heritage Information Centre (NHIC) Database (MNR 2026);
- Species at Risk Public Registry (Reference)
- Ontario Breeding Bird Atlas (BSC et al. 2006);
- Ontario Reptile and Amphibian Atlas (Ontario Nature 2019);
- Ontario Butterfly Atlas (TEA 2023);
- iNaturalist observation records (iNaturalist 2026);
- eBird HotSpot species lists (eBird 2026);

Conservation Authority resources:

- Rideau Valley Conservation Authority Public GeoPortal mapping (RVCA 2026).

Other provincial resources:

- Species-specific resources (such as recovery strategies, etc.), as required; and
- Agency Consultation, as required.

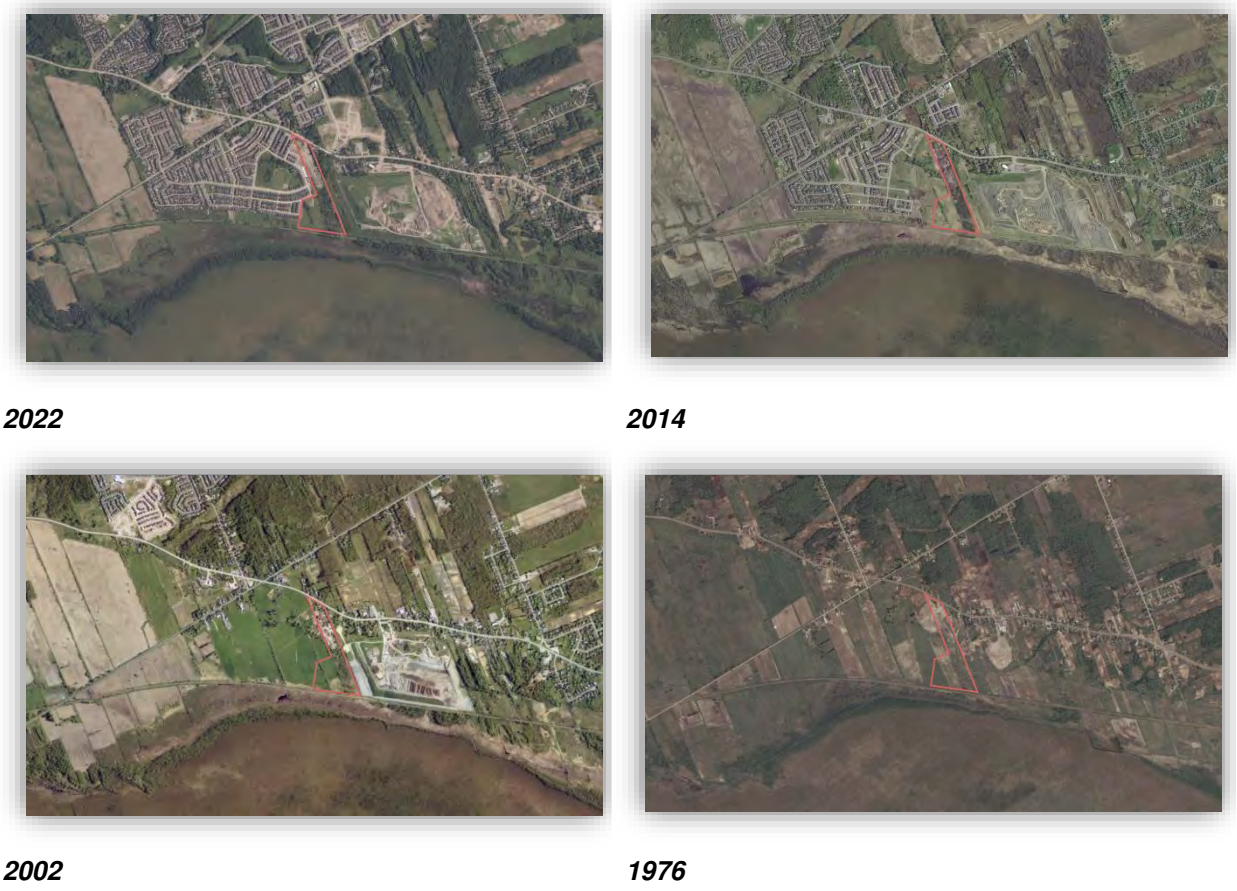
The following sections outline the relevant natural heritage background from secondary source review.

3.1. Historic Land Use

A desktop review of recent and historic aerial imagery illustrates land use patterns within and adjacent to the Study Area (City of Ottawa, 2019) (Figure 2). The surrounding landscape has been predominantly agricultural and industrial since at least 1976. Residential development to the west of the Study Area began expanding around 2005 and has continued to the present.

Within the 3252 Navan Road parcel, the northern portion of the property has been used primarily for soil and aggregate storage. The southern portion was in agricultural production prior to 1976 and has since regenerated into successional woodland habitat. A multi-use path is located immediately south of the property boundary and follows a former rail corridor.

Figure 2: Aerial Imagery Showing Land Use Changes Over Time



2022 ***2014***

2002 ***1976***

3.2. Landform, Geology, and Soils

The Study Area is located within the Ottawa Valley Clay Plains physiographic region. Its northern portion lies within a Sand Plains landform, while the southern portion transitions into a Clay Plains landform. These physiographic differences influence both surface conditions and hydrologic behaviour across the Site.

Surficial geology varies accordingly. The northern half of the Study Area is underlain by coarse-textured glaciomarine deposits—primarily sand and gravel with minor silt and clay—reflecting its sand plain setting. In contrast, the southern half contains fine-textured glaciomarine deposits composed mainly of silt and clay with minor sand and gravel. A localized pocket of colluvial material, including boulders, scree, and talus, is present near the centre of the Study Area.

Beneath these deposits, the bedrock geology consists of formations assigned to the Ottawa Formation, characterized by limestone with shale partings and localized sandstone layers in the basal portion.

These physiographic and geological conditions suggest that the southern half of the Study Area likely exhibits lower infiltration rates and supports damp to wet soils, favouring vegetation adapted to moisture-rich environments. Conversely, the coarse-textured soils and sand-dominated deposits in the northern half are expected to promote higher infiltration rates and support vegetation communities preferring comparatively drier conditions.

3.3. Aquatic Environment

The aquatic environment for this Study Area includes surface water, wetlands, and groundwater features, along with their physical and ecological functions. These features fall under both Conservation Authority policies and federal fisheries legislation.

Under the Conservation Authorities Act, surface water features and wetlands are regulated where they contribute to flood control, erosion prevention, hydrologic function, or ecological integrity. As a result, drainage features, ponds, streams, and wetlands within or near the Study Area may require review and permitting before any alteration occurs.

Under the Fisheries Act, any waterbody or wetland that provides direct or indirect fish habitat is protected, including features that supply flows, nutrients, or structure to downstream habitat. Both permanent and intermittent watercourses and their hydrologic connections must therefore be assessed for potential fish habitat implications.

3.3.1. Surface Water

Mapping from both the Rideau Valley Conservation Authority (RVCA, 2026) and the City of Ottawa (2026) identifies a watercourse associated with the subject property. Although the datasets differ slightly in alignment, both confirm the presence of a drainage feature along the southern portion of the lands. RVCA mapping depicts a channelized watercourse running along the eastern and southern property boundaries, while City mapping shows the feature flowing southwest across the southern half of the Site. In both representations, the drainage ultimately conveys flow westward toward a constructed compensation pond created through earlier development approvals. Updated alignments are illustrated in Figure 3.

Based on field interpretation and historic assessments, this feature is expected to possess a defined bed and banks and may therefore meet the revised Conservation Authorities Act (CAA) definition of a watercourse. The RVCA's Mud Creek Subwatershed Report (2018) previously documented a Headwater Drainage Feature (HDF) assessment at the Navan Road crossing, identifying the system as a natural, intermittent drainage feature with no evidence of channel modification. Although the assessment predates the current study, its characterization of the feature's headwater function remains relevant to understanding local hydrology.

However, the East Urban Community Environmental Management Plan (2013) indicates that the contributing catchment north of Navan Road is expected to be altered through planned development. As identified in that plan, upstream drainage will be redirected eastward through inline stormwater management infrastructure and outlet to

the east the BFI site. This redirection is now largely in place, and the hydrologic inputs reaching the watercourse at the subject property have been substantially reduced, with only the property immediately north of Navan Road continuing to contribute flows. The East Urban Community Phase 2 Community Design Plan (CDP), that was informed by the EMP, summarizes these findings, including the diversion of the headwaters north of Navan Road. These lands are currently under construction, with grading in proximity to the on-site drainage feature largely complete and the associated stormwater management infrastructure in place.

3.3.2. Floodplain and Regulated Limit

The Rideau Valley Conservation Authority (RVCA) administers development regulation under the Conservation Authorities Act through O. Reg. 41/24 – Prohibited Activities, Exemptions and Permits, which came into force on April 1, 2024. This regulation now governs all conservation authorities in Ontario and replaces previous CA-specific regulations, including the former O. Reg. 174/06. Under O. Reg. 41/24, RVCA regulates only those areas that pose natural hazard risks, including floodplains, erosion hazards, unstable soils, and watercourses and wetlands that meet the new provincial definitions.

Within the Study Area, RVCA has mapped a Regulation Limit associated exclusively with the Mer Bleue Bog Provincially Significant Wetland (PSW). This Regulation Limit reflects potential natural hazards associated with the PSW boundary and its hydrologic regime. Portions of the Regulation Limit extend into the broader Study Area; however, no part of this regulated area overlaps the Subject Property, and it does not interact with the proposed development footprint.

RVCA mapping confirms that there are no floodplains, erosion hazards, or other natural hazard features within the boundaries of the Subject Property. As such, no development activities proposed within the Subject Property fall under an RVCA permit requirement related to natural hazards. The location of the mapped Regulation Limit relative to the Study Area is shown in Figure 3.

3.3.3. Fish and Fish Habitat

The Study Area is located within the Rideau Valley watershed, more specifically within the Ottawa River East sub-watershed and the Mud Creek catchment (Rideau Valley Conservation Authority, 2018). Mud Creek supports a warmwater recreational and baitfish fishery, with 19 documented fish species occurring within the catchment. As a major tributary to Green's Creek, Mud Creek originates in the Mer Bleue Provincially Significant Wetland (PSW), an extensive hydrologically connected wetland complex that provides headwater inputs to the system.

Although the background review did not identify any site-specific information confirming the presence of fish within the drainage feature in the Study Area—and no past assessments have documented fish use of this feature—the proximity of the Study Area to the Mer Bleue wetland complex suggests that seasonal hydrologic connections may occur. In this context, the drainage feature may function as indirect fish habitat by contributing seasonal flows or hydrologic connectivity to downstream systems that support established fish communities within the Mud Creek catchment.

3.3.4. Wetlands

A review of the City of Ottawa's online mapping system (City of Ottawa, 2026) and provincial natural heritage information from the NHIC (MNR, 2026) identifies the Mer Bleue Provincially Significant Wetland (PSW) within the broader Study Area, as well as an unevaluated wetland located in the forested southern portion of the subject property.

Mer Bleue is a 7,700-year-old bog recognized internationally under the Ramsar Convention for its ecological significance (National Capital Commission, 2026). This extensive wetland complex supports a diverse range of wildlife and includes several regionally rare plant species. Mer Bleue forms part of the National Capital Commission's Greenbelt and is actively managed by the NCC (National Capital Commission, 2026).

3.4. Terrestrial Environment

Several specific natural heritage features require consideration for protection under the Ontario PPS. The protection of these features is generally administered by the City of Ottawa and the RVCA consistent with relevant provincial and federal legislation. These features are:

- Significant Woodlands;
- Significant Valleylands;
- Areas of Natural and Scientific Interest;
- Significant Wildlife Habitat (SWH);
- Species at Risk habitat;
- Provincially Significant Wetlands (detailed above); and
- Fish habitat (detailed above).

The subsections below provide a review of available background records to determine the potential presence of these natural heritage features within the Study Area. Where possible, natural heritage features have been illustrated in Figure 3.

3.4.1. Woodlands

Provincial NHIC mapping and recent aerial imagery identify the presence of wooded areas within the subject property and the broader Study Area. However, a review of historical imagery indicates that these forests are relatively young, with most areas established within the past 60 years. As a result, they do not meet the minimum age threshold required to be considered significant under the City of Ottawa's Significant Woodlands Guidelines (City of Ottawa, 2026).

3.4.2. Valleylands

The Site topography is generally flat and there are no Significant Valleylands present within the Study Area or identified on background review sources.

3.4.3. Area of Natural and Scientific Interest (ANSI)

The Mer Bleue Bog Life Science and Earth Science ANSIs are present within the southern limit of the Study Area, outside of the subject property.

3.4.4. Significant Wildlife Habitat (SWH)

Four categories of SWH exist within the eastern Ontario ecoregion 6E (MNR 2015). These include:

- Seasonal Concentration Areas of Animals;
- Rare Vegetation Communities or Specialized Habitat for Wildlife;
- Habitat for Species of Conservation Concern (not including Threatened or Endangered Species); and
- Animal Movement Corridors.

The potential for the presence of habitats matching the description of these SWHs within the Study Area was reviewed using available background information and aerial imagery, and it was determined that there may be "Seasonal Concentration Areas of Animals", "Specialized Habitat for Wildlife" and presence of "Habitat for Species of Conservation Concern".

Seasonal Concentration Areas of Animals

Suitable bat maternity habitat may be present within the upland forested areas onsite, as these woodlands contain mature deciduous and mixed trees that can provide cavities, loose bark, and other structural features commonly used by maternity-roosting bats. These habitat characteristics, combined with sheltered interior forest conditions, suggest that portions of the forested swamp habitat have the potential to support bat maternity colonies.

Rare Vegetation Communities or Specialized Habitat for Wildlife

Review of aerial imagery and background information did not identify any characteristics that would suggest the presence of Rare Vegetation communities.

Specialized Habitat for Wildlife

A review of aerial imagery and background information suggests that the habitat within the study area meets the size criteria and general characteristics for:

- Waterfowl Nesting Area SWH (in PSW only)
- Woodland Raptor (within subject property)
- Amphibian Breeding Habitat (within subject property)
- Amphibian Breeding Habitat – Wetland (within subject property)

Habitat for Species of Conservation Concern

The Significant Wildlife Habitat Technical Guide (MNR 2000) defines Species of Conservation Concern as globally, nationally, provincially, regionally, or locally rare (S-Rank of S2 or S3). S-Ranks are an indicator of commonness within the province of Ontario, on a scale of 1 to 5. S2 represents a species that is considered imperilled within Ontario. S3 represents a species considered as vulnerable within Ontario. The classification of Species of Conservation Concern does not include Species at Risk listed as Endangered or Threatened under the SCA or SARA. Species listed as Special Concern do not receive the same statutory species and habitat protections under Ontario's *Species Conservation Act, 2025* (SCA) as species listed as Endangered or Threatened; accordingly, the Special Concern species referenced below are not protected species (and do not have protected habitat) under the SCA on the Subject Property.

A review of background data (e.g., Ontario wildlife atlases and online databases; Appendix B) suggests that the following species of Special Concern may be found on the site:

- Eastern Wood-pewee (*Contopus virens*)
- Snapping Turtle (*Chelydra serpentina*)
- Golden-winged Warbler (*Vermivora chrysoptera*)
- Wood Thrush (*Hylocichla mustelina*)
- Monarch (*Danaus plexippus*)

In addition, Marsh Bird Breeding Habitat is likely present within the Mer Bleue Bog PSW to the south of the subject property.

Animal Movement Corridors

Given the proximity of the deciduous swamp habitat to the marsh communities associated with the Mer Bleue Bog PSW, it is likely that there is notable amphibian mobility between these two features. The mobility of amphibians between these two habitats could constitute an Amphibian Movement Corridor SWH and meet the threshold for significance. Further assessment is warranted.

3.5. Species at Risk and Species at Risk Habitat

In Ontario, Species at Risk (SAR) and protected habitat are regulated under the provincial *Species Conservation Act, 2025* (SCA), which came into force on March 30, 2026, and replaced the former *Endangered Species Act, 2007* (ESA). Protected species are identified through regulation (e.g., the *Protected Species in Ontario List - O. Reg. 60/26*), and the SCA establishes prohibitions and requirements related to activities that may kill, harm, harass, capture, or take protected species, or damage or destroy protected habitat. Depending on the species, location, and proposed activity, requirements may include proceeding through a registry-based process (where eligible) and complying with prescribed rules, or obtaining a permit from the Ministry of the Environment, Conservation and Parks (MECP) prior to undertaking work.

Because the Subject Property is located on non-federal land, the federal *Species at Risk Act* (SARA) applies only to the critical habitat of Schedule 1 migratory birds protected under the MBCA and Schedule 1 aquatic species. Species listed as Special Concern do not receive the same prohibitions and critical-habitat protections under SARA as species listed as Extirpated, Endangered, or Threatened; however, they may be considered in this assessment where they contribute to Significant Wildlife Habitat or other natural heritage policy considerations.

A desktop review of provincial and federal databases, supplemented by aerial imagery, identified potential habitat for several SAR within or adjacent to the Study Area. Based on this screening, ten Endangered or Threatened species have a moderate to high potential for occurrence, as summarized in Table 4 and detailed in Appendix C.

Table 4: Species at Risk with Occurrence Records and Suitable Habitat within the Study Area

Common Name	Scientific Name	S-Rank	SCA Status	SARA Status
BIRDS				
Bobolink	*Dolichonyx oryzivorus*	S4B	N/A	THR
Eastern Meadowlark	*Sturnella magna*	S4B	N/A	THR
Least Bittern	*Botaurus exilis*	S4B	N/A	THR
MAMMALS				
Little Brown Myotis	*Myotis lucifugus*	S4	END	END
Northern Myotis	*Myotis septentrionalis*	S3	END	END
Eastern Red Bat	*Lasiurus borealis*	S4	END	Under consideration
Hoary Bat	*Lasiurus cinereus*	S4	END	Under consideration
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END	Under consideration
Tri-colored Bat	*Perimyotis subflavus*	S3?	END	END
TREES				
Black Ash	*Fraxinus nigra*	S4	END	No Status
Butternut	*Juglans cinerea*	S2?	END	END

Notes:

S-Rank is an indicator of commonness in the Province of Ontario. A scale between 1 and 5, with 5 being very common and 1 being the least common.

SCA = Species Conservation Act, 2025 Status, SARA = Species at Risk Act, 2002 Status, END: Endangered

Bat Species at Risk

Three bat species (Eastern Red Bat, Hoary Bat, and Silver-haired Bat) were listed as Endangered in Ontario on January 27, 2025, under the former ESA, and remain protected under the SCA. As such, these species have been added as SAR having moderate to high probability of occurrence on the Site since Arcadis' previous ECR for this Project (Arcadis 2025a).

3.6. Wildlife and Wildlife Habitat

A review of current and historic aerial photos of the Study Area was used to identify potential wildlife habitat. Several species of fauna common to the City of Ottawa rural and urban areas are known to live in the habitats present within the Study Area. These species may include, but are not limited to:

- **Mammals:** Northern Raccoon, White-tailed Deer, Coyote, Eastern Gray Squirrel, Eastern Cottontail, among others.
- **Reptiles & Amphibians:** Eastern Gartersnake, American Toad, among others.
- **Birds:** American Crow, American Robin, Northern Cardinal, American Goldfinch, Black-capped Chickadee, Blue Jay, Song Sparrow, among others.

3.7. Trees

A review of recent and historical aerial imagery indicates that portions of the Subject Property support a notable amount of mature and regenerating tree cover, particularly along site boundaries and within lower-lying areas. These observations are consistent with the tree communities documented through previous field investigations.

Detailed information regarding tree species composition, size distribution, condition, retention opportunities, and proposed mitigation measures is provided in the Tree Conservation Report included as Appendix A to this Environmental Impact Study.

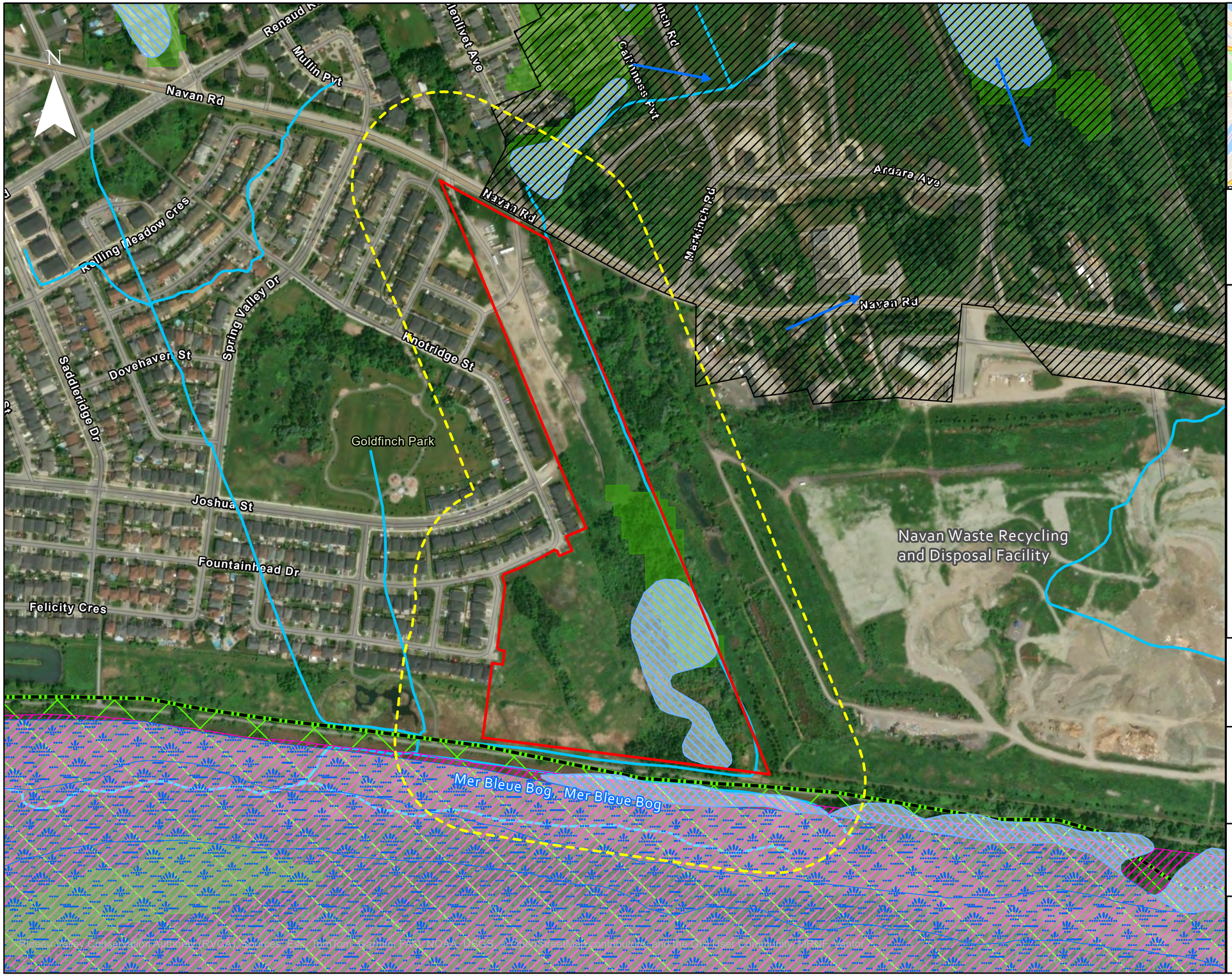
3.8. Summary of Natural Heritage Features

A summary of the known natural heritage features identified within the Site boundaries during the background review is summarized below in Table 4 and are presented in Figure 3. It should also be noted that the PPS indicates that development and site alteration shall be restricted in or near sensitive water features (including both surface water and groundwater features) such that these features and their related hydrologic functions will be protected, improved or restored, which may require mitigative measures and/or alternative development approaches. The City OP also includes these as natural heritage features defined in Ottawa's Environmental Impact Study (EIS) Guidelines, seeking to improve long-term integrity and connectivity of these features through land use planning and associated processes (City of Ottawa 2022).

Further background data is presented in Appendix A and Appendix B.

Table 5: Summary of Natural Heritage Features within the Study Area

Natural Heritage Feature	Present within Study Area	Justification	Further Assessment Required
Surface Water Features	Yes	A minor headwater drainage feature is mapped along the eastern portion of the subject property	**Yes**
Floodplain and Regulation Limits	Yes	The regulated area associated with Mer Bleue Bog is located within the Study Area	**Yes**
Fish and Fish Habitat	Yes	the proximity to the Mer Bleue wetland complex suggests that seasonal, indirect, fish habitat may be present	**Yes**
Provincially Significant Wetlands (PSWs)	Yes	A portion of the Mer Bleue Bog PSW is located in the southern part of the Study Area.	**Yes**
Significant Woodlands	No	The woodlands on site do not meet the age or size criteria for significance.	No
Significant Valleylands	No	No valleylands identified during review of satellite imagery.	No
Areas of Natural and Scientific Interest (ANSIs)	Yes	The Mer Bleue Bog Life Science and Earth Science ANSIs are located within the Study Area	No
Significant Wildlife Habitat	None identified in OP schedules	Potential for SWH / SAR needs to be determined following assessment of the suitable habitats on Site.	**Yes**
Species at Risk Habitat	Yes	Habitat for species at risk identified in review of aerial photos and background review.	**Yes**





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Study Area 120m
- Subject Site
- Proposed Future Drainage Path (CH2MHILL 2013)
- EUC Phase 2 Post-Development Catchment Area (CH2MHILL 2013)
- Provincially Significant Wetland (MNR, 2013)
- Unevaluated Wetland (MNR 2013)
- Significant Woodland (MNR 2013)
- Area of Natural and Scientific Interest (MNR 2007)
- RVCA Regulation Limit
- Watercourse (MNR, 2019)

Project:

Claridge Homes Spring Valley Trails

Title:

Phase 5 & 6 - Natural Heritage Screening

Prepared By:

FOTENN

Date:

3/31/2026

Figure: 3

4. Methodology

Based on the background review of the Project's natural heritage features and available wildlife occurrence records, the ecological surveys described below were undertaken to assess the potential impacts of the proposed development on the natural environment. These surveys followed industry-standard protocols and were completed to establish baseline environmental conditions, which were subsequently used to evaluate the potential for negative effects associated with Project development.

The assessment completed as part of this Environmental Impact Study is based on a combination of background review and field investigations undertaken to characterize existing natural heritage conditions and to evaluate the potential for negative effects associated with Project development. The ecological field investigations informing this EIS were largely completed between April and August 2020 in support of the original Environmental Impact Study prepared by WSP and submitted in October 2020. These surveys established baseline terrestrial, aquatic, and wildlife conditions within the Subject Site and the broader Study Area. A subsequent EIS update was completed by IBI Group, with supplemental fieldwork undertaken in May 2022 to address outstanding agency comments, with particular focus on confirming the form and function of an on-site Headwater Drainage Feature.

To support the current submission, Fotenn completed a site visit on March 26, 2026 to review existing site conditions and confirm the validity of the previous investigations. The site visit indicated that land use, vegetation communities, drainage features, and general environmental conditions remain consistent with those documented during the 2020 and 2022 field programs. As portions of the Site were snow-covered at the time of the visit, observations of vegetation, wetland and wildlife habitat conditions were general in nature, consisting of a review of visible community extent and land use, and were not a re-survey of these attributes; detailed characterization relies on the 2020 WSP and 2022 IBI field investigations. As a result, the surveys and field observations previously completed by WSP and IBI remain relevant and are relied upon as representative of current existing conditions for the purposes of this assessment.

A summary of field investigations informing this EIS is provided in the Fieldwork Summary table below, in accordance with Appendix 7 of the City of Ottawa EIS Guidelines.

Table 6: Fieldwork Summary

Date	Time	Personnel (Qualifications)	Weather Conditions	Purpose
December 17, 2019	08:30 – 15:00	WSP – A. Orr, C. Pytlak	-3 °C, variable clouds, light snow in afternoon, slight breeze	General field evaluation; tree survey
April 7, 2020	09:00 – 12:15	WSP – A. Rous, C. Pytlak	7 °C, sunny and clear, gentle wind	Headwater drainage feature assessment (visit 1)
April 28, 2020	20:15 – 21:30	WSP – C. Pytlak	10 °C, clear skies, no wind	Amphibian breeding survey 1; bat acoustic survey 1
May 27, 2020	08:00 – 10:30	WSP – A. Rous, C. Pytlak	34 °C, sunny and clear, light wind	Headwater drainage feature assessment (visit 2)
May 28, 2020	20:30 – 21:45	WSP – C. Pytlak	25 °C, overcast, drizzle, no wind	Amphibian breeding survey 2; bat acoustic survey 2

Date	Time	Personnel (Qualifications)	Weather Conditions	Purpose
June 2, 2020	07:00 – 08:30	WSP – C. Pytlak	10 °C, scattered clouds, slight breeze	Breeding bird survey 1; grassland SAR bird survey 1 (Bobolink and Eastern Meadowlark)
June 16, 2020	21:15 – 22:30	WSP – C. Pytlak	22 °C, clear, no wind	Amphibian breeding survey 3; bat acoustic survey 3
June 22, 2020	06:30 – 08:15	WSP – C. Pytlak	22 °C, scattered clouds, light wind	Breeding bird survey 2; grassland SAR bird survey 2 (Bobolink and Eastern Meadowlark)
July 2, 2020	07:00 – 07:30	WSP – C. Pytlak	22 °C, scattered clouds, light wind	Grassland SAR bird survey 3 (Bobolink and Eastern Meadowlark)
July 23, 2020	08:00 – 14:00	WSP – A. Orr	27 °C, overcast, no wind	ELC survey; vegetation survey
July 28, 2020	10:00 – 12:00	WSP – C. Pytlak	28 °C, sunny, no wind	Tree survey (growing season condition follow-up)
May 13, 2022	Mid-Day	IBI Group - Lindsay Jackson, Brittany Moore	~26 °C, Partly cloudy, light wind	Supplementary headwater drainage feature assessment
March 26, 2026	9am – 2:30pm	Fotenn - Alex Zeller	~5°C, Partly Sunny Spring melt; partial snow cover.	Confirmatory site visit (general conditions, drainage feature and Navan Road culvert)

To evaluate potential natural heritage features within the Study Area and to establish baseline conditions, the following studies have been completed to date:

Aquatic Environment

- Headwater Drainage Feature (HDF) Assessment [WSP & IBI]

Terrestrial Environment

- Ecological Land Classification [WSP]
  - Vegetation Survey, including rare plants [WSP]
  - Wetland Verification / Delineation [WSP]
  - Woodland Delineation [WSP]
- Significant Wildlife Habitat Assessment
  - Amphibian Breeding Surveys [WSP]
  - Breeding Bird Surveys [WSP]
  - Bat acoustic survey [WSP]
  - General habitat assessment for SCC [WSP]
  - Incidental SWH observations [WSP]

- Incidental Wildlife
    - Visual and auditory observations of wildlife during all field studies [WSP]

Species at Risk

- Identification of potential SAR and SAR habitat [WSP]
- Butternut Search [WSP]
- Black Ash Search [**Pending**]
- Breeding bird survey [WSP]
- Bobolink and Eastern Meadowlark surveys [WSP]
- SAR Bat Acoustic Survey [WSP]
- Incidental SAR and SAR habitat observations [WSP, IBI, and Fotenn]

Trees

- Inventory of trees within the subject property [WSP]
- Distinctive tree assessment [WSP]

Where applicable, a depiction of field survey locations is included at the end of this section in Figure 4.

4.1. Aquatic Environment

The following methods outline the approach used to characterize the aquatic environment and are based on field investigations and desktop analyses previously completed as part of the 2020 Environmental Impact Study prepared by WSP and the subsequent 2022 Environmental Impact Study prepared by IBI, which together documented surface water features, wetlands, and aquatic habitat functions within the Study Area.

4.1.1. Surface Water Assessment

As part of the aquatic environment assessment, an evaluation was undertaken to determine whether identified surface water features within the Study Area meet the definition of a "watercourse" under the revised *Conservation Authorities Act*. This evaluation incorporated the results of the Headwater Drainage Feature (HDF) assessment described below, together with updated observations of surface water flow conditions informed by changes in upstream land use and servicing north of Navan Road. These lines of evidence were used to assess the presence, frequency, and continuity of surface water flow, and to support the classification of surface water features under the current legislative framework.

4.1.2. Headwater Drainage Feature Assessment

Headwater Drainage Feature (HDF) assessments were completed by WSP and IBI, as documented in previous reports, to characterize the drainage features present within the Study Area and to confirm their form and function. These assessments were conducted in accordance with the Evaluation, Classification and Management of Headwater Drainage Features Guidelines (the "HDF Guidelines"; TRCA and CVC 2014). A supplementary HDF assessment was completed by IBI ecologists on May 13, 2022 to confirm the extent and characteristics of drainage features within the Study Area, followed by additional field investigations during spring freshet conditions in 2023 to collect baseline information under representative flow conditions.

All HDF assessments followed the rapid assessment approach outlined in the HDF Guidelines, applying the Unconstrained Headwater Sampling methodology (Section 4, Module 11) of the Ontario Stream Assessment

Protocol (Stanfield 2017). Field observations documented channel morphology, channel and wetted width, bankfull depth, water depth, substrate composition, and in-stream cover, providing the basis for feature classification and the development of management recommendations.

4.1.3. Wetland Verification / Delineation

Wetland identification and delineation for the Subject Site were informed by Environmental Impact Studies previously completed by WSP (2020) and IBI (2022). These studies applied Ecological Land Classification (ELC) to identify vegetation communities with wetland attributes and to delineate the extent of wetland features based on community composition and site observations. The results of this work established the baseline understanding of wetland presence and extent within the Study Area and are relied upon for the purposes of this EIS.

While detailed, wetland-specific field methodologies were not separately documented in those studies, wetland delineation was integrated into the broader ELC program through vegetation assessment and interpretation. Wetland boundaries were inferred based on the dominance of hydrophytic vegetation and associated ecological indicators identified during ELC fieldwork and were confirmed through site verification where access permitted. This ELC-based approach provides an appropriate basis for evaluating wetland features within the context of the EIS.

4.2. Terrestrial Environment

The terrestrial environment section provides a brief overview of the vegetation communities and wildlife habitat within the Study Area. Field studies and desktop review inform the identification of key natural heritage features.

4.2.1. Vegetation Communities / Ecological Land Classification (ELC)

The Ecological Land Classification (ELC) mapping and associated vegetation inventory for the Subject Site were carried forward from environmental impact studies previously completed by WSP (2020) and IBI (2022). These earlier field investigations form the basis for the characterization of vegetation communities within the Study Area and were reviewed and relied upon for the purposes of this EIS.

Vegetation communities were classified using the Ecological Land Classification for Southern Ontario system and delineated through interpretation of aerial photography, with boundaries refined through site-based observations consistent with ELC protocol. Field assessments were undertaken by systematically traversing accessible portions of the Site. Where site access was restricted, vegetation communities were assessed from adjacent public rights-of-way or from the property boundary to the extent visible.

In accordance with ELC standards, vegetation communities are generally required to exceed a minimum area threshold to be identified as discrete units. Smaller or highly disturbed areas were characterized at the vegetation community level or incorporated as inclusions within adjacent communities. In limited cases where smaller ecosites were relatively undisturbed and clearly representative of a defined vegetation type, a more detailed classification was applied.

Updated ELC vegetation type codes currently in use across Southern Ontario were applied for reporting purposes, providing an accurate and contemporary representation of the vegetation communities present within the Study Area.

4.2.2. Woodlands

The assessment of woodlands within the Study Area builds upon the earlier environmental work completed by WSP as part of the 2020 Environmental Impact Study. The evaluation approach applied in this EIS has been updated to reflect changes in City of Ottawa policy and guidance since that time and differs from the methodology applied in the earlier submission.

Woodlands within the Study Area were assessed for significance in accordance with the City of Ottawa Official Plan (2022) and the Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment (City of

Ottawa, 2022), which replace the former policies applied under Official Plan Amendment No. 179. This updated framework introduces revised screening and evaluation considerations for determining woodland significance and informing impact assessment.

For the purposes of screening, any treed area meeting the definition of a “woodland” under the Forestry Act, R.S.O. 1990, c. F.26, or classified as forest under the Ecological Land Classification for Southern Ontario, was considered eligible for evaluation. Initial screening criteria included woodland size and age thresholds, with Ecological Land Classification (ELC) mapping used to determine woodland extent and size, and interpretation of historic aerial imagery used to estimate woodland age.

4.2.3. Amphibian Surveys

Amphibian breeding surveys referenced in this report are based on the field investigations completed by WSP in 2020. These surveys were undertaken to evaluate and confirm the presence of candidate Amphibian Breeding Habitat for Significant Wildlife Habitat (SWH) within the Study Area and followed the Marsh Monitoring Program – Participant’s Handbook for Surveying Amphibians (Bird Studies Canada, 2008).

In accordance with the survey protocol, three amphibian call surveys were conducted on April 28, May 28, and June 16, 2020, with surveys spaced at least two weeks apart. Surveys began no earlier than one-half hour after sunset and were conducted under suitable weather conditions, with minimum night air temperatures of approximately 5 °C, 10 °C, and 17 °C for each respective visit. Survey locations were selected to coincide with areas of suitable candidate amphibian breeding habitat within the Study Area, including vernal pools and other surface water features.

Each survey consisted of standing at a predetermined survey station for a three-minute listening period to record calling amphibians. Calling activity of individuals estimated to be within 100 metres of the observation point was documented, while individuals beyond 100 metres were recorded as occurring outside the count radius. Calling intensity was classified using the following standardized abundance codes:

- **Code 1**: Calls not simultaneous; number of individuals can be accurately counted.
- **Code 2**: Some calls simultaneous; number of individuals can be reliably estimated.
- **Code 3**: Calls continuous and overlapping; number of individuals cannot be estimated.

In areas where suitable amphibian breeding habitat was identified, vernal pools (if present) were also visually examined during daytime site visits for egg masses and amphibian larvae. These inspections were conducted between April and June, when amphibians are typically concentrated around breeding habitats, and were completed in conjunction with other vegetation and wildlife field investigations.

Refer to Figure 4 for survey locations.

4.2.4. Breeding Bird Surveys

Diurnal breeding bird surveys referenced in this report were conducted to evaluate and confirm the presence of Significant Wildlife Habitat (SWH) for breeding birds, as well as habitat for Species at Risk (SAR) and Species of Conservation Concern (SCC), within the Study Area. Field investigations were completed by WSP in 2020 and were undertaken in accordance with the Ontario Breeding Bird Atlas – Guide for Participants (Bird Studies Canada, 2001).

Two breeding bird surveys were completed during the breeding season on June 2 and June 22, 2020, under suitable weather conditions. Surveys consisted of five-minute point-count observations conducted at established survey locations to document species presence and estimate relative abundance across the habitat types present within the Study Area.

To supplement the point-count data, wandering transect (area) searches were also completed by traversing the Study Area on foot. These searches involved recording all bird species observed or heard and documenting associated breeding evidence using standard Ontario Breeding Bird Atlas criteria (e.g., possible, probable, or confirmed breeding). The combined use of point counts and transect searches provided comprehensive coverage of available habitats and supported the assessment of breeding bird SWH and SAR/SCC habitat within the Study Area.

Refer to Figure 4 for survey locations.

4.2.5. Habitat for Species of Conservation Concern

Summarized below are Species of Conservation Concern (SCC) identified as having a potential likelihood of occurrence based on the assessments completed as part of the 2020 Environmental Impact Study prepared by WSP. These determinations were informed by available records and the presence of suitable habitat within the Project's Study Area and are documented in Appendix B. Species identified through this assessment include Black Tern, Eastern Wood-Pewee, Purple Martin, Short-eared Owl, Eastern Musk Turtle, Northern Map Turtle, Snapping Turtle, Western Chorus Frog, Monarch, and Northern Long Sedge. Suitable habitat for the majority of these species is associated with the Mer Bleue cattail marsh, which is located outside of the Subject Property.

Due to site access limitations, vegetation inventories and wildlife surveys undertaken to identify the presence or absence of SCC species and associated habitat were limited to areas within the Subject Property and observations from the public pathway along the southern boundary. In addition to targeted survey work, general habitat observations relevant to SCC with potential to occur were recorded and are summarized in Table 4 and Appendix C, with supporting habitat requirements provided in Appendix B.

4.3. Species at Risk

The assessment of Species at Risk (SAR) and associated habitat within the Study Area was informed by a combination of desktop screening and field-based surveys. Most of this work was completed by WSP Canada Inc. as part of the 2020 Environmental Impact Study (EIS) and is relied upon for the purposes of this updated assessment.

Ecological Land Classification (ELC) mapping, wildlife surveys, and targeted SAR screening were used to identify candidate habitat with the potential to support SAR and Species of Conservation Concern (SCC). Species listed in Table 4 and Appendix C were further evaluated based on their known habitat requirements and the likelihood of occurrence within the Study Area. This screening approach was informed by habitat descriptions and significance criteria outlined in the Natural Heritage Reference Manual (MNR, 2000), supplemented by background records from provincial and federal databases, as well as air-photo interpretation to confirm the presence, distribution, and extent of suitable habitat.

The results of the SAR and SCC habitat screening are documented in Appendix D – Species at Risk Screening and form the basis for determining which species and habitats are carried forward for evaluation in this EIS.

Bobolink and Eastern Meadowlark

Field surveys to determine the presence or absence of Bobolink and Eastern Meadowlark were completed by WSP Canada Inc. as part of the 2020 Environmental Impact Study (EIS), using the Ministry of Natural Resources and Forestry's Bobolink and Eastern Meadowlark Survey Protocol (MNR, 2011). Under Ontario's Species Conservation Act, 2025 (SCA), these species are not protected species (and do not have protected habitat) on the Subject Property. Surveys consisted of establishing transects across suitable meadow habitat, with survey stations located at approximately 250-metre intervals along each transect. Targeted Bobolink and Eastern Meadowlark surveys were conducted concurrently with the two breeding bird surveys described above (June 2 and June 22, 2020), with an additional survey visit completed on July 2, 2020.

During surveys, the qualified biologist recorded all visual and auditory observations of Bobolink and Eastern Meadowlark, including sex (where identifiable), general behaviour, and interactions with conspecifics and other bird species. Observations of Bobolink and Eastern Meadowlark encountered while travelling between point-count stations were also documented.

General habitat conditions were assessed at each survey station, including vegetation community classification, estimated relative cover of grasses and broad-leaved plants, and the presence of grass and forb litter suitable for nesting.

Butternut and Black Ash Inventory

A search for Butternut (Juglans cinerea) trees was completed by WSP Canada Inc. as part of the 2020 Environmental Impact Study (EIS) and was integrated with the tree and vegetation inventories undertaken at that time. The survey involved systematic pedestrian coverage of the Study Area to identify any Butternut specimens. For each individual encountered, general health, diameter at breast height (DBH), and UTM coordinates were recorded. Where warranted, a Butternut Health Assessment (BHA) was completed to fully evaluate tree condition in accordance with provincial guidance.

Black Ash *(Fraxinus nigra*) was considered as part of the Species at Risk screening; however, a targeted transect-based survey for this species was not completed due to seasonal constraints at the time of fieldwork. Identification and formal health assessments of Black Ash rely on site conditions and phenological characteristics best observed during the growing season; a dedicated transect survey will be completed during the growing season as part of detailed design, prior to site clearing, and reported in an EIS addendum.

Bats and Bat Habitat

Acoustic monitoring of bat activity was undertaken to evaluate the presence or absence of Species at Risk (SAR) bats within the Study Area. This survey work was completed by WSP Canada Inc. as part of the 2020 Environmental Impact Study (EIS). Three acoustic surveys were conducted using a Wildlife Acoustics Echo Meter Touch 2 Pro ultrasonic detector and were completed concurrently with the amphibian breeding surveys. Surveys consisted of recording bat calls for a ten-minute period at survey locations throughout the Study Area and were conducted approximately one-half hour after sunset, when bats typically emerge from roosts to forage. The results of the acoustic monitoring were used to assess potential use of the Study Area by SAR bat species.

4.4. Incidental Wildlife

A wildlife assessment within the property was completed through incidental observations while on site. This work was generally undertaken by WSP Canada Inc. as part of the 2020 Environmental Impact Study (EIS) submission. Incidental observations of wildlife, as well as other wildlife evidence such as dens, tracks, and scat, were documented through observational notes, photographs, and UTM coordinates. These observations were used to substantiate baseline ecological conditions and support conclusions regarding the overall ecological function of the Study Area.

Incidental wildlife observations are documented in Appendix E.

4.5. Trees

Tree-related information summarized in this Environmental Impact Study is supported by a detailed Tree Conservation Report (TCR), provided in Appendix A. The tree inventory, survey methods, and assessment information are based on field investigations completed as part of the WSP (2020) Environmental Impact Study and Tree Conservation Report, that included tree inventory, condition assessment, and evaluation in accordance with City of Ottawa requirements. A confirmatory site visit conducted in March 2026 indicated that site conditions remain largely unchanged. Readers are referred to Appendix A for full details regarding tree survey methods, inventory results, and mitigation measures supporting this EIS and for additional study requirements that are proposed.

4.6. Impact Assessment Approach

The evaluation of natural heritage features within the Study Area was undertaken in accordance with the Natural Heritage Reference Manual (MNR, 2010), the Provincial Planning Statement (2024), the City of Ottawa Official Plan, and other applicable municipal policies and guidelines. Together, these documents provide the technical and policy framework used to identify, characterize, and evaluate the presence, extent, ecological value, and function of natural heritage features, as well as to determine their significance at the provincial and/or municipal scale.

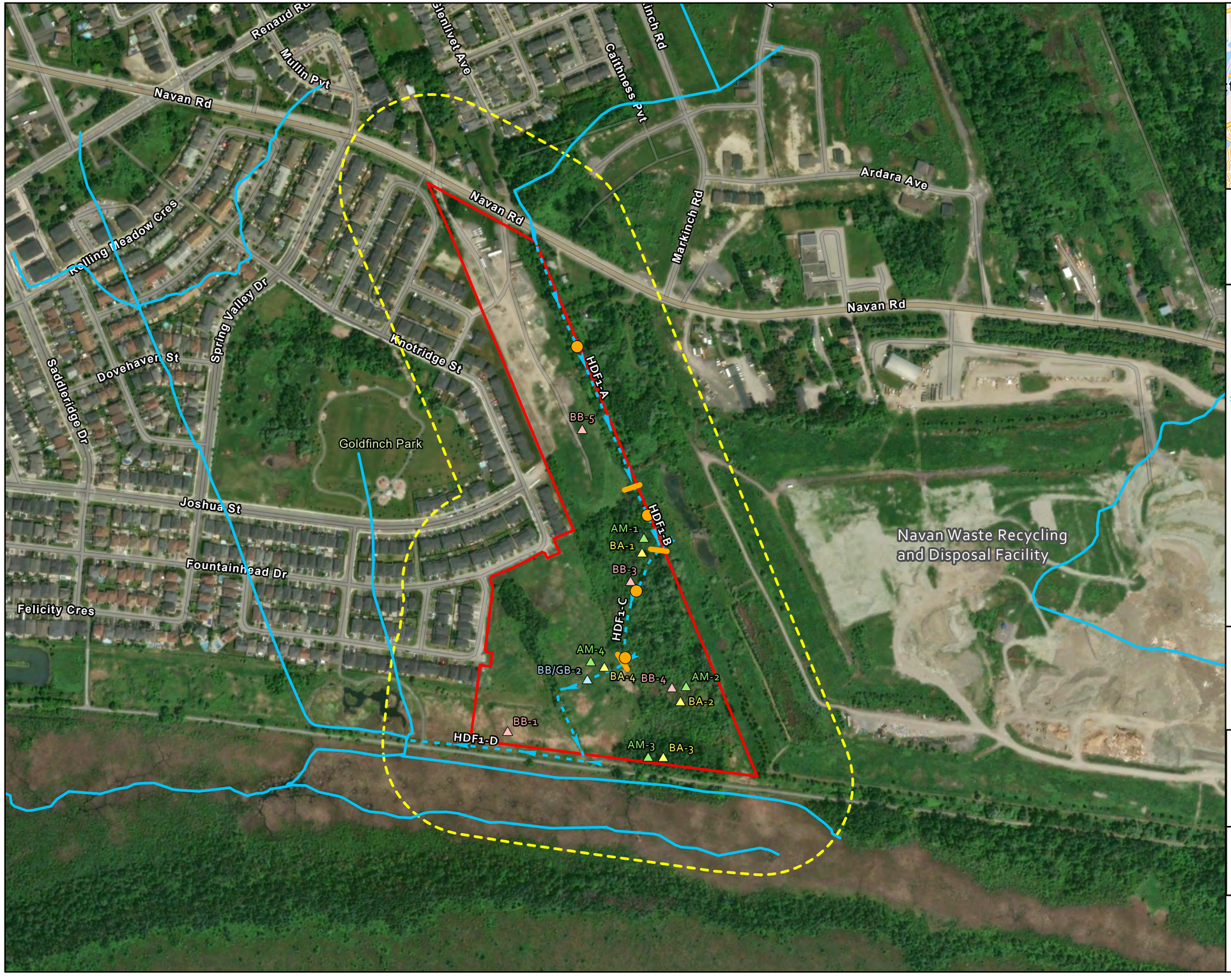
As noted above, natural heritage features were identified through a combination of background review, desktop screening, and review of existing site-specific studies. Where features were identified as potential or candidate natural heritage features, the assessment relied on site-specific field investigations completed by qualified professionals to confirm their presence, define their spatial extent, and characterize their ecological attributes, functions, and sensitivity. For features not designated as provincially significant, site-specific findings were evaluated against the criteria and guidance outlined in provincial and municipal documents to determine their relative importance and policy standing.

Following identification and characterization, the Environmental Impact Study (EIS) process compares the confirmed natural heritage features against the proposed development concept and associated project activities, including clearing, grading, servicing, stormwater management, and long-term land use changes. This comparative assessment is used to identify potential direct, indirect, and cumulative impacts that may arise during both construction and post-construction phases of the Project.

Identified impacts are evaluated based on commonly accepted EIS criteria, including the magnitude, geographic extent, frequency, duration, and nature (e.g., reversible or irreversible, temporary or permanent) of potential effects on each feature and its associated ecological functions. This approach allows for a clear understanding of how Project activities may interact with natural heritage resources and whether those interactions could result in negative effects as defined by applicable policy.

Where potential negative effects are identified, mitigation measures are developed and proposed in accordance with the mitigation hierarchy, prioritizing avoidance of impacts, followed by minimization, restoration, and, where necessary, compensation. Mitigation measures are tailored to the specific feature and impact pathway and may include design refinements, timing restrictions, protective setbacks or fencing, habitat restoration, construction controls, and post-construction management or monitoring commitments.

The assessment process also identifies any outstanding regulatory or permitting requirements associated with impacts to natural heritage features, including approvals, registrations, or authorizations that may be required under provincial or federal legislation or municipal by-laws. These requirements are summarized to inform subsequent stages of planning, detailed design, and implementation, ensuring that the Project proceeds in compliance with applicable policy and regulatory frameworks.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Subject Site
- Study Area 120m
- Watercourse (MNRF, City of Ottawa)
- Sampled Headwater Drainage Feature and Flow Direction
- Headwater Drainage Feature Sampling Location (WSP 2020)
- Headwater Drainage Feature Reach Limit (WSP 2020)
- Amphibian Breeding Survey Station (WSP 2020)
- Bat Acoustic Survey Station (WSP 2020)
- Breeding Bird Survey Station (WSP 2020)
- Grassland Bird Survey Station (WSP 2020)

Project:

Claridge Homes Spring Valley Trails

Title:

Phase 5 & 6 - Field Survey Locations

Prepared By:

FOTENN

Date:

4/1/2026

Figure: 4

5. Field Investigation Results

Field investigations forming the basis of this updated EIS were originally completed by WSP Canada Inc. as part of the 2020 Environmental Impact Study (EIS) submission, with subsequent supplementary work documented through the IBI Group 2022 EIS addendum. These studies provide the primary characterization of existing environmental conditions within the Study Area. Where feasible, existing conditions were reviewed through a single site visit completed on March 26, 2026, undertaken to verify that site conditions remain generally consistent with those described in the earlier studies and to support the interpretation of results under current policy and legislative frameworks. The following sections summarize the findings of these investigations and describe the existing conditions relevant to the Project.

5.1. Aquatic Habitat Assessment

The following subsection provides a summary of the findings from the aquatic field investigations completed within the Study Area, focusing on the offline/quarry pond and the headwater drainage features located along Barnsdale Road and Highway 416. These surveys were undertaken to characterize existing surface-water conditions, confirm the presence and function of fish habitat, and document hydrologic connectivity relevant to downstream systems. Together, these results establish the baseline aquatic conditions needed to assess potential impacts associated with the proposed development and to inform appropriate mitigation and management measures.

5.1.1. Surface Water Assessment

In accordance with the revised Conservation Authorities Act and the associated Ontario Regulation 41/24, the headwater drainage features within the Study Area were also assessed to determine whether they meet the current provincial definition of a “watercourse.” Under the Act, a watercourse is defined as a defined channel with a bed and banks in which a flow of water regularly or continuously occurs. The 2020 headwater drainage feature assessments documented the presence of defined channels with intermittent or minimal surface flow, supported primarily by upstream catchment contributions and seasonal conditions.

As noted above, observations from the March 26, 2026 site visit indicate that upstream flows have been substantially reduced, with only localized standing water observed during spring melt conditions and no evidence of regular or continuous flow. Based on these findings, and given the absence of sustained hydrologic input under current conditions, these features no longer meet the provincial definition of a watercourse for the purposes of Conservation Authorities Act regulation. However, the features continue to be assessed through the Environmental Impact Study process due to their localized hydrologic and ecological functions and their relevance under municipal policy.

Accordingly, based on current site conditions, the headwater drainage features within the Study Area do not meet the definition of a watercourse as defined under the Conservation Authorities Act.

5.1.2. Headwater Drainage Feature Assessment

Site investigations were initially completed on April 7 and May 27, 2020, by WSP Canada to characterize site conditions and evaluate the form and function of the headwater drainage feature located within the subject property. These investigations identified four distinct reaches, based on variations in riparian and terrestrial habitat, as well as physical modifiers such as road crossings and culverts.

A subsequent site visit was conducted on May 13, 2022, as part of a revised Environmental Impact Study to confirm site characteristics and re-assess the form and function of the headwater drainage feature. This field assessment refined and validated the findings of the October 2020 WSP assessment (Section 5.2.1 of the WSP Report; Appendix B), considering changes to upstream drainage conditions associated with approved development north of Navan Road. Since the 2020 assessment, stormwater formerly conveyed from upstream headwaters and collected within the Navan Road right-of-way has been approved for redirection into newly constructed stormwater management

infrastructure associated with an unrelated residential subdivision to the north, effectively removing the majority of upstream contributing flows to the drainage features within the Study Area.

As documented in the 2022 EIS, this redirection results in the removal of approximately 84% of the original contributing catchment area and was approved by the City of Ottawa, Rideau Valley Conservation Authority, and Fisheries and Oceans Canada, including associated habitat compensation requirements. While the original WSP Headwater Drainage Feature Assessment assigned a management recommendation of "Conservation" to all reaches, the reduction in contributing catchment area identified in 2022 resulted in revised management recommendations for portions of the system to "Maintain/Replicate Terrestrial Linkage," reflecting the diminished hydrologic function of the features while recognizing their remaining terrestrial and ecological roles.

A site visit undertaken on March 26, 2026 indicated that the physical form of the feature remains consistent with the observations documented during the 2022 assessment. The visit observed no sustained surface flow within the headwater drainage features, with only localized standing water present during a period of spring melt, consistent with the substantial reduction in upstream hydrologic contributions, with only the property immediately north of Navan Road continuing to drain to the feature. The following sections describe the characteristics and existing conditions of each of the four reaches identified through the 2020 and 2022 assessments. Feature classification and associated management recommendations are summarized in Table 7. The locations of the Headwater Drainage Feature (HDF) survey points are shown in Figure 4, and recommended management approaches are illustrated in Figure 6.



Photo 1: *Image taken at culvert south of Navan Road on March 26, 2026. Weather around 2 degrees with snow melting. No water was observed flowing from the culvert as noted by frozen surface water at culvert exit. Only standing water was observed in the drainage*

The management recommendations proposed herein are intended to provide a framework to guide future development while maintaining the ecological and hydrological function that these features have in the natural heritage system. The following provides a summary of the intent for each of the proposed management recommendations, as described in the HDF Guidelines (TRCA and CVC 2014):

- **Protection:** Protect and/or enhance the existing feature and its riparian corridor in-situ.
- **Conservation:** Maintain, relocate, and/or enhance drainage feature and its riparian zone corridor.
- **Mitigation:** Replicate or enhance functions through enhanced conveyance measures. Flows should be conveyed to the appropriate downstream receiver.
- **Maintain Recharge:** Maintain overall water balance through measures to infiltrate clean stormwater.
- **Maintain/Replicate Terrestrial Linkage:** Maintain or replicate the terrestrial corridor between features.
- **No Management Required:** Incorporate flow conveyance into standard stormwater solutions.

The following sections summarize the findings for each identified reach and present the corresponding management recommendations.

Reach HDF1-A

This reach enters the subject property from a culvert running beneath Navan Road and flows south along the eastern boundary of the property. The reach slopes toward its downstream limit and is channelized between a woodlot to the east and a built-up area to the west that has historically been used for sand and gravel storage. A small stand of regenerating forest is present along the western edge of the channel and provides a buffer between the adjacent land use and the drainage feature, allowing a defined channel to form along the property boundary and convey flows to downstream reaches.

During field investigations conducted by WSP in April and May 2020, this reach exhibited minimal surface flow, with conditions observed to be largely dry during the second visit. As part of a subsequent Environmental Impact Study update, a site visit completed by IBI on May 13, 2022 refined the characterization of this reach and documented an approximate channel depth of 120 mm and a bankfull width of approximately 1.3 m. The reach was observed to lie within a successional regenerating poplar forest along the right (east) bank and scrubland habitat along the left (west) bank. No in-stream vegetation was noted, apart from hydrophilic terrestrial vegetation along the channel margins.

Substrate within this reach is dominated by silt, with sand as the subdominant component. Deposition patterns are consistent with sheet flow erosion and in-stream erosion, and it is likely that erosion from adjacent land uses contributes to sediment deposition within the channel. The reach exhibits a slight gradient that allows water to flow southward; however, no defined pools were observed. No fish or wildlife were recorded during the 2020 or 2022 field surveys.

A subsequent site visit undertaken on March 26, 2026 indicated that the physical form of this reach remains consistent with that documented during the 2022 assessment. No surface flow was observed at the Navan Road culvert, and only localized standing water was present during a period of spring melt. These observations indicate that upstream hydrologic contributions have been substantially reduced, consistent with the redirection of flows to stormwater management infrastructure now in place within the residential subdivision north of Navan Road. Given the lack of sustained flow and observed site conditions, no fish are expected to occur within this reach under current conditions.

Given these characteristics, this Reach HDF1-A receives a management recommendation of "Maintain/Replicate Terrestrial Linkage".

Reach HDF1-B

This channelized reach continues along the eastern boundary of the subject property and is characterized by a change in land-use context, with an increased presence of regenerating scrubland and forest. A naturalized grassy berm occurs to the east of the defined channel, while a regenerating poplar forest stand is present to the west. During the 2020 field investigations, this reach exhibited minimal surface flow. A subsequent reassessment completed by IBI following a site visit on May 13, 2022 refined the characterization of this reach and documented that the channel narrows within this area, with a bankfull width of approximately 1.0 m and an average water depth of approximately 95 mm.

This reach occurs within a successional poplar forest on the western (left) bank and scrubland and meadow habitat on the eastern (right) bank. In-stream vegetation is limited and includes field horsetail (*Equisetum arvense*), water forget-me-not (*Myosotis scorpioides*), and spotted jewelweed (*Impatiens capensis*). The dominant substrate within this reach consists primarily of silt, with sand as the subdominant component. Sediment deposition is consistent with transport from sheet erosion originating in upstream reaches and was evaluated as substantial during the 2022 assessment. The reach has a slight gradient that allows water to flow southward; however, the channel lacks defined pools. No fish or aquatic wildlife were observed during the 2020 or 2022 field surveys.

As noted above, a site visit undertaken on March 26, 2026 indicated that the physical form of this reach remains consistent with that documented during the 2022 assessment, with only localized standing water observed during a period of spring melt and no evidence of sustained surface flow. Given these existing conditions, fish are not expected to occur within this portion of the watercourse.

Given these characteristics, this Reach HDF1-B receives a management recommendation of "Maintain/Replicate Terrestrial Linkage".

Reach HDF1-C

The limits of this reach were defined by distinct changes in riparian and terrestrial vegetation, as well as a transition in channel form. This reach is characterized by an increase in scrubland and forested swamp habitat on both the left and right banks of the defined channel. Based on the reassessment completed by IBI during a site visit on May 13, 2022, this reach becomes heavily braided in multiple locations, with minimal sheet flow observed, and begins to flow toward the western extent of the property where it drains into a mapped wetland feature.

During the 2020 field investigations conducted by WSP, this reach exhibited minimal surface flow during both site visits. The 2022 IBI assessment refined this characterization and documented that, although the channel is heavily braided, the average bankfull width is approximately 1.5 m where a defined channel is present at the upstream portion of Reach HDF1-C, with water depths of up to approximately 100 mm in the deepest sections. In-stream vegetation within this reach is more abundant than in upstream reaches, though still relatively sparse, and consists primarily of horsetail (*Equisetum* spp.), spotted jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), and sedge species.

Sediment deposition within this reach was evaluated as substantial during the 2022 assessment and is dominated by silt, with sand as a subdominant component. No evidence of active sediment transport was observed within the defined channel segments. The reach has a very slight gradient that allows water to flow generally toward the southwest, and the channel lacks any defined pools. No fish or aquatic wildlife were observed during the 2020 or 2022 field surveys.

As noted above, a subsequent site visit undertaken on March 26, 2026 indicated that the physical form of this reach remains consistent with that documented during the 2022 assessment, with no sustained surface flow observed. Given these conditions, fish are not expected to occur within this portion of the watercourse.

Given these characteristics, this Reach HDF1-C receives a management recommendation of "Conservation".

Reach HDF1-D

The fourth reach is characterized by a further change in vegetation and channel form. Within this reach, a defined channel is largely absent as the feature traverses a saturated reed canary grass meadow–marsh, with surface water flowing generally toward the southwest extent of the property. Flow then becomes channelized along a gravel pathway at the southern edge of the Site, where vegetation is dominated by cattail (*Typha* spp.) and reed canary grass. The channel continues westward and ultimately discharges into an existing constructed wetland through a culvert beneath the gravel pathway. Although a defined east–west channel had been documented through the central portion of the meadow–marsh during earlier investigations, no such defined channel was observed during the 2022 field visit.

During the 2020 field investigations, minimal surface flow was observed during the initial site visit, with only standing water present during the second visit. The 2022 IBI assessment further documented that where a defined channel re-emerges near the southern property boundary, the feature has an average bankfull width of approximately 6.0 m and an average bankfull depth of approximately 360 mm. Sediment deposition within this reach was evaluated as substantial, with substrate dominated by silt and sand as the subdominant material. Surface water conditions were characterized primarily by standing water and minimal surface flow, with little evident gradient. Nevertheless, this

reach is understood to contribute to water levels within the downstream constructed wetland and may also function as a localized flood attenuation and water storage area.

No fish or aquatic wildlife were observed within this reach during the 2020 or 2022 field surveys, and no evidence of amphibian breeding was recorded. As noted above, a subsequent site visit undertaken on March 26, 2026 indicated that the physical form of this reach remains consistent with that documented during the 2022 assessment, with only localized standing water observed during a period of spring melt. Based on these observations, no change in aquatic habitat conditions is anticipated for this portion of the watercourse, and fish are not expected to occur within this reach under current conditions.

Given these characteristics, this Reach HDF1-D receives a management recommendation of "Maintain/Replicate Terrestrial Linkage".

A summary of the management recommendations for each feature is provided below in Table 7 and displayed in Figure 6. This detailed assessment highlights the management classification proposed by the HDF Guidelines (TRCA and CVC 2014).

5.1.3. Wetlands

Information regarding wetland communities within the Study Area is documented in Section 5.3.2 of the WSP Environmental Impact Study completed in October 2020 (Appendix B). Subsequent review by IBI in 2022 confirmed the findings of the 2020 WSP assessment. A site visit conducted on March 26, 2026 further indicated that the extent of wetland communities remains consistent with those described in previous EIS submissions.

Four wetland community types were identified and delineated within the Study Area, including Meadow Marsh (MAMM1-3), Shallow Marsh (MAS2-1), Deciduous Swamp (SWDM4-5), and Treed Swamp (SWTM3). The Meadow Marsh, Deciduous Swamp, and Treed Swamp communities are associated with the headwater drainage feature that traverses the Subject Property. The Shallow Marsh community is associated with the Mer Bleue Provincially Significant Wetland (PSW) and is located outside of the Subject Property and the proposed development footprint.

While Provincially Significant Wetlands are present within the broader Study Area, they occur entirely outside of the Subject Property limits and are not anticipated to be affected by the proposed development.

Table 7: Headwater Drainage Feature Management Recommendations

Drainage Feature Segment	Step 1	Step 2	Step 3	Step 4	Management Recommendation	Drainage Feature Segment
	Hydrology	Modifiers	Riparian Habitat	Fish Habitat	Terrestrial Habitat	
HDF1-A	**Limited Functions:** Standing water present during late March to early May surveys, with no to minimal surface flow during freshet. Under existing conditions, the headwaters north of Navan Road have been largely developed, with flows diverted to stormwater management infrastructure; only the property immediately north of Navan Road continues to drain to the feature, which is insufficient to generate regular flows. No sustained surface flow was observed in March 2026, with only localized standing water present. This may represent the long-term condition; however, this has not yet been confirmed.	Degraded habitat (soil stockpiling) in riparian and terrestrial areas remains	**Important Function:** Forest/ Thicket along both banks – highly impacted by stockpiling.	**Contributing Functions:** Transport of materials to fish-bearing reaches	**Contributing Functions:** Riparian Condition is scrubland which may facilitate wildlife movement. Limited amphibian breeding.	**Maintain/Replicate Terrestrial Linkage**
HDF1-B	**Limited Functions:** Standing water present during late March to early May surveys, with absent to minimal surface flow during freshet. Under existing conditions, the headwaters north of Navan Road have been largely developed, with flows diverted to stormwater management infrastructure; only the property immediately north of Navan Road continues to drain to the feature, which is insufficient to generate regular flows. No sustained surface flow was observed in March 2026, with only localized standing water present. This may represent the long-term condition; however, this has not yet been confirmed.	Riparian habitat along the eastern bank of the watercourse is dominated by meadow. West bank is forested.	**Valued Function:** Forest along west bank, meadow along east bank.	**Contributing Functions:** Transport of materials to fish-bearing reaches.	**Valued Functions:** Riparian Condition is Forest & Meadow which may facilitate wildlife movement. Limited amphibian breeding but habitat suitable for movement.	**Maintain/Replicate Terrestrial Linkage**

Drainage Feature Segment	Step 1	Step 2	Step 3	Step 4	Management Recommendation	Drainage Feature Segment
	Hydrology	Modifiers	Riparian Habitat	Fish Habitat	Terrestrial Habitat	
HDF1-C	**Limited Functions:** Standing water and flows observed during both survey visits. Under existing conditions, the headwaters north of Navan Road have been largely developed, with flows diverted to stormwater management infrastructure; only the property immediately north of Navan Road continues to drain to the feature, which is insufficient to generate regular flows. No sustained surface flow was observed in March 2026, with only localized standing water present. This may represent the long-term condition; however, this has not yet been confirmed.	Riparian habitat along both banks is forested swamp. However, many invasive species were observed.	**Important Function:** Forested Swamp	**Contributing Functions:** Transport of allochthonous materials.	**Valued Functions:** Forested swamp may facilitate wildlife movement. Limited amphibian breeding but habitat suitable for movement.	**Conservation**
HDF1-D	**Limited Functions:** Flows observed during first survey visit and standing water only during subsequent visit. Under existing conditions, the headwaters north of Navan Road have been largely developed, with flows diverted to stormwater management infrastructure; only the property immediately north of Navan Road continues to drain to the feature, which is insufficient to generate regular flows. No sustained surface flow was observed in March 2026, with only localized standing water present. This may represent the long-term condition; however, this has not yet been confirmed.	The invasive Reed-canary Grass Meadow Marsh has limited ecological value. For the purpose of establishing a management recommendation, this is not considered “wetland habitat”.	**Valued Function:** Riparian habitat is Reed-canary Grass Meadow Marsh with limited ecological value.	**Valued functions:** Fish observed at downstream end during WSP field surveys.	**Contributing functions:** The Reed-canary Grass Meadow Marsh provides limited connectivity between habitats.	**Maintain/Replicate Terrestrial Linkage**

5.2. Terrestrial Environment

The subsections below provide the results of surveys related to the terrestrial environment of the Study Area. Where applicable, survey results are illustrated in Figure 5 and Figure 6 below.

5.2.1. Terrestrial Vegetation Communities

The ELC survey identified a total of three upland vegetation communities (minimum size 0.5 ha, as per ELC protocol, unless a significant smaller community is identified).

The upland natural environment includes:

- **Mixed Meadow:** dominated by herbaceous species with no more than 25% cover provided by either shrub or tree species.
- **Mixed Forests:** communities with >60% canopy cover composed of >25% deciduous trees, and >25% coniferous tree species.
- **Deciduous Forest:** communities with >60% canopy cover composed of >75% deciduous trees.

The Ecological Land Classification (ELC) survey completed as part of the 2020 WSP Environmental Impact Study identified a total of ten (10) vegetation communities within the Study Area, including areas associated with residential and commercial development. The vegetation communities documented are considered common within Ontario and are summarized in Table 8, which outlines the community types and their dominant vegetation cover. The location, extent, and boundaries of these communities are illustrated in Figure 5.

The 2022 IBI Environmental Impact Study did not identify any changes to vegetation communities or warrant updates to the Ecological Land Classification (ELC) mapping completed in 2020. A subsequent site visit conducted on March 26, 2026 indicated that existing site conditions remain largely unchanged from those documented in the previous studies. Based on these observations, vegetation communities within the Study Area are not expected to differ meaningfully from those identified during the 2020 ELC surveys.



Photo 2: *Image taken at East of Winterhaven Drive on March 26, 2026. No significant changes to the terrestrial environment have occurred since the 2020 EIS was prepared by WSP.*

5.2.2. Botanical Inventory

The vegetation survey completed as part of the 2020 WSP Environmental Impact Study identified a total of 69 plant species within the Subject Property. Twenty-eight species were documented within the Reed Canary Grass Graminoid Meadow Marsh (MAMM1-3), 48 species within the Poplar Mineral Deciduous Swamp (SWDM4-5), 12 species within the Willow Mineral Deciduous Thicket Swamp (SWTM3), and 14 species within the Dry-Fresh Deciduous Woodland (WODM5).

Approximately 60 percent of the species recorded are native. The average coefficient of conservatism (CC), ranked on a scale of 0 to 10 and representing a species' fidelity to specific ecological conditions (Oldham, 1995), was calculated to be 1.6. This low average value indicates that the majority of plant species present are tolerant of a wide range of habitat conditions and disturbance.

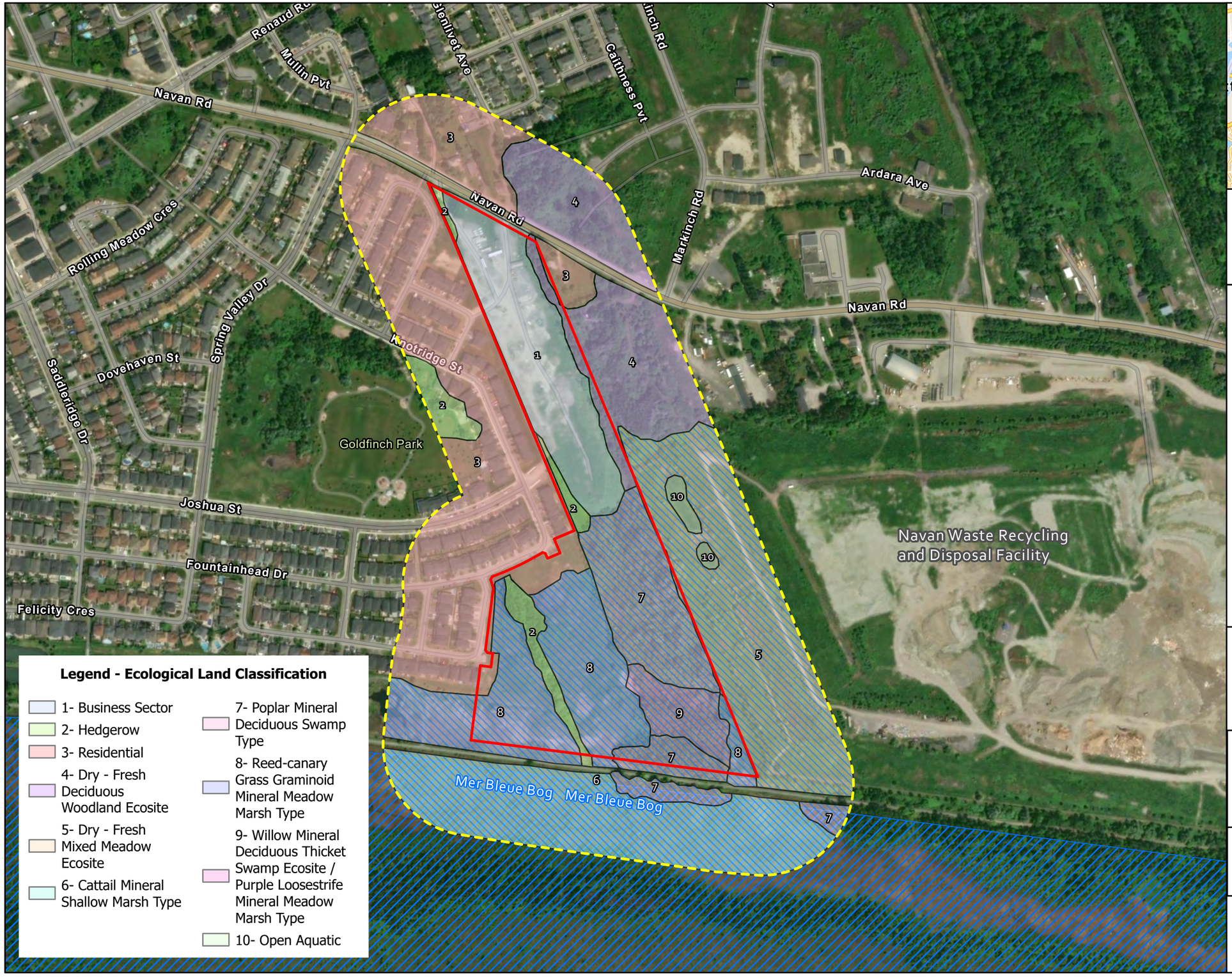
Nearly all plant and tree species identified during the survey are considered common within Ontario and the City of Ottawa. Black Walnut (Juglans nigra) and Black Locust (*Robinia pseudoacacia*) were recorded during the vegetation survey; both species are considered rare within the City of Ottawa (Brunton, 2005). No provincially or federally listed Species at Risk were recorded during the inventory. The full vegetation inventory is provided in Appendix E.

The 2022 IBI Environmental Impact Study did not identify any changes to vegetation communities or warrant updates to the botanical inventory completed in 2020. A subsequent site visit conducted on March 26, 2026 indicated that overall site conditions remain consistent with those documented in the previous studies. As such, it is expected that the botanical inventory conducted in 2020 continues to adequately characterize the vegetation communities and species currently present on the Subject Property.

Table 8: Summary of Ecological Land Classification for the Study Area

ELC Type	Total Area (ha)	Community Description
UPLAND – Mixed Meadow (MEM)		
Dry-Fresh Mixed Meadow [MEMM3]	6.0	This community is located primarily outside of the subject property's eastern boundary. It is dominated by Reed-canary Grass (Phalaris arundinacea) with Common Burdock (Arctium minus ssp. minus), Canada Goldenrod (Solidago canadensis) and Thistle species (Sonchus sp.) present throughout.
UPLAND – Deciduous Woodland (WOD)		
Dry-Fresh Deciduous Woodland Ecosite [WODM5]	4.7	This community is represented by two polygons; one bordering the eastern limit of the subject property, and the other located adjacent to the subject property off Navan Road. The woodland community is dominated by Manitoba Maple (Acer negundo), Trembling Aspen, and Green Ash in the canopy and sub-canopy. This community had evidence of disturbance due to fill and dumping from the adjacent commercial property.
UPLAND – Hedgerow (HR)		
Hedgerow [HR]	1.2	Hedgerow communities are located throughout the Study Area and consist mainly of young to mid-aged groups of Trembling Aspen and Manitoba Maple.
WETLAND – Meadow Marsh (MEM)		
Reed-canary Grass Graminoid Mineral Meadow Marsh Type [MAMM1-3]	4.8	This community is present throughout much of the western portion of the subject property. This community is dominated by Reed-canary Grass, Purple Loosestrife, Narrow-leaved Meadowsweet, and Tall Goldenrod (Solidago altissima var. altissima) in the understorey. The ground layer consists mainly of Reed-canary Grass, Purple Vetch (Vicia americana), Kentucky Blue Grass (Poa pratensis ssp. pratensis), and Common Dandelion (Taraxacum officinale). This community has evidence of disturbance from soil stockpiling from the adjacent residential development.
WETLAND – Swamp Thicket (SWT)		
Willow Mineral Deciduous Thicket Swamp Ecosite [SWTM3] ***Inclusion:*** *MAMM2-5 Purple Loosestrife Forb Mineral Meadow Marsh*	0.9	This thicket swamp community is located near the southern boundary of the subject property. It is dominated in the understorey by Glossy Buckthorn, Sandbar Willow (Salix exigua), Bebb's Willow (*Salix bebbiana*), and Pussy Willow (*Salix discolor*). This community contains a MAMM2-5 (Purple Loosestrife Forb Mineral Meadow Marsh Type) inclusion, consisting mainly of Purple Loosestrife, Spotted Joe-Pye-weed (*Eupatorium maculatum ssp. maculatum*) and Water-Horehound species (*Lycopus sp.*).
WETLAND – Shallow Marsh (MAS)		
Cattail Mineral Shallow Marsh Type [MAS2-1]	5.2	This feature is associated with Mer Bleue and is located outside of the subject property. It is dominated by Cattail species (Typha sp.).

ELC Type	Total Area (ha)	Community Description
WETLAND – Deciduous Swamp (SWD)		
Poplar Mineral Deciduous Swamp Type [SWDM4-5]	3.5	This community occurs within the southern portion of the subject property and consists mainly of young, regenerating vegetation. The canopy and sub-canopy are dominated by Trembling Aspen, Eastern Cottonwood (*Populus deltoides*), Willow species (*Salix sp.*), and Green Ash. The understorey is mainly dominated by dense Common Buckthorn, and Willow species. Purple Loosestrife and Narrow-leaved Meadowsweet (*Spiraea alba*) are also present throughout the understorey. The ground layer is comprised of Field Horsetail (*Equisetum arvense*), Green Ash seedlings, Dwarf Raspberry (*Rubus pubescens*), and Thicket Creeper (*Parthenocissus inserta*). This community has evidence of dumping and erosion from the adjacent commercial property, disease and pest damage to Trembling Aspen and Green Ash trees, and invasive species are prevalent throughout. ***This community forms a complex with the SWTM3 (Willow Mineral Deciduous Thicket Swamp Ecosite) community described below.***
Open Water (OA)		
Open Aquatic [OA]	0.24	This community is represented by two small, constructed ponds located on the eastern edge of the Study Area.
Developed Lands		
Business Sector [CVC_1]	3.5	This community occurs within the northern portion of the subject property and is occupied by an active sand and gravel storage and supply business. This community is mainly cleared land with piles of soil, sand, and other materials located within the business area. An office building with frontage to Navan Road is located in this community.
Residential [CVR]	11.4	This community is associated with multiple residential developments located within the Study Area. It consists of low-density housing units.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Study Area 120m
- Subject Site
- Wetland
- Mer Bleue Bog (Provincially Significant Wetland, MNR 2013)

Project:
Claridge Homes
Spring Valley Trails

Title:
Phase 5 & 6 - Ecological Land Classification

Prepared By:
FOTENN

Date:
3/31/2026

Figure: 5

5.2.3. Woodlands

The deciduous swamp and deciduous woodland communities identified within the Study Area meet the definition of a woodland as defined under the Forestry Act, R.S.O. 1990, c. F.26. These features were originally assessed as part of the 2020 WSP Environmental Impact Study in accordance with the woodland evaluation methods described above, including review of woodland size, age, and historical extent using aerial imagery.

The Poplar Mineral Deciduous Swamp (SWDM4-5), located near the centre of the Subject Property, is approximately 2.4 hectares in size and therefore meets the minimum size threshold for consideration as significant. However, review of historic aerial imagery from 1976 (Figure 2) indicates that this area was previously cleared and used for agricultural purposes and does not meet the minimum age requirement of 60 years. As such, this woodland does not meet the criteria for significance.

Similarly, Dry-Fresh Deciduous Woodland (WODM5) communities located outside the Subject Property are approximately 4.3 hectares and 6.5 hectares in size and meet the minimum size criteria for significance. However, these woodlands are not visible on aerial imagery dating back approximately 44 years (i.e., 1976) and therefore do not meet the minimum age requirement of 60 years required to be considered significant.

The 2022 IBI Environmental Impact Study did not identify any changes to woodland extent or characteristics that would alter the findings of the 2020 assessment. A subsequent site visit conducted on March 26, 2026 indicated that existing site conditions remain consistent with those documented during previous investigations. On this basis, the woodland significance evaluation remains unchanged, and there are no significant woodlands located within the Study Area under the applicable evaluation criteria.



Photo 3: *Image taken at East of Winterhaven Drive on March 26, 2026. No significant changes to the woodlands have occurred since the 2020 EIS was prepared by WSP.*

Accordingly, there are no Significant Woodlands present within the Study Area.

5.2.4. Significant Wildlife Habitat

Amphibian Call Surveys

In accordance with the Ecoregion 6E Criterion Schedule (MNR, 2015), amphibian breeding surveys were completed as part of the 2020 WSP Environmental Impact Study to assess the potential presence of Amphibian Breeding Habitat within woodland and wetland communities in the Study Area. Surveys were conducted within the meadow marsh and deciduous swamp communities, adjacent to surface water features and potential vernal pool habitat.

A total of four amphibian species were observed within the Study Area (Table 9). A full chorus of Spring Peepers (Pseudacris crucifer) was recorded during the second survey visit within the Mer Bleue cattail marsh, located outside the 100-metre survey radius. Gray Treefrogs (Hyla versicolor) were relatively abundant within and adjacent to the Subject Property, with multiple individuals detected within the deciduous swamp community. American Toad (*Anaxyrus americanus*), Gray Treefrog, and Spring Peeper were also heard calling from two open-water ponds along the eastern edge of the Study Area; however, these ponds are located outside the Subject Property and beyond the 100-metre survey radius.

No Species at Risk (SAR) or Species of Conservation Concern (SCC) were identified during the amphibian surveys. A site visit conducted on March 26, 2026 indicated that habitat conditions within the Study Area have not

fundamentally changed since the 2020 field investigations. As such, it is not expected that amphibian breeding habitat, species abundance, or species diversity within the Study Area have changed since the original surveys.

Based on these findings, Significant Wildlife Habitat for amphibians is considered absent from the Study Area.

Table 9: Amphibian Survey Results

Common Name	Scientific Name	Number of Observations	Comments	Meets SWH Criteria
American Toad	*Anaxyrus americanus*	1 (Call Code 1)	Outside of 100 metres; in Mer Bleue marsh, and in open water ponds on adjacent property to the east.	**No**
Gray Treefrog	*Hyla versicolor*	5 (Call Code 2)	Individuals heard scattered throughout deciduous swamp and open water ponds on adjacent property to the east.	**No**
Spring Peeper	*Pseudacris crucifer*	Full Corus (Call Code 3)	Full chorus heard on Survey #2 (May 28th) from Mer Bleue marsh, outside of 100 m.	**No**
Wood Frog	*Lithobates sylvaticus*	1 (Call Code 1)	Outside of 100 metres and Survey Area; in Mer Bleue marsh.	**No**

Though breeding amphibians were observed during surveys, they do not meet the quantity or species diversity requirements to support Candidate Amphibian Breeding Habitat (Woodland) SWH.

Breeding Bird Surveys

A total of 30 bird species were recorded during the breeding bird surveys completed as part of the 2020 WSP Environmental Impact Study (refer to survey methodology in Section 4.2.4). Evidence of breeding was classified as follows:

- **Possible Breeders:** Singing males observed within suitable nesting habitat.
- **Probable Breeders:** Pairs of a species and territorial behaviour observed within suitable nesting habitat.
- **Confirmed Breeders:** Active or used nests and fledged young observed within suitable nesting habitat.

Six species were confirmed to be breeding within the Study Area based on observations of recently fledged young, adults carrying food, or adults visiting nests. These species include Black-capped Chickadee, Common Yellowthroat, Northern Harrier, Song Sparrow, Swamp Sparrow, and Yellow Warbler.

All species recorded during the surveys are generally common throughout Ontario and the Ottawa area. The diversity of habitats present within the Study Area, along with the presence of surface water features and proximity to both a protected natural area and an active landfill, is likely contributing to the overall diversity of bird species observed.

The 2022 IBI Environmental Impact Study did not identify any updates or changes with respect to breeding bird conditions. A subsequent site visit conducted on March 26, 2026 indicated that habitat conditions within the Study Area remain consistent with those documented in 2020. As such, it is expected that breeding bird species richness and abundance within the Study Area remain largely unchanged from the original survey results.

The results indicate that the Study Area is considered SWH for breeding birds due to the observation of a Species of Special Concern: Eastern Wood-pewee.

Pileated Woodpecker Cavities

Large tree cavities consistent with use by Pileated Woodpecker (*Dryocopus pileatus*) were observed within mature Willow trees on site (Figure 6). Pileated Woodpecker is a species protected under the Migratory Birds Convention Act, 1994 (MBCA), which prohibits the disturbance or destruction of active nests. Although cavity nests may not be occupied year-round, large cavities created or used by woodpeckers are frequently re-used by the species itself or by other migratory birds and wildlife, and are therefore considered high-value wildlife features.

As a result, these cavity trees represent potential nesting habitat and are subject to protection when nests are active. Any proposed removal or disturbance of trees containing cavities would require careful consideration of timing relative to the breeding bird season and, where necessary, verification by a qualified avian biologist to confirm nest occupancy status prior to removal. Retention of cavity-bearing trees, where feasible and safe, is recommended to minimize the risk of contravening MBCA prohibitions and to maintain important wildlife habitat within the Study Area.

The presence of candidate Pileated Woodpecker cavity trees indicates potential nesting or roosting habitat. Updated field surveys conducted by a qualified avian biologist will be required prior to clearing to determine whether these cavities are actively used as nests or represent non-nesting foraging or roosting features prior to any proposed tree removal or disturbance.

Bat Maternity Colonies

During the preliminary site visit conducted in December 2019, biologists identified a limited number of candidate bat roost trees, defined as trees greater than 25 cm DBH containing cavities and/or peeling bark, within the Poplar Mineral Deciduous Swamp community (SWDM4-5). Based on these observations, the swamp does not meet the habitat criteria to be considered Significant Wildlife Habitat for bat maternity colonies, which requires greater than 10 suitable wildlife trees per hectare (MNR, 2015).

Acoustic surveys completed as part of the 2020 WSP Environmental Impact Study detected a total of three bat species, including Big Brown Bat (*Eptesicus fuscus*), Hoary Bat (*Lasiurus cinereus*), and Silver-haired Bat *(Lasionycteris noctivagans*). Big Brown Bat and Silver-haired Bat are indicator species for Bat Maternity Colony Significant Wildlife Habitat under provincial guidance. Bat detections were recorded most frequently within and adjacent to the deciduous swamp community. A single individual bat was visually observed along the eastern edge of the swamp, performing multiple passes during the second survey visit on May 28, 2020.

Based on the 2020 survey results, Significant Wildlife Habitat for bat maternity colonies could not be confirmed due to the low abundance of bats recorded on site and the absence of maternity colonies associated with cavity trees. The 2022 IBI Environmental Impact Study did not identify any updates or changes with respect to bat maternity colony habitat. A subsequent site visit conducted on March 26, 2026 indicated that existing habitat conditions within the Study Area remain consistent with those documented during previous investigations. As such, it is expected that the findings of the 2020 bat surveys continue to accurately reflect existing conditions within the Study Area.

Based on the results of the 2020 field investigations, the absence of identified maternity colonies, and observations during the March 26, 2026 site visit indicating that habitat conditions remain unchanged, Significant Wildlife Habitat for bat maternity colonies is not present within the Study Area.

Habitat for Species of Conservation Concern

Potential habitat for five Species of Conservation Concern (SCC) was identified during the Ecological Land Classification assessment and wildlife surveys completed as part of the 2020 WSP Environmental Impact Study (Appendix B). The presence or absence of these species within the Study Area was evaluated based on field observations and habitat suitability, as summarized below:

- **Short-eared Owl:** Meadow and cattail marsh habitats within the Study Area may provide suitable conditions. This species was not observed during field surveys.
- **Purple Martin:** Meadow habitats within the Study Area may provide suitable foraging opportunities. This species was not observed during field surveys.
- **Eastern Milksnake:** Meadow habitats with adjacent aspen hedgerows and swamp communities are present within the Study Area. This species was not observed during field surveys.
- **Monarch:** Milkweed plants were observed within the Study Area and Project footprint; however, no direct observations of Monarch caterpillars or adults were recorded during field surveys.
- **Snapping Turtle**: Cattail marsh habitat occurs along the southern extent of the Study Area. No observations or evidence of Snapping Turtle presence were recorded during field surveys.

The 2022 IBI Environmental Impact Study did not identify any updates or changes with respect to habitat for Species of Conservation Concern. A subsequent site visit conducted on March 26, 2026 indicated that habitat conditions within the Study Area have not undergone any discernible change since the 2020 field investigations. As such, it is expected that the findings from the 2020 surveys continue to accurately reflect existing conditions.

Based on the absence of observed species during field investigations, Significant Wildlife Habitat for Species of Conservation Concern could not be confirmed within the Study Area.

5.3. Species at Risk and Species at Risk Habitat

This section presents the results of field surveys and desktop screening for Species at Risk and their habitats within the Study Area, identifying any protected species or suitable habitat features that may be affected by the proposed development.

5.3.1. Bobolink and Eastern Meadowlark

Three targeted surveys for Bobolink and Eastern Meadowlark were completed in June and July 2020. No Bobolink or Eastern Meadowlark were observed during these surveys, and neither species was recorded incidentally during vegetation or tree surveys. The locations of the Bobolink and Eastern Meadowlark surveys are illustrated on Figure 6.

Biologists identified areas of potentially suitable habitat at that time, characterized by dense grassland cover with accumulated plant litter suitable for nesting, as well as intermittent shrub cover that could provide singing perches. However, the limited extent of suitable habitat, defined as less than 10 hectares, together with ongoing nearby residential development and construction activity, was assessed as a limiting factor for both species.

There were no updates to this assessment in the 2022 IBI EIS. A site visit conducted on March 26, 2026 indicated that overall site conditions remain consistent with those documented in earlier studies. In addition, portions of the open meadow habitat have begun to succeed toward denser scrub and thicket vegetation. This successional shift further reduces habitat suitability for Bobolink and Eastern Meadowlark, both of which prefer large, open grassland systems. Based on these observations, it is expected that the findings from the 2020 surveys continue to accurately reflect current conditions, and suitable habitat for these species is not present within the Study Area.

It has been determined that there is no suitable Bobolink or Eastern Meadowlark habitat present within the Study Area. For this reason, these species are not being carried forward to evaluation. Notwithstanding the survey results above, Bobolink and Eastern Meadowlark are not protected species under Ontario's Species Conservation Act, 2025 (SCA); accordingly, SCA species and habitat prohibitions are not applicable to these species on the Subject Property.

5.3.2. SAR Bats

Little Brown Myotis, Eastern Red Bat, Hoary Bat, Silver-haired Bat, Northern Myotis, and Tri-colored Bat are all listed as Endangered species provincially signifying that they are at risk of becoming extinct or extirpated in Ontario. There are three types of habitats required by bats: hibernation, maternity sites, and day-roost sites. The latter is not considered significant habitat.

These six bat species prefer to hibernate in caves or mines, and rarely hibernate in buildings (COSEWIC, 2013). Additionally, three of the six species (i.e., Eastern Red Bat, Hoary Bat, Silver-haired Bat) do not hibernate locally but instead migrate south for the winter. No caves or mines were present within the Study Area; as such, it is assumed that no suitable overwintering habitat will be impacted.

SAR bats can use tall, large cavity trees that are in the early to mid-stages of decay as maternity roosts, as well as loose/raised tree bark. These bat species occur in higher densities in mature deciduous and/or mixed forests due to increased opportunities for large snags. Both the woodland and swamp communities located within the Study Area have suitable habitat characteristics to support SAR bats. However, given the limited density of candidate bat maternity roost trees, the overall quality of suitable habitat is limited.

It has been determined that there is marginal habitat for bats within the Study Area. For this reason, these species are being carried forward to evaluation.

5.3.3. Butternut

Butternut was searched for within the forested areas in the Subject Site. Both Woodlands within the Study Area may provide suitable conditions for Butternut; however, this species was not observed within the Subject Site during field surveys completed in 2020, 2022, or 2026.

It has been determined that there are no known Butternut trees present within the Study Area.

5.3.4. Black Ash

Black Ash (Fraxinus nigra) was not specifically targeted during the 2020 field investigations, as the species was not listed as Endangered at that time. While the botanical surveys conducted in 2020 did not record any Black Ash individuals, portions of the Study Area (particularly the swampy habitats located in the southern extent) exhibit environmental conditions that are considered suitable for this species. As such, although Black Ash was not observed during previous surveys, the potential for its occurrence within suitable wetland habitats cannot be entirely discounted.

Given that suitable habitat for Black Ash is present within the Study Area, additional targeted field surveys are required during detailed design, prior to site clearing, to confirm the presence or absence of this species.

5.4. Incidental Wildlife and Wildlife Habitat

Biologists recorded direct observations or evidence of wildlife during site visits conducted as part of the 2020 WSP Environmental Impact Study, as described below. All species identified at that time were common to the Ottawa area, and none were listed under the provincial Endangered Species Act, 2007 at that time or are protected under the current Species Conservation Act, 2025.

Observations from winter, spring, and summer field visits indicated that the Study Area provides suitable year-round habitat for mammal and bird species. A subsequent site visit conducted on March 26, 2026 indicated that habitat conditions within the Study Area have not fundamentally changed since the 2020 investigations. As such, it is expected that these wildlife species remain present and continue to utilize the Study Area in a similar manner.

Birds

- **American Kestrel** (*Falco sparverius*) - Observed flying over adjacent landfill property (outside of Study Area)
- **American Tree Sparrow** (*Spizella arborea*) - Visual observation on western edge of subject property
- **Belted Kingfisher** (*Megaceryle alcyon*) - Visual observation at ponds adjacent to landfill property
- **Blue Jay** (*Cyanocitta cristata*) - Heard calling
- **Common Raven** (*Corvus corax*) - Heard calling to east of subject property
- **Eastern Whip-poor-will** (*Caprimulgus vociferus*) - Heard calling from Mer Bleue (outside of Study Area)
- **Green Heron** (*Butorides virescens*) - Observed flying away from ponds adjacent to landfill property
- **Hairy Woodpecker** (*Leuconotopicus villosus*) - Visual observation on eastern edge of deciduous poplar swamp
- **House Finch** (*Haemorhous mexicanus*) - Visual observation on western edge of subject property
- **Mourning Dove** (*Zenaida macroura*) - Visual observation near northern boundary
- **Pileated Woodpecker** (*Dryocopus pileatus*) - Large cavities observed on mature Willow trees
- **Wilson's Snipe** (*Gallinago delicata*) - Heard calling from Mer Bleue during amphibian surveys
- **White-breasted Nuthatch** (*Sitta carolinensis*) - Heard calling in SWD community

Mammals

- **Raccoon** (*Procyon lotor*) - Tracks observed in deciduous swamp
- **White-tailed Deer** (*Odocoileus virginianus*) - Tracks observed on edge of deciduous poplar swamp
- **Groundhog** (*Marmota monax*) - Visual observation in hedgerow on eastern boundary

5.5. Trees

Detailed information related to tree resources within the Subject Property is provided in the Tree Conservation Report (TCR) included as Appendix A. The TCR presents the results of the tree inventory, including species composition, size distribution, condition, ownership, and identification of Distinctive trees, as well as recommended retention, removal, and mitigation measures. The locations of inventoried trees and Distinctive trees are illustrated on Figure A-1, and readers are referred to Appendix A for the complete tree inventory results and supporting discussion.

5.6. Summary of Natural Heritage Features

The background review and site investigations conducted for this Environmental Impact Study provide sufficient evidence to conclude that the following natural heritage features and related constraints are absent from the Subject Site.

- **Headwater Drainage Features (HDFs):** Headwater drainage features are present within the Study Area and were confirmed through field investigations completed in 2020 and re-assessed in 2022. During the March 26, 2026 site visit, no sustained surface flow was observed, and only localized standing water during spring melt conditions.
- **Surface Water and Drainage Functions:** Although the drainage features exhibit a defined channel and banks, upstream stormwater contributions have been largely diverted by servicing works now in place north of Navan Road, with only the property immediately north of Navan Road continuing to drain to the feature.

These features continue to function in a limited hydrologic role and provide localized ecological and terrestrial connectivity functions. They would not be considered a “Watercourse” under the updated Conservation Authorities Act definition.

- **Fish Habitat (Indirect / Contributing):** No fish were observed during the 2020 field investigations, and no evidence of fish presence was identified during subsequent reviews. Based on the lack of sustained flow and the conditions observed in 2026, fish are not expected within on-site drainage features. However, these features may function as indirect or contributing fish habitat by conveying water toward downstream, fish-bearing systems during episodic flow events.

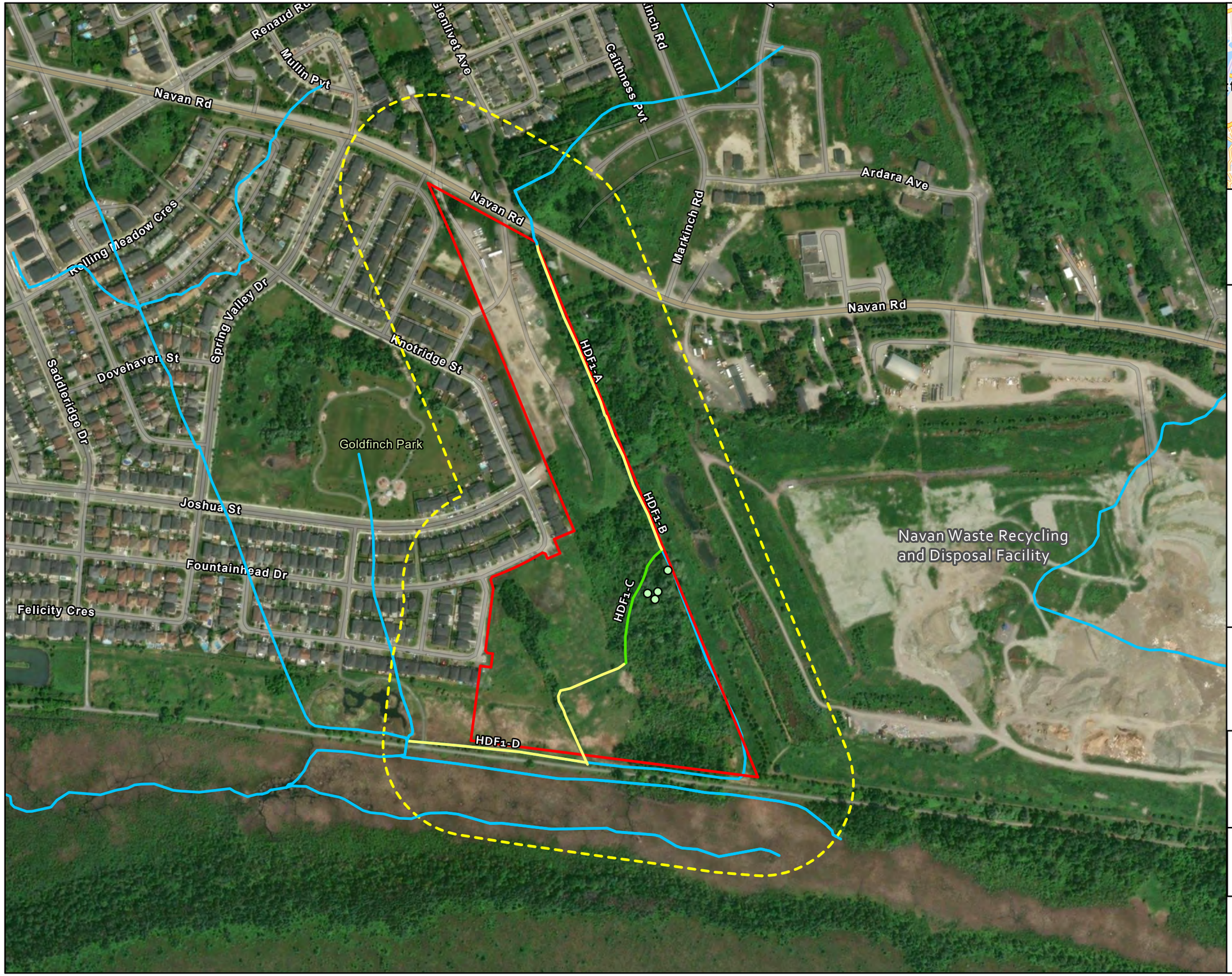
- **Wetlands:** Several wetland communities associated with the headwater drainage features are present within the Study Area, including meadow marsh, deciduous swamp, and thicket swamp communities. These wetlands were delineated during the 2020 field program, with no changes observed during the 2026 site visit. Mer Bleue Provincially Significant Wetland is present in the broader Study Area, but is located outside of the Subject Property and development footprint.

- **Vegetation Communities:** A range of upland and wetland vegetation communities occur within the Study Area, as documented in the 2020 Ecological Land Classification surveys. Site observations in 2026 indicated that vegetation communities remain largely unchanged and continue to reflect conditions described in earlier investigations.

- **Wildlife and Wildlife Habitat:** The Study Area supports common wildlife species typical of disturbed agricultural and peri-urban landscapes. Habitat is present for foraging, movement, and limited breeding by common mammals, birds, reptiles, and amphibians.

- **Significant Wildlife Habitat:** Significant Wildlife Habitat is present in the form of confirmed woodland raptor nesting habitat and habitat for Species of Conservation Concern, including Eastern Wood-pewee and Monarch. Candidate bat maternity habitat is also present due to the availability of suitable woodland structure.

- **Species at Risk Habitat:** Suitable habitat for provincially Endangered bat species is present within woodland and swamp communities on site. Although maternity colonies were not confirmed during previous field investigations, the availability of suitable roosting and foraging habitat requires consideration in planning and mitigation. In addition, suitable habitat for Black Ash is present within swamp and poorly drained areas of the Study Area. While Black Ash was not observed during earlier surveys, targeted species-specific surveys are required during detailed design, in conjunction with the updated Tree Conservation Report and prior to site clearing, to confirm the presence or absence of this species.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Subject Site
- Study Area 120m
- Watercourse (MNRF, City of Ottawa)
- Candidate Pileated Woodpecker Nesting Cavities (WSP 2020)

HDF Segment Recommendation

- Conservation
- Maintain/Replicate Terrestrial Linkage

Project:
Claridge Homes
Spring Valley Trails

Title:
Phase 5 & 6 -
Survey Results

Prepared By:
FOTENN

Date:
4/1/2026

Figure: 6

6. Description of Development Proposal

Claridge Homes proposes to develop a residential subdivision at 3252 Navan Road, known as Spring Valley Trails Phases 5 and 6. An open space block will be retained along the southern edge of the Subject Property. The total site area is approximately 12.9 hectares. The draft site plan illustrating the proposed development layout is provided in Figure 7: Concept Plan.

6.1. Construction Activities

The proposed works will prepare the Spring Valley Trails lands for low-rise residential development, including municipal roads, underground services, and a stormwater management pond (SWMP). The principal activities anticipated through site preparation and servicing—and their relevance to ecological receptors—are summarized below. Based on the most recent draft Concept Plan prepared for Claridge Homes (Figure 7), development of the Subject Property may include the following project components:

Pre-Construction Setup

- Establishing construction access points and temporary haul routes.
- Installing temporary site offices, laydown/staging areas, and equipment storage zones.
- Surveying and staking property boundaries, clearing limits, road alignments, and utility corridors.
- Installing perimeter controls and defining areas required for clearing and grading.

Vegetation Clearing and Grubbing

- Removing trees and vegetation within approved development limits to accommodate grading, infrastructure installation, and building footprints.
- Tree clearing, chipping or hauling woody debris, and removing brush.
- Grubbing stumps and root mats to prepare the subgrade for earthworks.
- Clearing field edges, hedgerows, and shrubs where roads, services, or lot grading require.

Site Grading

- Stripping and stockpiling topsoil for later reuse in landscaping and final stabilization.
- Undertaking cut-and-fill operations to achieve design grades for roads, building pads, the stormwater management pond, and public parks/blocks.
- Shaping the land to establish stormwater overland flow routes and subdivision drainage patterns.
- Constructing embankments, fills, or depressions required for the site's engineered grading plan.

Installation of Underground Services

- Trenching for and installing municipal watermains, sanitary sewers, and storm sewers throughout the subdivision.
- Installing utility infrastructure such as gas, hydro, telecommunications, and street-lighting conduits.
- Backfilling trenches, compacting subgrades, and preparing road corridors for base construction.

- Connecting new services to existing municipal networks at designated tie-in points.

Road Construction and Surface Works

- Preparing roadbeds with granular materials and compacted sub-base.
- Installing concrete curbs, gutters, sidewalks, and driveway aprons.
- Paving local streets in lifts (base course followed by surface course).
- Constructing subdivision intersections with existing roadways and internal connections between phases.

Stormwater Management System Construction

- Excavating and shaping the stormwater management pond, including forebay, permanent pool, and outlet structures.
- Installing stormwater inlet pipes, major/minor conveyance systems, and outlet control features.
- Constructing spillways, access routes, and pond embankments as designed.
- Implementing site drainage features such as swales, culverts, and catch basins that form part of the neighbourhood's long-term drainage network.

Homebuilding and Above-Grade Construction

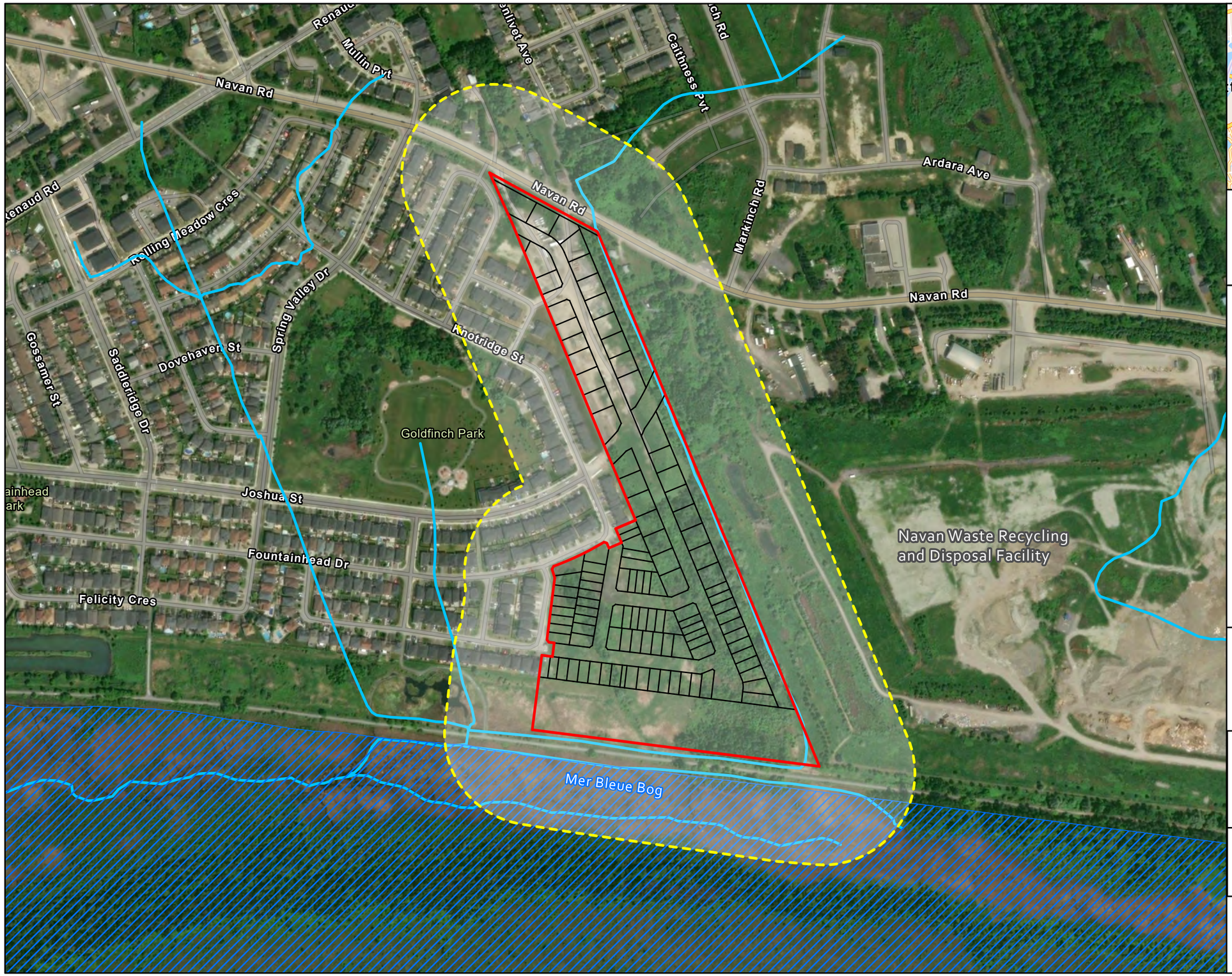
- Constructing building foundations, basements, and structural framing for single-detached homes and townhouses.
- Installing roofing, exterior cladding, windows, doors, and building systems (HVAC, plumbing, electrical).
- Pouring driveways, building porches, steps, and private walkways.
- Completing internal home finishes and lot-specific grading.

Final Grading, Landscaping, and Community Features

- Replacing stockpiled topsoil across lots, parks, and boulevard areas.
- Sodding or seeding all disturbed soils.
- Planting subdivision trees and landscape features in accordance with approved plans.
- Constructing park blocks, pathways, fencing, and streetscape elements.
- Completing final road paving (top lift), signage, and street-lighting installation.

Occupancy and Post-Construction Activities

- Homeowners begin occupying completed units as phases are finished.
- Minor touch-ups to boulevards, landscaping, road surfaces, and sidewalks continue as needed.
- Final inspections, certification of municipal infrastructure, and assumption by the City occur once subdivision construction is fully complete.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Watercourse (MNR, 2019)
- Subject Site
- Study Area 120m
- Site Plan
- Mer Bleue Bog (Provincially Significant Wetland, MNR 2013)

Project:
Claridge Homes
Spring Valley Trails

Title:
Phase 5 & 6 -
Proposed Site Plan

Prepared By:
FOTENN

Date:
4/15/2026

Figure: 7

7. Impact Assessment and Mitigation

The following sections describe the anticipated environmental impacts associated with the proposed development and the mitigation measures that should be implemented.

This impact assessment and associated mitigation measures consider both temporary (i.e., construction-related) impacts and permanent impacts associated with the occupation of the development. Opportunities and Constraints are depicted in Figure 8 below.

A summary of the potential impacts, proposed mitigation measures, monitoring requirements, and anticipated residual effects identified in this section is provided in Table 10 (Section 8), with each entry cross-referenced to the applicable subsection of this report.

7.1. Aquatic Environment

The assessment of potential impacts to drainage features within the Study Area is informed by the original Headwater Drainage Feature (HDF) assessment completed by WSP in 2020 and the subsequent Environmental Impact Study update prepared by IBI Group in 2022. Those assessments evaluated four defined reaches and were undertaken at a time when upstream drainage contributions north of Navan Road were still anticipated to influence on-site hydrologic conditions. Management recommendations summarized in Table 7 reflect existing conditions, with most upstream flows now diverted to stormwater management infrastructure; historical conditions are retained for reference.

At the time of the 2022 assessment, removal of the upstream catchment area north of Navan Road was expected to significantly reduce flows entering the on-site drainage features. The system was characterized as having intermittent surface flow under then-existing conditions, with post-removal conditions anticipated to result in negligible flows. Based on this functional context, most of the drainage feature was assigned a “Maintain / Replicate Terrestrial Linkage” management recommendation, with the central reach through swamp habitat retaining a “Conservation” designation due to its terrestrial ecological function.

Observations from a site visit completed by Fotenn on March 26, 2026 confirm that upstream surface water contributions from north of Navan Road have been substantially reduced, with only the property immediately north of Navan Road continuing to drain to the feature. This may represent the long-term condition; however, this has not yet been confirmed. Only localized standing water was observed during spring melt conditions, with no evidence of regular or continuous surface flow. Under current conditions, the drainage features therefore do not meet the definition of a “watercourse” under Section 28 of the Conservation Authorities Act and Ontario Regulation 41/24, which requires a defined channel in which water flows regularly or continuously.

As a result of this functional change, the drainage features no longer provide a meaningful aquatic habitat or hydrologic conveyance function. Their primary role is now as low-lying linear features that contribute to terrestrial and ecological connectivity across the Site. Accordingly, the applicable HDF management recommendation remains “Maintain / Replicate Terrestrial Linkage,” consistent with their existing form and function.

Based on current site conditions, potential impacts to aquatic habitat and indirect fish habitat previously evaluated in the 2022 EIS—such as effects related to sediment transport, dewatering, contaminant pathways, or altered runoff regimes—are no longer considered applicable. Consequently, the proposed development is anticipated to result in negligible impacts to aquatic habitat function, and no adverse effects to fish or fish habitat are expected.

Stormwater modelling has identified that, under interim conditions prior to full build-out of upstream lands, rare extreme storm events could result in localized increases in flow velocity, particularly at grade transitions within the upstream portion of Reach HDF1-B. This represents a potential erosion risk, rather than an ecological impact, given the absence of sustained flow or aquatic habitat. Any such risk is expected to be mitigated through standard

engineering controls (e.g., riprap, grade stabilization, or equivalent measures) designed to dissipate energy and control velocities. With implementation of these measures, no adverse downstream or ecological effects are anticipated.

Proposed realignment works affecting portions of the drainage feature, including localized realignments of Reaches HDF1-C and HDF1-D, have been designed to maintain or replicate existing terrestrial connectivity. These works are consistent with the assigned HDF management recommendation and are not anticipated to result in adverse residual effects. No enclosure or culverting of the drainage feature is proposed as part of this development. Culverting of approximately 35 m of Reach HDF1-A adjacent to Navan Road may be required in the future to accommodate the widening of Navan Road; these works do not form part of this application and are addressed as a cumulative impact.

Overall, with consideration of current conditions, proposed works, and standard mitigation measures, residual impacts to drainage features and associated ecological functions are expected to be negligible.

7.1.1. Aquatic Environment Management Recommendations

The management recommendations outlined below are intended to address potential effects on aquatic features and associated ecological functions within the Study Area. Although on-site drainage features no longer function as active watercourses, they continue to provide localized hydrologic, riparian, and terrestrial connectivity functions that warrant consideration during development. The recommended measures focus on minimizing construction-related disturbance, maintaining existing form and function, and supporting appropriate long-term management of aquatic-related features.

Proposed Drainage Feature Enhancement and Realignment

The management approach for the drainage features includes in-situ enhancement of the upstream reaches and realignment of the downstream reaches to accommodate the proposed development while maintaining key ecological functions. The objectives and associated design criteria guiding these enhancement and realignment works are summarized below.

Reaches HDF1-A and HDF1-B (Enhancement)

To maintain lot-level drainage conveyance and, more importantly, to support the Maintain / Replicate Terrestrial Linkage function identified through the Headwater Drainage Feature assessment, Reaches HDF1-A and HDF1-B will be retained in situ along the eastern limit of the Study Area (Figure 6). These reaches no longer function as active watercourses but provide important linear features supporting terrestrial movement and ecological connectivity. Any future culverting of the portion of Reach HDF1-A adjacent to Navan Road to accommodate the widening of Navan Road does not form part of this development and is addressed under Cumulative Impacts.

Consistent with prior consultation, a 15-metre buffer will be maintained between the proposed development and the drainage features to protect their form and function. The features will be retained within a 20-metre-wide corridor, which will be enhanced through supplementary native plantings, seeding, and localized grading or channel refinements, as appropriate, to establish a stable, naturalized corridor. Enhancement measures will focus on improving terrestrial habitat value, reducing erosion potential, and maintaining localized surface drainage, rather than restoring aquatic habitat.

Reaches HDF1-C and HDF1-D (Realignment)

To accommodate the proposed development layout, Reaches HDF1-C and HDF1-D will be realigned along the eastern boundary of the Subject Property within the same 20-metre-wide corridor (Figure 6). A 15-metre buffer will be maintained between the realigned drainage feature and development limits, consistent with the approach applied to the upstream reaches. The realigned feature will extend southward and connect to the existing constructed

wetland/compensation feature located at the southwestern extent of the Study Area. In total, approximately 350 m of drainage feature alignment will be modified.

Realignment works are intended to maintain and replicate existing terrestrial linkage functions, rather than reestablish a watercourse or aquatic habitat. To offset localized loss of riparian and terrestrial habitat associated with realignment, approximately 2.4 ha of land within the southern portion of the Study Area will be restored and naturalized (Figure 6). Restoration activities will focus on removing invasive species, localized re-grading where required, and substantial re-planting with appropriate native tree, shrub, and ground-layer species to support long-term terrestrial habitat structure and prevent re-colonization by invasive vegetation. Existing healthy native vegetation will be retained wherever practicable.

Where suitable, low-lying areas may be incorporated into the design to provide moist soil or shallow water conditions on an episodic basis, supporting habitat diversity and contributing to landscape resilience. Any open-water elements, vernal pools, or wetland-like features incorporated into the design will be secondary to the primary objective of maintaining terrestrial connectivity and will not be intended to function as permanent aquatic habitat or regulated watercourses.

A Habitat Restoration and Monitoring Plan will be prepared to guide implementation of the above works and to ensure that enhancement and realignment measures achieve the intended terrestrial linkage and ecological connectivity objectives. The Plan will outline restoration methods, performance targets, monitoring requirements, and adaptive management measures, and is discussed further below.

Stormwater Management

To support drainage and maintain existing ecological connectivity within the Study Area, supplementary stormwater from the proposed development may, where feasible, be directed south toward the realigned drainage feature and the existing habitat compensation area located in the southwest portion of the Site, consistent with the approved stormwater management strategy. Under existing conditions, upstream flows to the tributary are minimal, and stormwater inputs from this development are not required to offset the reduction in those contributions.

Any stormwater contributions directed toward the realigned feature are therefore intended, where practicable, to enhance localized conditions relative to the existing baseline of minimal upstream inflow, rather than to replicate historic hydrologic conditions. The volume and quality of any stormwater conveyed to the downstream system will be influenced by site grading constraints, servicing requirements, and detailed design considerations.

Where practicable, stormwater management design may incorporate measures that support the stability and functional performance of the realigned feature and downstream compensation area. A treatment-train approach may be considered, as appropriate, to manage runoff quantity and quality, potentially including measures such as oil-grit separators, vegetated swales, infiltration features, or other best management practices, to provide pre-treatment prior to discharge. These measures are intended to support erosion control, water quality protection, and localized habitat quality, rather than to establish regulated aquatic habitat or recreate a functioning watercourse.

Where stormwater is directed toward the downstream compensation area, conveyance elements—such as the downstream extension of the alignment near Reach HDF1-B—should be designed to ensure stable flow conveyance and erosion protection. Any localized grading or channel form adjustments should be designed to support terrestrial linkage, habitat diversity, and system resilience, and not as a requirement to create permanent aquatic habitat. Where implemented, these measures have the potential to provide an incremental ecological benefit within the realigned and enhanced terrestrial habitats, relative to ultimate post-development conditions.

The detailed design, sizing, alignment, and performance criteria associated with stormwater management infrastructure will be governed by the most recent servicing and stormwater management plan prepared by Arcadis, which provides the definitive technical basis for stormwater quantity and quality control for the development.

Conceptual illustrations provided herein (e.g., Figure 3) are intended for context only and will be refined through detailed design in accordance with the approved servicing strategy.

7.1.2. Aquatic Environment Mitigation

Proposed Mitigation Measures – Planning and Design Stage

- ✓ If removal or alteration of aquatic habitat is proposed, a License to Collect Fish for Scientific Purposes will need to be obtained from MNR.
    - Upon receipt of a License to Collect Fish for Scientific Purposes from MNR and within 48 hrs prior to construction activities, a fish / amphibian salvage should be conducted to remove / relocate wildlife within the offline pond.
- ✓ A detailed *Erosion and Sediment Control Site Plan* shall be developed for implementation during construction to prevent impacts from all associated activities to adjacent water features.
- ✓ Further consultation with RVCA will be required to permit works within the regulation limit. However, no permit is expected for the alteration of the headwater drainage feature.
- ✓ Grading and drainage shall be designed to ensure proper management of drainage off the site during construction activities.

Restoration and Monitoring Plan

A H*abitat Restoration and Monitoring Plan* shall be prepared for the re-aligned drainage feature and associated wetland and riparian habitats. The Plan shall define clear restoration objectives and performance criteria, describe detailed restoration methods, and establish a structured monitoring program to confirm that ecological functions are successfully restored or replicated. Monitoring shall be conducted for a minimum of five (5) years post-construction, or until performance criteria are achieved, whichever occurs later. Measurable SMART objectives (Specific, Measurable, Achievable, Relevant, and Time-bound) shall be established to evaluate vegetation establishment, habitat structure, hydrologic performance, erosion stability, and invasive species control. The Plan shall include adaptive management triggers and contingency measures to address deficiencies identified during monitoring and shall define reporting requirements and responsibilities to ensure long-term success of restoration objectives.

The *Restoration and Monitoring Pla*n shall focus on two primary areas: (1) the riparian buffer adjacent to the re-aligned drainage feature, and (2) the restoration of wetland features within the approximately 2.4-hectare restoration area located between the residential development and the Prescott–Russell Trail at the southern extent of the Study Area. The Plan shall be developed in consultation with the Rideau Valley Conservation Authority and the City of Ottawa and shall consider the following elements, as appropriate:

- ✓ Creation of a diverse open-water system incorporating shallow and deeper marsh areas with submerged, floating, and emergent aquatic vegetation to support water retention following larger precipitation events;
- ✓ Establishment of graminoid meadow marsh, thicket swamp, and deciduous swamp habitat communities;
- ✓ Incorporation of vernal pools within the deciduous swamp community to support amphibian breeding functions;
- ✓ Use of hydric soils to support wetland function, with preference given to re-use of on-site soils where feasible to mimic pre-development conditions;
- ✓ Installation of in-water and near-water habitat features to promote use by amphibians and other herpetofauna;

- ✓ Use of native ground cover, shrub, and tree species to enhance habitat diversity and ecosystem resilience;
- ✓ Integration of a footpath for recreational use, where appropriate, along with waste receptacles to promote stewardship and protection of restored features; and
- ✓ Installation of interpretive or regulatory signage, where feasible, to encourage protection of the naturalized areas and to provide educational information for residents and trail users.

Proposed Mitigation Measures – Construction Implementation

The following general mitigation measures are recommended to address impacts on the aquatic environment adjacent to the development area:

- ✓ Heavy-duty silt fencing (OPSD 219.130) and/or other equivalent erosion and sediment control measures shall be installed around the Project footprint, adjacent to the footprint of the drainage feature, and associated wetland habitats to clearly demarcate the development area and prevent erosion and sedimentation into water features. Erosion and sediment control (ESC) measures shall be monitored weekly to ensure they function properly and if issues are identified should be dealt with within 48 hours of notice.
- ✓ Stockpiling of excavated material shall not occur outside the delineated work area. If stockpiling is to occur outside of this area, double-row silt fencing shall be installed to contain any spoil piles and to prevent sedimentation into adjacent areas.
- ✓ Refueling of all equipment shall be conducted 30 m or more from any water feature. Storage of fuel and refueling shall be conducted within an area identified by the environmental monitor and the contract administrator.
- ✓ Drip pans shall be used under stationary equipment using fuel products such as generators, and similar equipment to ensure no deleterious substances enter water features.
- ✓ A spill response plan shall be developed, and a spill response kit shall always be kept on site. If a spill is identified, the contract administrator shall be notified immediately, and a report shall be made to the Spills Action Centre at 1-800-268-6060. All people working on site shall be made aware of the spill response plan.
- ✓ Heavy equipment shall not enter active watercourses or wetlands at any time.
- ✓ A dewatering plan shall be implemented to ensure adequate water handling. When dewatering to accommodate construction, dewatering traps with silt-fence (OPSD 219.240) or similar standards shall be implemented to avoid sedimentation and erosion in adjacent areas. Due to the sensitivity of downstream features, sediment bags shall be used within dewatering traps and replaced when at capacity. Dewatering shall occur within a well vegetated area, at least 30 metres from any receiving waterbody. If dewatering requires more than 50,000 L of water to be pumped per day, appropriate permits must be obtained from the Ministry of the Environment, Conservation and Parks (MECP) prior to the dewatering.
- ✓ Direct backyard surface flows from adjacent houses into the drainage features through the implementation of vegetated swales using native seed mix and vegetation.
- ✓ Implementation of low impact design strategies such as the implementation of oil-grit separators shall be required where stormwater runoff collection will be re-directed to the restored wetland feature.

Proposed Mitigation Measures – Construction Implementation

- ✓ All ESC measures shall remain in place until vegetation is re-established, as directed by the environmental monitor.
- ✓ Implementation of an environmental monitoring program to evaluate the functionality of the realigned watercourse and wetland, as well as maintain records of desired outcomes and conservation targets established within the planning and design stage.

With the successful implementation of the mitigation and restoration measures outlined above, impacts from the proposed development on the aquatic environment and indirect fish habitat are expected to be negligible and temporary in nature.

7.1.3. Fishes and Fish Habitat

Based on field investigations and background information, the on-site drainage features do not provide direct fish habitat under current conditions due to the absence of sustained surface flow. While an offline/artificial pond in the vicinity may support fish, the remaining drainage features function only as indirect or contributing habitat by episodically conveying water to downstream fish-bearing systems.

Potential project-related effects on fish and fish habitat are therefore limited to indirect, construction-phase risks associated with water quality and flow conveyance. With implementation of standard erosion and sediment control measures, maintenance of existing drainage pathways, and adherence to best management practices, these effects are expected to be temporary and negligible, with no anticipated adverse impact on downstream fish habitat.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ A Fish and Wildlife Salvage should be conducted for these features within 48 hours of Project activities.
- ✓ DFO Request for Review submission may be required to determine if the Project will result in serious harm to fish or fish habitat. This requirement shall be established through the habitat restoration design process.

Proposed Mitigation Measures – Construction Implementation

- ✓ Orange snow fencing or other suitable fencing should be used to delineate the construction limits from adjacent lands / areas.
    - This will prevent encroachment of construction activities into the non-developable / more naturalized areas. This fencing should be monitored weekly to ensure it is functioning properly. Any deficiency in the fencing should be dealt with within 48 hours of notification.
- ✓ A site-specific erosion and sediment control plan should be implemented to prevent on-site erosion and sedimentation / siltation outside of work areas, particularly toward downstream fish/wetland habitat present.

Based on the results of the hydrologic modelling and the characterization of existing drainage features, the proposed development is not expected to adversely affect fishes or downstream fish habitat.

7.1.4. Wetland Habitat

To facilitate construction of the proposed development, portions of the Poplar Mineral Deciduous Swamp (SWDM4-5), Willow Mineral Deciduous Thicket Swamp (SWTM3), and Reed-canary Grass Graminoid Mineral Meadow Marsh (MAMM1-3) communities will be removed or disturbed. These wetland communities are generally young, highly disturbed, and dominated by invasive and non-native species, with low plant diversity and limited

ecological integrity. Under current conditions, their primary function is to provide localized moisture retention and terrestrial habitat connectivity, rather than sustaining broader wetland or aquatic functions.

Consistent with the updated hydrologic assessment, these wetland communities no longer receive regular or sustained upstream flows and do not function as active or regulated wetlands under the Conservation Authorities Act. As a result, wetland-related impacts are considered localized and limited in ecological significance. No direct or indirect impacts to the Mer Bleue Provincially Significant Wetland (PSW) or associated ANSI lands are anticipated, as these features are located outside the Subject Property and are hydrologically and spatially separated from the development footprint.

Notwithstanding, the following localized wetland-related effects are anticipated as a result of site alteration and construction activities:

- Disturbance or removal of up to approximately 4.6 hectares of on-site wetland vegetation associated with disturbed meadow marsh and swamp communities;
- Incidental damage or loss of trees and other vegetation resulting from clearing, grading, and construction activities;
- Localized loss or alteration of habitat currently used by wildlife species tolerant of disturbed wetland conditions;
- Minor changes to localized drainage and soil moisture regimes within the Subject Property; and
- A reduction in on-site biodiversity and native species abundance within areas converted to urban land uses, with an increased risk of invasive species establishment along new edges and disturbed soils if not properly managed.

Given the existing degraded condition of these wetland communities, their limited ecological value, and the absence of hydrologic connectivity to regulated wetlands, the magnitude of wetland impacts is considered low. Proposed restoration, enhancement, and invasive species management measures—particularly within the southern restoration area and re-aligned drainage corridor—are expected to offset localized losses and support improved long-term terrestrial and ecological function relative to baseline conditions.

Restoration and Monitoring Plan

Portions of the on-site wetland communities are proposed to be retained, enhanced, and complemented through restoration and naturalization works within the approximately 2.4-hectare parcel located in the southern extent of the Subject Property. These works are intended to offset the localized loss of disturbed wetland vegetation on site and to improve long-term terrestrial and wetland-associated ecological function. As noted above, a comprehensive *Habitat Restoration and Monitoring Plan* is required to support the design and implementation of this restoration.

Restoration activities will be undertaken in accordance with the management recommendations identified through the Headwater Drainage Feature (HDF) assessment, which classified the on-site feature as having limited hydrologic function but retaining important terrestrial and ecological linkage value. In particular, reaches assigned a “Conservation” or “Maintain / Replicate Terrestrial Linkage” recommendation will be managed to preserve and enhance their role in supporting localized habitat connectivity and wildlife movement, rather than restoring or maintaining an active aquatic system. Restoration efforts will therefore focus on enhancing wetland-associated and low-lying habitats that reflect existing site conditions and functions, including removal and management of invasive species (e.g., Glossy Buckthorn and Purple Loosestrife) and the re-establishment of native vegetation communities appropriate to local soil and moisture regimes. Native tree, shrub, and ground-layer species will be used to increase structural diversity, improve habitat quality, and strengthen terrestrial connectivity within the restored area.

The HDF management recommendations form the basis for the proposed realignment and enhancement strategy, which is intended to maintain or replicate existing ecological linkage functions where development constraints require modification of the feature’s alignment. The on-site drainage feature and associated wetland communities

no longer meet the provincial definition of a "watercourse" under the Conservation Authorities Act; accordingly, the realignment or modification of the feature itself does not require a permit related to interference with a regulated watercourse. However, the restoration and monitoring works associated with implementing the Conservation and Maintain / Replicate Terrestrial Linkage recommendations will occur within the Rideau Valley Conservation Authority (RVCA) regulated area associated with the Mer Bleue Bog Provincially Significant Wetland. As a result, these restoration and enhancement works will require authorization under Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits).

The Habitat Restoration and Monitoring Plan shall be prepared to the satisfaction of the City of Ottawa and RVCA and shall include the following elements:

- Clear restoration objectives aligned with the localized wetland and terrestrial functions identified through this EIS;
- Native vegetation planting plans appropriate to meadow marsh, thicket swamp, and deciduous swamp conditions;
- Invasive species management and monitoring provisions;
- Habitat feature enhancement measures, where appropriate (e.g., shallow depressions, vernal pool features, or localized moist-soil areas), recognizing that restored areas are not intended to function as regulated watercourses or permanently inundated aquatic habitat; and
- Defined performance criteria and measurable monitoring benchmarks.

An environmental monitoring program shall be implemented for a minimum of five (5) years post-construction, or until performance criteria are achieved, whichever occurs later. Monitoring results shall be evaluated against clearly defined SMART (Specific, Measurable, Achievable, Relevant, Time-bound) objectives to confirm the success of restoration measures and to guide adaptive management, if required.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ A detailed Erosion and Sediment Control (ESC) Plan shall be prepared and implemented to minimize potential impacts to adjacent wetland areas during construction.
- ✓ Consultation with the Rideau Valley Conservation Authority (RVCA) shall be undertaken to secure the required permit for restoration and monitoring works occurring within the regulated area associated with the Mer Bleue Bog Provincially Significant Wetland.
- ✓ Active transportation features, such as walking paths, may be incorporated into the wetland restoration design, where appropriate, and should connect to adjacent footpaths to help define access routes and discourage informal encroachment into sensitive areas.

Proposed Mitigation Measures – Construction Implementation

- ✓ Construction limits shall be clearly delineated using orange snow fencing to prevent encroachment into adjacent wetland and natural areas. Fencing shall be inspected regularly and repaired promptly if deficiencies are identified.
- ✓ A site-specific erosion and sediment control (ESC) plan shall be implemented and maintained to prevent sedimentation outside approved work areas.
- ✓ All construction equipment shall arrive on site in a clean condition, free of fluid leaks, invasive species, and noxious weeds.

- ✓ Excess construction materials shall be removed from the site, and disturbed areas shall be stabilized and restored with native seed mixes upon completion of works, as required.

Proposed Mitigation Measures – Post-Construction

- ✓ Garbage bins should be installed in public spaces to reduce littering and prevent the accumulation of waste within or adjacent to restored wetland and naturalized areas.
- ✓ Interpretive or regulatory signage describing habitat restoration efforts and appropriate land use should be installed, where feasible, to promote awareness, stewardship, and protection of naturalized features.

With the successful implementation of the recommended mitigation, a moderate decrease in wetland habitat area is expected. It is anticipated that through the removal of invasive species and the construction of a wetland feature, biodiversity can be restored within the project footprint, providing higher quality wetland habitat.

7.2. Terrestrial Environment

To accommodate construction of the proposed development, the removal of vegetation communities consisting of meadow, mixed and deciduous forest habitat will be required. The Subject Site will be cleared as necessary, and the property will be graded.

7.2.1. Terrestrial Vegetation Communities

To accommodate project construction, most of the project footprint and associated vegetation communities will be cleared and graded. The impacts associated with this clearing will include the permanent loss or disturbance of vegetation communities, incidental damage to adjacent vegetation features, and localized changes to site drainage and habitat availability.

The permanent loss or disturbance of vegetation communities is approximately 8.7 hectares (see Figure 9 of Section 7.2.1 of the WSP Report located in Appendix B). This disturbance is directly associated with the clearing required to accommodate the Project and reflects the extent of vegetation removal previously identified in the 2022 Environmental Impact Study. A site visit completed in March 2026 indicated that there has been no discernible change in existing conditions since the earlier field investigations; vegetation communities remain consistent with those previously documented, and no new communities have established. Accordingly, the extent and distribution of impacts are unchanged from those described in the 2022 assessment. Vegetation planned for removal includes the following Ecological Land Classification (ELC) communities:

- / 0.04 ha of Fresh-Moist Deciduous Woodland (WODM5);
- / 1.9 ha of Poplar Mineral Deciduous Swamp (SWDM4-5);
- / 0.5 ha of Willow Mineral Deciduous Thicket Swamp (SWTM3);
- / 2.2 ha of Reed-canary Grass Graminoid Mineral Meadow Marsh (MAMM1-3);
- / 0.5 ha of Hedgerow (HR); and
- / 3.4 ha of Business Sector (CVC_1), which is predominately unvegetated.

Additional potential impacts associated with vegetation removal and site grading include accidental damage to trees and other vegetation due to construction activities, permanent loss of habitat for wildlife dependent on terrestrial communities, localized alterations to natural drainage patterns, reduced biodiversity and species abundance within developed areas, erosion and sedimentation affecting adjacent vegetation communities if not properly controlled, and an increased potential for the establishment or spread of non-native and invasive species following development.

The magnitude of these impacts is moderated by the existing disturbed condition of the Subject Property and the widespread presence of invasive species, including Glossy Buckthorn and Purple Loosestrife, which are abundant throughout the Site. Given that existing conditions have remained stable through 2026, the assessment of impacts presented herein remains valid and representative of current site conditions.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ The *Habitat Restoration and Monitoring Plan* shall address the management and removal of invasive species and incorporate appropriate native plant species to offset localized losses of vegetation and biodiversity associated with development-related removals.
- ✓ A detailed Erosion and Sediment Control (ESC) Plan shall be prepared and implemented during construction to ensure vegetation removal and site grading are carried out in a manner that minimizes potential impacts to surrounding natural and restored habitats.

Proposed Mitigation Measures – Construction Implementation

- ✓ Construction limits shall be clearly delineated using orange snow fencing or equivalent security fencing to prevent encroachment into adjacent natural features. Fencing shall be inspected regularly and maintained in good condition, with any deficiencies addressed promptly.
- ✓ A site-specific *Erosion and Sediment Control (ESC) Plan*, prepared during the planning stage, shall be implemented and maintained throughout construction to prevent sedimentation outside approved work areas.
- ✓ All construction machinery and equipment shall arrive on site in a clean condition and be free of fluid leaks, invasive species, and noxious weeds.
- ✓ Any fill materials used on site shall consist of clean fill only, free of contaminants, invasive species, and noxious weeds.
- ✓ All excess construction materials shall be removed from the site, and disturbed areas shall be stabilized and restored with appropriate native seeding and planting, as required and in accordance with approved restoration and landscape plans.

Proposed Mitigation Measures - After Construction

- ✓ Garbage bins shall be installed in public spaces to reduce littering and prevent the accumulation of waste in habitats adjacent to the development area.
- ✓ Interpretive or regulatory signage describing habitat restoration efforts and appropriate land use shall be incorporated, where feasible, to promote awareness, stewardship, and protection of naturalized features.

Vegetation removal associated with the proposed development is consistent with residential land development. Retention of the ecological corridor and implementation of the proposed wetland enhancement are expected to improve local biodiversity and complement adjacent habitat associated with the Mer Bleue Bog.

7.2.2. Woodlands

The swamp (SWDM4-5) and deciduous woodland (WODM5) within the Project footprint were deemed not significant based on the City of Ottawa's guidelines. A site visit conducted on March 26, 2026 indicated that there has been negligible change in existing conditions since the previous field investigations completed in 2020 and 2022. The extent, composition, structure, and overall condition of the woodland and swamp communities remain generally

consistent with those previously documented. As such, the anticipated effects of the proposed development on these features are unchanged from those identified in the 2022 Environmental Impact Study.

Notwithstanding their non-significant status, site clearing associated with construction of residential dwellings, driveways, and access roads is still expected to result in direct impacts to these woodland communities within the Project footprint. Anticipated impacts include:

- The permanent loss of or disturbance to approximately 1.94 ha of woodland habitat within the proposed Project footprint, including:
  - 1.9 ha of Poplar Mineral Deciduous Swamp (SWDM4-5); and
  - 0.04 ha of Fresh-Moist Deciduous Woodland (WODM5).
- Decreased biodiversity and reduced species abundance within cleared areas;
- A reduction in local urban canopy cover;
- The permanent loss of habitat for wildlife species that use these woodland and swamp communities; and
- Localized changes to natural drainage patterns associated with vegetation removal and site grading.

Given that existing conditions remain stable and unchanged through 2026, the impact assessment conclusions and mitigation measures identified in the 2022 study remain valid and applicable to the current Project design.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ Retention of healthy, mature, and mid-aged trees shall be prioritized where feasible, particularly along the Subject Property boundaries and within the realigned drainage corridor, as identified in Figure 9 of Section 7.2.1 of the WSP Report. Tree retention opportunities will be refined through detailed design to balance site grading, servicing requirements, and woodland protection.
- ✓ Tree protection and removal shall be further detailed through the preparation of an updated Tree Conservation Report (TCR) following detailed design, or prior to any tree removals required for early servicing, whichever occurs first, in accordance with City of Ottawa guidelines, to confirm specific retention, removals, and compensation measures and finalize total tree loss on the Site.

With the successful implementation of the mitigation measures outlined above, it is anticipated that there will be a moderate, permanent loss of non-significant woodland habitat within the Subject Property. This outcome is consistent with the disturbed baseline condition of the Site and the impacts previously assessed in the 2022 Environmental Impact Study.

7.2.3. Significant Wildlife Habitat

This section summarizes potential impacts the proposed project may have on Significant Wildlife Habitat confirmed within the Study Area.

Amphibian Breeding Habitat

The realignment of the feature through the southern portion of the Project footprint will result in the retention of swamp and thicket habitats that provide general amphibian habitat and maintain terrestrial movement connectivity to other suitable habitats. Amphibians were most frequently observed in areas south and west of the Project footprint, which will not be directly impacted by construction activities.

A site visit conducted on March 26, 2026 indicated that existing habitat conditions remain consistent with those documented during the 2020 and 2022 field investigations, with no discernible changes to vegetation communities, wetland extent, or amphibian habitat availability. As such, the assessment of amphibian habitat and anticipated impacts remains valid and unchanged from the 2022 Environmental Impact Study. Based on survey results and the

planned retention of key habitat features, the proposed development is expected to have a non-limiting impact on amphibians within the Study Area.

- Potential impacts on amphibians associated with the proposed development include:
- Permanent, but partial, loss of low-quality woodland and wetland amphibian habitat within the Project footprint as a result of vegetation clearing and grading;
- Potential physical harm to amphibians during clearing, grading, and construction activities;
- Potential indirect effects related to sediment or pollutant transport into adjacent wetland habitats during construction, if not properly mitigated; and
- Localized fragmentation of amphibian movement corridors, which will be mitigated through habitat retention and restoration measures identified in this EIS.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ General amphibian habitat features shall be incorporated into the design of the realigned drainage feature and associated wetland restoration areas, where feasible. Habitat design should be informed by a qualified biologist, as appropriate.
- ✓ Opportunities to support amphibians may include the incorporation of shallow, seasonally inundated depressions within restored swamp or low-lying areas, recognizing that any such features are intended to support habitat diversity and terrestrial connectivity rather than function as permanent aquatic systems.
- ✓ Where included, habitat enhancement measures may incorporate native wetland and moisture-tolerant vegetation and simple habitat features (e.g., woody debris or refugia) suitable for amphibian use.

Proposed Mitigation Measures – Construction Implementation

- ✓ Erosion and sediment control (ESC) measures, including silt fencing, shall be installed around the perimeter of the Project area prior to site activities to delineate construction limits and minimize the potential for wildlife entry. ESC measures shall be inspected on a regular basis and maintained in good working order, with any deficiencies addressed promptly.
- ✓ Prior to vegetation clearing or grading, a pre-construction sweep for amphibians should be undertaken in areas of suitable habitat, where feasible. Targeted amphibian salvage and relocation may be required from localized wet areas on a case-by-case basis, as determined by a qualified biologist.
- ✓ Heavy equipment shall not enter wetland areas unless required to undertake approved restoration, enhancement, or monitoring activities.
- ✓ Mitigation measures outlined in the City of Ottawa Protocol for Wildlife Protection during Construction shall be reviewed and all relevant measures implemented prior to and during construction of the proposed development.

With the successful implementation of the mitigation measures outlined above, it is anticipated that there will be an overall improvement in amphibian foraging habitat and terrestrial movement connectivity within the Study Area, supported by the proposed wetland restoration and enhancement measures.

Breeding Birds

Based on the results of the breeding bird surveys and observations during a site visit conducted on March 26, 2026, existing habitat conditions within the Study Area remain largely unchanged from those documented in the 2022 Environmental Impact Study. As such, the nature and extent of anticipated impacts to breeding birds associated with the proposed development are expected to be similar to those previously identified.

Vegetation removal within the Project footprint will result in a permanent loss of some nesting and foraging habitat, and moderate impacts to breeding birds within the Study Area are anticipated. However, the availability of comparable habitat in the surrounding landscape, together with the proposed restoration of riparian and wetland habitats, is expected to partially offset localized habitat losses.

The following direct and indirect impacts on breeding birds are anticipated:

- Permanent loss of nesting and foraging habitat within the development footprint;
- Potential physical harm to birds or active nests during vegetation clearing and construction activities;
- Localized reductions in species diversity, abundance, and distribution following development;
- Increased predation pressure associated with domestic animals; and
- An increased risk of bird collisions with buildings following occupation.

Pileated Woodpecker Cavity Trees

During field investigations conducted in support of the 2022 Environmental Impact Study, large cavity features consistent with potential use by Pileated Woodpecker (*Dryocopus pileatus*) were observed within several large White Willow (Salix alba) trees located within the Subject Property. These cavity features are characteristic of foraging, roosting, or nesting structures used by Pileated Woodpeckers and may also provide secondary nesting or shelter opportunities for other cavity-nesting bird species and wildlife.

At the time of the 2022 surveys, these cavity trees were not afforded year-round protection under the then-applicable Migratory Birds Convention Act (MBCA) framework, as protections primarily applied to active nests during the breeding period. As such, no direct regulatory constraints were associated with the presence of these cavity features at that time. A site visit conducted on March 26, 2026 indicated that existing conditions within the Study Area, including the presence and general condition of these cavity-bearing willow trees, have not changed materially since 2022.

Notwithstanding their regulatory status at the time of survey, cavity-bearing trees are recognized as high-value wildlife features due to their functional importance for nesting, roosting, and shelter. Removal of these trees, if required to accommodate the proposed development, would result in a direct and permanent loss of candidate cavity habitat for Pileated Woodpecker and other cavity-dependent species. Given the localized extent of these features, the disturbed context of the Site, and the availability of similar woodland habitat in the surrounding landscape, this impact is expected to be localized in nature. However, the loss of cavity trees represents an irreversible habitat change within the Project footprint that warrants consideration through appropriate mitigation measures, including retention where feasible and habitat compensation strategies.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ Improving breeding bird habitat quality shall be addressed through the development of the required *Restoration and Monitoring Plan*.
    - The restoration plan shall incorporate a diversity of native tree, shrub, and ground-layer species that provide suitable nesting, foraging, and cover habitat for local breeding birds, including fruit-bearing shrubs and species that support insect prey. Where appropriate, the design should also provide perching opportunities for aerial insectivores along open or naturalized low-lying features.

Mitigation for Pileated Woodpecker Cavity Trees

- ✓ **Updated seasonal surveys shall be conducted by a qualified avian biologist prior to any vegetation** removal affecting cavity-bearing trees or other mature trees across the Subject Property, including, but

not limited to, the identified White Willow trees, to determine whether observed cavities are being used for nesting/breeding purposes or are limited to foraging, roosting, or inactive use. Surveys shall be timed appropriately within the breeding season to allow reliable determination of cavity use and occupancy.

- ✓ If updated surveys confirm that cavities are used solely for foraging or non-nesting purposes, tree removal may proceed outside of the core breeding period, provided that general breeding bird timing restrictions and other applicable mitigation measures outlined in this EIS are followed.
- ✓ If updated surveys confirm the presence of an active nest cavity, clearing or disturbance of the affected tree(s) shall be managed in accordance with the Migratory Birds Convention Act (MBCA) and associated regulations. In such circumstances:
    - No tree removal or disturbance shall occur within the nest protection setback while the nest is active;
    - A setback distance appropriate to the species, site context, and guidance from Environment and Climate Change Canada shall be established and maintained; and
    - Vegetation removal may only proceed once the nest is confirmed inactive (i.e., following fledging or nest abandonment), as verified by a qualified avian biologist.
- ✓ Retention of cavity-bearing trees shall be prioritized where feasible within the development layout, particularly where retention does not conflict with safety, grading, or servicing constraints. Retained cavity trees shall be protected during construction through appropriate fencing and tree protection measures.
- ✓ Where retention of cavity trees is not feasible and nesting has not been confirmed at the time of removal, permitting through ECCC will be required and habitat compensation measures shall be identified and addressed through the Habitat Restoration and Monitoring Plan, as outlined in the Aquatic Habitat section of this EIS.

Proposed Mitigation Measures – Construction Implementation

- ✓ Bird-friendly building design principles shall be considered in the design of the development to minimize the risk of bird collisions. Building design shall incorporate the City of Ottawa Bird-Safe Design Guidelines, where applicable, and the Canadian Standards Association's Bird-Friendly Building Design (CSA 2019) guidelines shall also be consulted and applied, as appropriate, during detailed design.
- ✓ Retention of native vegetation along the realigned drainage corridor and within restored wetland areas shall be prioritized, where feasible, to maintain available nesting and foraging habitat for breeding birds.
- ✓ Orange snow fencing or other suitable fencing shall be installed to clearly delineate construction limits from adjacent naturalized areas and prevent encroachment of construction activities into surrounding habitats. Fencing shall be monitored on a weekly basis, and any deficiencies shall be addressed within 48 hours of identification.
- ✓ A site-specific erosion and sediment control (ESC) plan shall be implemented to prevent erosion and sedimentation outside approved work areas, particularly toward adjacent naturalized and restored habitats.
- ✓ Clearing of vegetation shall be avoided, where feasible, during the breeding bird and bat roosting season (March 15 to November 30, inclusive). Where clearing cannot be avoided during this period, additional review and mitigation by a qualified ecologist shall be undertaken in accordance with applicable legislation and City protocols.

- ✓ Additional mitigation measures outlined in the Protocol for Wildlife Protection during Construction (City of Ottawa, 2015) shall be reviewed prior to construction, and all relevant measures shall be implemented, as applicable, during construction of the proposed development.

With implementation of the recommended mitigation measures, and subject to confirmation of cavity use through updated seasonal surveys for Pileated Woodpecker, a minor overall loss of breeding and foraging habitat for birds within the Subject Property is anticipated.

Bat Maternity Colonies

Construction activities (including clearing, grading, and equipment operation) may result in the loss or disturbance of bat roosting and foraging habitat where trees are removed or woodland edges are modified. Short-term effects may also occur through noise, vibration, and temporary increases in human activity that disrupt bat use of adjacent forest stands, particularly during vegetation removal and construction activities.

A site visit conducted on March 26, 2026 indicated that existing habitat conditions within the Study Area are generally unchanged from those observed and documented in 2022. Woodland, swamp, and meadow communities continue to provide marginal roosting and foraging habitat for bats, consistent with prior assessments. As such, the nature and magnitude of potential impacts to bats associated with the proposed development are expected to be consistent with those identified in the 2022 Environmental Impact Study.

Removal of swamp and meadow vegetation communities is anticipated to result in a minor overall loss of available bat maternity and foraging habitat. However, given the availability of suitable meadows, woodlots, and edge habitat in the surrounding landscape, this loss is expected to be non-limiting at the local scale. In addition, residential and street lighting introduced through development may attract insects and provide alternative foraging opportunities for some bat species.

As identified in Section 5, several bat species present or potentially present within the Study Area (including Eastern Red Bat, Hoary Bat, and Silver-haired Bat) have been recently uplisted to Endangered status under provincial legislation. While no maternity colonies were confirmed during field investigations, the presence of suitable roosting and foraging habitat requires that potential effects be carefully managed during construction.

The following potential impacts to bat habitat are anticipated:

- / Permanent loss of candidate roost trees within swamp, hedgerow, and woodland habitats due to vegetation removals; and
- / Potential accidental displacement, injury, or mortality of individual bats using trees or woodland edges as temporary day-roosts during the active season.

Proposed Mitigation Measures – Construction Implementation

- ✓ Clearing of vegetation shall be avoided, where feasible, during the general bat active and maternity roosting period (May 1 to October 15) to reduce the risk of disturbance or harm to roosting bats. Where vegetation removal cannot be avoided during this period, additional mitigation and review by a qualified biologist shall be undertaken in accordance with applicable provincial guidance.
- ✓ To offset the localized loss of candidate roosting habitat within the Project footprint, approximately four (4) large bat boxes, installed on two poles, shall be provided in appropriate open areas adjacent to retained natural features near the eastern and southern boundaries of the Subject Property. Bat box locations and specifications shall be confirmed as part of the Habitat Restoration and Monitoring Plan, taking into consideration solar exposure, surrounding vegetation, and long-term compatibility with residential development.

With the successful implementation of the mitigation measures outlined above, the proposed development is anticipated to result in a negligible residual impact on bats and bat habitat within the Study Area.

Habitat for Species of Conservation Concern

No Species of Conservation Concern or associated habitat were identified within the Study Area based on background review and field investigations. Given the absence of suitable habitat and confirmed occurrences, no impacts to SCC are anticipated because of the proposed development.

7.3. Species at Risk and Species at Risk Habitat

7.3.1. Bobolink and Eastern Meadowlark

Bobolink (*Dolichonyx oryzivorus*) and Eastern Meadowlark (*Sturnella magna*) are not expected to be impacted by the proposed development. Targeted surveys and background review confirmed the absence of individuals and suitable grassland breeding habitat within the Subject Property and Study Area. As such, no direct or indirect effects to these species are anticipated because of the Project.

7.3.2. SAR Bats

Woodland, swamp, and hedgerow habitats within the Subject Property provide limited and marginal roosting and foraging habitat for SAR bats, consistent with the findings summarized in Section 5. No bat maternity colonies were confirmed during previous field investigations, and a site visit conducted on March 26, 2026 indicated that habitat conditions remain generally unchanged from those documented in earlier assessments.

Potential effects on SAR bats associated with the proposed development are therefore expected to arise primarily during construction-phase activities, including vegetation clearing and tree removal, where individual bats may be using trees or woodland edges as temporary day-roosts. Longer-term effects may include the localized loss or modification of foraging and roosting habitat where vegetation is permanently removed to accommodate residential development and associated infrastructure.

Given the disturbed condition of the Site, the limited extent and quality of bat habitat present, and the availability of suitable roosting and foraging resources in the surrounding landscape, the overall magnitude of potential impacts to SAR bats is expected to be low. With appropriate mitigation measures in place, impacts are anticipated to be localized and manageable.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ The *Habitat Restoration and Monitoring Plan* shall identify and document opportunities for planting large native tree species (e.g., Oak, Maple, Hickory) to support the long-term provision of suitable bat roosting and foraging habitat within the community as vegetation matures. Planting locations, species selection, and performance objectives shall be detailed and monitored through the Restoration and Monitoring Plan.
- ✓ Where possible, retain large mature trees (including cavity trees) to maintain available roosting habitat, specifically within parkland dedication and/or along the retained woodland edges.
- ✓ The installation of bat boxes (i.e., constructed roosting habitat) should be considered at the detailed design phase to offset habitat loss. Boxes should be in association with parkland or within the edges of stormwater management facility blocks, meeting the design criteria provided by Bat Conservation International (BCI 2025).

Proposed Mitigation Measures – Construction Implementation

- ✓ Tree removal should be avoided during the general active period for bats (i.e., March 15 to November 30, inclusive).
    - o If this is not possible, conduct an exit survey prior to cutting them down. If the exit survey identifies bats, contact MECP or biologist for additional guidance.

With implementation of the recommended mitigation measures, including avoidance of vegetation clearing during the bat active season, residual impacts to Species at Risk bats are expected to be temporary and minor. Under these conditions, and in the absence of confirmed maternity colonies, additional permitting or authorization under the Species Conservation Act is not anticipated to be required.

7.3.3. Butternut

Butternut (*Juglans cinerea*) is not expected to be impacted by the proposed development. Targeted searches undertaken during previous field investigations, supported by background review, confirmed the absence of Butternut individuals within the Subject Property and Study Area. As such, no direct or indirect effects to this species are anticipated as a result of the Project.

7.3.4. Black Ash

Black Ash (Fraxinus nigra) was not specifically surveyed during field investigations; however, areas of suitable habitat are present within the Study Area, particularly within the swamp and wetland communities located along the southern portion of the Subject Property. These habitats exhibit soil moisture and community characteristics consistent with those typically associated with Black Ash. As a result, there is a moderate potential for the species to occur within portions of the Project footprint.

Should Black Ash be present, vegetation removal and site grading associated with the proposed development could result in the direct loss of individual trees and associated habitat. Accordingly, targeted species-specific surveys will be required during detailed design, prior to site clearing, to confirm the presence or absence of Black Ash and to determine whether additional avoidance or mitigation measures are necessary.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ **Targeted transect surveys for Black Ash shall be completed by a qualified botanist during the appropriate growing season as part of detailed design, in conjunction with the updated Tree Conservation Report and prior to site alteration or vegetation removal**, to confirm the presence or absence of the species within the Study Area, with focus on swamp and wetland habitats in the southern portion of the Subject Property where suitable habitat has been identified.

- ✓ If Black Ash is not identified during targeted surveys, no further species-specific mitigation related to this species will be required.

- ✓ If Black Ash is identified within the Subject Property and cannot be avoided, permitting will be required and additional mitigation and compensation measures will be developed in consultation with the Ministry of the Environment, Conservation and Parks (MECP). In such cases, permitting or authorization under the Species Conservation Act may be required, depending on the location, condition, and potential impact to the individual trees or associated habitat.

In conclusion, while Black Ash was not specifically surveyed during previous field investigations, suitable habitat is present within portions of the Study Area. As such, targeted surveys are required during detailed design, prior to site clearing, to confirm the presence or absence of this species. The results of these surveys will inform any

necessary avoidance, mitigation, or permitting requirements to ensure compliance with applicable provincial legislation.

7.4. Incidental Wildlife and Wildlife Habitat

Construction and build-out activities associated with the proposed development (including clearing, grading, servicing, and residential construction) are expected to result in a minor negative impact on local wildlife, primarily due to the removal of existing vegetation and temporary disturbance during construction. A site visit conducted on March 26, 2026 indicated that existing site conditions remain generally unchanged from those documented in the 2022 Environmental Impact Study. As such, the nature, extent, and magnitude of impacts to wildlife and wildlife habitat are expected to be consistent with those previously identified.

Potential impacts to wildlife resulting from the proposed development include:

- Displacement, injury, or mortality of wildlife during clearing and grading activities due to interaction with construction equipment;
- Loss of general habitat suitable for common urban and rural wildlife within the development footprint;
- Temporary disturbance related to noise, vibration, and increased human activity during construction, including during breeding periods;
- Disturbance from artificial lighting associated with residential development, which may affect wildlife use of retained natural areas and adjacent habitats; and
- Increased potential for human–wildlife interactions following occupation, including wildlife mortality from vehicle traffic.

Most construction-related effects (e.g., noise, vibration, and temporary displacement) are expected to be short-term, while habitat loss within the development footprint will be permanent. Given the highly modified agricultural and suburban context of the Site, the limited ecological sensitivity of habitats present, and the retention of key natural features, impacts to general wildlife and wildlife habitat are expected to remain localized and low to moderate in magnitude.

Proposed Mitigation Measures – Planning and Design Stage

- ✓ Building and community design should consider the City of Ottawa's Bird-Safe Design Guidelines where practical (City of Ottawa, 2022a).
- ✓ Vegetation planting should consider bird breeding, wildlife shelter, and foraging habitat within the Subject Site.

Proposed Mitigation Measures – Construction Implementation

The best practices outlined in the *Protocol for Wildlife Protection during Construction* (City of Ottawa, 2015) shall be followed during all construction activities associated with the proposed development. The following measures are consistent with the Protocol and are intended to minimize potential impacts to wildlife and wildlife habitat:

- ✓ Impacts to natural vegetation shall be minimized to the extent possible through careful planning of clearing limits and construction staging.
- ✓ Pre-stressing of the site shall be undertaken, where appropriate, in advance of construction to encourage wildlife to vacate the area prior to the commencement of clearing and grading activities. Additional pre-stressing measures outlined in the City of Ottawa Protocol shall be implemented, as applicable.

- ✓ Orange snow fencing or other suitable fencing shall be installed around the perimeter of the work area to clearly delineate construction limits, prevent encroachment into adjacent habitats, and discourage wildlife from entering active construction zones. Fencing shall be monitored regularly, and any deficiencies shall be addressed promptly. Perimeter fencing shall be installed in a manner that does not prevent wildlife from leaving the site, including clearing the area prior to fencing installation where required.
- ✓ Clearing of trees, snags, or vegetation with potential bat roosting habitat shall be avoided during the bat active season (March 15 to November 30, inclusive), where feasible.
- ✓ Clearing of vegetation shall be avoided during the breeding bird season (April 15 to August 15, inclusive), where feasible. Where clearing cannot be avoided during this period, a qualified ecologist shall be consulted to determine whether nest searches can be conducted to facilitate clearing. No work shall occur within established setbacks of active nests until nests are confirmed inactive, in accordance with the Migratory Birds Convention Act (MBCA).
- ✓ Idling of construction machinery shall be minimized to reduce noise and disturbance to resident wildlife.
- ✓ If wildlife enters the active work area, construction activities in that area shall cease, and wildlife shall be allowed to vacate the site under its own power. Where necessary, wildlife may be relocated to suitable habitat outside the development area by a qualified professional, consistent with applicable legislation and best practices.
- ✓ Environmental awareness training shall be provided to on-site construction personnel to educate workers on local wildlife, site sensitivities, and applicable mitigation measures to ensure compliance with environmental requirements.
- ✓ If any wildlife is injured or found injured during construction, a qualified wildlife rehabilitation centre shall be contacted immediately. Injured wildlife shall be transported to an appropriate facility (e.g., Rideau Valley Wildlife Sanctuary), as directed by qualified professionals.

With the successful implementation of the mitigation measures outlined above, including wetland and aquatic habitat restoration and enhancement, the proposed development is anticipated to result in a negligible residual impact on wildlife within the Study Area. These restoration measures are expected to improve habitat quality and ecological function, providing a long-term benefit to wildlife in the surrounding area.

7.5. Trees

Tree-related impacts and associated mitigation measures are documented in the Tree Conservation Report (TCR) provided as Appendix A. The TCR includes an assessment of anticipated tree impacts resulting from the proposed development, identification of mitigation and protection measures, and consideration of impacts to Distinctive trees. Tree impacts, retention opportunities, and mitigation measures are illustrated on Figure A-1, and readers are referred to Appendix A for the complete tree impact assessment and supporting discussion.

An updated tree survey will be required following detailed design to document boundary trees, confirm the presence and limits of City-owned trees, and assess any additional trees that may be impacted by refined grading or servicing plans. Should tree removals be required prior to detailed design to accommodate early site servicing efforts, a TCR addendum will be completed to document the current conditions and stem density of the Site prior to issuance of a tree removal permit. Submission of the TCR addendum would be completed in parallel to the EIS submission and approval review.

The community landscape plan and the Habitat Restoration and Monitoring Plan shall consider the City of Ottawa Official Plan objective of achieving approximately 40 percent urban tree canopy cover and shall incorporate tree planting and retention measures that contribute toward meeting this target over the long term.

7.6. Indirect Impacts

Beyond direct impacts associated with the proposed development, a number of indirect impacts can affect the natural heritage system as the subject lands transition from largely agricultural/undeveloped uses to an urban neighbourhood. Because the area is already highly modified and habitat diversity is limited, these existing conditions shape how indirect impacts affect the habitats and features in the lands around the subject site.

- **Air, Light, and Noise:** Localized increases in dust and exhaust during active works, followed by routine traffic emissions after build-out, can influence adjacent features. New residential lighting and streetlights introduce a net increase in nighttime illumination that may negatively affect adjacent habitats. In addition, typical neighbourhood noise may alter wildlife behaviour in adjacent habitats.

- **Forest Edge Effects:** Where encroachment into woodland/forest habitat occurs, a reduction in interior habitat and loss of an established forest edge can allow deeper penetration of light and wind. This can change moisture, temperature, and understory composition at the edge. Given the Site's isolated woodland blocks in a growing urban setting, these edge-related changes are expected to be localized and not dissimilar to the existing condition.

- **Invasive Species:** Construction traffic, disturbed soils, and future landscaping are all factors that can introduce or spread non-native, invasive plants. Natural habitats, including the woodlands found onsite, may be susceptible to these impacts. Over time, this may shift understory composition and reduce the representation of native species if not actively mitigated (as noted above). The potential risk is greatest in recently disturbed areas and along linear features such as paths and roadways.

- **Hydrologic Effects:** Establishing new drainage patterns for the subdivision may influence how stormwater flows along edges and roadside ditches. Because the headwater drainage features mainly serve as roadside conduits, their overall role is expected to remain largely the same, with only small changes to local moisture regimes. No substantial negative impacts to the natural heritage systems are anticipated.

- **Climate Change:** In the short term, construction equipment and trucks will add noise and exhaust, and freshly exposed soils and pavement can make the area feel hotter and drier. As the neighbourhood opens, higher traffic volumes will increase localized emissions and heat. Over time, new street trees and park plantings will help shade surfaces and cool the microclimate, partially (but likely not fully) offsetting these effects.

Indirect impacts associated with the proposed development are expected to remain limited with proper mitigation in place. Retention of trees and strategic landscaping throughout parks, streetscapes, and open spaces will help moderate edge effects and support ecological function. With appropriate construction controls, invasive species management, and thoughtful community design, long-term indirect impacts can be effectively minimized. Overall, the development is anticipated to integrate into the surrounding landscape with minimal residual indirect effects.

7.7. Cumulative Impacts

Cumulative impacts have been considered in the context of the local and regional environment in which the Subject Property is situated. The proposed development is located in eastern Ottawa within an area that has experienced ongoing residential growth and urban expansion over the past two decades. Surrounding land uses include existing and active residential developments, remnant agricultural lands, limited woodland features, transportation infrastructure, and an active landfill to the west. The Subject Property represents a remnant parcel within the broader Spring Valley Trails development area, with additional development occurring or approved to the north.

At the landscape scale, the Study Area is located adjacent to the Mer Bleue Provincially Significant Wetland (PSW), a regionally and provincially important natural feature that provides significant ecological functions and habitat for a wide range of species. While the Mer Bleue PSW remains a dominant and intact natural feature within the broader

landscape, the Subject Property itself is largely fragmented from surrounding natural heritage features due to existing development, road infrastructure, and the Prescott–Russell Trail.

Previous development phases within the Spring Valley Trails community incorporated a constructed wetland as habitat compensation for earlier watercourse alterations. This feature is located downstream of the Subject Property and is connected via drainage features historically influenced by upstream flows. Since the preparation of the 2022 EIS, development north of Navan Road has redirected the majority of upstream headwater drainage into municipal stormwater management infrastructure, with only the property immediately north of Navan Road continuing to contribute flows to the on-site drainage features. Observations from the March 26, 2026 site visit confirm that these drainage features no longer exhibit sustained flow and no longer function as active watercourses.

Given this context, the proposed realignment and enhancement of on-site drainage features to accommodate development is not expected to adversely affect downstream connections or the function of the existing compensation wetland. The future widening of Navan Road, which does not form part of this application, may require culverting of approximately 35 m of Reach HDF1-A adjacent to the existing Navan Road crossing. Given the minimal flows within the feature under existing conditions and its primary terrestrial linkage function, this future enclosure is expected to represent a minor incremental effect, to be assessed and mitigated through the approvals for the road widening. Instead, the proposed stormwater management strategy, which includes the controlled redirection of treated lot-level and roadway runoff toward enhanced drainage corridors and restored wetland areas, will maintain localized hydrologic function and limit cumulative impacts on downstream receiving environments. Where stormwater is directed toward naturalized features, it will be managed using a treatment-train approach, incorporating measures such as oil-grit separators, vegetated swales, and other low-impact development practices consistent with current municipal and provincial guidance.

Based on the results of field investigations and confirmation that site conditions remain largely unchanged since 2022, the incremental contribution of the proposed development to cumulative effects on the natural heritage system is expected to be limited. The vegetation communities and wildlife habitat within the Subject Property are generally of low ecological quality and function, and their partial removal represents a marginal change relative to the broader pattern of urban development already established in the area. The retention of the ecological corridor and implementation of wetland and terrestrial restoration measures are expected to offset localized losses and provide long-term ecological benefits that complement the adjacent Mer Bleue PSW.

Overall, with implementation of the proposed mitigation, restoration, and stormwater management measures, the residual cumulative effects of the proposed development on natural heritage features and ecological functions are expected to be low and consistent with the scale of change already accommodated within the surrounding urban landscape.

Proposed Mitigation Measures – Planning and Design Stage

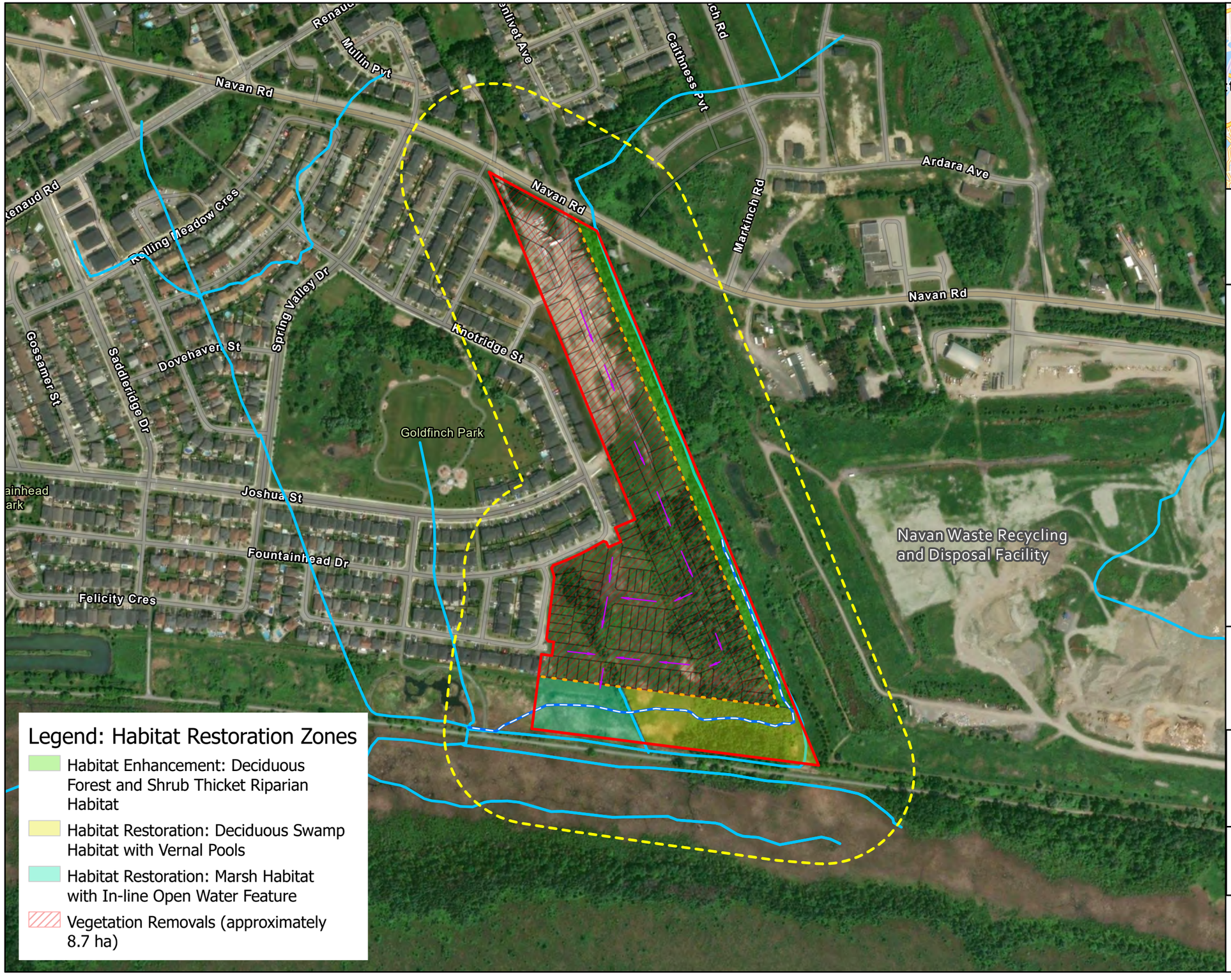
In addition to the mitigation measures listed above, the following mitigation should be considered to address the cumulative impacts resulting from the proposed development:

- ✓ Landscaping plans should compensate for the removal of woodlands and vegetation.
- ✓ Landscaping plans should include tree plantings to enhance canopy cover across the site, including replacement of any lost canopy cover due to tree removals, contributing toward the goal of 40% coverage in accordance with City Official Plan policies and associated guidelines; and
- ✓ Project design should promote the use of permeable landscaping materials and rain capture systems like rain gardens and permeable pavers.

Proposed Mitigation Measures – Construction Implementation

In addition to the mitigation measures listed above, the following mitigation should be considered to address the cumulative impacts resulting from the proposed development:

- ✓ Retention and enhancement of the vegetation within the setback along the existing and realigned drainage feature;
- ✓ Restoration and enhancement of the 2.4 hectares between the proposed development and the Mer Bleue PSW.
- ✓ Promote the use of low-impact design strategies such as the implementation of stormwater catchment and treatment by oil-grit separators and vegetated swales and releasing treated stormwater run-off to natural environments for maintenance of flows to downstream water features.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Subject Site
- Study Area 120m
- Tree Protection Fencing
- Existing Watercourse (outside of subject property, MNR 2019)
- Proposed Realigned Headwater Concept
- Conceptual Stormwater Flow Direction
- Site Plan

Legend: Habitat Restoration Zones

- Habitat Enhancement: Deciduous Forest and Shrub Thicket Riparian Habitat
- Habitat Restoration: Deciduous Swamp Habitat with Vernal Pools
- Habitat Restoration: Marsh Habitat with In-line Open Water Feature
- Vegetation Removals (approximately 8.7 ha)

Project:
Claridge Homes
Spring Valley Trails

Title:
Phase 5 & 6 - Opportunities & Constraints Assessment

Prepared By:
FOTENN

Date:
4/15/2026

Figure: 8

8. Summary and Conclusion

This report provides an evaluation of the anticipated environmental impacts associated with the construction and long-term occupation of the proposed Spring Valley Trails Phase 5 and 6 residential development located at 3252 Navan Road. The assessment is informed by field investigations completed between December 2019 and April–August 2020, supplementary investigations in May 2022, a comprehensive desktop screening review, and a site visit completed on March 26, 2026 to confirm existing conditions.

The March 26, 2026 site visit indicated that existing environmental conditions have not changed materially since the 2022 Environmental Impact Study, and that vegetation communities, wildlife habitat, drainage features, and wetland extent remain generally consistent with those previously documented. As such, the anticipated environmental impacts associated with the proposed development are expected to be similar in nature, extent, and magnitude to those identified in the 2022 assessment, subject to updated mitigation and management measures.

Key findings are summarized as follows:

- **Headwater drainage features** within the Subject Property formerly conveyed flows from Navan Road southward through the deciduous swamp and Reed Canary Grass meadow marsh. Upstream development north of Navan Road has since redirected most contributing flows into municipal stormwater infrastructure; the remaining contributing area, limited to the property immediately north of Navan Road, is insufficient to generate sustained flows. As a result, the feature no longer functions as a regulated watercourse. The drainage corridor will be realigned and enhanced to maintain terrestrial and ecological linkage functions, with restoration and monitoring works occurring within the Rideau Valley Conservation Authority (RVCA) regulated area associated with the Mer Bleue Bog.

- **Wetland communities** are present throughout the Subject Property and provide localized ecological functions, including foraging habitat for birds, amphibians, and mammals. Amphibian surveys indicate these wetlands provide marginal amphibian breeding habitat relative to wetlands in the surrounding landscape. Wetland and riparian functions are expected to be maintained or improved through implementation of the proposed Habitat Restoration and Monitoring Plan, including restoration of approximately 2.4 ha at the southern extent of the Study Area.

- **Vegetation communities** within the Subject Property consist primarily of deciduous poplar swamp, willow thicket, and Reed Canary Grass meadow marsh. These communities are generally disturbed and contain a high proportion of invasive and non-native species. The proposed development will result in a moderate loss of terrestrial and wetland vegetation and associated wildlife habitat; however, restoration and enhancement measures are expected to improve habitat quality and biodiversity over the long term.

- **Trees observed** include approximately 20 species, dominated by Trembling Aspen, Eastern Cottonwood, Green Ash, Manitoba Maple, and American Elm. Trees are generally mid-aged and in moderate to good condition, with evidence of pest or disease impacts on Green Ash, Trembling Aspen, and American Elm. Fourteen distinctive trees (>50 cm DBH) were previously identified. An updated Tree Conservation Report (TCR) will be required following detailed design, or prior to any tree removals required for early servicing, whichever occurs first, to reflect current site conditions, confirm retention feasibility, and document removal and compensation measures.

- **Pileated Woodpecker cavities (Candidate)**, primarily associated with large White Willow trees, were identified during previous surveys. As conditions remain unchanged, these features are still present. Updated seasonal cavity surveys across the Subject Property will be required prior to tree removal to confirm whether cavities are actively used for nesting versus foraging or roosting. Management and any required compensation will be addressed through the Habitat Restoration and Monitoring Plan and implemented in accordance with the Migratory Birds Convention Act.

- **No Species at Risk** were confirmed during field investigations. Bobolink and Eastern Meadowlark are not expected to be impacted due to the absence of suitable habitat. Butternut was not observed during targeted searches and is not expected to be affected by the Project. Black Ash was not previously surveyed, and suitable habitat is present within swamp and wetland communities, particularly in the southern portion of the Subject Property; therefore, targeted Black Ash surveys are required during detailed design, prior to site clearing, to confirm absence or determine if additional mitigation or permitting is required.

- **Wildlife and wildlife habitat** impacts associated with the proposed development are expected to be minor to moderate and localized, primarily related to vegetation removal and construction disturbance. With adherence to mitigation measures, including wildlife protection protocols, seasonal timing restrictions, and habitat restoration, residual impacts are anticipated to be low.

Overall, the mitigation measures described in this report—including updated tree and species-specific surveys, implementation of the Habitat Restoration and Monitoring Plan, and adherence to City and provincial wildlife protection requirements—have been developed to avoid or minimize environmental impacts associated with the Project. Based on the information available and subject to the implementation of the recommended mitigation, restoration, and monitoring measures, the proposed residential development is considered acceptable from an environmental perspective.

In accordance with Sections 3.5 and 3.7 of the City of Ottawa Environmental Impact Study Guidelines, a summary of potential impacts, recommended mitigation measures, monitoring requirements, and residual effects is provided by project phase in Table 10. Detailed descriptions of each measure are provided in the Impact Assessment and Mitigation section of this report.

Table 10: Summary of Potential Impacts, Mitigation, Monitoring, and Residual Effects

Project Phase	Natural Heritage Feature / Function	Potential Effect	Proposed Mitigation	Monitoring	Residual Effect	*EIS Section*
Planning and Design	Headwater Drainage Features (HDF1-A to HDF1-D)	Realignment of HDF1-C and HDF1-D; changes to local drainage	/ Realign within 20 m corridor with 15 m vegetated buffer / Retain HDF1-A/B in situ / Design grading/drainage to manage site runoff / RVCA consultation for works within regulation limit / Habitat Restoration and Monitoring Plan	/ Restoration and Monitoring Plan (min. 5 years post-construction)	**Low Impact** Terrestrial linkage function maintained	*7.1* *7.1.1*
	Wetlands (meadow marsh, thicket swamp, deciduous swamp)	Removal of up to ~4.6 ha of disturbed wetland vegetation	/ Restore/enhance ~2.4 ha wetland area in south of Site / Native planting / Invasive species management / ESC Plan / RVCA permit	/ Restoration and Monitoring Plan with performance criteria and benchmarks	**Moderate Impact** Decrease in wetland area, offset by restoration	*7.1.4*
	Woodlands (non-significant) and trees	Permanent loss of ~1.94 ha woodland/swamp; reduced canopy	/ Prioritize retention of healthy trees / Tree Conservation Report / Landscaping and tree planting toward 40% canopy target	/ Tree protection inspections per TCR	**Moderate Impact** Permanent loss of non-significant woodland	*7.2.2* *7.5*
	Pileated Woodpecker cavity trees	Loss of cavity trees / active nests	/ Updated seasonal surveys by qualified avian biologist before removal / Retain cavity trees where feasible / Nest setbacks if active	/ Pre-clearing surveys	**Low Impact** Minor loss of breeding/foraging habitat	*7.2.3*
	Black Ash	Potential loss of SAR trees if present	/ Targeted transect surveys during growing season / Permitting if present and unavoidable	/ Targeted surveys	**TBD** To be confirmed through surveys	*7.3.4*
	Wildlife and birds	Bird collisions; habitat loss	/ Bird-Safe Design Guidelines / Native planting for breeding, shelter and foraging / Bat boxes considered	/ None required	**Low Impact** Negligible Loss of Terrestrial Habitat – offset by enhanced wetland area	*7.2.3* *7.4*
Site Preparation (clearing and grubbing)	Breeding birds and bats (incl. SAR bats)	Harm to nests, birds and roosting bats during clearing	/ Avoid clearing of vegetation between Mar 15 to Nov 30	/ Pre-clearing surveys by qualified ecologist	**Low Impact** Manageable risk to Breeding Birds, bats, and associated habitat	*7.2.3* *7.3.2* *7.4*
	Amphibians and general wildlife	Injury/mortality during clearing and grading	/ Pre-construction amphibian sweep / Site pre-stressing / Fish and wildlife salvage within 48 hrs of works / City Protocol for Wildlife Protection during Construction	/ Environmental monitor during clearing	**Low Impact** Manageable risk to Amphibians and Wildlife	*7.2.3* *7.4*
Construction	Drainage features, wetlands and downstream habitat	Erosion, sedimentation and spills	/ Heavy-duty silt fencing and ESC Plan / Stockpiles within work area / Refuel 30 m from water / Spill kit and response plan / Dewatering plan / No equipment in wetlands	/ Weekly ESC inspections and after rain events	**Low Impact** Manageable risk to Drainage features, wetlands and associated habitat	*7.1.2* *7.1.4* *7.2.1*
	Drainage feature realignment (HDF1-C / HDF1-D), works within drainage features, and wetland restoration / enhancement areas	Direct disturbance of drainage features and wetland habitat; turbidity and sedimentation to downstream (indirect) fish habitat; temporary disruption of episodic flow conveyance; wildlife stranding	/ Complete works in drainage features during dry conditions or, where water is present, outside the warmwater timing window (March 15 to June 30) unless approved by DFO / Isolate and work in the dry / Fish and wildlife salvage within 48 hrs / Stabilize realigned feature before connecting flow / Re-vegetate disturbed areas promptly	/ Environmental monitor on-site during isolation, salvage, flow diversion and works within drainage features / Daily ESC / turbidity checks during these works / As-built inspection	**Low Impact** Temporary, localized disturbance offset by the realigned corridor and ~2.4 ha restoration area	*7.1.1* *7.1.3* *7.1.4*

Project Phase	Natural Heritage Feature / Function	Potential Effect	Proposed Mitigation	Monitoring	Residual Effect	*EIS Section*
			/ RVCA permit (O. Reg. 41/24) and DFO Request for Review as needed			
	Natural areas adjacent to work limits	Encroachment into retained habitat	/ Orange snow fencing at construction limits installed before works / Clean equipment and clean fill only / Remove excess materials	/ Regular fence inspections / Repairs within 48 hrs	**Low Impact** Manageable risk to adjacent natural areas	*7.1.3* *7.1.4* *7.2.1*
	General wildlife	Noise, vibration, human disturbance	/ Minimize idling / Stop work if wildlife enters area / Worker environmental awareness training	/ Environmental monitor	**Low Impact** Manageable risk to adjacent natural areas	*7.4*
Post-Construction / Operation	Realigned drainage feature and restored wetland	Establishment failure; invasive species	/ Implement Habitat Restoration and Monitoring Plan / SMART objectives / Adaptive management triggers and contingency measures / ESC remains until vegetation established	/ Min. 5 years post-construction or until performance criteria met	**Low Impact** Net improvement in habitat function, connectivity, and biodiversity.	*7.1.2* *7.1.4*
	Wetlands and natural areas	Littering, trampling, human-wildlife interaction	/ Garbage bins / Interpretive/regulatory signage / Walking paths where appropriate	/ Included in Restoration and Monitoring Plan	**Low Impact** Manageable Risks associated with human conflict outweighed by social benefit.	*7.1.4* *7.2.1*
	Downstream receiving features	Changes to runoff quality and quantity	/ Low impact development (oil-grit separators, vegetated swales) / Treated runoff directed to enhanced corridors	/ SWM inspections per servicing approvals	**Low Impact** Change in runoff quality and quantity is expected to be minor and well managed in accordance with CLA-ECA guidelines.	*7.1.1* *7.7*
	Bats and birds	Loss of roosting/nesting habitat	/ Install ~4 bat boxes / Native tree/shrub planting / Bird-friendly building design	/ Included in Restoration and Monitoring Plan	**Low Impact** Roosting habitat is not limited in this area. Installation of boxes offsets this impact.	*7.2.3* *7.3.2*

8.1. Policy Conformity and Next Steps

This EIS has been prepared in support of Draft Plan of Subdivision approval. An EIS addendum will be prepared following detailed design and prior to site clearing to document updated Species at Risk screening and targeted surveys (including Black Ash) completed in snow-free conditions during the appropriate season, the detailed design of the restoration and enhancement area, the detailed Habitat Restoration and Monitoring Plan (including performance thresholds, responsibilities and reporting), and the updated Tree Conservation Report.

Project-specific details and next steps, to help ensure adherence to the applicable policies and legislation:

Migratory Birds Convention Act, 1994

- ✓ No vegetation removal should occur between April 1 and August 15, to reduce the potential for incidental take of active bird nests.
- ✓ **Updated seasonal surveys shall be conducted by a qualified avian biologist prior to any vegetation removal** affecting cavity-bearing trees or other mature trees across the Subject Property.
    - Where retention of cavity trees is not feasible and nesting has not been confirmed at the time of removal, permitting through ECCC will be required and habitat compensation measures shall be identified and addressed through the Habitat Restoration and Monitoring Plan.

Fisheries Act, 1985

- ✓ DFO Request for Review submission may be required to determine if the Project will result in serious harm to fish or fish habitat. This requirement shall be established through the habitat restoration design process.

Fish and Wildlife Conservation Act, 1997

- ✓ If removal or alteration of aquatic habitat is proposed, a License to Collect Fish for Scientific Purposes will need to be obtained from MNR.

Conservation Authorities Act, 1990

- ✓ A H*abitat Restoration and Monitoring Plan* shall be prepared for the re-aligned drainage feature and associated wetland and riparian habitats.
- ✓ Consultation with the Rideau Valley Conservation Authority (RVCA) shall be undertaken to secure the required permit for restoration and monitoring works occurring within the regulated area associated with the Mer Bleue Bog Provincially Significant Wetland.
- ✓ A detailed *Erosion and Sediment Control Site Plan* shall be developed for implementation during construction to prevent impacts from all associated activities to adjacent water features.

Species Conservation Act, 2025

- ✓ **Targeted transect surveys for Black Ash shall be completed by a qualified botanist** during the appropriate growing season as part of detailed design, in conjunction with the updated Tree Conservation Report and prior to site alteration or vegetation removal.
    - If Black Ash is identified within the Subject Property and cannot be avoided, permitting will be required and additional mitigation and compensation measures will be developed in consultation with the Ministry of the Environment, Conservation and Parks (MECP).
- ✓ Tree removal should be avoided during the general active period for bats (i.e., March 15 to November 30, inclusive).

City of Ottawa Official Plan Policies, 2022

- ✓ It is recommended that the proposed development incorporate the City of Ottawa's Bird-Safe Design Guidelines, where feasible, to reduce the risk of bird collisions associated with building design.
- ✓ It is recommended that construction activities be carried out in accordance with the City of Ottawa's Protocol for Wildlife Protection during Construction to minimize potential impacts to wildlife during site works.
- ✓ The community Landscape Plan and the Habitat Restoration and Monitoring Plan, completed after detailed design, shall consider the City of Ottawa Official Plan objective of achieving approximately 40 percent urban tree canopy cover, and shall incorporate tree planting and retention measures that contribute toward meeting this target over the long term.

City of Ottawa: Tree By-law 2020-340

- ✓ **An updated tree inventory will be required following detailed design or prior to site clearing for servicing** to confirm tree removals along the site boundaries and in areas where grading or servicing may affect retained trees.
    - o The updated TCR shall be prepared in accordance with the City of Ottawa's Tree Conservation Report Guidelines and coordinated with the Landscape Architect and municipal engineering/grading design to ensure tree retention, removals, and compensation accurately reflect the mitigation measures outlined in this EIS and that grading is refined on a site-specific basis to maximize feasible tree retention.

/ Tree removals and other activities prohibited under By-law 2020-340 will require prior review and approval by the City, which can be achieved through the development application process and/or a permit under the by-law.

8.2. Standard of Care and Limitations

Field investigations were carried out using investigation techniques and ecological methods consistent with those ordinarily exercised by the qualified biologists who performed the fieldwork and other scientific practitioners, working under similar conditions and subject to the time, financial, and physical constraints applicable to these investigations. The field investigation results presented in this report are based on work undertaken by trained professionals and technical staff and the reasonable and professional interpretation using acceptable scientific practices current at the time the work was performed.

The results and findings of this study have been reported without bias or prejudice. Thus, conclusions have been based on our own professional opinion, substantiated by the results of this study, and have not been influenced in any way.

All contributors to this report, including the Tree Conservation Report provided in Appendix A, have read the entire report and have integrated relevant information into the recommendations for their subject area.

The information contained within this Environmental Impact Study is accurate and complete to the best of the assessors' knowledge.

Report Prepared by:



_____

Alex Zeller, M.Sc. (Biology)
Principal, Natural Environment – Fotenn
linkedin.com/in/alex-zeller-ecologist

References

- Bird Studies Canada (BSC), Environment Canada's Canadian Wildlife Service, Ontario Nature, Ontario Field Ornithologists and Ontario Ministry of Natural Resources. 2006. Ontario Breeding Bird Atlas (Atlas 2, 2001-2005). Retrieved from https://www.birdsontario.org/.
- Bird Studies Canada (BSC). 2001. Ontario Breeding Bird Atlas: Guide for Participants. Guelph: University of Guelph. Retrieved from https://www.birdsontario.org/jsp/download/obba_guide_en.pdf.
- Bird Studies Canada (BSC). 2009. Marsh Monitoring Program Participant's Handbook for Surveying (2009 Edition). Bird Studies Canada in cooperation with Environment Canada and the U.S. Environmental Protection Agency.
- City of Ottawa. 2013a. East Urban Community Phase 2 – Environmental Management Plan. Retrieved from https://ottawa.ca/en/planning-development-and-construction/community-design/environmental-management-plans/completed-environmental-management-plans.
- City of Ottawa. 2013b. East Urban Community: Community Design Plans for the Phase 1 and Phase 2 Areas. Retrieved from https://documents.ottawa.ca/sites/default/files/documents/euc_cdp_phase2_en.pdf.
- City of Ottawa. 2021. Tree Protection By-law 2020-340. Retrieved from https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/laws-z/tree-protection-law-no-2020-340#.
- City of Ottawa. 2022a. Bird-Safe Guidelines. https://ottawa.ca/en/planning-development-and-construction/community-design/design-and-planning-guidelines/completed-guidelines/bird-safe-design-guidelines#section-dc9cb259-ab3c-434f-b974-6d7b140ab161.
- City of Ottawa. 2022b. City of Ottawa Official Plan. Retrieved from https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/official-plan.
- City of Ottawa. 2022c. Protocol for Wildlife Protection during Construction. Retrieved from https://documents.ottawa.ca/sites/default/files/documents/construction_en.pdf.
- City of Ottawa. 2022d. Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment. Retrieved from https://documents.ottawa.ca/en/files/significant-woodlands.
- City of Ottawa. 2024. Urban Expansion in Future Neighbourhoods. Retrieved from https://engage.ottawa.ca/urban-expansion-in-future-neighbourhoods. Last accessed September 2024.
- Dobbyn, J. S. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists.
- eBird. 2024. eBird: An online database of bird distribution and abundance. Retrieved from https://ebird.org/
hotspots.
- Environment and Climate Change Canada (ECCC). 2022. Open Data. Retrieved from https://open.canada.ca/en/open-data.
- Environment and Climate Change Canada (ECCC). 2023a. Guidelines to Avoid Harm to Migratory Birds. Retrieved from https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html. Last accessed July 2024.

/ Environment and Climate Change Canada (ECCC). 2023b. Fact sheet: Nest Protection under the Migratory Birds Regulations, 2022. Retrieved from https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/fact-sheet-nest-protection-under-mbr-2022.html.

/ Environment and Climate Change Canada (ECCC). 2023c. Nesting Calendars. Retrieved from https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html#toc1.

/ Environment Canada (EC). 2013. How Much Habitat is Enough? Third Edition. Environment Canada, Toronto, Ontario.

/ Fisheries and Oceans Canada (DFO). 2013. Ontario Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat. Retrieved from: https://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/on-eng.html.

/ Fisheries and Oceans Canada (DFO). 2020. FFHPP Regulatory Review Process Map. Retrieved from https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/docs/process-map-plan-processus-eng.pdf.

/ Fisheries and Oceans Canada (DFO). 2022a. Project Near Water. Retrieved from https://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html.

/ Fisheries and Oceans Canada (DFO). 2024. Aquatic Species at Risk Map. Retrieved from https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html. Last accessed August 2024.

/ Geospatial Ontario (GEO; formerly, Land Information Ontario (LIO)). 2025. Aquatic Resource Area Polygon Segment. Retrieved from https://arcadis.maps.arcgis.com/home/item.html?id=0558f6ccea08410790a9182e568195c0. Last accessed July 2025.

/ Google. 2024. Aerial imagery centred around 45°13'55.47"N 75°44'42.28"W. Retrieved from Google Earth Pro software.

/ iNaturalist. 2024. iNaturalist Observations. Retrieved from https://www.inaturalist.org/.

/ Lee, H. 2008. Southern Ontario Ecological Land Classification Vegetation Type List.

/ Lee, H., Bakowsky, W., Riley, J., Puddister, M., Uhlig, P., & McMurray, S. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. North Bay, Ontario, Canada: Ontario Ministry of Natural Resources.

/ Ministry of Natural Resources (MNR). 2000. Significant Wildlife Habitat Technical Guide. Retrieved from https://www.ontario.ca/page/significant-wildlife-habitat-guide. Last accessed July 2024.

/ Ministry of Natural Resources (MNR). 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Toronto: Queen's Printer for Ontario. 248 pp.

/ Ministry of Natural Resources (MNR). 2011. Bats and Bat Habitats: Guidelines for Wind Power Projects. Retrieved from https://www.ontario.ca/page/bats-and-bat-habitats-guidelines-wind-power-projects. Last accessed September 2024.

/ Ministry of Natural Resources and Forestry (MNRF). 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. Ontario MNR Regional Operations Division: Southern Region Resources Section. Retrieved from https://docs.ontario.ca/documents/4776/schedule-7e-jan-2015-access-vers-final-s.pdf. Last accessed August 2024.

- Ministry of Natural Resources and Forestry (MNRF). 2022. Ontario Wetland Evaluation System (OWES). Retrieved from mnrf-pd-rpdpb-ontario-wetlands-evaluation-system-southern-manual-2022-en-2023-02-02.pdf. Last accessed September 2024.
- Ministry of Natural Resources and Forestry (MNRF). 2023. Ontario Watershed Information Tool (OWIT). Retrieved from https://www.lioapplications.lrc.gov.on.ca/OWIT/index.html?viewer=OWIT.OWIT&locale=en-CA. Last accessed September 2024.
- Ministry of Natural Resources and Forestry (MNRF). 2024. Natural Heritage Information Centre Database. Retrieved from https://www.ontario.ca/page/natural-heritage-information-centre. Last accessed September 2024.
- Ministry of the Environment, Conservation and Parks (MECP). 2023a. Policy Guidance on Harm and Harass under the Endangered Species Act. Retrieved from https://www.ontario.ca/page/policy-guidance-harm-and-harass-under-endangered-species-act. Last accessed July 2024.
- Ontario Geologic Survey (OGS). 2007. Physiography. Retrieved from https://www.hub.geologyontario.mines.gov.on.ca/. Last accessed September 2024.
- Ontario Geologic Survey (OGS). 2010. Surficial Geology. Retrieved from https://www.hub.geologyontario.mines.gov.on.ca/. Last accessed September 2024.
- Ontario Geologic Survey (OGS). 2011. 1:250 000 Scale Bedrock Geology of Ontario. Retrieved from https://www.hub.geologyontario.mines.gov.on.ca/. Last accessed September 2024.
- Ontario Breeding Bird Atlas (OBBA). 2001. Guide for Participants. Atlas Management Board, Federation of Ontario Naturalists, Don Mills. Retrieved from https://www.birdsontario.org/jsp/download/obba_guide_en.pdf. Last accessed August 2024.
- Ontario Invasive Plant Council (OIPC). 2024. Best Management Practices. Retrieved from https://www.ontarioinvasiveplants.ca/resources/best-management-practices/. Last accessed May 2024.
- Ontario Nature. 2019. Ontario Reptile and Amphibian Atlas. Toronto Entomologists' Association. Retrieved from https://www.ontarioinsects.org/herp/. Last accessed September 2024.
- Rideau Valley Conservation Authority (RVCA). 2026. RVCA Public GeoPortal. Retrieved from https://gis.rvca.ca/geoportal/. Last accessed March 2026.
- Stanfield, L. 2017. Ontario Stream Assessment Protocol (OSAP). Retrieved from https://trcaca.s3.ca-central-1.amazonaws.com/app/uploads/2019/06/05112225/osap-master-version-10-july1-accessibility-compliant_editfootnoteS1M4.pdf. Last accessed September 2024.
- Toronto and Region Conservation Authority and Credit Valley Conservation (TRCA and CVC). 2014. Evaluation, Classification and Management of Headwater Drainage Features Guideline. TRCA Approval July 2013 (Finalized January 2014). Retrieved from https://trca.ca/conservation/aquatic-ecosystems/headwater-drainage-features/. Last Accessed March 2024.
- Toronto Entomologists' Association (TEA). 2023. Ontario Butterfly Atlas. Retrieved from https://www.ontarioinsects.org/atlas/. Last accessed September 2024.
- Urban Forest Associates Inc. 2002. Invasive Exotic Species Ranking for Southern Ontario.

Appendix A

Tree Conservation Report

Tree Conservation Report: Spring Valley Trails

This Tree Conservation Report (TCR) has been prepared as a supporting element of the Environmental Impact Study (EIS) for the proposed development. The purpose of the TCR is to identify, inventory, and evaluate existing trees within the Subject Property, assess potential impacts associated with the proposed development, and establish appropriate mitigation, protection, and compensation measures in accordance with City of Ottawa requirements. The TCR is triggered by applicable Planning Act approvals, including the proposed Plan of Subdivision and associated development applications, and is intended to inform detailed design and construction. Tree-related constraints, impacts, and mitigation have been summarized throughout the EIS, with the full tree assessment, mapping, and recommendations provided herein in support of the broader natural heritage evaluation.

Site Description

The Subject Property is located at 3252 Navan Road in the City of Ottawa and has an approximate area of 12.9 hectares. Detailed site context, land use history, and environmental conditions are described in the accompanying Environmental Impact Study (EIS). This section provides a summary of site characteristics as they relate specifically to tree resources and the Tree Conservation Report.

The tree inventory and assessment for this TCR are based primarily on tree information documented in the WSP (2020) and IBI (2022) Environmental Impact Studies and Tree Conservation Reports, supplemented by a confirmatory site visit conducted on March 26, 2026, which indicated that site conditions and tree cover remain largely unchanged.

Tree cover within the Subject Property occurs mainly along the site boundaries and within lower-lying areas in the southern and eastern portions of the Site, where wetter soil conditions constrain development and provide opportunities for tree retention. Portions of the Site have been previously disturbed by grading and development-related activities.

The proposed development consists of a residential subdivision with associated roads, servicing, and open space blocks. Tree retention, removals, and grading-related impacts have been evaluated as part of the development concept, with particular emphasis on boundary trees and trees adjacent to retained natural features. Proposed impacts and mitigation measures are illustrated on the Tree Impacts Plan (Figure A-2) and discussed further in this report.

Tree Inventory and Assessment

In accordance with the City of Ottawa's Tree Conservation Report Guidelines, trees ≥10 cm DBH were surveyed within the Subject Property as part of the 2020 WSP Environmental Impact Study and Tree Conservation Report. Large stands of trees were assessed as groups based on species composition and density, consistent with standard City protocols. All Distinctive trees (≥50 cm DBH) were surveyed individually by a qualified professional, as outlined in the City guidelines. For each Distinctive tree encountered, species, DBH, health condition, height, and UTM location were recorded.

The original tree inventory was completed on December 17, 2019, with a follow-up survey conducted during the growing season on July 28, 2020 to confirm tree condition. No updated tree inventory surveys have been completed since that time; however, a confirmatory site visit conducted on March 26, 2026 observed that existing tree cover, distribution, and general condition remain largely unchanged from those documented in the 2020 surveys. As such, the tree inventory data remains representative of current site conditions and forms the basis of this Tree Conservation Report, subject to confirmation and refinement through detailed design and/or for early servicing requirements and the preparation of an updated TCR, as required by the City for issuance of tree removal permits.

Tree Inventory Results

The ELC and tree surveys recorded 20 tree species within the Study Area. The following species were encountered during the surveys:

- American Basswood (*Tilia americana*)
- American Elm (*Ulmus americana*)
- Bebb's Willow (*Salix bebbiana*)
- Black Cherry (Prunus serotina)
- Black Locust (*Robinia pseudoacacia L.*)
- Black Walnut (*Juglans nigra*)
- Common Buckthorn (*Rhamnus cathartica*)
- Crack Willow (*Salix fragilis*)
- Eastern Cottonwood (*Populus deltoides*)
- Eastern White Cedar (*Thuja occidentalis*)
- Eastern White Pine (*Pinus strobus*)
- Green Ash (*Fraxinus pennsylvanica*)
- Manitoba Maple (*Acer negundo*)
- Paper Birch (*Betula papyrifera*)
- Red Maple (*Acer rubrum*)
- Silver Maple (*Acer saccharinum*)
- Swamp White Oak (*Quercus bicolor*)
- Trembling Aspen (Populus tremuloides)
- White Poplar (*Populus alba*)
- White Willow (*Salix alba*)

A general tree count within the Subject Property estimated approximately 569 trees (≥10 cm DBH), with most trees measuring between 15–25 cm DBH. A confirmatory site visit conducted on March 26, 2026 noted that overall tree density, size distribution, and species composition remain largely unchanged from those documented in the 2020 surveys.

The tree community within the SWDM4-5 community is comprised mainly of Trembling Aspen (approximately 43%) and Eastern Cottonwood (approximately 31%), with lesser amounts of American Elm, Buckthorn, Green Ash, Manitoba Maple, and White Willow. Trees within this community are generally in healthy condition. Pest and disease damage continues to be evident on Green Ash and Trembling Aspen. Some trees near the northern boundary of this community remain in poorer condition, consistent with historic soil stockpiling and erosion associated with adjacent commercial land uses.

The WODM5 community is generally dominated by Manitoba Maple (approximately 68%) and Trembling Aspen (approximately 32%), with Green Ash, Black Walnut, Eastern White Pine, and Eastern White Cedar also present. Trees in this community continue to appear generally healthy. Due to property access limitations, only trees located within the Subject Property were inventoried and evaluated.

Hedgerow communities within the Subject Property consist primarily of Manitoba Maple (approximately 45%) and Trembling Aspen (approximately 40%), with lesser representation of White Willow, American Elm, and Basswood. Trees within the hedgerows remain in generally good health and exhibit smaller DBH ranges (typically 10–20 cm) compared to the swamp and woodland communities. Dead Green Ash trees remain present within these hedgerows, consistent with Emerald Ash Borer impacts previously documented.

A total of fourteen distinctive trees were identified during earlier surveys, of which eleven occur within the Subject Property and one Eastern White Pine is located immediately outside the property boundary. These distinctive trees were generally in good health at the time of assessment, except for two Silver Maple trees, which were evaluated as being in moderate condition due to observed dieback, dead branches, and large cavities. The March 26, 2026 site visit indicated that the distribution of distinctive trees remains consistent with previous observations.

The locations of distinctive trees are illustrated on Figure A-1, and detailed characteristics—including species, DBH, condition, and coordinates—are summarized in Table A-1.

Table A-1: Distinctive Tree Inventory

Tree ID	Scientific Name	Common Name	DBH (cm)	Condition	Notes	Easting	Northing
01	*Acer sachharinum*	Silver Maple	61	Moderate	Dead branches, large cavities present, fungus growth along trunk.	460020	5030739
02	*Acer saccharinum*	Silver Maple	68	Moderate	Fused trunks, some dieback.	460015	5030753
03	*Populus deltoides*	Eastern Cottonwood	70	Good	Good form.	460048	50303730
04	*Populus deltoides*	Eastern Cottonwood	52, 32, 35	Good	Slight lean, multi-stemmed.	460249	5030303
05	*Populus deltoides*	Eastern Cottonwood	71	Good	Minimal dead branches.	460275	5030290
06	*Salix alba*	White Willow	57	Good	Minor number of dead branches.	460297	5030227
07	*Salix alba*	White Willow	53	Good	n/a	460293	5030217
08	*Salix alba*	White Willow	53, 20	Good	Slight lean, multi-stemmed.	460284	5030225
09	*Populus deltoides*	Eastern Cottonwood	52	Good	n/a	460390	5030058
10	*Populus deltoides*	Eastern Cottonwood	60	Good	n/a	460206	5030519
11	*Populus deltoides*	Eastern Cottonwood	55	Good	Moderate lean, some dead branches.	460204	5030518
12	*Pinus strobus*	Eastern White Pine	55	Good	Outside of property parcel.	460213	5030527
13	*Ulmus americana*	American Elm	50	Good	Co-dominant stems, broken branches	460166	5030086
14	*Salix alba*	White Willow	51, 52, 46, 49, 53	Good	Multi-stemmed, lean	460311	5030253

Tree Preservation and Compensation Approach

Tree preservation and compensation within the Subject Property have been evaluated in accordance with the City of Ottawa's Tree Protection By-law, Tree Conservation Report Guidelines, and broader urban forest and natural heritage objectives. The approach balances the requirements of residential development with opportunities to retain existing trees, enhance ecological function, and increase long-term canopy cover within the future community.

Tree preservation efforts prioritize the retention of healthy, mature, and mid-aged trees where feasible, particularly along site boundaries and within areas adjacent to retained natural features. These trees provide immediate canopy cover, wildlife habitat value, and ecological connectivity, and their retention helps moderate edge effects between developed areas and adjacent natural systems.

Tree compensation and planting will be addressed through a dual-strategy approach, combining targeted planting within the habitat restoration and enhancement areas and comprehensive streetscape and subdivision-wide landscaping:

- The proposed *Habitat Restoration and Monitoring Plan* emphasizes tree planting within a swamp community and along the eastern portion of the Subject Property, identified as an ecological enhancement area. Tree planting in these areas will prioritize native species appropriate to wetland and swamp conditions, supporting biodiversity, improving habitat quality, and reinforcing terrestrial connectivity adjacent to the Mer Bleue Provincially Significant Wetland.

- In parallel, landscape plans for the broader subdivision will emphasize the planting of trees in accordance with City of Ottawa standards, including street trees, park trees, and trees within open space and private lands. Non-invasive, climate-appropriate species will be selected to ensure long-term viability and compatibility with municipal infrastructure and servicing constraints.

Through the combined application of tree retention, restoration planting, and subdivision-wide landscaping, it is anticipated that the future community will achieve and likely exceed the City of Ottawa's urban forest canopy target of approximately 40 percent over the long term. As proposed canopy trees mature, this strategy is expected to result in a net increase in overall tree cover relative to existing site conditions, contributing positively to urban forest objectives, microclimate moderation, and long-term ecological resilience.

Tree preservation, protection, and compensation measures will be refined through detailed design and documented in the updated Tree Conservation Report and Landscape Plans, ensuring consistency with City requirements and coordinated implementation during construction and post-construction monitoring.

Tree Impact Assessment and Mitigation

The proposed development will require tree clearing and grading within much of the Project footprint, resulting in an overall negative impact on tree cover within the Study Area. A site visit conducted on March 26, 2026 indicated that existing site conditions remain generally consistent with those documented in the 2020 Environmental Impact Study. As such, the extent and nature of anticipated tree-related impacts are expected to be similar to those previously identified; however, an updated TCR is required following detailed design, or prior to any tree removals required for early servicing, whichever occurs first.

Fourteen distinctive trees were identified during earlier field surveys, and it is anticipated that most will be removed due to the grade raise required to accommodate the proposed development. There remains potential for the retention of up to six distinctive trees along the perimeter of the Subject Property, particularly along the eastern

boundary where the drainage corridor will be retained and realigned. However, the feasibility of retaining these trees remains dependent on detailed grading and servicing requirements.

Healthy, mid-aged trees with sufficient setback from the development footprint are recommended for preservation and will require appropriate protection measures due to their proximity to construction activities. Trees located within the Rideau Valley Conservation Authority (RVCA) setback along the southern boundary of the Subject Property are recommended to be retained to maintain a natural buffer between the proposed development and the Mer Bleue Provincially Significant Wetland (PSW). Retention of these trees will also contribute to shading and ecological function along the realigned drainage corridor.

Anticipated impacts on distinctive and other inventoried trees are illustrated in the Tree Impacts Map provided below Figure A-2.

Proposed Habitat Restoration – Planning and Design Stage

- ✓ An updated tree survey shall be completed following detailed design or prior to early site servicing efforts to document trees along the boundary of the proposed development, identify opportunities for tree retention, and assess potential impacts to retained trees resulting from site grading, servicing, and construction activities. The survey and accompanying memo shall be submitted to the City of Ottawa for review and approval and shall be approved prior to the commencement of any on-site works.
- ✓ The required landscape plan shall include recommendations for native tree planting and be accompanied by a monitoring plan to ensure the successful establishment and long-term survivability of restoration plantings.
- ✓ Tree planting within the habitat restoration and enhancement areas shall prioritize native tree species appropriate to local site conditions, with the objective of enhancing habitat quality, supporting wildlife use, and strengthening ecological connectivity within and adjacent to the restored wetlands and drainage corridor.
- ✓ Tree planting within the broader subdivision shall be incorporated through the Community Landscape Plan and the Habitat Restoration and Monitoring Plan, including streetscapes, parks, open spaces, and private lands, using non-invasive and climate-appropriate species to increase canopy cover across the development and contribute to the City of Ottawa's urban forest canopy target of approximately 40 percent, where feasible.
- ✓ Tree species selection, planting density, and distribution shall be informed by this EIS and TCR, landscape design, and municipal engineering constraints to ensure compatibility with servicing, grading, and long-term tree health, while maximizing opportunities for canopy cover and shade.

Proposed Mitigation Measures – Construction Implementation Stage

- ✓ Tree retention shall be prioritized where feasible, particularly along the eastern and southern boundaries of the Subject Property and adjacent to retained natural features.
- ✓ Trees approved for removal shall be clearly marked prior to construction, and work crews shall be informed of the importance of removing only those trees identified for removal in the approved Tree Conservation Report.
- ✓ Tree protection fencing shall be installed around all trees to be retained within and adjacent to work areas prior to the commencement of construction activities.
    - Tree protection fencing shall be installed at the Critical Root Zone (CRZ) to prevent impacts to roots, trunk, and canopy. The CRZ shall be calculated as DBH × 10 cm, unless otherwise approved by the City.

- Groups of trees may be fenced together where fencing meets minimum CRZ requirements.
- All fencing shall be installed in accordance with the City of Ottawa Tree Protection Specification (City of Ottawa, 2019) and inspected regularly to ensure effectiveness.

✓ Within the CRZ of any retained tree:

- No materials, equipment, or spoil shall be stored;
- No signs, notices, or attachments shall be affixed to trees;
- No grade changes shall occur without prior approval; and
- No tunnelling, boring, or excavation shall take place.

✓ Excavation and construction activities near retained trees shall be carried out in a manner that avoids damage to roots, trunk, or branches. Where work is required near retained trees, it shall be supervised by an ISA-Certified Arborist, as appropriate.

✓ Prior to construction, any overhanging limbs or exposed roots of trees to be retained that may be affected by construction activities shall be pruned in accordance with industry best practices to minimize damage and promote proper wound closure. All such works shall be completed by, or under the supervision of, an ISA-Certified Arborist.

✓ Exhaust fumes from heavy machinery and stationary equipment shall not be directed toward retained trees for prolonged periods.

✓ Tree removals shall be avoided during the breeding bird season (April 15 to August 15) where feasible, in accordance with the Migratory Birds Convention Act (MBCA).

- Where tree removal cannot be avoided during this period, a nest survey by a qualified avian biologist shall be completed within 48 hours prior to removal.
- If active nests are identified, an appropriate buffer shall be established and maintained until the nest is confirmed inactive.

✓ All Green Ash trees removed shall be treated as potentially infected with Emerald Ash Borer and disposed of in accordance with City of Ottawa requirements to prevent the spread of the pest.

Proposed Mitigation Measures – After Construction

✓ Post-construction tree maintenance measures shall be implemented to address any damage sustained by retained trees during construction activities. Measures may include, but are not limited to:

- Treatment of trunk and crown injuries;
- Supplemental irrigation and drainage improvements, as required;
- Mulching to maintain soil moisture and reduce compaction; and
- Aeration of the root zone where soil compaction has occurred.

✓ Within twelve (12) months of construction completion, a condition assessment of all preserved trees shall be conducted by an ISA-Certified Arborist to evaluate post-construction health, structure, and safety.

✓ Trees identified as dead, in decline, or posing a safety hazard shall be pruned or removed, as recommended by the ISA-Certified Arborist. Where tree removal is required, it shall be undertaken promptly to mitigate foreseeable risk to people, structures, or infrastructure and in accordance with City of Ottawa requirements.

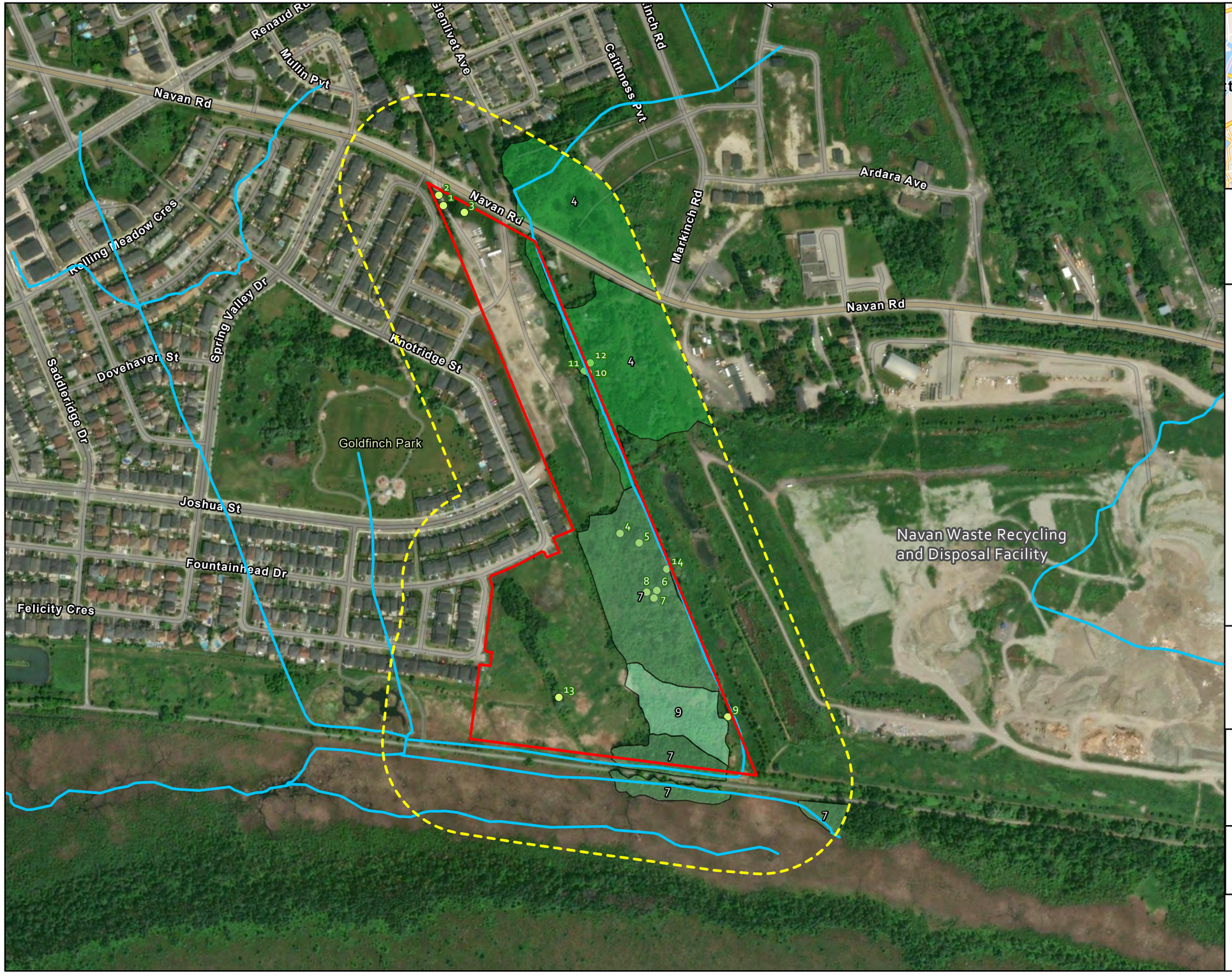
- ✓ Any required replacement or compensation planting resulting from post-construction tree loss shall be addressed in accordance with the approved Tree Conservation Report, Landscape Plan, and applicable City of Ottawa policies.

Conclusions

This Tree Conservation Report has evaluated existing tree resources within the Subject Property and assessed anticipated impacts associated with the proposed development. The analysis identifies opportunities for tree retention, outlines mitigation and protection measures, and establishes a framework for tree compensation and planting that supports the City of Ottawa's urban forest and canopy objectives. With the implementation of the recommended mitigation and restoration measures, the proposed development is expected to result in a balanced approach to tree removal and replacement, supporting responsible development and long-term canopy enhancement.

The findings of this TCR are consistent with the City of Ottawa's Tree Protection By-law and associated guidelines and demonstrate that tree preservation and compensation have been appropriately considered as part of the development process. The proposed restoration, enhancement, and subdivision-wide planting strategy is expected to contribute positively to overall canopy cover and urban forest resilience over time.

An updated Tree Conservation Report is required following detailed design or prior to early servicing works to incorporate finalized grading and servicing plans, document trees located along site boundaries, confirm the presence and limits of City-owned trees, assess any additional trees that may be affected by refined design elements, and document the results of the targeted Black Ash presence/absence surveys (and health assessments, if Black Ash is identified). The updated TCR shall be submitted to the City of Ottawa for review and approval prior to the commencement of any on-site works.





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Subject Site
- Study Area 120m
- Watercourse (MNR, 2019)
- Distinctive Tree (>50 cm DBH, WSP 2020)
- 4- Dry - Fresh Deciduous Woodland Ecosite
- 7- Poplar Mineral Deciduous Swamp Type
- 9- Willow Mineral Deciduous Thicket Swamp Ecosite /Purple Loosestrife Mineral Meadow Marsh Type

Project:

Claridge Homes Spring Valley Trails

Title:

Phase 5 & 6 - Tree Inventory

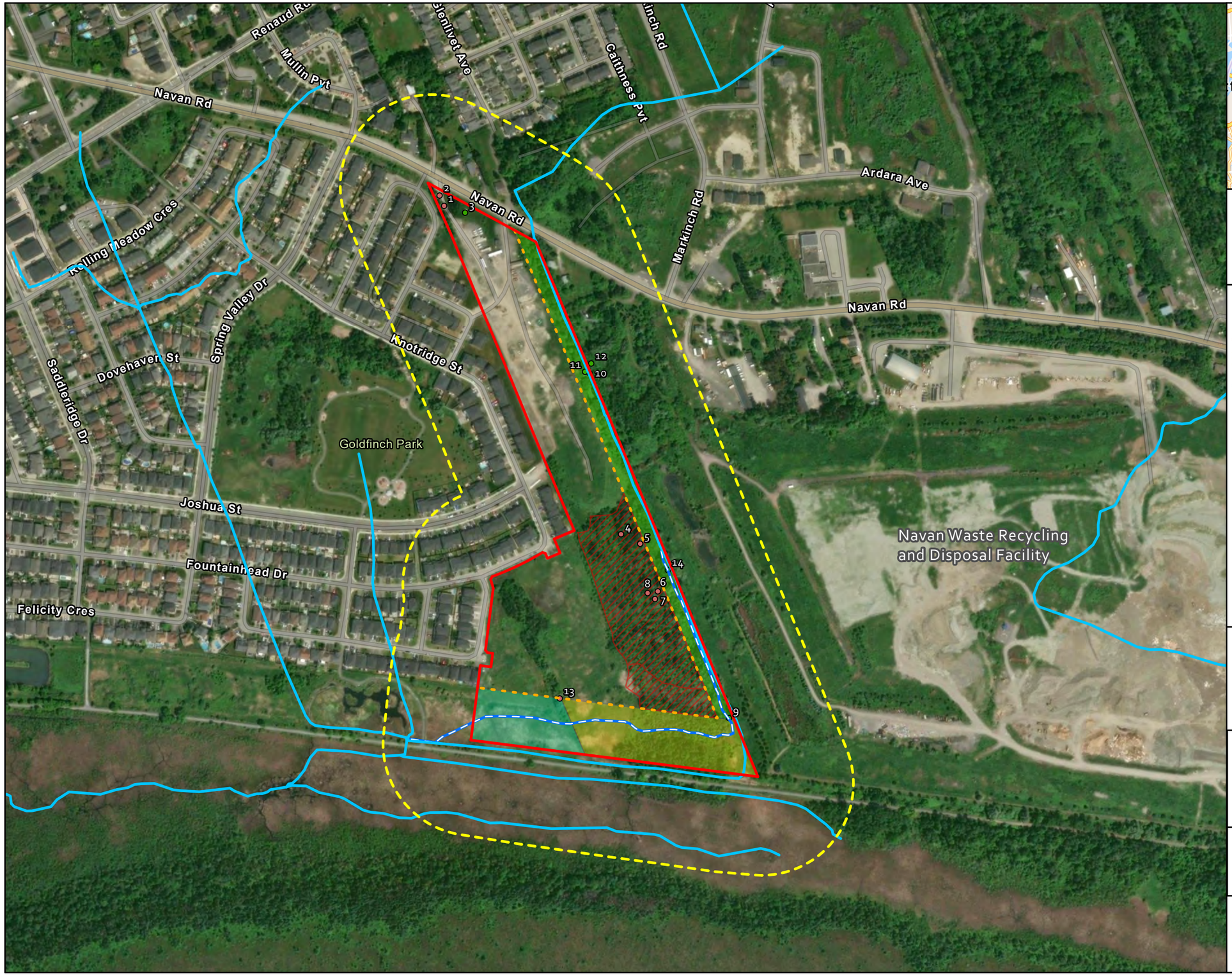
Prepared By:

FOTENN

Date:

4/1/2026

Figure: A-1





Scale: 1:5,000

0 35 70 140 210 280 Meters

Legend

- Subject Site
- Study Area 120m
- Watercourse (MNR, 2019)
- Tree Protection Fencing
- Proposed Realigned Headwater Concept
- Distinctive Tree (Potentially Retainable)
- Distinctive Tree (Removed)
- 4- Dry - Fresh Deciduous Woodland Ecosite
- Habitat Enhancement: Deciduous Forest and Shrub Thicket Riparian Habitat
- Habitat Restoration: Deciduous Swamp Habitat with Vernal Pools
- Habitat Restoration: Marsh Habitat with In-line Open Water Feature

Project:

Claridge Homes
Spring Valley Trails

Title:

Phase 5 & 6 - Impacts

Prepared By:

FOTENN

Date:

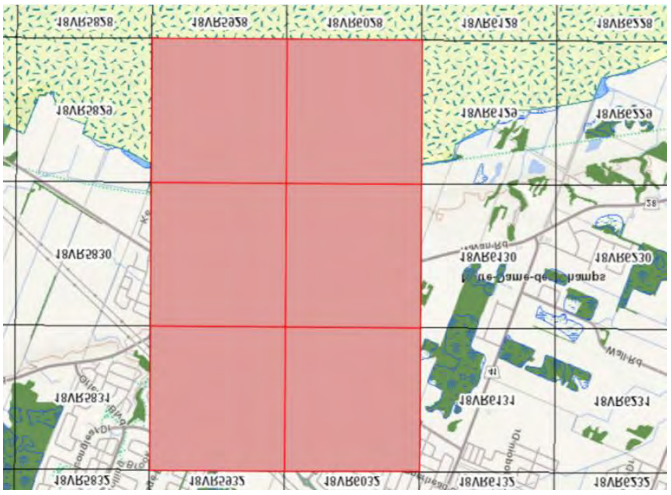
4/1/2026

Figure: A-2

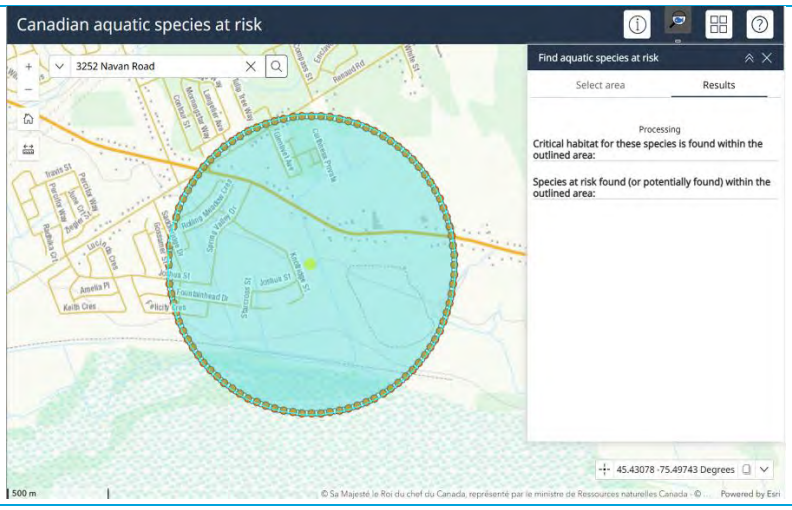
Appendix B

Aquatic Background Data

Table B1: Summary of Aquatic Background Data Collection

Aquatic Resources Background Information	
General NHIC map showing unevaluated wetland and woodlands within the Study Area.	
	
NHIC Species map does not indicate any aquatic species for the highlighted squares.	

The DFO species at risk map does not indicate species or critical habitat present within the study area.



Appendix C

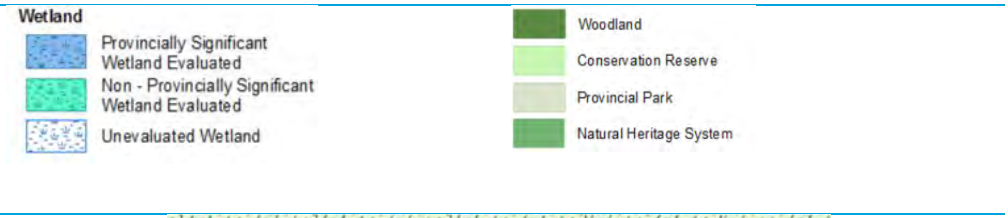
Terrestrial Background Data

Table C1: Summary of Terrestrial Background Data Collection

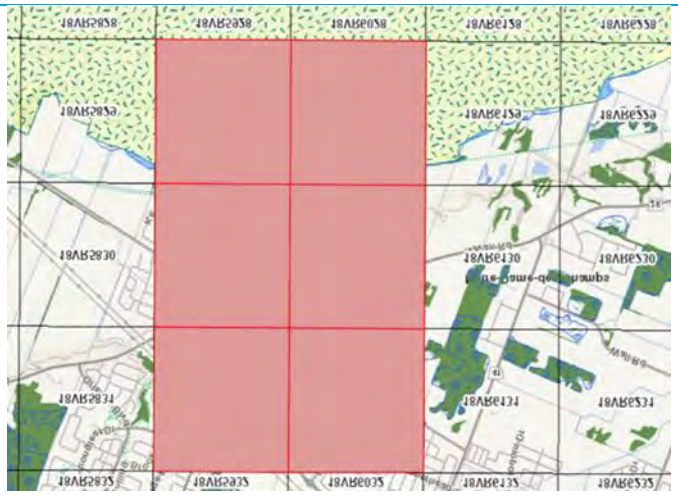
Terrestrial Resources Background

General NHIC map showing unevaluated wetland and woodland just north of the pond along Borrisokane Rd and south of Appalachian Cir.





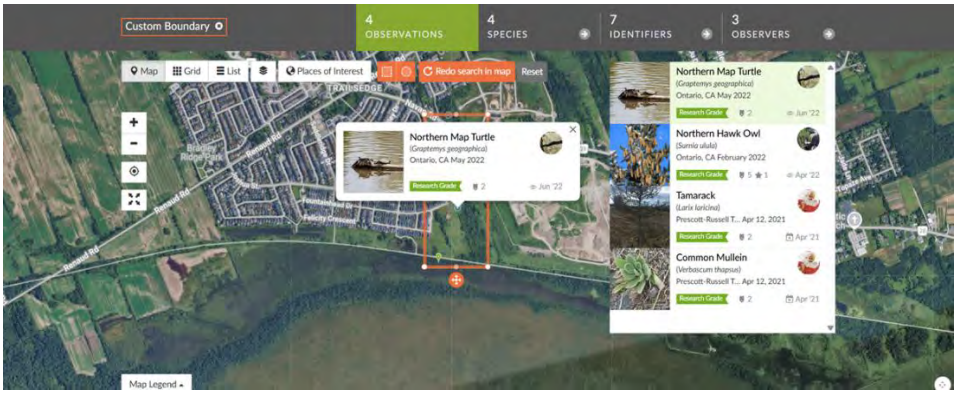
NHIC Species map indicates bank swallow, eastern meadowlark, bobolink, and wood thrush within highlighted squares.



NHIC data for the corresponding squares noted above.

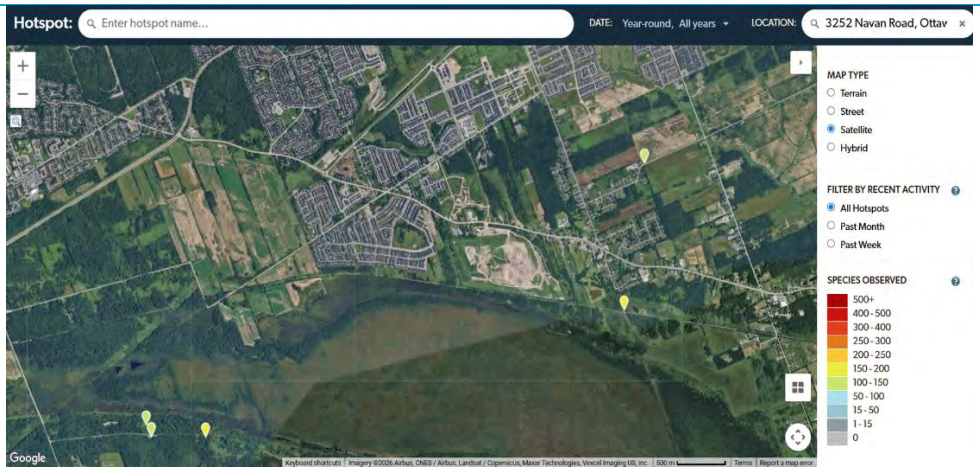
OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT COMMENTS
1109157 SPECIES		Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	18VR5931
1109157 SPECIES		Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	18VR5931
1109157 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	18VR5931
1109157 SPECIES		Butternut	Juglans cinerea	S2?	END	END	18VR5931
1109157 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	18VR5931
1109157 WILDLIFE CONCENTRATION AREA		Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area				18VR5931
1109967 SPECIES		Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	18VR6031
1109967 SPECIES		Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	18VR6031
1109967 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	18VR6031
1109967 SPECIES		Butternut	Juglans cinerea	S2?	END	END	18VR6031
1109967 WILDLIFE CONCENTRATION AREA		Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area				18VR6031
1109065 SPECIES		Midland Painted Turtle	Chrysemys picta marginata	S4		SC	18VR5929
1109065 SPECIES		Northern Long Sedge	Carex folliculata	S3			18VR5929
1109065 SPECIES		Golden-winged Warbler	Vermivora chrysoptera	S3B	SC	THR	18VR5929
1109065 SPECIES		Wood Thrush	Hylocichla mustelina	S4B	SC	THR	18VR5929
1109065 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	18VR5929
1109065 RESTRICTED SPECIES		RESTRICTED SPECIES	RESTRICTED SPECIES	RESTRICTED SPEC	RESTRICTED SPEC	RESTRICTED SPEC	18VR5929
1109065 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	18VR5929
1109065 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	18VR5929
1109875 SPECIES		Northern Long Sedge	Carex folliculata	S3			18VR6029
1109875 SPECIES		Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	18VR6029
1109875 RESTRICTED SPECIES		RESTRICTED SPECIES	RESTRICTED SPECIES	RESTRICTED SPEC	RESTRICTED SPEC	RESTRICTED SPEC	18VR6029
1109875 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	18VR6029
1109875 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	18VR6029
1109875 WILDLIFE CONCENTRATION AREA		Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area				18VR6029
1109156 SPECIES		Midland Painted Turtle	Chrysemys picta marginata	S4		SC	18VR5930
1109156 SPECIES		Golden-winged Warbler	Vermivora chrysoptera	S3B	SC	THR	18VR5930
1109156 SPECIES		Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	18VR5930
1109156 SPECIES		Wood Thrush	Hylocichla mustelina	S4B	SC	THR	18VR5930
1109156 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	18VR5930
1109156 SPECIES		Butternut	Juglans cinerea	S2?	END	END	18VR5930
1109156 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	18VR5930
1109156 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	18VR5930
1109156 WILDLIFE CONCENTRATION AREA		Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area				18VR5930
1109966 SPECIES		Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	18VR6030
1109966 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	18VR6030
1109966 SPECIES		Butternut	Juglans cinerea	S2?	END	END	18VR6030
1109966 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	18VR6030
1109966 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	18VR6030
1109966 WILDLIFE CONCENTRATION AREA		Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area				18VR6030

An iNaturalist search observations.



Exploring nearby eBird reports.

Notable observed along the Ottawa--Prescott-Russel Trail Link species include: Least Bittern, Willow Flycatcher, Sandhill Crane, Alder Flycatcher, American Bittern, Veery

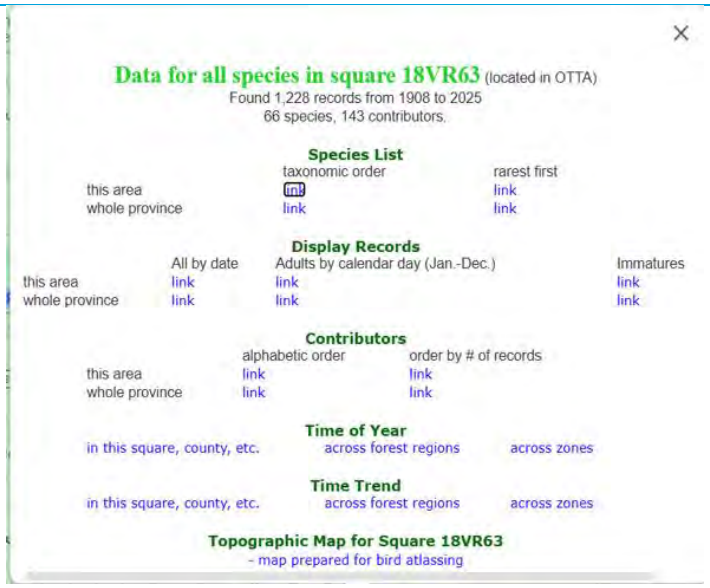


The ORAA produced 16 species for the square (18VR63) the study area is within. One notable SAR, Blanding's turtle, was last recorded in 2018.



4-Feb-26				
Square no: 1	18VR63			
Species #	Common Name	# of record	Earliest Year	Latest Year
1	Blanding's Turtle	4	2006	2008
2	Eastern Musk Turtle	1	2008	2008
3	Midland Painted Turtle	100	1986	2018
4	Northern Map Turtle	47	2006	2019
5	Red-eared Slider	2	2008	2012
6	Snapping Turtle	24	1987	2018
12	Eastern Gartersnake	35	1981	2019
15	Eastern Milksnake	1	1987	1987
20	Northern Watersnake	1	1981	1981
22	Red-bellied Snake	11	1981	2014
25	American Bullfrog	53	1980	2018
28	Gray Treefrog	3	1968	2013
29	Green Frog	28	1968	2015
31	Northern Leopard Frog	53	1966	2019
33	Spring Peeper	3	1968	2013
35	Wood Frog	5	1960	2009
36	American Toad	2	1965	1968
40	Blue-spotted Salamander	2	1992	2019
41	dependent unisexual salamander	3	1992	1998
44	Eastern Red-backed	2	2014	2017
51	Red-spotted Newt	3	1966	2018
53	Spotted Salamander	2	1966	1968

The OBA for research square 18VR63 produced 66 species, with the monarch, a species of special concern, being noted.



Appendix D

Species at Risk Screening

Common Name	Scientific Name	Habitat Description[1]	Conservation Status[2]				Source of Occurrence Record[3]	Habitat within Study Area?	Rationale for Determination of Habitat Presence
			Federal SARA	Federal COSEWIC	Provincial SCA	Provincial S-Rank			
Birds									
Bobolink	Dolichonyx oryzivorus	Primarily in forage crops, and grassland habitat. It is sensitive to edge effects, size of habitat and areas with dense shrub vegetation or a litter layer deeper than a few centimeters (COSEWIC, 2010). Provincially, this species' protected habitat is the area extending 60 m from the nest as well as the 300 m of suitable habitat around the nest (MECP, 2013).	THR	THR	N/A	S4B	NHIC, eBird, OBBA	**Yes**	Agricultural fields and open meadow habitats within Study Area.
Eastern Meadowlark	*Sturnella magna*	Open fields and pastures, meadows, prairies. Breeds in natural grasslands, meadows, weedy pastures, also in hayfields and sometimes in fields of other crops. Winters in many kinds of natural and cultivated fields. In the Midwest, it tends to prefer taller and lusher grass than Western Meadowlark, but in the Southwest, it lives in very arid desert grasslands.	THR	THR	N/A	S4B, S3N	NHIC, eBird, OBBA	**Yes**	Agricultural fields and open meadow habitats within Study Area.
Least Bittern	*Lxobrychus exilis*	Fresh marshes, reedy ponds. Mostly freshwater marsh but also brackish marsh, in areas with tall, dense vegetation in standing in water. May be over deep water, because it mostly climbs in reeds rather than wading. Sometimes in salt marsh or in mangroves.	THR	THR	THR	S4B	eBird, OBBA	**Yes**	Mer Bleue Bog provides ideal nesting habitat for this species.
Mammals									
Little Brown Myotis	*Myotis lucifugus*	Females establish summer maternity colonies, often in buildings or large-diameter trees. Foraging occurs over water, along waterways, and forest edges. Overwinter in cold and humid hibernacula (caves/mines) (COSEWIC 2013).	END	END	END	S3	AMO	**Yes**	Study Area contains deciduous woodlands that could provide cavities and loose bark suitable for roosting.
Northern Myotis	*Myotis septentrionalis*	Older (late successional or primary forests) with large interior habitat and snags that are in the mid-stage of decay. They prefer intact interior habitat and are sensitive to edge habitats (Menzel et al., 2002; Broders et al., 2006; SWH 6E Ecoregion Criterion Schedule). Critical habitat has not yet been defined by the province.	END	END	END	S3	AMO	**Yes**	Study Area contains deciduous woodlands that could provide cavities and loose bark suitable for roosting.
Eastern Red Bat	*Lasiurus borealis*	Roosts among the foliage of both deciduous and coniferous trees, of any age class, and occasionally shrubs. Maternity roosts tend to be large in diameter and tall, reaching or exceeding the height of the surrounding canopy. Forage in both forested and non-forested habitats, in both open and semi-cluttered habitats, both above and below forest canopies, and in both early and later stage forests. They overwinter in the southern United States.	Not listed	END	END	S4	AMO	**Yes**	Study Area contains deciduous and coniferous trees that could provide cavities and loose bark suitable for roosting.
Hoary Bat	*Lasiurus cinereus*	Roosts among the foliage of both deciduous and coniferous trees, of any age class, and occasionally shrubs. Maternity roosts tend to be large in diameter and tall, reaching or exceeding the height of the surrounding canopy. Forage in the open, including wetlands, grasslands and open fields with patchily distributed trees. They overwinter in the southern United States.	Not listed	END	END	S4	AMO	**Yes**	Study Area contains deciduous and coniferous trees that could provide cavities and loose bark suitable for roosting.
Silver-haired Bat	*Lasionycteris noctivagans*	Roosting by Silver-haired Bats occurs primarily under bark and in the cavities of large, decaying, coniferous and deciduous trees. They may occasionally roost in or on buildings, especially during migration when natural roosting sites may be scarce. Forage in young and old forests, as well as forest openings (canopy gaps), but are concentrated along forest edges. Overwinter in the United States, southeastern British Columbia, and sometimes the Great Lakes region in mines, rock crevices, trees, and snags.	Not listed	END	END	S4	AMO	**Yes**	Study Area contains deciduous and coniferous trees that could provide cavities and loose bark suitable for roosting.
Tricolored Bat	*Perimyotis subflavus*	Females establish summer maternity colonies, often in buildings or large-diameter trees. Foraging occurs over water, along waterways, and forest edges. Overwinter in cold and humid hibernacula (caves/mines) (COSEWIC, 2013). Critical habitat has not yet been defined by the province.	END	END	END	S3?	AMO	**Yes**	Study Area contains deciduous woodlands that could provide cavities and loose bark suitable for roosting.

Common Name	Scientific Name	Habitat Description[1]	Conservation Status[2]				Source of Occurrence Record[3]	Habitat within Study Area?	Rationale for Determination of Habitat Presence
			Federal SARA	Federal COSEWIC	Provincial SCA	Provincial S-Rank			
Plants									
Butternut	Juglans cineara	Found in a variety of habitat types but grows best on well-drained fertile soils in shallow valleys and on gradual slopes (COSEWIC, 2017). Provincially, butternuts are assessed and categorized based on the amount of canker. These categories are 1-3 with Category 1 trees as those that are heavily infected to the point that they are not expected to survive.	END	END	END	S2	NHIC	**Yes**	Sunny openings near forest edges with moist soils are present within the Study Area.
Black Ash	Fraxinus nigra	Predominantly a wetland species of swamps, floodplains, and fens. It has an intermediate light requirement and a tendency toward greater abundance in more alkaline sites. Most sites in which it is dominant are flood prone, where its high tolerance of seasonal flooding appears to offer a competitive advantage. Black Ash also occurs widely in moist upland forests, but generally at lower densities than in wet areas.	THR	THR	END	S4	-	**Yes**	Wetland habitat and drainage features may provide suitable habitat for Black Ash within the Subject Site.

Legend

Blue highlighted species are protected and/or have protected critical habitat within the Study Area and the species is confirmed present or has a Moderate to High probability of occurrence in the Study Area (i.e., the species is Threatened or Endangered under the SCA, and/or the Threatened or Endangered species' critical habitat is present – including federally listed migratory birds and fish). Only those SAR protected in the Study Area have been included in this table. Fish and molluscs have been excluded from this table as fish habitat is not present in the Study Area. No amphibian SAR occurrences have been reported in the vicinity of the Study Area.

Unhighlighted species are not expected to occur in the Study Area.

** Under consideration for status change*

1 Habitat description is sourced from the OMNR (2000) Significant Wildlife Habitat Technical Guide or from the Species at Risk in Ontario list provided in O. Reg. 230/08, unless otherwise cited.

2 Conservation Status: SC = Special Concern; THR = Threatened; END = Endangered; NAR = Not at Risk; Extirpated species have been excluded from the table.

***Federal SARA:** Species at Risk Act, 2002 Schedule 1 unless otherwise noted. The protection and/or conservation measures afforded by SARA apply only to species listed under Schedule 1.*

***Federal COSEWIC:** In the case that a species is not listed under Schedule 1 of SARA, but has a status recommended by the Committee on the Status of Endangered Wildlife in Canada, the uplisting of the species to Schedule 1 of SARA may be imminent.*

***Provincial SCA:** Species Conservation Act, 2025.*

***Provincial (or Subnational) S-Rank:** Subnational ranks are assigned and maintained by state or provincial NatureServe network programs.*

- *S1 – Critically Imperiled; S2 – Imperiled; S3 - Vulnerable; S4 - Apparently Secure; S5 - Secure; B - Breeding; N - Non-breeding; ? - Uncertainty*

3 Sources:

- *AMO = Atlas of the Mammals of Ontario*
- *iNat = iNaturalist observations*
- *OBA = Ontario Butterfly Atlas*
- *ECCC = Environment and Climate Change Canada Open Data*
- *ORAA = Ontario Reptile and Amphibian Atlas*
- *OBBA = Ontario Breeding Bird Atlas*
- *NHIC = Natural Heritage Information Centre Database.*
- *BCI = Bat Conservation International Inc. 2025. Bat Profiles.*
- *Colville = 2020 Field Survey results as reported by Colville Consulting Inc.'s 2024 Environmental Impact Statement0 Thompson Road, Town of Fort Erie*

Probability of Occurrence in the Study Area:

- ***Confirmed:** Species and/or preferred habitat has been observed in the Study Area (i.e., confirmed by recent field investigations, consultation with MECP, or reliable secondary source).*
- ***High:** Species has been reported in the vicinity of the Study Area during field investigations by others or within 10 km atlas square. The species' preferred habitat is abundant within the Study Area. Species with a high probability of occurrence would be expected to breed within or frequently use the habitats available within the Study Area and would be known to have a high relative abundance within the region (i.e., compared to other regions in Ontario).*
- ***Moderate:** Species' preferred habitat is present but limited or uncommon in the Study Area and breeding in the area is rare. Species with Moderate probability of occurrence may intermittently use the area for foraging, migration, or movement to other parts of their home range and therefore may have been documented in secondary sources or field investigations.*
- ***Low:** Species has been recorded in the vicinity of the Study Area during field investigations by others or within 10 km atlas square. The species' preferred habitat does not occur or is extremely limited within the Study Area. These species may intermittently move through the Study Area but are unlikely to become permanent residents. Reports of this species may be historical records.*

Appendix E

On-Site Species Observations

Table E1: Breeding Bird List

Common Name	Scientific Name	Conservation Status1		
		Federal (SARA, 2002)	Provincial (SCA, 2025)	S-Rank
Alder Flycatcher	*Empidonax alnorum*			S5B
American Bittern	*Botaurus lentiginosus*			S4B
American Crow	*Corvus brachyrhyncho*			S5B
American Goldfinch	*Spinus tristis*	-	-	S5
American Redstart	*Setophaga ruticilla*	-	-	S5B
American Robin	*Turdus migratorius*	-	-	S5
Black-and-white Warbler	*Mniotilta varia*			S5B
Black-capped Chickadee	*Poecile atricapillus*	_	_	S5
Brown Thrasher	*Toxostoma rufum*			S4B
Cedar Waxwing	*Bombycilla cedrorum*	_	_	S5
Chestnut-sided Warbler	*Setophaga pensylvanica*			S5B
Common Grackle	*Quiscalus quiscula*			S5B
Common Yellowthroat	*Geothlypis trichas*	_	_	S5B,S3N
Downy Woodpecker	*Picoides pubescens*			S5
European Starling	*Sturnus vulgaris*	_	_	SNA
Gray Catbird	*Dumetella carolinensis*	_	_	S5B,S3N
Great Blue Heron	*Ardea herodias*	_	_	S4
Mallard	*Anas platyrhynchos*	_	_	S5
Nashville Warbler	*Oreothlypis ruficapilla*			S5B
Northern Harrier	*Circus hudsonius*			S5B
Red-winged Blackbird	*Agelaius phoeniceus*	_	_	S5
Ring-billed Gull	*Larus delawarensis*	_	_	S5
Song Sparrow	*Melospiza melodia*	_	_	S5
Swamp Sparrow	*Melospiza georgiana*			S5B
Tree Swallow	*Tachycineta bicolor*			S4B
Veery	*Catharus fuscescens*			S4B
Warbling Vireo	*Vireo gilvus*	_	_	S5B
Yellow Warbler	*Setophaga petechia*	_	_	S5B
Yellow-bellied Sapsucker	*Sphyrapicus varius*			S5B
Yellow-rumped Warbler	Setophaga coronata			S5B

1 - Conservation Status:

SC = Special Concern; THR = Threatened; END = Endangered; NA = Not at Risk

Federal SARA = Species at Risk Act, 2002 Schedule 1 unless otherwise noted. The protection and/or conservation measures afforded by SARA apply only to species listed under Schedule 1.

Federal COSEWIC = In the case that a species is not listed under Schedule 1 of SARA, but has a status recommended by the Committee on the Status of Endangered Wildlife in Canada, the uplisting of the species to Schedule 1 of SARA may be imminent.

Provincial ESA = Endangered Species Act, 2007.

Provincial (or Subnational) S-Rank: Subnational ranks are assigned and maintained by state or provincial NatureServe network programs.

S1 – Critically Imperiled; S2 – Imperiled; S3 - Vulnerable; S4 - Apparently Secure; S5 - Secure; B - Breeding; N - Non-breeding; ? - Uncertainty

Table E2: Plant List

Common Name	Scientific Name	Conservation Status1			Coefficient of Conservation	Coefficient of Wetness
		SARA	SARO	S-Rank		
American Beech	*Fagus grandifolia*	-	-	S4	6	3
Basswood	*Tilia americana*	-	-	S5	4	3
Bebb's Willow	*Salix bebbiana*	-	-	S5	4	-3
Beechdrops	*Epifagus virginiana*	-	-	S5	6	5
Bitternut Hickory	*Carya cordiformis*	-	-	S5	6	0
Black Cherry	*Prunus serotina*	-	-	S5	3	3
Black Raspberry	*Rubus occidentalis*	-	-	S5	2	5
Black-eyed Susan	*Rudbeckia hirta*	-	-	S5	0	3
Bladder Campion	*Silene vulgaris*	-	-	SNA	0	5
Bloodroot	*Sanguinaria canadensis*	-	-	S5	5	3
Bracken Fern	*Pteridium aquilinum*	-	-	S5	2	3
Bull Thistle	*Cirsium vulgare*	-	-	SNA	0	3
Canada Horseweed	*Erigeron canadensis*	-	-	S5	0	3
Canada Mint	*Mentha canadensis*	-	-	S5	3	-3
Clubmoss Spp.	*Lycopodiopsida spp.*	-	-	-	-	-
Common Elderberry	*Sambucus canadensis*	-	-	S5	5	-3
Common Hemp-nettle	*Galeopsis tetrahit*	-	-	SNA	0	3
Common Juniper	*Juniperus communis*	-	-	S5	4	3
Common Lamb's-quarters	*Chenopodium album*	-	-	SNA	0	3
Common Milkweed	*Asclepias syriaca*	-	-	S5	0	5
Common Mullein	*Verbascum thapsus*	-	-	SNA	0	5
Common Oak Fern	*Gymnocarpium dryopteris*	-	-	S5	7	3
Common Plantain	*Plantago major*	-	-	SNA	0	3
Common Vetch	*Vicia sativa*	-	-	SNA	0	3
Common Viper's Bugloss	*Echium vulgare*	-	-	SNA	0	5
Eastern Hemlock	*Tsuga canadensis*	-	-	S5	7	3
Eastern Prickly Gooseberry	*Ribes cynosbati*	-	-	S5	4	3
Eastern White Cedar	*Thuja occidentalis*	-	-	S5	4	-3
Eastern White Pine	*Pinus strobus*	-	-	S5	4	3
European Honeysuckle	*Lonicera periclymenum*	-	-	SNA	0	0
Field Wormwood	*Artemisia campestris*	-	-	S5	8	5
Freeman's Maple	*Acer x freemanii*	-	-	SNA	6	-5

Common Name	Scientific Name	Conservation Status1			Coefficient of Conservation	Coefficient of Wetness
		SARA	SARO	S-Rank		
Garden Bird's-foot Trefoil	*Lotus corniculatus*	-	-	SNA	0	3
Geranium Spp.	*Geranium spp.*	-	-	-	-	-
Glossy Buckthorn	*Frangula alnus*	-	-	SNA	0	0
Green Ash	*Fraxinus pennsylvanica*	-	-	S4	3	-3
Hemp Dogbane	*Apocynum cannabinum*	-	-	S5	3	0
Herb-Robert	*Geranium robertianum*	-	-	S5	2	3
Ironwood	*Ostrya virginiana*	-	-	S5	4	3
Kentucky Bluegrass	*Poa pratensis*	-	-	S5	0	3
Large False Solomon's Seal	*Maianthemum racemosum*	-	-	S5	4	3
Lopseed	*Phryma leptostachya*	-	-	S4S5	6	3
Manitoba Maple	*Acer negundo*	-	-	S5	0	0
New England Aster	*Symphyotrichum novae-angliae*	-	-	S5	2	-3
New York Fern	*Parathelypteris noveboracensis*	-	-	S4S5	7	0
Northeastern Lady Fern	*Athyrium filix-femina var. angustum*	-	-	S5	4	0
Northern Starflower	*Lysimachia borealis*	-	-	S5	6	0
Ostrich Fern	*Matteuccia struthiopteris*	-	-	S5	5	0
Paper Birch	*Betula papyrifera*	-	-	S5	2	3
Partridgeberry	*Mitchella repens*	-	-	S5	6	3
Poison Ivy	*Toxicodendron radicans*	-	-	S5	2	0
Purple Leaf Sand Cherry	*Prunus x cistena*	-	-	SNA	0	0
Purple Loosestrife	*Lythrum salicaria*	-	-	SNA	0	-5
Purple-flowering Raspberry	*Rubus odoratus*	-	-	S5	3	5
Red Clover	*Trifolium pratense*	-	-	SNA	0	3
Red Maple	*Acer rubrum*	-	-	S5	4	0
Red Pine	*Pinus resinosa*	-	-	S5	8	3
Red Raspberry	*Rubus idaeus*	-	-	S5	2	3
Red-osier Dogwood	*Cornus sericea*	-	-	S5	2	-3
Riverbank Grape	*Vitis riparia*	-	-	S5	0	0
Royal Fern	*Osmunda regalis*	-	-	S5	7	-5
Running Clubmoss	*Lycopodium clavatum*	-	-	S5	6	0
Sandbar Willow	*Salix interior*	-	-	S5	1	-3
Sedge Spp.	*Cyperaceae spp.*	-	-	-	-	-
Sensitive Fern	*Onoclea sensibilis*	-	-	S5	4	-3
Sharp-lobed Hepatica	*Hepatica acutiloba*	-	-	S5	8	5
Small Enchanter's Nightshade	*Circaea alpina*	-	-	S5	6	-3
Smooth Brome	*Bromus inermis*	-	-	SNA	0	5

Common Name	Scientific Name	Conservation Status1			Coefficient of Conservation	Coefficient of Wetness
		SARA	SARO	S-Rank		
Staghorn Sumac	*Rhus typhina*	-	-	S5	1	3
Sugar Maple	*Acer saccharum*	-	-	S5	4	3
Sulphur Cinquefoil	*Potentilla recta*	-	-	SNA	0	5
Sunchoke	*Helianthus tuberosus*	-	-	SU	1	0
Tall Blue Lettuce	*Lactuca biennis*	-	-	S5	6	0
Tall Goldenrod	*Solidago altissima*	-	-	S5	1	3
Trembling Aspen	*Populus tremuloides*	-	-	S5	2	0
Virginia Clematis	*Clematis virginiana*	-	-	S5	3	0
Virginia Creeper	*Parthenocissus quinquefolia*	-	-	S4?	6	3
White Ash	*Fraxinus americana*	-	-	S4	4	3
White Baneberry	*Actaea pachypoda*	-	-	S5	6	5
White Elm	*Ulmus americana*	-	-	S5	3	-3
White Meadowsweet	*Spiraea alba*	-	-	S5	3	-3
White Oak	*Quercus alba*	-	-	S5	6	3
White Spruce	*Picea glauca*	-	-	S5	6	3
White Trillium	*Trillium grandiflorum*	-	-	S5	5	3
Wild Carrot	*Daucus carota*	-	-	SNA	0	5
Wild Lily-of-the-valley	*Maianthemum canadense*	-	-	S5	5	3
Wild Sarsaparilla	*Aralia nudicaulis*	-	-	S5	4	3
Wild Strawberry	*Fragaria virginiana*	-	-	S5	2	3
Willow Spp.	*Salix spp.*	-	-	-	-	-
Yellow Birch	*Betula alleghaniensis*	-	-	S5	6	0

1 - Conservation Status:

SC = Special Concern; THR = Threatened; END = Endangered; NA = Not at Risk

Federal SARA = Species at Risk Act, 2002 Schedule 1 unless otherwise noted. The protection and/or conservation measures afforded by SARA apply only to species listed under Schedule 1.

Federal COSEWIC = In the case that a species is not listed under Schedule 1 of SARA, but has a status recommended by the Committee on the Status of Endangered Wildlife in Canada, the uplisting of the species to Schedule 1 of SARA may be imminent.

Provincial ESA = Endangered Species Act, 2007.

Provincial (or Subnational) S-Rank: Subnational ranks are assigned and maintained by state or provincial NatureServe network programs.

S1 – Critically Imperiled; S2 – Imperiled; S3 - Vulnerable; S4 - Apparently Secure; S5 - Secure; B - Breeding; N - Non-breeding; ? - Uncertainty

Appendix F

Significant Wildlife Habitat Assessment

Table F1: Candidate Significant Wildlife Assessment (Ecoregion 6E) – 3252 Navan Road - Spring Valley Trails, Phase 5 & 6

Significant Wildlife Habitat	Candidate SWH		Confirmed SWH		Comments
	ELC Codes	Additional Criteria Summary	In Site	In Adjacent Lands	
Seasonal Concentration Areas of Animals					
Waterfowl Stopover and Staging Areas (terrestrial)	Certain cultural meadow or thicket Plus, evidence of annual spring flooding	Fields flooded from mid-March to May	No spring flooding observed. No large flocks of waterfowl observed during surveys.		Not discussed further
Waterfowl Stopover and Staging Areas (aquatic)	Specific aquatic habitat types (marsh, swamps)	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used for migration. Stormwater and sewage management facilities are not included.	No suitable habitat features present. No large flocks of waterfowl observed during surveys.		Not Present; Not discussed further
Shorebird Migratory Stopover Area	Beach/Bar Sand Dunes Meadow marsh	Shorelines used in May to mid-June and early July to October. Stormwater and sewage management facilities are not included.	No shallow shorelines, beaches, bars, dunes, or meadow marshes. No shorebirds observed during surveys.		Not Present; Not discussed further
Raptor Wintering Area	Requires combination of forest (deciduous, mixed, or coniferous) and upland (cultural meadow, cultural thickets, cultural savannahs, or cultural woodlands)	Combination of habitats must >20 ha and the field portion must be wind swept with little accumulation of snow. Where site is for eagles, open water and large trees and snags must be available.	The combination of woodland and meadow habitat on Site are not large enough. No large trees suitable for eagles were noted.		Not Present; Not discussed further
Bat Hibernacula	Crevices and caves	Active mines are not to be included. Buildings are not included.	No crevices or caves present		Not Present; Not discussed further
Bat Maternity Colonies	Deciduous, or mixed forests Deciduous or mixed Swamps (>5m tall)	>10/ha large diameter (>25 cm diameter at breast height) Snag trees in the decay classes 1-3 are preferred.	Suitable bat maternity habitat is present in the upland forest ecosites. Timing windows for SAR bats will protect for general bats.		Discussed under SWH section.
Turtle Wintering Areas	Swamps, marshes, open water, shallow water, open fen, or open bog	Water that is deep enough not to freeze solid with soft bottoms. Must be permanent waterbody (or wetlands with adequate dissolved oxygen)	Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH.		Not discussed further
Reptile Hibernaculum	Any habitat except very wetlands Talus, rock barren, cave and alvar	For snakes – needs to be below frost lines.	No rocky outcroppings present. No snakes encountered during the site investigations.		Not Present; Not discussed further
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff Swallow)	Exposed sandy slopes of banks or piles. Cliff faces or structures (bridges, silos etc….)	Does not include licensed aggregate areas. Does not include man-made structures or recently (within 2 years) disturbed soil	No suitable habitat features present. No bank or cliff swallows observed during surveys.		Not Present; Not discussed further
Colonially – Nesting Bird Breeding Habitat (Trees/Shrubs)	Swamps – deciduous or mixed (trees >5m) Treed fen	Typically requires tall trees as nests are usually 11-15m from ground but shrubs and emergent vegetation could be used.	Breeding bird surveys were completed, and no colonial nesting species were observed.		Not Present; Not discussed further
Colonially – Nesting Bird Breeding Habitat (Ground)	Any rocky island or peninsula on lake or large river. For Brewer's Blackbird – near watercourses in open fields, pastures		No rocky islands, or peninsulas were present. Breeding bird surveys were completed, and no colonial nesting species were observed.		Not Present; Not discussed further
Migratory Butterfly Stopover Area	***Not applicable to Ottawa Area – must be within 5 km of Lake Ontario***				
Landbird Migratory Stopover Area					

Significant Wildlife Habitat	Candidate SWH		Confirmed SWH		Comments
	ELC Codes	Additional Criteria Summary	In Site	In Adjacent Lands	
Deer Yarding Areas	Mixed or coniferous forests or swamps (>5m tall trees) Can include plantations, cultural thickets, or dry-fresh poplar-white birch deciduous forest	These are mapped by OMNR	None mapped by OMNR for this area		Not Present; Not discussed further
Deer Winter Congregation Area	All forest and wetland habitats and small conifer plantations	These are mapped by OMNR (typically, >100ha in size)	None mapped by OMNR for this area		Not Present; Not discussed further
Rare Vegetation Communities					
Cliffs and Talus Slopes	Near vertical face that is >3m in height (cliff or talus)	Typically, in Niagara Escarpment	Cliffs and talus slope habitat were not present		Not Present; Not discussed further
Sand Barren	Sand barrens various types but tree cover is always ≤ 60%	Must be >0.5ha	Sand barrens not present.		Not Present; Not discussed further
Alvar	Alvar, Coniferous Forest, cultural meadow, cultural savannah, cultural thickets, and cultural woodlands	Must have at least 4 indicator species with substantial cover (must not have large amounts of exotic or introduced species) Must be >0.5ha	Alvar habitat is typically flat and mostly unfractured calcareous bedrock. Not present		Not Present; Not discussed further
Old Growth Forest	Any forest or treed (>5 m) swamp	Must be at least 30 ha with at least 10 ha of interior habitat (edge considered 100 m) Have specific characteristics (snags, mosaic of gaps, multi-layered canopy)	Woodland A and Woodland B did not meet the requirements for old growth.		Not Present; Not discussed further
Savannah	Tallgrass prairie savannah and cultural savannah	Must have indicator species	No savannah present		Not Present; Not discussed further
Tallgrass Prairie	Tallgrass prairie (open prairie - <25% tree cover)	No minimum size	No tallgrass prairie was present.		Not Present; Not discussed further
Other Rare Vegetation Communities	Provincially rare S1-S3 communities as described in Appendix M of the SWHTG		None of the communities listed for the Ottawa-Carleton Area in Appendix M were present.		Not Present; Not discussed further
Specialized Habitat for Wildlife					
Waterfowl Nesting Area	Shallow marsh, meadow marsh, thicket swamp or deciduous (treed >5 m tall) swamps	Wetland must be 0.5 ha or consist of up to 3 smaller wetlands within 120 m of each other if known nesting is occurring.	The adjacent PSW likely provides suitable habitat for Waterfowl Nesting.		**Discussed under SWH sections.**
Bald Eagle and Osprey Nesting, Foraging, and Perching Habitat	Any forest or swamp (trees >5m) type of habitat that is immediately next to rivers, lakes, ponds, or wetlands	Nests on man-made structures are not included.	Some actives in general area but none observed during survey, no nests present on or near site.		Not Present; Not discussed further
Woodland Raptor Nesting Habitat	Any forest habitat or treed swamp (>5m tall) or coniferous plantation	Stand must be > 30 ha with >10 ha of interior habitat (edge is 200 m)	Presence of two (2) juvenile/fledged young of barred owl in the Dry-Fresh Hemlock – White Pine Mixed Forest observed by WSP in 2021.		**Discussed under SWH sections.**
Turtle Nesting Areas	Shallow marsh, shallow water, open bog	Close to water but away from roads. It must provide sand and gravel that turtles can dig through and be in open sunny areas.	Only marginal nesting habitat was observed within the study area.		Not Present; Not discussed further.

Significant Wildlife Habitat	Candidate SWH		Confirmed SWH		Comments
	ELC Codes	Additional Criteria Summary	In Site	In Adjacent Lands	
		Areas on the sides of municipal or provincial roads are not included.			
Seeps and Springs	Any forested community could have a seep/spring	Forest area with <25% meadow/pasture in the headwaters of a stream.	Candidate habitat not present.		Not Present; Not discussed further
Amphibian Breeding Habitat (woodland)	Any forest or treed swamp (>5m tall trees)	Wetland, pond, or vernal pool must be > 500 m^2 Those with water until mid-July (during most years) are better candidates	Woodland breeding habitat is present. Adjacent PSW provides the required water into the summer months.		**Discussed under SWH sections.**
Amphibian Breeding Habitat (wetlands)	Swamps, marsh, fen, bog, open water, or shallow water	Unless it is a larger wetland, must be >120 m from woodlands. Must be > 500 m^2	The adjacent PSW provides the required habitat for Amphibian Breeding		**Discussed under SWH sections.**
Woodland Area-Sensitive Bird Breeding Habitat	Any forest or treed swamp (>5 m tall)	Interior habitat (200 m edge used) in mature (>60 years) large (>30 ha) stand	Candidate habitat not present.		Not Present; Not discussed further
Habitat for Species of Conservation Concern (not including Endangered or Threatened Species)					
Marsh Bird Breeding Habitat	Meadow marsh, shallow water, fen, or open bog		Adjacent PSW provides the required habitat for Marsh Breeding Bird Habitat		**Discussed under SWH section.**
Open Country Bird Breeding Habitat	Cultural meadows	Must be large grasslands (>30 ha) Agricultural class 1 and 2 are not included Agricultural lands planted in row crop or intensive hay, or pastures (within past 5 years) not included.	Candidate habitat not present.		Not Present; Not discussed further
Shrub/Early Successional Bird Breeding Habitat	Cultural thickets or woodlands	Must be > 10 ha. Agricultural class 1 and 2 are not included. Agricultural lands planted in row crop or intensive hay, or pastures (within past 5 years) not included.	Candidate habitat and species present. However, the cultural thickets on Site to not meet the size requirements.		Not discussed further
Terrestrial crayfish	Not present in Ottawa Area				
Special Concern and Rare Wildlife Species	All special concern or species ranked as S1-S3, SH (plants or animals)	Habitat depends on the species. Of those listed in SWHCS there is a potential for Snapping Turtle.	Habitat for several SSC may be found within the study area.		**Discussed under SWH section.**
Animal Movement Corridors					
Amphibian Movement Corridor	Any habitat but amphibian breeding wetland habitat must be identified		The criterion indicates that amphibian movement corridors are to have a minimum of 15 m of native vegetation on both sides of the waterway. This is not present at this location.		**Discussed under SWH section.**
Deer Movement Corridor	All forests but project must be in Stratum II Deer Wintering Area and Deer Wintering Habitat must be confirmed.		Not applicable – no Deer Wintering Areas or Habitat identified by OMNR for area.		Not Present; Not discussed further