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Combined Environmental Impact Study
& Tree Conservation Report
4795 Bank Street, Ottawa, ON



July 2026

McKINLEY ENVIRONMENTAL SOLUTIONS

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EXECUTIVE SUMMARY

This Combined Environmental Impact Study & Tree Conservation Report was prepared to assess the property at 4795 Bank Street, Ottawa, ON (the Site). The Site is approximately 17.2 hectares in size. The Site occurs within the urban area of the City of Ottawa and is currently zoned Rural (RU) with a future neighborhood overlay. Bank Street forms the western boundary of the Site, beyond which is a residential subdivision. The area to the north of the Site consists of a residential subdivision and developed commercial properties. The Findlay Creek Stormwater Management Facility is located east of the Site. Blais Road forms the southern boundary of the Site, beyond which is a mowed field and several developed commercial properties.

The majority of the surface area of the Site consists of Agricultural Fields and Cultural Meadow. Two Deciduous Hedgerows are present at the edges of the Site. Riparian (Deciduous) Hedgerows are also present along the banks of Findlay Creek. Several agricultural buildings occur within the Site. Findlay Creek flows through the Site in an approximately northwest to southeast direction. Portions of the western part of the Site are shown to be within the 1:100 Year Floodplain of Findlay Creek and the associated 15 m wide Hazard Setback/South Nation Conservation Authority Regulatory Limits. Findlay Creek and its associated floodplain/corridor were the only significant natural heritage features found within the Site and/or immediately adjacent to the Site. Several Category 1 (Non-Retainable) Butternut Trees (endangered) occur within the Site. No other significant Species at Risk concerns were identified.

The proposed development will include the construction of a residential subdivision with a mix of single detached homes and townhomes. The development will also include a condo block at the corner of Bank Street and Blais Road. Two entrances to the new community will be constructed connecting to Bank Street and Blais Road. The subdivision will also include two parks and a new stormwater management pond in the northeast corner of the Site.

Findlay Creek will be retained within a 53 m wide enhanced channel corridor. The channel of Findlay Creek will be reconstructed within the enhanced channel corridor. The reconstructed channel will accommodate the floodplain and meanderbelt of Findlay Creek. Setbacks from the top of bank that are a minimum of 15 m wide will be preserved on each side of the reconstructed channel. Restoration work within the 53 m wide enhanced channel corridor will significantly improve the ecological features and functions of Findlay Creek compared to existing conditions, while also providing a watercourse corridor that is significantly wider than the connecting upstream and downstream watercourse corridors. The subdivision's internal road network will require the

installation of an 18 m wide watercourse crossing (i.e. crossing Findlay Creek). The watercourse crossing will be constructed with a suitably sized wildlife passage culvert.

Pending that the regulatory, mitigation, and avoidance measures outlined in this report are implemented appropriately, the development of the Site is not anticipated to have a significant negative effect on the natural features and functions.



1.0 INTRODUCTION

1.1 Reading the Integrated Tree Conservation Report (TCR)

This report is presented as a Combined Environmental Impact Study (EIS) & Tree Conservation Report (TCR). Readers who are principally interested in the TCR may choose to read only those portions of the report where the section headings are marked **(TCR)**. This includes Sections 1.3, 1.4, 1.5, 2.0.1, 2.0.2, 3.2, 3.3, 3.7.1, 4.1, and 4.5.2. Readers who are interested in the EIS should read the entire report, as the information included in the TCR sections is not reiterated.

1.2 Scoping the Environmental Impact Study

This Combined Environmental Impact Study (EIS) & Tree Conservation Report (TCR) was prepared following the City of Ottawa's *Environmental Impact Study Guidelines* (City of Ottawa 2025). As required by the City of Ottawa (2025) guidelines, this Combined EIS & TCR includes the following:

- Documentation of the existing conditions and the natural heritage features within the Site and around the Site;
- Identification of the potential impacts to the natural heritage features which may result from the proposed development;
- Recommendations to reduce any negative impacts through both avoidance and mitigation measures; and
- Recommendations to enhance the significant natural heritage features and their ecological functions.

This Combined EIS & TCR was prepared with guidance from the *Natural Heritage Reference Manual* (OMNRF 2010). The major objective of this Combined EIS & TCR is to assess whether the proposed development will negatively affect the significant natural heritage features and functions of the Site, and to ensure that impacts will be minimized through mitigation measures.

1.3 Site Overview (TCR)

This Combined Environmental Impact Study (EIS) & Tree Conservation Report (TCR) was prepared to assess the property at 4795 Bank Street, Ottawa, ON (Lot 20, Concession 5 from Rideau River, Gloucester) (the Site) (Refer to Figure 1). The Site is approximately 17.2 hectares in size. The Site occurs within the urban area of the City of Ottawa and is currently zoned Rural (RU) with a future neighborhood overlay. Bank Street forms the western boundary of the Site, beyond which is a residential subdivision. The area to the north of the Site consists of a residential subdivision and developed commercial properties. The Findlay Creek Stormwater Management Facility is located east of the Site. Blais Road forms the southern boundary of the Site, beyond which is a mowed field and several developed commercial properties.

The majority of the surface area of the Site consists of Agricultural Fields and Cultural Meadow. Two Deciduous Hedgerows are present at the edges of the Site. Riparian (Deciduous) Hedgerows are also present along the banks of Findlay Creek. Several agricultural buildings occur within the Site. Findlay Creek flows through the Site in an approximately northwest to southeast direction. Portions of the western part of the Site are shown to be within the 1:100 Year Floodplain of Findlay Creek and the associated 15 m wide Hazard Setback/South Nation Conservation Authority (SNCA) Regulatory Limits (City of Ottawa 2026).



FIGURE 1: SITE OVERVIEW & SNCA REGULATORY LIMITS

4795 Bank Street, Ottawa, ON

Combined Environmental Impact Study & Tree Conservation Report



*The 15 m wide Hazard Setback/SNCA Regulatory Limits are drawn relative to the 1:100 Year Floodplain of Findlay Creek. Mapping taken from City of Ottawa (2026). Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

1.4 Description of Undertaking (TCR)

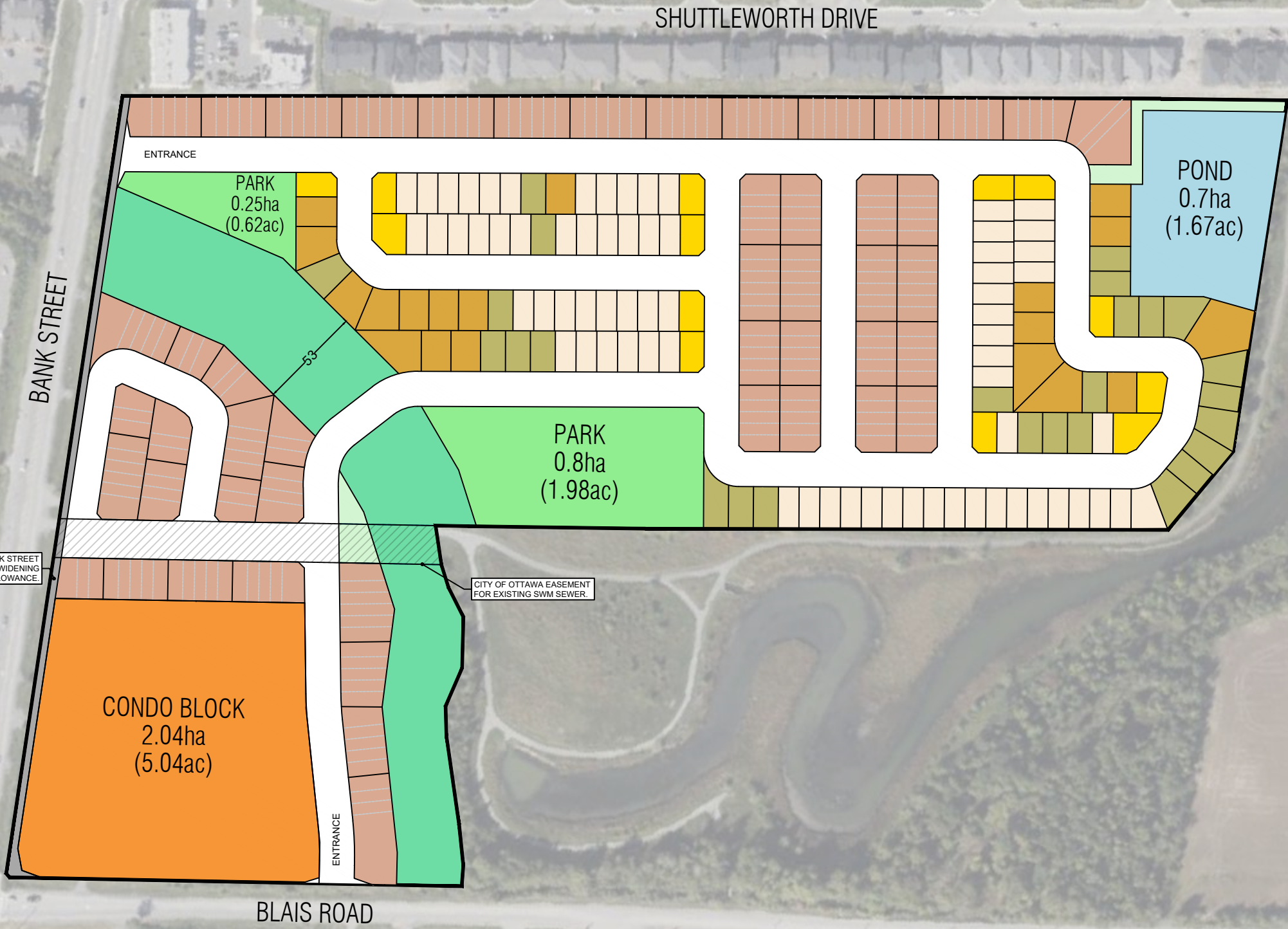
The proposed development is shown below in the Leitrim – CP-14 Concept Plan. As shown below, the proposed development will include the construction of a residential subdivision with a mix of single detached homes and townhomes. The development will also include a condo block at the corner of Bank Street and Blais Road. Two entrances to the new community will be constructed connecting to Bank Street and Blais Road. The subdivision will also include two parks and a new stormwater management pond in the northeast corner of the Site.

Findlay Creek will be retained within a 53 m wide enhanced channel corridor. The channel of Findlay Creek will be reconstructed within the enhanced channel corridor. The reconstructed channel will accommodate the floodplain and meanderbelt of Findlay Creek. Setbacks from the top of bank that are a minimum of 15 m wide will be preserved on each side of the reconstructed channel. The channel of Findlay Creek will be reconstructed according to natural channel design principles. The natural channel design will include dynamic meanders and sinuosity, as well as natural substrates and wetland pockets. The channel enhancement works will increase the length of Findlay Creek within the Site from approximately 415 m to 451 m, while also adding approximately 0.13 hectares of wetland habitat (GeoMorphix 2026). As described below in Section 3.3, the Riparian (Deciduous) Hedgerows surrounding Findlay Creek are highly degraded and vary between approximately 10 m and 40 m wide. The Riparian (Deciduous) Hedgerows will be removed during the construction of the enhanced channel corridor. Restoration planting will be undertaken throughout the 53 m wide enhanced channel corridor, which will improve the quality and quantity of the riparian vegetation community. Refer to Section 4.2.1 for additional details.

As shown below, the subdivision's internal road network will require the installation of an 18 m wide watercourse crossing (i.e. crossing Findlay Creek). The watercourse crossing will be constructed with a suitably sized wildlife passage culvert. Refer to Section 4.2.3 for additional details.



UNITS	
240	FRONT LOADED TOWNS
70	SINGLES (35')
13	SINGLES (37')
26	SINGLES (42')
19	SINGLES (50')
252	STACKED CONDO BLOCK
620	
	NHS
	PARK
	PATHWAY
	SWM POND
	ROW
	ROAD WIDENING



1.5 Agency Consultation & Regulatory Requirements (TCR)

A pre-consultation meeting was held with the City of Ottawa on March 13th, 2026. The pre-consultation meeting comments were reviewed prior to the preparation of this Combined Environmental Impact Study (EIS) & Tree Conservation Report (TCR). A pre-consultation meeting was held with the South Nation Conservation Authority (SNCA) on June 25th, 2026. The SNCA will be circulated as part of the development application review process. The following is a summary of the anticipated natural heritage related regulatory requirements:

- **Tree Removal Permit:** As described below in Section 4.1.2, a Tree Removal Permit under the City of Ottawa's Urban Tree Conservation By-law No. 2020-340 will be required prior to the commencement of tree clearing.
- **Ontario Regulation 41/24:** Ontario Regulation 41/24 regulates activities that alter shorelines, watercourses, and wetlands within the area regulated by the SNCA. A permit under O.Reg. 41/24 will be required to support the construction of the Findlay Creek enhanced channel corridor and the installation of the Findlay Creek watercourse crossing (Refer to Section 4.2.1 and Section 4.2.3 for additional details).
- **Fisheries Act:** A review by Fisheries and Oceans Canada (FOC) under the Fisheries Act will be required to support the construction of the Findlay Creek enhanced channel corridor and the installation of the Findlay Creek watercourse crossing (Refer to Section 4.2.1 and Section 4.2.3 for additional details). The Fisheries Act review request will be submitted concurrently with the draft plan of subdivision application. It is anticipated that the Fisheries Act review process will likely culminate in a letter of advice from FOC and that a full Fisheries Act authorization is unlikely to be required.
- **Ontario Species Conservation Act (SCA):** Several Category 1 (Non-Retainable) Butternut Trees (endangered) occur within the Site (Refer to Section 3.7.1 for additional details). Category 1 (Non-Retainable) Butternut Trees are not protected under the rules and regulations of the Ontario SCA. No other significant Species at Risk concerns were identified. As such, a review and/or authorization under the Ontario SCA is not anticipated to be required.

2.0 METHODOLOGY

2.0.1 Ecological Land Classification & Tree Inventory Methodology (TCR)

The Ecological Land Classification and Tree Inventory methodology included several components:

- **Ecological Land Classification and Plant Survey:** The vegetation communities throughout the Site were classified and delineated according to the Ecological Land Classification methodology (OMNRF 1998; Lee 2008). The delineation and mapping of the vegetation communities was supported by a three season plant survey. Site visits to identify plants and to delineate the vegetation communities were completed on April 21st (Sunny, 10 °C), May 16th (Mostly Sunny, 22 °C), and June 2nd (Mostly Sunny, 18 °C), 2025.
- **Tree Inventory:** A tree inventory was completed by undertaking tree sampling plots in areas of contiguous tree cover. The tree sampling plots were distributed evenly throughout the treed vegetation communities to achieve the desired density of one plot per hectare. Each tree sampling plot measured 5 m by 10 m in size, providing a total survey area of 50 m² (for each plot). Representative tree size measurements were also taken in areas of discontinuous tree cover. Trees ≥10 cm diameter at breast height (dbh) in size were measured with the use of a D-tape, which is a calibrated dbh tape. The tree inventory was completed on April 21st (Sunny, 10 °C), 2025.

2.0.2 Environmental Impact Study & Species at Risk Surveys Methodology (TCR)

This Combined Environmental Impact Study (EIS) & Tree Conservation Report (TCR) was prepared following the City of Ottawa's *Environmental Impact Study Guidelines* (City of Ottawa 2025) with guidance from the *Natural Heritage Reference Manual* (OMNRF 2010). The potential presence of natural heritage features was assessed by completing the following:

- Site surveys to classify and delineate the vegetation communities (described above);
- Site surveys to inventory trees (described above);
- Site surveys to document the occurrence of birds and other wildlife (described below);
- Site surveys to assess the potential presence of Species at Risk (SAR) and SAR habitat (described below);
- Site surveys to assess the potential presence of significant natural heritage features including Significant Wildlife Habitat (SWH), Significant Woodlots, Areas of Natural and Scientific Interest (ANSI), wetlands, fish habitat, and other features designated under the City of Ottawa Natural Heritage System;
- Examination of aerial imagery to evaluate landscape features; and
- Natural Heritage Information Center (NHIC) database review (OMNRF 2026).

The bird, wildlife, and SAR surveys included the following:

- **Butternut Tree & Black Ash Tree Survey:** A presence/absence survey for Butternut Trees (endangered) and Black Ash Trees (endangered) was completed in conjunction with the tree inventory. No Black Ash Trees were found within the Site. Several Butternut Trees were found within the Site. The health of the Butternut Trees and the associated regulatory requirements were evaluated by completing a Butternut Health Expert's (BHE) Report (Appendix C). Refer to Appendix C for further details with respect to the BHE Report methodology.
- **Bat Maternity Roost Assessment:** The Ontario Ministry of Natural Resources and Forestry (OMNRF) guidelines for bat surveying state that deciduous and mixed forest habitats have the potential to provide bat maternity roosting sites (OMNRF 2017a). As described below in Section 3.3, there are no forest habitats within the Site. Although there are no forest habitats within the Site, in an abundance of caution, the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows were evaluated for potential bat maternity roosting habitat by completing a cavity/snag tree survey. The cavity/snag tree survey was undertaken in conjunction with the tree inventory. The cavity/snag tree survey was completed following the methodology outlined in the OMNRF (2017a) *Survey Protocol for Species at Risk Bats Within Treed Habitats*. The agricultural buildings within the Site were also thoroughly searched for evidence of bat usage (Refer to Section 3.7.5 for additional details).

- **Breeding Bird Surveys:** The Breeding Bird Surveys were undertaken following the *Ontario Breeding Bird Atlas – Point Count Surveys Method* (Birds Ontario 2021). The timing and methodology of the surveys followed the requirements outlined in the OMNRF *Survey Methodology under the Endangered Species Act: Dolichonyx oryzivorus (Bobolink)* (OMNRF 2011). The Breeding Bird Surveys were completed on May 25th (Overcast, 18 °C), June 2nd (Mostly Sunny, 18 °C), and June 10th (Mostly Sunny, 21 °C), 2025. The Breeding Bird Survey points are shown below in Figure 2. The Breeding Bird Surveys included the following:
 - **Barn Swallows:** The agricultural buildings within the Site were thoroughly searched for the nests of Barn Swallows (threatened) (Refer to Section 3.7.5 for additional details).
 - **Chimney Swifts:** The chimneys that occur within the Site were evaluated to assess their potential suitability for Chimney Swift (threatened) nesting (Refer to Section 3.7.5 for additional details).
- **Blanding’s Turtle Basking Surveys:** Blanding’s Turtle Basking Surveys were completed following the OMNRF *Survey Protocol for Blanding’s Turtle (Emydoidea blandingii) in Ontario* (OMNRF 2015a). The OMNRF survey protocol required the completion of five survey visits during suitable weather conditions between late April and mid-June. The survey dates and conditions are summarized below in Table B (Refer to Section 3.7.3). The full length of the segment of Findlay Creek that occurs within the Site was surveyed during the Blanding’s Turtle Basking Surveys. This included the area immediately upstream and downstream of the Site.

FIGURE 2: BIRD SURVEY POINTS

4795 Bank Street, Ottawa, ON

Combined Environmental Impact Study & Tree Conservation Report



Mapping taken from City of Ottawa (2026). Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

3.0 EXISTING CONDITIONS

3.1 Topographic & Soil Conditions

The central part of the Site occurs at an elevation of approximately 90 m Above Sea Level (ASL). The Site slopes gradually towards the east, reaching approximately 88 m ASL at the edge of the adjacent Findlay Creek Stormwater Management Area. As described below, the majority of the Site consists of Agricultural Fields and Cultural Meadow. As such, topsoil is present at the surface throughout the majority of the Site.

3.2 Site History (TCR)

Historic air photos from 1976 and 1991 are included below (Photos from City of Ottawa 2026). Recent air photos are included in the report figures. In 1976 there were very few mature trees visible in the current locations of the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows. Mature Trees are visible in the current locations of the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows in the 1991 historic air photo. This suggests that the majority of the trees are approximately 40 years of age and younger.



Historic Air Photograph 1: Historic Air Photo from 1976 (Site limits shown in red). Note that the Site was farmed in 1976. In 1976 there were very few mature trees visible in the current locations of the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows (Photo from City of Ottawa 2026).



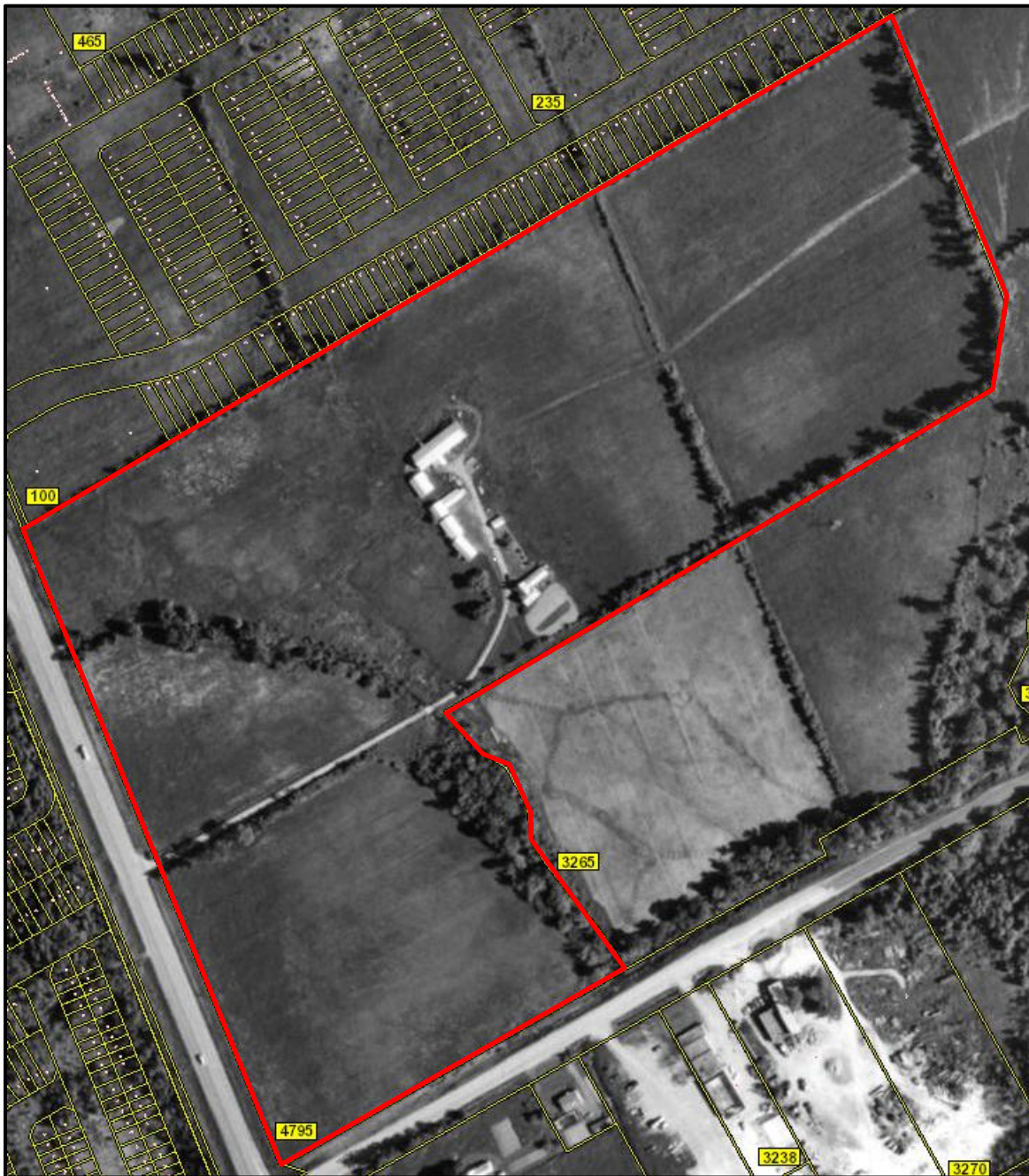
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Historic Air Photograph 2: Historic Air Photo from 1991 (Site limits shown in red). Note that the Site was farmed in 1991. In 1991 there were mature trees visible in the current locations of the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows (Photo from City of Ottawa 2026).



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3.3 Vegetation Communities (TCR)

The vegetation communities are shown below in Figure 3. Table A (below) provides an inventory of the trees within the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows. Refer to Appendix A for a list of the plant species that were observed within the Site. The following is a summary of the vegetation communities that occur within the Site:

- **Agricultural Fields:** Agricultural Fields are present in the northern part of the Site. The Agricultural Fields were planted with soybeans in 2024 and continue to be actively cultivated.
- **Cultural Meadow:** There are four patches of Cultural Meadow spread throughout the Site. Historic air photos show that the Cultural Meadow patches were actively cultivated until the early 2000s, after which they were left fallow (City of Ottawa 2026). Since that time, the Cultural Meadow patches have been regularly mowed. The groundcover within the Cultural Meadow patches is forb dominated. The dominant groundcover plants include Canada Goldenrod, New England Aster, Canada Thistle, Queen Anne's Lace, Dandelion, Brome Grass, and Timothy. The groundcover plants also include Wild Parsnip, Common Ragweed, Common Burdock, Lamb's Quarters Pigweed, Chickory, Bull Thistle, Philadelphia Fleabane, Prickly Lettuce, Ox-eye Daisy, Common Plantain, Common Mullein, Curled Dock, Common Milkweed, Red Clover, and White Clover. Isolated Trembling Aspen and Manitoba Maple stems that are up to 30 cm diameter at breast height (dbh) in size are present within the Cultural Meadow patches. The shrub cover is sparse and includes Wild Red Raspberry, Staghorn Sumac, and Red Osier Dogwood.
- **Deciduous Hedgerow (Northeast):** The Deciduous Hedgerow (Northeast) is a degraded feature that is dominated by American Elm, invasive Manitoba Maple, and dead White Ash stems. The dominant trees average between approximately 10 cm and 30 cm dbh in size (Refer to Table A). Similar sized Bur Oak, American Basswood, and Sugar Maple are also represented. The shrub layer is dense and is dominated by Common Buckthorn, Riverbank Grape, Hawthorn, Domestic Apple, and Red Osier Dogwood. The groundcover plants within the Deciduous Hedgerow (Northeast) are similar to the adjacent patch of Cultural Meadow.
- **Deciduous Hedgerow (Southwest):** The Deciduous Hedgerow (Southwest) includes trees that occur along the property line and/or at the edge of the Blais Road ditch. The Deciduous Hedgerow (Southwest) is dominated by Sugar Maple. American Elm, White Cedar, and American Basswood are highly represented. The dominant trees average between approximately 10 cm and 25 cm dbh in size (Refer to Table A). Similar sized Trembling Aspen and dead White Ash are also present. The shrub layer is dense and is dominated by Common Buckthorn, Red Osier Dogwood, Staghorn Sumac, Riverbank Grape, and Domestic Apple. The groundcover plants within the Deciduous Hedgerow (Southwest) are similar to the adjacent patch of Cultural Meadow.

- **Riparian (Deciduous) Hedgerows:** The Riparian (Deciduous) Hedgerows surrounding Findlay Creek are narrow features that include tree cover that is between 10 m and 40 m wide. The tree cover is too narrow and each contiguous patch of trees is too small to be classified as woodland and/or forest (OMNRF 1998: Lee 2008). The Riparian (Deciduous) Hedgerows are degraded features with many openings and a high proportion of invasive species. The Riparian (Deciduous) Hedgerows are dominated by dead White/Green Ash and invasive Manitoba Maple. American Elm, invasive Crack Willow, White Cedar, American Basswood, and Bur Oak are well represented. A few Sugar Maple and Trembling Aspen stems are also present. The dominant trees average between approximately 15 cm and 40 cm dbh in size (Refer to Table A). The shrub layer is dense and is dominated by Common Buckthorn, Red Osier Dogwood, Staghorn Sumac, Riverbank Grape, Wild Red Raspberry, and Domestic Apple. Speckled Alder and Willow shrubs are present in some areas along the banks of Findlay Creek. The groundcover plants within the Riparian (Deciduous) Hedgerows include White Trillium, Trout Lily, Red Trillium, False Solomon's Seal, Garlic Mustard, and Canada Goldenrod.



FIGURE 3: VEGETATION COMMUNITIES

4795 Bank Street, Ottawa, ON

Combined Environmental Impact Study & Tree Conservation Report



Mapping taken from City of Ottawa (2026). Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

TABLE A: TREE SIZE MEASUREMENTS

Deciduous Hedgerow (Northeast) (2 Plots)

Common Name	Scientific Name	Average DBH (cm)	DBH Standard Deviation	% Occupancy	Estimated Stems/Ha
American Elm	<i>Ulmus americana</i>	19	9	29%	800
Manitoba Maple	<i>Acer negundo</i>	19	10	25%	700
White Ash	<i>Fraxinus americana</i>	19	10	25%	700
Bur Oak	<i>Quercus macrocarpa</i>	14	5	7%	200
American Basswood	<i>Tilia americana</i>	18	11	7%	200
Sugar Maple	<i>Acer saccharum</i>	18	11	7%	200

Deciduous Hedgerow (Southwest) (1 Plot)

Common Name	Scientific Name	Average DBH (cm)	DBH Standard Deviation	% Occupancy	Estimated Stems/Ha
Sugar Maple	<i>Acer saccharum</i>	17	7	31%	1000
American Elm	<i>Ulmus americana</i>	25	1	19%	600
White Cedar	<i>Thuja occidentalis</i>	18	7	19%	600
American Basswood	<i>Tilia americana</i>	19	9	13%	400
Trembling Aspen	<i>Populus tremuloides</i>	19	9	13%	400
White Ash	<i>Fraxinus americana</i>	15	N/A	6%	200

DBH = Diameter at Breast Height measured in centimeters. N/A values in the DBH Standard Deviation are due to only one tree of that species being observed within the tree sampling plots.

TABLE A: TREE SIZE MEASUREMENTS

Riparian (Deciduous) Hedgerows (3 Plots)

Common Name	Scientific Name	Average DBH (cm)	DBH Standard Deviation	% Occupancy	Estimated Stems/Ha
White/Green Ash	<i>Fraxinus americana/pennsylvanica</i>	24	9	25%	733
Manitoba Maple	<i>Acer negundo</i>	26	8	23%	667
American Elm	<i>Ulmus americana</i>	24	6	18%	533
Crack Willow	<i>Salix fragilis</i>	33	11	11%	333
American Basswood	<i>Tilia americana</i>	27	2	9%	267
White Cedar	<i>Thuja occidentalis</i>	14	3	9%	267
Bur Oak	<i>Quercus macrocarpa</i>	26	1	5%	133

DBH = Diameter at Breast Height measured in centimeters. N/A values in the DBH Standard Deviation are due to only one tree of that species being observed within the tree sampling plots.



Photograph 1: Looking northeast at the Agricultural Field in the northeastern part of the Site (April 21st, 2025).



Photograph 2: Looking northeast at the Agricultural Field in the northwestern part of the Site (April 21st, 2025).



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Photograph 3: Looking north at the Cultural Meadow patch in the northeastern part of the Site (April 21st, 2025).



Photograph 4: Looking southwest at the Cultural Meadow patch in the southwestern part of the Site (April 21st, 2025).



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Photograph 5: Looking north at the Cultural Meadow patch in the southwestern part of the Site (May 16th, 2025).



Photograph 6: Looking south at the Cultural Meadow patch in the southwestern part of the Site (June 10th, 2025).



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Photograph 7: Looking east at the Deciduous Hedgerow (Northeast) (April 21st, 2025).



Photograph 8: Looking east at the Deciduous Hedgerow (Northeast) (May 16th, 2025).



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Photograph 9: Looking southwest at the Deciduous Hedgerow (Southwest) (April 21st, 2025).



Photograph 10: Looking southwest at the Deciduous Hedgerow (Southwest) from Blais Road (May 16th, 2025).



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Photograph 11: Looking north at the northern part of the Riparian (Deciduous) Hedgerows (April 21st, 2025).



Photograph 12: Looking southeast at the northern part of the Riparian (Deciduous) Hedgerows (May 16th, 2025).



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Photograph 13: Looking north at the southern part of the Riparian (Deciduous) Hedgerows (April 21st, 2025).



Photograph 14: Looking north at the southern part of the Riparian (Deciduous) Hedgerows (May 16th, 2025).



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3.4 Wetlands & Watercourses

There are no wetland features found within the Site. There are also no unevaluated wetlands shown to exist within 30 m of the Site, and no Provincially Significant Wetlands shown to exist within 120 m of the Site (City of Ottawa 2026; OMNRF 2026). As such, wetlands are not anticipated to be a significant concern for the proposed development.

3.4.1 Findlay Creek

As shown below in Figure 4, Findlay Creek flows in an approximately northwest to southeast direction through the Site. Portions of the western part of the Site are shown to be within the 1:100 Year Floodplain of Findlay Creek and the associated 15 m wide Hazard Setback/SNCA Regulatory Limits (City of Ottawa 2026). Findlay Creek was observed to have a wetted width between approximately 1.5 m and 3 m during the early spring (April 21st, 2025). The maximum observed water depth varied between approximately 60 cm during the early spring (April 21st, 2025) and approximately 30 cm during the early summer (June 10th, 2025). The watercourse had moderate flow volumes throughout the survey period and is likely to be hydrated year-round. The substrate of the watercourse includes a mix of silt, boulder, gravel, and detritus. The majority of the channel is heavily shaded and lacks in-stream aquatic vegetation. The riparian vegetation surrounding Findlay Creek is described above in Section 3.3 (i.e. the Riparian (Deciduous) Hedgerows). Within the Site, the watercourse flows through a large box culvert under the driveway that leads to the old farmhouse. The farmhouse driveway and box culvert will be removed during the future development of the Site. Findlay Creek flows through the roadside ditch of Blais Road immediately downstream of the Site. The watercourse flows into the Findlay Creek Municipal Drain further downstream.

Fish were observed within Findlay Creek and therefore the watercourse provides direct fish habitat. Findlay Creek is a tributary of the North Castor River (SNCA 2015). Monitoring of the North Castor River subwatershed indicates that the North Castor River and its tributaries provide direct fish habitat for a low diversity fish community that is dominated by species that are common throughout the region. Only ten common fish species were documented within the North Castor River subwatershed by the South Nation Conservation Authority (SNCA). The ten common fish species that were documented within the North Castor River subwatershed included Bluntnose Minnow, Pumpkinseed, Brown Bullhead, Rock Bass, Central Mudminnow, Smallmouth Bass, Common Shiner, White Sucker, Golden Shiner, and Yellow Perch (SNCA 2015).

FIGURE 4: WATERCOURSES & SNCA REGULATORY LIMITS

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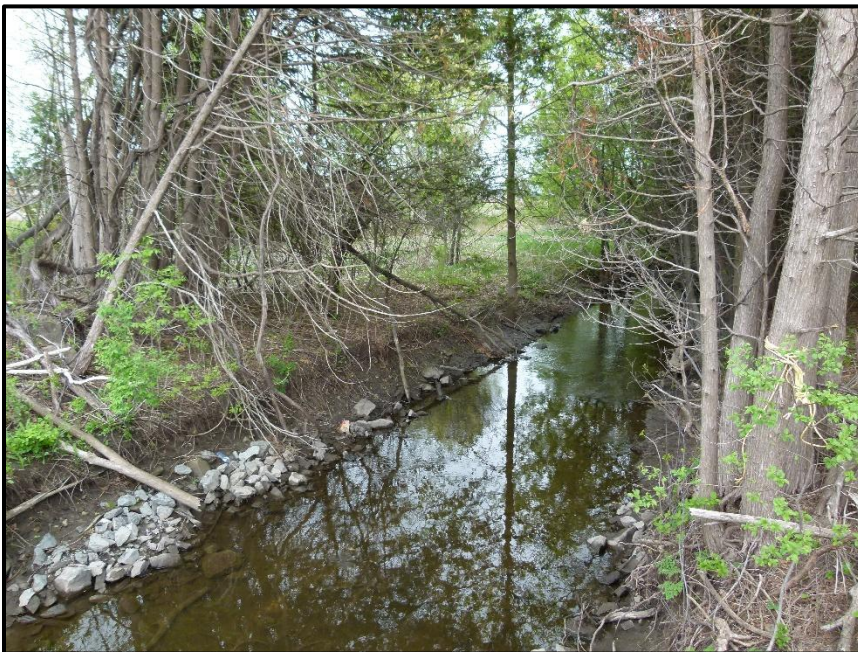
Combined Environmental Impact Study & Tree Conservation Report



*The 15 m wide Hazard Setback/SNCA Regulatory Limits are drawn relative to the 1:100 Year Floodplain of Findlay Creek. Mapping taken from City of Ottawa (2026). Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.



Photograph 15: Looking downstream along Findlay Creek in the northwestern part of the Site (April 28th, 2025).



Photograph 16: Looking downstream along Findlay Creek in the northwestern part of the Site (May 16th, 2025).



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Photograph 17: Looking upstream along Findlay Creek in the northwestern part of the Site (April 21st, 2025).



Photograph 18: Looking upstream at the large box culvert under the driveway that leads to the old farmhouse (April 21st, 2025).



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Photograph 19: Looking downstream along Findlay Creek in the southeastern part of the Site (April 28th, 2025).



Photograph 20: Looking downstream along Findlay Creek in the southeastern part of the Site (June 10th, 2025).



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Photograph 21: Looking downstream along Findlay Creek where it flows through the Blais Road ditch (April 28th, 2025).



Photograph 22: Looking downstream along Findlay Creek where it flows through the Blais Road ditch (June 2nd, 2025).



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3.5 Adjacent Lands & Significant Features

Bank Street forms the western boundary of the Site, beyond which is a residential subdivision. The area to the north of the Site consists of a residential subdivision and developed commercial properties. The Findlay Creek Stormwater Management Facility is located east of the Site. Blais Road forms the southern boundary of the Site, beyond which is a mowed field and several developed commercial properties. *Schedule C11 – C – Natural Heritage System (East)* of the City of Ottawa's New Official Plan does not identify any part of the Site as a Natural Environment Area, a Natural Heritage System Core Area, and/or as a Natural Heritage System Linkage Area (City of Ottawa 2022a). There are no unevaluated wetlands shown to exist within 30 m of the Site, and no Provincially Significant Wetlands shown to exist within 120 m of the Site (City of Ottawa 2026; OMNRF 2026). There are also no Areas of Natural and Scientific Interest (ANSI) shown to exist in the vicinity of the Site (OMNRF 2026). There are no forest and/or woodland habitats within the Site and/or immediately adjacent to the Site, and therefore there are no features in the vicinity of the Site which may qualify as Significant Woodlots. Findlay Creek and its associated floodplain/corridor were the only significant natural heritage features found within the Site and/or immediately adjacent to the Site (Refer to Section 3.4). The potential presence of Significant Wildlife Habitat and Species at Risk habitat is discussed below in Section 3.6 and Section 3.7 (respectively).

3.6 Wildlife & Significant Wildlife Habitat

The birds and wildlife species that were observed within the Site are listed in Appendix B. Twenty-seven bird species were observed within the Site. As described below in Section 3.7.5, foraging Barn Swallows (threatened) were observed during the Breeding Bird Surveys, as was evidence of Barn Swallow nesting within the agricultural buildings. No reptiles and/or amphibians were observed within the Site. The only mammal species observed within the Site were Eastern Grey Squirrel, Eastern Chipmunk, Groundhog, and White Tailed Deer. With the exception of the Barn Swallows, all of the birds and wildlife species that were observed within the Site are common species in urban and suburban areas throughout the region. No evidence was observed of stick nests, migratory bird stopover points, heron rookeries, caves, bedrock fissures, wetlands, reptile hibernacula, significant amphibian breeding habitat functions, or any other features/functions which may qualify as Significant Wildlife Habitat (OMNRF 2015b). The potential presence of Species at Risk habitat is discussed below in Section 3.7.

The City of Ottawa *Bird Safe Design Guidelines* identify that buildings which are located in close proximity to natural areas, parks, forests, and wetlands are likely to pose an increased risk of bird collision (City of Ottawa 2022b). In addition, buildings that are located along known or suspected migration corridors (e.g. rivers, escarpments, and other linear landscape features) also pose an increased risk of bird collision (City of Ottawa 2022b). The presence of Findlay Creek creates a moderate risk of bird collision. By extension, the buildings that will be constructed as part of the future development will pose a moderate risk of bird collision (City of Ottawa 2022b). Mitigation measures to address the risk of bird collision are described below in Section 4.4.1.

3.7 Species at Risk

The regulatory requirements for Species at Risk (SAR) in Ontario are established by the provincial Species Conservation Act (SCA) and the federal Species at Risk Act (SARA). The SCA protects the individuals of all threatened and endangered species that are listed under the SCA, as well as their significant habitat features. Threatened and endangered species of birds and fish that are not listed under the SCA are protected under the SARA. The SARA protects the individuals (including occupied nests) of threatened and endangered bird and fish species, however, the protection of significant habitat under the SARA applies only on federally owned lands. The discussion of SAR outlined below is divided between SCA protected species and SARA protected species in order to distinguish between the different regulatory regimes associated with the SCA and the SARA. All threatened and endangered species that have the potential to occur in the region surrounding the Site are discussed below (OMNRF 2026; SARA 2026; SARO 2026).

3.7.1 Species Conservation Act – Butternut Trees & Black Ash Trees (TCR)

A presence/absence survey for Butternut Trees (endangered) and Black Ash Trees (endangered) was completed in conjunction with the tree inventory. No Black Ash Trees were found within the Site. Several Butternut Trees were found within the Site. The health of the Butternut Trees and the associated regulatory requirements were evaluated by completing a Butternut Health Expert's (BHE) Report (Appendix C). The BHE Report confirmed the presence of eight Category 1 (Non-Retainable) Butternut Trees. Category 1 (Non-Retainable) Butternut Trees are not protected under the rules and regulations of the Ontario Species Conservation Act. No Category 2 (Retainable) Butternut Trees and/or Category 3 (Archivable) Butternut Trees were found within the Site.

3.7.2 Species Conservation Act - Species at Risk Bats

Eastern Red Bat, Eastern Small Footed Myotis, Hoary Bat, Little Brown Bat, Northern Long Eared Bat, Silver Haired Bat, and Tricolored Bat are all listed as endangered under the Ontario Species Conservation Act (SARO 2026). No caves, bedrock fissures, mining shafts, or other features which may function as bat hibernacula habitat were observed within the Site (OMNRF 2015b). Ontario's endangered bat species do not typically utilize buildings as hibernacula (OMNRF 2015b; SARO 2026). The only bat species in Ontario that regularly uses buildings for overwintering is Big Brown Bat, which is not listed as a Species at Risk in Ontario (OMNRF 2015b; SARO 2026).

Some of Ontario's endangered bat species may occasionally utilize abandoned buildings as maternity roosting sites (OMNRF 2015b; SARO 2026). It should be noted that buildings that are utilized by bats as maternity roosting habitat do not qualify as Significant Wildlife Habitat (OMNRF 2015b). The agricultural buildings that occur within the Site were thoroughly searched and no evidence of bat maternity roosting was observed (Refer to Section 3.7.5 for additional details). Although no evidence of bat maternity roosting was observed, in an abundance of caution, all building demolition will be undertaken outside of the endangered bat active season (Refer to Section 4.4.2 for additional details).

The Ontario Ministry of Natural Resources and Forestry guidelines for bat surveying state that deciduous and mixed forest habitats have the potential to provide bat maternity roosting sites (OMNRF 2017a). As described above in Section 3.3, there are no forest habitats within the Site. Although there are no forest habitats within the Site, in an abundance of caution, the Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows were evaluated for potential bat maternity roosting habitat by completing a cavity/snag tree survey. Most of the trees within the Site are too young to provide suitable cavity/snag tree habitat. Only one cavity tree was found within the Riparian (Deciduous) Hedgerows, which indicates that the density of cavity/snag trees is too low to support potential maternity roosting habitat (OMNRF 2017a).

In summary, hibernating and/or maternity roosting bats are unlikely to be a significant concern for the future development of the Site.

3.7.3 Species Conservation Act - Species at Risk Turtles

Blanding's Turtle Basking Surveys were completed along the full length of the segment of Findlay Creek that occurs within the Site. This included the area immediately upstream and downstream of the Site. The survey conditions and results are summarized below in Table B. As shown below in Table B, no turtles were observed within the Site. Several Species at Risk (SAR) turtles have been recorded within the region surrounding the Site (OMNRF 2026; SARA 2026; SARO 2026). The SAR turtles that have been recorded in the region surrounding the Site include the following:

- **Spotted Turtle:** Spotted Turtles (endangered) have been largely extirpated from the City of Ottawa and they are only known to persist in the region in a relatively small number of remote locations (OMNRF 2026; SARO 2026). In the region surrounding the Site, Spotted Turtles are known to occur within the Mer Bleue Bog (OMNRF 2026). There are no records of Spotted Turtles within the twenty-five Natural Heritage Information Center (NHIC) grids that include and surround the Site (a 5 km x 5 km search area) (OMNRF 2026). No Spotted Turtles were observed within the Site during the Blanding's Turtle Basking Surveys. As such, Spotted Turtles are unlikely to be a significant concern for the proposed development.
- **Blanding's Turtle:** Blanding's Turtles (threatened) utilize suitable wetlands and watercourses as core foraging and basking habitat (OMNRF 2021). Blanding's Turtles also utilize terrestrial habitat to move overland between suitable wetland and watercourse features (OMNRF 2021). The definition of Blanding's Turtle habitat includes any potentially suitable habitat features that occur within 2 km of a known Blanding's Turtle occurrence (OMNRF 2021). There are no records of Blanding's Turtles within the twenty-five NHIC grids that include and surround the Site (a 5 km x 5 km search area) (OMNRF 2026). No Blanding's Turtles were observed within the Site during the Blanding's Turtle Basking Surveys. The segment of Findlay Creek that flows through the Site is not within 2 km of a known Blanding's Turtle occurrence, and therefore it does not qualify as Blanding's Turtle habitat (OMNRF 2021). As such, Blanding's Turtles are unlikely to be a significant concern for the proposed development.

TABLE B: BLANDING'S TURTLE SURVEY RESULTS					
Survey Date	Start Temperature	End Temperature	Conditions	Start Time	Turtle Sightings
April 21, 2025	10°C	10°C	Full Sun	1:00 PM	<i>No Turtles Found</i>
April 28, 2025	20°C	20°C	Full Sun	1:00 PM	<i>No Turtles Found</i>
May 16, 2025	22°C	22°C	Mostly Sunny	11:00 AM	<i>No Turtles Found</i>
June 2, 2025	18°C	18°C	Mostly Sunny	1:00 PM	<i>No Turtles Found</i>
June 10, 2025	21°C	21°C	Mostly Sunny	9:30 AM	<i>No Turtles Found</i>



3.7.4 Species Conservation Act - Additional Species at Risk

The following Species at Risk have the potential to occur in the region surrounding the Site:

- American Ginseng – Threatened
- Black Tern – Endangered
- Hudsonian Godwit – Threatened
- Lesser Yellowlegs – Threatened
- Short Eared Owl - Threatened
- American Eel – Endangered
- Lake Sturgeon – Endangered

The following is a summary of the potential for these species to occur within the Site:

- **American Ginseng:** American Ginseng occurs in mature deciduous forests (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland habitats within the Site. As such, American Ginseng is unlikely to be a significant concern for the proposed development.
- **Black Tern:** Black Terns build their nests in shallow marshes (SARO 2026). As described above in Section 3.4, there are no marshes found within the Site and/or within 30 m. Therefore, Black Terns are unlikely to be a significant concern for the proposed development.
- **Hudsonian Godwit & Lesser Yellowlegs:** Hudsonian Godwit and Lesser Yellowlegs are shorebird species. Hudsonian Godwit and Lesser Yellowlegs occur within the Ottawa area as rare migrants, and both species are occasionally found foraging on beaches, mudflats, and in coastal lagoons (SARO 2026). The Site does not provide beach, mudflat, and/or lagoon habitat. As such, Hudsonian Godwit and Lesser Yellowlegs are unlikely to be a significant concern for the proposed development.
- **Short Eared Owl:** Short Eared Owls are found in areas with large tracts of open habitat including grasslands, marshes, and tundra (SARO 2026). The open areas within the Site are too small to be likely to provide suitable foraging habitat for Short Eared Owls. There were no Short Eared Owls observed within the Site during the Breeding Bird Surveys. As such, Short Eared Owls are unlikely to be a significant concern for the proposed development.
- **American Eel & Lake Sturgeon:** American Eel and Lake Sturgeon are fish species that are found in major rivers (SARO 2026). As described above in Section 3.4, Findlay Creek is too narrow and too shallow to provide riverine habitat. As such, American Eel and Lake Sturgeon are unlikely to be a significant concern for the proposed development.

3.7.5 Species at Risk Act - Barn Swallow & Chimney Swift

The agricultural buildings that occur within the Site are shown below in Figure 5. The agricultural buildings were thoroughly searched for the nests of Barn Swallows (threatened). The chimneys that occur within the Site were evaluated to assess their potential suitability for Chimney Swift (threatened) nesting. The following is a description of the agricultural buildings and the survey results:

- **Building #1:** Building #1 is a large Quonset hut constructed from galvanized metal and plastic sheeting. The Quonset hut is open at the bottom. No evidence of Barn Swallow nesting was observed within Building #1.
- **Building #2:** Building #2 is a small bungalow with vinyl siding and a shingled roof. The bungalow is well sealed and well maintained. The bungalow does not have a chimney. No evidence of Barn Swallow nesting was observed within Building #2.
- **Building #3:** Building #3 is a farmhouse with brick walls and a metal roof. The farmhouse has an attached garage/workshop with wooden walls and a metal roof. The farmhouse has been partially demolished and is accessible through open doors and windows. Active Barn Swallow nests were observed within the garage/workshop attached to the farmhouse. The chimney of the farmhouse has a metal cap and therefore it is not suitable for Chimney Swift nesting.
- **Building #4:** Building #4 includes two adjacent storage sheds that are made from wood and galvanized metal. The doors of the storage sheds are open and accessible. Several inactive Barn Swallow nests were observed within the smaller shed, indicating that Barn Swallows historically nested in the smaller shed.
- **Building #5:** Building #5 is a large barn/shed structure with four connected segments. Building #5 includes a mix of wooden and metal walls with metal roofs. Building #5 has several exterior openings. Active Barn Swallow nests were observed within Building #5.
- **Building #6:** Building #6 is a small Quonset hut constructed from galvanized metal. The Quonset hut has been partially demolished. No evidence of Barn Swallow nesting was observed within Building #6.
- **Building #7:** Building #7 is a storage shed/barn with wooden walls. Building #7 has been partially demolished. No evidence of Barn Swallow nesting was observed within Building #7.
- **Building #8:** Building #8 is a large barn with wooden walls and a metal roof. Building #8 has several exterior openings. Active Barn Swallow nests were observed within Building #8.

Active Barn Swallow nests were found within Building #3, Building #5 and Building #8. Inactive Barn Swallow nests were also found within Building #4, indicating that Barn Swallows historically nested in Building #4. Barn Swallows were also observed foraging within the Site during the Breeding Bird Surveys. Barn Swallows are listed as threatened under the Species at Risk Act (SARA). The SARA

protects the individuals (including occupied nests) of threatened bird species, however, the protection of significant habitat under the SARA applies only on federally owned lands. As such, the habitat of Barn Swallows that occurs within the Site is not protected under the SARA (i.e. the buildings used for nesting), whereas individual birds and active nests are protected under the SARA. All building demolition will be undertaken outside of the Barn Swallow nesting season in order to avoid impacting individual Barn Swallows and their active nests (Refer to Section 4.4.2 for additional details). As described above, only one chimney occurs within the Site, and it is not suitable for Chimney Swift nesting (i.e. it is a capped chimney). As such, Chimney Swifts are unlikely to be a significant concern for the proposed development.



FIGURE 5: EXISTING BUILDINGS

4795 Bank Street, Ottawa, ON

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-  - Site Limits
-  - Watercourses
-  - Building Number

Mapping taken from City of Ottawa (2026). Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.



Photograph 23: Looking west at Building #1. No evidence of Barn Swallow nesting was observed within Building #1 (April 21st, 2025).



Photograph 24: Looking east at Building #2. No evidence of Barn Swallow nesting was observed within Building #2 (April 28th, 2025).



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Photograph 25: Looking south at Building #3. Active Barn Swallow nests were observed within the garage/workshop attached to the farmhouse (April 21st, 2025).



Photograph 26: A close-up of the metal cap on the chimney of Building #3 (April 21st, 2025).



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Photograph 27: Looking east at Building #4. Inactive Barn Swallow nests were observed in the smaller shed (April 21st, 2025).



Photograph 28: Looking northwest at Building #5. Active Barn Swallow nests were observed within Building #5 (April 21st, 2025).





Photograph 29: An active Barn Swallow nest within Building #5 (May 16th, 2025).



Photograph 30: Looking northwest at Building #6. No evidence of Barn Swallow nesting was observed within Building #6 (April 21st, 2025).



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Photograph 31: Looking west at Building #7. No evidence of Barn Swallow nesting was observed within Building #7 (April 21st, 2025).



Photograph 32: Looking north at Building #8. Active Barn Swallow nests were observed within Building #8 (April 21st, 2025).



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Photograph 33: An adult Barn Swallow roosting in an active nest within Building #8 (June 10th, 2025).



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3.7.6 Species at Risk Act - Additional Species at Risk

The following Species at Risk have the potential to occur in the region surrounding the Site:

- Bank Swallow – Threatened
- Bobolink – Threatened
- Eastern Meadowlark - Threatened
- Canada Warbler – Threatened
- Cerulean Warbler - Endangered
- Eastern Whip Poor Will – Threatened
- Golden Winged Warbler - Threatened
- Henslow's Sparrow - Endangered
- Least Bittern - Threatened
- Loggerhead Shrike – Endangered
- Piping Plover – Endangered
- Red Knot - Endangered
- Red Headed Woodpecker – Endangered
- Wood Thrush – Threatened

The following is a summary of the potential for these species to occur within the Site:

- **Bank Swallow:** Bank Swallows nest in natural and artificial deposits of sand and silt with vertical faces (SARO 2026). There are no natural and/or artificial deposits of sand and/or silt within the Site. As such, Bank Swallows are unlikely to be a significant concern for the proposed development.
- **Bobolink & Eastern Meadowlark:** Bobolink and Eastern Meadowlark nest in relatively undisturbed grasslands, meadows, and pastures that are graminoid dominated (SARO 2026). As described above in Section 3.3, the open habitats within the Site consist of Agricultural Fields and forb dominated patches of Cultural Meadow. The open habitats within the Site are unlikely to be suitable for Bobolink and/or Eastern Meadowlark nesting. No Bobolinks and/or Eastern Meadowlarks were observed during the Breeding Bird Surveys. Therefore, Bobolink and Eastern Meadowlark are unlikely to be a significant concern for the proposed development.
- **Canada Warbler:** Canada Warblers nest in wet deciduous and coniferous forests with a dense shrub understory (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland habitats within the Site. As such, Canada Warbler is unlikely to be a significant concern for the proposed development.
- **Cerulean Warbler:** Cerulean Warblers nest in mature deciduous forests with an open understory (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland

habitats within the Site. As such, Cerulean Warbler is unlikely to be a significant concern for the proposed development.

- **Eastern Whip Poor Will:** Eastern Whip Poor Will are typically found nesting in areas with a mix of open and forest habitats (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland habitats within the Site. As such, Eastern Whip Poor Will are unlikely to be a significant concern for the proposed development.
- **Golden Winged Warbler:** Golden Winged Warblers nest in young shrubs at the edges of mature forests (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland habitats within the Site. As such, Golden Winged Warbler is unlikely to be a significant concern for the proposed development.
- **Henslow's Sparrow:** Henslow's Sparrows nest in large grasslands that are graminoid dominated (SARO 2026). As described above in Section 3.3, the open habitats within the Site consist of Agricultural Fields and forb dominated patches of Cultural Meadow. The open habitats within the Site are unlikely to be suitable for Henslow's Sparrow nesting. No Henslow's Sparrows were observed during the Breeding Bird Surveys. Therefore, Henslow's Sparrow is unlikely to be a significant concern for the proposed development.
- **Least Bittern:** Least Bitterns breed in open marshes and wetlands (SARO 2026). As described above in Section 3.4, there are no marsh and/or wetland habitats within the Site and/or within 30 m. As such, Least Bitterns are unlikely to be a significant concern for the proposed development.
- **Loggerhead Shrike:** Loggerhead Shrikes are found nesting in large pastures and grasslands with scattered low trees and thorny shrubs. They also nest and forage in alvars (SARO 2026). The patches of Cultural Meadow within the Site are too small, fragmented, and degraded to provide suitable habitat for Loggerhead Shrikes. No Loggerhead Shrikes were observed within the Site during the Breeding Bird Surveys. Therefore, Loggerhead Shrikes are unlikely to be a significant concern for the proposed development.
- **Piping Plover & Red Knot:** Piping Plover and Red Knot are shorebird species. Piping Plover and Red Knot occur within the Ottawa area as rare migrants, and both species are occasionally found foraging on beaches, mudflats, and in coastal lagoons (SARO 2026). The Site does not provide beach, mudflat, and/or lagoon habitat. As such, Piping Plover and Red Knot are unlikely to be a significant concern for the proposed development.
- **Red Headed Woodpecker:** Red Headed Woodpeckers are primarily found in association with open woodlands and woodland edges (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland habitats within the Site. Therefore, Red Headed Woodpeckers are unlikely to be a significant concern for the proposed development.
- **Wood Thrush:** Wood Thrush are typically found nesting within interior forest habitat (SARO 2026). As described above in Section 3.3, there are no forest and/or woodland habitats within

the Site. As such, Wood Thrush are unlikely to be a significant concern for the proposed development.

3.8 Linkages

Schedule C11 – C – Natural Heritage System (East) of the City of Ottawa's New Official Plan does not identify any part of the Site as a Natural Heritage System Linkage Area (City of Ottawa 2022a). As such, the Site was not identified as a significant wildlife movement corridor and/or as a significant linkage area during the analysis that was undertaken to support the development of the City of Ottawa's New Official Plan and its associated Natural Heritage System Mapping (City of Ottawa 2022a; City of Ottawa 2023). As described above in Section 3.5, the Site is surrounded by existing and/or planned development on all sides, and therefore the terrestrial areas of the Site are unlikely to provide a significant wildlife movement corridor. Findlay Creek likely provides a linkage function for aquatic wildlife and species that utilize disturbed riparian habitats. The natural features and functions of Findlay Creek, including its linkage functions, will be preserved within the enhanced channel corridor and the setbacks described below in Section 4.2.1.



4.0 DESCRIPTION OF ENVIRONMENTAL IMPACTS & MITIGATION

4.1 Terrestrial Habitat & Tree Retention (TCR)

4.1.1 Tree Retention (TCR)

The pre-development tree cover is shown below in Figure 6. As described above in Section 3.3, the majority of the Site consists of open habitats that lack mature tree cover. The mature tree cover within the Site is limited to the two Deciduous Hedgerows and the Riparian (Deciduous) Hedgerows. The two Deciduous Hedgerows overlap future development areas and therefore they will be removed as part of the future development of the Site. The two Deciduous Hedgerows are not significant ecological features, and therefore their removal is not anticipated to have a significant ecological impact. The Riparian (Deciduous) Hedgerows will be removed during the construction of the Findlay Creek enhanced channel corridor. As described above in Section 3.3, the Riparian (Deciduous) Hedgerows surrounding Findlay Creek are highly degraded and vary between approximately 10 m and 40 m wide. Restoration planting will be undertaken throughout the 53 m wide enhanced channel corridor, which will improve the quality and quantity of the riparian vegetation community. Refer to Section 4.2.1 for additional details. All trees that are proposed to be removed are privately owned and occur within the Site.

FIGURE 6: PRE-DEVELOPMENT TREE COVER

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Mapping taken from City of Ottawa (2026). Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

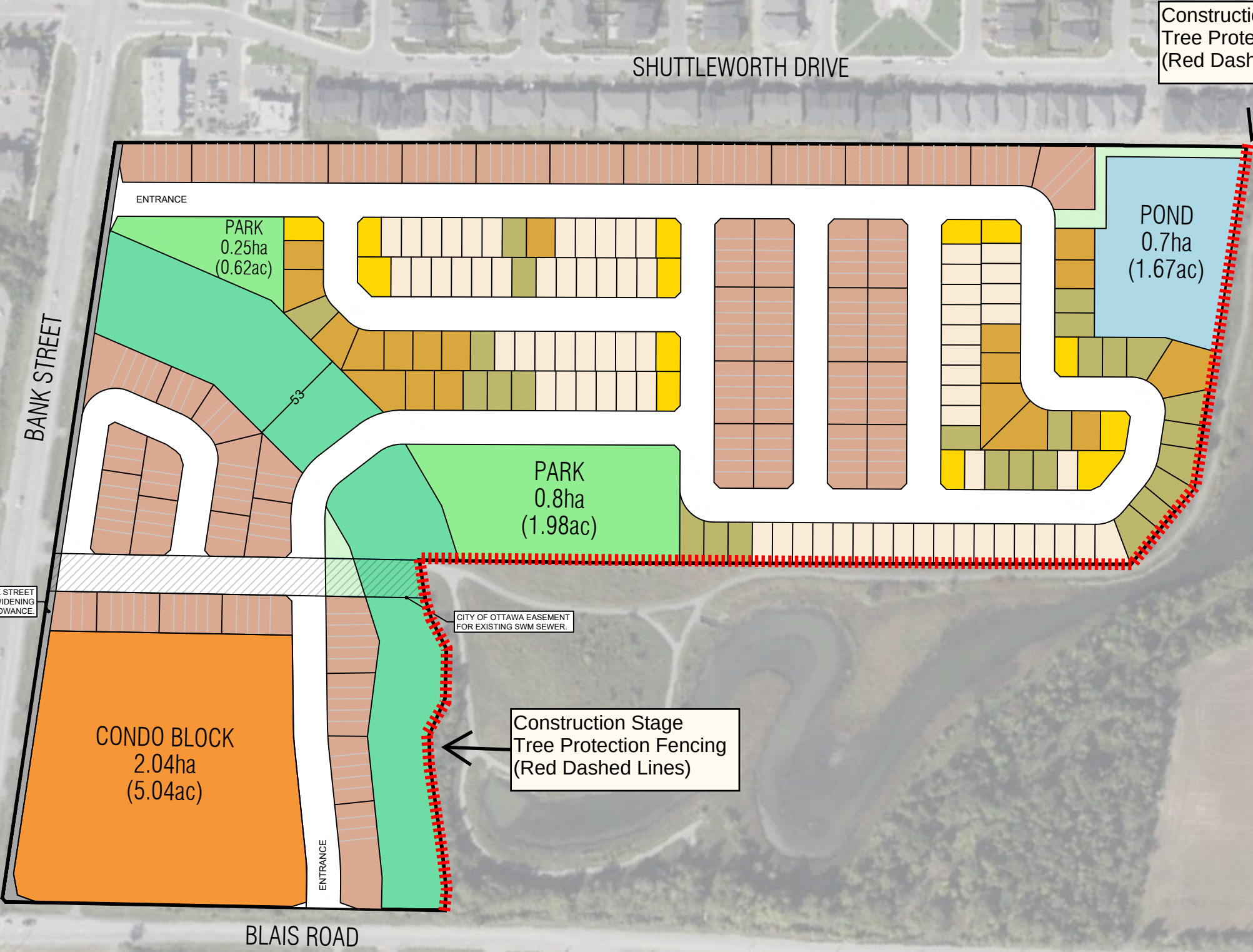
4.1.2 Tree Preservation Mitigation Measures (TCR)

A Tree Removal Permit under the City of Ottawa's Urban Tree Conservation By-law No. 2020-340 will be required prior to the commencement of tree clearing. The following tree preservation mitigation measures will be implemented to help protect and preserve retained trees:

- Trees are present east of the Site around the edges of the Findlay Creek Stormwater Management Facility. Sturdy tree protection fencing will be installed along the eastern edges of the Site to ensure the retention of the trees within the adjacent property. The tree protection fencing is shown below in the Tree Protection Fencing – Leitrim – CP-14 Concept Plan. The tree protection fencing must be at least 1 m in height and must be maintained until the completion of all adjacent construction activities (e.g. tree clearing, excavation, grading, earthworks, etc.);
- Protect the Critical Root Zone (CRZ) of retained trees. The CRZ includes the area within 10 cm of the trunk of a tree for every centimeter of trunk diameter at breast height (dbh). The CRZ is calculated as $dbh \times 10 \text{ cm}$;
- Attach signs to the tree protection fencing approximately every 10 m. The signs must identify the purpose of the fencing (i.e. to protect retained trees and their CRZ). The signs must also identify that the tree protection fencing is to be maintained throughout the construction phase of the development, and that the fencing is not to be moved and/or removed until construction is complete;
- When trees to be removed overlap with the CRZ of trees to be retained, cut roots at the edge of the CRZ and grind down stumps after tree removal. Do not pull out stumps. Ensure there is not root pulling or disturbance of the ground within the CRZ of retained trees;
- If roots must be cut, roots 20 mm or larger should be cut at right angles with clean and sharp horticultural tools without tearing, crushing, or pulling;
- Do not place any material or equipment within the CRZ of any retained tree;
- Do not attach any signs, notices, or posters to any retained tree;
- Do not damage the root system, trunk, or branches of any retained tree; and
- Ensure that exhaust fumes from all equipment are directed away from any retained trees and their canopies.



UNITS	
240	FRONT LOADED TOWNS
70	SINGLES (35')
13	SINGLES (37')
26	SINGLES (42')
19	SINGLES (50')
252	STACKED CONDO BLOCK
620	
	NHS
	PARK
	PATHWAY
	SWM POND
	ROW
	ROAD WIDENING



4.1.3 Replanting (TCR)

Landscaping features will be planted within the development area. The planting of trees and shrubs will mitigate the loss of woody vegetation from the tree clearing. The planting locations and specific planting requirements will be confirmed by a detailed Landscaping Plan. The Landscaping Plan should emphasize the use of locally appropriate native plant species, which may include the native plant species identified in Appendix A. Non-native species and invasive species should not be utilized in the Landscaping Plan. The planting of ash trees should be avoided due to the high likelihood that any planted ash trees will become infested with Emerald Ash Borer. During the development of the Landscaping Plan, the use of features which may reduce the urban heat island effect should be considered (e.g. large canopy trees, green roofs, vegetated walls, etc.).

The Riparian (Deciduous) Hedgerows will be removed during the construction of the Findlay Creek enhanced channel corridor. As described above in Section 3.3, the Riparian (Deciduous) Hedgerows surrounding Findlay Creek are highly degraded and vary between approximately 10 m and 40 m wide. Restoration planting will be undertaken throughout the 53 m wide enhanced channel corridor, which will improve the quality and quantity of the riparian vegetation community. Refer to Section 4.2.1 for additional details.

4.2 Watercourses & Aquatic Habitat

4.2.1 Findlay Creek Enhanced Channel Corridor

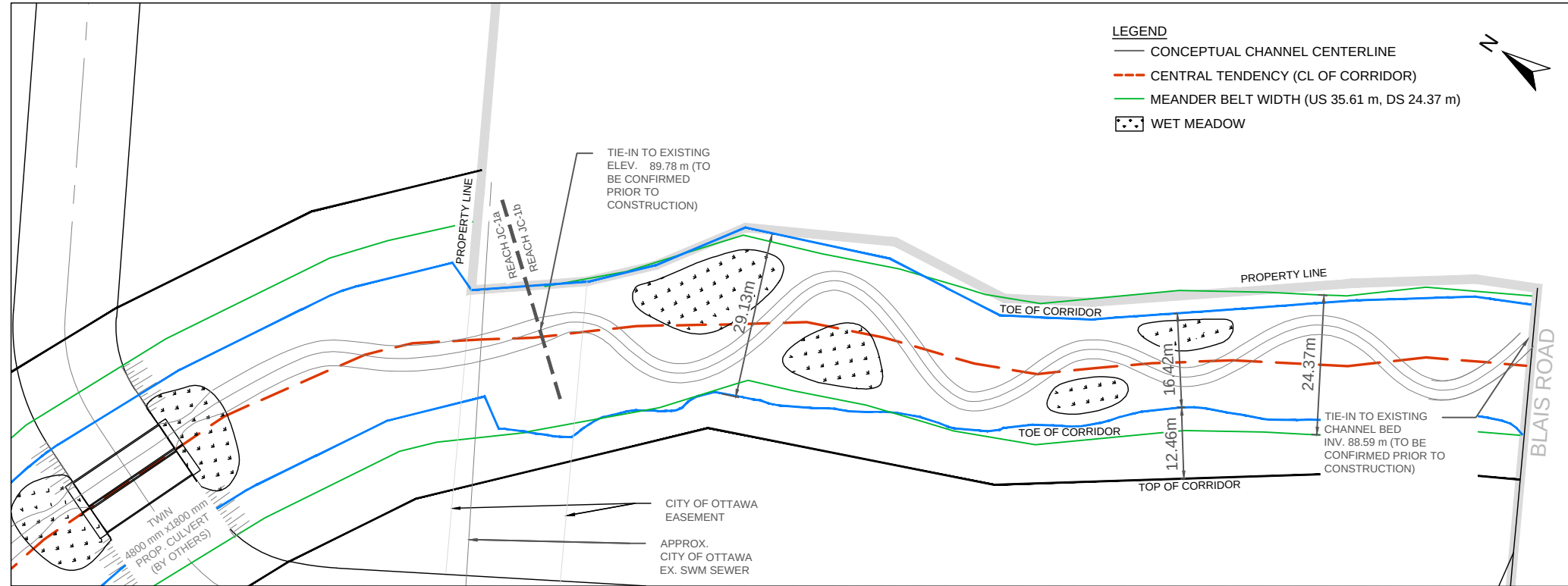
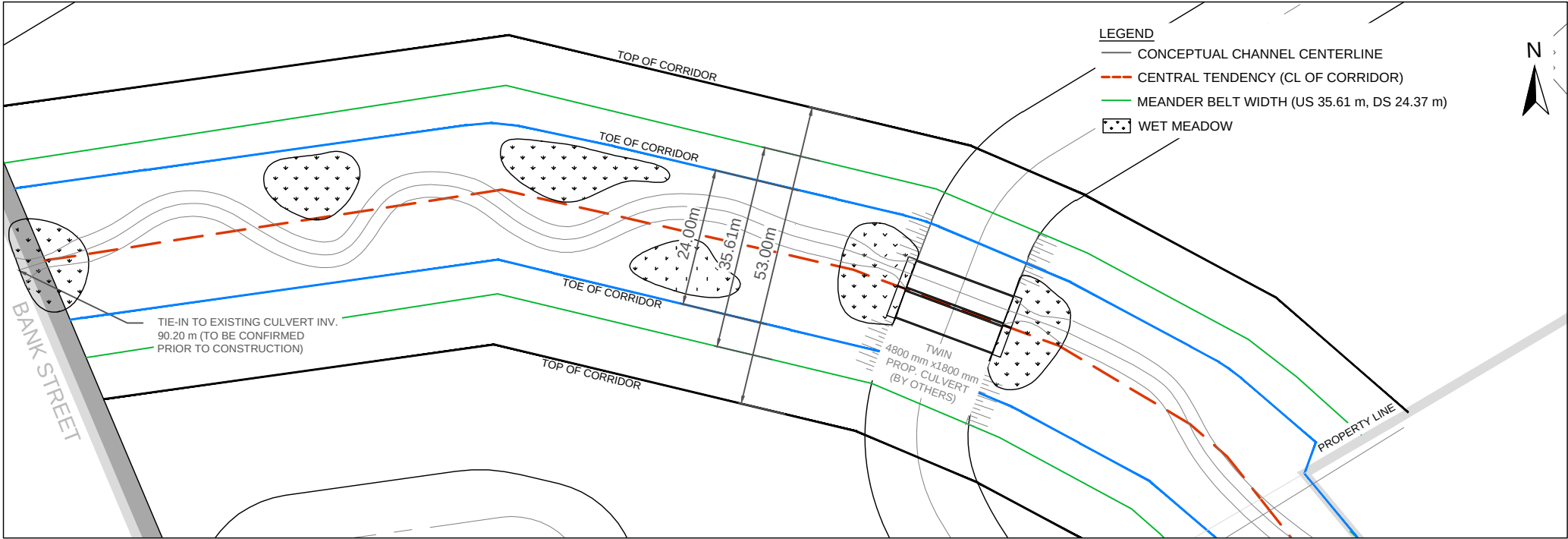
Findlay Creek will be retained within a 53 m wide enhanced channel corridor. The channel of Findlay Creek will be reconstructed within the enhanced channel corridor. The reconstructed channel will accommodate the floodplain and meanderbelt of Findlay Creek. Setbacks from the top of bank that are a minimum of 15 m wide will be preserved on each side of the reconstructed channel. The channel of Findlay Creek will be reconstructed according to natural channel design principles. The natural channel design will include dynamic meanders and sinuosity, as well as natural substrates and wetland pockets. The channel enhancement works will increase the length of Findlay Creek within the Site from approximately 415 m to 451 m, while also adding approximately 0.13 hectares of wetland habitat (GeoMorphix 2026). As described above in Section 3.3, the Riparian (Deciduous) Hedgerows surrounding Findlay Creek are highly degraded and vary between approximately 10 m and 40 m wide. The Riparian (Deciduous) Hedgerows will be removed during the construction of the enhanced channel corridor. Restoration planting will be undertaken throughout the 53 m wide enhanced channel corridor, which will improve the quality and quantity of the riparian vegetation community. Refer to the Findlay Creek – Conceptual Channel Design (below) for additional details.

The segment of Findlay Creek that occurs upstream from the Site runs through a watercourse corridor from Bank Street to the Leitrim Provincially Significant Wetland (PSW) that extends approximately 820 m through existing residential communities. The upstream watercourse corridor is approximately 33 m to 38 m wide along its entire length between Bank Street and the Leitrim PSW. The segment of Findlay Creek that occurs downstream from the Site runs through a watercourse corridor along the northwest side of Blais Road that is approximately 30 m wide. As described above, the 53 m wide enhanced channel corridor will significantly improve the ecological features and functions of Findlay Creek compared to existing conditions, while also providing a watercourse corridor that is significantly wider than the connecting upstream and downstream watercourse corridors. The transitions between the 53 m wide enhanced channel corridor and the upstream and downstream connection points are shown below in the Findlay Creek – Conceptual Channel Design.

The riparian plantings throughout the enhanced channel corridor and the setbacks surrounding the reconstructed channel will help to slow, filter and absorb overland stormwater flow, while also providing habitat for wildlife. The riparian plantings and setbacks will also provide a buffer from edge effects, noise, pollution, and other forms of human disturbance.

The 53 m wide enhanced channel corridor is anticipated to significantly improve the natural features and functions of Findlay Creek. The construction of the enhanced channel corridor will require a permit from the South Nation Conservation Authority under O.Reg. 41/24.





PLANFORM
NTS

SCALED FOR PLOT ON 'TABLOID'

DESIGNED BY: BMI	CHECKED BY: P.V.
DRAWN BY: QW	DATE: JULY 2026
DRAFT FOR INTERNAL DISCUSSION	GEO MORPHIX* 36 Main Street North, PO Box 205 Campbellville, Ontario L0P 1B0 T: 416.920.0926 www.geomorphix.com
BANK STREET SUBDIVISION OTTAWA CAIVAN	
FINDLAY CREEK CONCEPTUAL CHANNEL DESIGN CONCEPTUAL CORRIDOR	
PROJECT No.: 26028	DRAWING No.: MBW-1
SCALE: AS NOTED	SHEET 1 OF 2

4.2.2 Findlay Creek Enhanced Channel Corridor – Grading Impacts

The reconstructed channel of Findlay Creek will be contained within the Site following the completion of the channel reconstruction and enhancement works described in the previous section. Although the reconstructed channel will be contained within the Site, minor grade alterations will be required along the edge of the City of Ottawa owned lands located southeast of the Site (i.e. along the edge of the Findlay Creek Stormwater Management Facility) in order to accommodate the floodplain and meanderbelt of Findlay Creek. The Riparian (Deciduous) Hedgerows described above in Section 3.3 extend into the City of Ottawa owned lands (Refer to Figure 3). As such, it is anticipated that minor tree clearing within the City of Ottawa owned lands will be required to facilitate the minor grade alterations.

The extent of the minor grading works will be determined at the detailed design stage. Once the extent of the minor grading is known, the associated tree clearing impacts will be assessed by preparing an addendum to this Combined Environmental Impact Study (EIS) & Tree Conservation Report (TCR). The Combined EIS & TCR Addendum will include an inventory of any trees that may be impacted by the minor grading works, an impact assessment, a discussion of any mitigation requirements, identification of the presence/absence of Butternut Trees (endangered) and Black Ash Trees (endangered), and a discussion of the replanting and/or tree compensation requirements.

4.2.3 Findlay Creek Watercourse Crossing

As shown above in the Leitrim – CP-14 Concept Plan, the subdivision's internal road network will require the installation of an 18 m wide watercourse crossing (i.e. crossing Findlay Creek). The watercourse crossing will be constructed with a suitably sized wildlife passage culvert, thereby maintaining fish passage. A permit from the South Nation Conservation Authority will be required to authorize the installation of the Findlay Creek watercourse crossing. Dewatering and in-water work mitigation measures will be implemented during the installation of the watercourse crossing (Refer to Section 4.4.3 for additional details).

4.2.4 Stormwater Management

As shown above in the Leitrim – CP-14 Concept Plan, the subdivision will include a new Stormwater Management (SWM) Pond in the northeast corner of the Site. Stormwater flows will be directed to the new SWM Pond.

4.2.5 Sediment & Erosion Controls

Toed-in silt fencing will be required at the construction stage in order to prevent sediment and erosion from impacting Findlay Creek. The toed-in silt fencing will be installed at the edges of the Findlay Creek setbacks.

During construction, existing conveyance systems along Bank Street, Blais Road, and/or within adjacent developed properties could be exposed to significant sediment loading. Although construction is only a temporary situation, a Sediment and Erosion Control Plan will be required to ensure that the existing conveyance systems are not negatively impacted by sediment and erosion. The Sediment and Erosion Control Plan will include the following:

- Groundwater in trenches (if present) will be pumped into a filter mechanism, such as a trap made up of geotextile filters and straw, prior to release to the environment;
- Bulkhead barriers will be installed at the nearest downstream manhole in each new sewer which connects to an existing downstream sewer (i.e. existing sewers along Bank Street and Blais Road (if required)). The bulkheads will trap any sediment carrying flows, thus preventing any construction-related contamination of existing sewers;
- Seepage barriers will be constructed in any temporary drainage ditches;
- Construction vehicles will leave the Site at designated locations. Exits will consist of a bed of granular material, in order to minimize the tracking of mud off-site;
- Any stockpiled material will be properly managed to prevent those materials from entering the sewer systems; and
- Until landscaped areas are sodded and/or until streets are asphalted and curbed, all catch basins and manholes will be constructed with a geotextile filter sock located between the structure frame and cover.

4.3 Adjacent Lands & Significant Features

As described above in Section 3.5, the Site is surrounded by existing and/or planned development on all sides. Findlay Creek and its associated floodplain/corridor were the only significant natural heritage features found within the Site and/or immediately adjacent to the Site. Mitigation measures to protect Findlay Creek are described above in Section 4.2.

4.4 Wildlife & Species at Risk Mitigation

4.4.1 Bird Safe Design Guidelines

The City of Ottawa *Bird Safe Design Guidelines* identify that buildings which are located in close proximity to natural areas, parks, forests, and wetlands are likely to pose an increased risk of bird collision (City of Ottawa 2022b). In addition, buildings that are located along known or suspected migration corridors (e.g. rivers, escarpments, and other linear landscape features) also pose an increased risk of bird collision (City of Ottawa 2022b). The presence of Findlay Creek creates a moderate risk of bird collision. By extension, the buildings that will be constructed as part of the future development will pose a moderate risk of bird collision (City of Ottawa 2022b).

The City of Ottawa *Bird Safe Design Guidelines* identify mitigation measures which can be implemented to reduce the risk of bird collision. Where feasible and compatible with the development requirements, the following guidelines should be considered during the creation of the architectural/building designs and the Landscaping Plan (as applicable) (City of Ottawa 2022b). Guidelines which are not relevant to the proposed development have been omitted from the list below:

- Minimize the transparency and reflectivity of glazing (Refer to Guideline #2). Note that Guideline #2 is considered the highest priority to reduce the risk of bird collision;
 - Avoid monolithic, undistinguished expanses of glazing;
 - Incorporate visual interest or differentiation of material, texture, color, opacity, or other features to fragment reflections; and
 - Where glazing is used, bird-safe glass or glass with integrated protection measures is preferred. Refer to Guideline #2 for treatment directions.
- Avoid or mitigate design traps (Refer to Guideline #3);
 - All glazing that could create a fly-through, mirror maze or black hole effect should be made bird-safe, using bird-safe glass or integrated protection measures as described in Guideline #2;
 - Glass corners should be treated to render them bird-safe for 5 meters in each direction; and
 - Glass railings, parapets, and similar clear barriers should use bird-safe glass as specified in Guideline #2.
- Consider the impact of other structural features (e.g. antennas, wires, poles, etc.) (Refer to Guideline #4);
 - Grates should have a maximum porosity of 20 mm by 20 mm or 40 mm by 10 mm, or should be screened to prevent birds from falling through; and

- Ensure that vertical pipes, flues and vents are capped or screened to prevent wildlife entry.
- Design bird safe landscaping (Refer to Guideline #5);
 - Design plantings to minimize reflections of trees and shrubs in nearby buildings. In cases where planting near a glazed building façade or other reflective surface is desirable for shading or other purposes, Guideline #2 must be applied to obscure habitat reflections;
 - Avoid or minimize the number of linear landscape features leading directly into glass façades or doors. Where such features cannot be avoided, Guideline #2 must be applied;
 - Avoid using plant species known to attract birds in locations that could result in harmful collisions. Plant species that may attract birds include plants with abundant fruit or seed crops, as well as plants with flowers that are attractive to hummingbirds;
 - Minimize the exterior visibility of any indoor vegetation, green walls or water features to reduce their attractiveness to birds; and
 - Avoid locating ornamental fountains, ponds, stormwater retention basins, wetlands, swales or related infrastructure near glass façades or windows.
- Design exterior lighting to minimize light trespass at night (Refer to Guideline #6);
 - Avoid up-lighting;
 - Specify Dark Sky compliant, full-cutoff exterior fixtures to reduce light trespass;
 - Use motion detectors and other automatic lighting controls to reduce or extinguish non-essential lighting between 11 pm and 6 am;
 - Use minimum wattage fixtures to achieve appropriate lighting levels (note: minimum required lighting levels are established in the Ontario Building Code);
 - Minimize amount and visual impact of perimeter lighting; and
 - Avoid use of floodlighting.
- Avoid night time light trespass from the building's interior (Refer to Guideline #7);
 - Use window shades or blinds to prevent light trespass from occupied spaces between sunset and sunrise.

The potential application of the guidelines listed above will require consideration by the applicable Qualified Professionals (e.g. Architect, Landscape Architect, etc.) as they create the architectural/building designs and the Landscaping Plan. Refer to the City of Ottawa *Bird Safe Design Guidelines* for additional details (City of Ottawa 2022b).

4.4.2 Wildlife & Species at Risk Construction Stage Mitigation

The construction stage mitigation requirements for wildlife and Species at Risk (SAR) are summarized below. The requirements listed below include provisions from the City of Ottawa (2022c) *Protocol for Wildlife Protection During Construction* and the Fisheries and Oceans Canada (FOC) (2026) *Measures to Protect Fish and Fish Habitat*:

- **Temporary Wildlife Exclusion Fencing:** As described above in Section 4.2.5, toed-in silt fencing will be installed for sediment and erosion control purposes along the edges of the Findlay Creek setbacks. The toed-in silt fencing will also function as temporary wildlife exclusion fencing. The temporary wildlife exclusion fencing will reduce the likelihood that turtles, amphibians and other wildlife will enter the Site;
- **Sweeps:** Prior to vegetation clearing, preconstruction sweeps of vegetated areas will be undertaken to ensure wildlife are not present. A designated staff member will be required to conduct sweeps each morning prior to the commencement of work to ensure that wildlife have not entered the work areas;
- **Vehicle Operation:** Vehicles and equipment are to be operated on roads within the Site at a speed at which drivers are able to stop safely to avoid wildlife;
- **Equipment Washing:** All equipment shall be washed, refueled and serviced in a manner that prevents fuel and other deleterious substances from entering Findlay Creek. All machinery must arrive on Site in a clean condition and shall be maintained free of fluid leaks, invasive species and noxious weeds;
- **Spills:** A Spill Response Plan will be developed. The Spill Response Plan is to be implemented in the event of a sediment release or spill of a deleterious substance. An emergency kit will be kept at the Site any time development activities are taking place;
- **Species at Risk (SAR) Encounters:** If a SAR is encountered in the work area, construction in the vicinity must be stopped immediately and measures must be taken to ensure the SAR is not harmed. The project biologist and the Ministry of Environment Conservation and Parks (MECP) and/or Environment and Climate Change Canada (ECCC) must be contacted to discuss how to proceed prior to the recommencement of work;
- **General Provisions:** General provisions for Site management include the following:
 - Do not harm, feed or unnecessarily harass wildlife;
 - Drive slowly and avoid hitting wildlife;
 - Keep the Site tidy and free of garbage and food wastes. Secure all garbage in appropriate sealed containers;
 - Ensure proper Site drainage so that standing water does not accumulate on Site. This will reduce the likelihood that turtles and other wildlife may enter the Site;

- Any stockpiles should be properly secured with silt fencing to prevent wildlife from accessing areas of loose fill;
- **Vegetation Clearing Timing Window:** MECP (2023) defines the migratory bird nesting season as March 31st to August 31st each year. The turtle active season is defined as April 1st to October 31st each year. The active period for endangered bats is defined as April 1st to September 30th each year. In combination, these requirements dictate that vegetation clearing should be undertaken between November 1st and March 30th each year in order to avoid the active seasons of SAR and nesting migratory birds; and
- **Building Demolition Timing Window:** The Barn Swallow nesting season is defined as May 1st to August 31st each year (SARO 2026). The active period for endangered bats is defined as April 1st to September 30th each year (MECP 2023). All building demolition must be undertaken to avoid the Barn Swallow nesting season and the active period for the endangered bat species. In combination, these requirements necessitate that all building demolition must be undertaken between October 1st and March 31st each year.

4.4.3 Dewatering & In-Water Work Mitigation

Dewatering and in-water work is anticipated to be required during the construction of the Findlay Creek enhanced channel corridor (described above in Section 4.2.1) and during the installation of the Findlay Creek watercourse crossing (described above in Section 4.2.3). Dewatering and in-water work mitigation requirements are described below. The requirements listed below include provisions from the Fisheries and Oceans Canada (FOC) (2026) *Measures to Protect Fish and Fish Habitat*:

- **Monitoring:** All dewatering operations must be supervised by a Qualified Biologist, who must be present during the dewatering to relocate fish and other wildlife. Full time supervision by a Qualified Biologist is necessary during the initial water draw down;
- **Licenses:** A *Wildlife Scientific Collector's Authorization* and a *License to Collect Fish for Scientific Purposes* must be obtained from the Ontario Ministry of Natural Resources and Forestry prior to the commencement of dewatering. Relocation sites and detailed fish and wildlife salvage procedures will be identified during the fish and wildlife relocation license application process;
- **Fish & Wildlife Salvage:** Fish and wildlife must be relocated from the dewatering work areas. In accordance with the dewatering arrangement, the water level in any dewatering work areas must be drawn down to permit the safe removal of fish and wildlife. All removal activities must be undertaken before the area is completely dry, in order to avoid aquatic animals being exposed to dry conditions. During the water draw down, a mesh net will be in place around any dewatering pumps to ensure that fish will not become entangled in the pumps; and
- **In-water Work Timing Window:** The construction of the Findlay Creek enhanced channel corridor and the installation of the Findlay Creek watercourse crossing must occur outside of the South Nation Conservation Authority Sensitive In-water Work Timing Window (i.e. outside of the period from March 15th to July 15th each year).

4.5 Additional Considerations

4.5.1 Cumulative Effects

Cumulative effects were considered in the design of the mitigation measures described above. As described above, the development of the Site is not anticipated to contribute to the cumulative loss of wetland, forest, and/or Species at Risk habitat.

4.5.2 Wildland Fire Risk Assessment (TCR)

Per the City of Ottawa (2025) *Environmental Impact Study Guidelines*, Environmental Impact Studies must identify and describe any forest communities associated with a high or extreme wildland fire risk that occur within 100 meters of a proposed development. Forest communities that have >50% conifer tree cover may qualify as high or extreme fire risk forest communities (OMNRF 2017b). As described above in Section 3.3 and Section 3.5, there are no forest communities within the Site and/or within 100 m of the Site. As such, a Wildland Fire Risk Assessment should not be required.

4.5.3 Climate Change Impacts

Per the City of Ottawa (2025) *Environmental Impact Study Guidelines* and the new City of Ottawa Official Plan (City of Ottawa 2023), the design of the Stormwater Management System that will service the future development must take into account the potential impacts and risks associated with a changing climate. Where applicable, the evaluation of natural hazards such as the floodplain and unstable slopes must also take into account the potential impacts and risks associated with a changing climate (City of Ottawa 2023; City of Ottawa 2025). The potential impacts and risks associated with a changing climate are described in the document entitled *Climate Projections for the National Capital Region* (City of Ottawa & NCC 2020).

4.5.4 Monitoring

The construction stage monitoring requirements are described above in Section 4.4.2 and Section 4.4.3. Prior to vegetation clearing, preconstruction sweeps of vegetated areas will be undertaken to ensure wildlife are not present. A designated staff member will be required to conduct sweeps each morning prior to the commencement of work to ensure that wildlife have not entered the work areas. All dewatering operations must be supervised by a Qualified Biologist, who must be present during the dewatering to relocate fish and other wildlife. Full time supervision by a Qualified Biologist is necessary during the initial water draw down. No post construction monitoring requirements have been identified.

5.0 ENVIRONMENTAL IMPACT & MITIGATION SUMMARY TABLE

Table C summarizes the impact assessment and recommended mitigation measures discussed above in Section 4.0.

Table C: Impact & Mitigation Summary				
Development Activity	Natural Heritage Feature/Function	Potential Effects	Proposed Mitigation	Residual Effects
Tree Clearing within the Development Area	Trees & Vegetation	The two Deciduous Hedgerows overlap future development areas and therefore they will be removed as part of the future development of the Site.	The tree preservation mitigation measures described in Section 4.1.2 will be implemented to protect and preserve the retained trees on adjacent properties. A Landscaping Plan will be developed and new trees and shrubs will be planted to mitigate the loss of woody vegetation (Refer to Section 4.1.3).	The two Deciduous Hedgerows are not significant ecological features, and therefore their removal is not anticipated to have a significant ecological impact.
Tree Clearing within the Findlay Creek Enhanced Channel Corridor	Trees & Vegetation	The Riparian (Deciduous) Hedgerows will be removed during the construction of the Findlay Creek enhanced channel corridor.	Restoration planting will be undertaken throughout the 53 m wide enhanced channel corridor (Refer to Section 4.2.1).	The restoration planting will improve the quality and quantity of the riparian vegetation community.
Findlay Creek Channel Enhancement	Findlay Creek	The channel of Findlay Creek will be reconstructed within the enhanced channel corridor. The reconstructed channel will accommodate the floodplain and meanderbelt of Findlay Creek.	The channel of Findlay Creek will be reconstructed according to natural channel design principles. The natural channel design will include dynamic meanders and sinuosity, as well as natural substrates and wetland pockets (Refer to Section 4.2.1).	The reconstructed channel of Findlay Creek will improve the natural features and functions of Findlay Creek compared to existing conditions.

Table C: Impact & Mitigation Summary				
Development Activity	Natural Heritage Feature/Function	Potential Effects	Proposed Mitigation	Residual Effects
Development Adjacent to Findlay Creek	Findlay Creek	Potential sediment and erosion impacts, edge effects, noise, pollution, and other forms of human disturbance.	Setbacks that are a minimum of 15 m wide will be preserved on each side of the reconstructed channel. The enhanced channel corridor will be 53 m wide (Refer to Section 4.2.1).	The 53 m wide enhanced channel corridor will significantly improve the ecological features and functions of Findlay Creek compared to existing conditions, while also providing a watercourse corridor that is significantly wider than the connecting upstream and downstream watercourse corridors.
Findlay Creek Watercourse Crossing	Findlay Creek	The installation of an 18 m wide watercourse crossing without a suitably sized culvert could block fish passage and wildlife movement.	The Findlay Creek watercourse crossing will include a suitably sized wildlife passage culvert (Refer to Section 4.2.3).	The wildlife passage culvert will allow the movement of fish and other aquatic wildlife.
Stormwater Run-off	Downstream Areas & Existing Conveyance Systems	Stormwater run-off could impact downstream areas and existing conveyance systems.	The subdivision will include a new Stormwater Management Pond in the northeast corner of the Site.	None anticipated.
Sediment & Erosion	Downstream Areas & Existing Conveyance Systems	Sediment and erosion could impact downstream areas and existing conveyance systems.	The sediment and erosion control measures described in Section 4.2.5 will be implemented.	None anticipated.
Building Construction	Migratory Birds	New buildings may create a bird collision hazard. As described in Section 4.4.1, the presence of Findlay Creek creates a moderate risk of bird collision. By extension, the buildings that will be constructed as part of the future development will also pose a moderate risk of bird collision.	Where feasible and compatible with the development requirements, the City of Ottawa Bird Safe Design Guidelines should be considered during the development of the architectural/building designs. Refer to Section 4.4.1 for additional details.	As described in Section 4.4.1, the buildings that will be constructed as part of the future development will pose a moderate risk of bird collision.

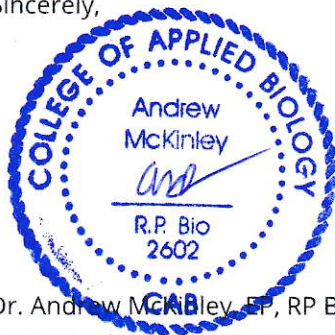
Table C: Impact & Mitigation Summary				
Development Activity	Natural Heritage Feature/Function	Potential Effects	Proposed Mitigation	Residual Effects
Vegetation Clearing & Construction Activities	Wildlife & Species at Risk (SAR)	Potential impacts to wildlife and SAR during vegetation clearing and construction.	The mitigation requirements for wildlife and SAR during construction are summarized in Section 4.4.2. Vegetation clearing should be undertaken between November 1st and March 30th to avoid impacting wildlife and SAR.	No significant wildlife and/or SAR concerns have been identified. Mitigation measures will be implemented in an abundance of caution. No significant impacts to wildlife and/or SAR are anticipated to occur as a result of the vegetation clearing and/or construction activities.
Building Demolition	Barn Swallow Nests	Potential destruction of active Barn Swallows nests during the nesting season.	Building demolition will be undertaken between October 1st and March 31st in order to avoid the Barn Swallow nesting season. In an abundance of caution, the building demolition timing window will also avoid the active season of the endangered bat species.	None anticipated.
Dewatering & In-Water Work	Fish & Aquatic Wildlife	Fish and wildlife could be impacted during dewatering and in-water work.	The dewatering and in-water work mitigation measures described in Section 4.4.3 will be implemented. In-water work must occur outside of the period from March 15th to July 15th each year.	None anticipated.

6.0 CLOSURE

Pending that the regulatory, mitigation, and avoidance measures outlined in this report are implemented appropriately, the development of the Site is not anticipated to have a significant negative effect on the natural features and functions.

We trust that the above information is sufficient. Please do not hesitate to contact the undersigned if you have any questions or require further information.

Sincerely,



Dr. Andrew McKinley, BP, RP Bio.
Senior Biologist, McKinley Environmental Solutions

7.0 REFERENCES

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APPENDIX A

Plant List



McKINLEY
ENVIRONMENTAL
SOLUTIONS

McKINLEY ENVIRONMENTAL SOLUTIONS

613-620-2255

mckinleyenvironmental@gmail.com

www.mckinleyenvironmental.com

TABLE A: PLANT LIST

Common Name	Scientific Name	Provincial S Rank	Brunton Significance Ranking for the City of Ottawa (Brunton 2005)	Vegetation Type
Brome Grass	Bromus sp.	N/A	Common	Grass
Timothy	Phleum pratense	SNA	Common	Grass
Garlic Mustard	Alliaria petiolata	SNA	Common	Herbaceous
Common Ragweed	Ambrosia artemisiifolia	S5	Common	Herbaceous
Common Burdock	Arctium minus	SNA	Common	Herbaceous
Common Milkweed	Asclepias syriaca	S5	Common	Herbaceous
Lamb's Quarters Pigweed	Chenopodium album	SNA	Common	Herbaceous
Chickory	Cichorium intybus	S5	Common	Herbaceous
Canada Thistle	Cirsium arvense	S5	Common	Herbaceous
Bull Thistle	Cirsium vulgare	SNA	Common	Herbaceous
Queen Anne's Lace	Daucus carota	SNA	Common	Herbaceous
Philadelphia Fleabane	Erigeron philadelphicus	S5	Common	Herbaceous
Trout Lily	Erythronium americanum	S5	Common	Herbaceous
Prickly Lettuce	Lactuca scariola	SNA	Common	Herbaceous
Ox-eye Daisy	Leucanthemum vulgare	SNA	Common	Herbaceous
False Solomon's Seal	Maianthemum racemosum	S5	Common	Herbaceous
Wild Parsnip	Pastinaca sativa	SNA	Common	Herbaceous
Common Plantain	Plantago major	S5	Common	Herbaceous
Curled Dock	Rumex crispus	SNA	Common	Herbaceous
Canada Goldenrod	Solidago canadensis	S5	Common	Herbaceous
New England Aster	Symphyotrichum novae-angliae	S5	Common	Herbaceous
Dandelion	Taraxacum officinale	SNA	Common	Herbaceous
Red Clover	Trifolium pratense	SNA	Common	Herbaceous
White Clover	Trifolium repens	SNA	Common	Herbaceous
Red Trillium	Trillium erectum	S5	Common	Herbaceous
White Trillium	Trillium grandiflorum	S5	Common	Herbaceous
Common Mullein	Verbascum thapsus	SNA	Common	Herbaceous
Speckled Alder	Alnus incana	S5	Common	Shrub
Red Osier Dogwood	Cornus sericea (stolonifesa)	S5	Common	Shrub
Hawthorn	Crataegus chrysocarpa	S5	Common	Shrub

Common Buckthorn	Rhamnus cathartica	SNA	Common	Shrub
Wild Red Raspberry	Rubus idaeus	S5	Common	Shrub
Willow Shrubs	Salix sp.	N/A	Common	Shrub
Manitoba Maple	Acer negundo	S5	Common	Tree
Sugar Maple	Acer saccharum	S5	Common	Tree
White Birch	Betula papyrifera	S5	Common	Tree
White Ash	Fraxinus americana	S5	Common	Tree
Green Ash	Fraxinus pennsylvanica	S5	Common	Tree
Butternut	Juglans cinerea	S3	Endangered (SCA)	Tree
Domestic Apple	Malus sylvestris	SNA	Common	Tree
White Spruce	Picea glauca	S5	Common	Tree
Trembling Aspen	Populus tremuloides	S5	Common	Tree
Bur Oak	Quercus macrocarpa	S5	Common	Tree
Staghorn Sumac	Rhus hirta	S5	Common	Tree
Crack Willow	Salix fragilis	SNA	Common	Tree
White Cedar	Thuja occidentalis	S5	Common	Tree
American Basswood	Tilia americana	S5	Common	Tree
American Elm	Ulmus americana	S5	Common	Tree
Riverbank Grape	Vitis riparia	S5	Common	Vine

Provincial Ranks (assigned by NHIC)

S5 = Very common within the province with > 1000 occurrences, populations or records

S4 = Common within the province with 21 - 1000 occurrences, populations or records

S3 = Rare within the province with 6 - 20 occurrences, populations or records

SNA = Ranking not available

SE5 = Very common exotic with > 1000 occurrences, populations or records within the province

S? = Unranked, or if followed by a ranking, temporarily assigned (eg. S4?)

APPENDIX B

Bird & Wildlife Species Lists



McKINLEY
ENVIRONMENTAL
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McKINLEY ENVIRONMENTAL SOLUTIONS

613-620-2255

mckinleyenvironmental@gmail.com

www.mckinleyenvironmental.com

TABLE B: BIRD LIST

Common Name	Scientific Name
Red Winged Blackbird	Agelaius phoeniceus
Canada Goose	Branta canadensis
Northern Cardinal	Cardinalis cardinalis
Turkey Vulture	Cathartes aura
Killdeer	Charadrius vociferus
American Crow	Corvus brachyrhynchos
Blue Jay	Cyanocitta cristata
Gray Catbird	Dumetella carolinensis
Wilson's Snipe	Gallinago delicata
Common Yellowthroat	Geothlypis trichas
<i>Barn Swallow - Threatened (SARA)</i>	<i>Hirundo rustica</i>
Baltimore Oriole	Icterus galbula
Ring Billed Gull	Larus delawarensis
Wild Turkey	Meleagris gallopavo
Song Sparrow	Melospiza melodia
Brown Headed Cowbird	Molothrus ater
House Sparrow	Passer domesticus
Savannah Sparrow	Passerculus sandwichensis
Black Capped Chickadee	Poecile atricapilla
Common Grackle	Quiscalus quiscula
Eastern Phoebe	Sayornis phoebe
Yellow Warbler	Setophaga petechia
American Goldfinch	Spinus tristis
European Starling	Sturnus vulgaris
American Robin	Turdus migratorius
Eastern Kingbird	Tyrannus tyrannus
Mourning Dove	Zenaida macroura

TABLE C: WILDLIFE LIST

Common Name	Scientific Name	Taxa
Groundhog	Marmota monax	Mammal
White Tailed Deer	Odocoileus virginianus	Mammal
Eastern Grey Squirrel	Sciurus carolinensis	Mammal
Eastern Chipmunk	Tamias striatus	Mammal

APPENDIX C

Butternut Health Expert's Report



McKINLEY
ENVIRONMENTAL
SOLUTIONS

McKINLEY ENVIRONMENTAL SOLUTIONS

613-620-2255

mckinleyenvironmental@gmail.com

www.mckinleyenvironmental.com

Instructions to Butternut Health Experts (BHEs):

Please enter the 6-character BHE Report number: MCK252 _____

BHE Report numbering format:

BHE Report numbers are to be assigned by the BHE using the first 3 letters of BHE's last name, followed by BHE's own 3-digit report numbering system. If the BHE's last name has fewer than 3 letters, use the full last name and numbers for the remaining characters.

Cover letter to client:

Insert your cover letter to your client here and include the below list of enclosures.

Caivan Communities
3713 Borrisokane Road
Ottawa, Ontario
K2J 4J4

Attn: Susan Murphy, President of Land Development

Re: Butternut Health Expert's Report - 4795 Bank Street

Working on behalf of Caivan Communities, McKinley Environmental Solutions prepared this Butternut Health Expert's (BHE) Report for the 4795 Bank Street property which is located in Ottawa (Ontario) (the Site). The Site is approximately 17.2 hectares in size. The Site will be developed in the future to accommodate a residential subdivision.

As described in greater detail below, the BHE Report documented the presence of eight Category 1 (non-retainable) Butternut Trees. Category 1 Butternut Trees can be removed 30 days after the BHE Report has been received by the Ministry of Environment Conservation and Parks (MECP). Per the rules and regulations of the Ontario Endangered Species Act (ESA), the removal of Category 1 Butternut Trees does not require an authorization under the Ontario ESA and/or Butternut compensation.

No Category 2 (retainable) and/or Category 3 (archiveable) Butternut Trees were found within the Site.

Please do not hesitate to contact the undersigned if you have any questions or comments.

Sincerely,

Dr. Andrew McKinley, EP, RP Bio.
Senior Biologist, McKinley Environmental Solutions

Enclosures:

1. Information from the Ministry of the Environment, Conservation and Parks about Butternut and the *Endangered Species Act, 2007*
2. Butternut Health Expert's Report, including the completed Butternut Data Collection Form

Species at Risk Branch
40 St. Clair Avenue West
14th Floor
Toronto ON M4V 1M2

Direction des espèces en péril
40, avenue St. Clair Ouest
14^e étage
Toronto ON M4V 1M2

Information for the Property Owner (or person(s) who requested the enclosed Butternut Health Expert's Report):

The enclosed Butternut Health Expert's Report (BHE Report) documents the results of the Butternut health assessment that was conducted by the Butternut Health Expert (BHE) identified in the top section of the report. If there are other Butternut trees (of any size or age) at the site that may be impacted by a proposed activity that are not identified in the enclosed BHE Report, they too must be assessed by a BHE before commencing any actions that may impact those Butternut trees or their habitat.

Butternut (*Juglans cinerea*) is listed as an endangered species in Schedule 2 of Ontario Regulation (O. Reg.) 230/08 "the Species at Risk in Ontario List". As an endangered species, the *Endangered Species Act, 2007* (ESA) prohibits adversely impacting Butternut and its habitat. A permit or agreement under the ESA is required before engaging in an activity that is otherwise prohibited under the ESA. The activity may be eligible for the Butternut conditional exemption in Part V of O. Reg. 830/21, provided the requirements of the regulation are met.

If the proposed activity is eligible for the conditional exemption in Part V of O. Reg. 830/21, the next step is to submit the BHE Report and the Butternut Data Collection Form enclosed in this package to the Ministry of the Environment, Conservation and Parks (MECP).

If the enclosed BHE Report does not identify which Butternut tree(s) are proposed to be killed, harmed or taken and the reasons for doing so (e.g., if "unknown" is indicated in Table 1) or if the information in the last two columns of Table 1 has changed since the date this BHE Report was produced, **do not edit the BHE Report to update this information**. Instead, the report must be submitted together with a cover letter that identifies which Butternut tree(s) are proposed to be killed, harmed or taken (by referencing the tree identification numbers) when you submit the BHE Report to MECP.

The BHE Report must be submitted to MECP at least 30 days before registering an activity in respect of the Butternut conditional exemption. MECP may need to examine the Butternut trees subject to the report during this 30-day period. **Adversely impacting Butternut trees during this 30-day period or before registration is completed is prohibited by the ESA**. Further, the conditional exemption for Butternut does not apply unless the requirements of Part V of O. Reg. 830/21 are being followed.

If the proposed activity is eligible for the Butternut conditional exemption, you may register the proposed activity using the “**Notice of Butternut Impact**” form after the 30-day period has elapsed.

If the proposed activity is not eligible for a regulatory exemption, please contact MECP to determine whether the proposed activity would require a permit or agreement under the ESA in order to proceed.

Please retain this information and a copy of the BHE Report for your records, along with any other documentation you may receive from MECP should an examination of the trees occur.

This information should not be relied upon to determine legal obligations. To determine your legal obligations, consult the *Endangered Species Act, 2007* and the relevant regulations made thereunder. These may be found at www.ontario.ca/laws. If legal advice is required, consult a legal professional. In the event of an error on this template or a conflict between this template and any applicable law, the law prevails.

If you have any questions, please contact MECP at SAROntario@ontario.ca.

Butternut Health Expert's Report (BHE Report)

BHE Report Number: MCK252

Butternut Health Expert Contact Information

Name of Butternut Health Expert

Last Name McKinley	First Name Andrew
-----------------------	----------------------

Mailing Address

Unit Number	Street Number 304	Street Name Berrigan Drive	PO Box
City/Town Ottawa	Province Ontario	Postal Code K2J 5B5	
Telephone Number 613-620-2255	Email Address mckinleyenvironmental@gmail.com		

Summary of qualifications as a Butternut Health Expert

a) expertise in relation to butternut

Dr. McKinley is the principal consultant and owner of McKinley Environmental Solutions. He completed the Ontario Ministry of Natural Resources and Forestry Butternut Health Assessor's Certification Course in both 2015 and 2019. Since 2015, he has worked on behalf of clients throughout Ontario to complete more than fifty Butternut Health Expert's Reports, Endangered Species Act Online Impact Registrations to authorize impacts to Butternut Trees, and applications for Overall Benefit Permits related to Butternut Trees. He has also completed hundreds of Tree Conservation Reports and Environmental Impact Studies. Dr. McKinley holds a PhD in Biological Science, he is a Certified Environmental Professional in four disciplines, and he is a Registered Professional Biologist (RP Bio).

b) expertise, education, training and experience necessary to assess the health of butternut trees
See above.

Property Owner Contact Information

Name of Property Owner (or representative)

Last Name Murphy	First Name Susan
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Mailing Address

Unit Number	Street Number 3713	Street Name Borrisokane Road	PO Box
Lot Number	Concession	Township	Rural Route
City/Town Ottawa	Province Ontario	Postal Code K2J 4J4	
Telephone Number 613-355-6706	Email Address susan.murphy@caivan.com		

Site Location

Unit Number	Street Number 4795	Street Name Bank Street	PO Box
Lot Number	Concession	Township	Rural Route
City/Town Ottawa	Province Ontario	Postal Code	

Additional Site Location Information

The Site is located at the municipal address 4795 Bank Street, Ottawa, Ontario.

Date(s) of Butternut health assessment

Start Date (yyyy/mm/dd) 2025/05/16

End Date (yyyy/mm/dd) 2025/05/16

Date BHE Report prepared (yyyy/mm/dd) 2025/05/16

Map datum used: ☒ NAD83 ☐ WGS84

Total number of trees assessed in this BHE Report 8

The assessed trees were numbered on site using White flagging tape and white paint.

The numbers at the site correspond to the tree identification numbers referenced in this report.

This BHE Report includes the following tables:

- Table 1: Butternut trees assessed by the BHE
- Table 2: Trees determined by the BHE to be Butternut hybrids
- Table 3: Summary of Butternut health assessment results

Table 1: Butternut trees assessed by the BHE

Tree ID #	UTM coordinates	Accuracy (+/-)	Category ¹ (1, 2 or 3)	Tree stem diameter ² (cm)	Is tree stem shorter than 1.37 m? (Yes/No)	Cultivated? (Yes/No)	Proposed to be: (killed, harmed, taken, or unknown ³)	If tree is proposed to be killed, harmed or taken, indicate reason tree is to be killed, harmed or taken, if known
1	E0453780 N5018309	1 m	1	6	No	No	unknown	
2	E0453886 N5018244	1 m	1	27	No	No	unknown	
3	E0453947 N5018143	1 m	1	17	No	No	unknown	
4	E0453988 N5018358	1 m	1	33	No	No	unknown	
5	E0453989 N5018354	1 m	1	27	No	No	unknown	
6	E0454023 N5018378	1 m	1	24	No	No	unknown	
7	E0454066 N5018402	1 m	1	28	No	No	unknown	
8	E0453959 N5018127	1 m	1	52	No	No	unknown	

¹ Details regarding the extent to which the tree is affected by Butternut Canker is presented in the Butternut Data Collection Form that accompanies this BHE Report.

² Diameter of the tree stem rounded to nearest cm, measured in accordance with the Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the *Endangered Species Act, 2007*

³ In this column, “unknown” indicates that at the time of assessment and reporting, there are no proposals to kill, harm or take this tree that are known to the BHE.

Table 2: Trees determined by the BHE to be Butternut hybrids

Tree ID #	UTM coordinates	Method used (genetic testing or field identification)	Additional Comments on Method Used

Table 3: Summary of Butternut health assessment results

Result	Total number of trees in this category	Information for persons planning activities that may impact Butternut
Category 1	8	Category 1 Butternut tree — the Butternut tree is affected by Butternut Canker to such an advanced degree that retaining the tree would not support the protection or recovery of Butternut trees in the area in which the tree is located.
		If the proposed activity will kill, harm or take one or more Butternut trees of any category (including Category 1), the BHE Report must be submitted to MECP at SARontario@ontario.ca.
Category 2	0	Category 2 Butternut tree — the Butternut tree is not affected by Butternut Canker or the Butternut tree is affected by Butternut Canker but the degree to which it is affected is not as advanced as a Category 1 Butternut tree and retaining the tree could support the protection or recovery of Butternut trees in the area in which the tree is located.
		- Activities that may kill, harm or take up to a maximum of fifteen (15) Category 2 trees may be eligible for the conditional exemption in Part V of Ontario Regulation 830/21. Refer to the regulation for eligibility conditions and requirements that must be fulfilled. - If the proposed activity will kill, harm or take more than fifteen (15) Category 2 trees, contact MECP for information on how to seek an ESA authorization (e.g., a permit).

Result	Total number of trees in this category	Information for persons planning activities that may impact Butternut
Category 3	0	- Category 3 Butternut tree — the Butternut tree may be useful in determining sources of resistance to Butternut Canker. - Activities that may kill, harm or take up to a maximum of five (5) Category 3 trees may be eligible for the conditional exemption in Part V of Ontario Regulation 830/21. Refer to the regulation for eligibility conditions and requirements that must be fulfilled. - If the proposed activity will kill, harm or take more than five (5) Category 3 trees, contact MECP for information on how to seek an ESA authorization (e.g., a permit).
Cultivated	0	An activity that will kill, harm or take a cultivated Butternut tree that was required to be planted to fulfil a condition of an ESA permit or agreement, or a conditional exemption, is not eligible for the exemption for cultivated trees that is provided by subsection 25 (5) of O. Reg. 830/21. Refer to the regulation for eligibility conditions.
Hybrid	0	Hybrid Butternut trees are not protected under the ESA but impacts to these trees may be subject to local municipal by-laws and other legislation.

Additional Information on Cultivated Tree Determination

No evidence of tree cultivation - the Butternut Trees are assumed to be naturally occurring.

Please note:

- A BHE Report that is submitted to MECP must include the completed Butternut Data Collection Form. As appropriate, please also ensure additional relevant documentation to support the assessment (e.g., completed Data Sheets for Field Identification of Butternut Hybrids, evidence that the Butternut was cultivated) and all relevant maps and photographs are provided.
- During the 30-day period that follows the submission of this BHE Report to MECP, no Butternut trees (of any category) may be killed, harmed or taken. MECP may need to examine the Butternut trees subject to the report during this 30-day period.

Butternut Health Expert's Comments

Note to BHEs: use this space to provide general comments.

Butternut (*Juglans cinerea*) is listed as an endangered species in Schedule 2 of Ontario Regulation 230/08 “the Species at Risk in Ontario List”. As an endangered species, the *Endangered Species Act, 2007* (ESA) prohibits adversely impacting Butternut and its habitat. A permit or agreement under the ESA is required before engaging in an activity that is otherwise prohibited under the ESA. The activity may be eligible for the Butternut conditional exemption in Part V of Ontario Regulation 830/21, provided the requirements of the regulation are met. For more information please refer to the following links:

[Endangered Species Act, 2007](#)

[Ontario Regulation 830/21 \(Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut\)](#)

[Ontario Regulation 230/08 \(Species at Risk in Ontario List\)](#)

[Ontario Regulation 242/08 \(General Regulation\)](#)

[Information about ESA permits and authorizations](#)

[Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the *Endangered Species Act, 2007*](#)

A Butternut Health Expert’s Report (BHE Report) completed by a “Butternut Health Expert” (BHE) as defined in section 21 of Ontario Regulation 830/21 is typically required as part of an application to the Ministry of the Environment, Conservation and Parks (MECP) for a permit or agreement under the ESA and is required in respect of the conditions of the Butternut conditional exemption in Part V of O. Reg. 830/21. **This Butternut Data Collection Form must be completed by the BHE and included in their BHE Report.**

This form should not be relied upon to determine your legal obligations. To determine your legal obligations, consult the *Endangered Species Act, 2007* and the relevant regulations made thereunder. These may be found at www.ontario.ca/laws. If legal advice is required, consult a legal professional. In the event of an error on this form or a conflict between this form and any applicable law, the law prevails.

Notice of Collection and Use

Personal information on this form is collected under the authority of Section 53 of the ESA and section 38 of the *Freedom of Information and Protection of Privacy Act*. Forms that have been submitted to MECP may be used by MECP staff to contact the property owner (or person acting on their behalf) to request permission to access the assessed trees for the purpose of examining the trees or to contact the BHE who prepared the BHE Report. Questions about the use of your personal information should be directed to the Administrative Assistant in the Species at Risk Branch, Ministry of the Environment, Conservation and Parks, 300 Water Street, Peterborough Ontario, K9J 3C7 at SARregistry@ontario.ca or 705-313-0942.

Fields marked with an asterisk (*) are mandatory.

Butternut Health Expert’s Report Number* MCK252	Start Date of Butternut Health Assessment (yyyy/mm/dd)* 2025/05/16	End Date of Butternut Health Assessment (yyyy/mm/dd)* 2025/05/16
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Butternut Health Expert (BHE) Contact Information

Last Name*		First Name*
McKinley		Andrew
Telephone Number*	Alternate Telephone Number	Email Address*
613-620-2255		mckinleyenvironmental@gmail.com

Summary of Qualifications as a Butternut Health Expert*

Dr. McKinley is the principal consultant and owner of McKinley Environmental Solutions. He completed the Ontario Ministry of Natural Resources and Forestry Butternut Health Assessor’s Certification Course in both 2015 and 2019. Since 2015, he has worked on behalf of clients throughout Ontario to complete more than fifty Butternut Health Expert’s Reports, Endangered Species Act Online Impact Registrations to authorize impacts to Butternut Trees, and applications for Overall Benefit Permits related to Butternut Trees. He has also completed hundreds of Tree Conservation Reports and Environmental Impact Studies. Dr. McKinley holds a PhD in Biological Science, he is a Certified Environmental Professional in four disciplines, and he is a Registered Professional Biologist (RP Bio).

Property Owner Contact Information

Last Name* Murphy	First Name* Susan
Company Name Caivan Communities	

Mailing Address*

Unit Number	Street Number 3713	Street Name Borrisokane Road	PO Box
Lot Number	Concession	Township	Rural Route
City/Town Ottawa	Province Ontario	Postal Code K2J 4J4	
Telephone Number * 613-355-6706	Alternate Telephone Number	Email Address susan.murphy@caivan.com	

Butternut Tree(s) Location Information

Address*	☐ Select if location of Butternut is the same as the property owner's mailing address		
Unit Number	Street Number 4795	Street Name Bank Street	PO Box
Lot Number	Concession	Township	Rural Route
City/Town Ottawa	Province Ontario	Postal Code	

General description of area containing Butternut (select one)

☐ Natural ☐ Rural ☒ Urban - Suburban ☐ Industry / Resource Extraction Area

Soil drainage (select one)

☒ Well Drained ☐ Moderately Drained ☐ Poorly Drained ☐ Unknown

Have any of the Butternut at this site produced seeds?

☐ Yes ☒ No ☐ Unknown

General Comments

Butternut Tree Data 1

Tree Identification Number* 1 Date of Assessment (yyyy/mm/dd)* 2025/05/16

UTM Zone* 18T

Northing* 018309

Easting* 453780

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 80

Tree Stem Diameter (cm)* 6

Number of sooty cankers* At or below 2m (the lower stem) 3 Above 2m 0 At the root (root flares) 1

Number of open cankers* At or below 2m (the lower stem) 3 Above 2m 0 At the root (root flares) 1

Metres from badly cankered tree* ☐ 40 metres or less ☒ Greater than 40 metres ☐ None found

Crown Class

☐ Dominant, full sun

☒ Co-dominant, two sides in the sun

☐ Intermediate, sun only from above

☐ Suppressed, shaded crown

Signs of Stress

☒ Twig dieback

☐ Branch dieback

☒ Defoliation

☐ Discolouration

Seed Signs

☐ Mature stamens or pollen

☐ Receptive pistils

☐ Seed set

☒ None

☐ Unknown

Below Crown

Number of stems 1

Main stem length (m) below crown 2

Number of epic-live

Number of epic-dead

Number of callused wounds

Bark type: ☐ Deep furrows/Narrow ridges

☒ Shallow furrows/Wide ridges

Tree Origin

☒ Naturally-occurring

☐ Planted (cultivated)

☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian?

☐ Upland

☐ Wetland

☒ Riparian

Vegetation Community

☐ Open

☐ Shrub thicket

☐ Savannah - Woodland

☒ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☒ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax

☐ Regenerating

Does this tree occupy edge habitat?

☐ Yes

☒ No

If "Yes", select which edge habitat:

☐ Road

☐ Trail

☐ Utility corridor

☐ Fencerow

☐ Forest/woodlot edge

☐ Watercourse/waterbody

Competing Species

1. Bckthrn

2. WAsH

3.

Comments about this tree

Butternut #1 is evidently in poor condition.

Butternut Tree Data 2

Tree Identification Number* 2 Date of Assessment (yyyy/mm/dd)* 2025/05/16 ☐ Select if Date is same as tree above

UTM Zone* 18T Northing* 018244 Easting* 453886

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 0 Tree Stem Diameter (cm)* 27

Number of sooty cankers* At or below 2m (the lower stem) 5 Above 2m 5 At the root (root flares) 2

Number of open cankers* At or below 2m (the lower stem) 5 Above 2m 5 At the root (root flares) 2

Metres from badly cankered tree* ☐ 40 metres or less ☒ Greater than 40 metres ☐ None found

Crown Class ☒ Dominant, full sun ☐ Co-dominant, two sides in the sun
☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 6

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☒ Deep furrows/Narrow ridges ☐ Shallow furrows/Wide ridges

Tree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☐ Upland ☐ Wetland ☒ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☒ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☒ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree
Butternut #2 is evidently dead.

Butternut Tree Data 3

Tree Identification Number* 3 Date of Assessment (yyyy/mm/dd)* 2025/05/16 ☐ Select if Date is same as tree above

UTM Zone* 18T Northing* 018143 Easting* 453947

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 0 Tree Stem Diameter (cm)* 17

Number of sooty cankers* At or below 2m (the lower stem) 5 Above 2m 5 At the root (root flares) 5

Number of open cankers* At or below 2m (the lower stem) 5 Above 2m 5 At the root (root flares) 5

Metres from badly cankered tree* ☒ 40 metres or less ☐ Greater than 40 metres ☐ None found

Crown Class ☐ Dominant, full sun ☐ Co-dominant, two sides in the sun
☐ Intermediate, sun only from above ☒ Suppressed, shaded crown

Signs of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 5

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☒ Deep furrows/Narrow ridges ☐ Shallow furrows/Wide ridges

Tree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☐ Upland ☐ Wetland ☒ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☒ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☒ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. Bsswood 2. WAsH 3.

Comments about this tree
Butternut #3 is evidently dead.

Butternut Tree Data 4

Tree Identification Number* 4 Date of Assessment (yyyy/mm/dd)* 2025/05/16 ☐ Select if Date is same as tree above

UTM Zone* 18T Northing* 018358 Easting* 453988

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 0 Tree Stem Diameter (cm)* 33

Number of sooty cankers*	At or below 2m (the lower stem)	Above 2m	At the root (root flares)
10	10	10	10

	At or below 2m (the lower stem)	Above 2m	At the root (root flares)
Number of open cankers*	10	10	10

Metres from badly cankered tree* ☒ 40 metres or less ☐ Greater than 40 metres ☐ None found

Crown Class ☒ Dominant, full sun ☐ Co-dominant, two sides in the sun

☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ Unknown

Below Crown	Number of stems 1	Main stem length (m) below crown 5
-------------	-------------------	------------------------------------

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☐ Deep furrows/Narrow ridges ☒ Shallow furrows/Wide ridges

Tree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☒ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☒ Shrub thicket ☐ Savannah - Woodland ☐ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☐ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species	1.	2.	3.

Comments about this tree
Butternut #4 is evidently dead.

Butternut Tree Data 5

Tree Identification Number* 5 Date of Assessment (yyyy/mm/dd)* 2025/05/16 ☐ Select if Date is same as tree above

UTM Zone* 18T Northing* 018354 Easting* 453989

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 0 Tree Stem Diameter (cm)* 27

Number of sooty cankers* At or below 2m (the lower stem) 6 Above 2m 3 At the root (root flares) 4

Number of open cankers* At or below 2m (the lower stem) 6 Above 2m 2 At the root (root flares) 4

Metres from badly cankered tree* ☒ 40 metres or less ☐ Greater than 40 metres ☐ None found

Crown Class ☐ Dominant, full sun ☒ Co-dominant, two sides in the sun
☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 6

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☐ Deep furrows/Narrow ridges ☒ Shallow furrows/Wide ridges

Tree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☒ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☒ Shrub thicket ☐ Savannah - Woodland ☐ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☐ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree
Butternut #5 is evidently dead.

Butternut Tree Data 6

Tree Identification Number* 6 Date of Assessment (yyyy/mm/dd)* 2025/05/16 ☐ Select if Date is same as tree above

UTM Zone* 18T Northing* 018378 Easting* 454023

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 50 Tree Stem Diameter (cm)* 24

Number of sooty cankers* At or below 2m (the lower stem) 6 Above 2m 0 At the root (root flares) 3

Number of open cankers* At or below 2m (the lower stem) 4 Above 2m 2 At the root (root flares) 1

Metres from badly cankered tree* ☒ 40 metres or less ☐ Greater than 40 metres ☐ None found

Crown Class ☐ Dominant, full sun ☒ Co-dominant, two sides in the sun
☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 5

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☐ Deep furrows/Narrow ridges ☒ Shallow furrows/Wide ridges

Tree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☒ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☒ Shrub thicket ☐ Savannah - Woodland ☐ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☐ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. Bsswood 2. WAsH 3.

Comments about this tree
Butternut #6 is evidently in poor condition.

Butternut Tree Data 7

Tree Identification Number* 7 Date of Assessment (yyyy/mm/dd)* 2025/05/16 ☐ Select if Date is same as tree above

UTM Zone* 18T Northing* 018402 Easting* 454066

Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ No

Is this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple Stems

Live Crown %* 30 Tree Stem Diameter (cm)* 28

Number of sooty cankers* At or below 2m (the lower stem) 3 Above 2m 0 At the root (root flares) 8

Number of open cankers* At or below 2m (the lower stem) 10 Above 2m 2 At the root (root flares) 4

Metres from badly cankered tree* ☒ 40 metres or less ☐ Greater than 40 metres ☐ None found

Crown Class ☐ Dominant, full sun ☒ Co-dominant, two sides in the sun
☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 4

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☐ Deep furrows/Narrow ridges ☒ Shallow furrows/Wide ridges

Tree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☒ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☒ Shrub thicket ☐ Savannah - Woodland ☐ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☐ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. WAsh 2. AmElm 3.

Comments about this tree
Butternut #7 is evidently in poor condition.

Butternut Tree Data 8Tree Identification Number* **8** Date of Assessment (yyyy/mm/dd)* **2025/05/16** ☐ Select if Date is same as tree aboveUTM Zone* **18T** Northing* **018127** Easting* **453959**Is this tree a Butternut tree or a putative hybrid? * ☒ Butternut ☐ Putative HybridIs the stem of this tree shorter than 1.37 m? * ☐ Yes ☒ NoIs this a single or multi-stemmed tree? * ☒ Single Stem ☐ Multiple StemsLive Crown %* **20** Tree Stem Diameter (cm)* **52**Number of sooty cankers* At or below 2m (the lower stem) **1** Above 2m **1** At the root (root flares) **6**Number of open cankers* At or below 2m (the lower stem) **0** Above 2m **2** At the root (root flares) **6**Metres from badly cankered tree* ☒ 40 metres or less ☐ Greater than 40 metres ☐ None foundCrown Class ☒ Dominant, full sun ☐ Co-dominant, two sides in the sun
☐ Intermediate, sun only from above ☐ Suppressed, shaded crownSigns of Stress ☒ Twig dieback ☒ Branch dieback ☒ Defoliation ☐ DiscolourationSeed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☒ None ☐ UnknownBelow Crown Number of stems **1** Main stem length (m) below crown **8**

Number of epic-live Number of epic-dead Number of callused wounds

Bark type: ☒ Deep furrows/Narrow ridges ☐ Shallow furrows/Wide ridgesTree Origin ☒ Naturally-occurring ☐ Planted (cultivated) ☐ UnknownIs this tree located in an area that is upland, wetland, or riparian? ☐ Upland ☐ Wetland ☒ RiparianVegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☒ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☒ Deciduous ☐ Coniferous ☐ Mixed☐ Climax ☐ RegeneratingDoes this tree occupy edge habitat? ☐ Yes ☒ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree
Butternut #8 is evidently in poor condition.

BHE Report Number MCK252				Start Date of Butternut Health Assessment (yyyy/mm/dd) 2025/05/16				End Date of Butternut Health Assessment (yyyy/mm/dd) 2025/05/16												
Total Number Butternut Trees in BHE Report 8				Butternut Health Expert's Name McKinley, Andrew																
Property Owner/Client Name Murphy, Susan						Property Address 4795 Bank Street Ottawa Ontario														
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Tree #	Live Crown %	Tree stem diameter (cm)	# bole cankers (BC)				# root flare cankers (RF)		40 m or less from cankered tree? (Y or N)	Circ. (cm) = $\pi \times$ tree stem diameter	Total BC Width (cm) = $(D \times 2.5) + (E \times 2.5) + (F \times 5) + (G \times 5)$	Total RF Width (cm) = $(H \times 2.5) + (I \times 5)$	Total BC Width % of Circ. = $L / K \times 100$	Total RF Width % of Circ. = $M / K \times 100$	Total BC + RF Width % of 2 * Circ. = $(N + O) / 2$	Tree Categories: 1, 2, or 3				
			Sooty (S) (will be assigned 2.5 cm per canker) Open (O) (will be assigned 5 cm per canker)				S	O								= Cat 2 if B >= 50 and N=0 else = Cat 1	= Cat 2 if B > 70 and P < 20 else = Cat 1	= Cat 2 if B > 70 and N < 20 else = Cat 1	Preliminary tree call = Cat 2 if Q= Cat 2 or R= Cat 2 or S= Cat 2 else = Cat 1	Final tree call = Cat 3 if T= Cat 2 and C > 19 and J='Y' else T
			S <= 2m	S > 2m	O <= 2m	O > 2m														
1	80	6	3	0	3	0	1	1	N	18.84	22.5	7.5	119.43	39.81	79.62	1	1	1	1	1
2	0	27	5	5	5	5	2	2	N	84.78	75.0	15.0	88.46	17.69	53.08	1	1	1	1	1
3	0	17	5	5	5	5	5	5	Y	53.38	75.0	37.5	140.5	70.25	105.38	1	1	1	1	1
4	0	33	10	10	10	10	10	10	Y	103.62	150.0	75.0	144.76	72.38	108.57	1	1	1	1	1
5	0	27	6	3	6	2	4	4	Y	84.78	62.5	30.0	73.72	35.39	54.55	1	1	1	1	1
6	50	24	6	0	4	2	3	1	Y	75.36	45.0	12.5	59.71	16.59	38.15	1	1	1	1	1
7	30	28	3	0	10	2	8	4	Y	87.92	67.5	40.0	76.77	45.5	61.13	1	1	1	1	1
8	20	52	1	1	0	2	6	6	Y	163.28	15.0	45.0	9.19	27.56	18.38	1	1	1	1	1



Photograph 1: Butternut Tree #1 – assessed as Category 1 (non-retainable) (May 23rd, 2025).



Photograph 2: Butternut Tree #1 – assessed as Category 1 (non-retainable). The live crown is relatively healthy (May 23rd, 2025).



Photograph 3: Butternut Tree #1 – assessed as Category 1 (non-retainable). Extensive canker on the root flare and lower stem is visible (May 23rd, 2025).



Photograph 4: Butternut Tree #1 – assessed as Category 1 (non-retainable). Extensive canker on the lower stem is visible (May 23rd, 2025).



Photograph 5: Butternut Tree #2 – assessed as Category 1 (non-retainable) (May 23rd, 2025).



Photograph 6: Butternut Tree #2 – assessed as Category 1 (non-retainable). The crown is completely dead (May 23rd, 2025).



Photograph 7: Butternut Tree #3 – assessed as Category 1 (non-retainable) (May 23rd, 2025).



Photograph 8: Butternut Tree #3 – assessed as Category 1 (non-retainable). The crown is completely dead (May 23rd, 2025).



Photograph 9: Butternut Tree #4 – assessed as Category 1 (non-retainable). The crown is completely dead (May 23rd, 2025).



Photograph 10: Butternut Tree #5 – assessed as Category 1 (non-retainable). The stem shows extensive canker damage (May 23rd, 2025).



Photograph 11: Butternut Tree #5 – assessed as Category 1 (non-retainable). The stem shows extensive canker damage (May 23rd, 2025).



Photograph 12: Butternut Tree #6 – assessed as Category 1 (non-retainable). Extensive canker is visible on the lower stem (May 23rd, 2025).



Photograph 13: Butternut Tree #6 – assessed as Category 1 (non-retainable). Extensive canker is visible on the lower stem (May 23rd, 2025).



Photograph 14: Butternut Tree #6 – assessed as Category 1 (non-retainable). The upper stem and crown are in poor condition (May 23rd, 2025).



Photograph 15: Butternut Tree #7 – assessed as Category 1 (non-retainable). Extensive canker is visible on the lower stem (May 23rd, 2025).



Photograph 16: Butternut Tree #7 – assessed as Category 1 (non-retainable). Extensive canker is visible on the root flare (May 23rd, 2025).



Photograph 17: Butternut Tree #7 – assessed as Category 1 (non-retainable). Extensive canker is visible on the lower stem (May 23rd, 2025).



Photograph 18: Butternut Tree #7 – assessed as Category 1 (non-retainable). The crown is in poor condition (May 23rd, 2025).



Photograph 19: Butternut Tree #8 – assessed as Category 1 (non-retainable) (May 23rd, 2025).



Photograph 20: Butternut Tree #8 – assessed as Category 1 (non-retainable). Extensive canker is visible on the root flare (May 23rd, 2025).



Photograph 21: Butternut Tree #8 – assessed as Category 1 (non-retainable). The crown is in poor condition (May 23rd, 2025).