Leitrim West Urban Expansion Area - S4

Tree Conservation Report

Prepared for Edge at Pathways Regional Inc.
1737 Woodward Drive, 2nd Floor, Ottawa ON K2C 0P9

Prepared by Arcadis Professional Services Canada
333 Preston Street, Suite 500, Ottawa, ON K1S 5N4

Project Number: 30260678
October, 2025

CLIENT:	Edge at Pathways Regional Inc.
PROJECT NAME:	Leitrim West Urban Expansion Area – S4 Lands
REPORT TITLE:	Tree Conservation Report
ARCADIS IBI REFERENCE:	30260678
VERSION:	**FINAL**
ORIGINATOR:	Brittany Semmler, Ecologist
REVIEWER:	Casey Little, ISA Certified Arborist

Table of Contents

1 Introduction

Arcadis Professional Services Canada Inc. (Arcadis) has been retained by Edge at Pathways Regional Inc. (the "Client") to prepare a Tree Conservation Report (TCR) to support the future development of the Leitrim West Urban Expansion Area – S4 Lands (the Project), located at 4850 Bank Street (Concession 4, Part Lot 22), within the City of Ottawa (the "Site").

1.1 Site Description

The 33.7-acre Urban Expansion Area (UEA) is generally rectangular in shape and is situated west of Bank Street and south of the existing Pathways at Findlay Creek Development, confined to the south by the future Earl Armstrong Road extension, adjacent to the south property line.

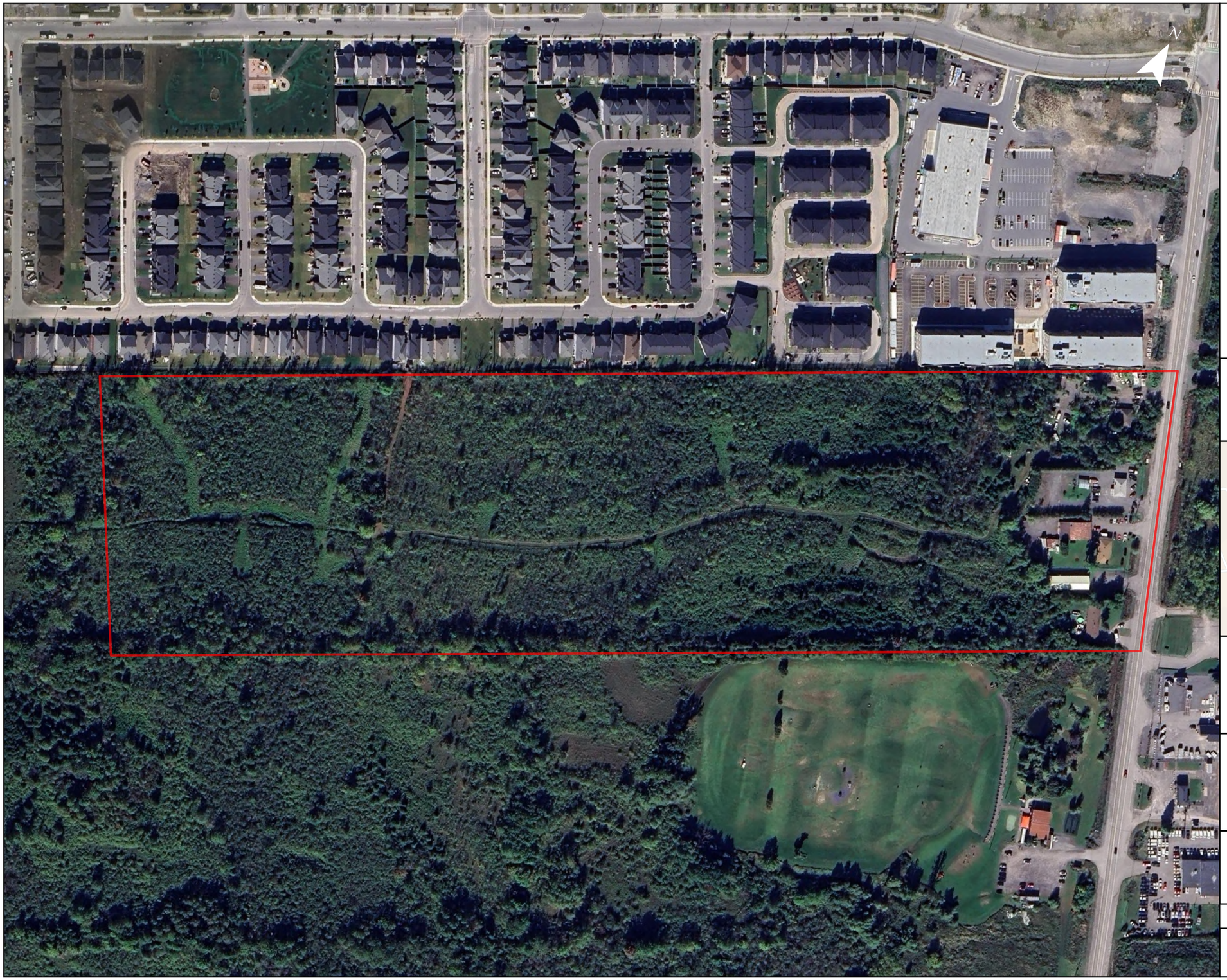
The UEA is currently zoned as RU – Rural Countryside Zone, however portions of which is included on Schedule C17 - Urban Expansion Areas as a Category 1 – Future Neighbourhood Overlay, as designated in the City of Ottawa Official Plan (City OP) (**Figure 1**).

A desktop review of recent and historic aerial imagery highlights the land uses within and adjacent to the Site (GeoOttawa 2025). From this review, the landscape around the Study Area has been predominantly agricultural fields separated by natural wooded hedgerows dating back to at least 1976. The property has experienced little change since at least 1976, likely due to it historically being located outside of the City's Urban Boundary (City of Ottawa 2022b; Google 2024).

A recent residential development Project by Regional Group (Pathways South at Findlay Creek Development) started construction around early 2019 and is located directly north of the UEA.

1.2 Objective

This Tree Conservation Report (TCR) follows the City of Ottawa *Tree Conservation Report Guidelines* (City of Ottawa, 2021), which required a site visit to identify trees larger than 10 cm in diameter that could be impacted by the project. Information on tree groupings, their species, size (diameter-at-breast height, dbh) and health were recorded. The TCR summarizes the results, identifies the ownership of the trees, and based on the current design plans provides commentary on which trees could be retained and those that are recommended to be removed. This information is depicted on the mandatory Map 1 and Map 2 of the TCR, as per the guidelines. In the paragraphs below, we have outlined the field methodology and findings of the tree inventory. This report will help determine the project's potential impact on existing trees and provide general recommendations to avoid and/or mitigate tree loss and injury.



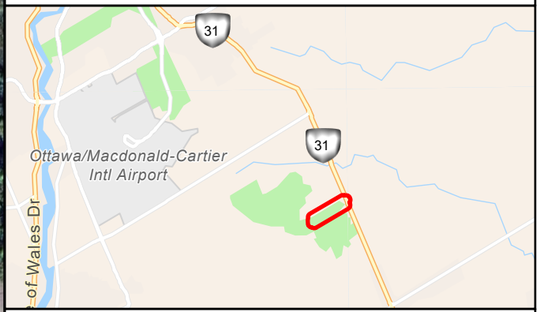
Legend

Urban Expansion Area Limits (CoO, 2025)

0 20 40 80 120 160

Meters

Scale: 1:2,750



Project:

Leitrim West Future Neighborhood Urban Expansion Area - S4

Title:

Urban Expansion Area Limits

Prepared By:

ARCADIS Design & Consultancy for natural and built assets

Project: 30258325

Date: 8/12/2025

Figure: 1

2 City of Ottawa Tree Protection By-Law

The Subject Property is located within the City of Ottawa's Tree Protection By-law No. 2020-340 (January 1, 2021) limits. The intent of this By-Law is to respect the protection of municipal trees and municipal natural areas in the City of Ottawa and trees on private property in the urban area of the City of Ottawa.

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

- *All City-owned trees throughout the urban and rural area.*
- *All trees 10 cm or more in diameter at breast height on private properties within the urban area that are subject to a Planning Act application for Site Plan, Plan of Subdivision, or Plan of Condominium.*
- *All trees 10 cm or more in diameter at breast height on private properties within the urban area that are over 1 hectare in size.*
- *All distinctive trees on private properties 1 hectare or less in size, where distinctive trees are defined as:*
    - *Trees measuring 30 cm or more in diameter at breast height within the City's inner urban area.*
    - *Trees measuring 50 cm or more in diameter at breast height within the City's suburban area.*

The Tree Protection By-law requires permits to be obtained before City-owned trees or protected privately owned trees are removed. It also sets out requirements for compensation to be provided when trees are removed, so that they can be replaced.

A TCR is required as a part of the application package for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 centimeters in diameter or greater on the site and/or if there is a tree on an adjacent site that has a Critical Root Zone (CRZ) extending onto the development site. The purpose of the TCR is to demonstrate how tree cover will be retained and protected on the Site, including mature trees, stands of trees, and hedgerows. The TCR also shows which trees must be removed on the site to accommodate the proposed development.

3 Methodology

3.1 Vegetation Communities / Ecological Land Classification

Due to the size of the UEA, individual trees were not assessed, instead vegetation communities within the Study Area were characterized and mapped using the *Ecological Land Classification for Southern Ontario* (ELC) (Lee, et al., 1998). The ecological community boundaries were determined through the review of aerial photography and then further refined through on-site vegetation surveys as specified by the protocol. Field studies were completed by systematically walking the UEA.

Surveys were completed in 2024, by qualified professionals as defined in Section 1 of the City of Ottawa's *Tree Protection By-law (2020-340)* (City of Ottawa, 2020). General tree health information was collected for each unique ecosite where trees ≥ 10 cm DBH were present.

Targeted searches for Butternut and Black Ash, both tree species listed as Endangered in Ontario under the *Endangered Species Act, 2007,* were undertaken as these species have known occurrences throughout the Study Area.

3.2 Tree Ownership

All trees inventoried are located on private property, owned by the Client, and are situated at 4850 Bank Street. Property boundaries were established by an Ontario Land Surveyor, as verified by the Draft Plan of Subdivision.

3.3 Limitations of Assessment

The inventory and assessment provided in this report has been completed using techniques of visual observation of above-ground parts of each tree. This tree assessment is therefore valid at the time of inspection, and no guarantee can be made about the continued health of the trees deemed to be in good condition.

4 Existing Conditions

The UEA is flat with no presence of steep slopes, valleylands or escarpments. There are no valued woodlands designated as Natural Environment Areas, or significant woodlands on or adjacent the Site. There are no rare communities, or other unique ecological features such as Provincially Significant Wetlands (PSW), and/or Area's of Natural and Scientific Interest (ANSI) within the UEA. It should be noted that the Leitrim PSW and ANSI is approximately 373 m from the western extents of the UEA.

The Study Area is located within the South Nation Conservation (SNC) jurisdiction and associated watersheds (SNC 2025). Mapping by SNC and the City indicate the presence of a watercourse east of the Study Area that flows northeast from the wetlands south of the Site, travels along the eastern extents of the UEA and crosses under Bank Street eastwards.

The Subject Site is mostly comprised of thicket habitat, and open meadow, with a mature hedgerow along the southern extents of the property. The adjacent lands to the north are fully developed (residential), the lands to the west consist of thicket habitat and open meadow, and the lands to the south also consist of thicket and meadow habitats with a portion in the southeastern extents currently operated as a golf driving range. Bank street is directly east of the UEA surrounded by commercial lands.

5 Results

5.1 Vegetation Communities Summary

The ELC survey identified a total of four upland vegetation communities (minimum size 0.5 ha as per ELC, unless a significant smaller community is identified) and one wetland vegetation communities within the UEA.

The upland natural environment includes:

- **Mixed Meadow** (dominated by herbaceous species with no more than 25% cover provided by either shrub or tree species)
- **Thicket** (communities with >25% shrub cover and <25% tree cover)
- **Coniferous Forest** (communities with >60% canopy cover composed of >75% coniferous trees)
- **Deciduous Forest** (communities with >60% canopy cover composed of >75% deciduous trees)

The wetland natural environment includes:

- **Deciduous Swamps** (communities with >25% canopy cover > 5m in height and >75% deciduous species)

All meadow communities surveyed within the UEA are impacted by land use activities occurring within the past 30 years. The native vegetation communities present are considered common within Ontario.

Overall, the ELC survey divided the Study Area into a total of seven ELC ecosites, plus an additional four ecosites associated with constructed lands (i.e., transportation and/or residential development).

The communities documented during ELC surveys, the dominant vegetation cover, as well as reference photos for each vegetation community on the UEA are summarized below in **Table 1** and displayed in **Figure 2**.

Table 1: Summary of ELC communities found within the Study Area

ELC Type	Total Area (ha)	Community Description	Photo Record
UPLAND – Mixed Meadow (MEM)			
MEMM4 Fresh-Moist Mixed Meadow	0.5	Much of this fresh-moist mixed meadow can be found in the western extent of the Site where it occupies open areas within the buckthorn thicket. Additionally, there is a smaller area close to the eastern edge of the Site. This meadow community features broadleaf graminoid species that have preference for moister soil regimes. This includes canary reed grass, goldenrod, asters, common dandelion, and Canada anemone. *Note: Four butternut were located on the edge of this community in the western extent of the Site.*	Looking west across meadow in western extant. Photo taken 07.08.2024. 
UPLAND – Thicket (TH)			
THCM2-1 Fresh-Moist White Cedar Coniferous Thicket	0.7	There are two ecosites in the eastern extent of the Site, with two more ecosites to the south and west of the Site in the Study Area. These areas feature many young Eastern White Cedar that are scattered and patchy in places but continuous in others. The canopy itself is less than 25% coverage, 10-15m tall, and primarily comprised of Eastern White Cedar. The sub-canopy, 20% coverage and 7-10m tall, had a similar composition to the canopy. Much of the understory is dominated by buckthorn species, with more than 50% coverage (.5-2m tall), with Red-osier Dogwood, Willow spp., Riverbank Grape, and Green Ash. In places where the cedar is dense, the ground cover is sparse, and in places where the buckthorn is dense, the ground cover was greater on average there was 40% coverage. Ground layer vegetation included Purple Loosestrife, Goldenrod, graminoids, and Riverbank Grape.	Thicket in southeastern extant of Site. Photo taken 07.08.2024. 

ELC Type	Total Area (ha)	Community Description	Photo Record
THDM2-6 Buckthorn Deciduous Shrub Thicket	8.6	This community occupies the majority of the Site and is dominated by glossy buckthorn. Canopy coverage is 20% and 15-20m tall, and comprised of scattered green ash, white ash, and white elm. The sub-canopy had similar species (20% cover, 5-8m tall). The understory (80% coverage, .5-2m tall) was comprised mainly of glossy buckthorn with willow and ash species. This densely covered area had a mix of graminoid, and broadleaf species found in other areas of the Site, such as goldenrod and purple loosestrife, for ground vegetation (30% coverage). This community can also be found south and east of the Site.	Thicket in middle of Site on either side of CL. Photo taken 06.05.2024. 
UPLAND – Coniferous Forest (FOC)			
FOCM4-1 Fresh - Moist White Cedar Coniferous Forest	0.4	This community borders the southwest corner of the site and additionally includes a small section to the northeast. The canopy (10-15m tall, 85% coverage) and is dominated by Eastern White Cedar, with small occurrences of White Birch and White Elm. The Subcanopy (5-10m tall, 75% coverage) and understory (0.5-5m tall, 50% coverage) is dominated by Eastern White Cedar, Green Ash, White Ash, and Buckthorn. Ground layer (25% coverage) had Wood Fern, Purple Loosestrife, and small Ash and Buckthorn species scattered throughout. Four Butternuts were located within this community with one outside of the Site, and one outside of the UEA. *Note: Four Butternuts are located within this ecosite.*	View from inside Forest. Photo taken 07.08.2024. 

ELC Type	Total Area (ha)	Community Description	Photo Record
FOCM5 Naturalized Coniferous Hedgerow	0.8	This area borders the southeastern extent of the Site. Part of the hedgerow contains an old agricultural access road that runs between the Site and the Target Golf Centre (driving range). The canopy (12-15m tall, 80% coverage) was largely composed of Eastern White Cedar, with some White Birch and White Elm. The subcanopy (5-8m tall, 85% coverage) including the above species but also included White Pine, Green Ash and White Ash, and Buckthorn. The understory (25% cover, 0.5-2m tall) included younger Red Pine and Riverbank Grape with the above noted species. Ground vegetation (35% cover) had Wood Fern species along with Goldenrod and Purple Loosestrife, but also young Buckthorn and Ash species. *Note: Nine Butternut (part of canopy and subcanopy) were located within this ecosite along with eleven Black Ash (subcanopy and understory).*	View from inside hedgerow. Photo taken 07.08.2024. 
UPLAND – Deciduous Forest (FOD)			
FODM11 Naturalized Deciduous Hedgerow	0.8	The hedgerow community covers most of the southern border of the Site and intersects the property in three areas. Two of those areas connect with the coniferous hedge-row community. This ecosite largely contains American Basswood in the canopy (10-25m tall, 80% coverage), with White Ash, American Elm, and Manitoba Maple. These noted species accompanied Green Ash, and Common Buckthorn in the subcanopy (5-8m tall, 70% coverage) and the understory (0.5-3m tall, 45% coverage), which also included Red-osier Dogwood. Ground vegetation included Virginia Creeper, Wild Carrot, Purple Loosestrife, Thin-leaved Goldenrod, Early Goldenrod, Joe-Pye Weed, Common Yarrow, and Red Raspberry. Note: Seven Butternut were located within this community as well as a bat cavity.	Photo from inside the hedgerow. Photo taken 08.08.2024. 

ELC Type	Total Area (ha)	Community Description	Photo Record
WETLAND – Deciduous Swamp (SWD)			
SWDM4-5 (Inclusion) Poplar Mineral Deciduous Swamp	0.1	This inclusion wetland community, located in the northeast corner of the Site, contained a headwater drainage feature. The canopy (10-15m tall, 35% coverage) primarily surrounded the community and was composed of trembling aspen, green ash, and white elm. The subcanopy (5-10m tall, 30% coverage) contained the above species including willow species and buckthorn, which was also true for the understory (0.5-4m tall, 25% coverage). Ground vegetation (70% coverage) contained reed canary grass, tussock sedge, joe-pye weed, purple loosestrife, marsh horsetail, and some narrow leaved cattail. *Note: one black ash was observed in this community.*	Within swamp in eastern extant. Photo taken 31.05.2024. 
CULTURAL – Constructed (CV)			
CL Cleared Lands	1.3	This area runs through the middle of the Site, appears to have been cleared for prior survey work.	Cleared lands in centre of Site. Photo taken 06.05.2024. 
CVC_1 Commercial and Institutional	0.7	There are few business areas off Bank Street including Bridgeport Motor Dealers along the eastern boundary.	*No Photo Available*

ELC Type	Total Area (ha)	Community Description	Photo Record
CVI_1 Transportation and Utilities	0.2	These areas consist of major roads, right of ways, and hydro corridors.	*No Photo Available*
CVR_4 Rural Property	1.1	These areas consist of rural homes along Bank Street.	*No Photo Available*

Legend

Urban Expansion Area Limits (CoO, 2025)

SAR Species

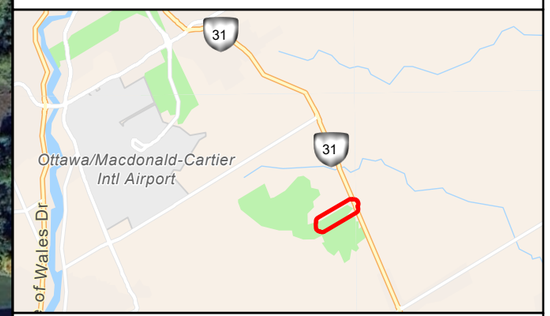
- Black Ash (>8cm DBH)
- Butternut
- Black Ash Concentration Area (<8cm DBH)

Ecological Land Classification

- 1 - Fresh - Moist White Cedar Coniferous Forest (FOCM4-1)
- 2 - Naturalized Coniferous Hedge-row (FOCM5)
- 3 - Naturalized Deciduous Hedge-row (FODM11)
- 4 - Fresh - Moist Mixed Meadow (MEMM4)
- 5 - Poplar Mineral Deciduous Swamp (SWDM4-5)
- 6 - Fresh - Moist White Cedar Coniferous Thicket (THCM2-1)
- 7 - Buckthorn Deciduous Shrub Thicket (THDM2-6)
- 8 - Cleared Land (CL)
- 9 - Business Sector (CVC_1)
- 10 - Transportation (CVI_1)
- 11 - Rural Property (CVR_4)

0 20 40 80 120 160 Meters

Scale: 1:2,750



Project:

Leitrim West Future Neighborhood Urban Expansion Area - S4

Title:

Current Vegetation

(Map 1 as per City Guidelines)

Prepared By:

ARCADIS Design & Consultancy for natural and built assets

Project: 30258325

Date: 8/12/2025

Figure: 2

5.2 Species at Risk

Targeted surveys for Butternut and Black Ash were undertaken during the 2024 field investigations. **A total of 20 Butternut and nine Black Ash (>8cm dbh) were located within the UEA**. There are also two small Black Ash concentration areas in the northern extents that contained several small saplings all <8cm dbh (**Figure 2**).

These trees will require assessment during the leaf-on period from mid-May to August 31 prior to development of the UEA.

6 Description of the Proposed Development

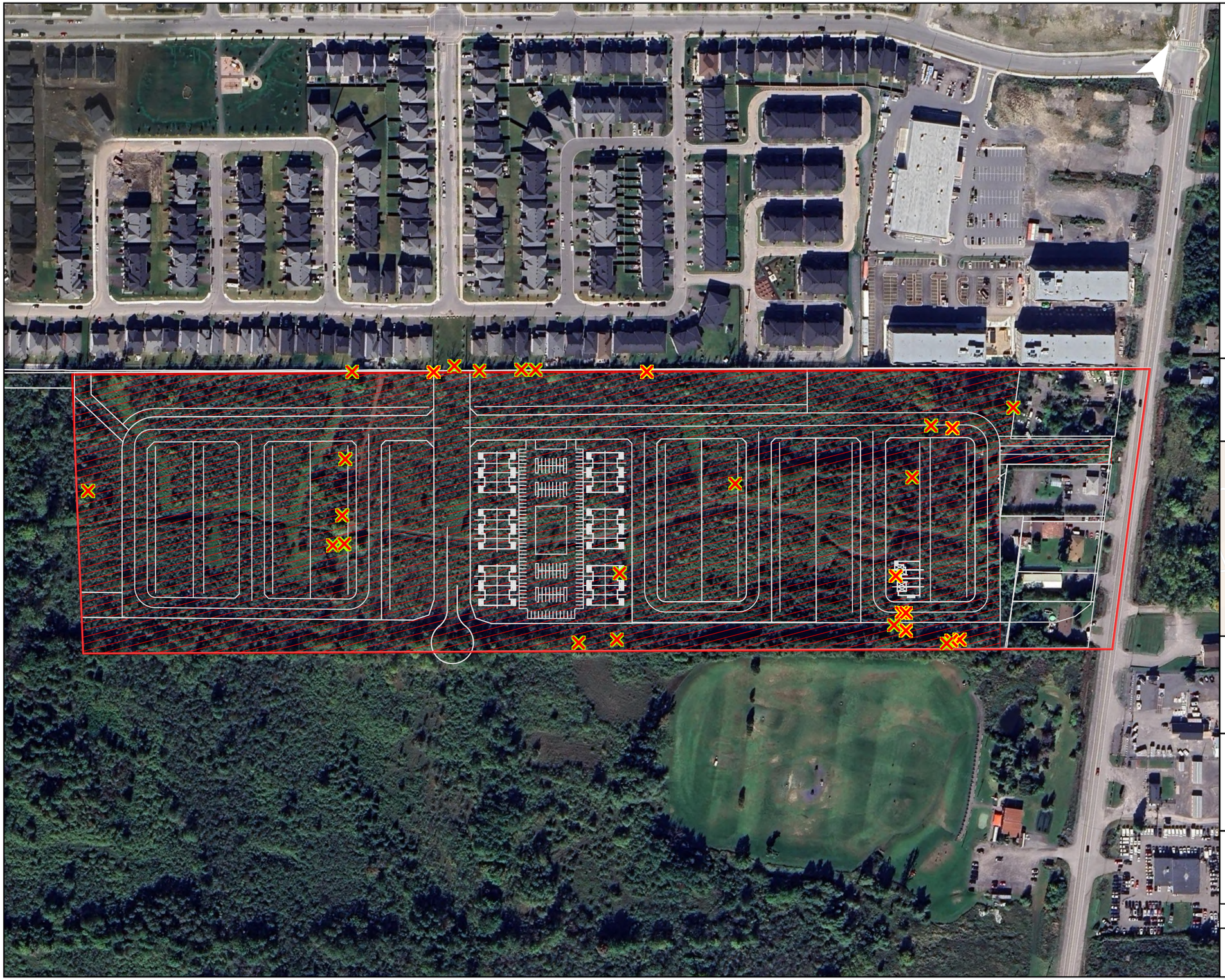
The proposed development is located west of Bank Street and south of both Paakanaak Avenue and Rallidale Street in the community of Leitrim, in the City of Ottawa. It is anticipated that the proposed development will be constructed in a single phase. The land uses include construction of a new low-rise residential subdivision including single houses, 2-storey townhouses, multi-residential block, a Park, a Stormwater Management Pond, and associated asphalt-paved local roads, driveways, and landscaped areas.

The draft Concept Plan (Novatech 2025) for the proposed development is illustrated in **Figure 3.**

6.1 Construction Activities

Based on the Concept Plan the development of this property will include the following major Project components:

- Surveying and staking out the development;
- Clearing of vegetation, excavation, and grading;
- Excavation to accommodate underground utilities including water, sewer, gas, and hydro;
- Construction of roads, homes, and apartments; and
- Landscaping and fencing.



Legend

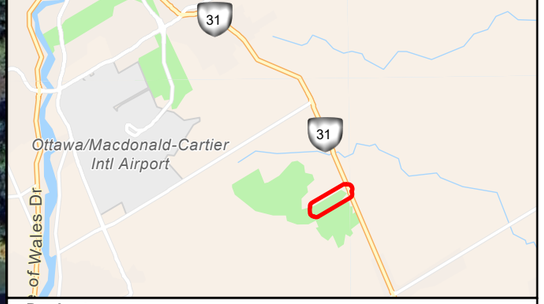
- Urban Expansion Area Limits (CoO, 2025)
- Concept Plan, Novatech (June, 2025)

Proposed Removals

- Black Ash (>8 cm DBH)
- Butternut
- Vegetation Removal

0 20 40 80 120 160 Meters

Scale: 1:2,750



Project:

Leitrim West Future Neighborhood Urban Expansion Area - S4

Title:

Tree Impact Assessment and Recommendations

(Map 2 as per City Guidelines)

Prepared By:

ARCADIS Design & Consultancy for natural and built assets

Project: 30258325

Date: 8/12/2025

Figure: 3

7 Impact Assessment and Recommendations

Based on the draft Concept Plan (Novatech 2025), all trees within the UEA are slated for removal. Impacts to individual trees within the site are not known at this time as Ecological Land Classification was used to gather general tree composition, age, and overall health conditions. Although majority of the UEA is comprised of thicket habitat dominated by glossy buckthorn, there are several wooded hedgerows throughout the UEA that contain mature trees in 'Good' condition. Specifically, the mature wooded hedgerow situated in the southern extents of the site measures approximately 720 m wide. Currently, impacts to the mature and healthy trees along this feature are anticipated, however, this is an excellent location to consider tree retention, if possible, during the Detail Design phase of the Project.

8 Mitigation Measures and Construction Management

8.1 Tree Removals

Based on the proposed project design and existing conditions of the trees on Site, all trees ≥ 10 cm DBH have been recommended for removal. The following recommendations are provided:

- ✓ Retain a Certified Arborist during site layout operations to confirm recommended tree removals, in proximity to the construction limits.
- ✓ If tree retention is possible, have the Certified Arborist confirm retention areas and clearly mark each individual tree for protection on site. Follow the recommendations below for trees that may be retained.

8.2 Tree Protection Measures

The most typical construction damage to trees is root damage from compaction and severance. While the drip line of a tree's canopy is typically thought to be associated with the root area, the root zones can extend significantly beyond the drip line of the tree, sometimes up to 2 or 3 times the height of the tree. Some trees on site are growing along the edge of proposed construction and will be at risk of contact with, and damage from, heavy equipment. To protect trees, grade changes and construction activities that could cause soil compaction should generally be kept away from trees as much as possible.

To successfully preserve trees that may be recommended for on-site retention, the following series of mitigation measures is recommended. These recommended measures largely center on the minimum CRZ of trees (The CRZ is calculated as DBH x 10 cm), as defined by the City's *Tree Conservation Report Guidelines*. The following measures are recommended to protect the CRZ of all trees slated for retention and/or impact:

Proposed Mitigation Measures – Planning and Design Stage

- ✓ At the Detail Design stages a tree impact assessment, within a revised TCR, should be carried out by an ISA Certified Arborist to assess impacts to all trees within the proposed development area.
- ✓ The development of a landscaping and compensation planting plan should be done in coordination with the City of Ottawa to identify targets for planting and appropriate species

as per the *Tree Protection (By-law No. 2020-340) Schedule B – Tree Compensation Requirements*.

- ✓ Invasive species, such as Buckthorn, Dog Strangling Wine, and Garlic Mustard, should be prioritized for removal and replaced with suitable native species.
- ✓ Prior to construction activities, overhanging limbs, and any exposed tree roots of trees to be retained (property boundary) should be pruned in a manner that minimizes physical damage and promotes quick wound closure and regeneration. Maintenance of roots or limbs should be carried out by an ISA Certified Arborist or a tree care specialist under the supervision of an ISA Certified Arborist.

Proposed Mitigation Measures – Construction Implementation

- ✓ Removals shall be determined at the detailed design stage. The retention of healthy trees shall be prioritized where possible, and Tree Protection Fencing shall be installed in a manner that protects the CRZ of retainable trees.
- ✓ A qualified professional shall mark all trees (dead and alive) that need to be removed, relative to the staked grading limits and referring to the tree inventory.
- ✓ At the Detail Design phase, Tree Protection Fencing shall be installed as per the updated TCR to protect the CRZ of the trees to be retained.
    - Tree protection fencing must be at least 1.2 m in height, and constructed of rigid or framed materials (i.e., moduloc - steel, plywood hoarding, or snow fence on a 2”x4” wood frame) with posts 2.4 m apart, such that the fence location cannot be altered. All supports and bracing must be placed outside of the CRZ, and installation must minimize damage to existing roots, as per the City of Ottawa Tree Protection Specification (Refer to **Appendix A**).
    - Protection fencing around trees that will be retained shall be installed at the critical root zone (CRZ) to ensure no impacts on this area. The CRZ is calculated as the DBH x 10 cm.
    - Tree protection fencing shall be monitored weekly to ensure that it is in working order. Should deficiencies be identified, the contractor must ensure to fix the fence within 48 hours of notice.
    - Do not place any material or equipment within the CRZ of any trees to be preserved.
    - There shall be no access to the area beyond the limit of construction. All construction access shall be limited to the development side of the tree protection fence.
    - Do not attach any signs, notices, or posters to any tree.
    - Do not raise or lower the existing grade within the CRZ of trees without approval.
    - Do not tunnel or bore when digging within the CRZ of a tree without approval.
    - Local adjustment of the protection fence should occur to slightly alter grading to mitigate adverse harm to specific trees along the property edges.
    - Groups of trees can be fenced together if the fencing still meets the recommended placement described above.
- ✓ Excavation activities around trees shall not damage the root system, trunk, or branches of any tree to be preserved.
- ✓ Exhaust fumes from all heavy machinery, vehicles, generators, and other equipment shall not be directed towards any trees for prolonged periods of time.

- ✓ Tree removals should be avoided during the breeding bird/active bat season (April 1st to September 30th) to limit disturbance to nesting birds/roosting bats and their young.
    - If trees are to be removed during the breeding bird/roosting bat season, it should be preceded by a nest survey and/or bat cavity survey by a qualified biologist. Surveys should be undertaken a maximum of 48 hours prior to the commencement of removals. If nests/roosts are found during a survey, or during construction, an appropriate buffer must be applied, and the nest/roost must not be disturbed until the young have fledged.
- ✓ All Green and White Ash trees removed should be treated as infected by the Emerald Ash Borer beetle and appropriately disposed of so not to infect other areas of the city.

Proposed Mitigation Measures – Post-Construction

- ✓ An updated removals tally shall be provided to the City Forester for review to ensure general compliance with the permit.
- ✓ Post-construction tree maintenance methods should be used to repair any damage caused to trees by construction activities. These may include but are not limited to treating trunk and crown injuries, irrigation and drainage, mulching, and aeration of root zone.
- ✓ Within 12 months of completion of construction, an assessment of preserved trees should be conducted. Trees that are dead, in poor health, or hazardous should be removed or pruned, as determined by an ISA Certified Arborist. Tree removal, if necessary, should occur promptly to avoid the foreseeable risk of trees falling and causing damage or harm to people and/or property.

It is anticipated that the proposed development will result in a decrease of mature trees within the UEA, and loss of several mature individuals located in the southern extents is possible. With the successful implementation of the mitigation measures recommended above, impacts to trees on site will be confirmed by a Certified Arborist during site layout, and where possible, recommendations for tree retention will be provided and updated in a revised TCR.

9 Permits and Approvals

The City of Ottawa's *Tree Protection By-law No. 2020-340* describes the rules that govern tree ownership in Ottawa and the responsibility of tree maintenance, including administration and enforcement. As per Part IV: Sections 42 – 44 Prohibition*: No person shall injure or destroy a tree without a permit.* Sections 45 to 48 - Application for tree permit stipulates the process of applying for a permit under this by law.

Therefore, it is recommended that consultation should be undertaken with the city prior to construction to confirm the requirements for tree removal permits associated with the municipal tree protection by law. Where required, tree removal permits must be obtained from the city prior to the start of construction.

10 Summary and Conclusions

Tree removals will be required for the construction of the proposed residential development at 4850 Bank Street. Tree removals within the Urban Expansion Area (UEA) have been assessed by cross referencing inventoried wooded locations with the Draft Concept Plan (**Figure 3**). The site plan has been developed to satisfy requirements of the City's OP.

It is anticipated that the proposed development will result in a decrease of vegetation within this 33.7-acre UEA, and potential loss of several mature trees located in the southern extents of the Subject Property. With the successful implementation of the mitigation measures recommended above, impacts to trees on site will be confirmed by a Certified Arborist during site layout, and where possible, recommendations for tree retention will be provided and updated in a revised TCR.

The mitigation measures described in this report have been developed to avoid or limit negative environmental impacts associated with the proposed development. This study was completed by Brittany Semmler, HBSc, and reviewed by Casey Little, Certified Arborist, with technical and field assistance provided by Daniel Shaw. The results and findings of this study have been reported without bias or prejudice. The conclusions of this study are based on our own professional opinion, substantiated by the findings of this study, and have not been influenced in any way.

Written by:

Brittany Semmler

Ecologist

Reviewed by:

Casey Little

Sr. Ecologist | Certified ISA Arborist

11 References

City of Ottawa. (2019, May). Tree Protection Specification. Retrieved from https://documents.ottawa.ca/sites/documents/files/tree_protection_specification_en.pdf

City of Ottawa. (2020). *Tree Protection (By-law No. 2020-340).* Retrieved 2023, from City of Ottawa: https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/laws-z/tree-protection-law-no-2020-340#section-695bd9df-6cab-4f74-88c2-8c03f3a2bb71

City of Ottawa. (2021). *Official Plan.* Retrieved from https://ehq-production-canada.s3.ca-central-1.amazonaws.com/559108490863e6ce9c3e31244ae48a4d27d5c119/original/1637858898/0138e612a15e0db56f65bd069274f425_Volume_1_-_Consolidated_Package_-_November_24__2021_%281%29.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Am

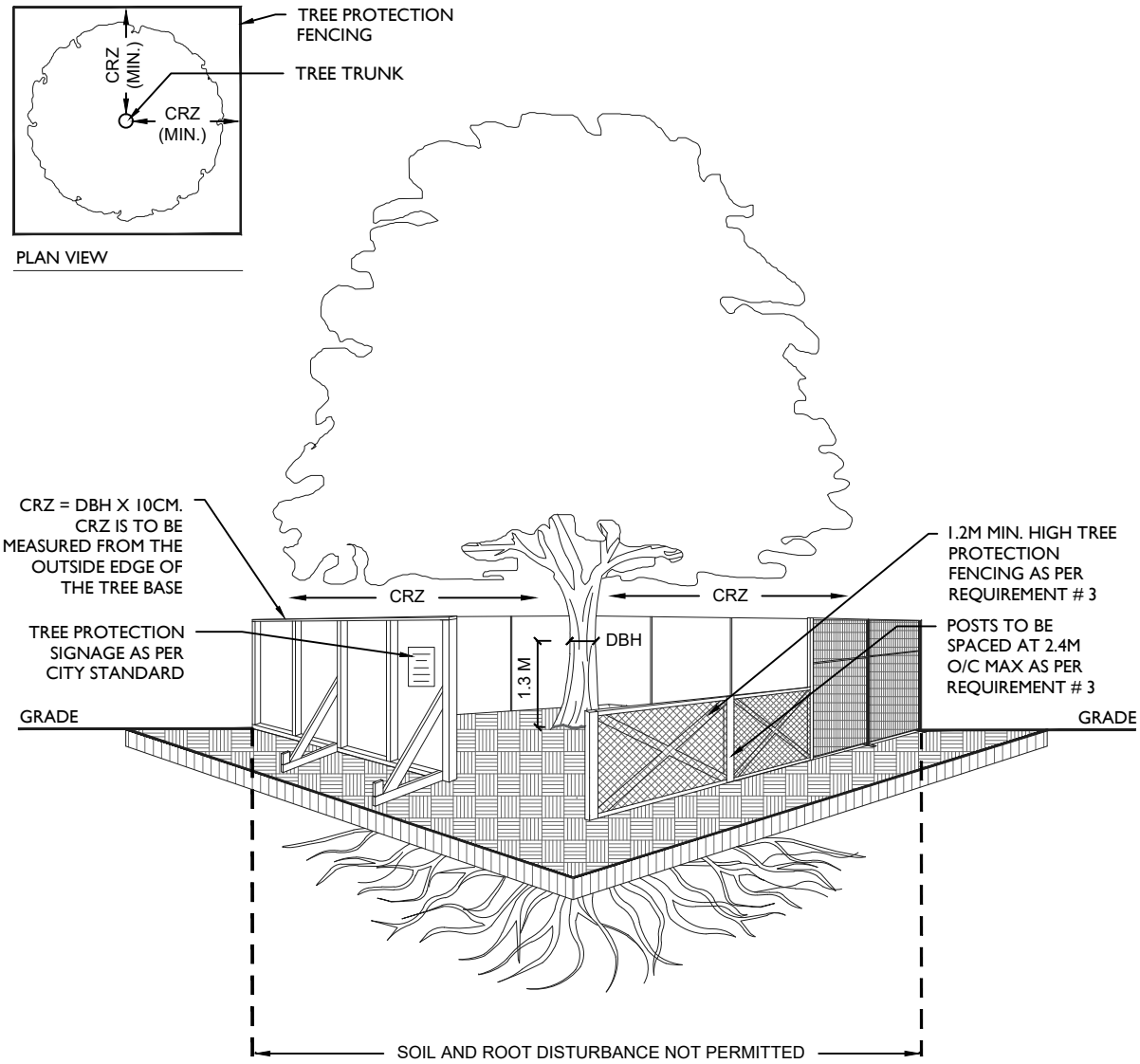
City of Ottawa. (2025). Retrieved from geoOttawa Webmap Portal. Retrieved from https://maps.ottawa.ca/geoottawa/

City of Ottawa. (2023). *Tree Conservation Report Guidelines.* Retrieved from City of Ottawa: https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/laws-z/tree-protection-law-no-2020-340#section-6b36ffbc-e9d2-4d08-b9bb-d68407d47af8

Government of Ontario. (2022, July). *Butternut*. Retrieved from Government of Ontario: https://www.ontario.ca/page/butternut-species-risk

Ministry of the Environment, Conservation and Parks. (2021, December). *Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the Endangered Species Act, 2007.* Retrieved 2023, from Government of Ontario: https://files.ontario.ca/mecp-butternut-assessment-guidelines-en-2022-03-02.pdf

APPENDIX A –
City of Ottawa Tree Specifications



TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
   - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
   - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
   - DO NOT RAISE OR LOWER THE EXISTING GRADE;
   - TUNNEL OR BORE WHEN DIGGING;
   - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
   - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
   - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

Ottawa

TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE:	NTS
DATE:	MARCH 2021
DRAWING NO.:	1 of 1