Tree Conservation Report

675 Borbridge Avenue, Ottawa, ON

2025-03-10

Report

KILGOUR & ASSOCIATES LTD.
www.kilgourassociates.com

Project Number: EXP 1712.1

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1.0 INTRODUCTION

This Tree Conservation Report (TCR) was prepared by Kilgour & Associates Ltd. (KAL) on behalf of the Le Conseil des Ecole's Catholiques du Centre-Est (CECCE)'s in support of the Phase 1 tree clearing at 675 Borbridge Avenue in Ottawa, ON for the future development of the Riverside South Catholic Secondary school (Figure 1). This project includes a phased approach to tree clearing to facilitate construction timelines and includes the removal of trees that need to be cleared to support the development, including the school footprint, parking lot, and courtyard.

For this report, and consistent with City of Ottawa guidance documents, a "tree" is defined as any species of woody perennial plant, including its root system, which has reached or can reach a minimum height of at least 450 cm at physiological maturity. The critical root zone (CRZ) is the extent of a tree's root system and is calculated as diameter at breast height (DBH) x 10 cm. The removal of trees on the Site cannot occur until written approval of the TCR has been granted through a tree permit as per the City of Ottawa's Tree Protection By-law. The approval of the TCR will come in the form of a letter (the tree permit) from the General Manager[1] with conditions specific to the Site, tree retention, and associated tree protection and tree removal. The approved TCR is a requirement for the approval of the Phase 1 tree clearing. A copy of the report must be available on the Site during tree removal, grading, construction, or any other site alteration activities, and for the duration of any on Site works.

2.0 PROPERTY INFORMATION

The Site, consisting of a single lot, is to be developed with CECCE's new Riverside South catholic secondary school. This report addresses trees located directly on the Site. The Site is currently forested. Forest cover in the Phase 1 area is primarily early successional regrowth (<25 years old) on former agricultural land. The Site directly abuts local or arterial roads as well as residential development on all sides.

2.1 Property Owner/ Applicant and Arborist Contact Information

Table 1 Contact information for the property owner/ applicant and arborist

Organization	Role	Contact Person	Phone Number	Email Address
Center East Catholic School Council (CECCE) 4000 Labelle St., Ottawa, ON K1J 1A1	Proponent	Jacques Lavictoire	-	lavicj@ecolecatholique.ca
Kilgour & Associates Ltd. 2285-C St. Laurent Blvd., Unit 16, Ottawa, ON, K1G 4Z6	Arborist	Kesia Miyashita, Senior Biologist	(613) 367 5546	kmiyashita@kilgourassociates.com
Kilgour & Associates Ltd. 2285-C St. Laurent Blvd., Unit 16, Ottawa, ON, K1G 4Z6	Arborist	Anthony Francis, Senior Ecologist	(613) 367-5556	afrancis@kilgourassociates.com

[1] General Manager of the Public Works & Environmental Services Department or the General Manager of the Planning, Infrastructure and Economic Development Department of the City of Ottawa, or their designate.

2.2 Qualifications of Arborists

Kesia Miyashita, MSc, P.Biol. is a biologist with fifteen years of experience, including 10 years of experience in environmental consulting and extensive field experience in ecosystems in Ontario, Alberta, and British Columbia. During her career in environmental consulting, Kesia has completed environmental assessments for a variety of major infrastructure projects and urban developments. Her expertise is in vascular and non-vascular plant ecology, with experience in both terrestrial and wetland ecosystems; she has performed vegetation community inventories, tree surveys, rare plant surveys and invasive weed surveys in a variety of natural environments, including native forest, urban nature preserves, grasslands, and wetlands. Prior to joining Kilgour & Associates Ltd. in May 2021, Kesia was employed with the Canadian Wildlife Service, where she contributed to policies and guidance documents related to the interface between the Species at Risk Act and the Impact Assessment Act and developed a strong understanding of key pieces of federal legislation. Kesia is a Professional Biologist with the Alberta Society of Professional Biologists and a Qualified Wetland Science Practitioner in the province of Alberta.

Anthony Francis (Ph.D.) is a Senior Ecologist with >20 years of consulting experience to both government agencies and private industry. He has worked on a diversity of projects relating to species at risk (SAR), invasive species, terrestrial and aquatic habitat, environmental effects monitoring and mitigation, and fate/effects of contaminants. Within each of these subject areas, Dr. Francis has completed projects addressing specific site concerns and broader policy initiatives. Dr. Francis' academic background is in spatial ecology with a focus on tree species diversity. As a Senior Ecologist at KAL, he regularly completes TCRs, Environmental Impact Statements, and Integrated Environmental Reviews for land development projects throughout Ottawa and eastern Ontario. He is also a certified Butternut Health Assessor (BHA #104).

3.0 EXISTING CONDITIONS

3.1 Tree Inventory

A review of trees on the Site was performed on August 8, 2024. While individual trees were not generally enumerated, the full site was surveyed following meandering transects situated within natural landcover units (i.e. Ecological Land Classification (ELC) units). During the survey, tree species (percent species composition), size distributions (average diameter at breast height), and the general health and condition of trees with a DBH ≥ 10 cm were noted. This area was also characterized through an Ecological Land Classification (ELC). Notable trees (i.e. those of listed species at risk, unusual size or uncommon presence of the area, or having a significant potential to support wildlife relative to other trees in the area) on the Site were identified, enumerated, mapped, their DBH measured, and their general health and condition documented. Three notable trees, with a DBH > 50 cm (Figure 1), were documented within the Phase 1 cutting area.

The trees located within the Phase 1 cut area were grouped within the ELC ecosites in which the trees occurred.

Trees documented on the west side of the Site occur within an early successional area of **Fresh-Moist Lowland Deciduous Forest (FODM7-2)**. Most trees here are <25 years old, but with a few older individuals located along the edges of the site's former farm fields. The canopy within this community is dominated by Green Ash (*Fraxinus pennsylvanica*) and Silver Maple (A*cer saccharinum*; approximately 35% each),

with lesser amounts of Manitoba Maple (*Acer negundo*; approximately 15%), American Elm (*Ulmus americana*; approximately 10%), White Ash (F*raxinus americana*; approximately 5%), and Red Maple (*Acer rubrum*; trace amounts). Trees were generally observed to be in good health, with less than 15% deficiencies noted on the trunks and canopies; occasional trees were noted to be in fair condition, with 15-40% deficiencies noted in the canopy.

Average DBH measurements for trees within this community were approximately 20 cm. Green Ash DBH measurements ranged from 12-20 cm, while Silver Maple DBH measurements ranged from 17-56 cm. Manitoba Maple and American Elm were generally smaller, with DBH measurements of 14 cm for Manitoba Maple and a range of 15-25 cm for both American Elm and White Ash.

The eastern portion of the Site is characteristic of a mature **Fresh-Moist Oak-Maple Deciduous Forest (FODM9-2)**. Trees in this area are generally larger than those in the FODM7-2 community described above. The canopy within this community is dominated by Silver Maple (approximately 65%), with Basswood (*Tilia americana*; approximately 15%), American Elm (approximately 10%), and Bur Oak (*Quercus macrocarpa*; approximately 10%). Trees were generally observed to be in good health, with less than 15% deficiencies noted on trunks and canopies.

Average DBH measurements for trees within this community were approximately 30 cm. Silver Maple measurements ranged from 23-55 cm, and basswood DBH measurements ranged from 10-15 cm. American Elm and Bur Oak DBH measurements ranged from 15-25 cm.

Legend

- Butternut
- Black Ash
- Notable Trees
- Butternut 25 m Buffer
- Black Ash 30 m Buffer

ELC

- FODM7-2
- FODM9-2
- Phase 1 Tree Cutting Area
- Study Area

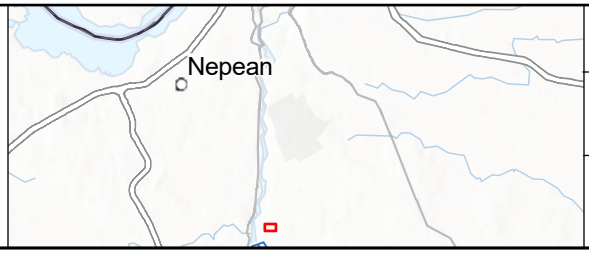

Figure 1.

0 25 50 100 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: EXP 1712
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3.2 Ecological Significance of Trees on Site

No federally or provincially significant tree species (i.e., those listed under the *Species at Risk Act* (SARA), the *Endangered Species Act* (ESA), or those tracked on the Natural Heritage Information Centre (MNRF, 2023) are present within or adjacent to the Phase 1 tree clearing area.

Given their urban context, the trees on the Site likely play a role in the regulation of relative humidity, sequestration of carbon and removal of pollutants, wind-shielding, shading and reduction of urban heat island effects, and filtration of dust, noise, and light pollution. They also provide some habitat structure in the surrounding urban landscape. However, the trees on the Site likely only provide habitat for common bird and small mammal species in the Ottawa area and not species of significance (i.e., species that are at risk, rare, or provincially or federally significant).

3.3 Other Natural Environment Elements

3.3.1 Surface Water Features

There is an isolated remnant drainage channel present on site (Figure 2). The feature does not connect to watercourses off Site. It functions as a land depression that likely captures water during heavy rainfall events and spring freshet. This mapped surface water feature will be impacted by the proposed tree clearing work described in this report.

Figure 2 Photograph showing the remnant drainage channel present within the Phase 1 tree clearing area. Taken on August 28, 2024

3.3.2 Steep Slopes

No steep slopes occur on or near the Site.

3.3.3 Valued Woodlots

The Site does not contain any woodlots designated as Urban Natural Features or Natural Environment Areas, areas evaluated in the *City of Ottawa Urban Natural Areas Environmental Evaluation Study* (UNAEES; Muncaster Environmental Planning Inc. and Brunton Consulting Services, 2005), or other areas that meet the criteria used in the UNAEES.

3.3.4 Significant Woodlands

The Site does not contain any significant woodlands per *Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment* (City of Ottawa, 2022).

3.3.5 High Quality Specimen Trees

There are three notable trees (> 50 cm DBH) within the Phase 1 development area to be removed (Figure 3). As future proposed development of the Site will necessitate the removal of all trees on the northwest corner of the Site within the Phase 1 work area, these trees would be removed in the near future regardless. No Pileated Woodpecker holes were observed in any of the high-quality trees within or adjacent to the Phase 1 tree clearing area.

3.3.6 Hazardous Trees

A formal risk assessment for hazardous trees (e.g., Tree Risk Assessment) was not completed for the Site, however, it is not expected that the retained trees on adjacent properties will pose a hazard.

3.3.7 Unique Ecological Features

The Site does not contain any riparian woodlots, rare communities, or other unique ecological features not already addressed in this document.

3.3.8 Species at Risk

No listed species subject to protection under Ontario's *Endangered Species Act* (ESA) were identified within, or in proximity to, the Phase 1 tree clearing area.

Three Butternut trees are present on the Site (Figure 1) and are subject to protection under the ESA. All areas within 25 m of those trees constitute their ESA-protected habitat. All three trees, however, are more than 25 m from the proposed cutting area.

There are numerous Black Ash (*Fraxinus nigra*) saplings (<8 cm DBH) on the east side of the site and a single Black Ash sapling located within the Phase 1 tree clearing area boundary. However, Black Ash saplings less than 8 cm DBH and less than 1.37 m in height do not meet the size requirements for protection under the ESA. One Black Ash tree (12 cm DBH; Figure 1) near the eastern property boundary

is subject to protection under the ESA, along with the 30 m space around it. This tree, however, is more than 30 m from the Phase 1 cut area.

4.0 PROPOSED DEVELOPMENT

The proposed development for the Site will support a new Catholic secondary school. The Site development is proposed to eventually include the main school building, portables, a basketball court, and one large soccer field surrounded by a track (Figure 3). This TCR is intended to support the first phase of site development, which will include preparatory ground works to allow for the construction of the main building and its immediate surround.

Further works for other elements of school infrastructure will ultimately be required on other portions of the site (Figure 3). Tree clearing to support the development of such additional elements will proceed through subsequent project phases following further review of tree retention options. All trees outside of the Phase 1 area, however, will be retained for now.

All trees within the Phase 1 tree removal area will be removed. All trees to be removed are located fully on the subject property and are owned by the proponent; none are partially (e.g. boundary trees) or wholly owned by the City or any other neighbouring landowners. Trees outside of the Phase 1 clearing area will be retained, particularly in areas of the Site that will be preserved.

With the implementation of mitigation measures identified in Section 5.0 below, no trees other than those specified for removal will be adversely affected by the proposed works.

Legend

Trees

- Removed
- Retained
- Planted
- Butternut
- Black Ash
- Butternut 25 m Buffer
- Black Ash 30 m Buffer
- Phase 1 Tree Cutting Area
- Study Area

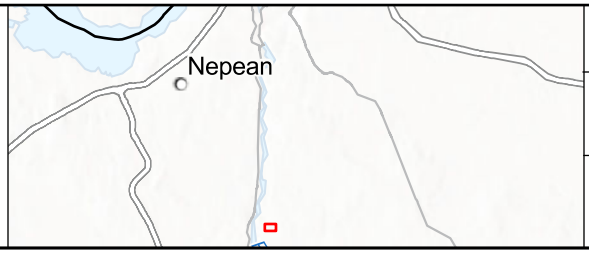

Figure 3. Proposed Development and Conserved Vegetation

0 25 50 100 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: EXP 1712
Map File Name: EXP 1712
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5.0 MITIGATION MEASURES

5.1 Site Preparation and Construction

To effectively minimize the impacts on the site trees, the following mitigation measures must be applied during site preparation and tree clearing: (City of Ottawa, 2015, 2020)

- Tree removal will be limited to those occurring fully in the Phase 1 area.
- Tree and vegetation clearing will not take place during sensitive times of the year for wildlife (breeding season; early spring throughout summer) unless mitigation measures are implemented and/or the habitat has been inspected by a qualified biologist.
    - The *Migratory Birds Convention Act*, 1994 protects the nests and young of migratory breeding birds in Canada. No clearing of vegetation shall occur during the breeding bird window (April 15 and August 15) to prevent impacts to birds. Combining the breeding bird window with the bat roosting season (May to September; MNRF, 2017), no clearing of vegetation shall occur between April 15 and September 30 inclusive to prevent impacts to both birds and bats. If vegetation clearing is to occur between April 1 and 15, a pre-clearing survey for active stick nests and cavity nests must be conducted to identify and protect early-nesting owls and raptors.
- To minimize impacts to remaining trees during tree clearing:
    - The Phase 1 tree clearing boundary must be flagged and staked so that it is highly visible to ensure that no trees outside of this area are impacted by the tree clearing;
    - Do not place any material or equipment within the CRZ of trees to be retained unless otherwise approved;
    - Do not attach any signs, notices, or posters to any retained trees unless otherwise approved;
    - Do not raise or lower the existing grade within the CRZ of retained trees unless otherwise approved;
    - Do not extend any hard surface or significantly change landscaping within the CRZ of retained trees unless otherwise approved;
    - Do not damage the root system, trunk, or branches of any remaining trees unless otherwise approved;
    - Ensure that exhaust fumes from equipment are not directed towards any tree's canopy.

5.2 Tree Planting Recommendations

Per the City of Ottawa Tree Protection By-Law (No. 2020-340), compensatory tree planting should be determined through the development review process. Replacement tree planting should be on the same property in the vicinity of the work area.

The entire Site is generally forested with near-100% canopy cover. Future Site development will result in the replacement of the forested area, particularly within the Phase 1 tree clearing area with the school footprint, parking lot, courtyard, space for future portable classrooms, and a basketball court resulting in land uses with a lower canopy coverage. The loss in canopy cover, however, will be mitigated by tree planting where feasible within the Phase 1 area (Figure 3).

Trees planted in compensation on the site must be non-invasive species and must be a minimum of 50 mm in diameter measured no less than 15 cm above ground level for deciduous trees, and no less than 200 cm in height as measured from ground level to midway between the tip of the leader and the uppermost whorl, or as otherwise approved by the General Manager. As space is limited, we recommend planting mostly smaller trees such as:

- Alternate-leaved Dogwood – *Cornus alternifolia*
- Blue-beech – *Carpinus caroliniana*
- Hawthorn – *Crataegus chrysocarpa, C. flabellata* or *C. submollis*
- Pin Cherry – *Prunus pensylvanica*
- Serviceberry – *Amelanchier arborea*
- White Cedar – *Thuja occidentalis*

Larger trees should still incorporate where feasible including species such as:

- Bur Oak – *Quercus macrocarpa*
- Freeman's Maple – *Acer freemanii*
- White Birch – *Betula papyrifera*
- Black Cherry – *Prunus serotina*
- White Spruce – *Picea glauca*

6.0 CLOSURE

This report was prepared for exclusive use by CECCE and/or their authorized agents, and may be distributed only by CECCE. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.

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7.0 LITERATURE CITED

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Appendix A Notable Tree Inventory

TREE #	Species Name	Number of Stems	DBH (cm)	Trunk Health	Canopy Health	Decay Class	Evidence of Pileated Woodpecker	Evidence of EAB	Location	Owned By	Fate
T 1	Red Maple	2	50	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462849.86 ft E 16445545.98 ft N	Proponent	Retained
T 3	Silver Maple	1	56	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462288 ft E 16445186.22 ft N 286.42 ft	Proponent	Removed
T 11	Silver Maple	2	55	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462628.49 ft E 16445043.28 ft N 288.39 ft	Proponent	Removed
T 13	Silver Maple	6	58	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462699.26 ft E 16445444.22 ft N 313.29 ft	Proponent	Retained
T 14	Large-tooth Aspen	1	59	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462785.78 ft E 16445388.15 ft N 310.55 ft	Proponent	Retained
T 15	Silver Maple	1	62	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462844.2 ft E 16445350.1 ft N 352.17 ft	Proponent	Retained
T 16	Silver Maple	3	56	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462848.86 ft E 16445339.78 ft N 329.06 ft	Proponent	Retained

TREE #	Species Name	Number of Stems	DBH (cm)	Trunk Health	Canopy Health	Decay Class	Evidence of Pileated Woodpecker	Evidence of EAB	Location	Owned By	Fate
T 17	Bur Oak	1	79	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462793.54 ft E 16445238.88 ft N 353.67 ft	Proponent	Retained
T 18	Silver Maple	1	57	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462838.58 ft E 16444976.05 ft N 317.51 ft	Proponent	Retained
T 19	Silver Maple	2	56	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462812.72 ft E 16444948.87 ft N 338.21 ft	Proponent	Retained
T 20	Silver Maple	6	75	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462733.27 ft E 16444925.47 ft N 347.12 ft	Proponent	Retained
T 21	Silver Maple	1	52	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462647.23 ft E 16445036.91 ft N 302.08 ft	Proponent	Removed
T 22	Silver Maple	1	62	Good: tree displays less than 15% deficiency	Good: tree displays less than 15% deficiency	1: Healthy Live tree	No	No	18N, 1462697.77 ft E 16445229.43 ft N 331.94 ft	Proponent	Retained