February 2, 2026

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Re: Pileated Woodpecker cavity assessment, 500 & 508 Edgeworth Avenue, Ottawa

1 Background

Blazing Star Environmental (BSE) was retained by Fotenn to collaboratively support a proposed development project by providing technical and field expertise to conduct a survey for Pileated Woodpecker (*Dryocopus pileatus*) cavity nests in trees associated with 500 and 508 Edgeworth Avenue, Ottawa ("the Site"; Figure 1). The Site consists of two single-home residential properties that are privately owned. Adjacent land to the west is owned by the National Capital Commission (NCC). The Site is proposed for conversion to a condominium tower; development plans are subject to review and approval by the City of Ottawa with additional oversight by the NCC.

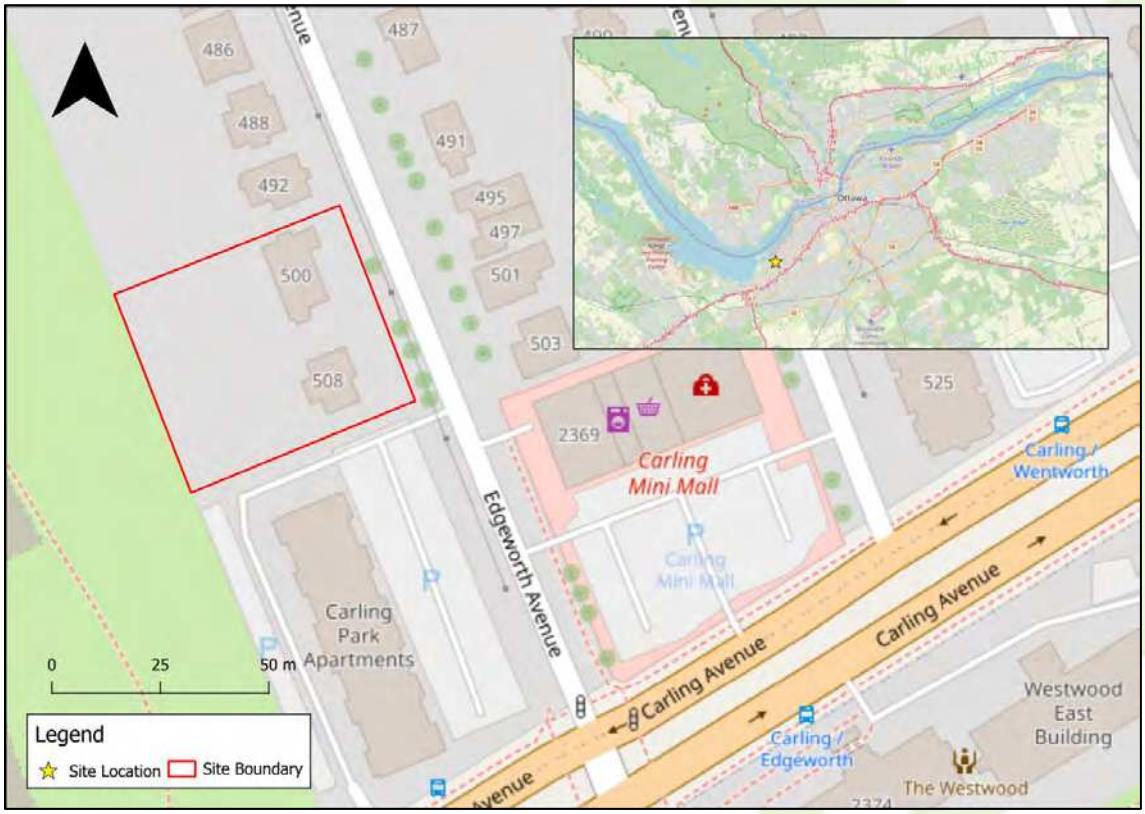

Figure 1: Map showing the location of the Site

The Tree Conservation Report prepared for the Site identified three trees with "woodpecker holes" (Dendron Forestry Services, 2025). These trees along with all other trees on the Site would need to be removed to support the proposed development. Given that cavity nests of Pileated Woodpecker are protected under Schedule 1 of the *Migratory Birds Regulations* (Environment and Climate Change Canada (ECCC), 2022), these observations triggered the need for surveys to assess whether the holes may be protected.

1.1 Pileated Woodpecker nest protection

The *Migratory Birds Regulations* provide year-round nest protection for Pileated Woodpecker until nest cavities can be deemed abandoned (ECCC, 2022). While Pileated Woodpecker itself is not a migratory bird species, its abandoned nest cavities are often used by federally protected migratory birds, such as Northern Saw-whet Owl (*Aegolius acadicus*) and Wood Duck (*Aix sponsa*; Rasmussen et al., 2008; Conner et al., 2001). If a cavity nest of Pileated Woodpecker has not been occupied by a migratory bird for 36 months, it is considered to be abandoned and no longer has high conservation value for migratory birds (ECCC, 2022).

If there is a need to damage, destroy, or remove a Pileated Woodpecker nest cavity, this can be done when:

- A notice regarding the unoccupied nest has been received by ECCC, and
- The nest has remained unoccupied by a migratory bird for 36 months from the time the notice is received by ECCC.

If the 36-month waiting period cannot be accommodated, a permit may be granted to damage, destroy, or remove the Pileated Woodpecker cavity nest, so long as appropriate due diligence and mitigation measures have been taken (ECCC, 2023a).

2 Methods

BSE (Katherine Black, Senior Ecologist) and Fotenn (Alex Zeller, Senior Ecologist) visited the Site during the morning of January 22, 2026, accompanied by the arborist that conducted the Tree Conservation Report for the Site (Astrid Nielsen, Dendron Forestry Services). Tree information previously compiled for the Tree Conservation Report was used to inform the field assessment (i.e., tree location, diameter at breast height (DBH), tree species, previously observed woodpecker activity, etc.). All trees on the Site were visually scanned with binoculars to search for signs of woodpecker activity. The location and characteristics of woodpecker cavities were noted and photographed.

Determination of Pileated Woodpecker nesting cavities was based on guidelines developed by ECCC (2023b) for cavity size, quantity, shape, edge texture, and height on the tree, along with the tree species, size (i.e., DBH), and condition (Table 1).

Table 1: Summary of Pileated Woodpecker cavities. Adapted from ECCC (2023b).

Characteristics	Nesting cavity	Roosting cavity	Foraging cavity
Number of holes	1	>1	>1
Edge texture	Smooth	Smooth	Rough
Hole shape	Round or teardrop	Oval	Irregular
Hole size	~9 cm wide ~12 cm high	7.5-10 cm wide 10-12.5 cm high	Variable
Cavity depth	75 cm	430 cm	5 to 20 cm
Cavity height above ground	6-15 m	4-20 m	0.5-10 m
Tree condition	Solid, with heart rot	Hollow	Dead and decaying
Tree DBH	≥40 cm	≥35 cm	≥25 cm

3 Results

Trees on the Site with cavities and/or signs of woodpecker activity are summarized below (Table 2).

Table 2: Summary of trees with potential woodpecker activity

Tree number*	Tree species	Ownership*	Tree DBH (cm)*	Tree condition*	Cavity height above ground	Cavity characteristics	Notes	Candidate Pileated Woodpecker Nest Cavity Present	Corresponding photo(s) in Appendix
3	Sugar Maple (*Acer saccharum*)	Private (the Site)	57	Fair	~10 m	• Number of holes: multiple • Edge-texture: smooth • Hole shape: irregular	Resulting from tree wounds, not woodpecker activity	No	N/A
4	Bur Oak (*Quercus macrocarpa*)	City of Ottawa	54	Fair/poor	~8 m	• Number of holes: multiple • Edge texture: rough • Hole shape: round	Woodpecker foraging cavities, species unknown	No	Photo 1
16	**Sugar Maple (*Acer saccharum*)**	**Private (the Site)**	**120**	**Fair/poor; multi-stemmed**	**~7 m**	**South stem:** **• Number of holes: one** **• Edge texture: smooth** **• Hole shape: round**	**Potential Pileated Woodpecker nesting cavity on south stem; potential Pileated Woodpecker**	**Yes**	**Photos 2-3**

Tree number*	Tree species	Ownership*	Tree DBH (cm)*	Tree condition*	Cavity height above ground	Cavity characteristics	Notes	Candidate Pileated Woodpecker Nest Cavity Present	Corresponding photo(s) in Appendix
						East stem: • Number of holes: multiple • Edge texture: rough • Hole shape: oval	foraging cavities on east stem		
30	Oakleaf Mountain Ash *(Sorbus thuringiaca*)	NCC	26	Poor	~4-6m	• Horizontal, orderly rows of multiple small holes	Yellow-bellied Sapsucker (*Sphyrapicus varius*) foraging holes	No	Photo 4
N/A – Hydro pole	N/A – Hydro pole	City of Ottawa	N/A	N/A	~1 m	• Number of holes: one • Edge texture: rough • Hole shape: oval	Potential Pileated Woodpecker foraging cavity	No	Photo 5

*Per the Tree Conservation Report for the Site (Dendron Forestry Services, 2025). Please refer to the Tree Conservation Report for tree locations.

4 Interpretation

While the residential setting of the Site does not reflect the typical habitat context associated with Pileated Woodpecker in the region, where the species is most often found in mature deciduous or mixed forest (Naylor et al., 1996), habitat context alone does not preclude presence. The single large cavity observed on the southern stem of Tree #16 exhibits characteristics consistent with a Pileated Woodpecker nesting cavity. In addition, the condition of Tree #16 (rated fair to poor per the Tree Conservation Report), its decay class (Class 2), and its diameter at breast height align with typical trees commonly selected by Pileated Woodpecker for cavity excavation (Bush et al., 2009). Potential use by Pileated Woodpecker is further supported by the presence of large foraging cavities elsewhere on the Site, including on Tree #16 itself.

5 Recommendations

Based on the available information, the Site, and particularly Tree #16, should be treated conservatively as potential nesting habitat for Pileated Woodpecker. Accordingly, it is recommended that the project proceed on the assumption that the *Migratory Birds Regulations* may apply until additional due diligence is completed to further assess nesting potential.

Potential approaches to refining or ruling out Pileated Woodpecker nesting use include the following:

1. **Detailed cavity inspection:**
   Undertake a closer assessment of the suspected cavity to determine whether the entrance leads to a chamber of sufficient depth and configuration to support Pileated Woodpecker nesting. This assessment could be completed at any time of year, subject to appropriate health and safety considerations for working at heights. Methods may include direct visual inspection and measurement or the use of a pole-mounted or lowered camera.
2. **Targeted breeding season surveys**:
   Conduct species-specific surveys during the breeding and nesting period (typically April–June) to assess Pileated Woodpecker presence or non-detection at the Site. Surveys should follow standard breeding bird survey protocols and include repeat visits, where appropriate, to account for detectability.

A staged approach is recommended, with the need for breeding season surveys informed by the outcome of a detailed cavity inspection. The cavity inspection should be prioritized, as confirmation that the cavity lacks a viable nesting chamber would effectively rule out Pileated Woodpecker nesting potential and eliminate the need for breeding season surveys. Conversely, if the cavity inspection confirms that the cavity exhibits characteristics suitable for nesting by Pileated Woodpecker, breeding season surveys would be required to assess use versus non-use. Non-use should be demonstrated through the absence of nesting activity over three consecutive breeding seasons to satisfy the 36-month waiting period (ECCC, 2023a).

6 Closure

We trust that this technical memorandum meets your needs. If you have questions or require additional information, please contact the undersigned.

Sincerely,

X

Katherine Black
Senior Ecologist

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Cayla Darling
Ecologist

Reviewed by:

X

Alex Zeller
Senior Ecologist, Fotenn

7 References

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8 Appendix: Photos

Photo 1: Tree #4 (Bur Oak) on City of Ottawa property with woodpecker foraging cavities (species unknown)

Photo 2: Tree #16 (Sugar Maple) on the Site with potential Pileated Woodpecker nest cavity

Photo 3: Tree #16 (Sugar Maple) on the Site with potential Pileated Woodpecker foraging cavities

Photo 4: Tree #30 (Oakleaf Mountain Ash) on NCC property with Yellow-bellied Sapsucker foraging holes

Photo 5: Hydro pole on City of Ottawa property with potential Pileated Woodpecker foraging cavity