

Tim-O-Tree

2441 Ogilvie Rd.

Ottawa ON K1J7N3

timotreeot@gmail.com



Tree Retention Plan:

61 Pinehurst

Background

The client wishes to develop 61 Pinehurst Avenue, demolishing the current building and erecting a new, larger dwelling in its place. The development could impact several trees on the property as well as adjacent properties.

Summary

Tree	Diameter at Breast height (DBH)	Ownership ¹	Condition ²	Recommendation ³
1. Black maple (<i>Acer nigrum</i>)	70cm	Municipal	Good	Retain

¹ All claims to ownership made in this report are based on the most recent draft of the site plan, which is provided by the client, as well as on-site observations.

² Tree condition is rated on a three-point scale, with each scale rated as follows: Poor—the tree is dead, dying, or poses a hazard; Fair—the tree is vigorous, but has some significant stressors or risk factors; Good—the tree is vigorous and does not have significant stressors or risk factors.

³ For the purposes of this report, “recommendation” is the best course of action, based on an assessment of the tree and consideration of good arboricultural practices. It does not necessarily denote contingencies for a construction project’s approval or completion.

2. Norway maple (<i>Acer platanoides</i>)	46cm	Private: 61 Pinehurst	Good	Retain
3. Norway Maple (<i>Acer platanoides</i>)	38cm	Private: 61 Pinehurst	Good	Remove
4. Norway Maple (<i>Acer platanoides</i>)	32cm	Private: 63 Pinehurst	Fair	Retain; erect fencing around part of CRZ
5. Norway Maple (<i>Acer platanoides</i>)	38cm	Private: 63 Pinehurst	Good	Retain; some root pruning

Tree 1: Municipal Black Maple

There is a black maple in the front yard of 61 Pinehurst. The site plan indicates that the tree is wholly owned by the city. The tree measures 70cm in diameter at breast height (DBH). According to the City of Ottawa's guidelines⁴⁵, the critical root zone (CRZ)⁶ of this tree measures 700cm.

The tree is in good condition, with a full canopy and no evident dieback. The tree has a strong trunk flare, and a sound structure with no evidence of included bark. One of the branches has a poor aspect ratio with the trunk, but the union doesn't look like it poses a hazard. Most pruning cuts are completely occluded, indicating good vigour and compartmentalization. There were no evident fruiting bodies or other signs of wood-decaying fungi.

⁴ Tree Protection (By-law No. 2020-340), Part 1 – General, Section 1.

⁵ It should be noted that the above is not consistent with ISA guidelines as it does not account for tree species or tree age. Tree species differ in their tolerance of root pruning. Tree age impacts resilience to root pruning and other stressors; mature trees are less vigorous and therefore less able to recover from construction damage and other stressors. For more information, see Kelby Fete and E. Thomas Smiley. *Managing Trees During Construction: Part 1*. Pg. 61.

⁶ Critical root zone is measured as radius from the trunk.

According to the site plan, the foundation of the new building will be no closer to the tree than the current building (about 400cm). Even though excavation will be occurring within the CRZ as calculated based on trunk girth, realistically there are no roots past the outside of the foundation. Therefore, construction of a new foundation at the same distance from the tree as the current foundation will most likely not require root pruning.



Tree 2 & 3: Norway Maples

There is a Norway maple in the back yard of 61 Pinehurst, next to the eastern edge of the property. It measures 46cm DBH⁷, meaning the critical root zone CRZ) measures 460cm.

The tree is in fair condition. It has a full canopy with few dead branches. It has multiple stems, some with included bark, but no signs of rot or tearing in these unions. The largest codominant stem has an included union with the trunk, but this inclusion is beginning to occlude via inosculation and this occlusion may progress, mitigating the mechanical weakness of the inclusion. The roots of the tree are likely girdled by the tree pressed up against its trunk, which reduces the structural stability of the buttress roots, but not enough to pose a significant hazard. There are two clothesline wheels embedded within the tree, at least one of which is too far gone to retrieve. While this poses a stress for the tree and interferes with potential occlusion of an included union, they do pose enough of a stress to the tree to affect its viability.

The smaller of the two trees measures 38cm DBH, meaning its CRZ is 380cm. The tree is in good condition, with a full canopy, a dominant central trunk and no signs of fungal infection. The tree's root structure is likely impeded by the presence of the adjacent Norway maple, but this does not pose a significant risk.

According to the site plan, at its closest, the foundation will be about 690cm from the trunks of these trees. That is well outside the CRZs of both trees.

⁷ The trunk of this tree is pressed up against the trunk of another Norway maple, but no inosculation between the two stems is evident, so they are most likely two separate trees rather than two stems of a single tree. Therefore, the stems have been measured individually, at 1.2m above the ground, rather than below the union, as with a single tree with multiple stems diverging below 1.2m



Tree 4 & 5: Norway Maples

In the adjacent back yard of 63 Pinehurst, there are three Norway maples. The smallest of these trees measures 24cm DBH and is therefore not distinctive. The middle tree measures 32cm, meaning its CRZ measures 320cm. The tree farthest to the south (right in photo below) measures 38cm, meaning its CRZ is 380cm.

The excavation, at its closest, will be well outside the CRZs of these trees. No root pruning will be necessary.



Fencing

All distinctive trees described above require protective fences to be erected around their CRZs for the duration of construction. Construction activities—such as excavation, use of heavy machinery, storage of tools and/or supplies—are not permitted within the CRZs⁸. The fencing

⁸ Technically, there will be excavation within the CRZ (700cm from trunk) of the municipal black maple in the front yard. However, realistically there are no roots present in this area as the new foundation will not be any closer to the tree than that of the current house. Therefore, even

must be constructed in accordance with Section 74 of the Tree Protection Bylaw as well as the Tree Protection Specification.

Conclusion

In reviewing the site plan, measuring the trees on and surrounding the lot, and considering industry-standard arboricultural practices, I feel that it is feasible to proceed with construction as planned without causing undue harm to distinctive trees.



Mason Hanrahan

ISA Certified Arborist, ON-2491A

Owner and President, Tim-O-Tree

though excavation will occur closer than 700cm from the trunk of the tree, this excavation will not involve root pruning.