Tree Conservation Report Half Moon Bay South

February 6, 2019

KILGOUR & ASSOCIATES LTD. www.kilgourassociates.com Project Number: MATT671.4



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1.0 INTRODUCTION

This Tree Conservation Report (TCR) has been written by Kilgour & Associates Ltd. (KAL) on behalf of Mattamy Homes (Mattamy). The area is currently under development as part of the Half Moon Bay South community.

This TCR provides an up-to-date inventory of trees on site and a description of their ecological significance to both the site and the surrounding area following City of Ottawa TCR guidelines (Ottawa, 2018a).

2.0 PROPERTY INFORMATION

The subject property is a lot located at 3718 Greenbank Road, Nepean, ON K2C 3H2 (PIN: 045922110) and is approximately 11 ha. The property is bordered by Des Soldats-Riendeau Street and a residential development to the north, future development lands to the south, Alex Polowin Avenue and residential area to the east, and a former mineral extraction pit to the west.

The property parcel is zoned as Multi-Residential Zone One (MR-1). The purpose of this zone is to recognize lands intended for residential development in the form of townhouses (Ottawa, 2018b).

3.0 SITE TREES AND ENVIRONMENT

3.1 Methodology and Site Context

All trees on site were surveyed by KAL Biologist Rob Hallett during a field visit on January 17, 2019. Mr. Hallett walked the entire lot and identified all trees within the proposed area of development. The norward extension from the west end of the lot is not part of the currently proposed development area and so trees were not specifically reviewed here in detail. No Butternuts however, were observed there.

Properties to the east and north have all recently been developed as new residential communities. The property to the west is a former aggregate pit. That area has also been slated for residential development though by a different developer. It was reviewed by KAL in early December of 2018; no Butternuts were observed there.

The property to the south had consisted of agricultural fields divided by hedgerows until ~2011. By 2014, the parcel had been cleared of all vegetation and most of its topsoil, presumably in preparation of for development. No trees are present there and there appears to have only been very limited regrowth of any vegetation. No significant grass regrowth was apparent there during either the site visit in January, or during previous site visits in late 2018 by KAL biologists for other work in the area.









364200 m

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3.2 Site Trees

No trees of special significance were found within 50 m of the proposed development area. Trees here are located almost entirely with a narrow hedgerow along the south property line. The hedgerow terminates at the east end at a new residential development and, as such, would not serve as a wildlife corridor connecting natural areas. Trees here may provide some limited food and nesting opportunity for small, urban-tolerant species, as well contributing to the overall canopy cover to the area.

Table 1. Results of a tree survey of the property on January 17, 2019.

Tree #	Tree	Diameter at Breast Height (cm)	Notes
1	Green Ash	85	
2	Apple	10	
3	2 Ironwoods	12, 15	
4	4 Manitoba Maples	10, 12, 15, 15	
5	3 Manitoba Maples	10, 10, 10	
6	2 Balsam Poplars	55, 55	
7	3 Manitoba Maples	20, 15, 10	
8	Manitoba Maple	10, 10	
9	Balsam Poplar	55	
10	Balsam Poplar	25	
11	Balsam Poplar	30	
12	Manitoba Maple	10	
13	Trembling Aspen	15	
14	Trembling Aspen	15	
15	Black Walnut	10	
16	Black Walnut	10	
17	Balsam Poplar	15	
18	Balsam Poplar	10	
19	Balsam Poplar	10	
20	Balsam Poplar	10	
21	Balsam Poplar	15	
22	Balsam Poplar	20	
23	Balsam Poplar	10	
24	Balsam Poplar	10	
25	Balsam Poplar	10	
26	Balsam Poplar	10	
27	Balsam Poplar	10	
28	Balsam Poplar	15	
29	Balsam Poplar	10	
30	Balsam Poplar	15	
31	Balsam Poplar	18	
32	Balsam Poplar	10	
33	Balsam Poplar	10	
34	Balsam Poplar	10	
35	Balsam Poplar	15	
36	Balsam Poplar	10	
37	Balsam Poplar	15	
38	Apple	15	
39	Basswood	15	
40	3 Basswoods	10, 10, 15	
41	6 Basswoods	30, 30, 10, 30, 30, 20	
42	Basswood	20	

		Diameter at	Notes		
Tree #	Tree	Breast Height			
		(cm)			
43	4 Basswoods	20, 20, 30, 20	Dead stems		
44	Balsam Poplar	15			
45	Green Ash	15			
46	2 Manitoba	15, 15			
47	Ralsam Poplar	15			
47	Balsam Poplar	10			
40	Balsam Poplar	10			
49 50	Balsam Poplar	10			
51	Balsam Poplar	10			
52	Balsam Poplar	15			
53	Balsam Poplar	15			
54	Bur Oak	100	Dead stems		
55	Manitoha Manle	100			
56	Manitoba Maple	20			
57	Basewood	20			
58	Manitoba Manle	20			
50	2 Manitoba	20			
59	Maples	50, 40			
60	Black Cherry	20			
61	Bur Oak	50			
62	Ironwood	20, 20			
63	Basswood	20			
64	Basswood	20			
65	Manitoba Maple	20			
66	Manitoba Maple	25			
67	Manitoba Maple	20			
68	Manitoba Maple	20			
69	Manitoba Maple	20			
70	Manitoba Maple	30			
71	Manitoba Maple	20			
72	Manitoba Maple	20			
73	Bur Oak	15			
74	Manitoba Maple	10			
75	Bur Oak	20			
76	Bur Oak	15			
77	Manitoba Maple	20			
78	Manitoba Maple	15			
79	Apple	10			
80	Bur Oak	120			
81	Manitoba Maple	10			
82	Basswood	140	Dead stems		
83	Manitoba Maple	20			
84	Bur Oak	55	Frost crack		
85	3 Bur Oaks	35, 20, 10			
86	Manitoba Maple	15			
87	Basswood	15			
88	Bur Oak	180			
89	Manitoba Maple	10			



Tree #	Tree	Diameter at Breast Height (cm)	Notes		Tree #	Tree	Diameter at Breast Height (cm)	Notes
90	3 Manitoba	15 20 10			107	Manitoba Maple	20	
50	Maples	10, 20, 10			108	Manitoba Maple	25	
91	Basswood	15			109	Manitoba Maple	20	
92	Basswood	90			110	Manitoba Maple	15	
93	2 Basswoods	60, 60			111	Manitoba Maple	20	
94	Manitoba Maple	130	Dead main		112	Manitoba Maple	30	Dead crown
95	Black Cherry	15			113	Bur Oak	15	
96	Manitoba Maple	20			114	Manitoba Maple	40	
97	Bur Oak	90			445	3 American	45 40 05	
98	Bur Oak	65			115	Elms	45, 10, 25	
99	Manitoba Maple	20			116	Apple	10	
100	Bur Oak	120	Dead crown		447	Five Manitoba	10, 20, 10, 15,	Dood arourn
101	American Elm	15			117	Maples	10	Dead crown
102	3 Manitoba	20 15 10			118	Manitoba Maple	10	
102	Maples	20, 15, 10			110	Two Manitoba	20.25 Dood grown	Dood grown
103	Manitoba Maple	20			119	Maples	30, 35	Dead crown
104	Manitoba Maple	20			120	Red Maple	140	Crown dying,
105	Manitoba Maple	20			120		140	Cavities
106	Manitoba Maple	20		7				

Table Note: Trees indicated in green (i.e. #1-44) are outside the area proposed for development within this current phase, and will be retained. Trees indicated in red (i.e. #45-120) will be removed to allow for site grading and construction. Retained trees may be removed in future phases of development beyond the scope of this report.

The most dominant species on site was Manitoba maple (*Acer negundo*; 60 individuals) followed by balsam poplar (*Populus balsamifera*; 24 individuals). The range of diameter at breast height across all surveyed trees was 10 cm to 180 cm, though most of the trees area small.

3.3 Site Environmental Features

3.3.1 Wildlife

The nearby lands are unlikely to provide any significant wildlife habitat though common birds and small mammals may nest in adjacent trees.

3.3.2 Species at Risk

A single tree had cavities suitable for birds or bats requiring such nesting space. This one Red Maple was nearly dead and should be removed for safety reasons regardless. Trees on site are not generally expected to provide habitat for protected cavity-nesting species. No other protected species would be expected to use site trees. Surrounding lands do not provide suitable habitat for any other SAR. No Butternuts were observed in the area.

3.3.3 Other Natural Heritage Features

Schedule L shows no potential natural heritage areas within 120 m of the project area. The nearest significant natural feature is the south block of the Cambrian Woods Urban Natural Area, located 450 m to the northwest.



4.0 **PROJECT DESCRIPTION**

The proposed development (Figure 2) will consist of a mix of singe homes and townhomes. The new Greenbank Road alignment is will be located at the western edge of the development area, in the central portion of the lot. Most of the site has already been cleared; remaining site trees on the eastern half of the site, located primarily in a single row along the south boundary, will be removed to accommodate site grading in the winter of 2019. Housing construction will begin in the spring of 2019 and be completed by 2020. The Greenbank Road corridor will also be cleared in prepared for road construction. Areas to the west of the Greenbank Road corridor will be left as-is for the time being. Trees there will be cleared under future phases of development with their removal addressed in Tree Conservation Reports associated with those development phases.







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5.0 IMPACTS AND MITIGATIONS

As no natural areas currently occur on or adjacent to the development area, no natural heritage features will be impacted by site development or will require specific mitigation measures for their protection or preservation. All trees on site will be removed. The limited canopy cover and function provided by these trees can be replace within the new community through trees to be planted as part of a site landscape plan.

Please note that this report does not constitute permission to remove any trees from the site. Removal of trees can only be undertaken upon the issuance of a tree removal permit from the City of Ottawa. This report may be used to support the application for that permit and to advise mitigation measures imposed by the permit. Accordingly, to minimize impacts to the trees on adjacent properties, the following protection measures are indicated as necessary during construction:

- Erect a fence at the CRZ of trees,
- Do not place any material or equipment within the CRZ of the tree (i.e. beyond the fencing);
- Do not attach any signs, notices or posters to any tree;
- Do not raise or lower the existing grade within the CRZ without approval;
- Do not dig within the CRZ of a tree (except for the xxx identified trees);
- Do not damage the root system, trunk or branches of any tree;
- Ensure that exhaust fumes from all equipment are NOT directed towards any tree's canopy.

The *Migratory Bird Convention Act* protects the nests and young of migratory breeding birds in Canada. The City of Ottawa guidelines require no clearing of trees or vegetation between April 1 and August 15, unless a qualified biologist has determined that no nesting is occurring within 5 days prior to the clearing.

Specific trees to be planted on site will be identified in the landscape plan for the development. Trees species identified in this plan should be non-invasive and should be native to the Ottawa area. Landscaping plans should consider species such as White Pine, Basswood, Sugar Maple, White Spruce, Pin Cherry, White Birch, Black Cherry, and White Cedar where conditions may now permit. Burr Oak may be considered where spacing allows for future showcase trees. Common Juniper, Service Berry, and Northern Bush-honeysuckle may be considered as appropriate shrub species. Trees must be planted to a density equivalent to at least one per unit, though the distribution of specific planting locations may be varied from necessarily planting on every lot, as may be dictated by individual lot considerations.



6.0 CLOSURE

This report was prepared for exclusive use by Mattamy and may be distributed only by Mattamy. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.

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Anthony Francis, PhD Project Director

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7.0 REPORT AUTHOR

Dr. Francis is an ecologist with over 18 years of experience in both terrestrial and aquatic projects. His doctoral thesis work on global plant diversity patterns included conducting tree surveys across North America. As a consulting ecologist he has worked on diverse ecological projects including reviews of forestry management and species-at-risk; environmental studies of contaminants (metals and suspended particulates); geomatic and statistical analyses for federal and provincial ministries as well as for private industry; and aquatic and terrestrial species inventories. He has written environmental impact statements and tree conservation reports for development projects across the Ottawa area and has coauthored federal environmental screening assessments for creek realignments and other infrastructure projects across Ontario.

8.0 LITERATURE CITED

- Ottawa, City of. 2018a. Zoning (By-law 2008-250). City of Ottawa By-law, Licenses and permits webpage. Available at: http://ottawa.ca/en/residents/laws-licenses-and-permits/laws/city-ottawa-zoninglaw
- Ottawa, City of. 2018b. geoOttawa. City of Ottawa interactive web mapping application. Available at: http://maps.ottawa.ca/geoottawa/

