

February 5, 2018

Michael Stott Director Urban Design and Landscape Architecture Fotenn Planning + Design 223 McLeod Street Ottawa, ON K2P 0Z8

Re: Tree Conservation Report - 800-900 Bank Street, Ottawa

Dear Michael,

This report details a pre-construction Tree Conservation Report (TCR) for the above-noted property in Ottawa. The need for this report is related to trees protected under the Urban Tree Conservation By-law 2009-200 and the Municipal Trees and Natural Areas Protection By-law 2006-279. Tree conservation reports are required for all site plan control applications on properties where there is a tree of 10 centimetres in diameter or greater. The approval of this TCR by the City of Ottawa and the issuing of a permit by them authorize the removal of approved trees. Importantly, although this report may be used to support the application for a City tree removal permit, it does not by itself constitute permission to remove trees or begin site clearing activities. No such work should occur before a tree removal permit is issued by the City of Ottawa. In particular, permission to remove shared or trees adjacent to the subject property will be required before a tree removal permit is issued.

The inventory and assessment detailed in this report concerns all trees on and directly adjacent to the subject property which could be impacted by the proposed construction. The status of each tree in terms of retention or removal is indicated. Field work for this report was completed on February 2, 2018.

All trees on the subject property are to be removed due to the proposed construction of an 8storey building. Trees located on adjacent private property will be retained as they are out of the way of construction. However, the majority of trees on adjacent City of Ottawa property are slated for removal due to conflicts with the proposed construction. Permission for these removals will be acquired beforehand. The exceptions are four juvenile trees: two white elm cultivars located on Bank Street and juvenile honey-locust and hackberry trees along Thornton Street. Of the trees to be removed only two are of desirable native species, white cedar and black walnut. The remainder are introduced, invasive and/or undesirable native species. Of particular note are the many Siberian elms which are proposed to be removed. In addition to being invasive, trees of this species are very prone to failure under wind, snow and ice loads.



In locations in which there are many stationary and moving targets (*i.e.* buildings, people, vehicles, *etc.*) many of these trees would currently qualify as hazardous. For a number of reasons they are a very undesirable species of tree. In short, and as quoted in Dirr (1998)¹, Siberian elms are "A poor ornamental tree that does not deserve to be planted anywhere!" He goes on to further state "One of, if not, the world's worst trees."

TREE SPECIES, SIZE, CONDITION AND STATUS

Table 1 below details the species, size, condition and status of each impacted tree:

Tree	Tree Species	Condition	D.B.H	Tree Condition Notes & Status (to be
No.	The species	$(VP \rightarrow E)$	(cm)	removed or retained)
1	Siberian elm	$(VI \rightarrow L)$ Fair	33 avg	Mature; located on shared property line;
1		Fall	55 avg	double-stemmed at 0.5m; introduced,
	(Ulmus pumila)			
				invasive species; to be removed with city
	0.1 1	D	22	permission
2	Siberian elm	Poor	22 avg	Maturing; double-stemmed at 0.25m;
				previously topped at 1.5; introduced,
				invasive species; to be removed
3	Siberian elm	Poor	16	Maturing; previously topped at 1.5;
				introduced, invasive species; to be removed
4	Siberian elm	Poor	16	Maturing; previously topped at 1.5;
				introduced, invasive species; to be removed
5	Siberian elm	Poor	20	Maturing; previously topped at 1.5;
				introduced, invasive species; to be removed
6	White cedar	Fair	10	Maturing; double stemmed at grade; native
	(Thuja occidentalis)			species; to be removed
7	White cedar	Good	20	Mature; located on neighbouring private
				property; to be retained
8	Manitoba maple	Fair	14	Maturing; double stemmed from grade;
	(Acer negundo)			located on shared property line; native
	(species (though undesirable as urban trees);
				to be removed with neighbour's
				permission
9	Manitoba maple	Poor	19	Maturing; located on city property; native
	i i unito ou mupio	1 001		species (though undesirable as urban trees);
				to be removed with city permission
10	Manitoba maple	Poor	21	Mature; located on city property; native
10		1 001	<i>L</i> 1	species (though undesirable as urban trees);
				to be removed with city permission

¹Dirr, Michael, A. <u>Manual of Woody Landscape Plants, Their Identification, Ornamental Characteristics, Culture,</u> <u>Propagation and Uses</u>. Fifth edition. Stipes Publishing, 1998.



Table 1. Continued

			DDU	
Tree	Tree Species	Condition	D.B.H	Tree Condition Notes & Status (to be
No.		$(VP \rightarrow E)$	(cm)	removed or retained)
11	Siberian elm	Fair	76	Very mature; located on city property;
				introduced, invasive species; to be removed
				with city permission
12	Siberian elm	Fair	66	Very mature; located on city property;
				introduced, invasive species; to be removed
				with city permission
13	Siberian elm	Fair	61	Very mature; located on city property; slime
				flux; introduced, invasive species; to be
				removed with city permission
14	Siberian elm	Fair	13	Maturing; located on city property;
				introduced, invasive species; to be removed
				with city permission
15	Siberian elm	Fair	59	Mature; located on city property; introduced,
				invasive species; to be removed with city
				permission
16	Siberian elm	Fair	57	Mature; located on city property; double
				stemmed at 2m; introduced, invasive
				species; to be removed with city
				permission
17	Siberian elm	Fair	67	Very mature; located on city property;
				double stemmed at 2m; introduced, invasive
				species; to be removed with city
				permission
18	Siberian elm	Fair	46	Mature; located on city property; introduced,
				invasive species; to be removed with city
				permission
19	Siberian elm	Fair	40	Mature; located on city property; smaller
				Siberian elm located below (poor condition;
				double stemmed; 13 avg); introduced,
				invasive species; to be removed with city
				permission
20	Siberian elm	Fair	40	Mature; located on city property; introduced,
				invasive species; to be removed with city
				permission
21	Siberian elm	Fair	32	Mature; located on city property; introduced,
	Steenun enn	- un		invasive species; to be removed with city
				permission
22	Siberian elm	Fair	25	Mature; located on city property; introduced,
	Stoonun onn	i un	25	invasive species; to be removed with city
				permission
				per 111551011



Table 1. Continued

Tree No.	Tree Species	Condition $(VP \rightarrow E)$	D.B.H (cm)	Tree Condition Notes & Status (to be removed or retained)
23	Siberian elm	Fair	33	Mature; located on city property; introduced,
			00	invasive species; to be removed with city
				permission
24	Siberian elm	Fair	43	Mature; located on city property; introduced,
				invasive species; to be removed with city
				permission
25	Siberian elm	Fair	24	Mature; located on city property; introduced,
				invasive species; to be removed with city
				permission
26	Siberian elm	Fair	24	Mature; introduced, invasive species; to be
				removed
27	Siberian elm	Fair	15	Maturing; introduced, invasive species; to be
				removed
28	Black walnut	Good	30	Mature; upright growth form; native species;
	(Juglans nigra)			to be removed
29	Siberian elm	Fair	13 avg	Mature; introduced, invasive species; to be
			U	removed
30	Siberian elm	Fair	10	Maturing; introduced, invasive species; to be
				removed
31	Siberian elm	Fair	19	Maturing; introduced, invasive species; to be
				removed
32	Siberian elm	Fair	14 avg	Maturing; introduced, invasive species; to be
				removed
33	Siberian elm	Fair	10	Maturing; introduced, invasive species; to be
				removed
34	Siberian elm	Fair	26	Mature; introduced, invasive species; other
				nearby Siberian elms of 11, 13 and 20 cm
				diameter are on the subject property; another
				elm, 47cm in diameter is shared; all to be
				removed
35	Siberian elm	Fair	25	Mature; located on shared property line;
				introduced, invasive species; to be removed
				with neighbour's permission
36	Siberian elm	Fair	22	Mature; located on neighbouring private
				property; introduced, invasive species; to be
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			removed with neighbour's permission
37	Siberian elm	Fair	16	Mature; located on neighbouring private
				property; introduced, invasive species; to be
				removed with neighbour's permission



Table 1. Continued

Tree	Tree Species	Condition	D.B.H	Tree Condition Notes & Status (to be
No.		$(VP \rightarrow E)$	(cm)	removed or retained)
38	Manitoba maple	Good	23	Mature; divergent towards south; native
				species (though undesirable as urban trees);
				to be removed
39	Manitoba maple	Fair	30	Mature; crown heavily asymmetrical
				towards north; native species (though
				undesirable as urban trees); to be removed
40	Hackberry	Good		Juvenile; located on city property; native
	(Celtis occidentalis)			species; to be retained
41	Honey-locust	Very good	9	Juvenile; located on city property;
	(Gleditsia			introduced species; to be retained
	triacanthos var.			
	inermis)			
42	Siberian elm	Fair	32 avg	Mature; double stemmed at 2m; introduced,
				invasive species; to be removed
43	Norway maple	Good	23	Mature; broad crown; introduced, invasive
	(Acer platanoides)			species; to be removed
44	Elm cultivar	Good	6	Juvenile; located on city property; native
	(Ulmus spp.)			cultivar; to be retained
45	Elm cultivar	Good	7	Juvenile; located on city property; native
				cultivar; to be retained

Pictures 1 through 5 on pages 6 through 9 of this report show selected trees on and adjacent to the subject property. The location of each tree is referenced by its number on the tree conservation plan prepared by Fotenn Planning and Design.

Endangered Species

No butternuts (*Juglans cinerea*) were identified on the subject or adjacent properties. This species of tree is listed as threatened under the Province of Ontario's Endangered Species Act (2007) and so is protected from harm. Black walnut, although closely related to butternut, are not so protected.

Tree Preservation and Protection Measures

Preservation and protection measures intended to mitigate damage during construction will be applied for the trees to be retained adjacent to the subject property. The following measures are the minimum required by the City of Ottawa to ensure tree survival during and following construction:

- 1. Erect a fence at the critical root zone (CRZ¹) of trees;
- 2. Do not place any material or equipment within the CRZ of the tree;
- 3. Do not attach any signs, notices or posters to any tree;
- 4. Do not raise or lower the existing grade within the CRZ without approval;



- 5. Tunnel or bore when digging within the CRZ of a tree;
- 6. Do not damage the root system, trunk or branches of any tree;
- 7. Ensure that exhaust fumes from all equipment are NOT directed towards any tree's canopy.

¹ The critical root zone (CRZ) is established as being 10 centimetres from the trunk of a tree for every centimetre of trunk Diameter at breast height (DBH). The CRZ is calculated as DBH x 10 cm.

Please do not hesitate to contact me with any questions concerning this tree conservation report.

Yours,

<u>Andrew Boyd</u>

Andrew K. Boyd, B.Sc.F, R.P.F. (#1828) ISA Certified Arborist #ON-0496A and TRAQualified Consulting Urban Forester



Picture 1. Tree #2-8 on and adjacent to 800-900 Bank Street.





Picture 2. Trees #9-16 adjacent to 800-900 Bank Street.





Picture 3. Trees #35-39 on and adjacent to 800-900 Bank Street.



Picture 4. Trees #27-42 at 800-900 Bank Street.





Picture 5. Tree #42 at 800-900 Bank Street (tree #34 and surrounding trees in background).

