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INTRODUCTION

Pursuant to Section 4.7.2 of the City of Ottawa's Official Plan, this Tree Conservation Report has been prepared for Smartcentres in support of Development Applications for 2025 Mer Bleue and 4200 Innes Road.

EXISTING TREE INVENTORY

An inventory of existing vegetation on the subject site was conducted November 7, 2016.

Refer to the **Existing Tree Inventory Schedule and Analysis** below and to **Tree Conservation Plan – TCP.1** attached to this report.

The schedule listed below is a list of plant material identified and evaluated on the subject property at date of inventory.

CODE (REFERENCE)	SPECIES	SIZE (cm) dbh –	VISUAL / CONDITION / REMARKS
1	Ash	approx 35	Dead / succumbed to EAB
	ASI	30	(Emerald Ash Borer) / remove
2	Ash	30	Dead / succumbed to EAB
			(Emerald Ash Borer) / remove
3	Ash	30	Dead / succumbed to EAB (Emerald Ash Borer) / remove
4 Group)	Young Ash	5-15	Good / development conflict /
• •			remove
5 (Group)	Hawthorn	5-10	Good / development conflict /
			remove
6 (Group)		10 - 20	development conflict / remove
7 (Group)	Ash	10-20	Dead / succumbed to EAB
			(Emerald Ash Borer) / remove
8 (Group)	Young Ash / Sumac	5-15	Good / development conflict /
			remove
9 (Group)	Ash	10-20	Poor /Dead / succumbed to EAB
			(Emerald Ash Borer) / remove
10 (Group)	White Poplar (grouping) with young shoots (invasive) / Hawthorn	35-45	development conflict / remove
11 (Group)	Hawthorn / Sumac	10-15	development conflict / remove
12	Elm	20	Dead / succumbed to DED (Dutch
			Elm Disease) / remove
13	Elm	20	Dead / succumbed to DED (Dutch
			Elm Disease) / remove
14 (Group)	Elm / Ash / Hawthorn	20-30	Poor / Dying/ Some succumbed to

EXISTING TREE INVENTORY SCHEDULE AND ANALYSIS:



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16 A 17 (Group) A 18 (Group) H 18 (Group) H 19 E	Elm Ash Ash / Elm / Manitoba Maple / Hawthorn Hawthorn / Ash / Elm / Buckthorn	20 20 20-30 15-25 50	DED (Dutch Elm Disease) and EAB (Emerald Ash Borer) remove. Dead / succumbed to DED (Dutch Elm Disease) / remove Dead / succumbed to EAB (Emerald Ash Borer) / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Good / development conflict /
16 A 17 (Group) A H 18 (Group) H B 19 E	Ash Ash / Elm / Manitoba Maple / Hawthorn Hawthorn / Ash / Elm / Buckthorn	20 20-30 15-25	Elm Disease) / removeDead / succumbed to EAB (Emerald Ash Borer) / removePoor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / removePoor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / removePoor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
17 (Group) A H 18 (Group) H B 19 E	Ash / Elm / Manitoba Maple / ławthorn ławthorn / Ash / Elm / Buckthorn	20-30	Dead / succumbed to EAB (Emerald Ash Borer) / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
17 (Group) A H 18 (Group) H B 19 E	Ash / Elm / Manitoba Maple / ławthorn ławthorn / Ash / Elm / Buckthorn	20-30	(Emerald Ash Borer) / removePoor / Dying/ Elm succumbed toDED (Dutch Elm Disease) and Ashto EAB (Emerald Ash Borer)development conflict / removePoor / Dying/ Elm succumbed toDED (Dutch Elm Disease) and Ashto EAB (Emerald Ash Borer)development conflict / remove
18 (Group) H B 19 E	ławthorn ławthorn / Ash / Elm / Buckthorn Elm	15-25	Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
18 (Group) H B 19 E	ławthorn ławthorn / Ash / Elm / Buckthorn Elm	15-25	DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
18 (Group) H B 19 E	Hawthorn / Ash / Elm / Buckthorn		to EAB (Emerald Ash Borer) development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
19 E	Buckthorn		development conflict / remove Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
19 E	Buckthorn		Poor / Dying/ Elm succumbed to DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
19 E	Buckthorn		DED (Dutch Elm Disease) and Ash to EAB (Emerald Ash Borer) development conflict / remove
19 E	Elm	50	to EAB (Emerald Ash Borer) development conflict / remove
		50	development conflict / remove
		50	
		50	Good / development conflict /
20 (Group) E	Elm		
20 (Group) ⊢	lm	45.00	remove
		15-20	Good / Fair / Poor / development
			conflict / remove
21 N	/lanitoba Maple	20	Invasive, undesirable species/
			development conflict / remove
22 (Group) H	lawthorn / Sumac	10-15	development conflict / remove
23 E	Im	20	Poor / development conflict /
			remove
24 E	Elm	20	Poor / development conflict /
			remove
25 A	Ash	20	Poor / development conflict /
			remove
26 A	Ash	20	Dead / succumbed to EAB
			(Emerald Ash Borer) / remove
27 E	Im	20	Poor / development conflict /
		20	remove
28 E	Elm	20	Poor / development conflict /
20		20	remove
29 A	Ash	20	Poor / development conflict /
23	1311	20	remove
30 A	Ash	20	
30 A	ASII	20	Poor / development conflict /
24		20	remove
31 A	Ash	20	Poor / development conflict /
			remove
32 A	Ash	20	Poor / development conflict /
			remove
33 A	Ash	20	Poor / development conflict /
			remove
34 A	Ash	20	Poor / development conflict /
			remove
35 (Group) A	Ash	20	Poor / development conflict /
、 · · /			remove
36 A	Ash	20	Poor / development conflict /
	-		remove





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37	Ash	20	Poor / development conflict / remove
38	Ash	20	Poor / development conflict / remove
39	Elm	25	Poor / development conflict / remove

DEFINITIONS

The **Critical Root Zone (CRZ)** is established as being 10 centimetres from the trunk of the tree for every centimetre of trunk DBH. The **CRZ** is calculated as **dbh x 10cm**

(dbh) diameter at breast height means the measurement of a trunk of a tree at a height of **120cm** above grade for trees of 15cm diameter or greater and at a height of **30cm** above grade for trees of less than 15cm diameter.

DISTINCTIVE TREES & TREE SPECIES AT RISK

Under the Urban Tree Conservation By-law, a 'distinctive tree' is defined as any tree with a dbh of 50cm or greater.

There is one (1) <u>living</u> 'distinctive trees' on subject property (see schedule above) <u>No</u> 'tree species at risk' were found or identified on subject property.

EXISTING VEGETATION IN THE PROPOSED LANDSCAPE

Due to proposed construction of building, parking area, site servicing and grading operations on the site, the existing tree clusters and groupings as indicated on TCP-1 (Plan), attached, will be removed. The landscape proposal will see a generous planting of deciduous and coniferous trees, shrubs and groundcovers to complement the site design and compensate for the loss of the existing vegetation due to the prospective development.

MITIGATIVE MEASURES

Measures intended to mitigate long term damage to trees following construction generally require preserving current site characteristics, particularly below ground. The following measures are recommended to promote survival for trees to be retained:



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Tree Protection Barrier:

Barriers for tree protection shall be installed adjacent to the trees to be protected. At a minimum, this barrier should be placed at a distance equal to the furthest spread of outside branches (the "dripline") or the CRZ, whichever is greater. All of the supports and bracing for the barrier shall be placed outside of the protected area and installed to minimize root damage. Furthermore, while the desired effect of the barrier is to prevent construction traffic from entering the protected area, it shall be kept in place until all construction has been completed. The barrier shall also have signage attached to it indicating its purpose as a protection barrier. Repair, fuelling of machinery, storage and stockpiling of materials, shall not take place within this protected area.

Tree Protection Barrier material options:

- 1.2m height min. solid plywood hoarding mounted securely on durable wood posts; posts to be max. 2.4m c/c; (to be approved City of Ottawa).
- 1.2m height min. chain-link fence with tubular steel support posts or "T" posts; posts to be max. 2.4m c/c; (to be approved City of Ottawa).
- 1.2m height min. plastic (polyethylene) "international orange" web fencing securely mounted on sturdy wood framework that includes top and bottom rail; posts to be max. 2.4m c/c; (to be approved City of Ottawa).
- Other methods and material approved by City of Ottawa.

In addition:

- Do not place any material or equipment within the CRZ of the tree;
- Do no attach any signs, notices or posters to any tree;
- Do not raise or lower the existing grade within the CRZ without approval;
- Tunnel or bore when digging within the CRZ of a tree;
- Do not damage the root system, trunk of branches of any tree;
- Ensure that exhaust fumes from all equipment are NOT directed towards any tree's Canopy.

Surface Treatment:

A protective root buffer is required for a minimum distance of 2.0 metres outside of the tree protection barrier. This buffer will consist of woodchips spread to a thickness of 10 cm covered by a layer of granular 'A' (gravel) deep enough to stabilize 2 cm thick plywood. This will help prevent the compaction of soil surrounding the trees' fine feeding roots.

Excavation & Root Pruning:

Excavation shall not take place within the CRZ. Instead, directional micro-tunnelling and boring shall be employed. When excavation must take place outside of the CRZ, a trench shall be carefully dug either by hand or with hydraulic or pneumatic air excavation technology. After the trench is established, a backhoe or other equipment stationed outside of the CRZ may be used to complete the work. If roots are encountered while trenching



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outside the CRZ, they shall be cleanly cut with either pruning shears or a saw wiped with alcohol before each cut.

Treatment of Exposed Roots:

If tree roots are exposed during construction, they shall be reburied immediately with soil or covered temporarily with burlap, filter cloth or woodchips and kept moist (i.e. watering with a soft-spray nozzle at least three times a week). A covering of plastic shall be used to facilitate moisture retention during an extended period when watering may not be possible (i.e. over weekends).

Fertilization:

Fertilizing the trees with a liquid, deep root, slow release fertilizer is recommended only after the completion of all construction.

Retaining Walls/ Tree Wells:

Avoid changes in grade close to trees to be retained. Where grade changes cannot be avoided, the installation of retaining walls or tree wells shall be considered for tree preservation.

We trust the aforementioned and attachment(s) satisfy the guidelines for the City of Ottawa's Tree Conservation Report.

Should further clarification be required regarding the contents of this Report, please do not hesitate to contact the undersigned.

Prepared by:

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Attachment: Tree Conservation Plan – TCP.1





