

Part 1: Tree Inventory



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Re: City Centre BRT Tree Inventory

1.0 INTRODUCTION

Ecoplans Limited was retained by MRC, on the behalf of the City of Mississauga to conduct a tree inventory of areas that could potentially be impacted by proposed construction for the City Centre Bus Rapid Transit (BRT). Construction will include the conversion of two median lanes to bus only lanes, localized road widening and intersection improvements. The project is located on Rathburn Road between Duke of York Boulevard and Hurontario Street. This report provides the findings of the inventory and provides recommendations regarding tree preservation and removal.

2.0 DESCRIPTION

The study area is an approximately 1.0 km stretch centered on Rathburn Road. The site is a highly developed commercial area with little to no natural landscape. The tree inventory was completed on October 15, 2009. Trees on site were assessed by species, size/age, and condition. Findings are recorded below in section 4.0 Vegetation Review.

3.0 DEFINITIONS

The following defines the terms and assessment criteria used within this tree inventory report:

Significant Tree: Trees with sufficient cultural or environmental value to warrant special consideration regarding protection or preservation. Factors in this determination typically include (but are not limited to) species, age, health and rarity.

Tree Group: Trees growing within a specific area whose species composition and age are of a similar range.

Species: The botanical and common names are provided for each tree.

DBH: Abbreviation for diameter at breast height (recorded in centimeters), a measurement of the tree stem taken at 1.4 m above ground.

Condition: Health assessment of the tree rated on a scale of good, fair and poor. Trees with good condition display less than a 20% defect/deficiency of tree structure and vigor, those in fair condition display less than 40% defect/deficiency, those in poor condition display an excess of 40% defect/deficiency.

4.0 VEGETATION REVIEW

4.1 North Side of Rathburn Road

Trees encountered on the north side of Rathburn Road are planted street trees consisting of four species. Inventoried trees were typically in fair to good condition and of intermediate age. No trees considered significant were found during the inventory. Six planting beds of rugosa rose (*Rosa rugosa*) were noted along Rathburn Road, outside the existing fencing adjacent to the Playdium property. Refer to Table 1 for specific information regarding tree species, size and condition.

TABLE 1:

TREE INVENTORY CHART: North Side of Rathburn Road Between Duke of York Boulevard and Hurontario Street				
Quantity	Botanical Name	Common Name	DBH	Condition
21	<i>Acer platanoides</i>	Norway maple	10-25	Fair
6	<i>Acer platanoides</i>	Norway maple	10-20	Good
13	<i>Acer platanoides</i>	Norway maple	10-20	Poor
19	<i>Fraxinus pennsylvanica</i>	green ash	16-21	Good
33	<i>Fraxinus pennsylvanica</i>	green ash	18	Fair
4	<i>Gleditsia triacanthos var. inermis</i>	thornless honeylocust	4.5-6	Fair-Good
8	<i>Gleditsia triacanthos var. inermis</i>	thornless honeylocust	15	Good
6	<i>Picea pungens</i>	Colorado spruce	10-15	1 Dead, 5 Fair

4.2 South Side of Rathburn Road

Trees encountered on the south side of Rathburn road are planted street trees consisting of five species. Inventoried trees were typically in fair to good condition and of juvenile to intermediate age. No trees considered significant were found during the inventory. Refer to Table 2 for specific information regarding species, size and condition.

TABLE 2:

TREE INVENTORY CHART: South Side of Rathburn Road Between Duke of York Boulevard and Hurontario Street				
Quantity	Botanical Name	Common Name	DBH	Condition
5	<i>Acer platanoides</i>	Norway maple	19	Fair
12	<i>Acer platanoides</i>	Norway maple	32	Good
1	<i>Acer platanoides</i>	Norway maple	10-15	Poor
4	<i>Fraxinus pennsylvanica</i>	green ash	22	Poor (Poor form and salt damage)
8	<i>Ginkgo biloba</i>	maidenhair tree	4.5	Good
5	<i>Gleditsia triacanthos var. inermis</i>	thornless honeylocust	4.5-6.0	Good
7	<i>Pyrus calleryana</i>	ornamental pear	4.5-6.0	Good

5.0 ANTICIPATED IMPACTS

Anticipated impacts are based on a preliminary review of the design drawings for the City Centre BRT route (drawing dated 28/10/2009). A number of existing trees are located in areas that are proposed for road widening, others are in close proximity and will interfere with, or be damaged by construction activities. At a minimum, the proposed work will require the removal of 12 Norway maples (10-20 DBH), 12 green ash (16-21 DBH), 4 green ash (22 DBH), 5 thornless honeylocust (4.5-6.0 DBH) and 3 Colorado spruce (10-15 DBH). Trees to remain should be protected as per City of Mississauga standards. It is not anticipated that tree removals will cause a significant environmental impact.

6.0 RECOMMENDATIONS

As compensation for the removals associated with the City Centre BRT, consideration should be given to replacing the removed trees with species proven to be hardy street trees within the Mississauga area. There are also trees that could be considered for transplant based on their size and condition. The thornless honeylocust (4.5-6.0 DBH) in particular, or any other newly planted tree of the 4.5-6.0 DBH range in good condition (i.e. maidenhair tree or ornamental pear) could be transplanted. In total there are 24 existing trees on site that could be considered for transplant. The Norway maples and green ash to be removed are not considered suitable for transplant. The Norway maples are too large or not of sufficient health to justify the procedure. Green ash should not be transplanted due to concerns regarding the emerald ash bore, a recent pest introduction that targets ash trees. No trees over 15 DBH should be considered for transplant. If any trees are transplanted they must be relocated outside of the work limits for this area, or to a new site entirely so the trees are only relocated once. It is detrimental to the health of a tree if it is transplanted numerous times over a short period of time.

7.0 SUMMARY

The site is a highly developed commercial area and trees on site are typically planted street trees composed of five species. Removals will be limited to those trees that are directly in the areas of road widening and those in close enough proximity to interfere with or be damaged by construction activities. No significant environmental impacts will result from the proposed tree removals.

Best Regards,

ECOPLANS LTD.



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