

TO: Mayor J. Lehman and Members of Council

FROM: R. S. Kahle, M. Eng., P. Eng., Director of Engineering

NOTED: R. J. Forward, MBA, M.Sc., P. Eng., General Manager of Infrastructure & Growth Management
C. Ladd, Chief Administrative Officer

RE: Investigation – Public Tree By-law
(File: A90-FO)

DATE: May 13, 2013

The purpose of this memorandum is to provide details in response to questions raised during General Committee on Monday, May 6, 2013 related to the recommended motion concerning the Public Tree By-law. There were a number of questions regarding the scope of effort necessary to provide members of Council with a reasonable estimate of the resource and financial implications of an amendment to the Public Tree By-law, and the associated timing of such a report.

General Committee recommended Motion 13-G-129 as follows:

“That staff in the Engineering and Roads, Parks and Fleet Departments investigate the feasibility of deleting the current definition of a public tree in By-law 2009-098 and replacing it with the following: “any tree having any of its main stem situated on a public park, highway or any lands owned by the City of Barrie is a public tree” and report back to General Committee on the financial and resource implications.”

The current Public Tree By-law defines a public tree as “any tree which has 50 percent or more of its main stem situated on a public park, highway or any lands owned by the City of Barrie”.

Should Council choose to revise the Public Tree By-law as per the recommendation, it would be necessary for staff to update the tree inventory to include trees that are presently not accounted for within the inventory. This would involve time and effort for staff to undertake field investigations to confirm tree locations, involving the finding of property bars and survey work to establish the property line if the bars are missing. The current condition of these trees would also have to be assessed by an arborist or professional forester. Attached is a map of a typical area on which the approximate locations of the trees are shown, derived from aerial photography. This provides some insight into the extent of investigation work that is necessary on a relatively small area of the city.

The aerial photography does not provide a level of detail and precision necessary to definitively conclude the location of trees which are apparently at or near the property lines, and field investigation would be required should the tree inventory be updated. However, for estimating purposes, the aerial photography shows that there are approximately 7,800 trees overlapping private property lines along the City Road Right of Ways, and a further 13,000 trees that are within 1 metre of the City Right of Way.

For the purpose of a conservative estimate, staff are assuming that 25% of these trees would become the responsibility of the City of Barrie, should a change in the definition of “public tree” be approved. Further, the City’s existing tree inventory is maintained on a cycle of every 3 – 5 years. To undertake pruning and trimming of the additional trees as per City standards (International Society of Arboriculture – ISA based standards), an estimated cost of \$300 per tree would be incurred. The resulting financial impact based on the assumptions utilized above is as follows:

- 20,800 (7,800+13,000) trees x 25% subject to the new definition = 5,200 trees
- 5,200 additional trees to be maintained x \$300/tree = \$1,560,000.

Please note that all figures are based on very conservative estimates of additional costs to be incurred by the municipality with conservative assumptions of both the percentage of trees that would become the responsibility of the City. Costs would only increase as the City's tree inventory increases as a result of trees in newer subdivisions becoming "public trees" under the new definition as they grow. The numbers are provided for estimate purposes only.

The current definition of a public tree is not uncommon, as there are other municipalities which have tree by-laws with a similar definition.

From a Risk Management perspective there are many tree hazards that a municipality faces such as dead, weak or diseased trees which may fall, break or snap causing injury or property damage to a third party; low hanging branches which could cause injury to person walking or running underneath; tree branches and foliage obscuring stop signs or regulatory signs; and trees that serve as a climbing apparatus which may permit access to roofs or other undesired locations. A Risk Assessment will need to be undertaken to determine the potential impact on future claims.



R. S. Kahle, M. Eng., P. Eng.
Director of Engineering

ATTACHMENT #1

