

# INFORMATION REPORT

<b>TO:</b> Chair and Members Public Works Committee	<b>WARD(S) AFFECTED:</b> WARDS 2 & 13
<b>COMMITTEE DATE:</b> December 2, 2013	
<b>SUBJECT/REPORT NO:</b> Tree Health and Maintenance in the Hamilton and Dundas Downtown Areas (PW13089) - (Wards 2 & 13) (Outstanding Business List)	
<b>SUBMITTED BY:</b> Gerry Davis, CMA General Manager Public Works Department	<b>PREPARED BY:</b> Mike McNamara (905) 546-2424, Extension 3919
<b>SIGNATURE:</b>	

## Council Direction:

Public Works Committee, at its meeting of June 3, 2013, approved the following:

*“That the issues raised by Mr. Nicholas Schwetz respecting tree health and maintenance in the downtown area be referred to staff for a report back to the Public Works Committee”.*

Additionally, Public Works Committee at its meeting of September 16, 2013, approved the following:

*“That staff be directed to include an evaluation of Tree Health and Maintenance in the Dundas Downtown area in their report to the Public Works Committee”.*

## Information:

During the June 3, 2013, Public Works Committee meeting, a presentation was given by Mr. Schwetz regarding the health of the trees in the downtown core. In his presentation, Mr. Schwetz identified the following conditions:

- trees are not indigenous (native) to Hamilton
- tree damage is occurring from tree grates
- there is a lack of growing space
- loss of tree canopy due to dead or unhealthy trees

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The following recommendations to mitigate the challenges were provided by Mr. Schwetz:

- remove tree grates
- increase the space around trees to promote growth
- remove unhealthy trees and replace with native species
- monitor trees and conduct tree health assessments

The trees identified by Mr. Schwetz are referred to by staff as hard surface trees. Generally these trees are planted in 5 x 5' tree pits that are located in boulevards adjacent to the sidewalk. The boulevards are often constructed of concrete, asphalt, or interlocking stone. Occasionally trees are planted in the flower beds decorating the pedestrian walkways.

The surface treatment placed over hard surface tree plantings may include steel grates, interlocking stone, concrete squares, wood chips/decorative mulch, or soil when the trees are located in flower beds. It is recognized that hard surface trees are under constant stress due to the following:

- lack of soil volume
- confined planting areas
- tree damage due to contact with car doors, bicycles, side walk maintenance equipment, snow removal equipment, vandalism and girdling by tree grates
- lack of water
- pollution
- reflective heat
- salt contamination
- soil compaction

Staff inspected the hard surface trees in the Hamilton and Dundas downtown areas and all hard surface trees growing throughout the City. The trees have been found to be in various stages of health ranging from poor/dead to good.

An annual inspection program of all hard surface trees has been implemented. The inspection includes an evaluation of tree health, condition of tree grates and planting pits, and identifying and scheduling tree replacement.

The 5 x 5' tree pits are being phased out where applicable. New streetscape designs attempt to incorporate current technology that supports greater soil volumes. The use of "Silva Cells" and continuous planting pits encourage larger, healthier trees.

Going forward, the trees identified in the assessment that are in a poor/dead condition will be removed this fall and replacements will commence in the Spring of 2014. Also tree grates that are causing damage to the trees will be removed or adjusted.

As we proceed with tree replacements, staff will attempt to use different planting methods to help improve tree health when hard surface trees are planted. For example, grates may be removed and trees planted at ground level with decorative woodchips placed around the tree, allowing for increased water penetration. In high pedestrian areas, another possibility may be a permeable rubber matting that can be installed

which allows water to penetrate without woodchips being tracked beyond the planting pit.

Species type will be selected based on the ability for survival and suitability for the location. Often native trees do not perform well in hard surfaces due to the harsh growing conditions, road salt and the absence of native soil.

The Forestry and Horticulture Section is committed to increasing tree canopy coverage to over 35% by 2030. The annual inspection and timely replacement of dead or dying hard surface trees will assist the Section in meeting this target and will contribute to the benefits of increased canopy coverage in the downtown cores.