



Corporate Report

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BUDGET COMMITTEE

DEC 07 2009

DATE: November 27, 2009

TO: Chair and Members of Budget Committee
Meeting Date: December 7, 2009

FROM: Paul A. Mitcham, P.Eng., MBA,
Commissioner of Community Services

SUBJECT: 2009 Urban Forestry Maintenance Backlog

- RECOMMENDATIONS:**
1. That the report dated November 27, 2009 from the Commissioner of Community Services be received for information.
 2. That the Budget Committee provide direction with regard to the funding to reduce or eliminate the urban forestry maintenance backlog.

BACKGROUND: At the Budget Committee meeting of November 17, 2009, staff were asked to report back on the current backlog of maintenance work in the Urban Forestry unit and to address resource requirements to reduce the backlog.

The Urban Forestry Operations Unit is responsible for the maintenance, preservation and protection of all City-owned trees. Both re-active and pro-active tree maintenance programs are currently utilized.

The Forestry Operations Unit consists of one Supervisor of Operations, four Maintenance Inspectors, fourteen full-time Arborists and four temporary Arborists. The eighteen Arborists are divided into seven crews: three aerial truck crews and four climbing crews, and cover all areas of the City. Crew members are certified and highly

trained allowing for each Arborist to complete pruning and removal and a variety of other arboricultural tasks. Staff complete work orders twelve months of the year, in all weather conditions. The Arborist staff complement has not increased in the last twelve years despite rapid growth in Mississauga and a significant increase in the number of City trees being maintained.

An Urban Forest Canopy Study (UFORE) recently completed by the City of Mississauga in conjunction with the Region of Peel, Toronto Conservation Authority, Credit Valley Conservation Authority and the City of Brampton has concluded that the Urban Forest within the City of Mississauga consists of approximately 2.7 million trees located on both public and private lands. Although the study could not provide an exact breakdown of the number of trees located on private versus public lands, the majority of these trees are located on City property or Conservation Authority lands managed by the City.

The City of Mississauga has a street tree population of 250,000 trees, comprised of a variety of species, size categories and ages. Over the past 30 years more than 200,000 trees have been planted. Annually approximately 5,000 trees are planted throughout the City. Approximately 1,500 trees decline and require removal due to insect, disease, environmental or mechanical damage. The trees are replaced along with 3,500 new trees that are planted within new developed subdivisions. The remainder of the publicly owned trees are located within our 113 woodlots, 501 parks, greenbelts, natural areas, cemeteries and City facilities.

Work Orders

Reactive work orders are generated as the result of an inspection request (service request) by the public, outside agencies, other City departments or as the result of storm calls. Each inspection request is distinct, pertaining to either a specific City tree or collection of trees. Requests include pruning or removal of trees, fertilizing of trees, sucker growth removal, insect and disease concerns. For each service request, Forestry staff complete an inspection, with completed inspections resulting in either a recommendation that no work is required, or the generation of a work order. Each work order receives a priority rating based on the potential for damage to persons or

property, species, condition and location of the tree. Currently four priority service levels are utilized as below.

- i) Emergency Storm Response – crews are dispatched 24 – 7, by Call Centre staff, Forestry Staff or Transportation and works after-hours dispatch with crews attending immediately;
- ii) Priority One – A work order that has been generated following an inspection and is scheduled to be completed within 24hrs;
- iii) Priority Two – A work order that has been generated following an inspection and is scheduled to be completed within 6 months; and
- iv) Priority Three – A work order that has been generated following an inspection and is scheduled to be completed within 12 months plus.

The number and severity of emergency storm response calls varies from year to year dependent on weather conditions. Each time a crew attends an emergency response call, a previously scheduled routine work order is not completed. This impacts the overall service levels of the Unit by pushing the completion date of routine work orders further back and eventually creates a backlog of work.

Proactive work is generated by Forestry staff inspections related to specific areas. The work is confined to large volumes of trees, with the work orders being completed by qualified contractors. Examples of proactive work include “block pruning” and “woodlot hazard tree mitigation”. Block pruning consists of contractors pruning each City tree located on an individual street, or all of the streets within one of the 59 City zones. Over the last five years this program has allowed for approximately 10,000 trees to be pruned annually allowing for consistent maintenance, a reduction in individual service requests from residents and conformance with required height clearances over roadways and sidewalks. Woodlot hazard tree mitigation consists of contractors completing the pruning or removal within specific woodlots, of hazard trees that are adjacent to pathways, roadways and private property, eliminating potential liability concerns so as to comply with industry norms.

The on-going use of contractors to complete pro-active large volume, geographic work orders allows the Arborist complement to focus on the increased number of storm response calls and the individual varied work orders generated as per individual service requests from members of the public. Over the last number of years, due to an increase in service requests, emergency storm response calls and a maturing tree population that requires different levels of maintenance, work orders have been rolled over from one year to be completed the next calendar year.

PRESENT STATUS:

The weather conditions encountered throughout 2009 have been unprecedented in regards to the volume of precipitation and severe storm events, some of which were localized. Storm events cause various levels of damage and destruction of trees, requiring immediate staff response. Depending on the volume and severity of the calls, crews attend to ensure that sites are made safe and secure and will return at a later date to complete all required work.

Throughout the first half of 2009, staff completed regular scheduled work orders and attended to 424 emergency storm response calls. On July 11, 2009 however, a significant storm impacted multiple areas within the City, from Streetsville throughout the core of the City to the Cawthra and Lakeshore area. Additional significant storm events were also experienced later in the summer. **All Forestry inspection and operations staff were dedicated solely from July 11 to October 5 to resolving storm related calls as well as work on additional damaged trees, discovered as Parks and Forestry staff inspected parks, green belts, woodlots and natural areas.** All routine scheduled work orders were put on hold as Forestry crews attended to 873 storm response calls and multiple Priority One work orders generated by Forestry inspection staff. Crews have attended to 1,297 emergency storm response calls since January 1, 2009, which in turn results in an equivalent number of scheduled work orders not being completed. **Presently, the Forestry Operations section has 2,575 outstanding work orders, which translate to a backlog in our service provision of approximately ten to twelve months.**

COMMENTS:

To allow for the reduction or elimination of the 2009 Urban Forestry scheduled maintenance backlog of 2,575 work orders, certified and trained contractors would need to be retained to complete various

arboricultural tasks, including the pruning and removal of City trees. To oversee the daily tasks, provide direction, and ensure compliance by the contractors with all legislative requirements, two temporary Contract Manager positions would be required throughout the duration of the awarded contracts.

For the longer term, staff anticipate that the City's tree inventory will continue to expand, that storm calls will continue to be a major, if unpredictable factor, and that demand for increased Forestry maintenance levels, such as those recently discussed in relation to flooding of Cooksville Creek experienced this past summer will continue. Staff believe therefore that while elimination of the existing backlog will help, a longer term resource plan, tied to the anticipated needs of Mississauga's urban forest will be required.

STRATEGIC PLAN: Action 4 under the "Green Pillar", calls for the City to implement a One Million Trees Planting Program. This direction will provide numerous environmental benefits but will add to the administrative, planting and maintenance workload of the Urban Forestry Section.

FINANCIAL IMPACT: A budget of \$780,000 will be required to eliminate the 2009 work order backlog. Work orders are prioritized below.

Activity	No of Orders	Dates Initiated	Priority	Contract Cost
Removal	883	Jan – Nov	High	\$480,000
Pruning	411	Jan – Jun	High	67,000
Pruning	1281	July – Nov	Medium	233,000
Total	2575			\$780,000

Cost estimates are based on 2009 contract rates and include the cost of labour, equipment and contract managers to oversee daily tasks, provide direction to contractors and ensure compliance with policies, procedures and regulation.

CONCLUSION: The unprecedented weather conditions experienced throughout 2009 have delayed normal scheduled Forestry Operations maintenance programs resulting in a backlog of work orders that are currently ten to twelve months behind planned service levels. Funding, totalling \$780,000 is required for 2010 to retain and manage qualified vendors,

allowing for the reduction of the Urban Forestry scheduled maintenance backlog.

While the additional funding in 2010 will serve to reduce the Forestry backlog, there is a gap between current staffing and funding levels and the need to carry out both emergency and routine work on a sustainable basis. In addition, the City will continue to expand its inventory of public trees, and has set a goal, as part of the Strategic Plan to plant one million trees over the next decade. Finally, there is a desire for enhanced levels of forestry maintenance in valley lands, and staff would like to provide for more proactive maintenance of City trees in parks and greenbelts, so as to meet industry standards. With this in mind, Urban Forest staff, in conjunction with Community Services Business Planning, will be developing a comprehensive plan, addressing the budget and resource capacity needs of Urban Forestry over the long term, allowing for adequate proactive maintenance of City owned trees and the ability to respond effectively to emergency situations. This plan will be brought forward as part of the City's 2011-14 Corporate Business Plan.



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