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# CITY OF KELOWNA

## MEMORANDUM

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**Date:** October 15, 2003  
**File No.:** 6300-02  
**To:** Ron Born, City Manager  
**From:** Joe Creron, Parks Manager  
**Subject:** Tree Removal in Crawford Falls  
Prepared by: Ian Wilson, Urban Forestry Supervisor

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### **RECOMMENDATION**

THAT Council authorize the removal of dangerous trees from the City-owned portion of Crawford Falls Park using helicopter logging and that the area be seeded, as per the recommendations of Dobson Engineering Ltd.

AND THAT all costs associated with this project, estimated to total \$200,000, be charged to chartfield 1092-0-00120 with the 2003 Financial Plan amended with interim funding from the Insurance Deductible Reserve.

### **BACKGROUND**

Dobson Engineering Ltd. (DEL) was retained by the City, primarily to assess slope and soil stability in the burned areas within City limits. DEL and affiliated forestry professionals have also examined some tree issues on City-owned properties in the area, such as the Crawford Falls trail.

Some of the DEL findings for Crawford park are as follows:

- There is currently a risk to public safety due to scorched trees as well as holes left from burned stumps;
- Although the park has been closed since the fire, it is evident that some members of the public are still using the area;
- The slopes above Bellevue creek are very steep (60-100%) and slope failures and erosion will occur after the fire;
- Many of the dead standing trees that fall are likely to end up at the bottom of the canyon in the creek, may impact upon public safety along the creek and will require clean-up and debris removal from the creek; and
- Failure to remove any of the fallen trees may result in a future fire hazard due to build-up of debris.

Therefore, DEL has recommended that the first priority for rehabilitation is to address the public safety issue created by dangerous trees. They determined that there were two main options:

1. Close the park to the public for several years, with the use of a security fence around the park;
2. Fall and remove danger trees to make the area safe and reduce future fire hazard.

The cost of Option #1 was estimated at \$56,000 to \$84,000. However, fencing would only be a temporary measure as tree removal and cleanup of downed wood may be required later on for public safety, to keep the creek clear of debris and to avoid fire hazard. Some tree removal would be required along the fenced area to ensure that the area is safe before the fence is installed. As well, WCB regulations require that danger trees are assessed and removed prior to crews working in an area. Therefore, even if the area is fenced it may be necessary to remove many trees in order for crews to safely work in the area (e.g. to clean trees and debris out of the creek).

Option #2 would involve cable logging or helicopter logging due to the very steep slopes involved. Cable logging was not deemed to be a good option due to the higher price (\$100,000 to \$117,000), the longer length of disruption to the neighbourhood (approx. 20 days) and the fact that it would only be able to remove the trees over 40% of the site.

In comparison, helicopter logging was priced at approximately \$87,000. This would require the least disruption (approximately four days of felling, followed by three days of helicopter work). It would also allow full access to the site with the least amount of ground disturbance.

DEL presented these options to a group of City staff, including members of Parks, Works and Utilities, Environment and the Recovery Team. The group concurred with DEL's overall finding that helicopter logging is the best overall option. There are, however, a few additional points that Council should be aware of:

- The cost of \$87,000 only includes logging. Further activities may include such things as logging supervision, filling in stump holes, and seeding and rehabilitation of the area. Therefore, the total cost may be closer to \$200,000. This is a preliminary estimate and is currently being refined by DEL.
- Time is of the essence. There is currently a small window of opportunity due to the availability of a helicopter logging contractor; also the area must be clear of snow, and winds are a factor during the removal phase.
- Due to the time constraints and the emergency nature of the problem it will be necessary to award a single-source contract for the helicopter logging..
- Timber would be salvaged to the extent possible, however DEL has estimated that cost recovery through timber sales may be negligible.
- Some of the cost of removal of the dangerous trees may be recovered through the Provincial Emergency Program. Funding for the project is currently shown from the Insurance Deductible Reserve and any recovery from PEP will reduce the reserve funding requirement.

In addition to Crawford Park there are other areas that also require attention. These include Kuiper's Peak (approx. 3 ha) near Southridge, approx. 6 ha of park land near Kettle Valley, as well as numerous smaller city parcels and road right-of-ways. Tree removal and rehabilitation options are still being explored in these areas, as well as discussion with the Provincial Emergency Program regarding funding.

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Joe Creron, Parks Manager

c.c.     Director of Parks and Leisure Services  
           Urban Forestry Supervisor  
           Director of Works and Utilities  
           Manager, Community Development and Real Estate  
           Environment Manager  
           Drainage/Solid Waste Manager