Date: January 19, 2009



TO: Board Members – Vancouver Park Board FROM: General Manager – Parks and Recreation

**SUBJECT: Stanley Park Hollow Tree Restoration Proposal** 

## RECOMMENDATION

A) THAT the Board approve the attached design by Cascade Engineering Group for the realigning and permanent stabilizing of the Hollow Tree in Stanley Park.

B) THAT the Board encourage the Stanley Park Hollow Tree Conservation Society to complete their fundraising for the Hollow Tree stabilization.

## **BACKGROUND**

Windstorms starting in December 2006 accelerated the rate of decline of the Hollow Tree in Stanley Park. In November 2007 staff responding to an increasing rate of lean of the snag, fenced the site off and retained a structural engineer to examine stabilizing solutions to render the snag safe for public examination.

On March 31, 2007, the Board received a staff report on the Hollow Tree and passed the following resolution:

"THAT the Board approve the taking down of the Hollow Tree as it has become a public safety concern."

Following a presentation from a sub-committee of the Vancouver Heritage Commission on June 9, 2008, the following motion was put to the Board and was defeated:

"THAT the Board reconsider the decision made at the March 31, 2008 Park Board meeting regarding the Hollow Tree."

At the Board meeting of July 7, 2008, a motion was raised under new business and was passed by the Board:

"WHEREAS there has been concern about the Hollow Tree being taken down in Stanley Park; and

WHEREAS the Vancouver Park Board has previously voted to have the Hollow Tree taken down: and

WHEREAS the Vancouver Park Board needs an engineering report confirming that the Hollow Tree can be stabilized and made safe in an upright position on its current site;

THEREFORE be it resolved that the Board delay taking down the tree for 150 days to

allow for a committee chaired by Lorne Whitehead to obtain from an independent engineering firm a suitable answer to maintain the Hollow Tree in its current location in an upright position within 90 days, and the committee has a further 60 days to raise funds required to implement an approved plan; and

Be it further resolved that the Board will not provide any funds for the retention of the Hollow Tree in its present position."

As a result, staff ceased work on the Hollow Tree, leaving behind a structurally engineered steel attachment collar for temporary external bracing and two internal wood diaphragms to hold the separated members to the trunk together and prevent their collapse when the snag was being moved.

Subsequently, the Stanley Park Hollow Tree Conservation Society began the work on the Hollow Tree as outlined in their report to the Board entitled "Conservation Plan for Stanley Park's Hollow Tree".

Wooden braces were attached to the previously installed collar to temporarily stabilize the tree, and the overgrowing hemlock tree was felled and disentangled from the remaining Hollow Tree root structure. This root structure was partially excavated and examined.

On October 27, 2008, the Board formally received the report from the Conservation Society and passed the following motion:

"THAT the Board receive the following report for information, and encourage the Stanley Park Hollow Tree Conservation Society;

- 1. to continue fundraising;
- 2. to prepare the required structural engineering report (with a seal of certification) on the entire project including:
  - a. methodology for straightening the Hollow Tree
  - b. plans and specifications for the structure required to maintain the tree in a safe, vertical position
- 3. to submit a final report for the Board at least two weeks prior to the end of the 60 day fundraising period (December 4, 2008); at which time the Board can consider approval of the concept, having the appropriate background materials in hand."

The drawings were emailed by Cascade Engineering to staff on December 4, and their review is the subject of this report.

## **DISCUSSION**

The Park Board staff received a set of seven drawings from Cascade Engineering Group (Attachment 1) and reviewed them in conjunction with the City Engineering Department. The latter directly contacted the designer and after further review believe the design is achievable. On this basis, staff recommend the plan to the Board.

A phone exchange with Mr. Whitehead of the Stanley Park Hollow Tree Conservation Society indicates that the "micropile" foundation for stabilizing of the Hollow Tree will be donated by the firm that specializes in this form of structure. The Society has raised approximately \$28,000 and proposes to continue to raise an additional \$25,000. They are approved for a \$25,000 matching grant from the Heritage Legacy Fund of British Columbia. With these additional amounts in hand, the Society feels the project can proceed.

The Society has asked that the Board pay for repair cost to the existing landscape in the Hollow Tree area. Staff originally allocated \$50,000 to cover the Hollow Tree costs. To date \$34,000 has been expended to cover consultant costs, the steel collar, two wooden diaphragms to hold the Hollow Tree together and a gravel resting site in preparation for the tree to have been laid down. Once the tree is stabilized, Park Board staff will need to replace the curbing around the parking area and sign and landscape the site. The \$16,000 remaining will be required to complete this work.

## **CONCLUSION**

The Stanley Park Hollow Tree Conservation Society has produced an acceptable set of engineering drawings for the stabilization of Hollow Tree and their fundraising efforts appear to be going well. On this basis staff recommends support for the continuation of the project.

Prepared by:

Jim Lowden
Special Projects
Vancouver Board of Parks and Recreation
Vancouver, BC

:yf