

**SUBJECT: BANK STABILIZATION AND CULVERT REPAIRS TO EAGLE
CREEK IN BURNABY MOUNTAIN GOLF COURSE**

RECOMMENDATIONS:

1. That the Commission approve the addition of \$150,000 to the 1996 Capital budget for bank stabilization repairs to Eagle Creek through Burnaby Mountain Golf Course.
2. That the Commission approve the expenditure of \$370,000 for bank stabilization and repairs to the culvert in Eagle Creek in Burnaby Mountain Golf Course.
3. That Council be asked to bring down a bylaw to appropriate \$370,000 from Capital Reserves for bank stabilization in Eagle Creek and rehabilitation of the culvert in Burnaby Mountain Golf Course.

REPORT

CULVERT REHABILITATION PROGRAM

The Commission currently has \$220,000 included in the 1996 Capital budget to undertake repairs to the culverted section of Eagle Creek that flows through Burnaby Mountain Golf Course. This culvert was initially installed in the 1970's as part of the construction of the course and is covered with 10 -14 meters of fill. That pipe is now weakening through corrosion and requires rehabilitation. The pipe has been assessed by the consulting Engineering group, Kerr Wood Leidal as "being near the end of its useful life and in need of upgrading."

A separate assessment has been made of the twin road culverts under Broadway, immediately downstream of the golf course culvert and identified similar rehabilitation requirements. A combined program of upgrading both sections will be administered by the Engineering Department. Corroded sections will be repaired, the pipes will be lined with shotcrete and new trash racks will be installed to protect the interior of the pipe. All work will subject to approval from the Ministry of Environment.

BANK STABILIZATION PROGRAM

Last spring, during the consultant's earlier field investigation, the concern of streambank erosion was noted in the ravine immediately upstream of the culvert within the golf course. Recent inspection by the engineering consultant indicated increased risk of slumping and recommended that the bank stabilization works proceed immediately to prevent potential damage to the rehabilitated culverts. While the erosion does not pose any immediate threat to the golf course operation, treatment is essential in order to prevent further damages downstream. Significant cost savings can be gained by undertaking the necessary remediation work in combination with the planned culvert repairs rather than delaying to a future year.

ITEM 11
DIRECTOR'S REPORT NO. 11
COMMISSION MEETING 96/06/05

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Page 2 of 2

The City's consultants have advised that the remediation works necessary to stabilize the banks will cost an estimated \$150,000. The Engineering Department will also administer the works as part of the culvert upgrading. All work would be done in accordance with all appropriate environmental requirements. Most of the work will occur within Eagle Creek ravine, thus resulting in very minimal disruption to golf play. A construction access route needs to be installed through the golf course, off the main fairways.

FINANCING

The Commission's 1996 Capital Budget has allocated \$220,000 through Capital Reserves for upgrading the culvert. The additional \$150,000 for the bank stabilization is not included in the 1996 Budget and will therefore cause the 1996 Capital Spending Limit to be exceeded by this amount. The Director Finance advises that sufficient Capital Reserves are available to finance these projects.

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cc: Director Engineering
Director Finance

