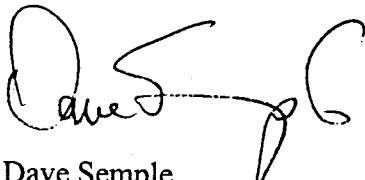




To: Parks Recreation & Cultural Services Committee **Date:** January 13, 2003
From: Dave Semple **File:** 7200-01
Director, Parks Operations
Re: Dredging of Scotch Pond and Entrance Channel

Staff Recommendation

That staff be directed to utilize the surplus funding from Account 40812 Britannia Shipyards Dredging (2002) in the amount of \$85,000 and Account 40800 McDonald Beach Boat Launch Dredging 2001 in the amount of \$88,000 for a total of \$173,000 for the required dredging operations at Scotch Pond as outlined in option 3 of this report.



Dave Semple
Director, Parks Operations

FOR ORIGINATING DIVISION USE ONLY		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Budgets	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<i>Bill Auld</i>

Staff Report

Origin

Staff has received a request from the Scotch Pond Heritage Fishers Co-operative for the dredging of the channel at the entrance of Scotch Pond and its basin. (See Map Attachment 1)

The current sediment build-up depth at the mouth of the entrance to Scotch Pond prevents the local commercial fishing and recreational users from entering or exiting the basin during low tides and severely limits the efficiency of the facility.

The purpose of this report is to update Council on the dredging information and to seek approval for funding to initiate the FREMP process and to dredge the entrance channel and the boat basin at Scotch Pond, as required.

Analysis

Preliminary partial soundings completed by the dredging contractor during the dredging operations last summer for the Tall Ships Event suggests some areas of the channel basin into the Scotch Pond Facility has risen more than 2 metres since it was last dredged in 1994. This would indicate that during local low water levels, these areas would only be a few inches deep. This condition must be corrected before we lose the ability to utilize Scotch Pond. At the same time, staff will be reviewing the depth sounding in Scotch Pond itself and recommending to do the dredging, if required.

Options for consideration:

Option 1

Delay dredging operations for future consideration

Consequences

- the Scotch Pond facility may be shut down due to inaccessibility and safety concerns for its users

Option 2

Complete survey and chemical soil analysis report only and consider dredging operations for future year capital

- a detail topographical survey, depth soundings and volume calculations of the site
- a chemical soil analysis report to be conducted

Consequences

- the Scotch Pond facility may be shut down due to inaccessibility and safety concerns for its users

- survey and soil analysis report is valid for one year and may be required to be completed again if the process is delayed for extended period of time

Option 3

In order for dredging operations to proceed the following actions must be undertaken

- a detail topographical survey, depth soundings and volume calculations of the site
- a chemical soil analysis report to be conducted
- a formal application to the Environmental Review Committee/FREMP/Environment Canada
- an ocean disposal application submission including application and dumping fees, local media notification, and notice presented in the Canada Gazette as per ERC requirements, and/or explore the option of land-disposal on Garry Point Park.
- City tender process
- dredging operations
- post dredge soundings and volume calculations & closing documents for the ERC

Consequences

- the ERC application process can take up to 6 months for approval, which would result in the dredging operations to commence in the fall of 2003 at the earliest. Based on past experience, dredging operations are required approximately every 5 to 10 years depending on site conditions, location and commercial/public use. Scotch Pond Basin appears to be overdue for its maintenance dredging program.
- results from the chemical soil analysis report will indicate if the sediments are suitable for ocean disposal.

Staff have met with the Scotch Pond Heritage Fishers Co-operative to explore options to assist in the funding of the dredging. They have no funds at this time due to the extensive work recently done on the floats and the electrical upgrade of the site. However, they have indicated they are willing to look at a contingency fund for dredging in the future.

Staff believe that given the expenses and scope of work required for the said processes that we be given the maximum latitude to do as much dredging as possible that would be effective, therefore staff recommend Option 3.

Financial Impact

Staff has identified available surplus dredging funding in the following capital accounts:

- *Britannia Dredging 2002*
- *McDonald Beach Dredging 2002*

While costs of actual dredging are unknown at this time, the total amount would be determined by undertaking the initial topographical survey and chemical soil analysis report. These are the estimated initial costs:

Topographical Survey & Depth Soundings	\$10,000.00
Collection & Chemical Soil Analysis Report	\$15,000.00
FREMP/EC/Environmental Review Committee Application	\$1,500.00
Ocean Disposal Application	

Ocean Dumping Fees @ \$0.47/cubic metre (to be determined upon receiving survey information)

Dredging Operations (to be determined upon receiving survey and tender bid submissions)

Past tender submissions varied from \$5.00 to \$8.50 per cubic metre plus mobilization and demobilization costs

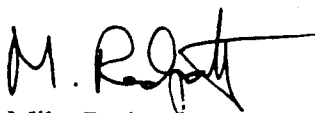
Once the initial survey and soil analysis are completed we can then provide the detail costs for the dredging operations through the City's Request for Quotation Tender Process.

Conclusion

In order to investigate the full extent of the scope of work required at the site, staff would require completing a topographical survey and depth soundings of the channel/basin to calculate the volume of sediments required to be dredged. In addition, a chemical soil analysis report would need to be completed to determine the sediments content and disposal options.

Assuming the chemical soil analysis report suggests there are no concerns with any contaminant levels of the subject area, we can then proceed with the formal application to Environment Canada and the Environmental Review Committee for the dredging and ocean disposal of the sediment materials.

There is funding available from the Britannia and McDonald Beach Dredging capital accounts to complete the initial administrative project requirements; however, further funding may be required for the complete dredging operations when the City receives all regulatory approvals from the federal agencies.

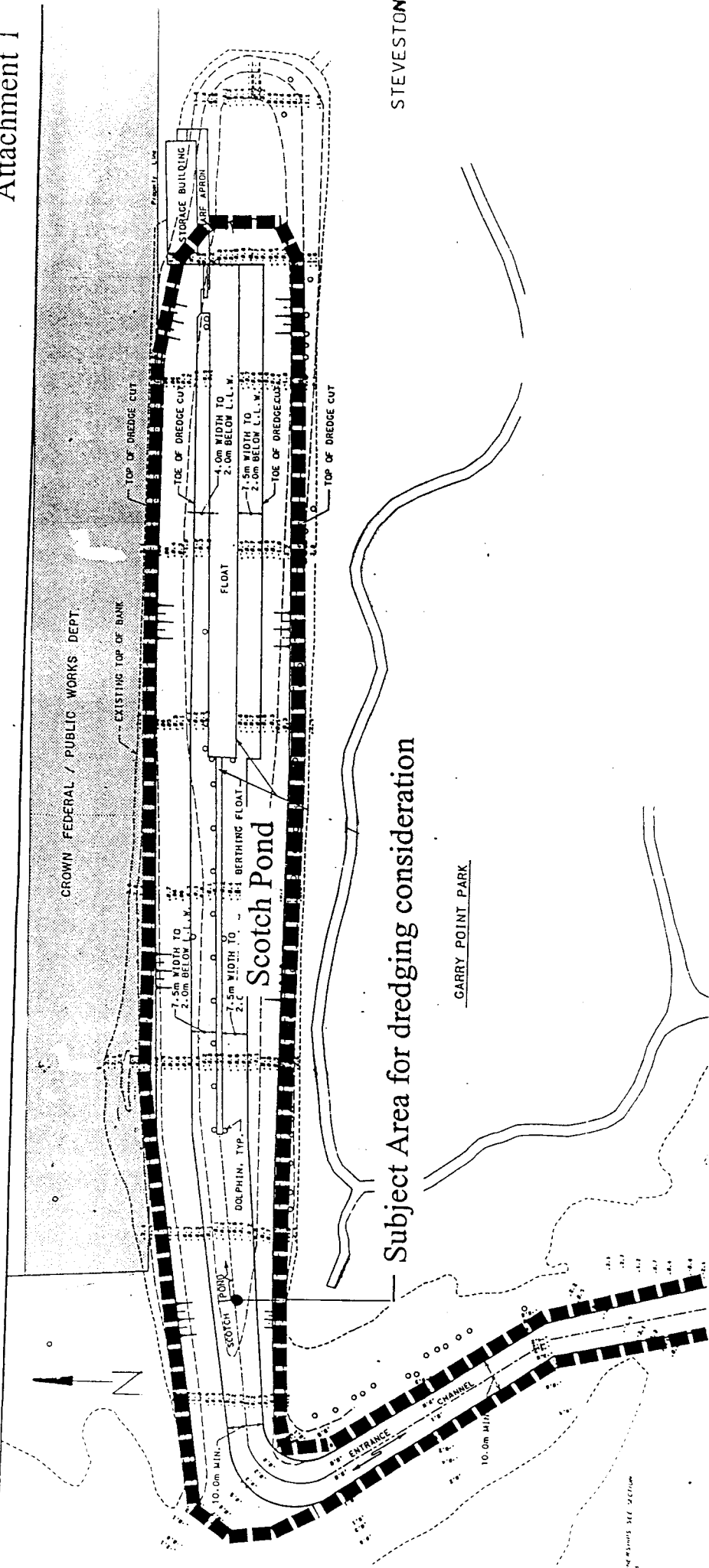


Mike Redpath
Manager, Parks - Programs, Planning & Design



Marcus Liu
Parks Engineering Technologist

STEVESTON



Subject Area for dredging consideration