



City of Port Moody

Report to Finance Committee

Date: October 15, 2024
Submitted by: Engineering and Operations Department – Project Delivery Services Division
Subject: Rocky Point Pool Boiler Replacement – Request for Additional Capital Budget

Purpose

The purpose of this report is to seek authorization from the Finance Committee to allocate funding from Climate Action Implementation Reserve to address the higher-than-anticipated project costs associated with the Rocky Point Pool Boiler Replacement Project.

Recommended Resolution(s)

THAT a maximum of \$135,000 from the Climate Action Implementation Reserve be allocated to complete required work on the Rocky Point Pool Boiler Replacement project as recommended in the report dated October 15, 2024, from the Engineering and Operations Department – Project Delivery Services Division regarding Rocky Point Pool Boiler Replacement – Request for Additional Capital Budget;

AND THAT the remaining budget of \$123,682 from the Rocky Point Pool Pool Covers project be re-allocated to complete required work on the Rocky Point Pool Boiler Replacement.

Background

In 2022-2023, Prism Engineering conducted an energy study at Rocky Point Pool as part of a larger Greenhouse Gas (GHG) Reduction Pathways project involving multiple civic facilities. This effort was made in alignment with the City's Climate Action Plan, recognizing that buildings account for almost half of the GHG emissions produced in the City. A number of carbon reduction measures were identified for Rocky Point Pool, including:

- Installing pool covers over both the main pool and the tot pool to reduce evaporation and heat loss;
- Replacing the gas-fired main pool boiler, which is already at end of life, with heat pump; and
- Replacing the gas-fired tot pool boiler, when it reaches end of life, with heat pump

The estimated retrofit costs provided in the report included engineering, project management, and supply and installation of equipment and were used to guide the 2023 capital budget planning for the above GHG reduction projects.

Discussion

As staff were working on the Rocky Point Pool Pool Covers project, it soon became apparent that while installation of the pool covers would achieve great GHG reductions (20.8 ton CO₂e/year according to the energy study), there were several factors including operation logistics and staff safety that would make the project operationally and financially undesirable. As such, staff do not recommend implementing this capital project of installing a thermal cover system at Rocky Point Pool. See **Attachment 1** for more details.

As for replacement of the main pool boiler and tot pool boiler, staff decided to combine the two projects together to maximize design and construction efficiency. Even though the gas-fired tot pool boiler is only about 5 years old with much life left in it, replacing it now with heat pump would mean imminent GHG reductions and energy cost savings. The existing electrical service has sufficient capacity to accommodate the additional electrical loads introduced by the new heat pump systems during the summer when the pool is open, but the electrical distribution within the Rocky Point Pool Building will need to be upgraded. The associated electrical upgrade costs were included in the estimated retrofit costs in the energy study. Table 1 below shows the allocation of capital budgets.

Table 1. Allocation of Capital Budgets

Project Description	Project Number	Capital Funding Approved (A)	Expended Costs as of September 15, 2024 (B)	Remaining Funding for Construction, Staff Costs and Contingencies (A – B)
Boiler Replacement (#1)	FC23220	\$100,000	\$47,289	\$52,711
Boiler Replacement (#2)	FC24220	\$144,000	-	\$144,000
#1 + #2	Subtotal	\$244,000	\$47,289	\$196,711
Pool Cover (#3)	FC24258	\$125,000	\$1,318	\$123,682
(#3)	Subtotal	\$125,000	\$1,318	\$123,682
			Total (#1+#2+#3)	\$320,393

The engineering consultant recently completed a class D (+/-50% accuracy) construction cost estimate which came to \$455,438 (includes a contingency of 5%). After subtracting the committed consulting design costs and spent staff time to date, there is only \$196,711 remaining in the budget for construction. This funding shortfall of \$258,727 is significant, because the construction cost estimate is essentially doubled the original project budget. The main cost drivers for the increased cost are increased electrical distribution upgrade costs, increased equipment costs and general contracting works such as heat pump foundations, trenching for buried pool piping that were not included in the original estimate.

Since staff do not support implementing pool covers for reasons stated above, staff recommend that the Rocky Point Pool Pool Covers project be terminated and the remaining budget in the project be re-allocated to the Rocky Point Pool Boiler Replacement project because both projects share the same goal of GHG reduction at Rocky Point Pool. This re-allocation would reduce the funding shortfall to \$135,045. To cover this shortfall, staff propose this be funded from the Climate Action Implementation Reserve.

Table 2. Proposed Funding

Project Description	Funding Source	Amount	Capital Cost Estimate
Capital Cost Estimate to Implement Boiler Replacement #1 & #2			\$455,438
	FC23220	\$52,711	
	FC24220	\$144,000	
	FC24258	\$123,682	
	NEW - Climate Action Implementation Reserve	\$135,045	
Total		\$455,438	\$455,438

The gas-fired main pool boiler is in dire need of repairs and is highly unlikely to be able to operate another season. Staff are working with the consultant to have a design package ready for tender in Q4 2024 to accommodate equipment lead time and contractor schedule such that the new heat pumps can be installed and operational prior to late May / June 2025 when the pool preparation works start.

Financial Implications

Should Council approve the recommended resolutions, additional funding of \$135,000 can be sourced from the Climate Action Implementation Reserve. The use of the Climate Action Implementation Reserve is appropriate as the recommended boiler replacement will have an immediate impact on GHG emission reductions, which is the goal of the Climate Action Plan.

Communications and Public Engagement Initiatives

There are no communications or public engagement initiatives associated with the recommendations in this report.

Council Strategic Plan Goals

The recommendations in this report align with the following Council Strategic Plan Goal(s):

- Strategic Goal 2.2 – Advance climate change mitigation and adaptation

Attachment(s)

1. Rocky Point Pool Pool Covers Memo.

Report Author

Sandy Tolentino, P.Eng.
Project Manager

Report Approval Details

Document Title:	Rocky Point Pool Boiler Replacement - Request for Additional Capital Budget.docx
Attachments:	- Rocky Point Pool Pool Covers Memo.pdf
Final Approval Date:	Oct 3, 2024

This report and all of its attachments were approved and signed as outlined below:

Julie Pavey-Tomlinson, General Manager of Community Services - Oct 1, 2024

Stephanie Lam, City Clerk and Manager of Legislative Services - Oct 2, 2024

Lindsay Todd, Manager of Communications and Engagement - Oct 2, 2024

Paul Rockwood, General Manager of Finance and Technology - Oct 2, 2024

Anna Mathewson, City Manager - Oct 3, 2024