



To: Paul Gipps, CAO

Date: December 8, 2020

From: Erin Goodwin, Facilities and Recreation Manager

Subject: Mt Boucherie Ammonia Chiller Replacement – Early Approval

#### RECOMMENDATION

**THAT** Council consider and resolve to authorize early approval for the 2021 Capital Budget request of \$450,000 for the Mt. Boucherie Ammonia Chiller Replacement project; and

**THAT** Council direct staff to release a request for quote for the project; and

**THAT** Council direct staff to bring forward a staff report in January, 2021 with the RFQ results.

### REASONING

Due to the need to order equipment approximately 12 weeks ahead of installation, early approval is being requested for Council's consideration. To minimize the impact to ice users and lost revenues, staff is recommending the work be completed between May 17, 2021 – July 24, 2021.

Early Council budget approval and RFQ release is recommended to ensure that project construction can start by May 17, 2021 and be completed by July 24, 2021. If Council grants early approval, staff will bring forward a staff report in January, 2021 with the RFQ results, for Council's consideration.

### BACKGROUND

In 2018, the Fernie BC ice rink had a catastrophic failure of its ammonia chiller which resulted in the death of three people. In response to this tragedy, Technical Safety BC (TSBC) mandated that all chillers be tested for possible deterioration and a replacement strategy for all chillers reaching the end of their lifespan be in place. The City of West Kelowna (CWK) existing chiller was installed in 1999. The anticipated lifespan for these chillers is approximately 20-25 years. As recommended by TSBC, the CWK's Preventative Maintenance Program requires annual testing of the ammonia plant which includes, but is not limited to the following:

- Brine PH levels to prevent corrosion.
- Pressure testing of the chiller to ensure there are no leaks.

These tests allow the CWK to have confidence that the chiller is working in a safe, effective manner, while confirming there are no major structural issues.

Although the chiller has no major structural issues at this time, due to the age of the equipment and potential safety risk if the pressure vessel were to fail, staff is recommending replacing it.

Staff is proposing to replace the existing chiller with a new plate and frame system which is much smaller and the critical charge of ammonia in the system will be considerably less and in turn will be much safer for staff and the general public in and around the facility.

Estimated timeline to complete the work: 12 Week Equipment Order

Ten (10) weeks Construction

Project Budget:

\$450,000

The CWK has applied for a grant through the Community Economic Recovery Infrastructure Program. If successful, the CWK could receive up 100% funding for this project. All grant application projects must start by Dec 31, 2021 and end before March 31, 2023. Starting the work prior to receiving grant money will not void any grant money, if the CWK's application is approved.

### FINANCIAL IMPLICATIONS

During a typical year, the CWK will shut down the arena for annual maintenance for approximately 6 weeks, starting June 1<sup>st</sup>. To complete this project, the CWK will need to shut the arena down for an additional 4 weeks.

Estimated lost revenue:	\$30,000
Project Budget:	\$450,000
Potential Grant Funding:	100% project costs

(lost revenue not included in project grant application project costs)

# **REVIEWED BY**

Warren Everton, Director of Finance/CFO

Shelley Schnitzler, Legislative Services Manager/Corporate Officer

## APPROVED FOR THE AGENDA BY

Paul Gipps, CAO

Powerpoint: Yes  $\boxtimes$  No  $\square$