

---

## CITY OF KELOWNA

# MEMORANDUM

---

**Date:** January 21, 2003  
**File No.:** 7900-20  
**To:** City Manager  
**From:** Sport & Facilities Manager  
**Subject:** Memorial Arena Future and Proposed Renovations

---

### **RECOMMENDATION:**

THAT City Council approve in principle the renovations of Memorial Arena in 2004 which include the replacement of the arena boards, concrete floor and related refrigeration plumbing equipment and ancillary building improvements;

AND THAT the Memorial Arena be designated as an ice arena until at least 2014;

AND THAT City Council instruct staff to proceed with detailed design and full cost estimates;

AND FURTHER THAT City Council consider the additional funding requirements in the 2004 provisional budget.

### **BACKGROUND:**

Memorial Arena is 54 years old with the existing artificial floor and boards system now 38 years old (1964 construction). This type of floor has an operational life span of 25 to 30 years. As the floor ages, the plastic pipes in the floor start to become brittle and crack, causing leaks in the floor and compromising the ability to make and maintain ice. Existing cracks in the concrete slab indicate the existence of shear forces acting on the slab. For the last several years we have had leaks occurring where the slab meets the boards indicating shear forces there as well. 2002 start up required the repair of 18 lines.

R.H. Strong and Associates were contracted to review and provide comments and observations on the condition of Memorial Arena's floor and board system. The report indicates that the life expectancy of the floor system has been reached and may be subject to sudden failure through shearing of a number of lines at one time. Through their experience and background with arena operations and refrigeration systems, and given the age of Memorial Arena's floor system and construction materials, we are considered to be operating on borrowed time.

During the 2003 budget deliberations, City Council approved \$150,000 towards the repairs of Memorial Arena's floor/board system. The budget submission outlined that floor/board replacement are estimated at \$700,000 and that the remaining funding requirements would be brought forward as part of the 2004 provisional budget process. In conjunction with the replacement of the floor/boards, an additional \$150,000 in 2005 would be required for additional improvements to upgrade aspects of the building for operational efficiencies and code requirements. During the budget review, Council requested a complete report on the project.

---

**DISCUSSION:**

---

Given the current floor condition, options considered for the future of Memorial Arena are:

1. Replace the floor/board system, complete other ancillary building improvements, and extend the life of Memorial Arena for an additional 10 years.
2. Continue to use as an ice arena until floor system fails, then retro fit facility for alternate uses.
3. Continue to use as an ice arena until the floor system fails, then close building until alternate use becomes priority.

The recommendation is to replace the floor and board system and undertake upgrades to the ancillary building areas. This work includes:

- Removing the existing boards, slab, refrigeration piping
- Excavate frozen material
- Install new subsoil
- Install sub-floor heating system
- Install insulation
- Install new concrete floor
- Install new boards, walkway and players benches
- Renovate ancillary building areas to improve the operation efficiency and aesthetics (commons areas, change rooms, public washrooms, etc.)

The current size of the arena playing surface is 80'x190'. This is considered small by current standards. During the detailed design phase, staff will investigate the feasibility of increasing the size of the playing surface, especially the length.

Pros of proceeding with option 1:

- Defers the need for development of new ice arenas by maintain Memorial Arena as an operational ice arena.
- Existing plant is in good shape with the exception of the condenser which is 15 years old and able to operate for at least an additional 10 years. Condenser may have to be replaced within 10 years at a cost of approximately \$80,000 (current price).
- Home for the Military Museum is confirmed for a minimum of 10 years.
- Defer the need for capital to redevelop Memorial for alternate uses.

Cons of proceeding with option 1:

- Uncertainty of the total usage of new ice which may result in some unbooked time within the arena booking system.
- As per agreement with RG Arenas, adult hockey will be removed from Memorial Arena after the 2003/4 season.
- More costly than simply closing Memorial Arena.

**SUMMARY:**

The replacement and repairs of Memorial Arena appears to be the most practical direction for a number of reasons. It maintains 6 operational ice sheets within the City allowing significant new ice to respond to current and future demands for arena ice time. Maintaining Memorial as an ice arena will defer the need for new arena development thus reducing demand on additional capital requirements within Parks and Leisure Services capital plan. It confirms a home for the military museum for at least 10 years. Finally, it provides for the upgrade and continued operation of a significant City recreation facility and landmark.

---

Should City Council approve the recommendations, we would plan to have detailed drawings complete in 2003, with tender/awarding stage from January to May 2004. In order to accommodate the Memorial Cup plans to host the Hall of Fame Exhibit in Memorial Arena, construction would commence immediately following the tournament. The construction period is expected to be approximately 16 weeks resulting in a 2004 start up in October.

---

Jim Gabriel  
Sport & Facilities Manager

Cc: Director of Parks and Leisure Services  
Recreation/Cultural Services Manager  
Civic Properties Manager