

ITEM #: 26
 DATE: 10-22-24
 DEPT: P&R

COUNCIL ACTION FORM

SUBJECT: AMES/ISU ICE ARENA RADIANT HEAT REPLACEMENT PROJECT

BACKGROUND:

The Ames/ISU Ice Arena has a radiant heating system which provides heat for the spectator seating area and the lobby area. This system is a critical feature of the Ice Arena and is regularly used when the Ice Arena is open for games and practices. When the radiant heating system is not properly functioning, staff often receives complaints regarding the temperature in the seating area. Without the system, it can be uncomfortable for spectators, especially when the outside temperature dips below 32 degrees.

The radiant heating system (spectator seating and lobby areas) was installed prior to the Ames/ISU Ice Arena opening in 2001 and has lasted 23 years. The life expectancy of the system is 15 years. **In February 2024, staff discovered that the spectator seating radiant heating was malfunctioning. Staff was able to make minor repairs to keep it functioning, however, these repairs are not a viable long-term solution. After exploring possible repair options, the recommended action is to replace the equipment.**

Staff explored alternatives to radiant heating such as a forced air system, but it was determined that this form of heating could conflict with the ice making system. Therefore, staff is proposing replacement of the malfunctioning system with a new radiant heating system. Staff received preliminary cost estimates from contractors capable of doing the work with a range of costs to replace the radiant heating system between \$65,000 and \$85,000. Relying on this estimate, City Council reallocated \$75,000 from the Women's Locker Room Project to the Radiant Heating Replacement Project in March.

The City hired KCL, West Des Moines, Iowa, to develop project specifications and a cost estimate for the project. KCL provided several material options but recommended pursuing heat treated aluminum due to the environmental conditions inside the Arena. Unfortunately, the latest cost estimates for the project are higher than the anticipated costs, as detailed in the table below:

| | |
|---|-------------------|
| Design and Engineering (work performed by KCL) | \$ 13,500 |
| Project Cost | \$ 138,550 |
| Contingency (5%) | \$ 6,900 |
| Total Project Cost | \$ 158,950 |

Because the available funding for this project is \$75,000, the estimated shortfall is \$83,950. The shortfall could be covered by the Ames/ISU Ice Arena Capital Reserve Fund, which currently has a balance of \$107,689. However, if this source is utilized, the balance would be reduced to only \$23,793. After the bids are received in November, the amount of additional funding needed, if any, will be apparent.

ALTERNATIVES:

1. Approve plans and specifications for the Ames/ISU Ice Arena Radiant Heat Replacement Project and set November 20, 2024 as the bid due date and November 27, 2024, as date of public hearing and award.
2. Do not approve plans and specifications for the Ames/ISU Ice Arena Radiant Heat Replacement Project.
3. Refer back to staff with direction as to how to proceed.

CITY MANAGER'S RECOMMENDED ACTION:

The radiant heating system at the Ice Arena is critical equipment to the facility as it provides heat to spectator areas. Currently, the system is not functioning and needs to be replaced as the system has exceeded its life expectancy by eight years. Staff receives multiple complaints any time the radiant heat system is not functional. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as described above.