

Los Alamos Ice Rink Temporary Chiller for the 2023-2024 Skating Season

Incorporated County of Los Alamos
Public Works Department &
Community Services Department

September 14, 2023

LOS ALAMOS 

Project Background

Existing floor and refrigeration equipment

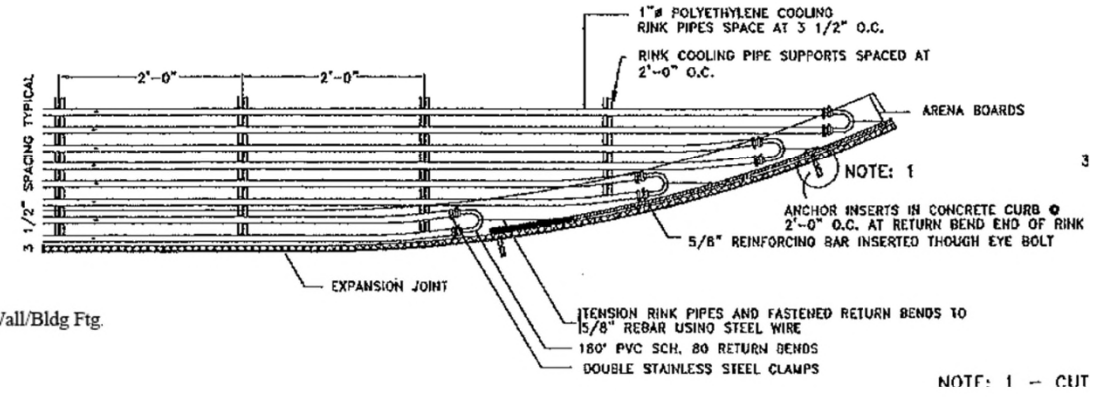
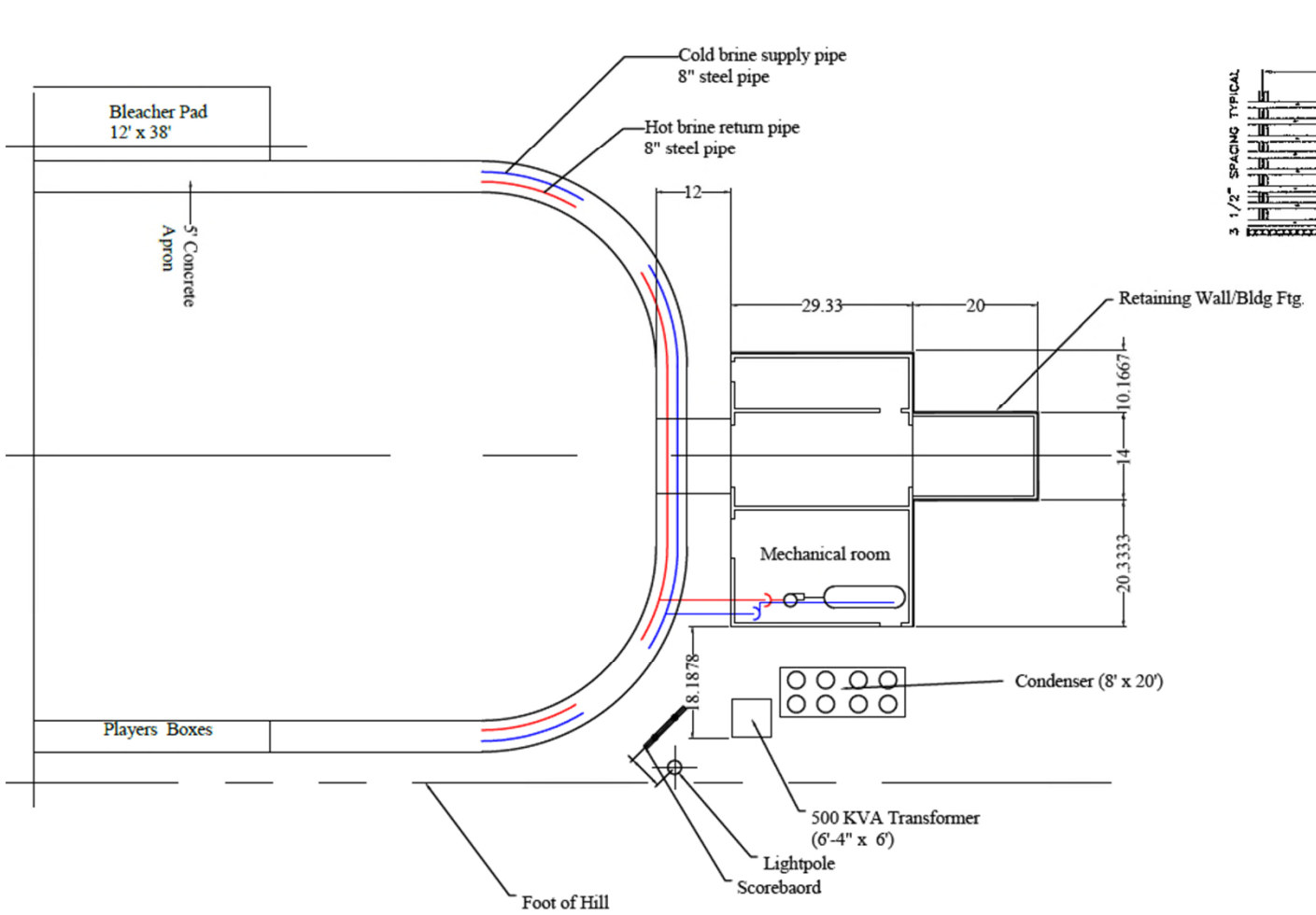
- Installed in 2002 (21 years of service)
- Expected service life of 25 years
- Prior budget cycles programmed equipment replacement in FY 2026



Mechanical room to Ice Rink Floor

Indirect refrigeration system

PLAN VIEW



Primary and Secondary Cooling Circuits

- Primary system refrigerant cools brine solution
- Secondary system cooled brine solution pumped through pipes embedded in ice rink floor

Current Condition

Existing floor & ice-making equipment at end of serviceable life

- Multiple equipment malfunctions over the last two seasons
- Difficulties to maintain ice
- High repair costs, difficulty to find replacement parts
- Existing chiller is unreliable for upcoming 2023-2024 season



Interim Solution

Temporary chiller system proposed to provide reliable service for the upcoming 2023-2024 ice skating season



Recommended location for temporary chiller

Example Temporary Chiller



Temporary ice rink and chiller at Landmark Center in Downtown St. Paul, MN.



Approximate chiller dimensions

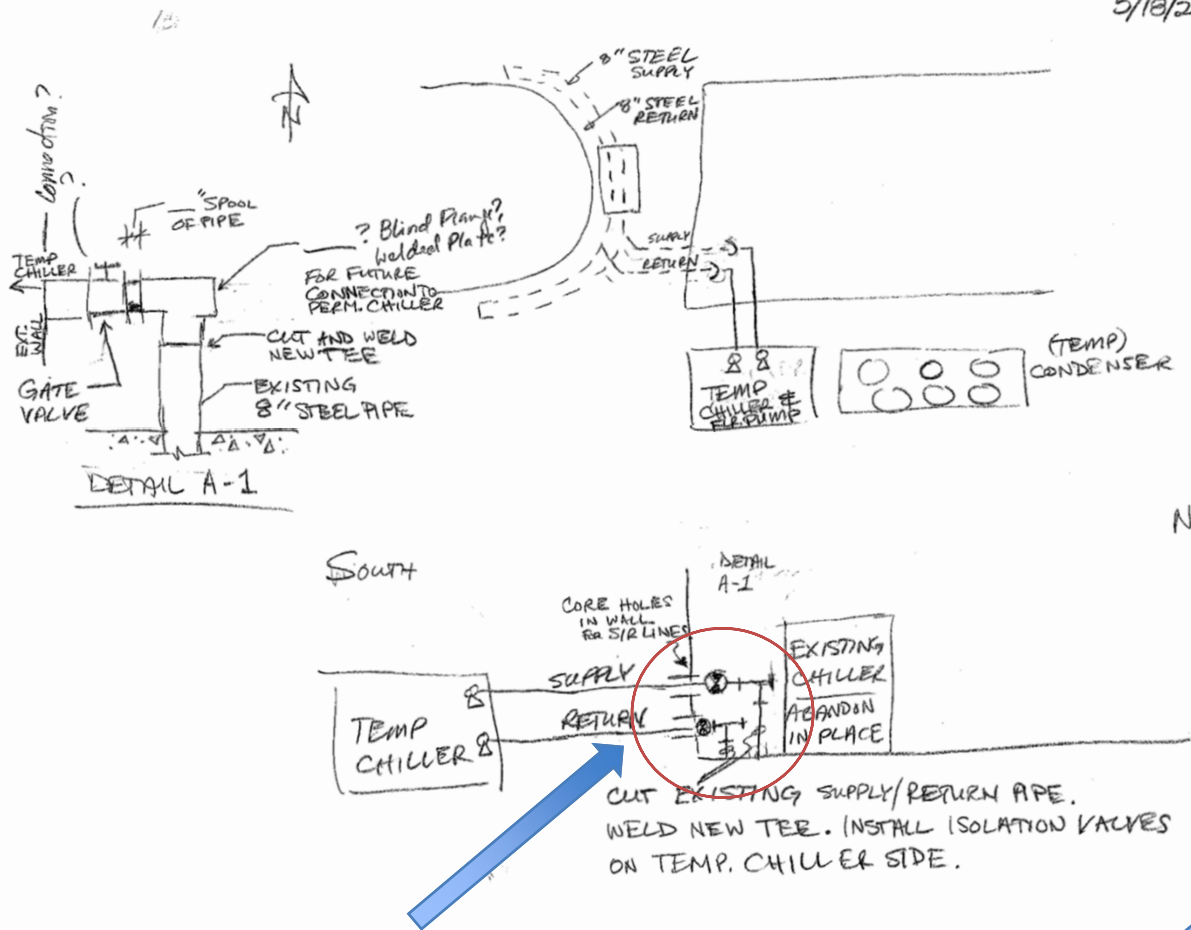
L = 24 feet

H = 9 feet

W = 8 feet

Changes to Existing Piping

5/18/2023



Cut and connect to secondary coolant supply / return pipes to ice rink floor

Project Progress

- Aug. 8 2023. Council approved agreement for procurement of temp. chiller services
- Aug. 15 2023. Agreement fully executed & notice to proceed
- Aug. 24 2023. Contractor reserved Temp. chiller for County
- Today. Presentation to Parks & Recreation Board
- Work in progress. Contractor is preparing work schedule
- Work in progress to procure a programmed long-term replacement.



Next Steps

- Sep. 2023. Review work schedule & Kickoff meeting with Contractor
- Early Oct. 2023. Removal of existing chiller
- Oct. 16 2023 Temporary chiller estimated date of arrival to site and start of installation
- Last week of Oct 2023. Start the ice making process
- Mid-Nov 2023. Start of the ice season.



Discussion & Questions

