

Crisler Arena Renovation



Project Description

Built in 1967, Crisler Arena is a multi-purpose venue with a seating capacity of approximately 13,800 used for academic, athletic, and entertainment events. The arena has received minor renovations since construction, and we now propose addressing its highest priority infrastructure needs, including life safety, mechanical and electrical. The project will include: replacement of the roof and asbestos abatement as needed; new fire detection, alarm, and suppression systems; a new smoke evacuation system; emergency egress lighting; replacement of the heating and ventilation units; and building electrical system upgrades. The project will also replace the seats in the lower and upper bowl, including the addition of seating meeting the requirements of the Americans with Disabilities Act, as well as relocate and widen aisles and add hand rails to the aisles.

Energy Efficiency Measures

- Increased insulation in the existing roof, in the new exterior walls and under new slabs.
- Energy efficient windows/glazing in new windows for increase thermal performance.
- High efficiency lighting throughout.
- Occupancy sensors to control lighting during unoccupied times.
- Demand control ventilation to reduce amount of outside air being heated/cooled during times of low occupancy.
- Increase thermostat dead bands for heating during unoccupied times.
- Supply air ductwork sized at lower velocities which reduces the static pressure and therefore less fan energy is required.

Other Sustainability Features

- Reuse of the existing Arena, reducing waste from demolition of the existing arena and reducing the impact from constructing an entirely new arena.
- Site is located on public and UM bus routes, encouraging use of public transit.
- No new parking provided on-site (to reduce pollution and land development impacts).
- Use of an Erosion and Sedimentation Control Plan during construction to reduce pollution from construction by controlling soil erosion, waterway sedimentation, and airborne dust generation
- Energy efficient transformers
- Use of low VOC materials for pipe connections.
- Monitoring outside air delivery to ensure during low load conditions that the correct amount of outside air is being delivered.
- Air handling systems will be designed for thermal comfort by the occupants.
- Refrigerant systems will utilize HCFC which have almost zero ozone depletion ratings.
- The new mechanical system will be commissioned.
- Use of low-VOC materials (eg carpets, paints).
- Use of regional and local materials where possible.

Project Data

- Budget: \$23M
- Schedule: Completion scheduled for Winter 2012
- Square Feet: 360,000 gsf