



UNIVERSITY OF  
SOUTH DAKOTA

## OWNER PROJECT REQUIREMENTS

### Track / Soccer Restroom & Concessions Building

#### 1.1 GENERAL PROJECT DESCRIPTION

The University of South Dakota is engaging in a 2,016 square foot building located within the new track and soccer complex on the USD campus. The facility will provide restrooms for up to 1,000 spectators, a meeting room, and concessions areas. Also planned is a small ticket booth to be located at the main entrance on the north side of the complex.

Exterior wall finishes shall be low maintenance such as stucco, or veneers consisting of masonry, stone or similar materials. Interior finishes shall be durable, low maintenance with the ability to withstand low pressure washing and extremes in temperature. The color palette for the new facility shall be similar to the softball and storage buildings already on the complex.

We do not anticipate achieving LEED Silver certification. The facility is a small construction project to provide restroom and concessions spaces to the USD track and soccer complex. The complex has been exempted from meeting the LEED Silver certification requirement.

#### 1.2 DESIGN AND CONSTRUCTION STANDARDS AND CODES

- The International Code Council's 2009 International Building Code, the latest edition of the International Fire Code, and International Mechanical Code and the associated appendix chapters for each code.
- The South Dakota State Plumbing Commission's rules and regulations governing the installation of plumbing.
- The South Dakota State Electrical Commission's rules and regulations governing the installation of electrical wiring, fixtures and equipment.
- The Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities.
- ASHRAE Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality

**NOTE:** Should there be any conflict between any of the above "Codes", "Guides" or "Laws", the more stringent shall apply.

### 1.3 OUTDOOR DESIGN CONDITIONS

The new HVAC systems shall be designed to temper indoor space temperature and relative humidity as defined below whenever the outdoor air conditions are no more severe than the following:

Winter: -19°F  
Summer: 95°F dry bulb / 73.2°F wet bulb

### 1.4 INDOOR DESIGN CONDITIONS

- Indoor Air Quality – ASHRAE Standard 62: Ventilation For Acceptable Indoor Air Quality shall be used to establish specific ventilation rates and indoor air quality levels to prevent indoor air quality problems.
- The facility is a smoke-free environment.
- Low-Emitting Materials – All adhesives, sealants, and paints are to be specified as low-VOC to substantially reduce indoor air contaminants.
- Temperature – The mechanical systems are anticipated to be similar to a wall-mounted mini-split system in the concessions and team meeting room. No other heating or cooling system is required. Variance in individual comfort levels will be accommodated by allowing controllability of the system in rooms where a system is provided.
- Building Envelope – Building construction and sealants must be of high quality to ensure minimal weather infiltration.
- Plumbing – Fixtures, piping and drains must have the capacity to be winterized as the facility will not be heated during winter months.

#### 1.4.1 ANTICIPATED HOURS OF OPERATION

Day	Hours
Sunday	8 am – 10 pm
Monday – Friday	6 am – 10 pm
Saturday	6 am – 10 pm

Occupancy of the facility will be intermittent throughout the spring, summer and fall. Use of the facility will be limited to those attending sporting events and practices. During winter months the facility will be winterized and not available for use.

#### 1.4.2 SPACE TEMPERATURES

Space Type	Summer	Winter
Concessions	80°F Maximum	System not in use
Meeting Room / Storage	80°F Maximum	System not in use
Restrooms	No HVAC Provided	No HVAC Provided
Unoccupied Hours	90°F Maximum	System not in use

The HVAC systems should be sized to achieve the setpoint temperatures. The plus/minus tolerances are intended to provide an acceptance measure for control system tuning.

#### 1.4.9 DOMESTIC HOT WATER

- Domestic Hot Water Heaters will be set to produce 140°F water. The mixing valve will be set to supply 120°F water to the distribution pipe. Water Temperature is 110°F at fixture point of use.
- The domestic hot water heater will have a high efficiency rating of 90% or greater.

#### 1.4.11 LIGHTING AND LIGHTING CONTROLS

- Lighting levels shall meet or exceed by no more than 10% IES recommended levels.
- The use of incandescent lamps shall be prohibited.
- Fluorescent fixtures and lamps shall be T8, 32W (or less) with electronic ballasts.
- LEDs shall be utilized were possible.
- Light fixtures shall be vandal resistant and able to operate in extreme temperatures.
- The following table further outlines lighting controls anticipated for some spaces.

Space	Control Type	Setpoints
Meeting Room	Occupancy Sensor	OS time off after 10 minutes
Concessions	Occupancy Sensor	OS time off after 10 minutes
Restrooms	Occupancy Sensor	OS time off after 15 minutes
Mechanical / Electrical	Wall Switches	No automated control - considered a safety issue
Exterior lighting	Time of Day Schedule and Photocell	Exterior lighting controlled through a combination of Photocell & Schedule.
Emergency Egress	Not Controlled	Always on.

### 1.5 FACILITY OPERATION

The facility will be operated by the University of South Dakota Facilities Maintenance Staff.

- Building operators will be able to manually over-ride the HVAC to operate during scheduled-off hours.
- Building operators will be able to manually over-ride lighting controls to operate during scheduled-off hours.

#### 1.5.1 TRAINING

The facility operators and staff need to understand the capabilities and limitations of the systems and how to operate user controls. Necessary facility personnel shall have thorough training on all building and utility systems including maintenance, minor repair and operation before occupancy. The list of instruction topics and signatures of each participant shall be provided by the Contractor. Training by designers, manufacturers, suppliers and/or installing contractors on new systems shall be required. All training must occur onsite. Although not considered comprehensive, a list of the anticipated systems requiring training is below:

- HVAC System Components
- Domestic Water System

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