

STATEMENT OF WORK

Scope of Work: To install a paging/sound system throughout the Rapid City Swim Center (RCSC). This work shall include all labor, material equipment and related services necessary to furnish, install and connect the paging/sound system complete with all required devices, wiring and connections as shown on the drawings and as further specified herein.

System Description:

1. Furnish and install a main public address system with music playback capability. The system shall be capable of high quality, reliable and satisfactory operation as hereinafter described. The system shall be the product of one manufacturer or of an agency experienced in such work. The installation and connection of all equipment and test of the operations of the system shall be made by a representative of the manufacturer or aforementioned agency. Components of the system shall be pre-assembled and pre-wired such that only connections to building wiring system need be made at the site. The system shall be complete with all parts and components necessary for the operation described.
2. The system shall consist of the following components: amplifier, mixer, equalizer, speakers, CD player, external music source (i.e. radio, DMX, satellite radio, etc.) mounting rack, message display board, junction boxes, switches, wiring and accessory equipment necessary to provide a complete operating system.
3. The system shall reproduce the page/sound throughout the building or be able to page or direct music to only certain areas of the building at one time. The building is divided into seven areas: lobby (lower/upper), Party room, Racquetball courts, three locker rooms, Multi-purpose Room, and the pool area divided into two areas.
4. The system shall reproduce sound from the lifeguard office consisting of microphones, auxiliary inputs and area switching capability.
5. The system shall be able to integrate with the display board at the front desk to inform customers of the events/programming going on in the center.

System Equipment:

1. Amplifiers: The amplifiers shall be solid state and shall be rated at 300 watts RMS continuous output and shall be TOA 900 series or equal as approved by the city. Provide (1ea) TOA 900 series amplifier for the lobby and party room speakers. Amplifier to be located within the sound system rack in the telephone room.
2. Lifeguard Office: The mixer shall be solid state and shall be 8 channels (4 microphones and 4 aux input capable) and shall be TOA 900 series or equal as approved by the city. Auxiliary switches to turn on and off certain areas shall also be located in the lifeguard office.
3. Main Pool Speakers: Speakers shall be environmental speakers due to the demanding air quality in the pool area. Units shall be Bose model 302A speaker or equal as approved by city. Speakers to be attached to the pool area walls and final mounting height defined by the system vendor.

4. Lobby/Party Room Speakers: Ceiling speakers shall be 8 inch 70 volt distributed type. Tap speakers at 2 watt each. Included appropriate baffle and enclosure.
5. 70 Volt Volume Controls: Provide [2ea] Volume control Lowell 25 watt for lobby and party room. The location shall be in the front desk office.
6. Equalizer: Equalizer to be used on the main pool speakers only. Equalizer shall be 31 band, 1/3 octave 12db cut or boost single rank space unit.
7. Microphones:
 - a. Wireless Type: Shall be [1ea] Audio-Technica ATW T&R310 UHF wireless handheld system. Provide rack kit, microphone and accessories.
 - b. Corded Microphones: Shall be [2ea] Audio-Technica Pro 41 microphones. Provide adjustable table top stand and 25 ft of microphone cable.
 - c. At each Microphone shall be a switches to allow all page or paging in only selected area(s)
8. Rack Enclosure: Provide [1ea] 16 space, 22 inch deep wall mounted rack with lockable front door. The rack shall be Middle Atlantic (#LWR-16-22FD) or equal as approved by the city. Also include in the rack, a mountable 8 outlet power director. Provide the necessary blanks to fill in the gaps between the equipment.
9. Message Display Board: Provide a 40 inch LCD television to be wall mounted at the front desk. The display must be capable of displaying video, television and computer graphics. Provide wall mounting supports and hardware.
10. Interface unit: Provide an interface unit between the main equipment rack and the equipment rack in the multi-purpose room. This unit shall be able to over ride the multi-purpose music selection to allow for paging in the room from the front desk.
11. Connection Plates: Provide connection plates for interface between lifeguard office multi-purpose room and main equipment rack.
12. Wiring:
 - a. Provide plenum rated 16awg stranded shielded 2 conductor speaker cables for the main pool area.
 - b. Provide plenum rated 18awg stranded shielded for 70 volt lobby and party room speakers.
 - c. Provide [2ea] plenum rated 18awg stranded shielded pairs for interconnect from lifeguard office to the main rack.

System Equalization:

1. Utilizing TEF 20 technology, equalize and aim speakers for optimum performance.
2. The system shall be installed complete and ready for operation and the installing agency shall make complete tests to insure proper operation of all parts. All volume controls shall be set at 1/2 maximum output after which individual room adjustments shall be made by changes at the individual speaker taps

Work Start Date: Funding for this project will be available Jan 2007.

Work Completion Date: All installation, work and testing must be completed by 30 April 2007

Funding of the Project: This project is budgeted for \$ 17,000.00 dollars

STATEMENT OF WORK

Scope of Work: To install a security system throughout the Rapid City Swim Center (RCSC). This work shall include all labor, material equipment and related services necessary to furnish, install and connect the security system complete with all required devices, wiring and connections as shown on the drawings and as further specified herein.

System Description:

1. Furnish and install a burglary alarm security system. The system shall be capable of high quality, reliable and satisfactory operation as hereinafter described. The system shall be the product of one manufacturer or of an agency experienced in such work. The installation and connection of all equipment and test of the operations of the system shall be made by a representative of the manufacturer or aforementioned agency. Components of the system shall be pre-assembled and pre-wired such that only connections to building wiring system need be made at the site. The system shall be complete with all parts and components necessary for the operation described.
2. The system shall consist of the following components: Panic switches, keypads, video cameras, video recorder, door magnetic contacts, motion detectors, exterior siren, junction boxes, switches, wiring and accessory equipment necessary to provide a complete operating system.
3. The system shall be capable of sending an alarm signal to police station and/or security company and sound an audible alarm upon unauthorized building entry.

System Equipment:

1. Control Panel shall be DSC Pc 55016Z or equal as approved by the city.
2. Keypads:
 - a. Install remote keypads adjacent to each of the 3 entry doors. Keypads shall be mounted 54 inches above the floor.
 - b. Keypad shall be DSC PK 5590 CL flush mount kit.
 - c. Provide all mounting brackets, wiring and connectors from the keypads to the main panel.
3. Video Cameras:
 - a. Install [27 ea] fixed security video cameras in the following locations: [4ea] in lobby, [2ea] in racquetball area, [5ea] in the pool area, [1ea] in back stair well, [1ea] for each of the back entrances, [2ea] for each hall (upper and lower) way, [1ea] in the multi-purpose room and [8ea] outdoor cameras for parking lot security. Each indoor camera shall be impact resistant, auto iris and variable focus cameras. Bosch VDC-455 Series or equal approved by the city. The outdoor cameras shall be impact resistant, auto iris and variable focus. Bosch Series or equal approved by the city.
 - b. Each camera will send a signal to the video recorder during normal business hours. Also these cameras must be turned on by the motion sensor or door contact switches after hour to record any activity. System shall be turned on also when the panic buttons are pushed.
 - c. All cameras will be in a fixed housing to provide the maximum coverage of the area they are located and be located high enough to protect them from daily contact.
 - d. Provide all mounting brackets, wiring, connectors and housings to connect the cameras to the video recorder at the control panel.

4. Video Recorder:

- a. Install [2es] PC based video recorders to record the video from the cameras. The PC based video recorder shall have the following requirements or equal as approved by the city.
 - i. AMD 64 3400 Dual Core processor or better
 - ii. 1GB of memory
 - iii. DVD\CD Player/recorder
 - iv. Minimum of three expansion slots
 - v. GeoVision (GV816) DVR card
 - vi. Minimum of 500 GB of storage
 - vii. 256 GB video card (non-integrated part of the mother board)
 - viii. KVM Switch (to share keyboard, mouse and screen)
 - ix. 17 inch Flat screen monitor.
 - x. Minimum three year warranty
- b. The recorder shall be programmable to scan all cameras and record different scan time or record constantly.
- c. The recorder shall be programmable to turn on and record an area where the system has been activated.
- d. The recorder shall be capable of recording at minimum of 120 frames per second
- e. The recorder shall be remote access capable.

5. Motion Detectors:

- a. Install motion detectors to cover all entry areas and to activate security cameras
- b. Motion detectors shall be equal to DSC Strata (ST-300 Series)
- c. Provide all mounting brackets, wiring and connectors from the motion detectors to main panel and video cameras.

6. Door Contacts:

- a. Install steel door contacts on all external doors.
- b. Install door contacts on all interior doors that separate public space and non-public space.
- c. Magnetic door contacts to equal to Sentrol 2700 Series.
- d. Provide all mounting brackets, wiring and connectors from the door contacts to the main panel.

7. Panic Buttons:

- a. Install [4ea] panic buttons to silently activate the system. Upon activation, the main panel will dial 911 to dispatch police to the center.
- b. Provide all mounting brackets, wiring and connectors from the panic buttons to the main panel

8. Siren:

- a. Install 2 weatherproof sirens on the exterior of the building equal to ATW DS301SET or equal approved by the city.
- b. Provide all mounting brackets, wiring and connectors from the sirens to the control panel.

9. Wiring: Wiring may be installed without conduit in attic or crawl space. Install or use existing conduits from security panel to attic or crawl space.

Testing: The system shall be installed completely and ready for operation. The installing agency shall make complete tests to insure proper operation of all parts and interface with outside agencies.

Work Start Date: Funding for this project will be available Jan 2007.

Work Completion Date: All installation, work and testing must be completed by 30 April 2007.

Funding of the Project: This project is budgeted for \$ 32,000.00 dollars