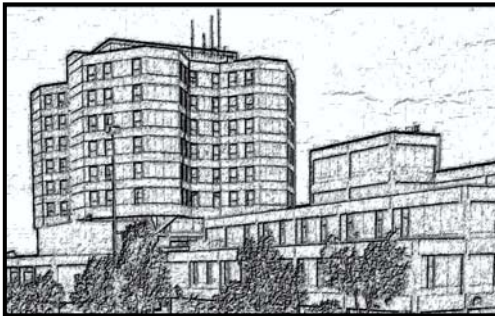




Rapid City Regional Hospital – Fire Alarm System Replacement



Skyline Engineering recently worked with Rapid City Regional Hospital and Hughes Associates to prepare bid documents including specifications and plans for a complete Fire Alarm System Replacement of the Rapid City facility non-addressable system.

Our staff has been involved in many mechanical and electrical design changes at Regional Hospital including a 150,000 SF multi-phase, multi-department expansion and renovation project, the two-story, 40,000 SF Cancer Care Institute, a renovation of the 70,000 SF Patient Tower, the remodel and expansion of the Administration Department, a sixteen station Dialysis Treatment Unit, an Outpatient Surgery Center, the MRI Addition, the renovation of NICU, PICU, Pediatric and Intermediate Care Departments, a renovation and expansion of the Obstetrics Department, an Expansion to the Cancer Care Institute, and various specialized medical equipment installations. All of these projects have required fire alarm systems extensions with healthcare criteria.

Project Data

Location

Rapid City, South Dakota

This project involved a complete system upgrade from a non-addressable system to an addressable fire alarm system.

Building Type

Regional Medical Center

Component replacement consists of more than 1000 fire/smoke dampers, over 2500 photoelectric detection devices, approximately 700 notification appliances and many other device types. A primary goal of the project was the conversion from various detection methods throughout the facility to total area coverage detection to eliminate facility duct detectors as allowed by the Uniform Building Code.

Building Area

585,000 square feet

System Features

Addressable
Command Center
Electrical Graphics
Campus Arrangement

The project involved the review of multiple existing plan sets and reduction of the documentation to a single set of plans outlining existing system components and defining all required new devices and system components. To determine the requirements of the new fire alarm system, a thorough review of current applicable codes was conducted. This included input from the State Administrative rules, Department of Health, Rapid City Building Officials and the most current Building Codes for Healthcare facilities of this type.

Completion Date

Scheduled for 2005

This high-rise facility includes features such as a central command center, fire alarm system digital graphics, multiple campus buildings, multiple off-site buildings monitoring, multiple annunciator locations, multiple elevators, pre-action suppression systems, a commercial kitchen, patient areas and nurse station interface.