



Sisters of Mercy Enterprise Data Center



Project Overview

Building Type: Data Center

Project Type: Design-Build

Completion Date: May 2010

Project Value

Total Scope: \$61,000,000

Mechanical Scope: \$9,040,500

Project Team

Engineer: C&R Mechanical Company

General Contractor: S.M. Wilson

Electrical Contractor: _____

Architect: Arcturis

Description

C&R Mechanical Company is playing a key design/build role in the development of this 40,000 square foot, 3.2mW facility, which features a complete Tier 4 mechanical system installation (per ANSI/TIA-942-2005 standard). All mechanical and electrical support systems will be located on the building's first floor. The second floor is planned to include 11,000 square feet of support areas, and an 8,700 data room space to house high-density data storage, with chilled water in-row coolers intermingled within the storage rack system. At fully-installed capacity, the mechanical systems will consist of two (2) 1,350 ton chilled water plants, each capable of supporting the entire building independently. Initial equipment installation includes two (2) 450 Tom chillers, two (2) 450 ton cooling towers, eight (8) water circulation pumps, and six (6) air-handling units. Space and provisions will be allotted for four (4) future 450 ton chillers and four (4) future 450 ton cooling towers. Complete 2N Redundant cooling systems will ensure that all building cooling requirements are met with around-the-clock support. Extensive life-cycle-cost analysis efforts during the design phase ensure the owner a fast payback on their investment, and energy efficient operation into the future.

While the Sisters of Mercy Health System worked on their electronic health records initiative (a project to integrate information systems at all hospitals and clinics), the limitations of their existing data center facility in Sunset Hills, MO became apparent. This new 40,000 square foot, two-story data center is slated to house just a handful of employees, and will serve as the primary Corporate Data Center for Mercy Health Systems. This building will be located in the Heidmann Industrial Park in Washington, MO. Construction began August 2008 and is scheduled for May 2010 completion.