

# Midwest Construction's Best of 2006 Awards

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## Marianjoy Rehabilitation Hospital

### Project of the Year: Health Care

Marianjoy Rehabilitation Hospital initiated a phased, two-year, fast-track replacement hospital and parking structure in west-suburban Wheaton, Ill.

The facility is located on a four-acre site on a 65-acre campus, and hospital services and operations were ongoing during construction. The 175,000-sq.-ft., three-floor facility has 120 private, inpatient rooms, each offering a view of the wooded campus or gardens. The building will also have a partial basement and enclosed penthouse.

#### Healing Patients with Design

The project goal is to build a sanctuary of healing.

Patients will be located in one of six healing and treatment communities anchored by centrally located nursing stations. The communities serve patients who have experienced strokes, neuromuscular disorders, brain injuries, spinal cord injuries and pediatrics.

The hospital features a two-story main lobby and 15-ft.-high cascading waterfall, thereby focusing on patients' mind, body and spirit.

Other features include a two-story chapel, glass-walled cafeteria overlooking the Labyrinth Garden, two-story chapel with simple altar, custom-designed stained glass windows and semi-private balcony providing access to the chapel for patients on the upper floors. The pediatrics section contains therapeutic and recreational opportunities, including toys educational video games, big-screen TVs and computers.

Environmental elements include healing gardens, open-air tree- and plant-filled Enabling Garden, Labyrinth Garden that is based on the original labyrinths at Chartre Cathedral in France and accommodations to move the existing, mature trees.

Diagnostic and treatment equipment will allow physicians to expand their specialty care in areas that include audiology, aquatic therapy, biofeedback, driver rehabilitation, golf medicine, hand therapy, lymphedema care, occupational and physical therapy, pelvic pain care, psychiatry, psychology, speech and language pathology, swallowing and voice, therapeutic recreation and vestibular rehabilitation.

The project's first phase included utility relocations, oxygen storage tank relocation, temporary surface parking and selective demolition operations to begin the construction of the four-level, precast concrete parking structure.

The 517-car structure is designed to be barrier free and will be fully handicapped accessible, including a ratio of 10 percent handicapped staff allotment with 8-ft., 2-in. van vertical clearance heights. The parking structure attaches to the existing hospital and matches existing floor heights.

## **'Nourishing Body and Spirit'**

The Wheaton Franciscan Sister believe "The land makes possible great healing, nourishing body and spirit."

As a result, preserving the facility's 60-acre natural environment was critically important. This was an issue because the new hospital and parking structure are twice the size of the existing facility.

Plans called for the new structures to be built on top of existing open parking lots.

The building sites were adjacent to numerous mature oak, hickory and a variety of other species, some estimated to be 200 to 250 years old. These trees required special care, fertilization and maintenance during construction to ensure their health.

An independent arborist was hired to collaborate with the campus' arborist and grounds crew on the care of those trees.

But several trees fell within the building's footprint.

The sisters requested that the trees be harvested and milled so the lumber could be used in the new chapel's stained-glass window frames, altar, tabernacle and some furniture.

## **Budgeting the Project**

The project's principal obstacle was its budget, which was fixed and firm-no additional funding sources would be available. Initial project estimates placed the project over budget, as well as subsequent market conditions influencing higher bids.

Through an exhaustive, six-month value engineering exercise, Gilbane Building Co., the construction manager, developed about \$8 million in options.

About \$3 million of these options were approved and implemented, resulting in significant budget savings to Marianjoy but without sacrificing the program. The new building is a post-tensioned concrete structure and required extensive coordination efforts.

The building type tested the project schedule due to the time requirements for constructing a post-tensioned concrete building and the care required to ensure the imbeds, sleeves and slab penetrations were in place at the time of casting.

Jury Comments: "The project seemed to affect the community. We like that they tried to keep as many trees as possible. It's a very pristine setting. This must have been a difficult project. The Franciscan sisters are very particular on what goes on. We've not huge fans of the aesthetics, but given what they had before, this is an upgrade."