

Harlem Hospital: A New Landmark Rises in Harlem



The new Harlem Hospital New Patient Pavilion is about 75 percent complete, but it is already turning heads as the 429 panels of the curtainwall system are erected, depicting three images from the Pursuit of Happiness mural painted by Vertis Hayes as WPA projects back in the 1930s.

It's tremendous," said Anita O'Brien, project executive, Harlem Hospital Center, major modernization program for New York City's Health and Hospitals Corporation. "I know in the future, the pavilion will be one of the stops on those double-decker tour busses – first stop the New Patient Pavilion followed by lunch at Sylvia's," she added. When complete in February, 2012, "it will be a landmark in the community."

The curtainwall is one aspect of the major modernization project which entails the renovation of the existing Martin Luther King Pavilion, and the construction of the new \$150 million, 190,000 sq ft pavilion on Lenox Avenue

between 136th Street to 137th Street.

The building will house a new emergency room, six surgical suites, a new Intensive Care Unit, diagnostic center, and other functions. It will be linked to the MLK Pavilion and the Ron Brown Ambulatory Care Pavilion, and will provide a new main entrance for the hospital on Lenox Avenue.

We had three challenges on this project, said Chuck Siconolfi, HOK's principal designer and director of the firm's global healthcare practice. First and foremost was to accommodate the programmatic goals of the hospital, which were to increase its emergency, surgical, ICU and outpatient capacity.

The second challenge was to determine the site for the project that would allow sufficient square footage but also be the least disruptive, so work could be phased in the most efficient manner, he added.

And the third challenge was to use the building itself to further enhance the hospital's strong connection to its community.

The design team was presented a

The building itself strengthens Harlem Hospital's connection with its community as scenes from a WPA-era mural are set at an urban scale.

PHOTOS COURTESY TDX CONSTRUCTION

gift: several murals painted during the WPA era in the 30s that were slated for removal and restoration from buildings that were to be demolished. The murals

PROJECT TEAM:

Owner: New York City Health and Hospital Corporation
Agent for Owner: Dormitory Authority for the State of New York
Commissioning Authority: EME Group
Architect: HOK with sub-consultant Studio JTA
Structural Engineer: Robert Silman Associates with Trevor Salmon
MEP Engineer: Kallen & Lemelson
Electrical Engineer: Lakhani & Jordan
Construction Manager: TDX Construction Corp.



Using a new technology, the images from the historic mural were digitally printed on each 5-ft x11-ft glass panel, and the ceramic ink was then baked into the glass. The panels were laminated with a typical insulated glass unitized system, framed and then shipped to the site for installation. PHOTOS COURTESY TDX CONSTRUCTION

were slated for future placement in the new patient pavilion.

The design team felt that the message of the artist resonated with the community and by using its images on an urban scale, that the community could feel an even stronger connection with the hospital “without even entering the building,” Siconolfi said.

Then the question became how to do it. — how to get the image on the glass, what was the right level of lighting for those inside and outside the building and how to ensure no dark bands would mark through the image.

The curtainwall system is a typical insulated glass unitized system, but what is unique is that in addition to the two 1/4-in. glass panels on either side of a 1/2-in. air pocket, this system has a third panel of glass on the exterior. Utilizing a new technology from General Glass International, a company based in Secaucus, N.J., the images from the historic mural were digitally printed on the third glass panel, said Tom Tilleli, senior project manager, TDX Construction Corp., New York, N.Y., the construction manager for the project. The ceramic ink on each 5 ft x 11 ft panel was baked into the glass, and then shipped to J.E. Berkowitz

Architectural Glass, Pedricktown, N.J. for lamination. The panels were then shipped to Canada for framing and then sent back to the site for installation.

“We looked at a number of systems, and we settled on this process,” Tilleli said. The close proximity of GGI was a plus. The owner was concerned that if replacement panels were needed in the future, that they would take a long time to arrive at the site. But with GGI so close by, the replacement cycle should only be about four to six weeks, Tilleli said.

The curtainwall is the crowning jewel of the project, but there were challenges right from the beginning of the job, Telleli said. As the construction team mapped out site logistics, they found that construction of the new pavilion would have to tip toe around the existing emergency room entrance on 135th street. Tilleli and team suggested a relocation of the ER entrance to 136th street. “By doing so, we have two years off the construction schedule,” he added.

One of the design challenges came right away as the geotechnical engineer determined that the loose sandy soil was subject to liquefaction if there were a seismic event. Instead of recommending deep caissons or other expensive mitiga-

tion options, the geotechnical engineers, C.T. Male Associates, Latham N.Y. recommended injected grout through holes nine ft on center, 40 ft deep to compress and add density to the soil. The process was executed by Hayward Baker Inc., Odenton, Md. This allowed the design to proceed with spread footings instead of costly deep foundation solutions.

Once the utilities and MRI units were relocated, “it was pretty much typical construction,” Tilleli said.

In addition to 15 percent minority-owned business participation goals and 7 percent women-owned business participation goals, the project had a community participation coordinator to engage up to 25 percent of local residents on the project, said Ronald Gecsed, DASNY’s chief project manager.

The community employment program’s objective is to obtain 25 percent employment from the nine zip codes surrounding the hospital, Gecsed said. So far, the team has been able to place 100 men and women in positions in the trades from those zip codes.

“It’s very rewarding to create such a building of historical importance and at the same time, provide a place for better health-care for the community,” Telleli said. ♦