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Cover Story - July 2006 Blending Centuries

Roosevelt Island Development Merges New and Old Towers

by Natalie Keith

A new 500,000-sq.-ft. apartment complex on New York City's Roosevelt Island is wrapping various construction specialties into a development that will preserve an unusual slice of the city's history.

The new \$170 million Octagon development on the East River isle blends the renovation of an historic structure with two new 14-story apartment towers.



"The most challenging aspect of the project was

the restoration of the Octagon Tower," said Bruce Becker, president of Becker + Becker Associates of Fairfield, Conn., the project's architect and developer.

The renovation of the five-story Octagon Tower brings back an 1841 building designed by Alexander Jackson Davis. It first served as entry and administrative space for the New York Lunatic and Pauper Society and later as Metropolitan Hospital. It was vacated in 1954 and, after fires in 1982 and 1999, only the eight exterior walls remained.

Work began in November 2004 with New York-based Gotham Construction as general contractor on the effort to restore the 30,000-sq.-ft. historic building and build the two towers, one 230,000 sq. ft. in size and the other 250,000 sq. ft. The first residents moved into a completed portion of one tower on April 17, but work will continue on the rest of the project through late fall.

Upon its completion, the complex will have 500 units, 400 of which will rent at market rates, which under a first-year promotion is \$1,690 monthly for studio apartments with a home office, \$1,800 for one-bedroom units, \$3,015 for two-bedroom units, and \$3,798 for three-bedroom units. The remaining 100 units will be reserved for middle-income individuals under an affordable housing program.

The most noteworthy aspect of the old building, which is listed on the National Register of Historic Places, is a central "flying" circular staircase that Charles Dickens wrote about it in his travelogue, American Notes.

While the project team restored the exterior to its classic look, it used a modern interpretation in reconstructing a new seven-story staircase rising into the atrium. The main support is a steel tube positioned in the center that runs up the backbone of the entire spiraling stairway, said Kevin Murphy, project manager for Gotham.

The reconstruction effort required approvals from four different historic preservation groups, Becker said.

"We didn't have enough information to replicate the flying staircase," he added. "We've reinvented it, but it's similar in its basic geometry to the original."

Instead of hiring different contractors to complete the various renovation tasks, such as stone and glass work, Gotham hired Nicholson & Galloway of Glen Head, N.Y., for the entire restoration effort.

"Their job was to advertisement coordinate the restoration of the envelope," Murphy said. "I could have hired five separate contractors to do the envelope. We were able to save time by hiring the right people for the job."

Nicholson & Galloway, which started work last summer and was set to wrap up in late spring, coordinated with Building Conservation Associates of New York, which designed aspects of the restoration, said Mark Haynes, project executive for Nicholson. Among the major tasks was demolishing interior masonry walls and bracing exterior walls, followed by constructing new foundations, a steel superstructure, and a slate roof.

The team also restored stonework on the outside of the building and installed new windows and doors.

Some historic details incorporate modern materials, including a fiberglass product approved by the New York City Landmarks Preservation Commission - that attempts to recreate the original cornices and dormers, which had been made of galvanized sheet metal. The team built wood patterns to create plaster molds, which they then used to shape the fiberglass panels, Haynes said.

"The Octagon was a small building, but it took us the same amount of time to restore as to construct two large new towers," Haynes added.

The project overall has made quick progress, Becker said.

"We are several months ahead of schedule," he added.

In addition to the restoration tasks, the project has various sustainable design features because the developer is seeking a silver rating under the U.S. Green Building Council's Leadership in Energy and Environmental Design program. The team is using locally produced materials, recycling construction waste, and installing 250 rooftop photovoltaic panels that will generate 50 KW - enough to power the development's common areas.

With such features, the Octagon will use 35 percent less power than the maximum amount allowed for its size under the city building code, Becker said.

The project team had also considered using geothermal technology to address power needs but scrapped that plan after drilling two 1,500-ft. test wells and discovering that the water flow would be inadequate, Gotham's Murphy said.

The historic structure connects to the first five floors of the new towers and contains a lobby, gallery space, and amenities designed by the Rockwell Group of New York, the project's interior designer.

Among the amenities are a 2,200-sq.-ft. fitness center, clubroom, conference room, and day-care center, as well as a one-acre courtyard, a terrace and pool, six tennis courts, and a playground.

Despite its location virtually in the middle of New York City, nestled between Queens and Manhattan, Roosevelt Island provides an extra challenge because of its isolated nature. The island is relatively remote, with the only road access coming from a small bridge on the Queens side.

The team also had to reroute sewer and water pipes and extend electric lines, not a common event in modern times in a built-out city like New York, Murphy added.

## **Key Players**

Developer-Architect: Becker + Becker Associates, Fairfield, Conn.

**Owner's Representative:** Merritt & Harris, New York; Robert A. Silpe, New York

Construction Manager: Gotham Construction, New York

Interior Design: Rockwell Group, New York

Historic Preservation: Nicholson & Galloway, Glen Head, N.Y.; Building Conservation Associates, New York

Curtain Wall: Israel Berger & Associates, New York

Solar Panels: Solar Design & Associates, Harvard, Mass.

Landscape Architecture: Langan Engineering and Environmental Services, Elmwood Park, N.J.

Building Systems: Steven Winter Associates, Norwalk, Conn.

Structural Engineer: Rosenwasser Grossman Consulting Engineers, New York

Mechanical Engineer: Ettinger Engineering Associates, New York

**Environmental:** Wall & Associates, New York; Ecosystems Strategies, Poughkeepsie, N.Y.

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