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The Newspaper for the School Construction Industry

Structural Upgrade Requires a Surgeon's Touch

NEW YORK — A delicate conversion of a 1900s-era mansion into a private middle school recently received a preservation award from the New York City Landmarks Conservancy.

Now owned by the Marymount School, a Catholic educational organization for girls, the beaux-arts building's structural redevelopment and renovation were completed in August 2002 and earned the 2003 Lucy G. Moses Preservation Award from the Conservancy.

Serving varying uses over the century, the six-



Artisans restored and replaced elements such as mahogany millwork and crown moldings in the library.

story, wood structure's floors sagged, while decorative elements such marble fireplaces and hand-carved wood columns were damaged. The general contractor, ICS Builders Inc., had to complete work while accommodating a densely populated, elite neighborhood on the Upper East Side.

"Upon delivery, workers moved structural steel elements into the site by hand, through window openings and up and through the building, as there was no space on the street to erect a permanent crane," says Ted O'Rourke, senior vice president at ICS, who adds the team refrained from making noise during what he describes as "surgery."

A 50-ton rooftop Trane unit was installed with a mobile crane on Saturday mornings, when street traffic was light. And because one neighbor refused access to his site, the team devised and installed a hanging scaffold system suspended from a roof.

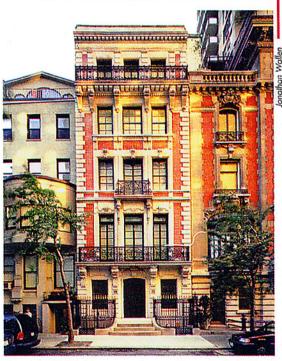
Restoration of the facade interfaced with the interior work, especially at the roof area, where new structural steel was required to support the rooftop HVAC equipment. Agreements with neighbors required that new HVAC units not exceed certain heights. In addition, the team had to maintain interior ceiling heights, requiring careful coordination of duct passages.

A search was needed to identify a supplier capable of delivering replication marble to match the original exterior stone. Materials used to restore the façade included Vermont Danby marble, red-colored Romanstyle brick, buff-colored Roman brick, and cast stone at the court parapet copings.

Workers performed Dutchman repairs, a historically accurate method involving the replacement of An Emlen Publication www.schoolconstructionnews.com

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DESIGN/CONSTRUCTION



A grand old Manhattan mansion now houses a Catholic middle school for girls.

exterior stone elements, fastened with stainless steel pins and epoxied to existing stone. Structural demands called for new concrete spread footing and the majority of the original wood supports to be replaced by a new steel structure, one floor at a time.

The team also expanded the building's foundation at the rear of the property to support the extended kitchen in the cellar and the enlarged and modernized multipurpose room on the ground floor. Designs for the project were provided by Platt Byard Dovell White Architects.