

F.W. Dodge

NEW YORK CONSTRUCTION NEWS

430 Park Avenue Renovation Creates Class A Office Building

by David S. Chartock

With demand for office space high, especially since the events of Sept. 11, building owners are looking for ways to upgrade their buildings to attract new tenants.

One building, for which a \$24 million renovation was started before the terrorist attacks on America, is 430 Park Avenue in Manhattan. The 300,000-sq.-ft. building is located between 55th and 56th streets. It was constructed in the 1920s as an apartment building and converted in the 1950s to an office building. Now, nearly 50 years later, it is being renovated into a Class A office building.

The entire 19-story building, which is a reinforced-concrete building with a steel skeleton, has been gutted except for the Mercedes Benz dealership on the first floor. The renovation includes gutting and replacing the interior mechanical systems and upgrading the building's facades.

The Park Avenue facade features

LEFT: The 80-year-old 430 Park Avenue, shown in this aerial view, is now being renovated. The project will give the building new facades on its east, north and south sides, raising the building's profile among its neighbors. The renovation will upgrade the building's space to Class A office space.



PHOTO BY BERNSTEIN ASSOCIATES/
COURTESY OF HRH CONSTRUCTION



ABOVE: On the 17th floor of the building, as on all floors, 0.25-in.-thick, insulated, Solex panels and new interior mullion caps will replace the existing fixed-light and hopper windows.

RIGHT: In addition to work on the north and south sides, new glazing will be installed on the block-long Park Avenue facade. More than 400 windows will be replaced, and exterior mullions will be refinished.

PHOTOS BY BERNSTEIN ASSOCIATES/
COURTESY OF HRH CONSTRUCTION



Still, adjustments in the field are sometimes needed.

"In order to support the curtain wall, we had to design a steel substructure frame located behind the existing masonry façade, said Joseph Blanchfield, an associate partner with Gilsanz Murray Steficek, the project's New York-based structural engineer and curtain wall consultant. "The existing masonry facade could not support the loads of the curtain wall. As a result, a lot of precise coordination of steel penetrations through the masonry walls was required. Sometimes this meant being able to adjust plans in the field.

"We ran into a lack of historical information about the existing structure and had to do a lot of probing by removing brick to examine the underlying conditions."

The "facelift" to the north and south side of the building is another challenge. "The architect came up with an idea to put a modern aluminum-and-glass curtain wall on those two facades that would be sympathetic to the curtain wall on the Park Avenue façade," Blanchfield said. "Since the north and

south street walls were built to the property line originally, we had to come up with a technical solution to allow a new curtain wall to be installed over the existing brick without exceeding 4 in. beyond those property lines. Although we came up with a number of different solutions, the one that was selected was a modification of a conventional, unitized curtain wall system to fit within that 4-in. clearance without removing the brick."

He said that on the Park Avenue facade, the wall will be upgraded by removing operable windows and ventilators. In addition, he said, "We will remove discrete elements, such as mullions within the wall, and will install new glass, eliminating the operable sections and producing a more airtight and acoustical facade."

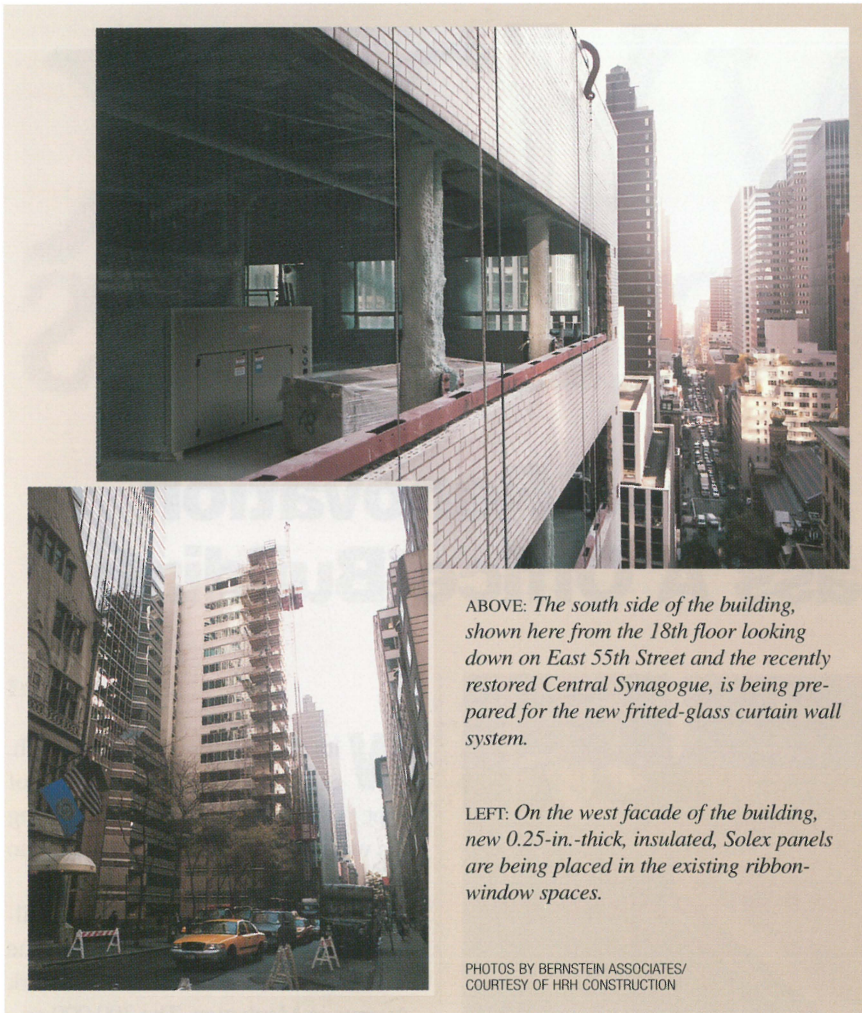
There will also be structural improvements made to the building's roof. Here, where a window cleaning system serviced only the Park Avenue facade, a new window cleaning system will be installed to service the north, east and west facades, Blanchfield said.

Dan Shannon, a partner with Moed de

Armas & Shannon Architects, the project's New York-based architect, said the Park Avenue or east façade's "hopper windows will be replaced with a single panel of green-tinted glass because the buildings on the west side of Park Avenue are predominantly tinted-green glass. On the north and south façades, where there is the white-glazed brick, we will completely reclad these elevations and install a new curtain wall. Furthermore, the steel-framed casement windows on the west facade will be replaced with an insulated, operable, green-tinted window.

"If you looked at the building before construction started, you had this classic Park Avenue facade flanked by a white brick wall (the west walls that face the rear yards). This was inappropriate for Park Avenue because they are visible facades. By cladding them in flush, silicon-glazed glass, we create two new bookends to the building that are consistent with the rest of Park Avenue."

Another design challenge was turning what Shannon called "the inhospitable lobby" into a "welcoming private space." To achieve this, a new entry lobby will be created. What was once a



ABOVE: The south side of the building, shown here from the 18th floor looking down on East 55th Street and the recently restored Central Synagogue, is being prepared for the new fritted-glass curtain wall system.

LEFT: On the west facade of the building, new 0.25-in.-thick, insulated, Solex panels are being placed in the existing ribbon-window spaces.

PHOTOS BY BERNSTEIN ASSOCIATES/
COURTESY OF HRH CONSTRUCTION

clear glass with hopper windows. The entire glass assembly within this facade needs to be removed. It will be replaced with a one-piece insert that will consist

of glass and a metal frame, said Joseph Armocida, a vice president with HRH Construction, the project's New York-based construction manager.

On the 55th and 56th Street side, existing casement windows will be removed. The existing brick will be tied back with a helifix anchor to stabilize the wall, and the entire façade, including the windows, will be resurfaced with a metal and glass curtain wall system. Existing casement windows at the back of the building will be removed and replaced with new casement windows, Armocida added.

He said that in the interior, "We will replace the steam riser system with a new fin tube perimeter heating system. We will also upgrade all of the electrical services and install a new bus duct system with panels on each floor."

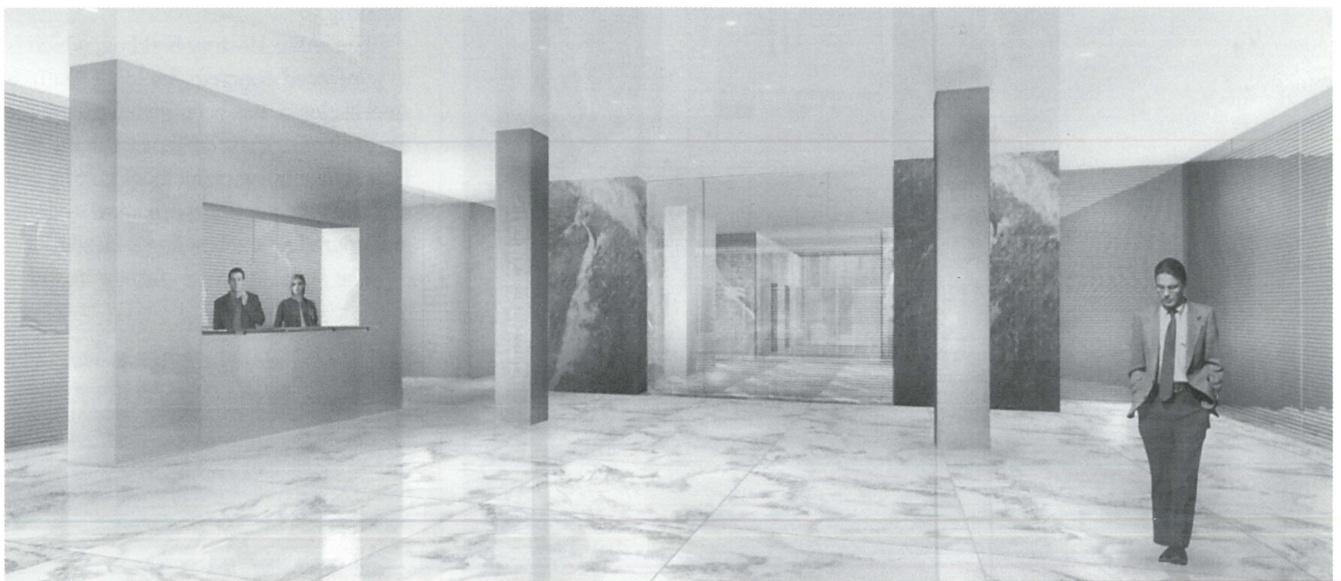
Each floor will have its own air-conditioning system and there will also be new fire alarm and sprinkler systems.

Armocida said the reglazing of the Park Avenue curtain wall system "is a challenge because the existing glass has to be removed while the framework is retained. To achieve this, we will have the existing glass cut out in place."

He added that the two new curtain wall facades will require structural steel support "because the existing structure was not uniform from top to bottom. As a result, custom-made steel will be installed to conform to existing conditions."

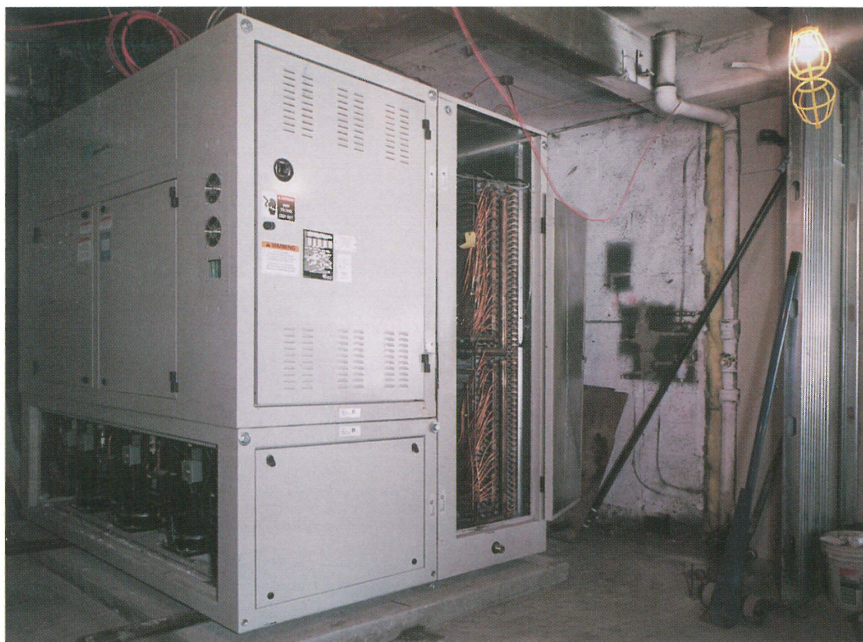
Armocida said the project also has a fast-track schedule, which is requiring careful coordination of the trades and of the delivery of supplies and materials.

RENDERING COURTESY OF MOED DE ARIMAS & SHANNON ARCHITECTS



A rendering of what the building's new interior will look like.

PHOTO BY BERNSTEIN ASSOCIATES/COURTESY OF HRH CONSTRUCTION



Each floor of the renovated 430 Park Avenue tower will be equipped with a 40-ton, water-cooled, self-contained VAX DX air-conditioning unit.

“white marble room will be replaced using backlit glass walls that will be reminiscent of the new curtain wall system on the north and south sides of the

building,” Shannon said. “Then, protruding into that space will be a marble room that will consist of light green marble, and sliding glass doors in the middle

DEVELOPMENT TEAM:

ARCHITECT: Moed de Armas & Shannon Architects, NYC

STRUCTURAL ENGINEER & CURTAIN WALL

CONSULTANT: Gilsanz Murray Steficek, NYC

MECHANICAL, ELECTRICAL & PLUMBING

ENGINEER: Jaros Baum & Bolles, NYC

CURTAIN WALL CONTRACTOR: W&W Glass Systems Inc., Nanuet, N.Y.

CONSTRUCTION MANAGER: HRH Construction, NYC

OWNER: 430 Park Avenue Co., NYC

of it that will allow entry into an inner lobby. This was designed this way to create a more secure and more private environment.”

In addition to the new lobby, six elevator cabs will be refinished to reflect the lobby finishes by using stone floors and metal and glass walls.

The apartment building-turned-office building will be ready in May for new, high-profile tenants who want a Park Avenue address. ■



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