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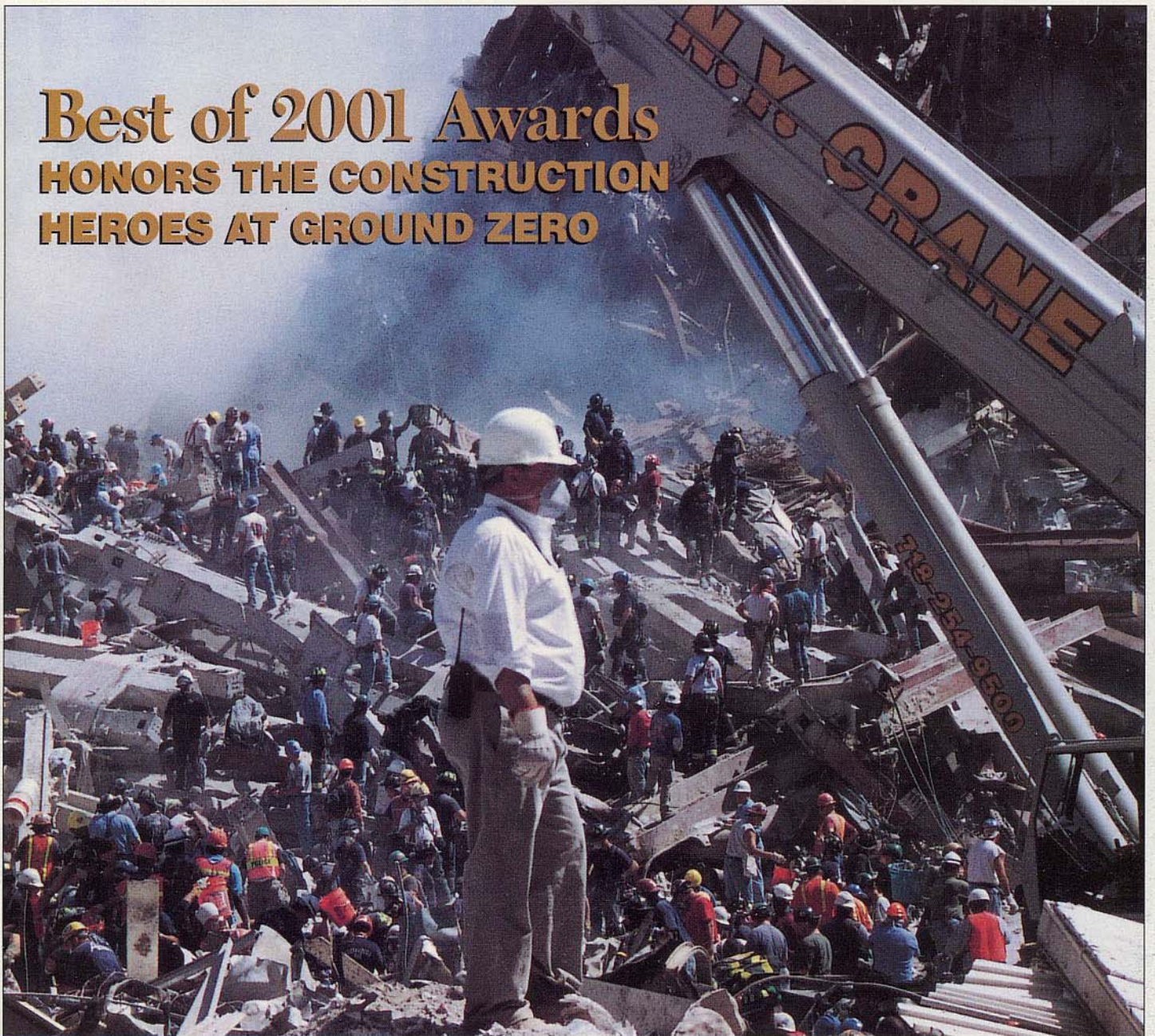
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**Best of 2001 Awards
HONORS THE CONSTRUCTION
HEROES AT GROUND ZERO**





2001 AWARD OF MERIT: INSTITUTIONAL PROJECT

The Thaw Conservation Center at the Pierpont Morgan Library

The Thaw Conservation Center at the Pierpont Morgan Library occupies the 5,700-sq.-ft. fourth floor of this four-story structure. The building was constructed in 1853 and expanded in the 1890s.

Key challenges in adapting the existing building to meet the requirements of the Thaw Conservation Center included providing an ample amount of northern light while maintaining the existing shallow roof line; introducing constantly elevated relative humidity into an historic building envelope; and performing the work in an occupied, operational building.

One of the development team's first solutions to project challenges was the teamwork that played an integral part of this project's success. The architect, structural engineer, mechanical electrical and plumbing engineer and the construction manager worked closely with the staff of the Morgan Library to develop creative, workable solutions to the challenges of the project.

For example, the structural engineers examined the original trusses throughout the attic and determined that only two were actually functioning as trusses because of poor member geometry. When analyzed with full snow loads, it was determined that the trusses had to be replaced. However, the structural engineer determined that the upper and lower chords, which consisted mainly of wooden 4x10s, could be retained if the additional web members were added to correct the geometry. To accomplish this, steel posts and struts

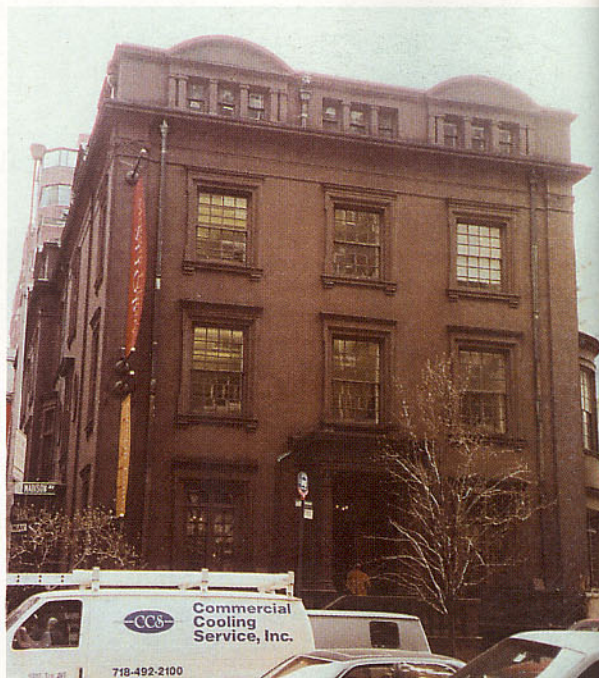
were inserted using specially made brackets bolted to the chords. This allowed the rest of the roof structure to remain intact throughout the project. In this manner, renovating the trusses

became less intrusive than installing a whole new roof structure, which would have required keeping the building empty for several months.

To provide the required amount of northern light, crucial for the examination and treatment of works on paper, the architects called for the removal of all of the lowered ceilings on the floor and introduced 13 skylights parallel to the roof planes. The skylights were carefully fitted amongst the trusses and purlins. This dramatically opened the space and allowed the renovated trusses to become a bold feature of the center.

The introduction of a climate control system helped to maintain a 50 percent RH. This meant that a true, continuous vapor barrier had to be installed at the walls and roof, close to the inner finished surfaces. To accomplish this, the architects specified sheets of 10-millimeter-thick polyethylene to take advantage of its strength and ease of handling.

A key challenge was maintaining continuity between the exterior walls and the roof; if the sheet were located on the inner side of the roof sheathing, it would have had to have been cut and patched into a thousand pieces around all of the purlins and trusses and then



covered with drywall. Instead, the barrier was detailed to pass from inside the perimeter walls through a slit in the roof and then laid easily in uninterrupted sheets on the upper surfaces of the roof sheathing, still close to the "warm/wet" side of the assembly.

The jury recognized this project for overcoming significant "structural issues" related to a confined space and for the "creative solutions" used to meet project needs.

DEVELOPMENT TEAM

ARCHITECT: Samuel Anderson Architect, NYC

STRUCTURAL ENGINEER: LZA Technology, NYC

MECHANICAL, ELECTRICAL & PLUMBING ENGINEER: Landmark Facilities Group Inc., East Norwalk, Conn.

MILLWORK CONTRACTOR: Petersen Geller Spurge Inc., Hudson, N.Y.

LIGHTING CONSULTANT: Kugler Tillotson Associates, NYC

STRUCTURAL STEEL CONSULTANT: Feinstein Iron Works Inc., Flushing, N.Y.

CONSTRUCTION MANAGER: Barney Skanska Construction Co., NYC

TENANT: New York University Conservation Center, NYC

OWNER: The Pierpont Morgan Library, NYC