

New York-Presbyterian Hospital Vivian and Seymour Milstein Family Heart Center

New York, NY



Completion
2010

Client
New York-Presbyterian Hospital

Value
US\$150,000,000

Lend Lease Involvement
Construction Management

Highlights

- LEED Gold — the first LEED Gold rated hospital in the New York metropolitan area
- First climate wall in New York City

The six-story, 120,000 square foot building concentrates all of New York-Presbyterian's advanced cardiovascular medicine, both interventional and non-invasive cardiology, as well as surgical in one state-of-the-art facility; this innovative building was designed in collaboration with the hospital's clinical team to create an environment for translating scientific discoveries into bedside applications.

The Heart Center's medical space has expanded radiology, ultra sound, phlebotomy rooms and EKG rooms on the lower level. There are two new cardiology interventional suites with two shelled for future use and 20 pre-procedure bays. The surgical floor provides 26 pre-operative bays along with eight new operating rooms, two of which are hybrid. There are 20 intensive care unit beds for cardiac patients.

Scope

Phase I included demolition, foundation work, rock removal, excavation, steel erection and coordination activities. Phase two included construction of the heart center including architectural and MEP components, and consisting of steel decks with concrete superstructure slabs, slab penetrations with MEP infrastructure, and a stone and masonry façade.



Construction Challenges & Innovation

There were many challenging tasks including blasting during medical procedures, removal of nine stories of escalators and the installation of the first climate wall in NY City. This climate wall allows natural light on all floors and includes a five story, glass atrium with three transverse glass bridges connecting the Herbert Irving Pavilion to the new Heart Center.

Bovis Lend Lease conducted test blasting exercises during 'mock' medical procedures to determine the best action to mitigate any interruptions to hospital operations from rock blasting, resulting in no interruptions during excavation works.

Leadership in Sustainability

Bovis Lend Lease streamlined its LEED process focusing on environmental impact reduction, waste reduction, indoor environment quality and energy conservation, targeting LEED Gold rating.

Specifically, the project team recycled debris including excavated rock, which was so hard it broke machines at the recycling plant, and recycled and sorted

construction waste. Over 90% of the structural steel members installed are from recycled steel.

The project team implemented an indoor air quality management plan during construction, which included protection of the building ventilation system. Sealed ductwork kept dust and other contaminants from entering the system, while filters protected the system for future use. This is especially critical in a hospital environment for infection control.

Additional sustainable components include the installation of a noise-mitigating construction fence, recycling and reducing waste to the landfill, and use of low-VOC adhesives, sealants, paints and carpets.

Awards

2009 Outstanding Project Award
The Greater New York Construction User Council

Best of 2009 — Award of Merit, Healthcare
New York Construction

2007 Top Projects — Ranked #29
New York Construction