

Project Experience

World Trade Center Tower 2, 3, and 4 New York, New York

Project Description

After the destruction of the World Trade Center a new site master plan had to be created that acknowledged the memory of those lost and looked to the future with hope. Architect Daniel Libeskind's proposal was selected as the master plan, offering a vision for a new center of business in the United States that would be the largest sustainable and secure mixed-use project in the country. As owner of the site, the Port Authority of New York and New Jersey was responsible for restoring most of the site's infrastructure, while Silverstein Properties, leaseholder for the complex, was responsible for the design, construction, leasing, operations, and financing of Towers 2, 3 and 4, which encompass 9+ million sq. ft. of office and retail space.

This rebuilding program is a \$7 Billion Public-Private Partnership and will be financed by a combination of insurance proceeds, revenue bonds, and conventional financing. The project is being developed in close cooperation with the City of New York, the State of New York, the Port Authority of New York and New Jersey and numerous other public agencies. It has been described as the most visible and complex real estate development ever undertaken.

The interconnected nature of the site and logistics of operating in a dense urban environment on the \$20B of related work spread across the site's various projects create extremely complicated coordination and program management requirements that SPI has worked through. Underground these projects include: a transit hub for the Port Authority Trans-Hudson railway (PATH) and two Metropolitan Transit Authority subways, a passageway to the World Financial Center, loading docks, a vehicle screening center, parking, a central utility plant, a museum and 250,000 square feet of retail. Above ground projects include: another 250,000 square feet of retail, two new roads, a memorial, performing arts center, transit hub entrance, and 12 million square feet of office space in five towers.

Integrating the site's overlapping infrastructure elements into the office towers and retail required SPI to work on and intimately understand the many different elements associated with this project. For example, to ensure the timely completion of the site's transit hub SPI offered value-engineering and scheduling services to the Port Authority to provide options to reduce its cost (potentially by hundreds of millions of dollars) and accelerate its construction, while still maintaining the facilities' functionality and architectural distinction.

Three Pritzker Prize architects were hired to design SPI's towers: Foster + Partners for Tower 2; Rogers, Stirk, Harbour + Partners for Tower 3; and Maki & Associates for Tower 4. To improve coordination in the design and construction of SPI's towers, the design architects, architects of record, engineers, construction managers, and their related consultants work out of a design studio overlooking the site in SPI's headquarters at 7 WTC.



Currently, the design for all three towers is complete. Tower 4 is almost completely bought out and construction has commenced. When the Port Authority finishes preparation of the respective Tower 2 and 3 sites, construction will commence on their respective foundations. The towers will all be LEED "Gold" certified and will incorporate renewable energy, interior day lighting, reused rainwater, and recycled construction debris and materials. Some of the life-safety enhancements include a blast resistant enclosure and reinforced concrete building core.