Plaza Construction Erects First Permitted Flood Protection System In New York City

--Removable, Barrier Flood Wall Installed at 55 Water Street -

NEW YORK, March 31, 2014 /PRNewswire/ -- Directly following Hurricane Sandy in October 2012, Plaza Construction (http://www.plazaconstruction.com/) was asked to start working on the development of a flood prevention solution for 55 Water Street, one of New York City's largest office structures with 54 stories and 3.8 million square feet located in the financial district. Hurricane Sandy was the second-costliest storm in U.S. history with damages to New York City estimated at $50 billion due to storm surges flooding streets, tunnels and subway lines and cutting power in and around the city.

Plaza Construction with a team of experts consisting of EKO Flood USA, architect HLW International, and engineer Thornton Tomasetti, along with New Water Street Corporation, the owner/operator of 55 Water Street managed the planning, design and permitting stages to produce the first permitted flood protection system for 55 Water Street. EKO Flood USA has been designing removable barrier flood control systems since 1988 with over 100 systems in place in Europe and the US – all with a 100% success rate against flooding.

The new flood barrier protection system installed at 55 Water Street is designed to protect against an eight-foot flood line, higher than 7-1/2 foot flood line recommended by FEMA to protect against storm surges for the next hundred years. The building was designed by renowned architect Emory Roth and the flood barrier protection system had to fit with the aesthetics of the building. Basically, it had to be invisible to the occupants and visitors of the building.

"Plaza was contracted by New Water Street Corporation to help them develop a flood protection system to guard against future storm surges that continue to be a major threat to the infrastructure of New York City and its neighboring communities," said Richard Wood, CEO, Plaza Construction. "Together with our partners, we created a simple, fast and easy solution in a modular set up, take down and store removable barrier flood protection system that is tested to withstand an 8-foot flood line."
"The new flood protection system at 55 Water Street is designed to protect the entire building from flooding," said George Acero, Executive Vice President, New Water Street Corporation. "For efficient preparedness, the building management plans to conduct drills on erecting and breaking down the system on an annual basis."

The flood barrier system at 55 Water Street is based on a removable post and panel flood protection system that easily adapts to the requirements of a particular building site. The system at 55 Water Street is stored in the sub-level of the building and will require 30 men and eight hours to assemble into place, and completely protects the entire building against an 8-foot water line, preventing water from entering the building and seeping into the lower levels.

"The advanced design of the EKO system is new to the tri-state region, as we were presenting a unique concept for storm protection," said Yu-chi Yang, the Project Architect at HLW International. "The final design resulted in a very comprehensive set of guidelines for reviewing similar proposals in the future."

According to the Aine Brazil, Vice Chairman at Thornton Tomasetti, "The integration of the flood barrier system with the existing foundation wall was one key to the economic and practical feasibility, minimizing new foundations in the sidewalk, and providing the necessary continuity of the flood proofed bathtub as an extension of the existing 60 foot deep basement."

Located in downtown Manhattan, 55 Water Street is a virtual city unto itself that provides a fail-safe operating environment. Powerful systems support massive capacities instilling confidence that any crisis can be readily addressed. An extraordinarily advanced technological infrastructure includes multiple redundancies in every major operating system from electric, HVAC, and telecom to life safety and security. Tenants can also avail themselves of sufficient excess power to operate without interruption for multiple days should an emergency situation arise. It is the second largest privately owned office building in the country, and is situated on 3.7 acres and boasts multiple open spaces that enhance the quality of life in Lower Manhattan.

"Now with the installation of a removable, flood barrier protection system, 55 Water Street offers added protection in terms of guarding the building against flooding," adds Mr. Acero.

Plaza Construction is one of the nation’s leading construction management and general contracting companies. Since 1986, the firm has played a very relevant role in building corporate headquarters, commercial properties, healthcare centers, universities, transportation facilities, museums, retail spaces and residential buildings.

SOURCE Plaza Construction
Find this article at:

☐ Check the box to include the list of links referenced in the article.