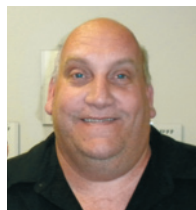


BRUGG FLEXWELL®-HL Pipe Deployment in Manhattan

BRUGG FLEXWELL®-HL Pipe Supplies Fuel to Helicopters at New York's Wall Street Heliport



Tony Ramos,
Core Engineered Solutions

"We at Core sell compliance, value and long service life. The BRUGG pipe offers all of these values and stands alone in above ground applications. It also exceeds all the criteria for pipe below ground and under piers. I don't know any other double-wall pipe that protects against fires, UV and offers the same durability and flexibility. Surprisingly the flow rates are not affected by the pipe corrugation. BRUGG's people throughout the process were models of how a supplier should service their customers and product. Core looks forward to many more opportunities with this product."

The Wall Street Heliport, located in lower Manhattan, is used for both tourist excursion flights and business air traffic. Currently there are 5 separate, active helicopter excursion companies catering that share this location. Combined, these businesses operate a total of twenty 5 to 6 passenger Bell helicopters. Each of these sightseeing tours lasts between 15 and 30 minutes, with approximately 10 to 15 minutes of ground time allowed between return and departure of the next tour. On any typical sunny summer day at the height of the tourist season, this heliport will experience more takeoffs and landings than JFK International Airport over the same period of time. In addition to the tourist flights, there are also regular business flights, most of which consist of modern Sikorski Helicopters. In July, during this peak operating season, a new fueling system was installed using BRUGG Pipesystems' FLEXWELL®-HL pipe.

Core Engineered Solutions is a firm, which specializes in fuel storage and supply system installations for applications such as diesel generators, emergency power systems, wastewater treatment plants, and aviation fueling installations. Core's leading product line is "Convault", a ma-



Wall Street Heliport in Manhattan/New York City

nufacturer of concrete reinforced fuel storage tanks. Core was awarded the contract to construct a new fueling terminal for the prominent and highly visible Wall Street Heliport. This heliport is located on the East River, very close to "Ground Zero". In order for this project to be approved and completed, Core was required to use piping material which was marina-proof, flexible, sturdy and resistant to UV exposure. BRUGG FLEXWELL®-HL pipe met all of these requirements. Thanks to the efforts of BRUGG's Manufacturer's Representative, Yeager Engineered Systems, Core was introduced to the right pipe for the job. To complete this project, 560 feet of 2" pipe, 20 feet of 3" pipe and a total of 8 couplings were used.

With temperatures approaching 100 degrees, the pipe installation was completed in July 2010 with the expert assistance from BRUGG factory personnel. Not only the intense helicopter traffic but also the 7 to 10 foot tidal changes had to be considered in the planning of this



Deployment of 500 ft. of FLEXWELL®-HL pipe



Temporary attachment of the pipe



Final attachment of the pipe to the pier



Installation work during ongoing helicopter traffic

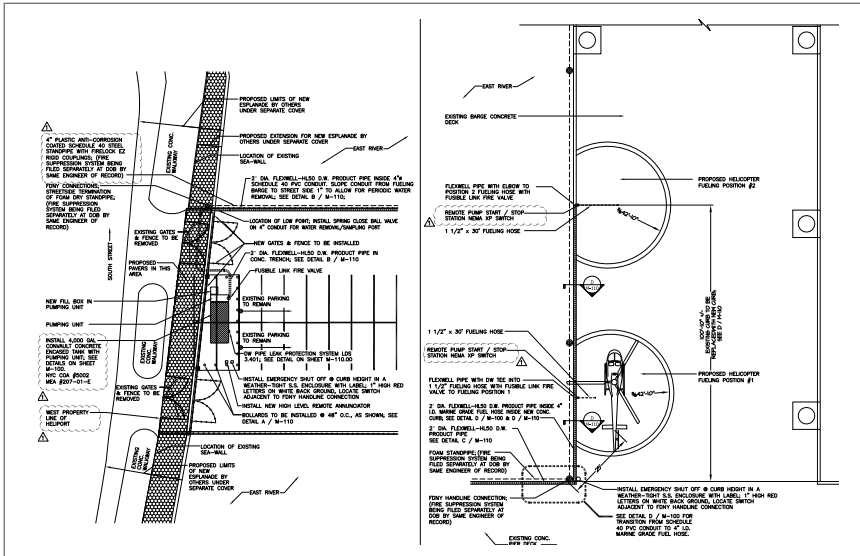
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installation. The first step was to lay out a 500 ft. length of pipe along the length of the pier, to the first fuel station. The pipe was then connected, using a coupling, to the dispenser manifold. The whole length of pipe was then carefully secured to the side of the pier, using a boat and mobile crane located onsite. This was a very complex and difficult process to complete, due to the changing tides, wave action caused

by the movement of boat traffic on the East River and the constant helicopter rotors. At this point the piping was placed beneath the deck of the pier, and positioned in a channel between a support beam and the deck, and finally raised through a hole into the pump station – all the while being subjected to the constant waves on the river.



Plan layout of the fueling system at the Wall Street Heliport

Lastly, an additional length of 3" and 2" piping was installed between the tank and the pump station for filling and transferring jet fuel. The final pressure test confirmed that the BRUGG FLEXWELL®-HL piping installation had no errors or leaks anywhere in the system. The customer will be able to rely on the quality, reliability and durability of this pipe installation for many years to come.

Because of the preparation and planning by Core Engineered Solutions and American Environmental (installation), and to the know-how of the BRUGG personnel on site, this project was completed in one week. During the course of this installation, the local technicians were trained and certified in the installation of BRUGG FLEXWELL®-HL piping.

To obtain additional information please fill in the data below and fax to No. 706.235.6035

- Please send me additional information
- I have a project and would like to be contacted

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