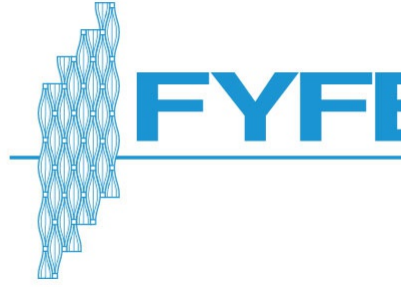




# AEGION®

## Stronger. Safer. Infrastructure.®



### NASSCO Beam and Pile Repair

Pier III/IV is a reinforced concrete structure consisting of a deck supported by an array of 16 inch octagonal precast concrete piles. The pier is one of two outfitting piers at the industrial facility constructed in 1968. The pier is 66-ft wide and 550-ft long excluding the extension that was added at some later date. A total of 195 piles are connected to a series of longitudinal beams that run the full length of the pier. Approximately 35% of the piles were installed with a cast-in-place concrete build-up at the top of the pile with build-ups ranging in length from a few inches to around 6 ft.

The owner retained Triton Engineers Inc., a structural engineer in Del Mar, CA to review all available as-built drawings and documentation. Triton Engineers then proposed that the Tyfo® Fibrwrap® systems be used to supplement longitudinal and transverse tension strength where reinforcing steel was lost due to corrosion. Fibrwrap Construction was awarded the design-build contract to design and install the Tyfo® Fibrwrap® systems to strengthen the required beams, columns and slab locations.

