New Carquinez Bridge

Project Description
As marine subcontractor to the FCI/Cleveland Bridge JV, Vortex performed major marine foundation work and provided marine support for construction of the new 3,465 foot long, 3-span suspension bridge. The project won numerous awards and received international recognition, becoming North America’s first suspension bridge of its kind to be built in 35 years, as well as the first suspension bridge to be built in the U.S. with concrete towers.

Utilizing its fleet of derrick barges, tugs, and support barges, Vortex installed 12 ten foot (10’) diameter steel casings into the rock for each of the 400 foot tall tower foundations. 300 foot long rock-sockets were then drilled through the casings. Continuous rebar cages were placed and concrete was poured to complete the foundation piles. Prestressed concrete piles were also driven to support the transition pier and the south cable anchorage.

During the course of this project, Vortex provided all marine support required by the prime contractor in support of its operations, including construction of the 4 pier foundations (72’ x 60’ x 20’), assistance with the installation of the 24 each steel deck sections, and installation of access trestles. Vortex further supplied extensive dive services, and assisted with the installation and demobilization of temporary marine structures.