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Scaffold Industry

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Bay Bridge Gets Support

Why Fall Protection Fails

Liability Exposure, Part II

SCAFFOLD INDUSTRY ASSOCIATION SIA
The Voice of the Scaffold and Access Industry

Shoring Up a Bridge Project

Waco 100K/leg shoring provides support for construction of temporary bypass

The 100K vertical shoring design was completed by D.H. Charles Engineering under the supervision of Danny's Construction Co. and Construction Enterprises, Inc.

The $1.04 billion San Francisco Oakland Bay Bridge is getting a lot of support.

Waco Scaffold, of Carson, Calif., in conjunction with Construction Enterprises Inc., of Mill Valley, Calif., is leasing Waco 100K/leg shoring to the contractor erecting a temporary bypass south of the eastern span of the Bay Bridge on Yerba Buena Island.

Caltrans will reroute bridge traffic onto the bypass in 2009 as it constructs the new permanent span on the north side. Drivers can see the new construction as they approach the island from their through-the-windshield vantage point on the upper deck of the Bay Bridge, as it is being built to their left as they near Yerba Buena Island.

This structure is a duplicate to the existing structural steel truss bridge with upper and lower decks for traffic. It will carry the Bay Bridge traffic starting in September 2009 and allow the current west end of the east span to be

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The shoring is braced with steel beams installed at two intermediate locations and, at the top, the steel truss bridge is being assembled on top of the 100K towers.

The 100K/leg shoring is bolted to driven steel H-pile and rises to 165 ft. above ground.

removed. The need to connect the new bridge with the existing Yerba Buena Tunnel without impeding weekday commute traffic has created this complicated construction procedure. It has turned the eastern end of Yerba Buena Island into a bustling construction site.

The general contractor is C.C. Myers, Inc. and the steel bridge erection contractor is Danny's Construction Co., of Minnesota. The 100K vertical shoring design was completed by D.H. Charles Engineering, of Santa Rosa, Calif., under the supervision of Danny's Construction Co. and Construction Enterprises, Inc., which is the supplier/owner of the Waco 100K shoring.

In March, crews installed the first piece of the new bypass atop a pair of columns. The double-deck steel span will take traffic on a curving 1,200-ft. detour. The temporary bypass will carry traffic in both directions for three years. Drivers likely will face a reduced speed limit on the bypass, which will extend from the end of the trestle section of the existing bridge to the tunnels. It will allow crews to demolish the current link to the island and build a connection for the new span.

The 100K/leg shoring is bolted to driven steel H-pile and rises to 165 ft. above ground. The towers have eight legs and carry approximately 800,000 lbs. They are braced with steel beams installed at two intermediate locations and, at the top, the steel truss bridge is being assembled on top of the 100K towers.

There are five spans of the temporary bypass bridge. The first four spans are 240-ft.-long and are currently being erected. As of late August, the third of the four spans was being installed and the project is on schedule. The fifth span will require a three-day weekend bridge closure – planned for Labor Day 2009 – as crews cut the existing span and slide it off its supports on a set of rails erected 150 ft. in the air. Then, the new span will be lifted onto another set of rails atop the bridge supports and put into place. ■