

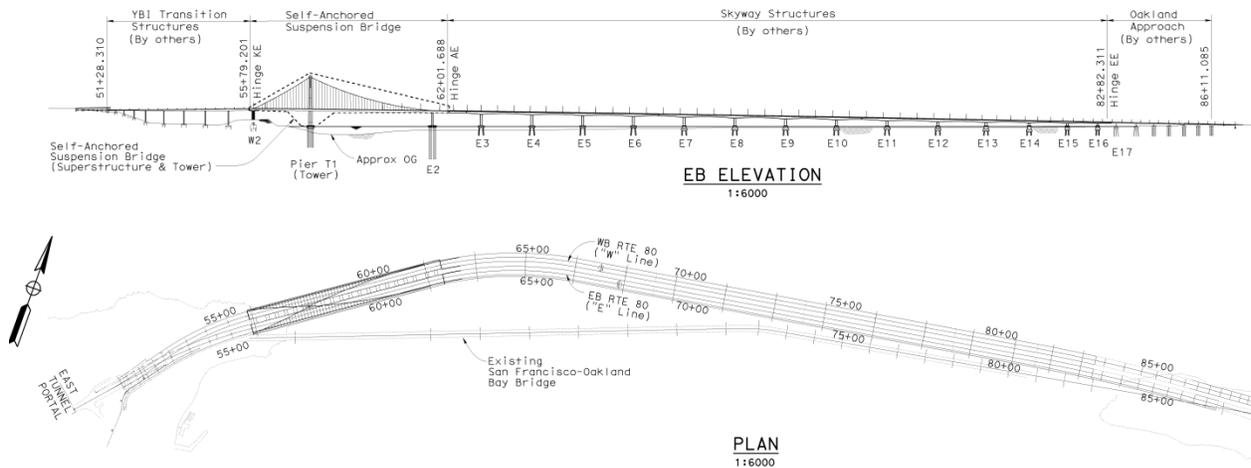
**SAN FRANCISCO-OAKLAND BAY BRIDGE NEW EAST SPAN:
CONSTRUCTION PROGRESS AND CHALLENGES**

Brian Maroney

California Department of Transportation
Sacramento, California

San Francisco-Oakland Bay Bridge: New East Span

The new Bay Bridge East Span is comprised of four major structures. From west to east they are: (1) the Yerba Buena Island Transition Structure, (2) the Self-Anchored Suspension Bridge, (3) the Skyway, and (4) the Oakland Touchdown Approach. The entire East Span is being targeted for opening on Labor Day weekend of 2013 (more information is available at <http://www.baybridgeinfo.org>). The entire structure is 3.5 km (2.2 miles) long.



The Yerba Buena Island Transition Structure (YBITS)

461 meters long; cast-in-place concrete box girders; several outrigger bents; under construction. This section will be instrumented with 28 sensors.

The Self-Anchored Suspension Bridge (SAS)

623 meters long with a 385m main span and a 180m back span. A unique signature structure with a 160m tall tower that is comprised of 4 steel shafts connected with steel shear links, and steel box girders connected by steel cross beams; under construction. This bridge is being instrumented with 86 sensors.

The Skyway

2,085 meters long; 4 concrete frame structures separated by hinges with steel pipe beams; 452 pre-cast concrete segments; 3-cell concrete box girders; construction completed in April 2008. Instrumentation of this structure with 73 sensors has been completed and is online.

The Oakland Touchdown Approach (OTD)

330 meters long; cast-in-place concrete box girders; phase 1 construction completed in June 2010, phase 2 under construction. The approach has been instrumented with 12 sensors. A geotechnical array with 15 sensors, to a depth of 160 meters, has been installed at a site southeast of the approach.

