

CE 890 Graduate Seminar

SPEAKER: Asad Esmaily, PhD, PE (Associate Professor of Structural Engineering)

TOPIC: “San Francisco – Oakland Bay Bridge East Span Seismic Safety Project”

DATE: February 9, 2011

TIME: 4:00 p.m. (refreshments at 3:45 p.m.)

PLACE: 2144 Fiedler Hall

ABSTRACT

Construction of the new east span of the San Francisco Bay-Bridge, connecting Oakland to Yerba Buena Island, started in year 2002. This is a part of a seismic replacement and retrofit project which retrofits the west span and the San Francisco approach, and replaces the east span and Oakland touchdown.

The east span of the Bay Bridge, spanning between Oakland and Yerba Buena Island, called “Skyway”, will be replaced by a prestressed-post tensioned segmental part starting from Oakland and a Self-Anchored Suspension part close to the Yerba Buena Island.

Preliminary studies started in year 1989 after the Loma Preita earthquake inflicted serious damage on the bridge.

The replacement project of the east span consists of 4 different parts, including construction of the passing through the Yerba Buena Island, Self-Anchored Suspension Bridge, segmental part, and Oakland touchdown. A brief description of the project in general will be followed by a more pictorial description of the construction of the segmental part of the Skyway.