

VORTEX MARINE CONSTRUCTION, INC. Livingston Street Pier Oakland, CA 94606-5215 Phone: (510) 261-2400 Fax: (510) 261-2444 www.vortex-sfb.com

## **Emeryville Marina Breakwater Replacement**

**OWNER:** City of Emeryville

LOCATION: Emeryville, CA

CONTRACT VALUE: \$5,350,000

VORTEX ROLE: Prime Contractor

**PROJECT SCHEDULE: June 2006 to March 2007.** 

## **Project Description**

This project required that a new 1280 foot concrete breakwater be constructed to protect the Emeryville Harbor and Marina due to the severe degradation of the existing timber structure.

This work involved driving 78 concrete batter piles and installation of 254, five foot wide concrete sheet piles, ranging in lengths from 29 to 57 feet.

A reinforced concrete cast-in-place cap was then installed, structurally tying together the batter piles and the concrete sheet piles. 726 feet of concrete cap was also widened to serve as a concrete promenade and fishing pier. Timber handrails were constructed along the length of the promenade, with a fish cleaning station, and a composite plastic approach deck was installed to transition from the shoreline.

Upon completion of the new structure, the old timber breakwater was dismantled and recycled.

