

I-238/I-580/I-880 Widening & Rehabilitation

A HOCHTIEF Company

Owner

California Department of Transportation

Location

Hayward and San Leandro, CA

Value

\$106,000,000

Market

Highways & Interchanges

Start - Completion Dates

8/2006 – 12/2009

- Reconstruction of two major interchanges
- Demolition and reconstruction of multi-lane bridges over UPRR tracks and BART commuter rail
- An array of structure and pavement types
- Significant traffic management involving more than 55 lane closure patterns and detours for more than 1,500 closures
- Numerous environmental considerations

Project Description

Interstate 238 serves as the single east-west freight connector between the San Francisco and Oakland ports and California's agricultural heartland. Flatiron reconstructed more than two miles of I-238 in Alameda County. I-238 is the portion of state Route 238 that connects two other major interstates—I-880 in the west and I-580 in the east.

Work for this project included the construction of one new bridge, two bridge replacements, 10 bridge widenings, freeway widening, freeway paving and other associated work. Bridge scope included an array of design elements—three hydraulically jacked bridges, precast concrete girders, structural steel trusses, and prestressed cast-in-place concrete. Widening scope included eight cast-in-place and four mechanically stabilized earth retaining walls. Pavement types included recycled dense grade, rubberized and concrete. The project completed about four months ahead of schedule.

Significant construction challenges included phased demolition and reconstruction of multilane bridges over railroad tracks and BART commuter train tracks, driving piles at numerous road crossings in a congested urban setting, vibration monitoring and noise restrictions, significant traffic management involving more than 55 lane closure patterns and numerous detours and many utility relocations. Additional challenges included environmental considerations, such as handling of soils with elevated levels of lead (ADL), construction of biofiltration basins and swales, settlement wick drains, avoidance of impact to archeologically significant sites, a cemetery and a large grove of redwood trees. Work above seven busy city streets involved pedestrian control and careful coordination with the County and five bordering communities.

Company Role

Flatiron was the prime contractor, self-performing more than 70 percent. Flatiron self-performed all structures, retaining walls, roadway grading and pavements.

Awards

- 2011 John L. Martin Partnered Project of the Year Diamond Award
- California Transportation Foundation (CTF) - Interchange Project of the Year, TRANNY, 2010
- AGC California - Excellence in Partnering - Projects Over \$50 Million, 2010
- Caltrans Gold Award - Partnering Success In Motion, 2010

