

# Valley Center Road Bridge

Kleinfelder provided construction management services for the replacement of the Valley Center Road Bridge. Located within tribal lands of the Rincon Band of Indians, the Valley Center Road Bridge over the San Luis Rey River serves as the primary community access to the adjacent Rincon Casino and Resort. The original 467-foot bridge had 20-span concrete slabs with pier walls founded on steel piles and experienced a long history of bridge scour. The project required replacement of this functionally obsolete bridge that was nearly 80 years old.

## PROJECT RESULTS

*The new Valley Center Road Bridge is a five-span, 486-foot-long cast-in-place post-tensioned box girder superstructure supported by pier walls and founded on driven steel piles. This project was awarded the 2012 Transportation/\$5-\$15 Million Construction Management Project Achievement Award by the CMAA San Diego Chapter.*



## PROPER PROFILES FOR EACH STAGE

A critical construction management task involving the stage construction was ensuring that the constructed elevations for both the roadway pavement and bridge deck of each stage produced proper profiles and conformed to previous stages of work. Another challenge was coordinating stage construction that involved pavement striping. The site was also identified to be habitat for the endangered Arroyo Toad, which required environmental permits for protection measures.

## MATCHING FINAL DECK ELEVATIONS

Kleinfelder surveyed the existing pavement at the match line approaches and determined final elevations that produced a smooth ride and proper surface drainage for the roadway pavement. Similarly, for the bridge deck of the Stage 2 structure, as-built deck elevations on the Stage 1 structure were obtained, then final deck elevations were adjusted to match the Stage 1 structure. In determining these bridge deck grades, an allowance was made for anticipated deflections due to post-tensioning and false-work release.

### Location:

Valley Center, California

### Owner:

County of San Diego

