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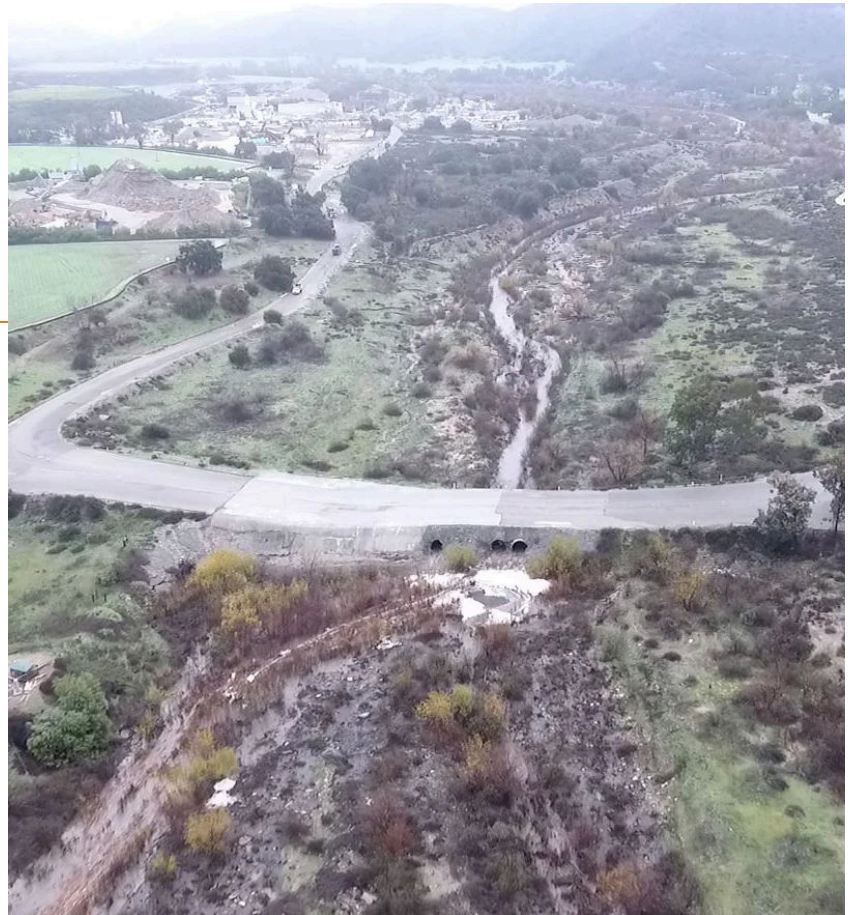
2024

**PROJECT AWARD WINNER**

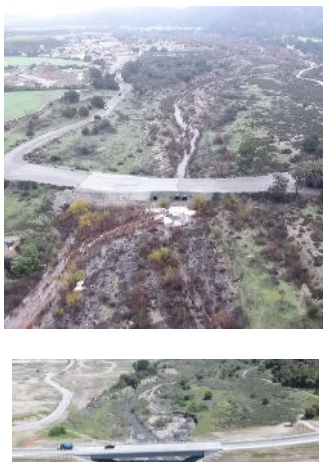
# Environmental Engineering Project

## Gibby Road Bridge

Rancho Mission Viejo



The new Gibby Road Bridge replaces a 70-foot wide earthen embankment low-flow Arizona Crossing earthen embankment that crosses San Juan Creek. The bridge enabled the removal of the earthen embankment to restore the creek to a natural flow condition, allows for fish passage, and prevents roadway crossing closures during storm events that were common with the original crossing. The bridge consists of a single-span, cast-in-place pre-stressed concrete box girder structure spanning approximately 220-feet. The design approach overcame multiple constraints, both regulatory (environmental permitting/riparian protection), and physical (high groundwater, high sediment loads through the crossing, and flow/transport capacity continuity). The bridge structure required revetment consisting of a complex combination of grouted riprap installed over top of soilcrete columns constructed with jet grouting.



### BRIDGE CONSTRUCTION SEQUENCE

