

Escondido Pure Water Pipeline Creek Crossing



Project Description

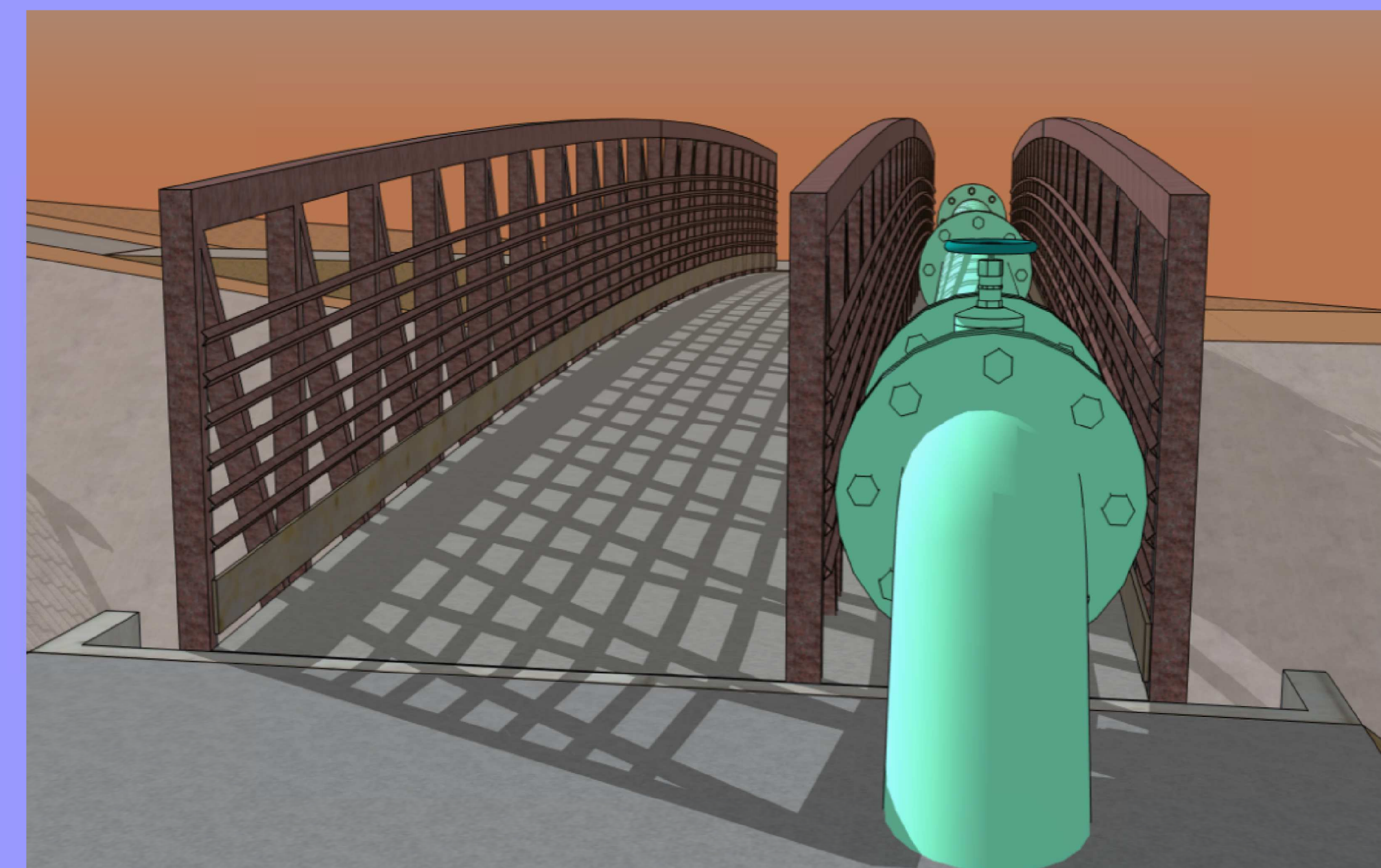
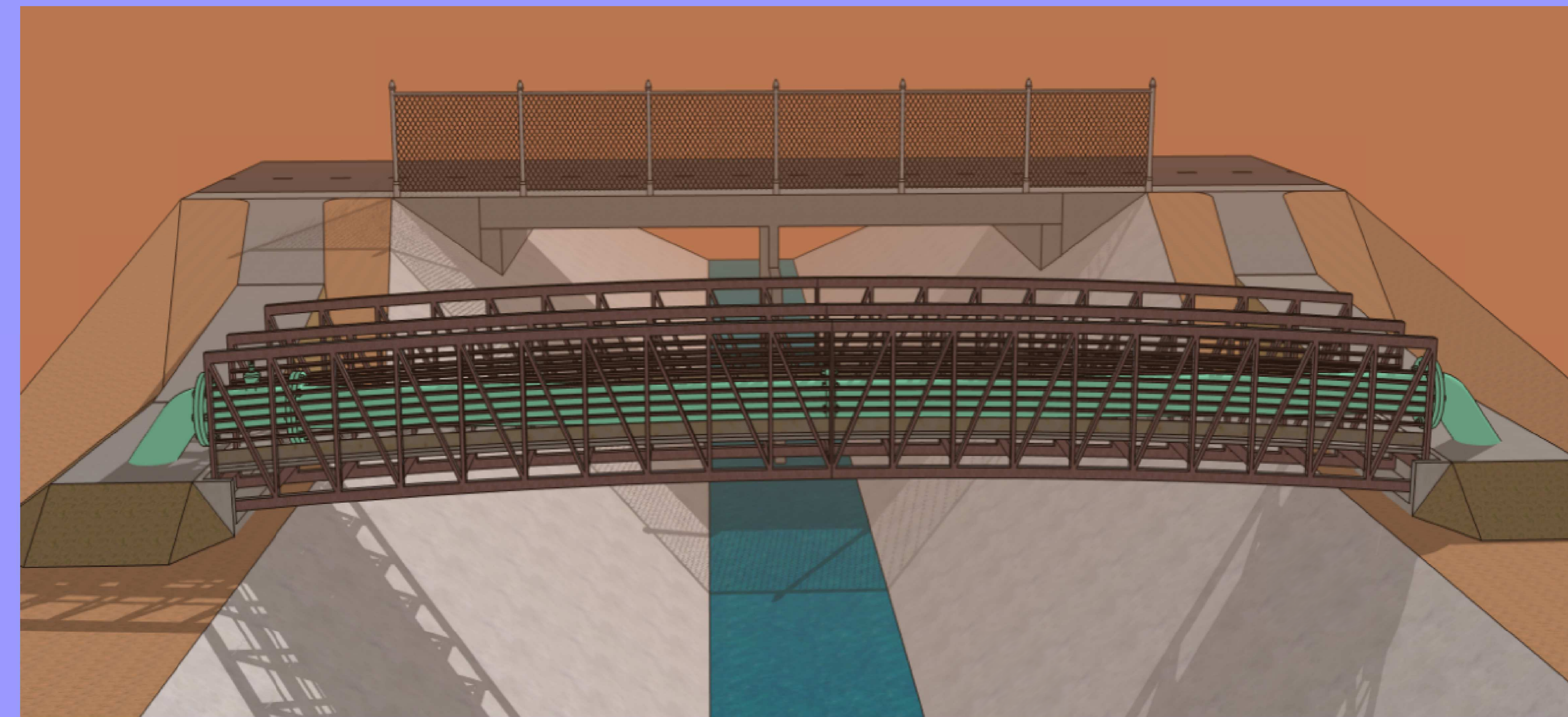
The City of Escondido is constructing a new water treatment facility which will treat effluent from their Hale Avenue Wastewater Treatment Plant. The water produced will be piped to a reservoir in eastern Escondido. Our team evaluated two alternatives to get the new 24" pipe across the Escondido Creek.

Our alternatives were as follows:

1. Jack and Bore underneath the channel
2. Design a pedestrian bridge the pipe would attach to across the channel

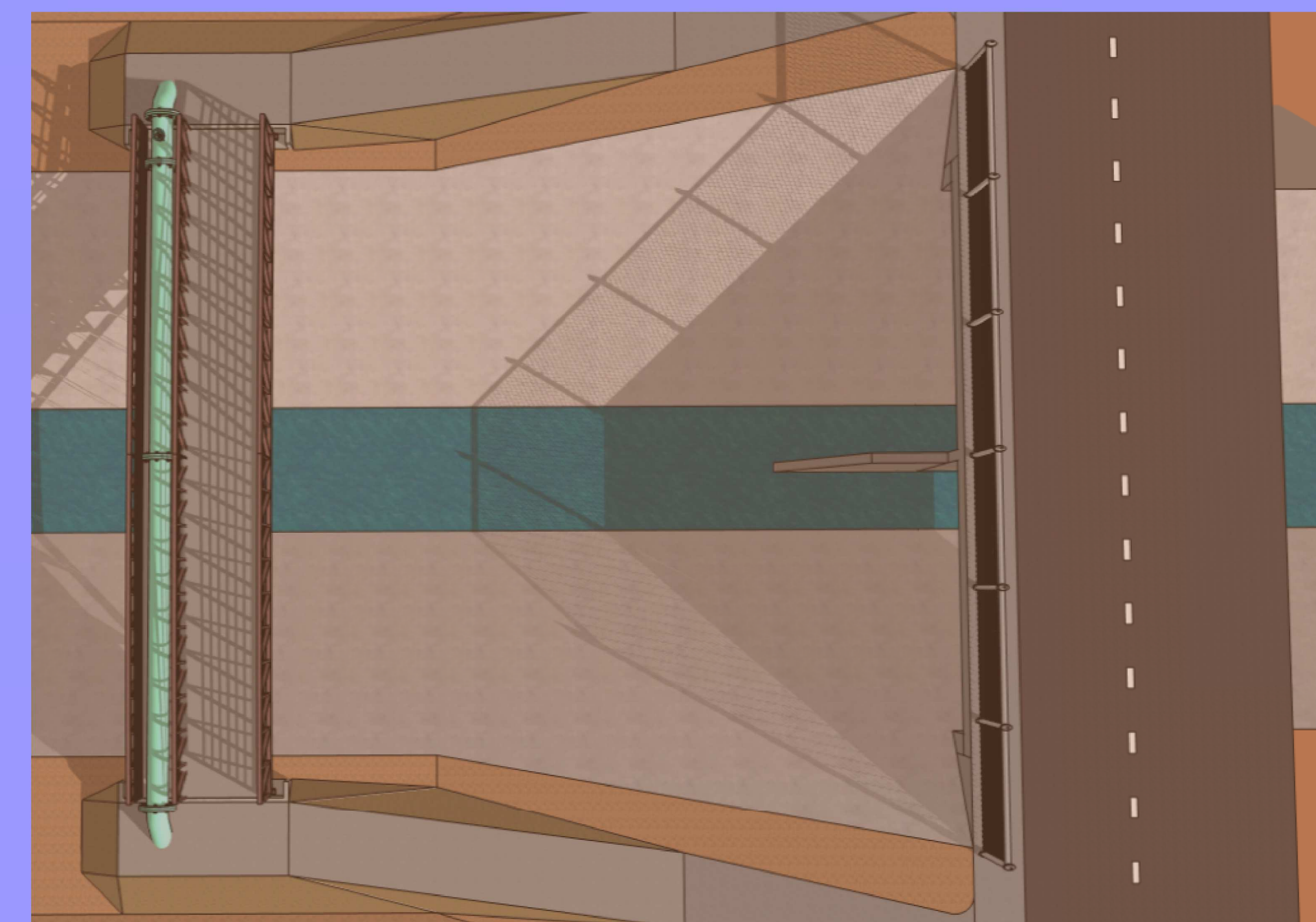
Our main objective was to find the best alternative without interfering with the performance of the channel. After careful evaluation of the two options our team determined the best option was the Pedestrian Bridge

Our Design



The pipe will cross over the Escondido Creek via a pedestrian bridge structure that will be built. The pipe will rest on top of the bridge deck, supported by pipe saddles along the length of the bridge.

The bridge will be a flat pratt steel truss with a concrete deck. It will span 120' in length with a 15' width adjacent to the existing Washington Street bridge.



Design Considerations

Transportation

- Right of way
- New signage for the proposed bridge
- Traffic control permits
- Restriping of the existing roadway
- Mobility improvement for pedestrians and bikes

Construction

- Cost
- Construction Staging
- Temporary structures
- Schedule

Structural

- Reinforced concrete design
- Steel design
- Foundations
- Seismic

Geotechnical

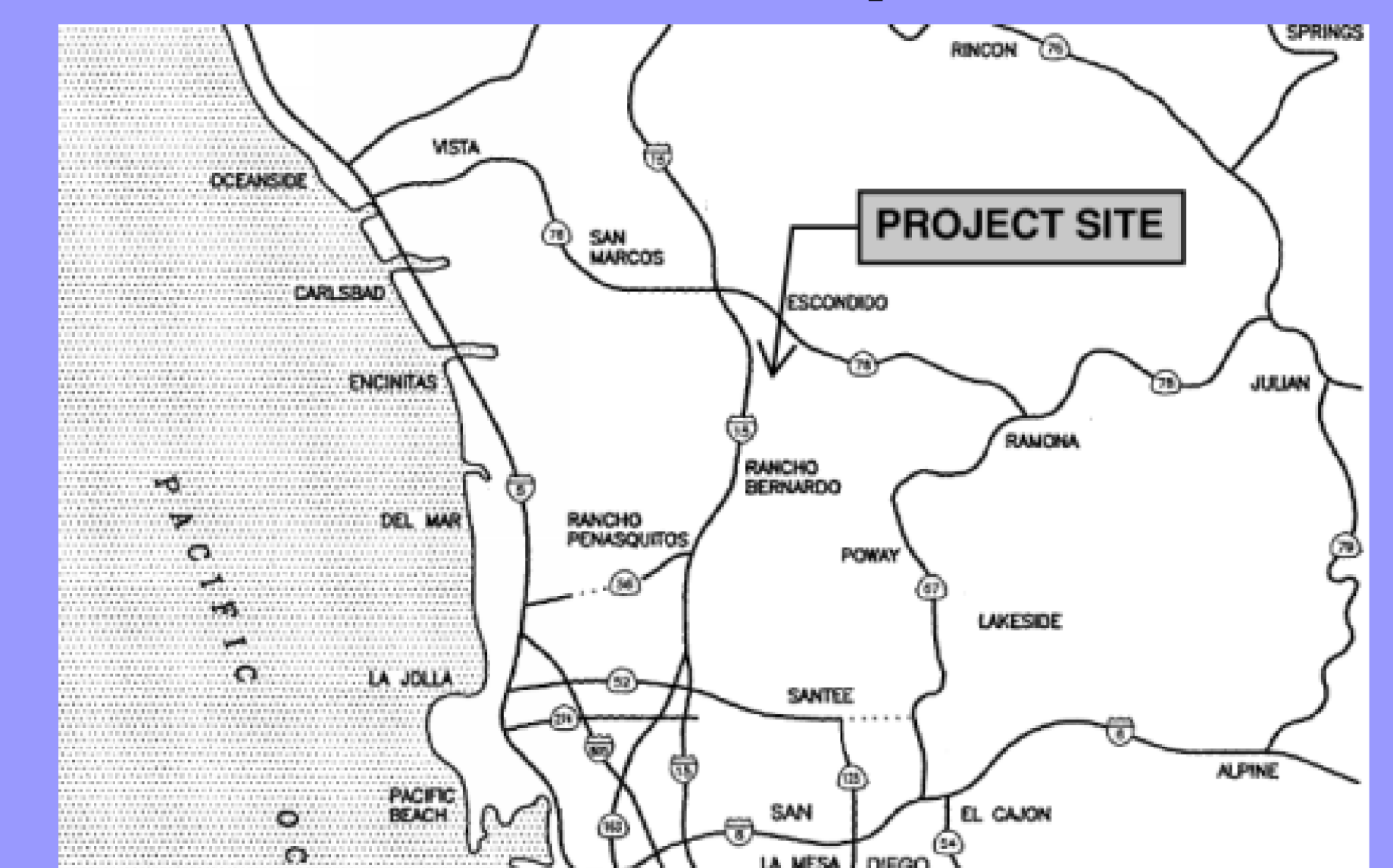
- Foundations
- Seismic

Our Design Team



Name	Discipline
Haley Donovan	Project Management
Dakota Newsome	Transportation
Sheena Sinigayan	Construction
Thong Nguyen	Structural
Andrew Bartleet	Structural
Bryan Tran	Geotechnical

Site Map



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SPRING 2020