Teaching a Dog New Tricks: The Seismic Retrofit of the Dog Creek Bridge Using Both Steel and Advanced Composites

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The Dog Creek Bridge

- Built in 1956, Rehabilitated in 1989
- Seismic Retrofit in the Summer of 2017
- Located in Shasta-Trinity National Forest
- Open Spandrel Concrete Arch Bridge, 682 feet long with the longest span of 300 feet
The Dog Creek Bridge
Difficult Access
View from Above
Project Overview
The Dog Creek Bridge
Steel Jacket Installation
Steel Jackets Prior to Grouting
Steel Jacket Installation
Steel Jacket Installation
Staging Platforms
Staging Platforms
Saturation Area on Staging
Material Sampling for Field QC
Field Quality Control – Environmental Monitoring
Arch Rib Detailing
Fiber Anchor Detail at Spandrel Arch Connection
Unfinished Strengthened Arch
Finish Detailing
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