

stain that reacts with concrete was used to bring out the natural texture and color of the concrete. Extra care was taken to achieve the ideal color, as the scenery coloration changes throughout the day and year with the sun's position and season. Formliners also were used to create a rock texture on the mechanically-stabilized earth wall panels and piers matching the texture of nearby canyon wall relief, providing a natural rock appearance for river and trail users.

Long concrete spans, efficiently combined with post-tensioned segmental technology, resulted in a delicate footprint, and building from above protected the cherished environment during construction. Balanced cantilever construction allowed for continual recreation on the river, which was important to this region of outdoor enthusiasts. The cast-in-place segmental post-tensioned concrete box girders will offer long service life, resulting in low life-cycle cost for the citizens of Utah.

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*Fred Doehring is deputy bridge design engineer for the Utah Department of Transportation in Salt Lake City, Utah, and Stephen E. Fultz is assistant regional director with Figg Bridge Engineers in Denver, Colo.*

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## Visual Sensitivity

A guiding theme of "A Bridge in Harmony with Nature" shaped the context-sensitive design. A stakeholder group representing the community guided the design to ensure realization of the community's vision. Stakeholders included in the discussions included city and county leaders, property owners, businesses, the Lions Club, the Bureau of Land Management, the National Park Service (including Arches), and the Moab Trails Alliance.

The arching shape of the variable-depth superstructure reflects the spirit of nearby Landscape Arch, a prominent feature in Arches National Park. Bridge piers were located to avoid the trail network, and overhead construction allowed trail use and many recreational events to continue during construction.



### AESTHETICS COMMENTARY by Frederick Gottemoeller

Low and close to the Colorado River, surrounded by stunning high desert buttes and rock formations, this bridge occupies a very small part of the total visual field. Its designers were wise to design it so that it seems to be an integral part of the topography. Its most obvious feature, its color, captures the color of the surrounding rocks perfectly.

But, there's more. The girder is very well proportioned. The significant difference in girder depth between haunch and midspan, and end spans makes visible the concentration of forces over the piers. The clear desert sunlight causes the overhang to cast a deep shadow across the top of the girder that makes the midspan and end spans seem even thinner. The piers are too short to make a visual statement on their own, so the designer has not made the attempt. Instead, the piers have been designed as simple cylinders. They are notched at their tops and seem to cradle the haunches. As a result, they act as visual foils for the girder. Their visual mass contrasts with the relative thinness of the girder, reinforcing its delicate appearance.

Because the bridge is so low to the water, the view of the bridge interacts with its own reflection, which reinforces initial impressions. Altogether the bridge seems delicate, almost liquid, a fitting contrast to the robust formations in the background.

Bridges don't always have to be foreground elements. Sometimes it is best when they just blend in, become a part of a beautiful scene that was strong before they got there, and is strong still.



Snow covers the mountain landscape in Moab, showcasing the elegant, graceful curves of Utah's longest concrete bridge span.