a “gateway experience,” and ultimately makes a place memorable.

In addition to the bridge architecture, the look of the many walls along the highway was an important component of the project’s overall visual impact. Working with the Caltrans District 8 Landscape Architect, the team developed a detailed series of flowing, interweaving curvilinear lines that would complement both structures. The success of the fluidity concept, which governed the wall and overcrossing aesthetics of both projects, was thoroughly embraced by Caltrans District 8, which covers Riverside and San Bernardino counties. The design is now the new master theme for the aesthetic redesign of the entire I-10 San Bernardino corridor. ▲

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COMMUNITY AESTHETICS

COMMENTARY

by Frederick Gottemoeller

Communities often ask that a prominent bridge in their community illustrate some community landmark or characteristic, or ask that it serves as an icon of their community. With major bridges, the main structural element itself, say an arch or cable stay tower, usually serves this need. With typical highway overpasses, the structural elements are not large or particularly distinctive, which leads designers to look elsewhere for something unique.

One typical response is to use formliners to make the concrete surfaces look like some other materials that are traditional in the area. Or specific images might be inset into the concrete, say a dolphin in a waterfront community or a bison in a western environment. Or a bridge in an historic community might be festooned with antique-looking streetlights designed to look like those from the nineteenth century. Sometimes the effort even includes miniaturized versions of an arch or a cable stay tower with actual miniature stays, hoping the pattern will have an impact even when the size isn’t there.

With these two bridges, their designers took a different tack. Recalling that concrete starts out in a fluid state, and realizing that recent experimentation in forming techniques have begun to free concrete from the restrictions imposed by flat plywood sheets, they decided to investigate whether the bridge itself could be shaped to meet the symbolic goals of the community. They sculpted the concrete into abstract shapes calling to mind the cars on the racetrack and the fountain that is a key part of Fontana’s identity. The shapes are large enough to be appreciated even by drivers moving at 70 mph. The abstraction even extends to the retaining walls, where a wavy line calls to mind water more effectively than a whole school of inset fish.

The next challenge will be to use these new forming techniques to shape the structural concrete itself to more efficiently carry the forces on the structure. Natural shapes might be the best model. There are many amazing natural structures built without a single sheet of plywood.