



**The International Association of Lighting Designers (IALD) regular column tackling the principles of lighting design... This issue, Faith E. Baum IALD, LC, principal of Illumination Arts, talks about the sympathetic lighting schemes for bridges...**

## bridging the lighting gap

Last spring, I participated in a public workshop for the replacement of a bridge that carries a major state highway over a river, and is the only direct route to the communities on either side of the bridge. In spite of its importance in transportation, the bridge is located in the middle of a State Park, with the Atlantic Ocean only a hundred yards to one side, and campsites all around. I was told that there was great interest in aesthetic lighting on the bridge, possibly to match a highly illuminated bridge elsewhere in the state.

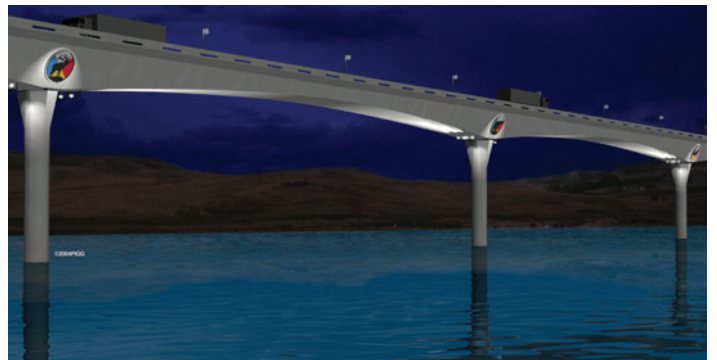
Part of my research into the context of this bridge included a drive around the area late one moonless night. Turning off my headlights, I found myself in complete and utter darkness. The sound of the ocean and the stars in the sky were clearly the nighttime attraction here.

When I gave my lighting presentation at the next workshop, I showed everyone a small, low wattage luminaire, which emitted no perceptible light in the illuminated presentation room. Then, I turned off all the lights and spoke while the workshop participants became accustomed to the darkness. When I turned the luminaire back on in the darkened room, I was able to illuminate entire tables of people, enough for them to be seen from across the room. It was a vivid example – and warning – for all present that we needed to remain vigilant about developing a lighting solution that respected the context of the bridge. Ultimately, the participants selected a very controlled, but beautiful, lighting solution that will be enjoyed by everyone who chooses to view it, or not. As the example above and our lighting publications are testament to, in recent years, everyone from community groups to departments of transportation have been adding aesthetic

lighting to their existing and new signature bridges, believing that such lighting will raise awareness of their location and create a destination site. But as lighting designers we must be cautious, and make sure that we are fully educated about the context of the bridge, lest we design a nighttime signature that is at odds with the environmental, cultural or aesthetic place in which the bridge is built.

While that might seem obvious, as my experience proved, sometimes even the local residents need to be reminded of the context in which they reside so as not to create a lighting design that is inappropriate for its surroundings. It is our responsibility to educate the people participating in the decision-making process as to the lighting options available to them, and how these choices might impact or alter their visual landscape.

At another bridge lighting presentation, where the stakeholders were a small group of representatives from the North Dakota Department of Transportation and the Three Affiliated Tribes, a lesson was learned about the importance of understanding the cultural context of a bridge. Located on a reservation in the northwest corner of North Dakota, aesthetic lighting would likely have been considered inappropriate. But on one side of the bridge there is a casino, with all of the requisite neon and building floodlighting. In spite of that, the workshop attendees thought that aesthetic lighting would be unnecessarily costly, and selected a simple lighting solution, that reflected what was important to them: the lighting of the tribal symbols integrated into the design of the bridge itself. It was a perfect example of context sensitive design, and how such workshops can help the design team to recognise and address




Sensitive and thoughtful lighting of the Blue Bear Bridge in North Dakota was aided by discussions at workshop sessions

the many cultural issues that impact design decisions.

Sometimes though, the bridges we are lighting are located in downtown urban areas, over a body of water or a tangled mass of highways and roads. By definition, cities are more highly illuminated, and the stakeholders are likely to be less concerned about light pollution, and more concerned with creating a nighttime signature on the skyline. The lighting for such nighttime signatures often needs to be in contrast with surrounding structures to make the bridge stand out in a crowded landscape.

For example, the task force assigned to manage the design process for a bridge in a medium-sized U.S. city selected glass as its theme. In contrast with the bridges described above, the task force determined that this was to be a bridge that would become a destination for tourists. The final lighting solution incorporated hundreds of colour-changing LED luminaires and,

when the project is completed, local events and holidays throughout the year will be marked by lighting events on the pylon of this bridge. The bridge will distinguish itself from all others, and the lighting will create a picture postcard image that will eventually become an icon for their city. It is our job as lighting designers to know the difference between the bridges described in the three anecdotes above. Communities throughout the world are recognising the value in creating such signatures, and lighting designers can help them realise their vision by bringing their technical expertise and aesthetic sensibility to these projects. Selecting lighting solutions that are based on an understanding of the cultural, aesthetic, environmental and political context of a bridge will result in many more beautiful and appropriate signatures on the skylines of our cities and towns. 

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**74** Correspondence concerning this column and its contents is welcomed. Please email comments to [p.james@mondiale.co.uk](mailto:p.james@mondiale.co.uk). This will then be forwarded to the IALD and may be considered for publication in *mondo\*arc*.

The projects mentioned in this article were designed by Faith Baum during her tenure with The Mintz Lighting Group.