



 $\wedge$  The deck, arch and pier are one and the same, which gives the structure an economy and lightness.

## Mobius Bridge, Bristol

Connecting one bank to another is only one aspect of Hakes Associates' bridge designs.

🚟 UNITED KINGDOM — TEXT: KIRSTEN HANNEMA

Julian and Cari-Janie Hakes's partnership seems to be founded on winning competitions—the first one in 1995 when they were still studying at Cambridge University, the next one in 2000, when they formed Hakes Associates. In 2004 and 2005 they went on to win two more competitions in England with their designs for the Mobius in Bristol and the Bridge of Hope in Liverpool. They are currently working on designs for two 300-metre-long cycle/pedestrian bridges in Boston (USA) and two 500-metre-long highway bridges in Kuwait. It's starting to look very much as if striking bridge designs will become their trademark.

The Mobius Bridge design, developed in collaboration with Buro Happold, is a typical example of Hakes Associates' style. Inspired by the endless Möbius loop, the new pedestrian and cycle river crossing is a dynamic, continuously tied structure that is physically and structurally independent of both riverbanks in order to avoid forces that could damage the adjacent buildings and archeological remains on the site. The geometry of the bridge has been carefully chosen to produce an effective structural solution in relation to the site constraints. The main span comprises a steel arch in compression, with the deck suspended by relatively small diameter hanger cables. There is a connection between the arch and the deck where the two cross over, and the deck section spans the remaining distance to the end as a beam.

This autonomous construction lends the bridge a sculptural character, turning it into a local landmark and a symbol of the regeneration of the Finzels Reach area of which it is part.  $\leftarrow$ www.hakes.co.uk

