



This unusual steel bridge is the downstream one of two crossings over the River Medway in Maidstone that provide access to a landscaped river park.

The design is a re-working of a simple beam and uses an unconventional box section to achieve a particularly slender appearance. The appearance from a distance is of a thin blue straw rested on the tips of four slender fingers, as this 75m long steel box beam bridge is carried by two delicate V-shaped piers.

The circular cut outs in the bottom of the beam serve two functions. They facilitate inspection access to the inside of the steel box beam and they also lighten the overall appearance of the bridge and provide visual relief for the long horizontal underside of the bridge. The result is a striking and unusual bottom flange to an otherwise relatively conventional shallow box girder.

The V-shaped piers reduce the effective span, but being on the bridge centreline they provide no torsional restraint to the box. This is provided instead by innovative sliding sleeved bars cast into the nose of the concrete abutments. These also provide lateral restraint to the bridge deck.

**Client:**  
Maidstone Borough Council

**Architect:**  
Studio Bednarski

**Contractor:**  
Balfour Beatty Construction

**Location:**  
River Medway in Maidstone,  
Kent

**Service Dates:**  
2000 - 2001

**Services:**  
Conceptual and Detailed  
Design

**Awards:**  
The Structural Steel Design  
Awards 2002

