A GUT(SY) BRIDGE DESIGN

WORKING ON A PROJECT SITE that was only about the size of two football fields was just one of the challenges for the Gut Bridge team, which included designer Hardesty and Hanover and fabricator Steward Machine Company (an AISC member and certified fabricator). The bridge, in South Bristol, Maine, employed a double-counterweight design that allowed the structure to fit within the site.

In addition, using a cable-stayed superstructure minimized the weight of the forward span, allowing the span to be efficiently counterweighted (balanced) and eliminating the need for a cross-counterweight, leaving an aesthetically pleasing appearance and reduced foundation costs. The counterweights are located in the tower masts and below grade to minimize the scale of the structure, a key design requirement established during meetings with the community.

The Gut Bridge was one of this year’s NSBA Prize Bridge Award winners. You can learn about (and see plenty of photos of) all the winners in next month’s (June) issue.