

Holt Fleet Bridge Refurbishment



aVolkerWessels company



Project information

VolkerLaser carried out sensitive refurbishment of the 19th century Holt Fleet Bridge, a grade II listed structure that crosses the River Severn in Worcestershire. Designed by Thomas Telford, the bridge was opened in 1828 and strengthened a century later, in 1928.

Client Worcestershire County Council Value £1.1 million Duration 9 months

This historic bridge was built almost two hundred years ago, comprising five cast iron ribs with X-braced spandrels, as was common to several of Thomas Telford's structures. It was strengthened in 1928 when the upper and lower parts of each rib and some of the diagonal struts above them were encased in concrete. The road deck was rebuilt in reinforced concrete and widened at the same time.

Our team completed works to enable the lifting of a 7.5 tonne weight restriction imposed during the early part of 2009. This entailed concrete and parapet repairs, replacement of sandstone to the approach wing walls and painting of the entire structure. Spanning two districts of Worcestershire, we worked with Heritage Inspectors from both Malvern and Wychavon to develop a suitable specification and approach to the works.

Working space within the bridge structure was extremely restricted, to the point where only the smaller members of our workforce were able to access the area. A specific work method and rescue procedure was implemented, with each operative being supervised by a second, and sometimes a third man to ensure safety within such a confined space.

During the main works, the area below the bridge was fully scaffolded and sheeted for access and safety purposes. However, whilst the scaffold was being erected and dismantled a full-time manned safety boat was employed. This was on hand to rescue any person or items that might enter the water. On several occasions the boat was also used to guide the many large pleasure cruisers and barges as they negotiated the river below the bridge, made narrower by the presence of scaffolding.

Holt Fleet Bridge forms a key part of Worcestershire's transport network, as the only road to cross the River Severn between Stourport-on-Severn and Worcester.

Care was taken to maintain this important highway link throughout the contract. Temporary traffic signals were used to keep a single lane open at all times, with these being manually operated during peak times to ensure minimum disruption to motorists. This sensitive and pro-active approach was particularly important to nearby businesses and residents.

Works were completed slightly ahead of programme allowing the road to fully reopen a month earlier than anticipated.