

Historic canal bridge stabilised and strengthened

Client: Warrington M.B.C.

Location: Lymm, Cheshire

Approved Installer: Quadriga

Opened in 1761, the Bridgewater Canal is considered to be England's first 'true' canal and connects Runcorn, Manchester and Leigh. The bridge at Lymm had weakened over the years and, in addition to structural stabilisation works, needed vegetation removed, decayed bricks and stonework cut out and replaced with matching material, cleaning and repointing.

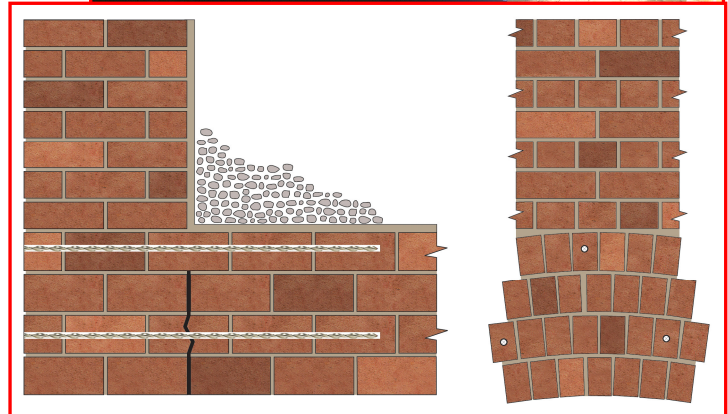
The brick and stone bridge was suffering from extensive weathering and required essential repairs and reinforcement to ensure its long term stability. The owners specified proven Helifix systems to economically secure and upgrade the bridge without affecting its original appearance.

The Helifix solution

The Approved Installer carried out much of the work from pontoon boats and scaffolding, to obtain full access. The bridge also had to remain open to vehicles and pedestrians throughout the period of the contract.

To secure the bridge arch HeliBars were bonded into channelled-out mortar joints and extended to the spandrel wall where they were tied in to other HeliBars installed every six courses. Grouted CemTies were installed perpendicular to the barrel arch face to reconnect separating brick rings and restore structural integrity. Additional bonded HeliBars were used to stitch cracks in the brickwork.

Once the restoration works were completed, which included resurfacing the road and footpaths, the historic Lymm bridge was fully stabilised and strengthened with no visible signs of the concealed non-disruptive structural repairs.



CS076.05.13