## Case History



## Outwood Viaduct Radcliffe, UK



Following its closure in 1966, Outwood Viaduct had fallen into dereliction, however its proposed demolition by British Rail was forestalled due to public objection led by the Railway Heritage Trust and it was eventually given Grade 2 listed status.

It spans the river Irwell at the western edge of Radcliffe, Greater Manchester. The spans were fabricated and erected in 1881 and have an overall length of over 100 metres. Each span comprises six cast iron open spandrel arch ribs with lateral bracing.

British Rail had previously attempted to strengthen the four tapering brickwork pillars by adding new masonry to the original single archway piercings located in each pier. This new work had however began to detach from the original structure and extensive cracking was visible between the new and the old (see right).

Cintec supplied 109 stud and rebar stitching anchors ranging from 1 to 10 metres in length. These

were installed through the cracks to re-connect the inner reinforcement brickwork to the original structure as indicated in the design proposal below.

After renovation, Outwood Viaduct was formally opened as a footpath, bridleway and cycleway in 1999 by Sir William McAlpine, President of the Railway Heritage Trust.





