

Timsbury Bridge - concrete repair



Timsbury Bridge is an early two span reinforced concrete bridge, built circa 1910, carrying the A3057 Stockbridge Road over the River Test. Inspection showed the concrete deck exhibited spalling of concrete due to severe corrosion of reinforcement. Subsequent assessment proved weakening of some structural elements.

Our brief was to identify the cause of corrosion, carry out remedial works, and strengthen the bridge. Close inspection and testing proved that the low concrete cover to reinforcement and high levels of chloride in concrete were the causes of corrosion.

After considering several options, the solution of concrete repairs with installation of galvanic anodes to prevent corrosion through the bridge deck was adopted. We also installed carbon fibre reinforced plates to main beams where original shear links had corroded away, applied a protective concrete coating to the whole structure and repainted the parapets.

Key benefits

- Refurbishment of whole bridge in one twelve week contract
- Extended life of the bridge avoiding costly replacement
- Works completed without any detrimental effect to the River Test, a Site of Special Scientific Interest (SSSI)

Location:

A3057 Stockbridge Road,
Romsey, Hampshire

Client:

Hampshire County
Council

Value: £230,000

Completed: November
2012

Specialist teams:

Hampshire Services'
Engineering Consultancy,
Raymond Brown (main
contractor)



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Hampshire
County Council