



Project Profile - Civil Engineering & Infrastructure

PROJECT

Little Bridge, Tonbridge

SUMMARY

Repair and waterproofing of bridge deck

PRODUCTS

Fastfill

CLIENT

Kent County Council

CONTRACTOR

Enterprise Managed Service Ltd

BACKGROUND ►

The Little Bridge is located in Tonbridge, a market town in Kent some four miles from Tunbridge Wells. Situated in the centre of Tonbridge's High Street, the cast iron bridge carries traffic over the Botany Stream. It was first built around 1887 and is a smaller version of the Big Bridge in Tonbridge. Both structures were built by a local foundry whose previous output was mainly limited to cutlery, so they are also known as the 'knife and fork' bridges.

The Little Bridge had suffered failure of its waterproofing membrane which was allowing penetration of water and de-icing salts and corrosion in the bridge structure, threatening its integrity. After removal of the existing bridge deck, a new levelling screed was required to act as a carrier layer for the main waterproofing membrane. Whilst work was carried out over a three week period, the road remained open to northbound traffic, but southbound traffic was diverted. Speed of reinstatement was critical to minimise disruption in this historic town, whose name is thought to be derived from the 'town of bridges.'

THE SOLUTION ►

Fastfill, a rapid setting, Portland cement-based structural repair mortar, was chosen for this project due to its ability to develop its strength extremely quickly, ensuring that the road could rapidly return to normal service. Setting in as little as 10 minutes at 20°C., this was of particular advantage on this project as the waterproofing membrane could be installed the day after **Fastfill** was applied, ensuring that the council met their tight timeframe. It is pre-packaged, simply requiring the addition of clean water on-site and can be bulked out with sharp sand or aggregate to a flowing consistency for floor or deck repairs up to maximum depth of 300mm. With no substrate or inter-layer priming required, **Fastfill** ensures that economic, yet long-lasting, repairs can be carried out.

CE marked in accordance with BS EN 1504, **Fastfill** also complies with the Highways Agency Standard BD27/86 for the repair of Highway Structures. With a Portland cement base, its physical properties are similar to that of the base concrete, ensuring a monolithic repair exceeding the tensile strength of concrete. It has very high diffusion resistance to acid gases and chloride ions and is able to withstand 10 bar water pressure.



FM 41091
EMS 597350
OHS 597351

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