CASE STUDY



COLD APPLIED IRONWORK REIENSTATEMENT ON ONE OF THE UK'S BUSIEST A-ROADS





(!)

PROBLEM:

Meon were invited to provide specialist repair solutions for an ironwork reinstatement, on a failed cover located on the westbound carriage of the A40 near London. On such a busy road, the impact of leaving a defect of this nature causes further deterioration of the surrounding surface, damage to the ironwork, damage to vehicles and further economic impact. Due to the location the works were carried out during a night time lane closure, a fast and effective repair was necessary.







SOLUTION:

The reinstatement began with the old ironwork and surround excavated by the Kier team, allowing the rest of the repair to be carried out effectively, using our Meon range of surface repair products. The new ironwork was successfully re-bedded with HardMaster W620, a two-component, high strength bedding mortar with exceptional performance. Following this, HardMaster W615, our rapid strength and flowable concrete was poured in to effectively backfill the ironwork. Finally, PermaFyx L273 was applied to finish off the reinstatement.



RESULT:

The location of the repair required minimal disruption of the road network, ensuring the shortest closure time was a necessity for the work. The Meon range of products successfully provided this requirement without compensating for quality, strength, and durability of the finished repair. The reinstatement was effectively completed in a timely manner, without any need for hot works, compaction, or large plant equipment.



SYSTEMS USED:



Magma HardMaster W620 Two Part Polymer Modified Bedding Mortar

HardMaster W620 is a high strength bedding mortar that provides exceptional performance in wet conditions. It has a guaranteed cure as it is a two-component product and can achieve strengths of 40N/mm2 in 3 hours. Typical applications include the bedding of inspection chamber frames/covers, stanchion posts, kerbstones, setts and other street furniture installations.



Magma HardMaster W615 Rapid Strength Flowable Concrete



HardMaster W615 is a high performance rapid set and rapid strength flowable backfill concrete which is designed to complement the HardMaster range of bedding mortars, and can be opened to traffic just 90 minutes after being mixed and placed. It is perfect for any application that requires high early strength gain and a quick return to service time.



Magma PermaFyx L273 Permanent Asphalt Repair Kit



PermaFyx L273 is a permanent asphalt repair product based on high-performance cold applied MMA (Methyl Methacrylate) resin which will outlast the surrounding substrate. This is the perfect solution for small defect repairs such as potholes and ironwork surrounds, where it's not practical to call out a hot box, but a permanent repair is required.



PROJECT OBJECTIVES:



Focused on improved road safety through performance whilst removing high risk operations in support of the industries Zero Carbon goal.

DURABILITY



For every application, we aim to be able to demonstrate ways to reduce Whole-Life costs through improved system performance.

SUSTAINABILITY



Supporting central government Decarbonisation strategy with a goal to reach net zero by 2050.