

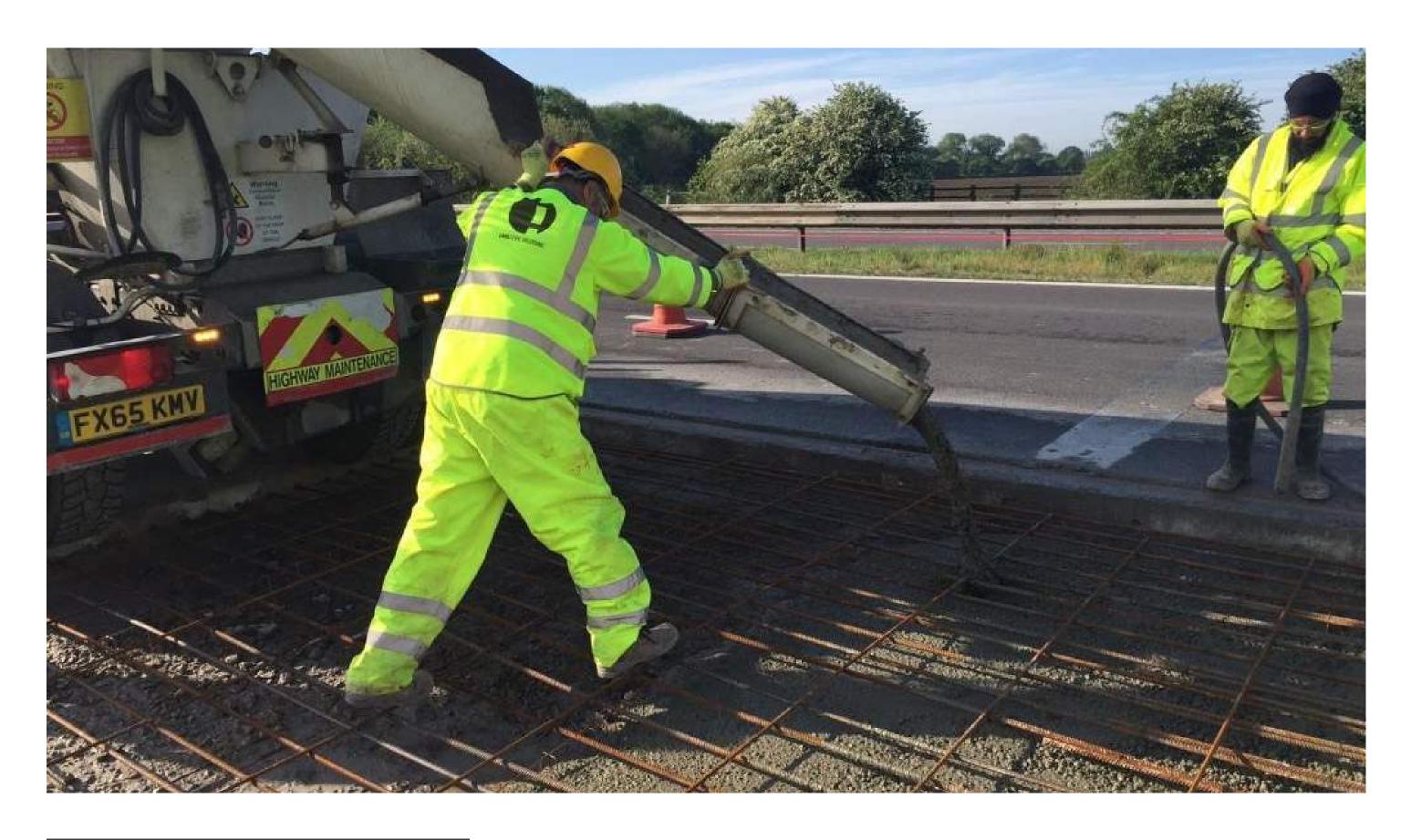
## MOTORWAY REPAIR SAVINGS MADE USING 'KERB TO KERB' SOLUTIONS.

A-one+ successfully kept the M180 flowing with LMS Highways' unique services to deliver time and budgetary savings.



When it comes to maintaining motorways in England, keeping maintenance and repairs to a high standard, short time-scale and within budget is imperative if disruption to the road user is to be kept to a minimum. The M180 is no different, running along the south side of the Humber and joining Grimsby to Doncaster, when the road surface began to fail prematurely in a significant and rapid manner, time was of the essence to investigate the cause, formulate a plan and repair before too much degradation caused major problems. This is where specialist contractors make all the difference especially with early engagement with the principal contractor.

A-one+ Integrated Highway Services is a highway engineering provider that designs, constructs and operates thousands of miles of road networks. Established by industry leaders, CH2M, Colas and Costain, A-one+ successfully manages Areas 4 and 12 of the Highways England road network. Over the last 7 years, A-one+ has worked with the team at LMS Highways Ltd, subcontract specialists in repair, in Areas 7 and 14 on various projects. It is times such as these when faced with the urgent repairs to the M180 that the historical working relationship between principle contractor and specialist contractor comes into its own. The team at Area 12 were unaware of the full repertoire of services that LMS Highways could deliver until a supply chain meeting when they realised they had found a contractor with the solutions.



"The package of specialist services supplied by LMS Highways supported the needs of the work well and made it a quick, efficient project with a single point of contact for the works."

Gareth Lewis – VM Manager A-One+. The M180, a busy motorway in South Yorkshire, was suffering from water ingress problems causing large sections of the hard shoulder and areas of lane 1 to develop large cracks and potholes. The overlaid thin surface coarse had been re-laid in the previous few years with the expectation that this would last for 10-12 years as it had done previously. However, now it was failing prematurely, the hard shoulder and lane 1 needed to be closed, reducing capacity for the road user. The reason needed to be urgently investigated and the lanes reopened as quickly as possible.

A-one+ completed trial holes and FWD testing to identify if the wetlands either side of the motorway were causing drainage issues and waterlogging to the subbase. Agreements with Highways England meant that the project could and should be accelerated as the road surface was degrading rapidly during the investigation process. The question then raised, was how to repair it and how to do it quickly.

A delegation from A-one+ attended one of LMS Highways' popular Lunch and Learn events last year. Managing Director Paul Winter was talking about the successful launch of LMS Civil Solutions specialising in concrete bay replacements, in addition to the other works that the company delivers. This and the specialist knowledge and experience that the company has built up in the 30+ years of trading enabled the collaboration that this project needed.







The team at A-one+ recognised that to complete the required works to the timescales needed, using a mix of contractors simply wasn't viable. Close project integration and assurance of programme was an absolute requirement, therefore one subcontractor with specialists in the following areas would keep the contractor interface simple and speed up the design process:

- New drainage needed to be installed to prevent waterlogging.
- CRCP concrete replacement needed in areas of severe degradation.
- The jointed concrete slabs needed to be treated and sealed to prevent water from penetrating the wearing course below.
- Thin bond repairs where concrete degradation was in patches.
- Plug Joints Nonstandard detail and life expired joints needed collaborative approach to the investigation and reinstatement.
- Road marking and studs after new surface course laid.







Works took place over a combination of nights/days and weekends to complete the project as quickly as possible. A-one+ milled out the surface course of the hard shoulder and lane 1 in preparation for LMS Highways to commence works. The LMS Civil Solutions team tackled the drainage first followed by 8 shifts of CRCP repairs. Simultaneously the LMS joint repair crews planed out and sealed transverse and longitudinal joints, completed thin bond repairs and plug joints. Once sections of road were completed, the surface course was re-laid, the road marking and road studs reinstated by the LMS road marking crew and the road reopened.

Junction 2 slip roads of M180 were a little more complicated as the surface course could not be removed in advance and the busy junction could not be closed during normal hours. To avoid disruption to the road user the slip roads were surveyed in collaboration between A-one+ and LMS Highways prior to a complete weekend of junction closure. Over one weekend, the road was milled, repaired, surface course re-laid, road markings reinstated and road reopened ready for Monday morning rush hour.

Over a matter of weeks, over 11000 Im of joints repairs and 350m2 of CRCP repairs were carried out. By combining LMS Highways and LMS Civil Solutions highly experienced teams, they were uniquely placed in the market to deliver these works rapidly. This was due to a single-contractor interface, early contractor involvement and streamlined programming for the project, meaning the work was completed quickly and on-budget, avoiding costly delays for the road user.

"From our point of view, from the very first discussion, it was a pleasure to work with Aone+. Not only did they have a very clear idea of the challenges but they were very keen to learn from the benefit of our experience in handling larger-scale repair schemes – we felt there was a great deal of collaboration in this scheme."

Paul Winter –
Managing Director
LMS Highways

A-one + were completely satisfied with the solutions provided by the teams and are now looking at further projects in their areas where the LMS 'Kerb to Kerb' service would be beneficial.



Our Kerb to Kerb service could help you achieve 10-15% savings with increased accountability and single point of contact.