

M5 Oldbury Viaduct

VolkerLaser was contracted to undertake the largest ever concrete repair project carried out in the UK on behalf of BMV – a joint venture between BAM Nuttall, Morgan Sindall and VolkerFitzpatrick. Works included concrete repair and waterproofing works on 3km of the carriageways between junctions 1 and 2 of the M5.

Highways, bridge and tunnels of the o

VolkerLaser began work on the National Highways site following six months of Early Contractor Involvement (ECI). The project initially expected around 3,000 concrete repairs, but once the viaduct's surface was removed and testing began, it became clear the scope was significantly larger and more complex than anticipated.

Covering a 50,000m² worksite, the scheme involved core VolkerLaser services including hydrodemolition, diamond drilling, continuity testing, sacrificial anode installation, and reinstatement using pre-bagged flowable concrete. The sheer scale of the project introduced major logistical challenges.

As the number of required repairs more than doubled, programme pressure intensified. With works taking place on a live motorway and lane closures causing disruption to traffic, close collaboration was vital to manage the schedule and minimise delays to the planned completion date.

With works taking place on one of the busiest motorway routes, and lane closures causing considerable delays to the travelling public, collaboration was key to managing the programme in order to achieve completion with minimal delay to the planned finish date. To meet these requirements, we arranged our teams to work in two, full nine-hour shifts, six days a week.

Nine high pressure water jetting (HPWJ) crews from three specialist supply chain partners were employed to minimise the risk of resource provision being an issue on this critical activity, and repair materials were sourced from two separate suppliers, minimising risk of supplies being disrupted by plant breakdowns or quality issues. Operationally, as one team completed repairs after the HPWJ had passed through, another team began infilling. Shortly after, another team began to undertake surface preparation and waterproofing application.



Steadily and consistently, works moved down the carriageway. This required constant collaboration with all subcontractors, as well as BMV and National Highways. Planning and progress monitoring was essential.

Due to working across such a large area, we made daily briefings a priority, running "Point of Work Briefings" and "End of Work Briefings". It was mandatory for each operative to receive a "Start of Work Briefing" before being allowed on site, with "Point of Work Briefings" being undertaken by individual gangers, outlining specific risks to each work location. To ensure full collaboration and a lessons learnt mentality, "End of Work Briefings" were conducted for each gang to provide feedback, generating improvements for the next shift.

The project required an extension of time to complete but given the circumstances of more than double quantities, this was inevitable. Only eight months were required to be added to the original 14 month contract period.



