

SPOTLIGHT ON WOODHOUSE TUNNEL

STRUCTURAL STRENGTHENING AND REFURBISHMENT

Our largest contract to date, this exercise in logistical expertise saw VolkerLaser deliver a wide breadth of specialist strengthening works to a vital piece of infrastructure, working purely at night.

As a major transport link, and vital piece of infrastructure within the centre of Leeds, Woodhouse Tunnel sees over 75,000 cars pass through every day. Originally built in the late 1960s, refurbishment and strengthening to the two-lane tunnel was identified as necessary in order to address over forty years of deterioration and is part of a wider £25 million maintenance scheme of improvements to the Leeds Inner Ring Road.

Undertaking over 400 nightshifts within a two-year period, VolkerLaser provided a wide breadth of specialist trades, fixing over 500 tonnes of reinforced steel, placing over 5000m² of formwork and pumping nearly 2000m³ of concrete.

This was a major, almost military exercise in logistical expertise, as a delay to the removal of traffic control, even by fifteen minutes, would have resulted in rush hour gridlock back to the M621 which is only a mile and half from the tunnel. Traffic management was implemented at around 19:00 every evening, and the tunnel closed to road users, re-opening the following morning at 06:00.

To deliver the project with minimal disruption, VolkerLaser ensured equipment, materials and resources were transported in and out of the tunnel and all debris cleared, leaving an intensive 7-hour window to complete the required works. In general, the public where unaware of the mindful planning undertaken to ensure minimal disruption and that their journeys were unaffected. The minimal feedback from the public is a prime example of the smooth stakeholder management thanks to the joined-up approach by all involved, receiving only four complaints in two years of the scheme.

Planning and programming were vital to the project; incorporating lengthy closures, due to local and national events being held in the area, requiring scheduling. Managing

£11 M
CONTRACT VALUE

104 WEEKS

PROJECT DURATION

400NIGHTSHIFTS

500 TONNES
REINFORCED STEEL

the needs of a range of stakeholders, VolkerLaser accelerated the works in order to complete all potentially disturbing drilling works within a four-week window, whilst patients of the Children's Cancer Ward within Leeds General Infirmary were moved elsewhere. Similarly, the programme was also accelerated during summer months whilst students at the local university returned home.

VolkerLaser successfully delivered works within budget and to the agreed targeted timescales, working in close co-operation with Carillion in order to provide many value engineering solutions during Early Contractor Involvement. An extra half an hour was negotiated on either side of the night shift, as well as the bold proposal of the simultaneous refurbishment of both sides of the tunnel.

This was VolkerLaser's largest contract to date, and a testament to our logistical expertise, the project was shortlisted in the Construction News Specialist Awards for Project of the Year.

