

Woodhouse Tunnel A58(M), Leeds Refurbishment and Strengthening







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.

Client	Carillion / Leeds City Council
Value	£11 million
Duration	November 2013 to 2016

Concrete Repairs Drainage Shuttering Waterproofing Reinforcement Excavation

Painting

Concrete Placing

As a major artery and vital piece of infrastructure within the centre of Leeds, Woodhouse Tunnel - which carries the A58(M) beneath the busy city centre and Leeds General Infirmary, as well as adjacent to the university - 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 up to the M621, a mile and a half's distance 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.

Endeavouring to deliver works with minimal interference, 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. Our conscientious delivery was generally unbeknownst to the general public, who were able to continue their schedules as normal without disruption. 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 have been vital to the project; incorporating lengthy closures as a result of events of both local and national importance into its schedule. Managing the needs of a multiplicity 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 have 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.

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.

"We needed somebody that could react quickly, that knew what they were doing, and knew how to resolve any potential issues that we had envisaged - and that is exactly what we had with VolkerLaser. It has been a big team effort between Carillion, Leeds City Council and VolkerLaser. I'm really pleased with the outcome of the scheme"

Andy Crampton : Project Manager : Carillion PLC



