



LB Foster®

CUSTOMER

Crossrail Limited

SECTOR

Security, CCTV and
Communications

A38 Birmingham Tunnels

Security,
CCTV and
communications



Birmingham City Council/AMEY: Security, CCTV and communications

As part of the Birmingham Highways Maintenance and Management Service, run by Amey in partnership with Birmingham City Council, the A38 tunnels in Birmingham city centre closed for six weeks in 2013 while essential refurbishment was carried out.

The St Chad's and Queensway tunnels closed to all traffic. The closures of the 40-year-old tunnels enabled work on structural modifications, upgrading fire protection and improving the lighting and general appearance to take place. Further refurbishment works, including new emergency, control and communications systems, was carried out in 2014.

“L.B. Foster Telecoms successfully delivered the Security and Communications Packages to programme and budget, as part of the A38 Birmingham Tunnels Project.”

Simon Topping Senior Project Manager VVB Engineering Limited



Requirement

L.B. Foster Telecoms, on behalf of principal contractor AMEY and VVB Engineering, was contracted to install new security, CCTV and communications systems in the St Chad's and Queensway tunnels. Technology included cameras capable of detecting vehicles causing obstructions, variable message signage (VMS) to warn motorists of incidents inside the tunnels, response systems to control emergency exits doors ensuring people escape into safe areas and PA and radio rebroadcast systems for emergency announcements.

Specification

- > Closed Circuit Television (CCTV) PTZ – point tilt zoom
- > Tunnel and Portal Lane Control Signs (LCS) Variable Message Signs (VMS)
- > Video Automatic Incident Detection (VAID)
- > Tunnel Traffic Control Signs TTCS

Our Solution

We worked closely with VVB Engineering Limited, a specialist mechanical and electrical contractor providing integrated 'turnkey' solutions within the transport sector. We adopted the principles of BS11000 (Collaborative Working) with VVB Engineering, generating a number of positive outcomes in line with AMEY's objective of completing all work within a 12 week timeframe.

We incorporated improvements to AMEY's original design of the Security and Communications Package, resulting in significant additional reductions in design changes and cost, as well as a more time efficient approach.

Our onsite team of skilled engineers ensured the equipment installations in the tunnels were free from design errors that can occur when working around existing infrastructure.

We had approximately 120 people at any one time working in the tunnels over the six week closure period. This involved building a strong leadership capability and establishing core values and behaviours with VVB Engineering Limited for all employees working on site. The safe systems of working that we applied under the eight stages of BS11000 ensured that no major accidents or incidents occurred during the tunnel refurbishment.

What they said

"This strategic collaboration made a significant contribution to supporting our Stage 2 BS11000 Audit (and successful certification), reducing impact on design and associated costs, reducing health and safety risks and any potential impact on the client, Birmingham City Council. Well done."

Simon Topping - Senior Project Manager VVB Engineering





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