



## Corsham Data Centre Fibre Link (Network Upgrade)

<b>Client</b>	Network Rail Telecom
<b>Project &amp; Location</b>	Corsham Data Centre Fibre Link
<b>Duration</b>	Start: September 2018 Completion: August 2019
<b>Infrastructure Requirement</b>	Network Upgrade
<b>Scope of Works</b>	<ul style="list-style-type: none"> <li>Design &amp; engineering services to deliver GRIP 4-8 requirements</li> <li>De-vegetation &amp; renovation of existing routes</li> <li>Fibre installation, termination, splicing &amp; testing</li> </ul>

## PROJECT OVERVIEW

In order to support various Network Rail Telecommunication projects (Trans-Pennine Initiative; CP6 Transition Programme; Project Swift 2) connections to Data Centres outside of the railway boundary were required in order to provide interfaces and connectivity.

Instalcom Limited were engaged as Principal Contractor to undertake the survey, design and installation of a telecom fibre network at locations in Leeds, Manchester, Farnborough, Corsham, Glasgow, Edinburgh and Milton Keynes.

Due to client diversity requirements a total of 14 x routes were designed.

Employing a phased delivery approach and adhering to all appropriate Railway Group, Network Rail Company Standards, ORR Railway Safety Principles and Guidance, National & European Standards/Legislation ensured a 'right first time' approach for design and installation.

## DELIVERY & INNOVATION

- Works were delivered using in-house teams and resources with access to 11 established yards/offices across the UK this ensured geographically local teams could be deployed in an effective and efficient manner whilst minimising our carbon footprint
- In order to reduce manual handling and minimise the environmental impact Instalcom used Techn-crete in place of traditional post mix to secure the elevated trough route posts
- Instalcom appointed as Principal Contractor
- Instalcom responsible for the civils and telecom design
- Instalcom adopted a collaborative approach in working with Network Rail and the Local Highway Authorities

## KEY CHALLENGES

- Design management to develop a standard suite of designs for the highway element of the works within a reduced time period
- Stakeholder communication and co-ordination holding regular meetings resulted in stakeholders being kept informed and engaged throughout the process
- Variations and change managed via the Integrated Project Schedule (IPS)



# CORSHAM DATA CENTRE

Instalcom Ltd

- Rail side works at Corsham in close proximity to both ends of the historic Box Tunnel. On the West side of the tunnel an elevated route was chosen to be installed between the previously installed highway chamber to an existing fibre joint on the in the Down Cess
- Due to the steepness of the cutting Instalcom proposed the use of Arco-system elevated GRP duct and associated posts, to minimise the installation time and limit the operative's exposure to working at height. Individual safety harnesses and lanyards were attached to a fixed 'Lifeline' to prevent fall from height
- All works completed on time and within budget



## PROJECT KPIS

- Aspirational key dates were detailed within the Contract documentation and phased delivery approach was employed to ensure Network Rail expectations were managed effectively. During GRIP 5 Network Rail aligned Key Performance Indicators with other projects, (Trans-Pennine Initiative) confirmed during GRIP 5.
- KPI dates were achieved according to plan
- Achieved ZERO harm
- No environmental incidents
- Assent granted to work within SSSI site at NRT Data Centre Fibre
- Works delivered ahead of programme
- Health & Safety File approved by Client
- Successful brand promotion of Network Rail
- Proactive stakeholder management and successful implementation of communications strategy to meet internal and external party expectations



## CONTACT US

Want to know more about the Instalcom infrastructure service offering in the following sectors:-

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