



Linbrooke

Total Network Solutions



GREAT NORTHERN - GREAT EASTERN (GNGE) JOINT LINE RELIEF CAPACITY PROJECT

Project Summary

Client: Siemens Rail Automation (part of the GNGE Alliance which comprises of Network Rail, Babcock, Carillion and Siemens)

Timescales: January 2013 – December 2014

Linbrooke Disciplines: Telecommunications, Power, Civils

Linbrooke Services Utilised: Project Management, Survey, Design, Installation, Commissioning, Hand Back

Customer Objective

To enable heavy freight trains to operate at higher speeds (60-75 mph) on the 85 miles of route, and also to ensure that the Great Northern - Great Eastern route becomes the primary daytime course for freight traffic in order to free track capacity for passenger trains on the main East Coast Main Line (ECML) route.

Project Overview

The Great Northern - Great Eastern Project was a £280m programme of essential renewals between Peterborough and Doncaster, designed to improve capacity on the East Coast Main Line route by providing a modernised diverse route capability.

The project successfully delivered infrastructure renewal works on 85 miles of route - including improvement and enhancement works to multiple level crossings and bridges. Linbrooke were selected to provide the telecommunications and power services for the installation of the latest generation of Siemens' modular signalling equipment and level crossing controllers.

"I would like to re-iterate my thanks and gratitude to the commitment and services of Linbrooke, without which we would simply not be in the fortunate position we are now in and would not have been unable to achieve our end game."

– Rob Cairns, Delivery Director Siemens Rail Automation

Linbrooke Project Scope

Acting as telecommunications and power subcontractor to Siemens Rail Automation for the GNGE project, Linbrooke were responsible for the design, implementation, commissioning and hand back into service of all relevant works.

Our scope of works included:

- Significant FTN uplift works to support IP signalling and voice services
- Provision of over 170 miles of fibre cable to support IP based modular signalling
- Provision of copper infrastructure and distribution cabinets along the route area
- Renewal of over 200 lineside telephones connected to a brand new concentrator at Lincoln SCC
- Provision of 4 principal supply points (PSP's)
- Provision of 28 DNO cabinets
- Provision of points heating and level crossing lighting works
- Provision of all civils works in support of our telecommunications and power deliverables
- Commissioning the works over 5 individual Entry Into Service (EIS) stages
- Provision of training for maintainer

Providing a full turnkey solution for all telecoms, power and civil engineering works, Linbrooke worked tirelessly to ensure the completion of this high profile project was successful.

Benefits of working with Linbrooke

Linbrooke utilised a collaborative approach throughout the duration of this project, working closely with all parties and stakeholders in the delivery alliance. This included intense cooperation with Network Rail Telecomms (NRT), Alcatel and Siemens in order to successfully overcome all technical problems encountered with the fibre optic based Ethernet services for the modular signalling system.

This ensured that the issues and risks discussed by all parties and the agreed strategies for resolution were successful. Linbrooke provided extensive support in order to safeguard the project's effective delivery.

Costs savings were achieved through the use of multidisciplinary civil engineering construction teams.

To ensure successful project delivery, we consistently provide:

- A strong and detailed understanding of the technical scope
- An impeccable health and safety record
- The continuity and efficiency that results from the union of our three core areas – telecoms, power and signalling
- The ability to adjust to project alterations rapidly – and provide alternative solutions when required
- A highly skilled and experienced work force