Linbrooke
Total Network Solutions

# MANCHESTER METRO

## Project Summary

**Client:** Greater Manchester Passenger Transport Executive (GMPTE)

**Timescale:** 2011 – 2014

**Linbrooke Disciplines:** Power, Telecommunications

**Linbrooke Services Utilised:** Installation, Test & Commission

## Customer Objective

To construct an extension of circa 35km to the existing tram network in the Greater Manchester area in order to enhance the existing Metro system and the important link to Media City. This included the utilisation of previously abandoned railway sites.

## Project Overview

Delivered alongside other parties' construction activities, Linbrooke were employed to install, terminate and test both the power and the telecommunications cables over 3 sections of the new Metro Tram Network (MTN) – namely the South Manchester Line, the Oldham Rochdale Line and the East Manchester Line.

Collectively this equated to works on 36 tram stops, 4 sub stations and over 200km of power and telecoms cable – including fibre and intertrip cable to automatically disconnect a generator when necessary. Works on new platforms to install Customer Information Systems (CIS's) were also undertaken in order to ensure a modern and aesthetically pleasing appearance.

*"It is testament to the dedicated effort put in by all Linbrooke employees that the works were completed within agreed timescales and were of the highest quality."*

*– Nick Peters, Linbrooke Construction Manager*

## Linbrooke Project Scope

Linbrooke deployed over 20 engineers who worked concurrently on the full range of tasks – from cable and equipment installation through to testing and commissioning.

Our scope of works included the provision of infrastructure at tram stops for:

- CCTV
- Passenger information displays
- Public address system
- Ticket vending machines
- Passenger emergency call and help points and staff telephones - both in platforms and in lifts

We were also responsible for the:

- Installation and testing of leaky feeder through tunnels
- Trackside installation, termination and testing of 28km of fibre optic trunk cables
- Installation and testing of multi core copper mass and 22km of intertrip cable between sub stations
- Installation of Tram Management System (TMS)
- Installation of points controller cabinets
- Installation of tram detector/transponder/mass detector loops
- Installation of tram signals and Points Position Indicators (PPI), signals passed at speed and variable speed signs
- Installation and testing of points motors, heating and sprung points cables
- Installation of mesh radio routers and intelligent access points

Overall, Linbrooke installed circa 155km of power and telecoms cable on this project.

## Benefits of working with Linbrooke

Working simultaneously on the full range of tasks, Linbrooke's strong industry relationships and quality driven workforce enabled us to collaborate effectively and well with all other third parties on the project. All site works have also been undertaken in an environment classified as zero Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

To ensure successful project delivery, we consistently provide:

- A strong, detailed understanding of the technical scope
- A full turnkey delivery of telecoms, signalling, power, civils and track which ensures multidisciplinary efficiency
- An impeccable health and safety record
- The ability to rapidly adjust to project changes – and provide alternative solutions when required
- A highly skilled and experienced work force – predominantly trained in our own training facility
- Strong relationships with a number of industry experts due to continual collaboration

For further information on this project or to discuss world class telecoms, power and signalling solutions, call us on 08448000983, visit our website at www.linbrooke.co.uk or email info@linbrooke.co.uk