

# Pro Rail Services



## CLIENT NAME

Network Rail

## PROJECT NAME

Liverpool Street – Jetting and CCTV Survey

## SECTOR

Railway Drainage

## DURATION

3 x Weekend Possessions

## LOCATION

Anglia Route

## CONTACT US

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## LIVERPOOL STREET – JETTING AND CCTV SURVEY

### INTRODUCTION

Pro Rail Services Ltd. Is a Railway civil engineering contractor who execute railway drainage maintenance contracts on Network Rail infrastructure. This project took place at Liverpool Street Station on Anglia Route.

### THE CHALLENGE

Track drainage in the area was both unknown and not functional, causing numerous wet beds on the track and surcharged catchpits.

Pro Rail Services Ltd. was commissioned by Network Rail Anglia Route to high pressure jet, CCTV survey and map the drainage system in the area, identify key points such as outfalls, flow directions, invert levels and connections between the Cess and 6 foot drainage systems.

The project took 3 x 12 hour Weekend possessions with RRV Drainage Suction Unit, Jet Vac Unit, CCTV and topographical survey support.

### THE SOLUTION

The Pro Rail Services Ltd planning team developed a project plan that ensured the works could be completed safely and effectively within the allotted 3 x 12 hour possessions.

The team consisted of:

- Site manager
- Surveyor
- Two jetting lorry units with Portareel
- RRV team with suction unit
- POS Supervisor
- RRV Operator
- Crane Controller
- CCTV survey team
- Six multi skilled operatives

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## LIVERPOOL STREET – JETTING AND CCTV SURVEY

### DELIVERING THE SOLUTION

The Pro Rail Services Ltd team surveyed and mapped out 63 No. runs using Leica GPS GS10 and Leica Total Station TS06 Plus survey equipment.

With support from our RRV Suction Unit, Jetting and CCTV units, we were able to determine outfalls, locate and clear the most serious pipe blockages and identify poor condition of track drainage sections such as collapsed and broken pipes.

On track plant provided under our POS Licence and RRV fleet included:

- Doosan DX270 RRV Excavator
- RRV Trailer and Boxes
- RRV Drainage Suction Unit

Off track support included:

- Jet Vac Unit
- High Pressure Jetting equipment
- IBOS CCTV Survey equipment using Wincan UX Software

### THE RESULTS

- All planned works were safely delivered with no incidents
- All 63 catchpits, rail and surrounding ground levels were mapped and invert levels measured in ordnance datum Newlyn coordinates
- 3 extra catchpits were found and dug out while buried under the ballast
- AutoCAD drawings were provided with all necessary details for future repairs and designs to prevent further floods and general drainage improvements
- Catchpit Condition Reports and CCTV Survey Reports with recommendations for remedial works in additional to longitudinal sections were issued on time to the Route Drainage Asset Manager for his consideration.