



CASE STUDY

Wigan Wash Down

Customer
Network Rail

Completion Date
July 2026

Location
Wigan

PROJECT OVERVIEW

Cairn Cross was appointed by Network Rail to design and deliver a new underframe wash facility at Wigan Springs Depot for the MPV Sandite rolling stock fleet.

The £2.4 million project involved the construction of a modern automated washdown facility, including drainage infrastructure, civil engineering works, mechanical and electrical installations, testing, and staff training. Designed as a comprehensive cleaning solution, the facility provides efficient cleaning of both the vehicle undercarriage and sides while improving operational performance and environmental compliance.

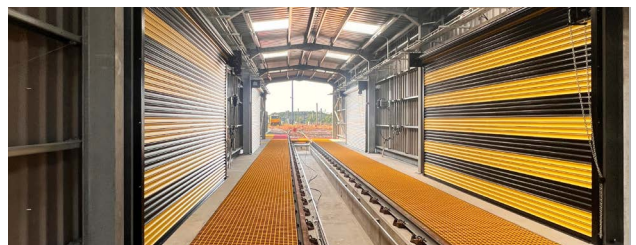


THE CHALLENGE

The existing washing arrangements at Wigan Springs Depot were no longer fit for purpose and presented challenges in maintaining safe, effective, and reliable cleaning operations.

Network Rail required a new solution that would address health and safety concerns, improve environmental performance, and provide a more efficient method of cleaning the MPV Sandite fleet while meeting modern operational standards.

The works also required the management and removal of uncharted ground obstructions, alongside the safe identification, removal, and disposal of asbestos-containing materials (ACM) to ensure the project was delivered safely and compliantly.





THE SOLUTION

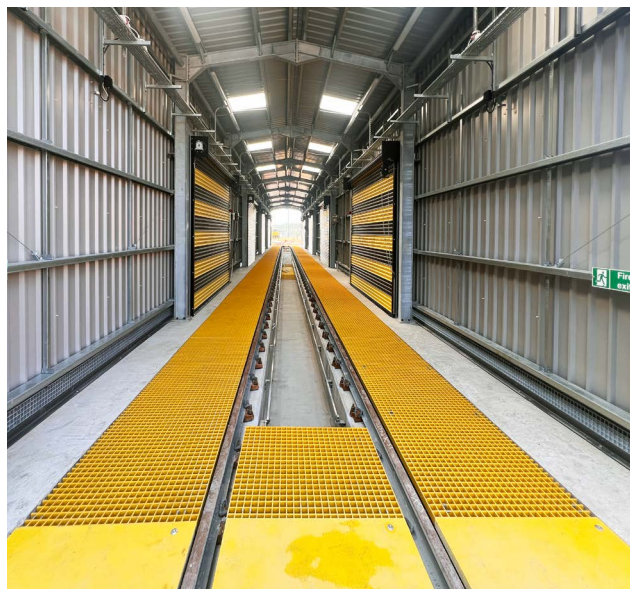
Cairn Cross developed and delivered a state-of-the-art washdown facility tailored to Network Rail's operational requirements.

The facility incorporates advanced ChassisJet cleaning technology, enabling automated cleaning of train undercarriages and vehicle sides.

The design also includes high-clearance wash bays with manual override capabilities for targeted cleaning using high-pressure hand lances.

Supporting infrastructure included new drainage systems, wastewater treatment and separation technology, service roads, track realignment, mechanical and electrical installations, and a range of ancillary works.

The integrated water management system ensures wastewater is treated and discharged safely in line with environmental regulations.



CAIRNCROSS

1 Cadman Court, Morley, Leeds, LS27 0RX

0113 284 2415 ▶ info@cairncross.uk.com ▶ www.cairncross.uk.com

Cairn Cross Civil Engineering Limited. Registered in England and Wales 03110217 ▶ VAT No566419417

THE RESULT

- Delivered a pioneering automated undercarriage and side-wash facility for Network Rail's MPV Sandite rolling stock fleet, providing a complete "one-stop" cleaning solution.
- Improved health, safety, and environmental performance through modern washdown technology and advanced wastewater treatment systems.
- Installed an underframe cleaning facility with effective drainage, enabling safer, cleaner, and more environmentally responsible rail vehicle maintenance.
- Enhanced operational ergonomics and maintenance efficiency for depot staff through automated cleaning systems and manual cleaning capabilities where required.
- Successfully delivered within the agreed programme while working in a live rail environment, ensuring minimal disruption to depot operations.
- Achieved an outstanding safety record with zero accidents across 24,750 man-hours worked.
- Delivered a fully compliant facility that supports the long-term reliability and performance of Network Rail's seasonal treatment fleet.

