



CASE STUDY

Canton High Level Platforms

Customer
Transport for Wales

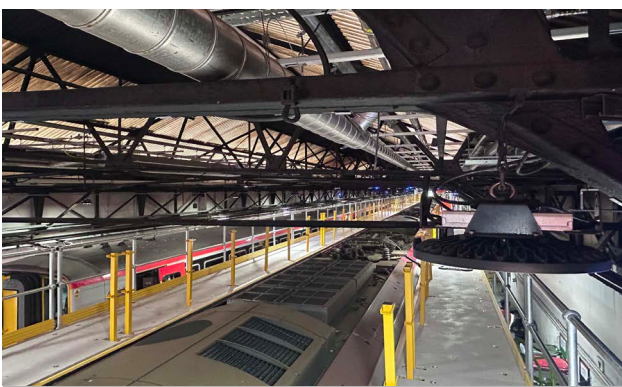
Completion Date
June 2026

Location
Canton

PROJECT OVERVIEW

Cairn Cross successfully delivered the installation of two pairs of High Level Access Platforms (HLAPs) within Road 2 of the train maintenance shed at Canton Depot for Transport for Wales.

The project was designed to provide safe, full-length roof access to Stadler FLIRT trains during maintenance operations. The installation included two independent, double-sided 78-metre access platforms, complete with integrated power outlets and under-platform lighting, improving both safety and operational efficiency for depot maintenance teams.



THE CHALLENGE

Delivering the project within a live operational maintenance depot presented several engineering and logistical challenges.

The existing concrete floor levels within the maintenance shed varied significantly, requiring bespoke engineering solutions to ensure the platforms could be installed accurately and safely. Working space was limited, making the installation of large steel structures particularly challenging.

Existing manhole chambers located within the proposed foundation positions also required careful consideration to avoid conflicts with the platform support columns. In addition, once the platforms had been installed, the existing depot lighting no longer provided adequate illumination due to the new structures, requiring a redesign of the lighting arrangement without disrupting depot operations.

Enhancing rail maintenance through innovative engineering and collaborative delivery, providing safer access, improved efficiency, and lasting value for our clients.



THE SOLUTION

Working collaboratively with the TFW, designers and specialist suppliers to develop practical solutions that maintained programme and operational requirements.

Steel support columns were manufactured to varying lengths to accommodate the uneven floor levels, ensuring the platforms were installed level without extensive remedial works to the existing slab.

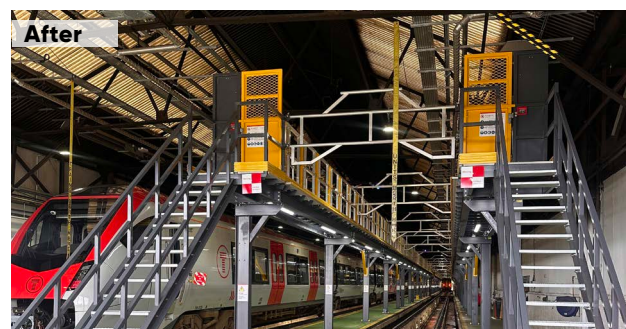
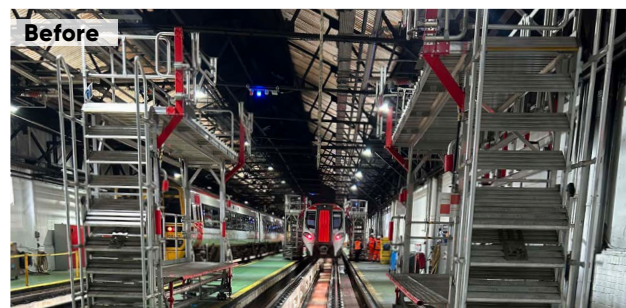
A Road Rail Vehicle (RRV) was utilised to safely lift and position the platform structures within the confined working environment. The platform support layout was redesigned to avoid existing manhole chambers, eliminating the need for costly diversions.

Following installation, the depot lighting was relocated into the four-foot using a Road Rail Mounted MEWP, restoring effective illumination throughout the maintenance area while complementing the new under-platform lighting.



THE RESULT

- Successfully delivered two independent 78-metre High Level Access Platforms within a live operational depot.
- Provided Transport for Wales with safe, full-length roof access for Stadler FLIRT train maintenance.
- Overcame complex site constraints through bespoke engineering and collaborative planning.
- Installed integrated power supplies and under-platform lighting to enhance maintenance operations.
- Reconfigured existing lighting to maintain safe working conditions throughout the maintenance shed.
- Delivered the project over 50 days with 1,200 accident-free working hours.
- Zero accidents, zero recorded incidents and zero lost time injuries throughout the project.
- Completed the works safely with minimal disruption to ongoing depot operations through careful planning and phased delivery.
- Improved long-term maintenance efficiency while enhancing safety for depot personnel.



CAIRNCROSS

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