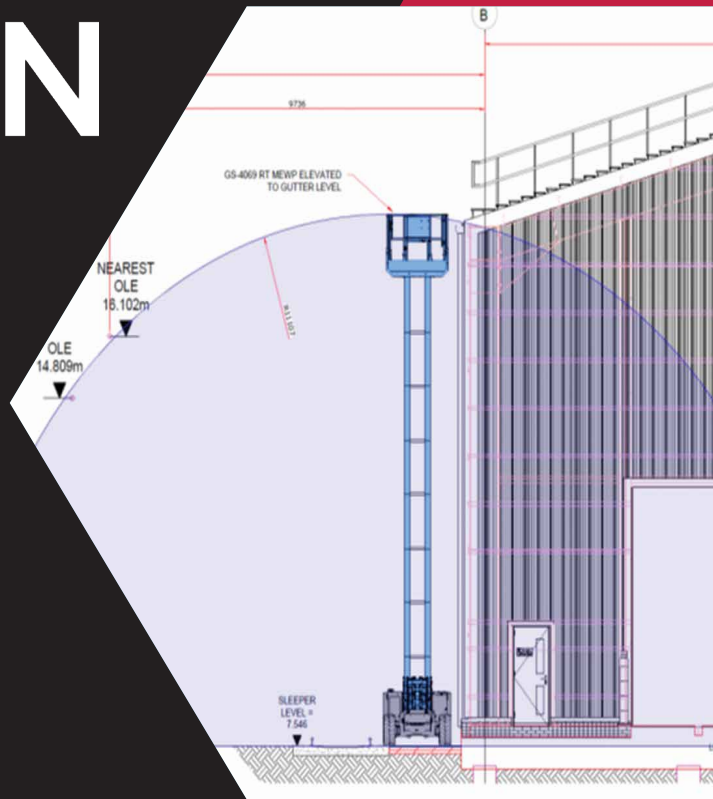


HEXAGON

Case Study

Canton Bogie Drop

A new bogie drop facility was required at Canton Depot. Hexagon provided Principal Designer support, temporary works and various permanent works design through the project cycle. Also, Hexagon provided construction support during the construction phase.



Customer
Transport For Wales

Completion Date
Feb 2026

Location
Canton, Cardiff

ABOUT US

HEXAGON is a design consultancy providing engineering expertise and services, specialising in rail depots and designs relating to train facility infrastructure works.

Working closely with developers, contractors, and other stakeholders to ensure that your project's structures are safe, stable, and structurally sound.

Hexagon's construction heritage ensures that they understand construction compliance and real-world situations to provide you with trusted, reliable and workable designs.

DESCRIPTION

For this project, Hexagon Design acted as Principal Designer, coordinating and managing the overall design process throughout the scheme.

Our scope included comprehensive Temporary Works Design, covering:

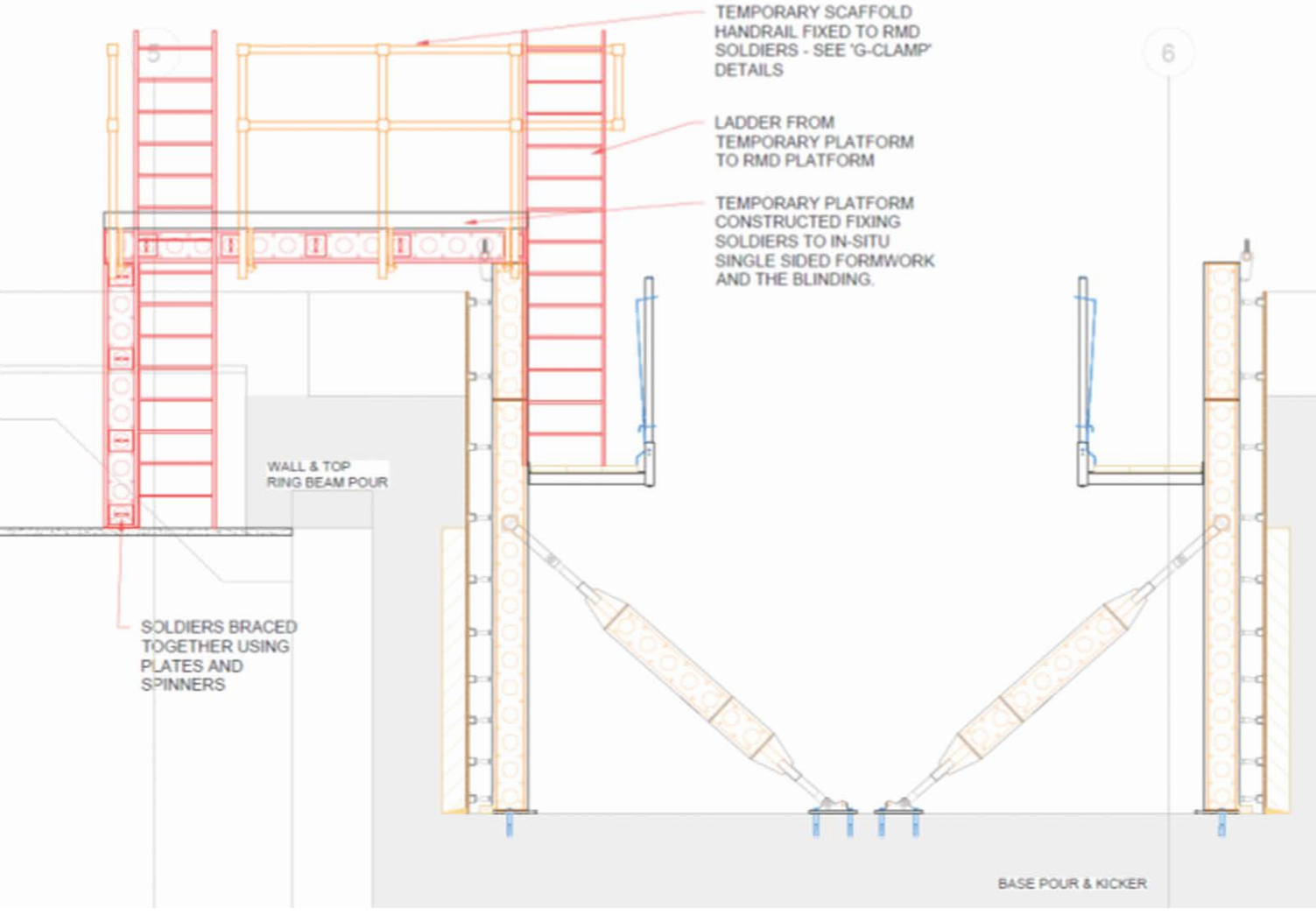
- Formwork design
- Piling platform design
- Dewatering system design

- Cranes and concrete pump foundations
- MEWP access foundations

In addition, Hexagon delivered extensive Permanent Works Design, including:

- Concrete external slab design
- Vertical ladder design
- Plant room roof design
- Compressed air system design
- P-way crossing design
- Car park layout and design
- Excavation sequencing strategy
- Concrete pour sequencing

We also provided ongoing construction-phase support, working closely with the delivery team to maintain design intent, resolve technical queries efficiently, and support successful project delivery in line with programme requirements.



Outline & Detailed Design

Calculation & Temp Works Design Package

Calculation & Design Management Services

REQUIREMENTS

For this project, Hexagon Design undertook the Principal Designer role, providing leadership and coordination throughout the design process.

Our Principal Designer responsibilities included:

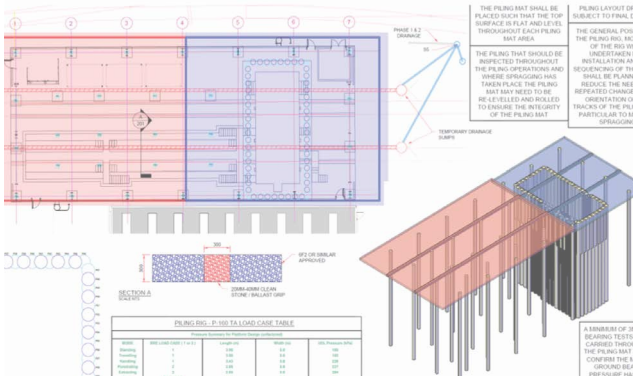
- Identifying foreseeable risks associated with the works
- Eliminating risks where possible through design development
- Reducing and controlling residual risks

- Ensuring effective cooperation and information sharing between designers
- Developing and maintaining the project hazard record

All temporary works designs were prepared, submitted, and approved prior to construction.

The permanent works design was developed to deliver best value for the client, while aligning with the contractor's preferred construction methodology to ensure efficient and practical delivery.

Hexagon also provided ongoing construction-phase support, offering responsive design input and resolving technical queries to support smooth project delivery throughout the build phase.



The project was successfully delivered in line with programme, budget, and client expectations.

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