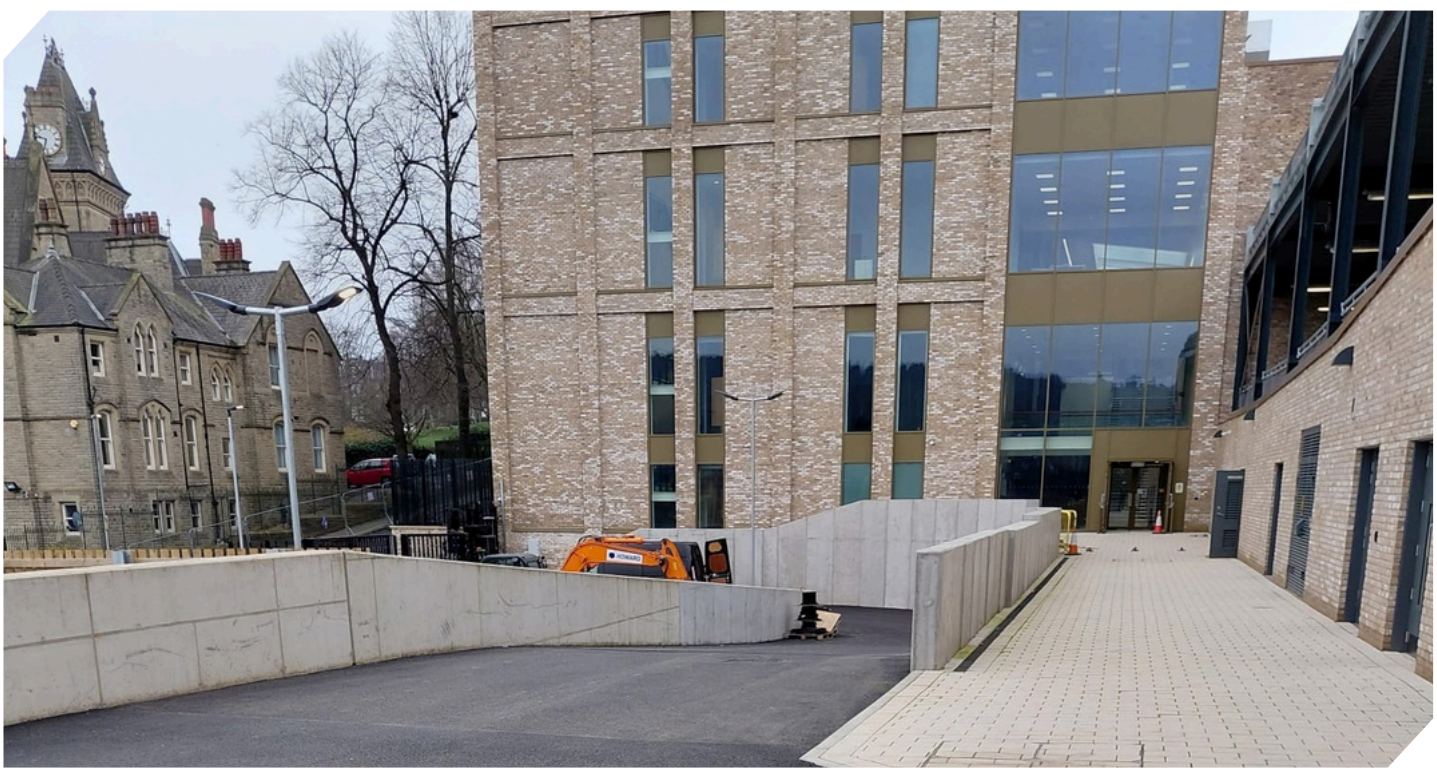
HOWARD
CIVIL ENGINEERING

PROJECT CASE STUDY:

Kirklees District Headquarters for West Yorkshire Police

CLIENT:

Willmott Dixon



BACKGROUND

Howard Civil Engineering supported Willmott Dixon in the delivery of the new Kirklees District Headquarters for West Yorkshire Police, a major development providing modern policing facilities for the region.

Constructed on the former Kirklees College site, the project combines a new-build headquarters with the extensive refurbishment and modernisation of the historic Grade II listed Oldroyd building, preserving an important part of the site's heritage while creating a contemporary operational facility.

The completed headquarters provides approximately 10,000m² of accommodation, including a state-of-the-art custody suite, public helpdesk, flexible office space, gym and property store. Alongside the construction works, the project has delivered significant social value through investment in local businesses, employment opportunities and community initiatives across Kirklees.

SCOPE OF WORK

Howard Civil Engineering delivered a wide range of specialist civil engineering and reinforced concrete works across the project, including:

- Reinforced concrete foundations and retaining walls, including split-level fibre reinforced concrete (FRC) works using in-house designed and installed formwork systems.
- Construction of reinforced concrete retaining walls to strengthen and support the existing Oldroyd building during refurbishment.
- Safe installation of reinforcement and formwork using scissor lifts to improve working practices during complex wall construction.
- Construction of foundations for precast retaining walls, with Howard Civil Engineering coordinating delivery logistics for the installation of precast units.
- Installation of charge point bases, interceptor tanks, drainage systems, ducting and security gate foundations.
- Delivery of external works to the Carlton Road and Pyrah Street car parks, including hard landscaping and associated infrastructure.
- Extensive drainage alterations within and around the retained historic building.
- Construction of reinforced concrete columns, capping beams, curved retaining walls, suspended slabs and power-floated ground floor slabs.
- Installation of two large attenuation tanks to manage and control surface water discharge.
- Delivery of bespoke external landscaping features including raised planters, granite staircases, block paving, automated security gates and prefabricated drainage and service chambers.



PROJECT CHALLENGES

The project presented numerous technical and logistical challenges due to the combination of major new-build construction and the refurbishment of a Grade II listed Victorian building.

The refurbishment works required extensive underpinning beneath the retained Oldroyd building, which had originally been constructed without conventional foundations. New basement areas, lift shafts and elevator pits were created beneath the existing structure while carefully protecting historic architectural features. These works were undertaken within extremely confined conditions using compact electric excavators and tracked walk-behind dumpers, enabling safe construction while minimising risk to the existing building.

The new headquarters extension incorporated deep mass concrete foundations extending to approximately six metres below ground level together with reinforced concrete retaining walls reaching heights of around six metres. Howard Civil Engineering also installed a bespoke waterproofing system to both the new and existing structures using specialist products developed specifically for the project by Premcrete, with all installations subject to manufacturer inspection.

The site's challenging topography, with approximately 20 metres of level difference across the development, introduced significant engineering complexity for both the substructure and external works. Multiple interfaces with existing highways, drainage outfalls and surrounding infrastructure required close coordination with local authorities and statutory stakeholders throughout the programme.

The external works created further challenges due to restricted working areas, live traffic management, proximity to schools and residential properties, multiple site access points and limited storage space. Deliveries and construction activities were carefully coordinated through daily planning meetings, adopting a just-in-time delivery strategy to maintain programme efficiency while minimising disruption.

Works to the Pyrah Street car park were undertaken adjacent to a live public highway, requiring extensive liaison with Kirklees Council to coordinate permits, traffic management and public safety measures. Similarly, the Carlton Road car park required close coordination between multiple trades during the installation of precast retaining walls, drainage, security infrastructure and electric vehicle charging facilities.

Throughout the project, Howard Civil Engineering successfully managed numerous interfaces between specialist contractors while maintaining quality, programme and safety objectives across this technically demanding development.



SPECIALIST EQUIPMENT & TECHNIQUES

Advanced Digital Construction Management

Dalux and Fieldview platforms were utilised throughout the project to manage drawings, quality assurance and construction records, while providing access to comprehensive 3D models of both the substructure and superstructure. These digital tools enabled improved design coordination, simplified construction sequencing and enhanced collaboration across the project team.

Specialist Reinforced Concrete Construction

Howard Civil Engineering utilised in-house designed formwork systems alongside specialist reinforced concrete techniques to construct complex retaining walls, suspended slabs, columns and foundations across varying site levels.

Underpinning and Confined Space Construction

Carefully sequenced underpinning operations were carried out beneath the retained Grade II listed building using compact electric excavators and tracked walk-behind dumpers, allowing significant structural works to be completed safely within highly restricted working environments.

Bespoke Waterproofing System

A specialist waterproofing solution was installed across both the refurbished and new-build structures using bespoke products developed specifically for the project. All installations were inspected by the system manufacturer to ensure long-term watertight performance.
Integrated Logistics and Stakeholder Coordination
Daily coordination meetings, just-in-time material deliveries and close liaison with Kirklees Council, Building Control and other stakeholders enabled the project team to safely manage complex logistics, public interfaces and multiple concurrent work activities.



OUTCOME

The Kirklees District Headquarters has delivered a modern policing facility that brings operational teams together under one roof while preserving one of Huddersfield's historic buildings for future generations.

Howard Civil Engineering played a significant role in the successful delivery of the project, overcoming complex structural, logistical and engineering challenges across both the new-build and refurbishment elements. Through specialist reinforced concrete construction, extensive underpinning works, advanced digital construction management and close collaboration with the wider project team, Howard delivered high-quality infrastructure that supports the long-term operation of this important public facility.

The completed development provides West Yorkshire Police with a modern, efficient headquarters while leaving a lasting social and economic legacy for the local community.