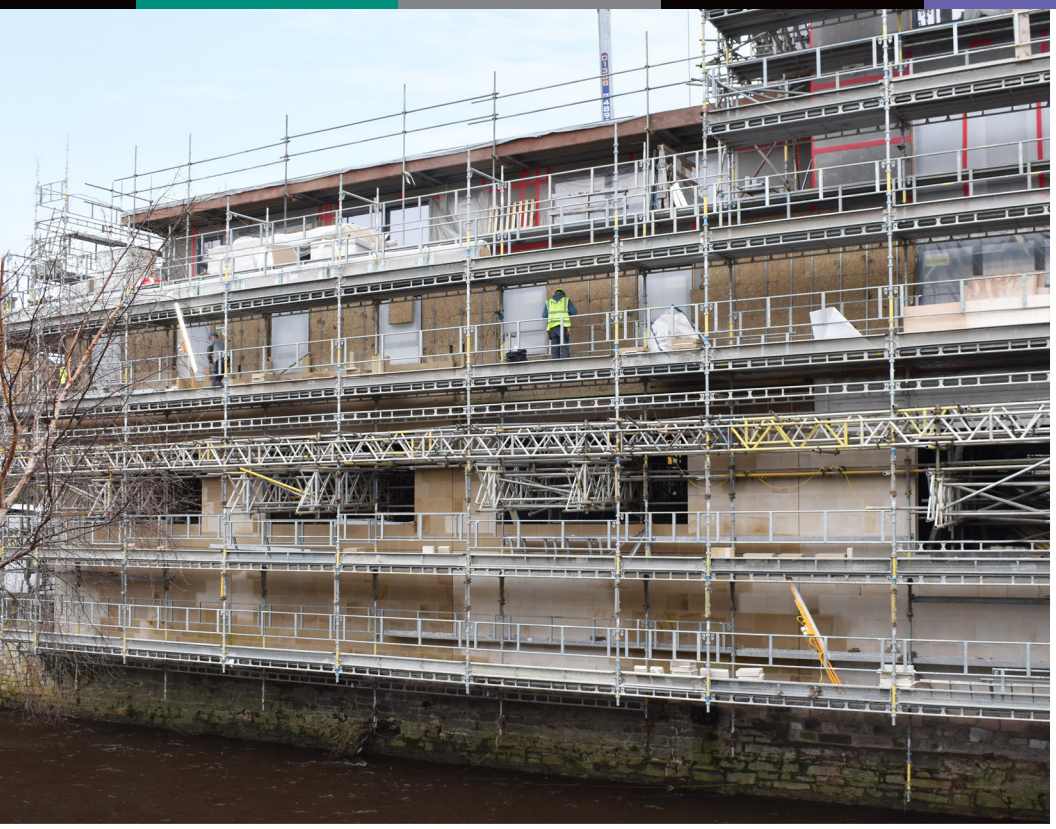
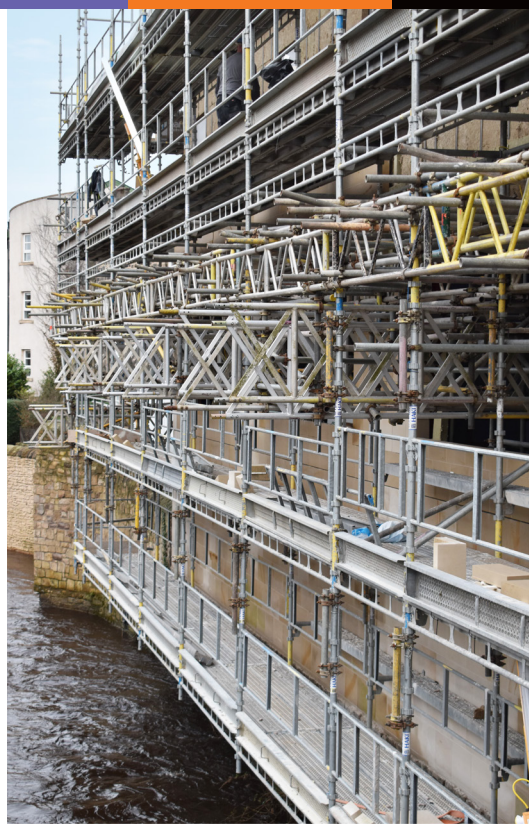
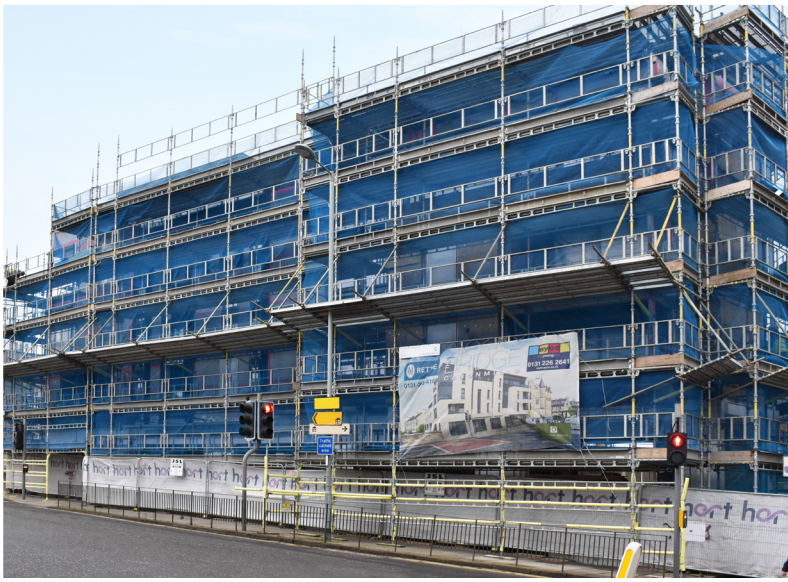
Enigma-is

CASE STUDY
The Bridge at Cannonmills

INSIGHT • INNOVATION • INCLUSIVITY • INVESTMENT • INTEGRITY







City centre waterside residential development

Provision of temporary access utilising HAKI system scaffolding and a cantilevered scaffold design solution above the “Water of Leith” river on the west building elevation due to restricted access.

Location: **Edinburgh**

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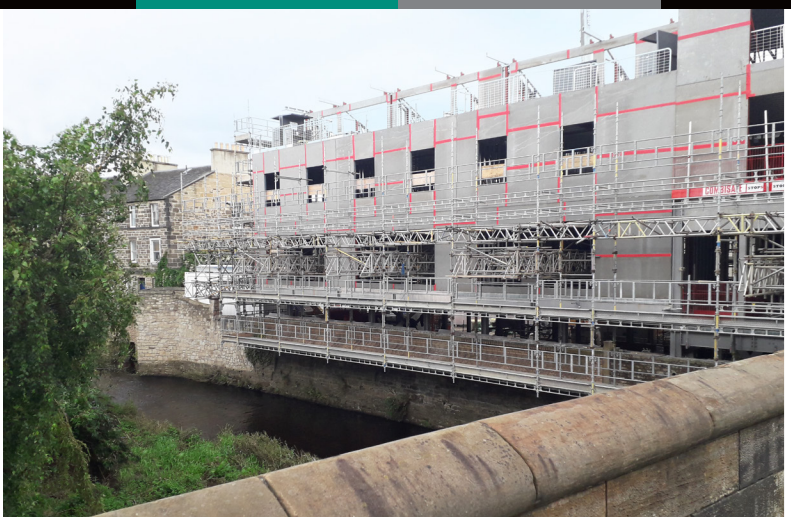

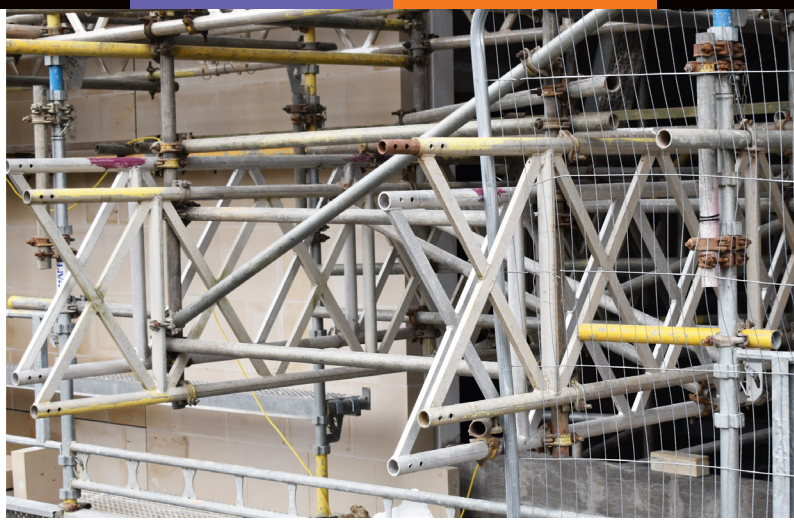

City centre waterside residential development

The Bridge at Cannonmills, Edinburgh is a city centre waterside development on the "Water of Leith" river incorporating 6 Apartments and 3 Townhouse outlets on the ground floor.

Project Summary

Due to the development being adjacent to the "Water of Leith" in Edinburgh's New Town, it presented several design challenges to overcome. Including providing access to the external building perimeter directly above the water, Enigma was appointed by primary contractor Hart Builders to design and erect a practical scaffold structure to enable temporary access on all elevations. Enigma, successfully overcame the client's challenge with building above the river on the west elevation by designing a cantilever scaffolding suspended from the 1st floor of the building. Additionally, throughout the project, Enigma was involved in close consultation with the site Construction Engineer and the Met-frame specialist company to ensure that the proposed design provided a practical solution that would enable them to work with minimal disruption.

Value Engineering

With no ground floor access on the west building elevation and the 'Water of Leith' river running directly below. The Enigma engineering department highlighted the risks of the river level rising and had to overcome this complex access challenge. With a bespoke design solution that involved several cantilevered beams built from the first-floor level, projecting over the river to support HAKI bridging beams. The scaffold was then built above and hung below the bridging beams, with the rear end of the cantilevered beams fixed to temporary steel beams with pairs of Gravlock couplers to prevent uplift. Also, the HAKI system allowed the scaffold hanging below the bridging beams to be erected in 1m/1.5m uprights. So scaffolding could be dismantled one lift at a time when high rising water levels were predicted, without disrupting further lifts. Additionally, to further support the client throughout the work, Enigma quickly accommodated site requests and acted within 24-hours to provide suitable adjustments to suit the build process.

NASC CONTRACTOR MEMBER
FS704676 EMS704678 OHS704679 ENMS709158
BRITISH SAFETY COUNCIL Five Star Safety, Health and Environmental Integrated Audit 2016

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