Nolan Associates

consulting civil and structural engineers

| Project Details | |
|---------------------|----------------------------|
| | |
| Client | St Modwen Developments |
| Structural Engineer | Nolan Associates |
| Main Contractor | Galliford Try Partnerships |
| Architect | Pick Everard |
| Cost | £50 million |
| Duration | 27 Months |

Project Details

The triangle development at Uxbridge forms Phase 7 of the St Modwen redevelopment of part of the former RAF Northholt site Uxbridge. It comprises 249 apartments spread over four blocks, offering a range of ownerships and tenures. In addition, a new road junction adjacent to the site will be created, with further landscaping of the communal areas also taking place.

The four separate blocks have varying heights of between 5 and 8 storeys linked by a ground level podium slab. The blocks and podium slabs are also located over an underground car park formed in part in permanent sheet piles.

The structure comprised, reinforced concrete flat slabs with insitu columns and shear cores on a piled foundation.

Due to car park layout requirements a number of building columns could not pass through the podium level slab thus requiring transfer beams. These beams could not be in reinforced concrete due to height restrictions so it was decided to adopt the use of "delta beams" which were cast into the insitu concrete slab, and so allowed a smaller structural depth. A prefabricated starter was developed for the columns being transferred.

Nolan Associates were responsible for all of the design and detailing of the civil and structural works, and also prepared the Approval in Principle documents for the sheet pile walls as they are located adjacent to local authority adopted sections of highway.



Rendered image showing blocks C and D

The Triangle Block Uxbridge

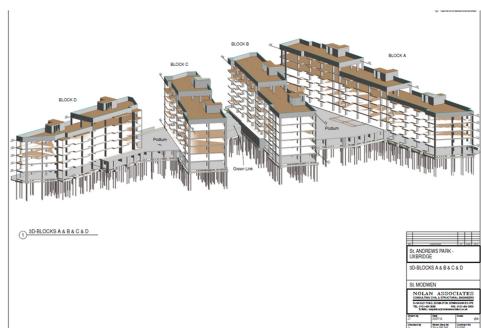
Construction Photographs

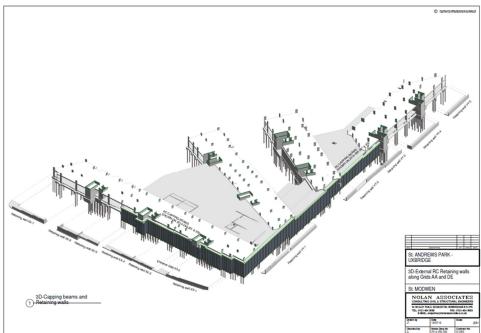


The four blocks under construction



Delta Transfer Beams during construction prior to casting concrete





Construction Photographs

Revit image

Revit image of sheet pile wall

NOLAN ASSOCIATES 54 Hagley Road, Edgbaston, Birmingham, B16 8PE Tel: 0121-454-3099 E-mail: enquiries@nolanassociates.co.uk Web: www.nolanassociates.co.uk