bourne
STEEL



NORTH EAST QUADRANT

UNIVERSITY OF SOUTHAMPTON

Bourne Group is proud to contribute to the landmark North East Quadrant (NEQ) development at the University of Southampton's Highfield Campus.

Our scope comprised the design, fabrication and erection of approximately 600 tonnes of structural steelwork and 2 architectural steel staircases for the new University building.

A key element of the project was the installation of two 45-tonne, double-height trusses, which were fabricated and delivered in two sections as an escorted wide load. The trusses were successfully lifted and positioned using a 250-tonne mobile crane, requiring careful coordination and precise planning due to its size and weight.

The project presented several complex temporary works challenges, particularly as no support could be taken from the concrete frame during construction. To overcome this, a specialist temporary connection strategy was developed, incorporating shoulder bolts to all column and truss connections. These remained in place until the steel frame was fully loaded and stabilised, at which point they were systematically replaced with TCBs (Tension Control Bolts) to achieve the final permanent connections.

This approach enabled the steelwork to be safely erected while maintaining the required stability throughout the construction sequence, demonstrating our capability in delivering complex structural steel solutions within challenging site constraints.

Market Sector: New Build
Client: University of Southampton
Engineer: Arup
Main Contractor: Kier

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