

Kingswood Academy School Extension



Location:
Hull, East Riding of
Yorkshire



Client:
Sewell Construction /
Esteem / Hull City
Council



Architect:
AHMM



Value:
£4.4 million



Civil Engineering

Structural
Engineering

Building Consultancy

Geotechnical and
Geoenvironmental
Engineering

Project Management

Specialist services

Hull City Council / Esteem proposed a new secondary school extension building to be constructed to the rear of the award winning Kingswood Academy.

The building was proposed to offer an additional 150 spaces for students and features a glazed ground floor cafeteria space with undercroft.

Engineering and Design Factors

Key structural engineering challenges that had to be overcome on this project were as a result of the open spaces present across the ground floor to allow for a glazed cafeteria space and the limited opportunity for bracing this offered. This created lateral stability challenges that were overcome through the use of a diaphragm system taking forces back to stability cores around areas of vertical integration to one end of the building.

The temporary stability of the structure was also considered, with temporary systems being designed and detailed by Alan Wood & Partners Structures team to ensure that the structure remained safe and stable throughout the process of the build.

Description of the Works

Alan Wood & Partners provided support on this project in the form of our Geotechnical, Civil and Structural specialisms to deliver a BREEAM 'Very Good' facility that is serving the community and will continue to do so for decades to come.

Core services

Civil Engineering / Structural Engineering / Geotechnical and Geoenvironmental Engineering

Sectors

Education