

Project Details

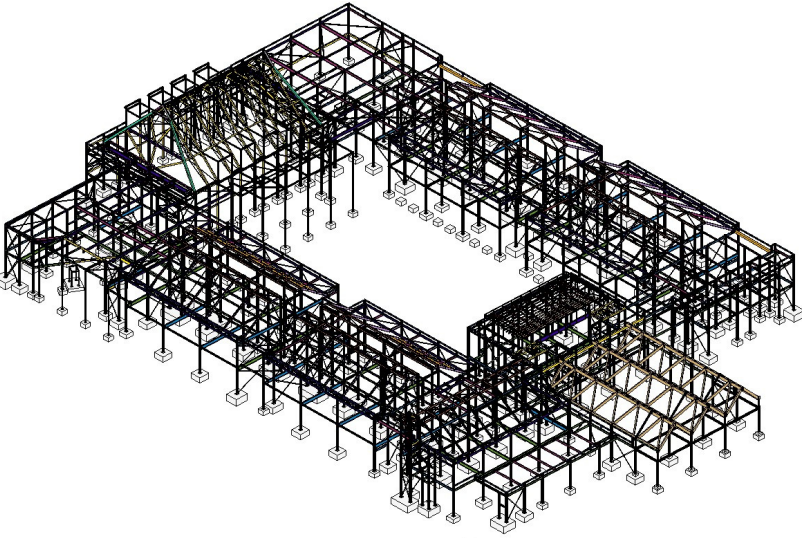
Client	Warwick Independent Schools
Structural Engineers	Nolan Associates
Main Contractor	Speller Metcalfe
Architect	Nicholas Hare Architects
Cost	£29 Million
Duration	2 Years

Project Details

This project involved the construction of a new High School forming one phase of the larger Project One Campus project, at Warwick School, Myton Road, Warwick.



Main Hall Roof



3D Revit model showing the structural frame

Construction Photographs



View from the courtyard



Erection of steel frame



View of the completed structure

Design Principles

The King’s High Building is approximately 100m long and comprises 4 blocks with a central courtyard. The structure is generally a 2-storey steel frame with hollowcore plank first floors and hollowcore or metal deck roofs. Stability is achieved by vertical bracing and some frame action. The building is clad generally in brickwork with several reconstituted stone elements which required the design of bespoke support and restraint details.

The roof over the Dining Hall comprises glulam trusses spanning up to 17m. The trusses run longitudinally and are inclined to form the roof slopes. The glulam truss members are joined with recessed steel plates to conceal the connections from view.

The roof over the Main Hall comprises 18m span twin-rafter trusses with central struts and wire sections (including the raised bottom tie) to minimise the visual intrusion.



Erection of Dining Hall Roof



Dining Hall Roof