

Case study – DfE

Orsett Heath Academy, New Secondary School

New 1200 place secondary school with sports specialism

1. Project Context

A three-storey secondary school offering sports and events hall, changing facilities, dining hall, activity studio, staff offices, play areas and pitches, and modern teaching spaces. School designed in compliance with DfE requirements.

2. Design Objectives

New school for 1200 pupils which offers specialism in sports education. The development was also built on training pitches for Thurrock Rugby Club, the school being adjacent to the rugby club and having an emphasis on sports education aims to provide a thriving sports hub for the area.

3. Evidence of Compliance

In collaboration with the design team, AWP provided structural and civil engineering design to comply with requirements set by the Department for Education. This took the form of a multi-stage review process for drawings and designs to be signed off and approved by the DfE.

4. Innovation & Best Practice

The steel structure of the main school building is of modular construction and built off-site, then delivered with the majority of fixtures and finishes complete.



Location:
Essex



Client:
McAvoy Group



Architect:
Stride Treglown



Value:
£21m



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Engineering

Structural
Engineering

Geotechnical and
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The sports hall, main hall, dining hall and activity studio are traditional steelwork construction. To overcome the challenges faced when coordinating the junctions between traditional build and modular framed portions, BIM and clash detection techniques were utilised.

5. Stakeholder Engagement

The design team worked with the DfE and the school to ensure the new school was delivered in accordance with requirements. This took the form of “client engagement meetings” and design review by the DfE.

6. Visual & Technical Evidence

AWP provided technical drawings, 3D revit models and design calculations for substructure, superstructure, below ground drainage and external works.

7. Outcomes & Impact

The development provides a new secondary school for 1200 pupils and enhances the sports facilities for the area.



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