Using BIM on a high school in North Ealing has instigated a cultural change within Kier Construction.

Kier has pushed forward the boundaries of BIM implementation on the William Perkins Church of England High School (WPCEHS).

BIM coordinated the complex building services design within a cross laminated timber building and accurately defined the numerous builders workholes for manufacture. Kier used its innovative BimXtra system to extract the BIM data from the models and to use this for developing the detailed design schedules and work package procurement orders such as ductwork, pipework, insulation and controls.

The BIM output has also been linked to the programme to create a true 4D BIM output and is able to run active electronic change control. In addition the Furniture, Fixtures & Equipment (FF&E) has been developed using the Kier FF&E system that links the drawings and schedules to the Kier product database and which includes the cost and product information. The costed FF&E schedules are produced directly from BIM and represent a true 5D BIM application.

The project is now in the construction phase and the Kier team is using iPads linked directly to the BimXtra system for QA monitoring. The company believes that this is one of the first true Level 3 data driven BIM platforms in operation.

The WPCEHS project has further embedded the use of BIM and BimXtra within Kier and led to mandated use across the group. Kier is now delivering a structured training programme for the use of BIM and BimXtra on its projects to maximise the value from BIM.

Judges’ comments

“Kier has demonstrated the value of BIM from initial design through to facilities management via an in-house integrated system which also allows subcontractors to be engaged.”

Finalists (Title – submitting party)

- Heathrow T2B Project – Balfour Beatty
- Garth Hill Extra Care – Calford Seaden
- William Perkins Church of England High School – Kier
- 240 Blackfriars – Mace