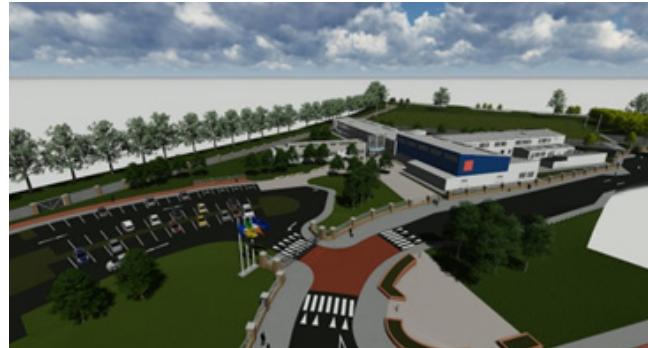


Schools Bundle 4

Delivery of 4 Post Primary Schools & Achieving 7D Facilities Management (BIM-2-FM)



Skibbereen, Co. Cork



Carrick on Suir, Co. Tipperary



Tulla, Co. Clare



Dundalk, Co. Louth

Schools Bundle 4 is a Design, Build & Maintain contract with BAM PPP which, had to be delivered to Level 2 BIM as part of the contract. The project consisted of the construction of four post primary schools across Ireland, with a construction programme of 14months. The schemes are:

- Carrick on Suir, Co. Tipperary – 500 pupil school
- Skibbereen, Co. Cork – 900 pupil school
- Tulla, Co. Clare – 650 pupil school
- Dundalk, Co. Louth – 700 pupil school

The construction of the schools consisted of pre-cast beam and column with a traditional cavity blockwork on the external leaf, with a roof build-up of structural steel with a standing seam roof cladding system. Some benefits from leveraging BIM technology and process included:

- 91% reduction in site precast cores
- 78% reduction with site corrective actions
- Instant access to information via mobile devices

Each of the designers and supply chain provided a 3D model and then a 'Federated Model' was created so that each designer had the ability to coordinate the design as the project progressed. This proved to be a success for both the design and construction phase of Schools Bundle 4 and also for hand over to the BAM Facilities Management team.

Client;
BAM PPP (on behalf of NDFA)

Contractor:
BAM Building

Design team:
HJ Lyons,
Wilson Architecture,
CJ Falconer,
JV Tierney,
Malachy Walsh & Partners,
Molone O'Regan

Value: €65m

Completion: May 2016

Area: 33,021m²

Key Features:

- PPP Contract for Design, Build and Maintain
- Full 3D design & coordination
- Point Cloud Data used to verify As Built information with HDS Laser Scanners
- 7D (or BIM-2-FM) implementation for Facilities Management

BIM 2 FM

For many within the Irish and UK construction industry, the ambition is to adopt full Level 2 BIM delivery, through to FM. However, in February 2016 BAM was the first company to achieve this in Ireland, when it completed the first full commercial transition of a progressively developed building information model data-set.

Autodesk Building Ops was the CAFM system of choice for BAM FM. This application is new and has been developed entirely by Autodesk. BAM has a major focus with user experience which Building Ops delivers well. It also provides a more efficient asset management tool than BAM's previous CAFM system

The link formed between Autodesk Building Ops and BIM 360 Field is bi-directional and seamless and was the primary technology used to deliver populated Asset Information Models (AIM).

