30 Broadwick Street, London
Client led BIM from construction through to operations

30 Broadwick Street (formerly St Lawrence House) is a 92,300 sq ft, six storey new-build office and retail scheme in London W1. It is the first project to be delivered in accordance with Great Portland Estates’ own Asset Information Requirements (AIR's), which set out the data GPE needs at handover for the FM phase.

Collaboration was central to the success of the project and our team worked closely with the client to help them achieve their AIR's. At the outset, we carried out an Employers’ Information Requirement Survey to assess the information that was needed by the client to deliver the scheme. BAM then worked with the client to refine the process and identify the data required for each asset, before deciding on how and where the data would be collected and by whom.

Services Engineering developed the building model for construction issue; field capturing assets and classifying them using Uniclass 2015. Each piece of asset data was matched to the relevant AIR and further enhanced using Autodesk BIM360 Field, which enabled the engineers and building services manager to capture and add real-time photographs, technical and O&M information using an iPad.

“The varying features within BIM360 Field has provided countless opportunities in streamlining a project managers workload in managing the snagging process both prior to and post completion”

Chris Bushell, Project Manager, HUSH Project Management & Consulting Ltd

30 Broadwick Street, London

Client:
Great Portland Estates

Contractor:
BAM Construction

Services Engineering:
BAM Services Engineering

Facilities Management:
BAM FM

Floor area: 92,300 sq ft
Completion: Ongoing

Key Features:
- New build office and retail scheme in London's Soho
- First project delivered to Great Portland Estates’ own Asset Information Requirements
- Development of workflow that goes from design to handover and FM operations and allows us to incorporate clients specific requirements
- The creation of a process that can be replicated on other projects
- Information is provided in one location, in the right format for the client
- BAM FM has been awarded the maintenance contract for the scheme
Use of 4D BIM

Our use of 4D enabled us to demonstrate visually to stakeholders the sequencing, timings and impacts of our logistics strategy and construction management plan. This helped people to easily understand what we were proposing and allowed us to:

- Fully engage with Westminster City Council on the project’s proposed Construction Management Plan. Accurate visualisations of the logistics strategy and sequencing of construction works meant Westminster could quickly identify the potential safety impacts on the surrounding environment.
- Inform local residents and businesses, of the sequencing and timing of events that could impact their daily activities
- Share our proposals with subcontractors during progress meetings and logistics strategy
- Utilise 4D for the monthly client progress reporting, providing transparency on progress at all levels and an analysis of changes to the planned construction sequence.

FM maintenance

“BAM and our team continue to work with BIM from an FM perspective, with the BIM model on 30 Broadwick Street being further utilised to potentially improve ongoing operation and management of the building post-construction”

Martin Quinn, Project Manager, Great Portland Estates

BAM FM has been awarded the maintenance contract for 30 Broadwick Street. As part of the contract we will be adopting our BIM for FM solution, where we will use BIM 360 Field to interrogate assets and the associated accumulated data and records, plus analyse the geometry/location.

BIM 360 Field has already been configured for Broadwick Street to enable us to add further data and documents to the asset during the operations phase. This will be via a mobile iPad or via a web enabled interface. Mobile engineers will be able to search and navigate the model using iPad to exact asset locations within the facility. This is achieved by a 3D perspective view from the BIM model.

This ‘virtual’ environment gives FM personnel the ability to walk through the model, select pieces of equipment and then display or add to the existing asset data. Data can be enhanced with additional documentation such as manuals, photos, maintenance regimes and checklists etc.

Checklists for routine and statutory maintenance activities will be added within the BIM 360 Field to create a digital maintenance record. In addition, key assets plus assets associated with statutory testing will be marked with a Barcode/QR code which is readable in BIM 360 Field to verify that this is the correct asset and record.

Outcomes of our approach

We now have a refined workflow process that takes us from design, through to handover and FM operations and allows us to easily incorporate our client’s specific requirements into the data collection process. Most importantly, it can also be replicated on other BIM projects.

Our BIM for FM approach will give BAM FM the right information that can be readily accessed allowing it to operate the asset efficiently throughout the maintenance contract.