BIM IMPLEMENTATION

DIGITAL MANAGEMENT OF ASSETS

BY

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<table>
<thead>
<tr>
<th>ARCHITECTURE</th>
<th>PHOTOGRAPHY</th>
<th>FM</th>
<th>BIM</th>
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<tr>
<td>2006</td>
<td>2008</td>
<td>2012</td>
<td>2018</td>
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OUR VISION
TO CREATE AN ENABLING ENVIRONMENT THAT SUPPORTS

ECONOMIC GROWTH  CULTURAL DEVELOPMENT  GREAT CITY
STRATEGIC DEVELOPMENT

REPRESENTS THE COUNCIL AS ITS DEVELOPMENT ARM, EXPLORING REGENERATION AND DEVELOPMENT OPPORTUNITIES THAT BENEFIT PORTSMOUTH.
BIM FOR PORTSMOUTH
DIGITAL TRANSFORMATION
A BOLD STEP…

“WE ARE PASSIONATE ABOUT CREATING A WORKING ENVIRONMENT THAT WILL SIGNIFICANTLY IMPROVE PROJECT OUTCOMES AND END USER EXPECTATIONS.”

PROCESS IMPROVEMENTS

TECHNOLOGY

INFORMATION EXCHANGE

VALUE
PUBLIC ORGANISATION

ASSET OWNERS

PROPERTY DEVELOPERS

HOUSING DEMAND

POTENTIAL TO DRIVE CHANGE.

OWN 17,000 PROPERTIES

DELIVERED OVER 230 PROPERTIES IN THE LAST 5 YRS.

18,000 UNITS BY 2036
PHASED APPROACH

2018
- Identified the need for BIM
- Awareness workshop
- Staff capability survey

2019
- BIM adoption and implementation road map
- Project viability assessment & ROI

2020
- BIM working group
- Awareness & team focused workshop
- BIM implementation on projects

STRATEGY

PHASED APPROACH

Business Case & Awareness
Pilot Project & Market Testing
Digitizing Portsmouth
AIM & Smart City
BIM Accreditation
ASSET MANAGEMENT
ESTABLISHED PROCESS

DESIGN
- DESIGN SERVICES
- INFRASTRUCTURE

DELIVERY
- STRATEGIC DEVELOPMENT
- PROJECT MANAGEMENT

OPERATE
- ASSET MANAGEMENT
- FACILITIES MANAGEMENT

RIBA WORK STAGES
- 0: Strategic Definition
- 1: Preparation & Briefing
- 2: Concept Design
- 3: Spatial Coordination
- 4: Technical Design
- 5: Manufacturing & Construction
- 6: Handover
- 7: In-Use

WWW.PORTSMOUTH.GOV.UK | JAN. 2021
**Digital Asset Information Challenges**

**Information Request**
- Tender documentation (traditional employers requirements (ER) & exchange information requirements (EIR))

**Siloed Data**
- Access to the required information/data when needed.

**Existing Assets vs New Assets**
- Over 90% of our assets already exist.

Website: www.portsmouth.gov.uk

Jan. 2021
DIGITAL ASSET MANAGEMENT
OPTIMIZATION

- Integrating BIM into an already established system of working.

- Ensuring optimal cooperation between the delivery team and stakeholders.

- Ensuring that the pre-construction information is up to date and ready for later stages.

- Creating a structure for collecting, maintaining, and sharing data.

- Breaking down the project information into COBIE format to help with management of the asset after handover.
BIM PROJECTS
ARUNDEL STREET

TYPE: RESIDENTIAL DEVELOPMENT

STAGE: RIBA STAGE 4 - 7
<table>
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<th>PROJECT</th>
<th>BIM IMPLEMENTATION</th>
<th>PROJECTIONS</th>
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<td>To develop 76 new homes for rent to meet the housing needs of the city. A modern 22-floor residential tower in Portsmouth city centre; our Arundel Street development tackles the Portsmouth housing shortage head on. Built on council owned land; this slick, attractive block includes a balcony for every flat and a ground-floor commercial unit.</td>
<td>• Carried out project viability assessment and ROI. • Established our project information requirement by issuing an EIR as part of the tender documentation. • Define Asset information requirements using our standard O&amp;M Documents. • CDE Setup: BIM360</td>
<td>• Monitor and measure progress at every stage. • A more efficient Operational and asset management experience. • Effective use of AIM and COBie to facilitate the Operations of the asset • 4D and 5D optimisation</td>
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TIPNER WEST

TYPE: REGENERATION SCHEME
STAGE: RIBA STAGE 1-3
Tipner West is a unique site where land meets sea and roadway meets waterway. With the provision of more that 4,000 homes, over 145 acres of marine employment. We're pioneering a new way of living in one of the most ambitious and innovative housing and employment developments in the south coast.

PROJECT

BIM IMPLEMENTATION

• Issued EIR to define our information requirements
• Early Stakeholders engagement and helping to lay a foundation for a process that integrates design with the rest of the projects lifecycle.
• CDE Setup: information was shared using BIM360

PROJECTIONS

• Setting project as an example to raise the profile of BIM in Portsmouth city council
• Laying a foundation for SMART city processes and technology.
• Better Project team collaboration.
• Identified Triggers for a smooth and effective Asset Management.

JAN. 2021
EDINBURGH HOUSE

TYPE: EXTRA CARE HOUSING

STAGE: RIBA STAGE 1 - 3
The building will be designed primarily for people with varying degrees of dementia and will accommodate both very frail and more active people, including those with physical and mental disabilities.

We aim to provide 62 new extra care flats to meet the needs of local people. The principle of a new extra care housing facility is to allow people to maintain an independent lifestyle but they may need some 'extra care' to do that.

• Carried out project viability assessment and ROI.
• Established our project information requirement by issuing an Exchange information requirement EIR as part of the tender documentation.
• Received pre-contract BEP.
• CDE Setup: BIM360

• Monitor and measure progress at every stage.
• A more efficient Operational and asset management experience.
• 4D and 5D optimisation
Any Questions?....