

6D BIM ASSET INFORMATION REQUIREMENTS

- 1.1 The Contractor shall progressively develop Asset Information Models (AIM) from As-Built Models (ABM) with information on the rooms, spaces, equipment and elements that required by the Authority's Asset Information Standard (AIS).
- 1.2 The Engineer will be issuing AIS to the Contractor during project implementation. The Contractor shall make necessary updates to the AIM upon request by the Engineer.
- 1.3 The Contractor shall refer to the AIS to include the following information in the AIM but not limited to:
 - (a) Asset code;
 - (b) System code/ Sub system code/ Components;
 - (c) Location code;
 - (d) Chainage number;
 - (e) Asset attributes: Manufacturer name/ Supplier name/ Model number. etc.;
 - (f) Element geometry;
 - (g) Reference documentation (O&M manual, selected equipment catalogue/ technical specifications, detailed drawing, etc.);
 - (h) Installation date;
 - (i) Warranty Start and End dates; and
 - (j) Asset useful life.

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- 1.4 The Contractor shall coordinate with the Interfacing Parties to obtain the necessary design and installation detailed drawings and BIM models to form a complete project, services and / or systems for AIM development.
- 1.5 The Contractor shall issue the AIM to the Interfacing Parties in a timely manner for their review and verification on the data and information accuracy of their BIM Elements, components to form a complete project, services and / or systems.
- 1.6 In the event where there are disputes between the Contractor and Interfacing Parties, the Engineer's decision shall prevail.
- 1.7 Where necessary, the Contractor shall coordinate with the respective Interfacing Parties to provide all necessary design and installation detailed drawings and BIM models to form a complete project, services and / or systems for their AIM development.
- 1.8 The Contractor shall be responsible and accountable to review and verify the data and information accuracy of the BIM models developed by the respective Interfacing Parties, to form a complete project, services and / or systems.
- 1.9 Where URL links are required for the embedded Core Information (CI) in the BIM Elements, the Contractor shall ensure that the URL links are in proper order prior to handing over the AIM to the Engineer.
- 1.10 The AIM shall be able to generate an asset listing. The asset listing template shall be based on MMS data registration template to be provided by the Engineer's appointed MMS Contractor. The Contractor shall ensure the information consistency between the generated asset listing and data registered in the MMS.
- 1.11 The Contractor shall discuss with the MMS Contractor to establish the asset information requirements and the MMS requirements and document the agreed requirements in the BEP.

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- 1.12 The Contractor shall follow the asset naming convention provided by the Engineer's appointed MMS Contractor to create the unique asset code to identify the relevant BIM Elements in the AIM and MMS. The Contractor shall ensure that the unique asset code in the AIM corresponds to the physical asset. The details of the process of data registration, data capture in the AIM and data validation shall be submitted to the Engineer for acceptance prior to installation and documented in the BEP.
- 1.13 The Contractor shall responsible and accountable for the accuracy of the asset code information embedded in the BIM Elements and shall ensure there is no duplication of unique asset code in the AIM under their scope of supply.
- 1.14 The Contractor shall further develop both ABM and AIM. The Contractor shall ensure the data and information consistencies between ABM and AIM prior to submission of respective interfacing contracts' As-Built submission dates for the Engineer's acceptance.