



Government
of South Australia
Department for Infrastructure
and Transport

Exchange Information Requirements (EIR)

Building Projects Exchange Information Requirements (EIR)

Project name:	PROJECT NAME
Project address/location:	PROJECT ADDRESS
SAMIS Asset Number	0000
Brief project description:	OUTLINE PROJECT DESCRIPTION
Appointing party:	DEPARTMENT FOR INFRASTRUCTURE AND TRANSPORT (DIT) BUILDING PROJECTS

Based on Natspec
EIR Template
Version: V4
Date: 4/3/2026

Building Projects Exchange Information Requirements (EIR)

Document references

In this document:

- The 'EIR Template' or 'Template' means the *NATSPEC Exchange Information Requirements (EIR) Template*.
- The 'EIR' means the *Exchange Information Requirements* for the nominated project.
- The 'BEP' means the *BIM Execution Plan* (for a specific project).
- The 'National BIM Guide' or 'Guide' means the *NATSPEC National BIM Guide*.

Document control

Title/Role	Name	Company/ Organisation	Email	Tel. No.	RACI
Author	Ralph Hems	ODASA	ralph.hems@sa.gov.au	0413307943	R
Owner	Lead Agency Representative	TBA	TBA		C
Appointing party representative	Project Manager	DIT	TBA		A
Information Manager	Ralph Hems	ODASA	TBA		I

Key to responsibilities for developing EIR.

R Responsible for undertaking activity

A Accountable for activity completion

C Consulted during activity

I Informed following activity completion

Role responsible for maintaining and updating EIR: **Ralph Hems - Principal BIM Advisor** ralph.hems@sa.gov.au

Version history

Version	Date	Amended by	Approved by	Comments
Rev 1	September 2023	RH		Draft
Rev 2	November 2023	RH		DCCIF Review Issue
Rev 3	December 2025	RH		For issue
Rev 4	July 2026	RH		BIM EIR Template. For Issue

TABLE OF CONTENTS

SECTION 1 – INTRODUCTION.....	2
1.1 AS ISO 19650 alignment.....	2
1.2 Purpose.....	2
1.3 Application.....	3
1.4 BIM Execution Plan.....	3
1.5 Projects requiring BIM capacity tier levels.....	3
1.6 Project specific, commercial, management and technical sections.....	3
SECTION 2 – Project Specific Details	4
2.1 Project description.....	4
2.2 Project goals and objectives	4
2.3 BIM application uses.....	4
2.4 Project BIM deliverables.....	5
SECTION 3 – Commercial.....	0
Asset and Project Information Requirements.....	0
3.1 Procurement strategy	0
3.2 Project team members	0
3.3 Common Data Environment.....	0
3.4 Project information delivery milestones	1
3.5 Existing conditions information	1
3.6 Asset and project information purposes	1
3.7 Asset and project information models.....	2
3.7.1 AIM and PIM integration strategies.....	2
3.8 AIM and PIM deliverables.....	2
3.8.1 AIM and PIM deliverables formats	3
3.9 AIM and PIM deliverables level of information need.....	3
3.10 Spatial object level of information need	4
3.11 Physical asset classes.....	5
3.11.1 Physical asset object alphanumeric level of information need	5
SECTION 4 – Management	6
4.1 Information management requirements.....	6
4.2 Information quality assurance.....	13
4.3 Information security	14
4.4 CDE management.....	14
4.5 Project meetings.....	15
4.6 BIM Execution Plans	16
SECTION 5 – Technical.....	18
5.1 Software	18
5.2 Software file formats.....	18
5.3 IT infrastructure	18
5.4 Collaboration resources.....	18
5.5 Coordination facilities	18
5.6 Coordination	18
5.7 Model geographic location.....	18
5.8 Asset identification.....	18
5.9 Model object and property naming.....	18
5.10 Standard and project reference information	19
5.10.1 Information standards	19
5.10.2 Information production methods and procedures.....	19
5.10.3 Reference information.....	19
5.10.4 Shared resources.....	19
ANNEX A - References and Abbreviations.....	20

SECTION 1 – INTRODUCTION

1.1 AS ISO 19650 alignment

This Exchange Information Requirements (EIR) document is aligned with the requirements of the AS ISO 19650 series of standards and uses the terminology from them throughout. Refer to these standards for details of the requirements and definitions of terms.

Definitions of other BIM terms can also be found on the ISO Online Browsing Platform (OBP):

<https://www.iso.org/obp/ui>

Refer to Annex A: Abbreviations and the NATSPEC National BIM Guide - Appendix A: Glossary for a more detailed description of abbreviations used in this document.

1.2 Purpose

As part of the Building Information Modelling (BIM) implementation across Government, the Department of Infrastructure and Transport (DIT) Building Projects supports the implementation of Stage 2 BIM Maturity in accordance with AS ISO 19650. This includes compliance with AS ISO 19650:1, AS ISO 19650:2 (concepts, principles, and project delivery) and AS ISO 19650:3 in terms of operational purposes.

Stage 2 BIM maturity includes both manual and automated information management processes to generate a federated information model. The information model includes all information containers delivered by the BIM delivery teams in relation to the project, including use of digital information technology, a Common Data Environment (CDE), and DIT BIM requirements for coordination of federated 3D models during the design and delivery phases of the project.

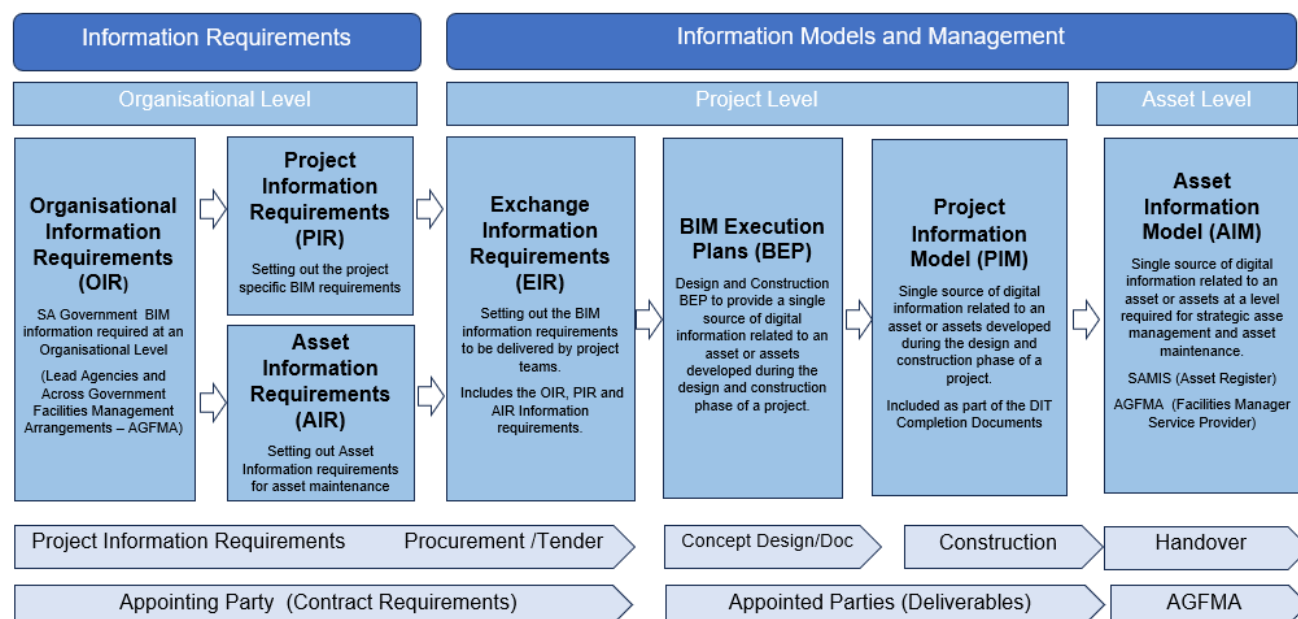
The BIM requirements stated in this EIR document are in support of the DIT Building Projects project delivery requirements. They provide consistency in the use of building information and 3D modelling with clear principles and processes for the management of building information.

This document defines the DIT Building Projects Exchange Information Requirements (EIR) for the project and includes the following information requirements.

- Organisation Information Requirements (OIR) documenting DIT Building Projects BIM information requirements.
- Asset Information Requirements (AIR) documenting the general asset information requirements.
- Project Information Requirements (PIR) documenting the core and project specific BIM information requirements and the level of information needed at each project milestone stage.

The Diagram below shows the Building Projects project and asset delivery process based on AS ISO 19650 and hierarchy of asset information requirements.

BIM Information Requirements



1.3 Application

This EIR document forms part of the invitation to tender documentation provided by the appointing party (DIT) Building Projects to prospective lead appointed parties, Lead Professional Service Contractors (LPSC) and the General Building Contractor (Contractor).

The EIR document is to be read in conjunction with the Project Conditions of Contract and other Tender briefing documents and describes the BIM information and requirements for the prospective design and Construction delivery team is required to deliver for the project stages they are engaged for:

- Design Delivery BIM Team for Part 1 Concept, 2A Design Development and 2B Documentation Stages.
- Construction Delivery BIM Team for Part 3 Construction Stage.

1.4 BIM Execution Plan

The EIR requires the preparation of a project BIM Execution Plan (BEP) submitted in response to the EIR as the primary tool of BIM management for both the Design /Documentation and Construction stages of the project.

The BEP will outline the Delivery Team's collaboration and communication strategy to be adopted for each stage of the BIM project including communication methodology, protocols, design coordination, information exchange meetings, schedules, roles & responsibility, information delivery and task information plans.

The LPSC leading the Design/Documentation team shall be responsible for creating and updating the Design Building Execution Plan (DBEP) with changes to the project occurring during the Design & Documentation stages to include the requirements of the EIR with reference to the relevant sections of this document.

The Construction Delivery BIM Team shall review and update the DBEP to create the Construction BIM Execution Plan (CBEP) with reference to the relevant EIR requirements for construction and project completion requirements.

Any changes to the approved DBEP or CBEP will require review and sign off by the appointing party.

1.5 Projects requiring BIM capacity tier levels.

Noting that not all Delivery Teams are at the same level of BIM capability or maturity, the following BIM Capability Tiers Levels have been included in Building Projects Prequalification Application requirements for capital works projects as follows:

- BIM Tier 1 - Project value < \$5 million (small scale simple / conventional buildings).
- BIM Tier 2 - Project value >\$5 million to < \$15 million (medium scale / complexity buildings).
- BIM Tier 3 - Project value >\$15 million to < \$250 million (large scale / complex buildings).
- BIM Tier 4 - Project value > \$250 million (large scale, very complex buildings requiring specialist BIM applications).

For further information refer to Building Projects Prequalification Applications Guidelines - Appendix B: BIM Capability Framework [Building Projects Prequalification](#)

It is important the tendering parties confirm the BIM Tier Level with the Building Projects Representative prior to the submission of their Tender for the Design/Documentation or Construction stages of the project.

1.6 Project specific, commercial, management and technical sections

The following sections are based on the four aspects of producing information as identified in AS ISO 19650:1.

- Section 1 – Introduction and purpose of this EIR document
- Section 2 – Project Details: Includes Project Specific Details, required BIM applications and BIM deliverables for the project.
- Section 3 – Commercial: Includes Asset and Project Information Requirements for BIM information delivery and required BIM contract requirements for procurement.
- Section 4 – Management: Includes required management processes to be adopted for the implementation of BIM.
- Section 5 – Technical: Includes Building Projects technical requirements for provisions that support the delivery and management of information.

SECTION 2 – PROJECT SPECIFIC DETAILS

2.1 Project description

Outline description: Refer to the DIT Building Projects Project Brief documents and Conditions of Tendering for a full description of the project scope and general requirements.

2.2 Project goals and objectives

The appointing party's goals and objectives for the implementation of BIM in accordance with AS ISO 19650 for this project are shown in the following Project goals table.

Project goals table

Priority	Goal description	Required Use of BIM	Measure of Success
High	Improve design decision making and comprehension with stakeholders at critical project milestones to ensure design quality.	Use BIM information management processes and the principles of AS ISO 19650 with collaboration and visualisation tools.	Reduce the number of design and value management changes during all stages of the project.
High	Achieve a fully coordinated building information model for stakeholder signoff prior to commencement on-site.	Use of BIM conflict and clash detection software for all discipline federated models.	Fully coordinated 3D federated BIM with no clashes, errors, or omissions.
High	Implementing of a project specific information management and coordination process.	Use of a common data environment (CDE) for all project information to be shared across all project work packages	Reduce the number of requests for information during construction.
High	Handover complete project information at completion of the construction works	Provide for review an assessable as-built information dataset from the Construction Delivery Team.	Reduce the number of incomplete project information submissions at Practical Completion.

2.3 BIM application uses.

To support the above BIM project goals and objectives, the following project BIM applications uses have been identified to be used as stated in the **BIM Application uses table**.

The BIM applications listed in the table correspond to those found in the *NATSPEC National BIM Guide, Appendix C – BIM use & enabler descriptions* with reference to the appropriate clause reference number.

Refer to DIT Building Information Requirements G168 guide note for Building Projects 3D Modelling requirements in association with the BIM use applications.

BIM Application uses table.

Required	NBG Appendix. C Clause No.	Use of BIM (Reference NBG Appendix C)	DIT BIM G168
Design / Documentation Stage			
YES	2.1	<i>Existing conditions modelling. Topographical including overall site contours, landscaping, paving and surrounding infrastructure and buildings affected by the new or refurbishment works.</i>	8.8 8.12
YES	2.4	<i>Spatial and Material Design Models, Design Visualisation for Communication and Functional Analysis.</i>	8.1, 8.14
YES	2.5	<i>Site analysis to determine the optimal location on site for the proposed project.</i>	8.9,
YES	2.6	<i>Design Authoring for all disciplines. Extent of 3D modelling to all areas affected by the new and refurbishment works including associated site works, topography, landscaping features and building services connections.</i>	7.1-7.3, 8.1- 8.7
YES	2.7	<i>Design Review. BEP Status Reports as evidence of the current status of BIM deliverables. All data, schedules, and drawings sheets to be derived from the federated 3D Model.</i>	10

YES	2.8	Structural engineering and analysis (including seismic bracing if required for seismic importance levels IL3 and IL4).	8.2
YES	2.9	Lighting Analysis. Includes both external site and internal artificial lighting and daylight analysis.	8.4
YES	2.10	Engineering Analysis. Assess the performance of various system options to determine the most effective engineering solution to the Project Brief performance requirements and design codes.	8.15
YES	2.10	Acoustic Spatial Modelling by acoustic consultants (based on architectural 3D base models).	8.13
YES	2.11	Energy analysis and modelling (3D Base model and data for NCC Section J compliance).	8.11
YES	2.12	Asset Management, sustainability considerations and analysis to be adopted at all stages of a facility's life, including planning, design, construction, and operation.	8.17
YES	2.13	Project Brief and Space Validation compliance with brief reference codes and standards. (i.e. NCC and performance solutions).	8.9
YES	2.14	3D Model Clash detection/coordination and conflict checking to determine conflicts of geometry within models that would result in re-design on site.	8.10
Construction Stage			
YES	2.18	Construction fabrication and integration of digital fabrication 3D shop drawings to the As-Built 3D Models during construction.	7.4
YES	2.20	Record As-Built 3D models and BIM asset information for record documents in the Project Information Model.	12.1
YES	2.20	Building Projects Completion and Record Documents for Practical Completion, Handover, and commissioning Systems.	12.2
YES	2.20	SA Health Data Requirements - Appendix A and B - Room by Room Architectural Data and Engineering Service Data schedules.	12.3

Note: Any amendments to the above table to be included in the DBEP and CBEP for approval by DIT.

2.4 Project BIM deliverables

Building Projects BIM Implementation Process (P042) outlines the use of a BIM assessment selection matrix to determine the specific project BIM deliverables required to meet the project BIM goals and objectives.

BIM Deliverables for the project are summarised in the following Project BIM Deliverables table.

Project BIM Deliverables table

Project Stage	BIM Objectives	BIM Deliverables Description	Format
Concept (Part 1)	Compliance with AS ISO 19650:1&2	Include the BIM Application Uses and 3D Modelling requirements.	IFC
		Provide the Design BEP for review and approval.	pdf
	Definition of design assumptions	Provide 3D Massing Models and other outputs (e.g. Functional Relationship Diagrams) to support design options and assumptions.	IFC/rvt, pdf
	Stakeholder engagement	Provide photo realistic walkthroughs and flyovers derived from the 3D Model for stakeholder and media presentations.	IFC/rvt/pdf/ mp4
	BIM Project Reviews	Provide BIM Status Report and federated 3D Models in accordance with Project Review G29.	IFC/rvt pdf
Design Development (Part 2A) and Documentation (Part 2B)	Common Data Environment	Common Data Environment to be fully established for all Design Team parties.	pdf
	Open BIM formats	Provide IFC 2x3 TC1 (2.3.0.1) or IFC 4 compliant file formats.	IFC
	BIM project co-ordination	Use of federated 3D Models for conflict and clash detection with evidence of conflict resolution.	IFC, pdf
	Data structuring and information	Schedule of Accommodation (SoA), drawings, schedules, and data derived from federated 3D Models.	IFC/rvt / pdf
	BIM Project Reviews	Provide BIM Status Report and federated 3D Models "reference only" in accordance with Project Review G29.	IFC/rvt
Construction	Compliance with AS ISO 19650: 1&2	Provide the Construction BEP updated from the Design BEP for review and approval.	pdf
	Project Information Model (PIM)	Provide continuous recording of data and as built records for the Project Information Model for project completion documents.	rvt, dwg, and pdf

	Asset Information Model (AIM)	Provide federated 3D BIM models, and associated project and asset information data from the PIM for the AIM.	IFC/rvt/dwg/pdf.
--	-------------------------------	--	------------------

SECTION 3 – COMMERCIAL

Asset and Project Information Requirements

This section outlines the asset and project information requirements for the project to align with AS ISO 19650:1&2.

3.1 Procurement strategy

The project procurement strategy is shown in the Project procurement strategy table.

Project procurement strategy table

Project procurement strategy:	<i>Lump Sum/Design and Construct/ Integrated Project Delivery.</i>
Contractor engagement: indicative date:	<i>Refer to Building Projects Conditions of Tendering.</i>

Appointing party's asset management approach, refer to:

- DIT Strategic Asset Management Information System (SAMIS) [AGFMA - Department for Infrastructure and Transport - South Australia](#)

Appointing party's FFE procurement approach, refer to:

- Building Projects - Project Brief and Condition of Tendering documents for FFE procurement requirements.

3.2 Project team members

The contact details for key stakeholders who contributed to the development of the EIR are shown in the Project team member's table.

Project team members table

Role	Discipline	Name	Company/ Organisation	Email
Appointing Party BIM representative	Principal BIM Advisor	Ralph Hems	DIT/ ODASA	ralph.hems@sa.gov.au
Appointing Party Project Manager	Building Projects Project Manager	<i>TBA</i>	<i>DIT Building Projects</i>	<i>TBA</i>
Lead Agency Representative	Lead Government Agency Representative	<i>TBA</i>	<i>TBA</i>	<i>TBA</i>

3.3 Common data environment

Provision of a Common Data Environment (CDE):

- By the Lead PSC as the Lead Appointed Party.
- For the Early Works and Construction phase, a Common Data Environment shall be hosted and managed by the Contractor. Throughout all phases of the project, the appointing party shall have access to view BIM information and data for review and allow for BIM information (documents and data) to be exported to the appropriate Asset Management software.

CDE Functional Requirements: Refer to clause 4.5 CDE Management for more details on CDE functional requirements.

CDE access: Require access for LPSC, DPSCs, DIT Building Projects and Lead Agency Representatives for project information and transfer of 3D Models, drawings and other documents required by Building Projects for review.

Instructions for using the CDE:

- The LPSC is encouraged to use electronic project collaboration tools such as document management and file sharing sites, reviewing tools, project communication websites, web meetings, and video conferencing.
- A Drawing and 3D Model register will be managed and maintained by the CDE during all phases of the project.

3.4 Project information delivery milestones

Project information should be continuously exchanged via the CDE throughout the life of the project to enable key decision making at critical project milestones.

The key project milestones are to be complied with to enable Building Projects review and monitor compliance with the EIR document at critical milestone stages as shown in the Project information delivery milestones table.

Project information delivery milestones table

Stage	Delivery Milestone	Date	Key Decision Date	BIM Compliance and Reports
Concept (Part 1)	Design BIM Execution Plan	4 wks. after startup	Design Startup Meeting	Design BIM Execution Plan (DBEP) by the Design Delivery team.
	Development of Concept Design	1 wk.*	Concept Design Report	Approved DBEP to be included in Appendix to the Concept Design Report.
Design (Part 2A)	End of Design Development	1 wk.*	60% Documentation Review	BIM status report for the end of Design Development. Issue of 3D federated Model and associated documentation for review.
Documentation (Part 2B)	End of Documentation	1 wk.*	90% Documentation Review	BIM status report for end of Documentation. Issue of completed 3D federated Model and associated documentation for review.
Tender (Part 2B)	Tender documents for Contractor Issue	1 wk.*	100% Documentation Tender issue	Design BIM Status Report confirming the status of BEP BIM deliverables and any outstanding BIM issues still unresolved.
Construction (Part 3)	Construction BIM Execution Plan	4 wks. after startup	Construction Team startup meeting	Construction BIM Execution Plan (CBEP) updated from the DBEP.
	PIM Model and associated Documentation	1 wk.*	Practical Completion	Continuous collation of record documents within the PIM. CBEP progress reports included in project meetings.
Practical Completion (Part 3)	Completion documents	1 wk.*	PC and Handover	Issuing of a 'federated' 3D Built Model, project data, and Completion Documents.
Post Occupancy	BIM Lesson Learnt	1 wk.*	Post Construction Review	Post Construction Review online survey.

*Weeks before the key decision point. wk = 5 working days

Information handover procedure: Refer to DIT Building Projects Guide to Completion Documents (G178).

Completion Documents at Practical Completion: Refer to 0171 DIT General Requirements - Completion Documents and Completion Documents (G182).

3.5 Existing conditions information

Available existing conditions information: Refer to SAMIS Asset Register, Hazardous Materials Register and maintenance reports.

Additional existing conditions modelling requirements: Model existing structures and functions associated with the project scope to enable a clear understanding of what is changing from the current state to the proposed design including all site works affected by the new works and connections to existing building services.

Survey and modelling methods including integrated laser - scanned data, 3D topographical surface modelling, photogrammetry and LIDAR data can also be used to provide a 3D model of the existing building and site features.

Reliance on or use of legacy data is entirely at the LPSC or Contractor's risk. It requires site specific verification unless otherwise specified in the Contract Documents.

3.6 Asset and project information purposes

Information purposes: The purposes of the asset and project information required by the appointing party are shown in the Asset and project information purposes table.

Asset and project information purposes table

Information purpose	Information requirements
Design / Documentation	

Regulatory compliance	For essential safety provisions and certification.
BIM Design Review	Information Models and associated documentation to enable BIM reviews for 3D Model integrity and quality assurance process.
BIM Model Coordination	Information Models by all disciplines to be federated into one 3D Model for coordination both independently and collaboratively, using software identified by the Lead Appointed party.
Presentation Communication of design intent	Information Models and associated documentation to enable suitable 'walk through' and 'flyovers' required to represent the design solution accurately to the Lead Agency and major stakeholders.
Documentation for Construction	All information models are to be coordinated with all graphic and written information of the design including materials, products, systems, and detailed specification of the required standards of quality for the construction of the works.
Construction	
Record modelling	Purpose of record modelling, scope, (e.g. As-Designed model, As-Built model), accuracy requirements, verification procedures, and responsibilities.
Record and Completion Documents	Operational and Maintenance data for manuals, test certificates, essential services/fire safety measures certification and compliance requirements noted in Building Projects Project Completion Document requirements.
Fabrication	
Fabrication and Shop Drawings	Co-ordinated graphic and written descriptions of components and assemblies adequate for off-site fabrication and site installation.
Asset Management	
Completion Documents	For asset management, preventive maintenance, warranties, and any service agreements including expiry dates for nominated assets.

3.7 Asset and project information models

Requirement: Deliver elements of the asset and project information models described in the following clauses.

3.7.1 AIM and PIM integration strategies.

Requirement: Coordinate information included in each element of the AIM and PIM to minimise duplication and eliminate omissions and contradictions. Implement measures to integrate information to enable it to be used effectively for the purposes documented in the Asset and Project information deliverables table.

Information classification: Incorporate DIT Strategic Asset Management Information System (SAMIS) classification hierarchy and data in AIM and PIM information containers/files and model objects to enable the effective integration and management of information.

3.8 AIM and PIM deliverables.

Requirement: Provide the deliverables shown in the AIM and PIM deliverables table.

Timing: Provide the deliverables at the delivery milestones shown in the Project information delivery milestones table.

AIM and PIM information deliverables table.

AIM and PIM element	Information Purposes	
	Regulatory compliance:	Operations & maintenance
3D Models		
Architectural /Landscaping Structural /Civil		As-Built federated 3D model.
Building Services (MEP)		As-Built federated 3D model.
Record Documents		
All as-built Record Documents		As-Built drawings and schedules for all disciplines.
Completion Documents		
Authority approvals	Development Approvals (NCC and planning conditions).	Include all NCC Essential Safety Provision items.

AIM and PIM element	Information Purposes	
	Regulatory compliance:	Operations & maintenance
Completion Documents	Include compliance documentation for NCC performance solutions and required tests and certificates.	As- Built drawings and schedules and all compliance certificates.
Operational and maintenance (O&M) Manuals	Include all regulatory certificates of compliance.	Include product and material data sheets and commissioning reports.
Warranties and service agreements		Include in O&M manuals.
Product evidence of conformity	Certificates of product compliance.	Include in O&M manuals.
Data (object-based)		
<i>Room Data Sheets</i>		<i>Include in Completion Documents</i>
<i>SA Health Data Requirements</i>		<i>Include in Completion Documents</i>

3.8.1 AIM and PIM deliverables formats

Requirement: Provide deliverables shown in the **AIM and PIM deliverables table** in the formats shown in the **AIM and PIM deliverables format table**. Requests for alternative file formats to be approved by the DIT BIM Manager.

AIM and PIM deliverables format table

Deliverable	File type	Issue	Physical format
3D federated Models (all disciplines)	Native file format (i.e. rvt) and IFC 2x3 or IFC 4	Electronic transfer	IFC, NWD or other
Drawings (all disciplines)	Native file format (i.e. rvt - dwg) and PDF/A	Electronic transfer	Dwg and pdf readable A3/A1
Specifications and compliance certificates	Microsoft Word	Electronic transfer	pdf
Space and equipment Schedules	Excel spreadsheet	Electronic transfer	xlsx
Reports and other documents	PDF/A	Electronic transfer	A4 bound
Photographic images	JPEG	Electronic transfer	N/A
Videos, animations	MP4	Electronic transfer	N/A
Data	Native file format (xlsx, csv)	Electronic transfer	IFC or other open file formats

3.9 AIM and PIM deliverables level of information need.

Requirement: Provide deliverables at each information delivery milestone at the level of information need (LoIN), and in the formats specified in the AIM and PIM deliverables level of information need table.

AIM and PIM deliverables Level of Information Need (LoIN) table

AIM and PIM element	LoIN at end of Design Development (DD)	Discipline	LoIN at end of Documentation (Doc)	Discipline	LoIN at Pre-construction Procurement	Discipline	LoIN at end of handover from construction to operation	Discipline
Models *								
Level of Development (LOD)	200	All	300-350	All	300-350+	All	300-350+	C
All Disciplines	3D federated models for coordination.	All	As-Designed federated and coordinated model.	All	'Reference only' federated 3D model.	All	Updated As-built federated 3D Models used for construction.	C
Drawings								

AIM and PIM element	LoIN at end of Design Development (DD)	Discipline	LoIN at end of Documentation (Doc)	Discipline	LoIN at Pre-construction Procurement	Discipline	LoIN at end of handover from construction to operation	Discipline
All general arrangements drawings.	DD layouts	All	Documentation final As-Designed layouts. Finishes and FF&E schedules.	All	'For construction' layouts and set out plans	All	As-Built drawings	C
Documents								
Authority approvals	DA Conditions of approval	A	NCC Performance solutions	A	NCC approvals	A	All compliance certificates - NCC	C
Schedules Materials and Finishes	DD schedules	A	As-Designed schedules	A	For construction schedules	A	As-Built schedules	C
Specification	DD preliminary specification.	A	As-Designed specification	A	For construction specification	A	As-Built amended specification	A
Reports	NCC analysis report.	A	As-Designed NCC compliance	A	Final NCC compliance	A	Project progress reports	C
Completion Documents.							Record Documents and O&M Manuals	C
Data (object-based)								
	See Physical Asset object alphanumeric Level of Information Need (LoIN) table							

* Refers to virtual 3D models as a whole (i.e., not individual model object/elements).

Key to disciplines abbreviations

A Lead PSC-Architecture All All Design Disciplines C Contractor

3.10 Spatial object level of information need

Requirement: At each information delivery milestone include the properties in spatial objects shown in the Spatial object level of information need table.

Spatial object level of information need table

Property category	Generic property name	Description	Required at end Part 2A Design Dev.	Discipline	Required at end Part 2B Doc.	Discipline	Required at end of Const.	Discipline
General ID & description	Space ID	Room No - SAMIS	✓	A	✓	A	✓	A
	Space name	Room Name	✓	A	✓	A	✓	A
	Designation Reference	Additional room referencing.	✓	A	✓	A	✓	A
Location	Zone	Building number and name (SAMIS)	✓	A	✓	A	✓	A
	Storey or level	Level Number	✓	A	✓	A	✓	A
Geometrical quantities	Height, length, width, floor area, and volume	All Dimensions	✓	A	✓	A	✓	A
Function	Functional classification	Grouping of similar spaces (e.g. Admin)	✓	A	✓	A	✓	A
Surface finishes	Material and Finishes Schedules	Description of all surface finishes.	✓	A	✓	A	✓	A

Key to disciplines abbreviations

A Lead PSC Architecture C Contractor

3.11 Physical asset classes.

The Strategic Asset Management Information System (SAMIS) contains the Lead Agencies asset register and includes asset data that identifies and physically describes all maintainable site, building and plant & equipment assets.

SAMIS asset data is based on the following asset hierarchy.

Facility → Site → Buildings → Levels → Rooms

Standardised naming conventions are to be used with key model elements following the above hierarchy.

DIT Assets Data Standard guidelines outline the required asset data to be undertaken by separate contractors engaged under the Across Government Facilities Management Agreement (AGFMA). [Buildings - Asset and Contract Documents - Department for Infrastructure and Transport - South Australia](#)

Refer to the Lead Agencies Strategic Asset Management System (SAMIS) asset register for existing asset information.

3.11.1 Physical asset object alphanumeric level of information need

Requirement: At each information delivery milestone, the discipline responsible for adding properties to asset objects at three phases of a project is indicated by a symbol or fill in the appropriate cell. See the Key to disciplines below the table. Include the alphanumeric properties in physical asset objects shown in the Asset object sharing properties responsibilities matrix.

Asset object shared properties responsibility matrix.

○ = Designed intent ● = Confirmed

Property category	Generic property name	Data type	Responsibility										
			Design						Construction			FM	
			A	S	C L	M	E	P	C	K1	K2	K3	F
General ID & description	Asset ID	Text											●
	Asset name	Text	○	○	○	○	○	○					●
	Designation / References	Text	○	○	○	○	○	○	●	●	●	●	●
Location	Space ID and Name	Text	○						●	●	●	●	●
Parent system or assembly	System ID and Name	Text		○	○	○	○	○	●	●	●	●	●
	System name	Text							●	●	●	●	●
Classification or category	Asset class or category	Text											●
	Asset type: fixed/moveable	Text											●
Manufacture & supply	Product / Make / Model number Manufacturer	Text		○	○	○	○	○	●	●	●	●	●
	Serial number and Acquisition date	Text							●	●	●	●	●
	QR code	Text											●
Warranties	Warranty start / end date and identifier	Text							●	●	●	●	●
Life cycle & maintenance	Expected Life	Text											●
	Maintenance frequency	Text											●

Key to disciplines

A	Architecture	S	Structural Engineer	P	Plumbing/Hydraulic engineering
E	Electrical Engineering	CL	Civil Engineering	M	Mechanical Engineering
K	Subcontractor 1,2,3	C	Contractor (Construction)	F	Facilities/Asset Manager

SECTION 4 – MANAGEMENT

4.1 Information management requirements

The following table outlines the information management functional requirements roles and responsibilities as described in AS ISO 19650 to support the application of building Information management.

Information Management functional requirement table

Role Organisation	Phase	Responsibilities
Building Projects (BP)	Procurement/ Delivery	- Review and confirm the submitted BEP document against the requirements of the EIR. - Provide access to reference information and shared resources.
BIM Design Delivery Team LPSC	(Part 1,2A - 2B and 3 Completion Documents	- Development, coordination, and publishing of the BEP. - Confirmation and distribution of the model common reference point / origin to all team members. - Determine the project BIM georeferenced point(s) and monitor alignment of all discipline models to this point. - Coordinating team file management. - Define team responsibilities for provision of information at each project stage in alignment with the EIR. - Provide lead BIM Coordination for the Design Team to enable early integration and coordination of design models. - Provide the BIM Use applications and project deliverables with the assembly of federated 3D models for coordination meetings and stakeholder engagement. - Facilitating design coordination meetings with all the discipline BIM Coordinators. - Facilitating the use of federated 3D models for coordination and clash detection meetings providing clash resolution reports showing the identification and resolution of all physical 3D interferences (hard) and required clearances (soft) clashes. - Confirm that the design deliverables specified in the EIR are provided in the formats specified. - QA reviews of the integrity of the coordinated models (each discipline is also expected to conduct their own QA review of their discipline models prior to issue). - Provide BIM Status reports on the delivery and achievement of the BIM Objectives and deliverables of the DBEP at the milestone stages of the project. - Provide in addition to AutoCAD pdf and rvt drawing files provide the base authored 3D federated models for “reference only” - Review the Construction BEP against the DBEP and review record documents.
BIM Construction Delivery Team	Construction (Part 3)	- Development, coordination, and publishing of the Construction BEP and provide BIM Status Reports as part of all monthly construction reporting. - Confirmation and distribution of the model common reference point / origin to all team members. - Coordinating construction team file management. - Establishing standards and procedures for the delivery of BIM by the construction team including specialist subcontractors in line with the EIR. - Assembly of federated design /construction models for coordination meetings. - Facilitating the use of any trade models in construction phase clash detection / coordination meetings. - Monitoring compliance of trade models with the Construction BEP standard and EIR - Coordinating / facilitating the delivery of the as constructed BIM data by the construction team. - Facilitating communication between the Design Team and the construction team. - Confirm that the construction deliverables specified in the contract are provided in the formats specified. - Confirm that data outputs (schedules tables in O&M Manuals) have been validated and are complete. - QA reviews of coordinated /fabrication models for construction. - Provide Record Documents (as Built documents and any 3D fabrication models used for construction).
LPSC/Lead Agency	Completion/ Handover	Review the Project Information Model at Practical Completion and Handover.
BIM Lessons Learnt	Post Completion	All BIM Team members to participate in PCR survey and if required a Lesson Learnt Building information management lesson learnt workshop.

4.2 Information quality assurance

Information quality assurance requirements:

All information containers within the common data requirement are to be easily identified and located to enable reporting on the level of quality intended at each project milestone.

Information is to be suitably secured and protected against unauthorised access, information loss or corruption, degradation and where practicable, obsolescence.

The following Model QA checks will be carried out by the Design and Construction BIM Managers at the intervals noted.

Check	Definition	Responsible	Software	Frequency
EIR Compliance Check	Audit of DBEP compliance to the EIR	Design Team BIM Managers	N/A	Completion of each project stage critical milestone
Visual Review	Confirm there are no unintended model elements	Design Team BIM Managers	BIM Authoring	Ongoing and prior to data exchange
Standards check	Confirm BIM/CAD standards have been followed	All parties	BIM Authoring	Ongoing
Model integrity check	Confirm that BIM model has no undefined or incorrectly defined, duplicated elements	All parties	BIM Authoring	Ongoing and prior to information exchange
Interference check	General high-level review of model elements utilising design models to minimise clashes.	All parties	BIM coordination	Fortnightly, prior to information exchange
Cross Check	Review other consultants' models and advise on quality and clashes with own discipline in a timely manner.	Design Team BIM Managers	BIM Authoring	Following information exchange
Authoring software warnings	Review and minimise, warnings generated by the authoring software.	Model element author Task Team BIM Coordinators	BIM Authoring	Ongoing and prior to information exchange
Data Integrity Validation	Ensure parameters and coding used are consistent between disciplines to facilitate data extraction for schedules and reports.	Task Team BIM Coordinators	BIM Authoring	Ongoing and before data transfer
Data Security	Implement and maintain a Data Security Plan	All parties	N/A	Ongoing
EIR Compliance	High level audit of CBEP conformance.	Construction Team BIM Manager	N/A	Monthly review and Completion of Construction Phase

Quality assurance standards: In addition, to contract requirements, also conform to the standards documented in Technical, Standards and project reference information.

Technical, Standards and Project reference information.

Document title	Required /Recommended
AS ISO 19650:1 and 2: 2019 - Organization and Digitization of Information about Buildings – Concepts and Principles, Delivery Phase of the Assets	Required
ISO 19650:5:2020 - Organization and Digitization of Information about Buildings – Security-minded approach to information management	Recommended
BS EN ISO 8717:2021 Building Information Modelling – Level of Information Need Concepts and principles	Required
AS-NZS ISO 9001:2019 - Quality Management Systems - Requirements	Recommended
ISO/IEC 27001:2022 Information Security, Cybersecurity and Privacy protection – Information Security Management Systems - Requirements	Recommended

BIM Forum LOD Specification current published version (i.e. 20202 Part I 2022-12-31)	Required
ANZRS (Australian and New Zealand Revit Standards) Management	Recommended
BIM-MEP AUS - Services Content Standards	Recommended
DIT Building Projects Specification and Guide Notes	Required
NATSPEC National BIM Guide	Required
VBIS Classification - Services	Recommended
SAMIS Asset Data Standard	Required
SA Health Project Completion Requirements and Guide Notes	Required (for SA Health Projects only)
Australian Health Facility Guidelines BIM Requirements (AusHFG)	Required (for SA Health Projects only)

Edition and version of the above standards are the current published version.

4.3 Information security

Information security requirements:

All information generated during the project shall comply with ISO 19650-5 regarding information security requirements.

DIT minimum data security requirements are defined below and shall apply to all project stages:

- Protection of any commercially sensitive and/or personal data/information, as required, in compliance with ISO 19650:5:2020.
- Information to be shared within members of the delivery team only, unless delegated and approved by DIT with appropriate access controls established to ensure that only permitted users have access to view or edit data, and all digital platforms are secured by username and password meeting the Principal's information security requirements.
- All project communication and information exchanges to be conducted through the common data exchange (CDE).
- In performing the data requirements of the EIR that no part of the Data be corrupted, deleted, or subjected to unauthorised access or use and that no errors are introduced into the Data.
- All data to be stored in Cloud based services located in Australia with all project data managed within the digital engineering platforms must be appropriately backed-up, archived and recoverable in accordance with the Information Management requirements.

Data Security Plan:

- The LPSC and Contractor must establish, implement, and maintain a Data Security Plan for the management of requirements for the digital security of the Project. The Data Security must detail the project specific needs of confidentiality, integrity, and accessibility with the consequences of any loss or unauthorised release of the information.
- All project data managed within the digital engineering platforms must be appropriately backed-up, archived and recoverable in accordance with the Information Management requirements.

In addition to the above requirements a review of data security requirements must be in place at all critical milestone stages of the project.

Refer to [Using Cloud Systems | State Records of South Australia](#) for SA Government Cloud based systems requirements.

4.4 CDE management

CDE standards and procedures:

Schematic Design and Design Documentation stages:

- As the Lead Appointed Party, the LPSC is to establish, host and manage a Common Data Environment (CDE) as a software or online tool that facilitates the management and exchange of information in line with AS ISO 19650.

Early Works and Construction stages:

- The construction project Common Data Environment shall be hosted and managed by the Construction Contractor.

Throughout all phases of the project, the appointing party shall have access to view BIM information and data for review, BIM information (documents and data) is to be exported to the appropriate Asset Management software.

The CDE is to include the following base functional requirements:

- A diagrammatic representation of the information workflows internally within the lead appointed party environment linking to the appointing party CDE to be provided to demonstrate how the information exchange will occur.
- Permissions controls to allow access for different user groups.
- Approval and verification controls.
- Ability to archive information.
- Automatic notifications to aid collaborative CDE workflows.
- Ability for information containers to transition between states (WIP shared publishing and archive).
- Ability to configure enforceable naming rules to suit ISO 19650 and project's information standard.
- Ensure all information containers have a "unique ID" (file name) without duplication.
- Ability to configure and assign attributes (Status, Revision, Classification) to each information container to suit AS ISO 19650 and project's information standard.
- Provide an audit trail capture with automatic capture of user's name and date when information container transitions between states.
- Provide issuing and transmittals to issue information to stakeholders.
- Include a version control and check in checkout system.
- Capability to manage architecture, engineering, and construction software programs and file formats.
- Ability to integrate with other CDEs and business systems through direct integrations, with program interface and/or customisation.
- Security protections should be industry best practice in IT security: two factor authentication, data encryption, data recovery, and redundancy.

The Design Delivery BIM and Construction BIM Teams are encouraged to use electronic project collaboration tools such as document management and file sharing sites, reviewing tools, project communication websites, web meetings, and video conferencing.

Chosen authoring software / tools must have IFC 2x3 (or higher) export and import functionality and IFC format deliverables must be required at all major milestones, along with the native authoring software files.

4.5 Project meetings

It is a requirement of the EIR that there be constant collaboration and communication across all the BIM Design and Construction Teams.

Requirements: The meetings required by the appointing party are shown in the **Meetings schedule**

Meetings schedule.

Meeting type	Min Frequency	Purpose	Chairperson	Participants
BIM Design Team Meetings	2 weeks	BIM Coordination and workflows for Design Development, Documentation and BEP review	Design Team BIM Manager	Lead Agency, Design team, and DIT representative
BIM Construction coordination meetings	2 weeks	BIM Coordination and workflows for Design Development, Documentation and BEP review	Construction BIM Manager	Lead Agency, Design Team Construction Team BIM Managers and DIT representative
Information Management Workshops	4 weeks	Review data management and transfer for design and construction activities for integration at handover	Design Team BIM Manager	Lead Agency, Design Team Construction Team BIM Managers and DIT representative
Completion /Handover	At Practical Completion	Review project data transfer for Completion Documents, BIM federated 3D Models and asset information data	Design Team BIM Manager	Lead Agency, Design Team Construction Team BIM Managers and DIT representative
Post Construction	POE and PCR review. Online survey	BIM Lessons Learnt (included as part of the PCR review)	DIT BIM representative	Lead Agency, Design and Construction Team BIM Managers and DIT representatives

Communication and Collaboration Requirements

The LPSC and Contractor are expected to use electronic project communication software and tools (i.e. file sharing sites, reviewing, document management, shared review tools, web meetings and video conferencing) for communication and collaboration purposes to the BIM Team members and other stakeholders and Lead Agency representatives.

Record of Meetings

The Design Team BIM Manager is to keep written evidence and records of all design coordination meetings, issues raised and actions required as evidence that all outstanding issues have been resolved at the end of the documentation stage prior to construction. The use of BIM clash detection software and automated dashboards are to be used as a reference only and do not replace formal written reporting on the status of BIM deliverables.

4.6 BIM Execution Plans

The DBEP and CBEP shall be based on the format of the NATSPEC BEP Template [NATSPEC BIM Execution Plan \(BEP\) templates](#). The DBEP and CBEP should include specific responses to the EIR with cross referencing and any variation to the requirements of the EIR must be recorded within the DBEP and CBEP for approved by DIT BIM representative.

The lead appointed parties should advise the appointing party of any change to nominated project personnel, roles or responsibilities outlined in the BEP. Any such change will require a review and updated submission of the BEP.

The EIR identifies specific information to be included in the DBEP and CBEP.

The DBEP will cover but not be limited to the following:

- Project information (Lead Agency, Facility Name, project address/location, project description).
- Project stages (including modelling existing assets) and nominated start/end dates (schedule of BIM activities including milestones and submittals).
- Specify relevant industry and agree DIT asset data with the Lead Agency Asset/Facilities Manager which will be used in the execution of BIM for the project.
- Objectives and goals are aligned to DIT EIR with specific benefits realisation metrics defined.
- Specific uses of BIM aligned to this EIR for BIM deliverables and uses and nominate any further contractor uses of BIM.
- Identify the entire Delivery Team including all Appointed Parties, including proposed parties not yet appointed (contractor, steel fabricator etc).
- A high-level responsibility matrix (roles and responsibilities) of all BIM delivery team members.
- Processes of communicating to DIT the design, reviews and user group/stakeholder sign off.
- Communication and collaboration strategies between the Delivery Team and Construction Team (contractor), the BIM Manager and the DIT Project Manager.
- The overall Information delivery plan (i.e., Master Information Delivery Plan (MIDP) and Task Information Delivery Plans (TIDPS) will include what data will be authored, at what stage and in which system and any classification/asset data structures to be used and the electronic data management system (EDMS).
- Include a diagram illustrating the flow of all information (graphical and non-graphical) between all digital parties.
- Model development requirements (LOD is used, a LOD Matrix).
- Level of Information need requirements (LOIN) including any critical asset information requirements.
- Use of asset file hierarchy based on SAMIS asset coding, room, and naming conventions (nomenclature).
- The model sharing methodology as agreed between information managers/BIM Managers.
- The organisation of the Common Data Environment (CDE) and protocols for its use. Frequency of model exchanges, acceptable file formats for exchange and protocols for issuing models, (e.g. checks required prior to sharing). Include a diagram illustrating the flow of all information (graphical and non-graphical) between all digital systems.
- The proposed 3D BIM 'federation' strategy to be adopted for coordination and clash detection.
- Required elements, processes and management techniques required for coordination tasks.
- Methodology for quality assurance, data quality plan, and validation of BIM files, project wide.

- Schedule of software and hardware selections, file format, file exchange requirements, and ICT infrastructure proposed to be used.
- Clash detection categories, process, and requirements to comply with NATSPEC Delivery Team BEP Annex F - Class Detection Process and Requirements. While clashes can be assigned priorities it is expected that all physical and spatial clearances (i.e. safety, maintenance seismic) will be fully coordinated and resolved by the Design Delivery Team at the end of the Documentation Stage.
-

The CBEP will cover but not be limited to the following:

- Be based on the DBEP and updated to meet the BIM requirements for the construction phase of the project and include cross referencing to the BIM requirements of the EIR.
- The model sharing methodology as agreed between contractor and subcontractors for fabrication/shop drawing models, coordination and conflict detection process requirements.
- Include a diagram illustrating the flow of all information (graphical and non-graphical) between all digital parties.
- The organisation of the Common Data Environment (CDE) for Construction and protocols for its use. Frequency of model exchanges, acceptable file formats for exchange and protocols for issuing models, (e.g. checks required prior to sharing). Include a diagram illustrating the flow of all information (graphical and non-graphical) between all digital systems.
- Required elements, processes and management techniques required for coordination of construction tasks.
- Schedule of software and hardware selections, file format, file exchange requirements, and ICT infrastructure proposed to be used.
- Clash detection categories, process, and requirements to comply with NATSPEC Delivery Team BEP Annex F.-
- Methodology for quality assurance, data quality plan, and validation of BIM files for delivery of DIT project completion requirements for Practical Completion and Handover.

SECTION 5 – TECHNICAL

5.1 Software

Open standards: To facilitate the exchange of information between project team members and ensure the long-term access to project data, all model authoring software is required to be buildingSMART IFC 2x3 TC1 (2.3.0.1) or IFC 4 compliant and BCF (BIM Collaboration Format).

Non-IFC compliant software other than model authoring software: Where data needs to be exchanged between any non-IFC compliant software proposed for the project, demonstrate how data exchange will be achieved.

Proposed software: Alignment of software versions across the team is required to avoid compatibility issues and all software proposed for the project is to be clearly stated in the BEP.

Software compatibility testing: Prior to the mobilisation and startup of the BIM project teams for design and construction, test software for compatibility and demonstrate that the information exchanges between software proposed for the project can be achieved.

5.2 Software file formats

Open software file formats required by Building Projects and Lead Agencies (i.e. to be compatible with their systems) are included in the AIM and PIM deliverable format table. Determine the software required to deliver them during the development of the BIM Execution Plans (DBEP and CBEP).

Upgrades to subsequent versions of the software after commencement of the project will be subject to agreement by the project team and DIT Building Projects.

5.3 IT infrastructure

Requirement: Provide IT infrastructure for the project including hardware, network, communication, management, and support provisions including back-up systems in the event of disruptions.

IT capacity and performance: As required for the information delivery documented in the BIM Execution Plan.

5.4 Collaboration resources

Requirement: Provide collaboration resources necessary for the information delivery documented in the BIM Execution Plan.

5.5 Coordination facilities

Provision of coordination facilities: The LPSC will provide project coordination facilities including meeting room and video conferencing equipment.

5.6 Coordination

Requirement: Make sure all construction models have been spatially coordinated to eliminate all conflicts and clashes between model elements and information to eliminate contradictions and inconsistencies, and that all cross references are correct.

Coordination / Clash Detection requirements: In accordance with clash detection requirements of NATSPEC Delivery Team BEP template, Annex F. The objective of the clash detection process is to produce a federated model with all outstanding coordination and clash issues resolved prior to construction.

5.7 Model geographic location.

Requirement: Establish a Model Geo-reference Point before modelling commences. Align all models with the Model Geo-reference Point documented in the DBEP.

Site set-out point establishment procedure: The LPSC is to define the Model Geo-reference Point and Survey Point for the purpose of aligning construction set-out on site with the model.

Strategy for aligning models with the Model Geo-reference Point: The contractor shall confirm the Model Geo-reference Point and/or 3D grids provided to the LPSC prior to construction.

5.8 Asset identification

Note: Asset identification (i.e. QR codes) will be undertaken by separate contractors engaged by Across Government Facilities Management Agreement (AGFMA) with all assets will have a unique SAMIS code for the purpose of identification and to facilitate the cross referencing of information about assets in different information locations and formats.

5.9 Model object and property naming.

Open standards: To facilitate the reliable exchange of information, use buildingSMART Industry Foundation Classes (IFC) naming conventions for model objects and object properties.

Minimum requirements: Include the IFC designations IFC Element Type and Predefined Type in all model element objects.

5.10 Standard and project reference information

Standards and project reference information location: In accordance with AS ISO 19650:2, a single secure location for these resources is to be established as part of the electronic data management system (EDMS).

5.10.1 Information standards

Information for the project: Conform to the information standards and information management standards listed in the Project information standards directory.

Project information standards directory

Document title	Edition / version	Date
Building Projects Information and Management System	BPIMS update	Current edition

5.10.2 Information production methods and procedures

Information production for the project: Conform to the requirements of the documents listed in the Project information production methods and procedures directory.

Project information production methods and procedures directory

Document title	Edition / version	Date
Building Projects Electronic Documents (G65)	BPIMS update	Current edition
Building Projects Required Completion Documents for Building Projects (G178)	BPIMS update	Current edition
<i>Department of Health and Wellbeing (DWH) - SA Health Project Completion</i>	<i>DWH Capital Projects website</i>	<i>Current edition</i>

5.10.3 Reference information

Requirement: Take into consideration the information listed in the Project reference information directory when producing information for the project.

Project reference information directory

Document title	Edition / version	Date
Building Projects Project Brief and Guidenotes	BPIMS	Current
Lead Agency Requirements (i.e. as noted in the Project Brief documents)	Lead Agency current version	Current
SAMIS Asset Registers	SAMIS	Current
AS ISO 19650: Organisation of information and construction works - information management using building information modelling. Part 1: Concepts and Principles Part 2: Delivery phase of the assets.1&2	Standards Australia	Latest edition
Bim Forum LOD Specification	BIM Forum	Latest version

5.10.4 Shared resources

Requirement: Take into consideration, or use as directed, the resources listed in the **Project shared resources directory**.

Project shared resources directory.

Document title	Edition / version	Date
Building Projects Guidenotes Building Projects 2D/3D dwg/rvt title blocks and standard drawings.	BPIMS	Current
AusFHG BIM resources (SA Health Projects)	BIM Resources AusFHG (healthfacilityguidelines.com.au)	Current
Natspec BIM Portal and Properties Generator	NATSPEC BIM - NATSPEC BIM Properties Generator	Current

ANNEX A - REFERENCES AND ABBREVIATIONS

References

- Open BIM Object Standard (OBOS) NATSPEC & Masterspec NZ 2018
- ABAB Asset Information Requirements Guide ABAB 2018
- AS ISO 19650:2 BIM services; Organization of information about construction works — Information management using building information modelling.

Abbreviations

Abbreviation	Description	Reference
AGFMA	Across Government Facilities Management Arrangements	AGFMA - Department for Infrastructure and Transport - South Australia (dit.sa.gov.au)
AIM	Asset Information Model	NBG2022 Appendix A (natspec.org)
AIR	Asset Information Requirements	NBG2022 Appendix A (natspec.org)
AM	Asset Management	NBG2022 Appendix A (natspec.org)
AMS	Asset Management system	NBG2022 Appendix A (natspec.org)
AP	Appointing Party	NBG2022 Appendix A (natspec.org)
AusHFG	Australasian Health Facility Guidelines	AusHFG (healthfacilityguidelines.com.au)
BEP	BIM Execution Plan	NBG2022 Appendix A (natspec.org)
BIM	Building Information Modelling	NBG2022 Appendix A (natspec.org)
BPIMS	Building Project Information Management System	https://www.dit.sa.gov.au/building_projects
CDE	Common Data Environment	NBG2022 Appendix A (natspec.org)
C	Contractor (General Building /Main Contractor)	Building Projects Prequalification Application Guidelines
DIT/BP	Department of Infrastructure and Transport Building Projects	Building Projects systems and tenders - Department for Infrastructure and Transport - South Australia
DPSC	Discipline Professional Services Contractor	Building Projects Prequalification Application Guidelines
EIR	Exchange Information Requirements	NBG2022 Appendix A (natspec.org)
FMSP	Facility Management Service Provider	AGFMA - Department for Infrastructure and Transport - South Australia (dit.sa.gov.au)
IFC	Industry Foundation Classes	NBG2022 Appendix A (natspec.org)
LAP	Lead Appointed Party	NBG2022 Appendix A (natspec.org)
LOIN	Level of Information Need	NBG2022 Appendix A (natspec.org)
LOD	Level of Development	NBG2022 Appendix A (natspec.org)
LoI	Level of Information	NBG2022 Appendix A (natspec.org)
LPSC	Lead Professional Services Contractor	Building Projects Prequalification Application Guidelines
MIDP	Master Information Delivery Plan	NBG2022 Appendix A (natspec.org)
NATSPEC	National Building Specification	NBG2022 Appendix A (natspec.org)
OIR	Organisational Information Requirements	NBG2022 Appendix A (natspec.org)
PIM	Project Information Model	NBG2022 Appendix A (natspec.org)
PIR	Project information Requirements	NBG2022 Appendix A (natspec.org)
SAMIS	Strategic Asset Management Information System	<u>Buildings - Asset and Contract Documents - Department for Infrastructure and Transport - South Australia</u>
TIDP	Task Information Delivery plan	NBG2022 Appendix A (natspec.org)