Project BIM brief - XXX

This Project BIM Brief (PBB) defines council's requirements and expectations for the project with regard to BIM and the asset data contained within a BIM model

The document identifies BIM goals, uses, objectives, and responsibilities. It is an integral part of our procurement process and should be read in conjunction with our BIM Tender Evaluation and BIM specialist contract conditions.

We will work with the successful tenderer and their team to finalise a BIM execution plan which will provides the framework for management and operational functions of BIM throughout the asset's life cycle.

This project BIM brief follows the guidelines detailed in the New Zealand BIM handbook and CCC's requirements for asset management, facilities management and operations.

Prepared By	Company	Date
	Christchurch City Council	

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BIM Goals

Over the last several years Christchurch City Council (Council) have been embarking on the implementation of Building Information Modelling (BIM) processes and associated technologies to improve the collection and verification of asset data during design, construction and ongoing operation of its assets.

Christchurch City Council's BIM goal is to enable collaboration and provide structured information that creates value for all parties involved in the project. We intend to use the as built model and the asset data it contains to support the ongoing asset management, operations and maintenance of the XXX facility.

Project Goals

Goal description	How	BIM Uses
Optimisation of Design, improved stakeholder engagement	Use the 3D model as a visual tool for cross discipline collaboration and communication with CCC and key stakeholders	Design authoring Design Review Phase Planning
Respect to overall project Value and budget control	Reduced errors and rework through improved design and construction coordination	Cost estimation Design authoring Design review 3D coordination
Support safety in Design	Safety in design and HAZOP reviews using the 3D model as a visual aid	Design review
Optimised handover, improved O&M	A digital As Built model at handover that includes verified asset information to councils CSS/IDS As Built requirements.	Model review and updates during construction

BIM Scope

- Includes completion of a BIM execution plan and compliance with all of the elements included in that plan with a particular focus on cross discipline coordination and collaboration across the complete project lifecycle from design through construction and handover to project closure

BIM Deliverables

A staged approach is taken in the delivery of BIM outputs on a project. The five key deliverables are

Stage 1 RFP respondents complete Specialist Conditions Checklist for evaluation by CCC

Stage 2 Lead Consultant reviews and finalises BIM execution plan (BEP) based on the CCC template in conjunction with CCC representatives

Stage 3 An integrated 3D model in IFC format is populated with asset data and information during Design stages and completed "For Construction"

- Provide a model in a cloud hosted environment for review and validation by design teams and CCC or engagement with key stakeholders.
- An integrated 3D model in IFC format of the plant, process, services, architectural and structural elements on site.
- Asset data and relevant documentation attached to the building, plant and components
- A model that will enable model elements to be populated with asset data in subsequent project phases
- A model that will enable linking of P&ID's and O&M documents to model elements in subsequent project phases.

Stage 4 An integrated 3D Model is updated with asset data and construction changes during construction and enable linking of P&ID's and O&M documents to model elements

Stage 5 The As Built 3 Dimensional BIM model in IFC format containing a complete set of asset data to the level of development (LOD) outlined in the BEP and containing the attributes prescribed in CCC's As Built requirements - (CAT) and specifications.

BIM Competency Expectations

BIM Use	Responsible Parties	Demonstrated Competencies within Consultant, Design and Contracting teams	Value to CCC
Design authoring	Arch, Struct, MEP, Fire, Civil	• Ability to create and develop a Building Information model • Design and construction experience	High
Design Review	Arch, Struct, MEP, Fire ,Civil	• Ability to manipulate, navigate and review a 3 D model • Strong understanding of how building/facility systems integrate	High
3D coordination	Arch, Struct, MEP, Fire, Civil	• Ability to manipulate, navigate and review a 3 D model • Ability to run clash detection software • Strong understanding of how building/facility systems integrate	High
Cost Estimation	QS, Construct, Arch, Struct, MEP, Fire, Civil	• Ability to identify quantities for the appropriate estimating level upfront • Ability to adjust a cost plan to suit data available in the model over the duration of the design phase	High
Model Navigation and Updates	Construction contractors	• Ability to manipulate navigate and review a 3D model • Ability to use BIM application for construction updates • Ability to communicate effectively between design construction and CCC's project teams	High
Phase Planning	Construction contractors	• Knowledge of utilising BIM in construction programming and coordination during construction.	High

Common Data Environment (CDE)

Council will work with the lead designer to agree the use of a CDE that functions as a digital hub for project stakeholders to collect, manage, and disseminate relevant approved project information in a managed environment. Information includes building information models, drawings, reports, and other project-related information.

Key Roles and Responsibilities

Lead Consultant BIM Manager

The Lead Consultant responsibilities are to facilitate the delivery of BIM goals for the project. This includes but is not limited to

- Developing and workshopping this BEP with project participants
- Facilitating the use of the BEP by all project participants
- Coordination and Validation of models received from Project participants
- Facilitating data transfer
- Verifying that models are fit for purpose for quantity take off and Quantity Surveying purposes
- Clash detection, clash resolution, clash reporting
- Validation and audit of Federated model
- Communicating issues back to project participants
- Chair design model management and coordination meetings

Construction Lead BIM Manager

The Construction Lead's responsibilities are to facilitate the delivery of BIM goals for the project. This includes but is not limited to

- Coordination and collaboration with the Lead Consultant BIM Manager and other project participants
- Facilitating the use of the BEP by all project participants
- Coordination and Validation of model updates received from project participants
- Facilitating data transfer
- Clash detection, clash resolution, clash reporting
- Validation and audit of federated model
- Communicating issues back to project participants
- Chair construction model management and coordination meetings

Key Project BIM Contacts

It is expected that the BIM aspects of the project will be overseen by the following team

Role	Company Name
CCC Project Manager	Christchurch City Council
CCC BIM Advisor (3Waters, Facilities, Parks specific)	Christchurch City Council
Lead Consultant	
Lead Consultant BIM Manager	
Lead Contractor	
Lead Contractor BIM Manager	