

BIM Specialist Conditions For EOI/ RFP/Tender Evaluation

CCC intends to integrate BIM into projects to assist the resolution of project challenges before they become issues, to de-risk the project and enhance delivery of the design, construction, handover and operational phases. The building model will be contributed to by all consultants and the contractor, but owned by CCC. At the conclusion of construction the model will be used by the operational teams to support the ongoing operation of the facility.

Collaborative Project Delivery

CCC has also identified that BIM integration and the use of a federated BIM model will support collaboration across design disciplines and specialist construction contractors. CCC recognises the change management aspect that may be required to drive meaningful collaboration and that there is likely to be a requirement for facilitated workshops and health checks at various points in the project.

The key to BIM success, and indeed project success, is building a team that can work collaboratively.

The key elements of CCC's contract requirements and conditions in relation to BIM are outlined below:

1. The Lead Design team is responsible for the BIM Execution Plan (BEP) following the NZIQS /NZIA Best Practice Guidelines and BIM NZ Handbook.
(Note: CCC also recognises the international BIM standards PAS 1192 / ISO 19650)
2. BIM information must be freely available; no disclaimers that the model cannot be used for anything.
3. The Council will not accept Disclaimers that restrict collaboration and the re-use of information on BIM models for this project.
4. Use of virtual reality to assist the visualisation of the building to stakeholders who do not have a detailed construction knowledge; this has been particularly challenging in previous projects and CCC wish to maximise the potential BIM offers in this area.
5. 2D drawings shall be cut from the 3D model, with no separate 'detail drawings' being produced outside of the authoring tool (noted that the use of sketches is often necessary during construction to enable timely responses to RFIs; this is acceptable subject to the same information being confirmed in a suitable format for integration into the model within 5 working days)
6. The consultants' federated / collaborated / co-ordinated 3D BIM model(s) are to be part of the Tender Documents.
7. That asset information developed in the design and construction phases of the project can be incorporated into the Council Asset Management Information System, SAP.
8. BIM is expected to be used to support the management of the projects Safety in Design (SiD) obligations.
9. Regular design clash detection and design coordination reviews; minimum requirements for each project phase will need to be developed
10. Enhanced process for the accurate capture of as-built information via; photographs, 3D photography and laser scanning.

Specialist Conditions

These specialist conditions cover the subject matter of BIM. Responses should be compiled on a separate sheet and will be evaluated and scored on each of the following areas relating to BIM.

BIM Evaluation Category	BIM Evaluation Item	Response Included Y/N
General		
Intellectual Property	Sharing of BIM models project files and associated IP are shared and allowed for.	
Communication	There is clear communication from the respondent regarding their approach to the BIM Brief and proposal relating to BIM	
RFP requirements	All briefed requirements are met, overall impression	
Experience delivering a federated BIM model	Case Study Evidence (to be provided on a separate sheet.	
Case Study	Project details clear	
Case Study	Details of Project team provided	
Case Study	What was the purpose of the project	
Case Study	What value was added?	
Case Study	What collaboration occurred?	
Case Study	How was the model shared with key stakeholders?	
Case Study	What was scope of services for the BIM Manager/BIM lead carried out	
Case Study	How was independence and quality assurance achieved?	
Case Study	How was the model novated to the contractor?	
BIM EXECUTION PLAN	What is the approach to each section of the BEP?	
CCC requirements	Have CCC uses of the BIM model been accounted for and allowed for in response	
	Have CCC nominated data exchange formats been applied	
	Is there a strategy for stakeholder engagement and communication using the BIM model?	
Safety in Design Requirements	How does the BIM model incorporate Safety in Design	
Quality Assurance	What is the strategy for providing Quality Assurance to the BIM model	
Collaboration/Coordination	Are Roles and responsibilities clearly defined?	
	What provision has been made for:	
	<ul style="list-style-type: none"> • Common data environment strategy 	
	<ul style="list-style-type: none"> • Collaboration strategy 	
	<ul style="list-style-type: none"> • Coordination strategy 	
	<ul style="list-style-type: none"> • Reporting strategy 	
	<ul style="list-style-type: none"> • Coordination meetings 	
	<ul style="list-style-type: none"> • Model exchange process 	

Working with non-designers	Ownership of the Model and process post design has been covered	
	Methodology for Live model sharing with non-design team defined	
	A Strategy for Model use by downstream suppliers and the asset owner has been defined	
	Digital set out explained	
Modelling Strategy	Detail of Model element and Level of Design(LOD) strategy for each discipline is clear	
	Model Content Plan (including any QS integration)is in place.	
	Passive fire BIM strategy	
	Seismic engineering BIM strategy	
	Penetration location strategy	
	Secondary Steel	
	Arch BIM allowed for	
	Strt BIM allowed for	
	Mech BIM allowed for	
	Elec BIM allowed for	
	Hydr BIM allowed for	
	Fire Active BIM allowed for	
	Civil BIM allowed	
	Landscaping BIM allowed for	
	Rooms and Spaces	
	BIM deliverables at design stage strategy	
As Built and Metadata		
	A strategy is in place to provide support the built model.	
	There is a strategy to ensure asset meta data (SAP) Integration with the model.	
	A strategy is in place to integrate the O&M manuals with the BIM model	
Personnel and Team - BIM		
Include BIM capability and competence for the relevant members of the project team.	BIM Manager	
	Arch BIM Lead	
	Strct BIM Lead	
	Mech BIM Lead	
	Elec BIM Lead	
	Hydr BIM Lead	
	Fire BIM Lead	
	Civil BIM Lead	
	Landscaping BIM Lead	