

# Design and documentation stage

# Standard

QH-IMP-374-4:2015

## 1. Statement

The management of a capital infrastructure project undertaken on behalf of the Department of Health requires the establishment of a project environment which includes the completion of the full design for the new infrastructure and documentation required for construction to ensure each stage of a project is in accordance with legislation, whole-of-government policy and the principles of business, planning and project management.

## 2. Scope

Compliance with the requirements in this standard is mandatory.

This standard applies to all employees, contractors and consultants within the Department of Health divisions and commercialised business units.

This standard can be used by Hospital and Health Services either as is, by re-branding or as a base for a Hospital and Health Service specific policy.

## 3. Principles

Compliance with this standard will ensure the planning and delivery of capital projects are based on sound business, planning and project management principles.

## 4. Requirements

### 4.1 Criteria for design and documentation stage

- 4.1.1 During the design and documentation stage, the Project Director shall oversee the completion of:
- a Schematic Design Report
  - a Developed Design Report
  - contract documentation
  - planning approval to develop the site for a capital infrastructure project
  - the Building Performance Evaluation Mid-project Evaluation Sheet at project hold points.
- 4.1.2 Throughout the design and documentation stage the Project Director shall ensure continued governance of the project through:
- the Project Steering Committee, with user representatives of the new or redeveloped space informing the design development and review for that space
  - review and implementation of the established Community Engagement Plan
  - review and monitoring of the established Risk Management Register with strategies to reduce, mitigate and/or manage project risks
  - review and implementation of the established Change Management Plan
  - the application of quality management activities, utilising tools and strategies that demonstrate and facilitate achievement of defined objectives, standards, codes and

legislation, e.g. Capital Infrastructure Requirements, Engineering Review, Design Review.

- 4.1.3 The project business case will be finalised by the business area with contribution from the capital infrastructure delivery project team, following completion of the Schematic Design Report.
- 4.1.4 The Project Director shall update the Capital Project Implementation Plan at each stage (i.e. Schematic Design, Developed Design and Contract Documentation), with documentation of further detail around planned strategies. The updated CPIP shall be endorsed by the Project Steering Committee and approved by the relevant Chief Executive, Hospital and Health Service or delegate and Executive Director, Capital Projects Unit, Health Infrastructure Branch.
- 4.1.5 The Project Director shall seek endorsement of the Schematic Design Report and Developed Design Report from the Project Steering Committee and approval from, at a minimum, the relevant Chief Executive, Hospital and Health Service, and the Chief Health Infrastructure Officer, Health Infrastructure Branch.

## 4.2 Schematic Design Report

The Project Director shall ensure a Schematic Design Report is prepared that translates the Project Definition Plan (PDP) into floor plans and elevations. The architectural and engineering standards and scope components shall be incorporated into the design to achieve the intent of the PDP.

- 4.2.1 The Project Director shall ensure that, at a minimum, the Schematic Design Report includes:
  - floor plans and elevations, plus staging plans
  - demonstrated compliance with building regulations and policy requirements
  - schedule of furniture, fittings and equipment requirements
  - communication and infrastructure requirements including logical design report and associated bill of materials, technical assurance approval, delivery program and cost estimate category 3 confidence level, as per the Capital Works Management Framework Estimate Categories and Confidence Levels
  - a register of departures including rationale from the Australasian Health Facility Guidelines spatial requirements
  - completion of Capital Infrastructure Requirements Schematic Design checklists with a register of departures including rationale from the Capital Infrastructure Requirements
  - a register of assumptions underlying the Schematic Design Report, plus inclusion of their cost in the cost estimate
  - summary of main risks from the Project Risk Register
  - program, scope and cost estimate alignment with government objectives and benefits identified for the project
  - land and site planning requirements including development approval
  - completed Building Performance Evaluation Mid-project Evaluation sheet.
- 4.2.2 The Project Director shall ensure that a design review and an engineering review are undertaken to demonstrate:
  - alignment with Capital Infrastructure Requirements including the design and performance requirements, as outlined in the Functional Design Brief in the PDP report
  - compliance with the architectural and engineering requirements through the utilisation of the Schematic Design checklists in the Capital Infrastructure Requirements
  - alignment with project objectives including scope, budget and timeframe
  - analysis of options for design and engineering services to ensure value-for-money for the project and during lifecycle of the infrastructure.

## 4.3 Developed Design Report

- 4.3.1 The Project Director shall ensure the Developed Design Report builds on the Schematic Design with more detailed site plans, floor plans, ceiling plans, elevations, room details (Room Data Sheets) and engineering plans.
- 4.3.2 The Project Director shall ensure that, as a minimum, the Developed Design Report includes:
- site plans identifying the site development and staging; civil works and landscaping; floor plans; ceiling plans; sections and elevations; and room layouts, identifying equipment and furniture, materials and finishes, construction details, layouts for mechanical, electrical, communications, hydraulic and fire services
  - communication and infrastructure requirements including physical logical design report and associated bill of materials, technical assurance approval, delivery program, procurement program and cost estimate category 4 confidence level, as per the Capital Works Management Framework Estimate Categories and Confidence Levels
  - a single prioritised and categorised data set of furniture, fittings and equipment deliverables for each room with quantity and cost
  - completion of Capital Infrastructure Requirements Developed Design checklists with a register of departures including rationale from the Capital Infrastructure Requirements
  - a register of assumptions underlying the Developed Design Report, plus inclusion of their cost in the cost estimate
  - demonstrated compliance with building regulations and policy requirements
  - a documented strategy for commissioning
  - summary of main risks from the Project Risk Register
  - program, scope and cost estimate alignment with government objectives and benefits identified for the project.
- 4.3.3 The Project Director shall ensure a design review and an engineering review are undertaken to demonstrate:
- analysis of options for design and engineering services including value-for-money, including for lifecycle management
  - compliance with building regulations
  - functionality for the purpose
  - alignment with project objectives including scope, budget and timeframe
  - compliance with the architectural and engineering requirements through utilisation of the Developed Design checklists in the Capital Infrastructure Requirements.
- 4.3.3 The relevant Chief Executive, Hospital and Health Service or delegate should, during the Developed Design stage, commence activities to prepare for the commissioning process – Commissioning and Finalisation Standard.
- 4.3.4 The Project Director shall update the Capital Project Implementation Plan to include, at a minimum, the strategy to manage design changes during the Developed Design Stage.

## 4.4 Contract Documentation

- 4.4.1 The Project Director shall ensure that, at a minimum, the Contract Documentation includes:
- a complete set of drawings and specifications required to define and build the facility, as outlined in the Developed Design Report
  - a cost estimate at a Category 5 confidence level as per the Queensland Government, Capital Works Management Framework Estimate Categories and Confidence Levels

- written confirmation by the Project Manager, Procurement Manager and Principal Consultant that the required contract documentation for the tender process is current and complete, plus compliance with Capital Infrastructure Requirements.
- 4.4.2 The relevant Chief Executive, Hospital and Health Service, and the Chief Health Infrastructure Officer, Health Infrastructure Branch shall approval the pre-tender documentation by. The Information and Communication Technology Project Manager shall arrange completion of documented specifications, and provides a cost estimate Category 5 confidence level as per the Capital Works Management Framework Estimate Categories and Confidence Levels.

## 5. Related legislation and documents

Relevant legislation and associated documentation includes, but is not limited to, the following:

### Department of Health:

- Financial management practice Policy and Manual
- Governance and management of capital infrastructure program and projects Policy
- Integrated risk management Policy

### Other:

- Department of Housing and Public Works 2012, Capital Works Management Framework
- Department of Infrastructure and Planning 2010, Project Assurance Framework
- Department of Queensland Treasury and Trade 2008. Value for Money Framework
- Department of Housing and Public Works 2013, Queensland Procurement Policy
- *Financial Accountability Act 2009* (Qld)
- Financial Performance Management Standard 2009 (Qld)
- *Queensland Industry Participation Policy Act 2011* (Qld)
- Queensland Government Workplace Relations Management Policy
- *Sustainable Planning Act 2009* (Qld)

## 6. Definitions

Term	Definition
Building Performance Evaluation	BPE supports benefits management and realisation for capital projects. This methodology facilitates comprehensive evaluation of design and performance outcomes throughout the process of planning and delivery of capital infrastructure to ensure benefits outlined in the business case are enabled and realised.
Business	The Business is the relevant Hospital and Health Service or Division.
Business Case	A Business Case provides a substantiated argument for the proposed project and includes analysis and justification for the scope and delivery options to provide best value for the funds requested.
Capital Works Management Framework (CWMF)	The CWMF is the Queensland government's key policy for managing risks in the planning and delivery of government building projects. It identifies the major risk areas and sets out the steps that must be taken to manage those risks. The CWMF gives effect to the whole-of-Government Prequalification (PQC) System for building industry consultants and contractors seeking to undertake government building projects.
Functional Design Brief	The Functional Design Brief includes: <ul style="list-style-type: none"> <li>• description of the models for clinical and operational service delivery</li> <li>• summary of the functional space requirements defined at the completion of health service and infrastructure planning</li> <li>• specific design and performance information which relates to the project site and building requirements.</li> </ul>
Governance	The functions, responsibilities, processes and procedures that define how a program/project is set up, managed and controlled.
Governance and management of capital infrastructure program and projects Policy	The intent of the policy is to establish a consistent statewide approach to all health service planning and capital infrastructure program/projects.
Major Capital Works	Major capital works are capital works that: <ul style="list-style-type: none"> <li>• are structural works of a building; or</li> <li>• involve alterations to the building envelope; or</li> <li>• result in additional recurrent operational expenditure; or</li> <li>• result in the need for regulatory compliance certification of the building structure or with building service standards, including building and information technology standards.</li> </ul>

## Version Control

Version No.	Date	Comments
Version 1.0	20 June 2012	New Implementation Standard
Version 2.0	5 May 2015	Policy Rationalisation Project Review – this policy document does not include references to the Investment Management Framework as this framework has not been endorsed at this point in time.