SECTION C2 - PROJECT SPECIFIC INFORMATION

PROJECT STAGES

The Project will be delivered by altering procurement methodologies. These may include;

- AS2124 with the DEPW's Special Conditions of Contract and Annexure.
- AS4300 with DEPW's Special Conditions of Contract and Annexure
- Early Contractor Involvement

The commission will be extended on a stage-by-stage basis, at the sole discretion of the Client. The Client is not obliged to proceed with any stage past Concept Design. This is further clarified in the scope of services.

The Consultant is responsible for obtaining written approval of completed Deliverables for each stage from the Client and written approval to proceed to the next stage. Notwithstanding, the commission for the Consultant and subconsultant team is anticipated to include the following stages:

- (a) CD Concept Design;
- (b) SD Schematic Design;
- (c) DD Design Development;
- (d) CD Contract (Construction) Documentation;
- (e) TE Tender;
- (f) CN Construction; and
- (g) PC Post-construction (Defects Liability Period).

2. PROJECT BACKGROUND

The Building Rural and Remote Health Program (BRRHP) – Phase 2c of works will deliver a suite of standardised health care facilities to 31 regional sites across Queensland.

It has been identified that poor quality of health facilities in rural sites is compromising patient and staff experiences and the application of contemporary models of care. Contributing to the poor condition of the facilities is the age of the buildings. This results in multiple issues both operationally and financially.

In 2013 and 2014 the Department of Health undertook the Community Hospitals Program to improve health facilities in rural and remote areas. In 2020 a preliminary business case was developed which focused on developing the earlier work in rural healthcare facilities. Developing a solution of asset condition-based upgrades at regional sites, to ultimately inform the development of a long-term strategic infrastructure delivery partnership to deliver excellence in rural and remote health care facilities.

In 2020, the Department of Health initiated a detailed business case (DBC) to address the issues of aged healthcare facilities across regional sites. Market sounding feedback in 2022 suggested regional bundling for the program. Therefore, the decision was made to bundle these sites together as a program of works under the Building Rural and Remote Health Program (BRRHP). This also allowed the inclusion of the adjacent Staff Accommodation Program to fall under the same program. This has been referred to as Phase 1 of the program and required GIC approval.

Following the identification of an initial 5 sites, an additional 26 sites were captured within Phase 2 and funded centrally through Sustaining Capital. This included additional Staff Accommodation Sites. This tranche of works being Phase 2c which will cover 19 sites in total. Of those, 9 sites are located within the Southern region forming part of this project. Of these sites, 6 remain to be announced.

3. PROJECT SCOPE

The Southern Queensland scope for the development is generally as described in the table below:

Ite m	Site	Scope	Estimated Construction Value (ex GST)
1	Chinchilla Hospital	Replacement	\$35M
2	Nanango Hospital	Replacement	\$18M
3	Jandowae Hospital *	Refurbishment	\$7.5M
4	Cherbourg Hospital	Replacement	\$24M
5	Texas Multipurpose Health Service	Refurbishment	\$12.5M
6	Murgon Hospital	Refurbishment	\$18.5M
7	Laidley Hospital *	Refurbishment/Expansion	\$36.5M
8	Boonah Hospital *	Refurbishment/Expansion	\$33M
9	Childers Multipurpose Health Service	Refurbishment/Expansion	\$20M

^{*}Announced sitest

4. PROJECT DOCUMENTATION

The following provides an overview of the current status of project specific documentation. This is not an exhaustive list of documents and it remains the responsibility of the consultant to ensure all relevant project information is obtained to satisfy the scope of service and the project deliverable.

Document	Status	Responsible	
Program Management Plan	In Use	Client	
Clinical Planning and Service In Development CPSSD Strategy Site Report			
Master Plan	Complete	Client	

5. OBJECTIVES & PLANNING PRINCIPLES

The key project objectives are to:

- Improve the health and equity of Queenslanders living in rural and remote Queensland
- Support people living in rural and remote Queensland to access a sustainable configuration of health services
- Plan and operationalise locally determined health services that better meet the health needs of rural and remote communities.

6. PROJECT BUDGET

The estimated construction cost is noted in Section 3 Project Scope. This figure excludes non-contract works such as professional fees, statutory fees and charges, relocation and decanting costs, loose Furniture, Fixtures & Equipment (FF&E) and Queensland Health costs. It also excludes the Transition Accommodation and Hospital and Health Service Main Offices.

7. PROJECT PROGRAM

The Project is to be completed in the shortest possible timeframe in accordance with the indicative milestone dates below. The Consultant should note the following indicative milestone dates:

Page 18

Key Project Milestone	Duration	Target Completion Date	
Letter of Acceptance		Early December 2023	
Sketch Planning	10 weeks	February 2024	
Concept Design	4 months	April 2024	
Ministerial Announcement	Unknown*	Unknown*	

Version 10.0

Key Project Milestone	Duration	Target Completion Date	
Schematic Design	12 weeks	TBC*	
Design Development	12 weeks	TBC*	
Contract Documentation, incl. Tender documents	8 weeks	TBC*	
Tender, Evaluation and Award	4 weeks	TBC*	
Construction	52 weeks	TBC*	
Post Construction	52 weeks	TBC*	

^{*}Key milestone dates and durations to be determined during Concept Design execution. The anticipated completion for the program of works is mid-2029

*The Duration timeframes listed in the above table are for the purpose of providing a response to this Request for Offer and are subject to change following the completion of this Scope of Services.

8. PROJECT ROLE DEFINITIONS

Queensland Health key roles include:

- (a) Program Management Office Procurement (PMOP) who will:
 - (i) act as Procurement Manager for engaging the Consultant and building contractor; and
 - (ii) input into selection of the Consultant and Sub-consultants.
- (b) Department of Health (DoH)/Client, who will:
 - (i) manage budget transfers and contingency expenditure;
 - (ii) approve Consultant Fees, variations and acceptance of construction tender;
 - (iii) manage all Government reporting requirements including Treasury briefing and cash flows and general briefings;
 - (iv) ensure defined protocols for control and management of the Project align with Queensland Health and Government requirements;
 - (v) provide financial and procurement approvals in accordance with delegations;
 - (vi) ensure appropriate governance in all facets of project delivery is maintained;
 - (vii) resolve any escalated matters or risks;
 - (viii) provide detailed written briefs for change proposals; and
 - (ix) manage the operational commissioning of completed portions of work to enable smooth transition of staff and operations (construction commissioning by others).
 - (x) seek approval of project funding;
 - (xi) communicate project details to internal and external stakeholders;
 - (xii) coordinate User Group requirements from within its organisation and sign-off design work when requested;
 - (xiii) prepare equipment transfer strategy and program. Procure Group 2 and 3 FF&E in line with budget and construction program requirements;
 - (xiv) maintain service delivery to existing facilities throughout the planning and construction stages; and

(xv) manage any reasonably required decants in order that construction works are performed as efficiently as possible.

The table below identifies the different roles and companies to be involved in the Project.

Role	Entity	Key Roles (not limited to)		
Client	DoH	Means the person identified in Item 1 of the Annexure Part A to the Contract.		
Project Director	DoH	The Project Director is the Client's delegate responsible for overseeing and directing the activities of all Parties to the Project. The Project Manager (PM) will liaise with the Project Director on matters of architectural merit and matters of technical judgement and is responsible to the Project Director for performance of the Project under the contract.		
Procurement Manager Department of Health, Manager Client risk related to the procurement of the Consu contractor. The procurement role includes the: selection of professional consultants; calling require selecting tenderers from the PQC system; it the QTender system; reviewing tenders; undertaking		Manages the interface between the public and private sectors to minimise Client risk related to the procurement of the Consultant and building contractor. The procurement role includes the: selecting and commissioning of professional consultants; calling of tenders which may require selecting tenderers from the PQC system; inviting tenders through the QTender system; reviewing tenders; undertaking financial capacity assessment and obtaining QBCC approval; and making recommendations.		
Project Manager (PM)	External Consultant (Part of PM's Commission)	To provide project management services in the delivery of the Project. The PM is ultimately responsible for the overall delivery of all aspects of the Project within the time, cost, and quality constraints imposed by the Client. The PM is the Client's representative who has responsibility to ensure satisfactory performance and delivery of the Project under the commission. The PM is responsible for overseeing and directing the activities of all Parties on the Project. These services are being procured concurrently to the Principal Consultant tender. For sake of clarity, the Principal Consultant services will be commissioned by DoH but will report to the Project Manager,		
Programmer	Programmer Part of PM's Commission The person or firm engaged to provide specialist program establish and maintain project program, and to update, mon project status against the program milestones.			
Superintendent	The person who, as an agent of the Client, honestly and fai the Superintendent functions described in the building contribution. The Superintendent cannot be the same individual as the P			
Superintendent's Representative (SR)	Part of PM's Commission	The SR is appointed by the Superintendent in respect of the building contract to exercise the functions of the Superintendent on behalf of the Superintendent.		
Surveyor Secondary Consultant The QS will undertake cost planning and cost manager		The firm appointed by the Client to provide quantity surveying services. The QS will undertake cost planning and cost management of the Project; undertake studies and value management; and generally ensure that the		

Role	Entity	Key Roles (not limited to)	
		Client's financial interests in respect of this Project are protected and that value-for-money is obtained at a reasonable cost.	
Principal Consultant /		The firm commissioned by the Client to deliver the design documentation for the Project. The Consultant will also commission, engage and coordinate the activities of design Sub-consultants.	
Architect (PC)	hitect (PC) External Consultant	The Consultant will be responsible for undertaking and managing all of the design and documentation including coordinating the work of all Secondary Consultants and Sub-consultants in accordance with the brief and to the benefit of the Project overall.	

9. MANAGEMENT GROUPS

Management of the project will use, amongst other things, a structured series of meetings and formal status
reporting on time, cost and design issues. Two committees have been established and are charged with the overall
management and direction of the Project namely the Project Steering Committee and the Project Control Group.
The planned meeting structure is as follows:

9.1 Project Steering Committee

- 1. The Project Steering Committee (PSC) provides strategic direction and policy decision-making for the Project. The PSC is responsible for resolving scope and operating issues and addressing potential budget overruns.
- 1. The PSC should operate on a consensus basis and considers all aspects of the Project including change management and commissioning. The Client's accountable officer/s for implementation of the infrastructure works, will, after liaising with HHS Chief Executive if necessary, rule on any contentious issues.
- 1. The PSC will meet monthly as a minimum, for all stages of the commission until 3 months after Practical Completion. The PSC will be held remotely to:
 - (a) establish overall policies and strategies for the project;
 - (b) receive reports on design, progress and costs;
 - (c) discuss and resolve significant, broader issues;
 - (d) give executive direction to the Project;
- 1. The PSC will be chaired by the DoH (or nominated delegate) and will have the following as members:
 - (e) the Client's Executive General Manager;
 - (f) HHS Chief Executive (as required)
 - (g) HHS Executive Director, Nursing & Midwifery Services;
 - (h) HHS Executive Director, Medical Services:
 - (i) HHS Executive Director, Primary Health Care
 - (j) HHS Executive Director Corporate Services;
 - (k) HHS Director of Infrastructure
 - (I) the Client's project team representatives;
 - (m) Project Director; and
 - (n) others on an as needed basis.

1. The responsibility for the related administration (agendas, reports, minutes, etc.) for PSC meetings rests with the PM.

9.2 Project Control Group

- 1. The Project Control Group (PCG) provides approvals, acceptances, directions and decisions pertaining to design and coordination issues. Any issues related to budget and scope will be referred to the PSC. The PCG will ensure decisions of the PSC are implemented. The PCG will meet monthly as a minimum, for all stages of the commission until 3 months after Practical Completion. It is preferred that consultants attend this meeting in person. The PCG will be held remotely. Participants an attend via Video conferencing or tele conferencing medias. The PCG will meet to:
 - (a) implement the directions of the PSC; and
 - (b) receive reports on design, progress and cost and to discuss and resolve budget, programming and other issues that may impact on the completion of the project (the PCG will provide more detailed direction on all aspects of the project).
- 1. The PCG meetings will be chaired by the Client and will have the following as members:
 - (c) Project Director (Chair);
 - (d) the Client's project team representatives;
 - (e) senior representatives from the HHS services of Nursing & Midwifery, Medical Services, Primary Health Care;
 - (f) Other HHS stakeholders as required;
 - (g) PM (agenda & minutes);
 - (h) the Consultant;
 - (i) QS; and
 - (j) Other consultants as required.

9.3 OTHER MANAGEMENT MEETINGS

Design Team Meetings will be held on a fortnightly (minimum) basis during the design phases of the Project and will be chaired and minuted by the Consultant. The PM is required to attend this meeting in on site or via video/teleconference for non-site based members.

- (a) User Group Meetings will be held on a fortnightly basis during the design stages of the Project and will be chaired and minuted by the Consultant and attended by the PM. Sub-consultants and Secondary Consultants will attend as required. These meetings will be on site or via video/teleconference for nonsite based members.
- (b) Consultants shall allow for three site meetings to all sites during design stage and will be chaired and minuted by the Consultant. The Consultant is required to attend these meetings.
- (c) Site Meetings will be held on a monthly basis during the construction stage. The first meeting will be chaired and minuted by the Superintendent's Representative and the remainder by the Contractor. The purpose of the meeting is to discuss contractual issues and resolve or seek direction on significant design coordination issues. These meetings are to be held on site and will be attended by the Contractor, the PM/SR, the Project Director, the Consultant and Sub-consultants as required.
- (d) Site Liaison meetings will be held on a fortnightly basis during construction. The meeting will be attended by a representative of the Client and the Contractor to allow a fortnightly look ahead for construction activities and planned service interruptions. These meetings are to be held on site or via video/teleconference for non-site based members.

Minutes for all meetings must be distributed within 3 working days of the meeting.

10. COMMUNICATION

Communication management is the process required to ensure timely and appropriate generation, collection, distribution, storage and ultimately disposal of project information. It provides the critical links between project team members for the dissemination of ideas and information that are necessary for the success of the Project.

The PM is responsible for the development, implementation and updating of a Communication Plan. The Consultant will comply with the Communication Plan.

The objectives in adherence to the communication process include:

- (a) ensuring that the Parties participating in the Project understand the processes involved in managing communications throughout the life of the Project;
- (b) the identification of communication channels, highlighting the lines of flow of information between Parties.

 Communication channels must be very clear to ensure the sharing of accurate information;
- (c) ensuring all key stakeholders are aware of the progress of the Project at all times to support role performance;
- (d) maintaining appropriate information flow to relevant committees to facilitate their decision-making responsibilities; and
- (e) ensuring clarity around roles and responsibilities and alignment of direction between and within teams.

Project relationships form the framework for the development of the project culture, whereby participating Parties work together within the commercial parameters of the Contract to deliver outcomes to the mutual benefit of all Parties.

11. PROJECT REPORTING

The management of the reporting process will be the responsibility of the PM. The Consultants will be required to provide reports to the PM as outlined in the Section C3 Scope of Services and at the specified intervals.

- (a) The Consultant will input, update and report on the Project in a format compatible with Queensland Health's project portfolio management system.
- (b) The Consultant will be required create a Project Program in Microsoft Project. This Program must be structured in such a way that it facilitates Queensland Health's reporting requirements and is imported and managed within the system. Further reporting required to be undertaken by the Consultant will include cost reporting and cash flows, risk management and creation of dashboards.
- (c) Updates to the Project particulars within the system will be undertaken where:
 - (i) Significant changes in the Project occur; and
 - (ii) At monthly reporting intervals in line with the submission of Monthly Project Status Reports.
- (d) Any training required to be undertaken by the Consultant so that the tool can be used effectively will be undertaken as part of the Services.

The following project level controls will be implemented to manage the project and provide mechanisms to deliver information to the project management team and agency/program management:

- (a) Project Status Reports will be produced monthly for circulation to the PSC to inform of project progress. The report will include the Cost Monitoring report following building Contract award; and
- (b) an End of Project Report (Close-out Report) will be produced by the PM at project completion and will be circulated to the PSC and any delegated project assurance roles. The End of Project report will include at a minimum:
 - (i) Official confirmation that the project has come to an end
 - (ii) Confirmation of the normalisation of the services of the Gladstone Hospital Emergency Department

- (iii) Review of Project Implementation Plans
- (iv) Review of the success of the projects aims and objectives
- (v) Stakeholder analysis such as HHS users and community
- (vi) Cost summary
- (vii) Any project issues of note such as WHS breaches
- (viii) Summary of project success including lessons learned

Project reporting requirements are listed in the table below:

Report	Prepared By	Content	Medium	Timeframe	Target Audience
Project Status Report	PM (with input from the Consultant, Sub-consultants and Secondary Consultants)	Project Management Status	Word and PDF document sent via email	Monthly	PSC
Construction Status Report	Contractor	Construction Status	Word and PDF Document sent via email	Monthly	PSC
Cost Monitoring Report	QS	Cost Status	Excel and PDF Document sent via email	Monthly	PSC

12. CHARTER FOR LOCAL CONTENT

- (a) The Queensland Government's Charter for Local Content does apply to this Project.
- (b) The Consultant must familiarise themselves with the Charter and incorporate any relevant principles of the Charter into the contract Deliverables. The Consultant will be responsible for any reporting required of the client as a result for the Project.
- (c) Full details of the Charter and its requirements can be found on the Department of State Development website: https://www.statedevelopment.gld.gov.au/industry/industry-support/gld-charter-for-local-content

13. INDIGENOUS PROJECT UNDER THE BUILDING AND CONSTRUCTION TRAINING POLICY

- (a) The Queensland Government's Indigenous Projects under the Building and Construction Training Policy does apply to this Project.
- (b) One site has been identified as an Eligible project located in Queensland and selected as an Indigenous Project for this Project.
- (c) The Consultant must familiarise themselves with the Policy and incorporate any relevant principles of the Policy into the contract Deliverables. The Consultant will be responsible for any reporting required of the client as a result for the Project.
- (d) Full details of the Policy and its requirements can be found on the Department of Treaty, Aboriginal and Torres Strait Islander Partnership, Communities and the Arts website: https://www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/business-economic-development/indigenous-projects-under-building-construction-training-policy

SECTION C3 - SCOPE OF SERVICES

SERVICES: Principal Consultant

PROJECT: Building Rural and Remote Health Program (BRRHP) - Phase 2c - Southern Queensland sites

The duties required of the Consultant that will be necessary to complete the Project under the contract. The listing is not necessarily an all-inclusive list and the Consultant should propose a detailed list of any additional roles, duties and responsibilities which are to be undertaken.

As referenced previously, the program is required to respond to the market's capacity and capability in the rural and remote sites across Queensland. This was demonstrated during the delivery of Phase 1 and Phase 2a and 2b of the program, and each site may have a different procurement strategy.

As such, this scope of services is broken down into 4 portions;

- Scope of services up to Concept Design including the procurement strategy endorsement. This will be the minimum
 form of engagement for services retained with all other portions to be awarded as a variation to the contract under
 the provided fee offering.
- 2. Scope of services for Design & Construct procurement strategy (awarded as a variation)
- 3. Scope of services for Construct-Only procurement strategy (awarded as a variation)
- 4. Scope of services for Early Contractor Involvement procurement strategy (awarded as a variation)

The Consultant will prepare a fee according to the four portions. At minimum, the Consultant will be retained to the Concept Design phase but may be extended based upon the presented fees where required.

PORTION 1 – SCOPE OF SERVICES UP TO CONCEPT DESIGN

1.0 Project Outcomes

The Consultant shall undertake the role of Principal Consultant. The Consultant will be responsible for the day-to-day management and completion of the concept design and scope definition including coordinating the work of all Sub-Consultants and Secondary consultants. On completion of the concept stage the Consultant may be engaged to provide additional services to suit the procurement strategy.

The Consultant will undertake all duties and responsibilities as outlined in the Terms of Reference and will be responsible for producing the concept design and scope definition which will ensure that program team may make an informed decision on the procurement of the site under the program. This will include;

- To ensure efficiency in building design to achieve Value for Money in capital and recurrent costs without compromising service provision. Simple, cost effective, functional design solutions and construction techniques are considered appropriate. Consideration must be given to the entire life cycle of the project including the ongoing maintenance and recurrent costs.
- To consider Life Cycle Costing parameters for engineering systems, materials and finishes.

Page 25

- To ensure Building Design sympathetic with the existing facility / environment along with providing a high quality
 environment that responds to the service needs and priorities on site, including patient privacy and security both
 internally and externally. Design should be fit for purpose and responsive to changing future needs.
- To plan to maintain delivery of fully functional adjoining facilities' services during the development and construction of the Project while minimising the impact of construction on Hospital staff, patients and public.
- To develop and maintain a suitable communication and consultation process for the Project, and to communicate Project objectives to the relevant stakeholders.
- To deliver the Project at the earliest time and within financial budgets.
- The Consultant will ensure that they and all secondary and sub-consultants fulfil their obligations by ensuring that the
 concept design report includes references to the following requirements and in addition undertakes an assessment of
 the building contractors designs to ensure compliance with:
 - 1. The Queensland Health Capital Infrastructure Requirements (CIR); and
 - 2. The Australian Health Facility Guidelines (AHFG) are benchmarked against them.
- The Consultant will coordinate with the Project Manager to ensure they complete and submit all CIR checklists relevant to the concept design in a timely manner, including coordinating input where required from all consultants, Secondary consultants and Sub-consultants and assist the Project Director by expressly noting and summarising any deviations from the CIR, and make reference to the relevant clause within the checklists from which the deviation is made.
- To ensure compliance with the current legislative requirements and consideration of proposed access code requirements and provisions of the Disability Discrimination Act.

1.1 The principal duties of the Consultant

- Provide all the expert professional advice and skills required for the class of service which the Consultant has agreed
 to provide and ensure that only personnel possessing the necessary competence and professional expertise are used
 to provide those services.
- Remain fully responsible for all work undertaken regardless of any review or acceptance of that work by or on behalf
 of the Queensland Health and be liable for any loss or damage suffered as a result of any negligent act, error, omission
 or statement on the part of Consultant or their employees, agents or sub-consultants.
- Accept responsibility for the technical and contractual accuracy of all documents produced by the Consultancy under the commission.
- Carry out all responsibilities in accordance with recognised professional standards and applicable Government policy and procedures.
- Certify that documentation has been properly and competently prepared and checked, by signing and dating the drawings and specifications, before submission to the Queensland Health.

- Ensure that Queensland Health's and Users' functional requirements are met throughout the development including during the production of design and contract drawings, specifications and other contract documents.
- Be the single point of official contact between all Sub-Consultants and the PM in respect of the Project.
- The Consultant will ensure satisfactory coordination, integration and completion of the work of Sub-Consultants for the project within the program dates and budgets.
- The Consultant is responsible for the performance of all Secondary and Sub-Consultants.
- The Consultant will meet fortnightly or as required with the PM, or their nominated representative to report on progress of all parts of the Project and provide written status reports for those meetings.
- Participate in all Project Control Groups, Site meetings and Design meetings as necessary.
- Participate in the evaluation of consultants and contractors as required.
- Prepare monthly reports on progress and submit to the PM in accordance with the PM's reporting schedule.
- Take all reasonable steps to ensure probity and compliance with all State Government Acts, Regulations and quidelines and the specific Client requirements associated with the delivery of the Project.

1.2 Commissioning relationships

- 1. The Consultant will be commissioned by Queensland Health. The Consultant will report directly to and provide comprehensive support to the PM.
- 2. Queensland Health has under a separate commission appointed a QS to the Project.
- 3. The Consultant will be responsible for the following roles and may engage Sub-consultants to undertake these activities as required:
 - 1. Architect
 - 2. Structural / Civil Engineer
 - 3. Mechanical Engineer
 - 4. Electrical Engineer
 - 5. Hydraulics Engineer
 - Town Planner
 - 7. Certifier
 - 8. DDA Consultant
 - 9. Fire Consultant

- 10. Vertical Transport Consultant
- 11. Security / Audio Visual (AV) / ICT Consultant
- 12. Acoustic Consultant
- 13. Landscape Architect
- 14. Interior Designer
- 15. Geotechnical Engineer
- 16. Land Surveyor
- 17. Asbestos Consultant
- 18. Environmentally Sustainable Design Consultant (including for assessment and reporting under the provisions of Part J of the Building Code of Australia)

As well as other consultants as necessary including:

- · Way finding/Signage Consultant
- · FFE Consultant
- Other specialist sub-consultants considered necessary to complete the Project, as it relates to its delivery.
- 4. Responsibility of managing the actual program and cost objectives of the Project lies with the PM with advice provided by the Consultant as required. The PM is required to take direction from the Queensland Health Project Director for final decisions regarding any aspect of the Project. The Consultant is required to take direction from the PM.

1.3 Outcomes and Deliverables

1.3.1 Concept Design

The consultant will ensure that:

- Concept designs are documented including the provision or sketch and block planning to inform the stakeholders on the options for siting and within the boundaries of authority requirements. Documents produced under this are checked for accuracy, completeness and compliance with the brief, all applicable statutes, regulations and by-laws, standards and drafting standards.
- 2. All concept drawings are to be signed by the Consultant's Representative as certification of accuracy, completeness and compliance with all items noted above.
- 3. Where necessary all investigations, calculations and designs for the sites have been approved by a suitably experienced professional Engineer or Surveyor registered in Queensland and provide their Certificates signed by the

appropriate professionals in regard to their particular field of expertise and submit them with the final tender documentation.

4. The consultant will provide a concept design report at the end of the phase of the sites to the client. The completion of the concept design report will incorporate inputs from the Project Manager and Quantity Surveyors and must include an endorsed version of a scope plan and scope ladder.

1.3.3 Aconex Document Management System

- 1. The Consultant will utilise the document management system as nominated by Queensland Health for the complete duration of the project. The licence for the document management system will be provided by Queensland Health at no cost to the Consultant. The content and ownership of the document management system will remain with Queensland Health. Queensland Health do not provide training in this system. Training can be sought directly from Aconex in a variety of formats.
- 2. The consultant shall use the document management system in all capacities including but not limited to the following:
 - 1. Documentation
 - 2. Correspondence
 - 3. Project direction
 - 4. RFI's
 - 5. Contractual Notices
 - 6. Connected Cost functions including variations, cost reports, progress claims and cash flows

1.3.4 FFF

Generally, the consultant will perform the following functions for FFE:

- 1. Document all FFE including Group 1, Group 2, Group 3 and Group 4 as supplied to meet requirements:
 - 1. Group 1 supplied and installed by the Contractor
 - 2. Group 2 supplied by the Client and installed by the Contractor
 - 3. Group 3 supplied and installed by the Client
 - 4. Group 4 supplied and installed by the HHS (consumable items)

1.4 Local Content

1. The Queensland Government's Charter for Local Content is overseen by the Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP).

- 2. The Consultant will assist Queensland Health to fulfil its obligations under the Charter for Local Content by also ensuring that all consultants engaged on the Project are meeting their obligations with regard to the Charter and by assisting as necessary in undertaking the above listed requirements.
- 3. Full details of the Charter and its requirements can be found on the DSDMIP website http://www.statedevelopment.qld.gov.au/resources/charter-for-local-content.html

1.5 Code Compliance

- 1. The Queensland Government's Code of Practice for the Building and Construction Industry (Queensland Code) and the Queensland Government's Implementation Guidelines to the Queensland Code of Practice for the Building and Construction Industry (Queensland Guidelines) apply to all publicly funded building and construction work exceeding \$2 million in value that is the subject of an expression of interest or request for tender by the Queensland Government.
- 2. A Workplace Relations Management Plan (WRMP) is required for publicly funded construction Projects exceeding \$10 million in value that are the subject of an expression of interest or request for tender and shall include those Projects assessed to be High Risk/Significant Projects under the PQC System, or other building construction Projects involving State Government funding exceeding \$10 million.
- 3. The Building Code 2013 (the National Code) applies to all federally funded Projects subject to the same Codes and Guidelines. The Queensland Code is to be interpreted in a manner that ensures that it does not contravene the National Code.
- 4. The Consultant will assist Queensland Health to fulfil its obligations under the Codes and Guidelines. In particular, the Consultant will be responsible for ensuring the application of, and compliance with, these Codes and Guidelines by:
 - 1. ensuring that compliance with these Guidelines is an integral component of their contract management systems and procedures;
 - 2. all expressions of interest, tender and contractual documents clearly set out the requirements specified in these Guidelines; and
 - 3. ensuring that the contractor and its subcontractors comply with the requirements of the Codes and Guidelines.

PORTION 2 – SCOPE OF SERVICES FOR DESIGN & CONSTRUCT PROCUREMENT STRATEGY

1.0 Principal Consultant Duties

The Principal Consultant Duties are those associated with the delivery of the Project via Design and Construct AS 4300 -1995 Form of Contract.

1.1 Objectives, process and requirements of the Service

The Consultant shall undertake the role of Principal Consultant. The Consultant will be responsible for the day-to-day management and completion of the Principal Project Requirements (PPR) including coordinating the work of all Sub-Consultants and Secondary consultants. The consultant will utilise the outcomes from the concept design report to inform the additional deliverables for a successful project outcome. On completion of the PPR stage the Consultant will remain engaged in an overarching capacity as design reviewer as well as to undertake and coordinate discipline design compliance site inspections. The Consultant will undertake all duties and responsibilities as outlined in the Terms of Reference, and will be responsible for producing the PPR which will ensure that the following objectives, processes and policy requirements are met by the building contractor during their design and construction phase:

- To ensure efficiency in building design to achieve Value for Money in capital and recurrent costs without compromising service provision. Simple, cost effective, functional design solutions and construction techniques are considered appropriate. Consideration must be given to the entire life cycle of the project including the ongoing maintenance and recurrent costs.
- To consider Life Cycle Costing parameters for engineering systems, materials and finishes.
- To ensure Building Design sympathetic with the existing facility / environment along with providing a high quality
 environment that responds to the service needs and priorities on site, including patient privacy and security both
 internally and externally. Design should be fit for purpose and responsive to changing future needs.
- To maintain delivery of fully functional adjoining facilities' services during the development and construction of the Project while minimising the impact of construction on Hospital staff, patients and public.
- To develop and maintain a suitable communication and consultation process for the Project, and to communicate Project objectives to the relevant stakeholders.
- To deliver the Project at the earliest time and within financial budgets.
- The Consultant will ensure that they and all secondary and sub-consultants fulfil their obligations by ensuring that the PPR includes references to the following requirements and in addition undertakes an assessment of the building contractors designs to ensure compliance with:
 - 1. The Queensland Health Capital Infrastructure Requirements (CIR); and
 - 2. The Australian Health Facility Guidelines (AHFG) are benchmarked against them.
- The Consultant will coordinate with the Building Contractor to ensure they complete and submit all CIR checklists relevant to the design in a timely manner, including coordinating input where required from all consultants, Secondary consultants and Sub-consultants and assist the Project Director by expressly noting and summarising any deviations from the CIR, and make reference to the relevant clause within the checklists from which the deviation is made.
- To ensure compliance with the current legislative requirements and consideration of proposed access code requirements and provisions of the Disability Discrimination Act.

1.2 The principal duties of the Consultant

- Provide all the expert professional advice and skills required for the class of service which the Consultant has agreed
 to provide and ensure that only personnel possessing the necessary competence and professional expertise are used
 to provide those services.
- Remain fully responsible for all work undertaken regardless of any review or acceptance of that work by or on behalf
 of the Queensland Health and be liable for any loss or damage suffered as a result of any negligent act, error, omission
 or statement on the part of Consultant or their employees, agents or sub-consultants.
- Accept responsibility for the technical and contractual accuracy of all documents produced by the Consultancy under the commission.
- Carry out all responsibilities in accordance with recognised professional standards and applicable Government policy and procedures.
- Certify that documentation has been properly and competently prepared and checked, by signing and dating the drawings and specifications, before submission to the Queensland Health.
- Ensure that Queensland Health's and Users' functional requirements are met throughout the development including during the production of design and contract drawings, specifications and other contract documents.
- Be the single point of official contact between all Sub-Consultants and the PM in respect of the Project.
- The Consultant will ensure satisfactory coordination, integration and completion of the work of Sub-Consultants for the project within the program dates and budgets.
- The Consultant is responsible for the performance of all Secondary and Sub-Consultants.
- The Consultant will meet fortnightly or as required with the PM, or their nominated representative to report on progress
 of all parts of the Project and provide written status reports for those meetings.
- Participate in all Project Control Groups, Site meetings and Design meetings as necessary.
- Participate in the evaluation of consultants and contractors as required.
- Prepare monthly reports on progress and submit to the PM in accordance with the PM's reporting schedule.
- Take all reasonable steps to ensure probity and compliance with all State Government Acts, Regulations and guidelines and the specific Client requirements associated with the delivery of the Project.

1.3 Commissioning relationships

- 1. The Consultant will be commissioned by the PM. The Consultant will report directly to and provide comprehensive support to the PM.
- 2. Queensland Health will under a separate commission appoint a QS to the Project.
- 3. The Consultant will be responsible for the following roles and may engage Sub-consultants to undertake these activities as required:
 - 1. Architect
 - 2. Structural / Civil Engineer
 - 3. Mechanical Engineer
 - Electrical Engineer
 - Hydraulics Engineer
 - 6. Town Planner

- 7. Certifier
- 8. DDA Consultant
- 9. Fire Consultant
- 10. Vertical Transport Consultant
- 11. Security / Audio Visual (AV) / ICT Consultant
- 12. Acoustic Consultant
- 13. Landscape Architect
- 14. Interior Designer
- 15. Geotechnical Engineer
- 16. Land Surveyor
- 17. Asbestos Consultant
- 18. Environmentally Sustainable Design Consultant (including for assessment and reporting under the provisions of Part J of the Building Code of Australia)
- 4. Other consultants as necessary including:
 - · Way finding/Signage Consultant
 - · FFE Consultant
 - Other specialist sub-consultants considered necessary to complete the Project, as it relates to its delivery.
- 5. Responsibility of managing the actual program and cost objectives of the Project lies with the PM with advice provided by the Consultant as required. The PM is required to take direction from the Queensland Health Project Director for final decisions regarding any aspect of the Project. The Consultant is required to take direction from the PM.

1.4 Outcomes and Deliverables

1.4.1 Certification and Checking

The consultant will ensure that:

- 1. All documents produced under the Project are checked for accuracy, completeness and compliance with the brief, all applicable statutes, regulations and by-laws, standards and drafting standards.
- 2. All drawings are to be signed by the Consultant's Representative as certification of accuracy, completeness and compliance with all items noted above.
- 3. Where necessary all investigations, calculations and designs for the Project have been approved by a suitably experienced professional Engineer or Surveyor registered in Queensland and provide their Certificates signed by the appropriate professionals in regard to their particular field of expertise and submit them with the final tender documentation.
- 4. The consultant will provide a brief report of compliance at the end of the Project to the client addressing contractor compliance with design and functionality through the delivery phase.

1.4.2 Room Data Sheets

 As part of the PPR stage the Consultant is to develop individual room data sheets (RDS) in both CSV and pdf format (one data sheet per room) and include provision to recheck, update and reissue the sheets as necessary and as requested by the Client. Any changes to formats are to be agreed in advance by the client. 2. Room Data Sheets will be checked and approved by the PM and the Client prior to the finalisation of the Performance Specification. They will be subsequently used as the base level documentation for assessment of all design stages. These data sheets form the basic data for the preparation of schedules of equipment to be purchased by the contractor and the Client, and an updated version is therefore essential to ascertain estimated costs against the budget, and for asset management purposes. Note that the Room Data Sheets must be prepared in a CSV format which enables the easy extraction of data into MS Excel and the Queensland Health FFE Application for the purpose of ordering equipment.

1.4.3 Aconex Document Management System

- 1. The Consultant will utilise the document management system as nominated by Queensland Health for the complete duration of the project. The licence for the document management system will be provided by Queensland Health at no cost to the Consultant. The content and ownership of the document management system will remain with Queensland Health. Queensland Health do not provide training in this system. Training can be sought directly from Aconex in a variety of formats.
- The consultant shall use the document management system in all capacities including but not limited to the following:
 - Documentation
 - 2. Correspondence
 - 3. Project direction
 - 4. RFI's
 - 5. Contractual Notices
 - 6. Connected Cost functions including variations, cost reports, progress claims and cash flows

1.4.4 FFE

Generally, the consultant will perform the following functions for FFE:

- 1. Document all FFE including Group 1, Group 2, Group 3 and Group 4 as supplied to meet requirements:
 - 1. Group 1 supplied and installed by the Contractor
 - 2. Group 2 supplied by the Client and installed by the Contractor
 - 3. Group 3 supplied and installed by the Client
 - 4. Group 4 supplied and installed by the HHS (consumable items)

1.5 Local Content

- 1. The Queensland Government's Charter for Local Content is overseen by the Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP).
- The Consultant will assist Queensland Health to fulfil its obligations under the Charter for Local Content by also ensuring that all consultants engaged on the Project are meeting their obligations with regard to the Charter and by assisting as necessary in undertaking the above listed requirements.
- 3. Full details of the Charter and its requirements can be found on the DSDMIP website http://www.statedevelopment.qld.gov.au/resources/charter-for-local-content.html

1.6 Code Compliance

1. The Queensland Government's Code of Practice for the Building and Construction Industry (Queensland Code) and the Queensland Government's Implementation Guidelines to the Queensland Code of Practice for the Building and

- Construction Industry (Queensland Guidelines) apply to all publicly funded building and construction work exceeding \$2 million in value that is the subject of an expression of interest or request for tender by the Queensland Government.
- 2. A Workplace Relations Management Plan (WRMP) is required for publicly funded construction Projects exceeding \$10 million in value that are the subject of an expression of interest or request for tender and shall include those Projects assessed to be High Risk/Significant Projects under the PQC System, or other building construction Projects involving State Government funding exceeding \$10 million.
- 3. The Building Code 2013 (the National Code) applies to all federally funded Projects subject to the same Codes and Guidelines. The Queensland Code is to be interpreted in a manner that ensures that it does not contravene the National Code.
- 4. The Consultant will assist Queensland Health to fulfil its obligations under the Codes and Guidelines. In particular, the Consultant will be responsible for ensuring the application of, and compliance with, these Codes and Guidelines by:
 - ensuring that compliance with these Guidelines is an integral component of their contract management systems and procedures;
 - 2. all expressions of interest, tender and contractual documents clearly set out the requirements specified in these Guidelines; and
 - 3. ensuring that the contractor and its subcontractors comply with the requirements of the Codes and Guidelines.

2.0 STAGES

2.1 D&C Procurement Strategy

- 1. The Consultant will be required to produce tender documentation in the form of PPR (Principal's Project Requirements) including but not limited to:
 - 1. The stated purpose for which the works are intended.
 - 2. the Performance Specification to suit the procurement model including technical sections, Conditions of Contract and associated Preliminaries and General Requirements.
 - 3. the tender drawings.
- 2. The Consultant shall further provide the following Services:
 - 1. Review and verification of tender documents to ensure they have been prepared in the appropriate format and their compliance with Queensland Health requirements and State Government guidelines, policies and legislation.
 - 2. Participation in the tender process including but not limited to the tasks as listed in "Tender Stage"
 - 3. Provision of professional advice at a hand over meeting between the Consultant's team and Contractor's Consultant team within 2 weeks of contract award.
 - 4. Provide professional advice / documentation required as a result of any errors or omissions on the part the Consultant produced during the PPR Stage.
 - 5. Conduct further stakeholder management during the PPR stage as required to further develop a comprehensive and fully coordinated set of room data sheets, that take into account all Queensland Health and the end user's requirements, for the D&C contractor to utilise.
- 3. When the D&C contractor is appointed, the Consultant will be retained to provide ongoing services in a review and advisory role by Queensland Health. The Consultant will not be novated to the D&C Contractor and the D&C Contractor

will be required to commission their own design team. The Consultant will undertake all duties outlined in the Terms of Reference to the extent necessary to ensure that the D&C contractor fulfils its design obligations under the contract and adheres to all Queensland Health Capital Infrastructure Requirements (CIR), Australian Health Facility Guidelines, Stakeholder Requirements, Queensland Health specific ICT requirements, BPE and the Project Brief. The Consultant's ongoing involvement in its review and advisory role will generally comprise:

- 1. Ongoing stakeholder management ensuring that any development in the documentation meets the Project brief and end user's requirements;
- 2. Extensive input and expert advice regarding the design, with iterative reviews to ensure that it is being developed in accordance with Queensland Health Guidelines, Frameworks and the CIR;
- 3. Guidance on building aesthetics;
- 4. Provide guidance to the D&C Contractor with regard to the process and procedures required under the CIR. Conduct a comprehensive review of the completed CIR checklists submitted by the D&C Contractor and provide expert analysis on any deviations.
- 5. Undertake a comprehensive review of the finalised detail design and Detail Design report. The Consultant is required to certify that the design meets all Queensland Health Capital Infrastructure Requirements, Australian Health Facility Guidelines, Stakeholder Requirements, Queensland Health specific ICT requirements and the Project Brief.;
- 6. Monitor developing desige
- 7. Attendance at design coordination meetings as necessary to fulfil the role;
- 8. Site inspections of the construction work acting in the capacity of the Principal's Representative. These will be conducted during and at completion of the works for the primary purpose of verifying that the works are being undertaken in-line with the approved design.

2.2 Principal's Project Requirements (PPR Stage)

Key Deliverables:

- 1. Schematic design 100% complete in line with project programme
- 2. Design reflects AHFG requirements, relevant codes and legislation
- 3. Design documentation is fully coordinated with other disciplines
- Aligns with HPW Capital Works Management Framework Estimate Categories and Confidence Levels
- 5. Performance Specification ready for D&C Contractor tender, which includes technical sections, Conditions of Contract, associated Preliminaries and General Requirements as well as the tender drawings.

Generally by phase:

- This Stage involves the development of properly coordinated documents, suitable for a D&C Contractor tender and subsequent construction in accordance with the agreed Procurement Strategy. The documents, and the Project, must have all relevant approvals in place. A pre-tender estimate will also be prepared to demonstrate that the Project remains within budget.
- 2. As required (if not provided by the Client with the Request for Offer) Liaise with separately appointed sub-consultants and carry out a site evaluation/site analysis covering amongst other things:
 - 1. Titles
 - 2. Zoning

- 3. Legal Constraints
- 4. Existing Site Conditions
- 5. Environmental Constraints
- 6. Site Services
- 7. Other statutory Authority regulations that may impact upon the development of the site
- 3. This Stage involves the ongoing development and refinement of the approved Business Case Concept Design by all consultants and the incorporation of all authority requirements into the design. A further Cost Estimate will be prepared during this Stage to demonstrate that the Project is still within budget.
- 4. Review and adjust the design to comply with PM's instructions.
- 5. Obtain other Consultants' advice and integrate it into the design ensuring all coordination issues are addressed and consolidated onto the Consultant's plan.
- 6. Organise and chair meetings of design consultants as considered necessary, or as directed by the PM, for Technical Coordination, and prepare and distribute minutes of all meetings promptly in the form of Action Statements.
- 7. Refine the specification, including a Schedule of Materials and Finishes, to a standard acceptable to the PM.
- 8. Work with the QS to ensure tight financial and scope control is achieved and maintained and where necessary value manage the design to maintain project budget. Value Management should be continually benchmarked against the Business Case budget to ensure that minimal project deliverable compromise is required.
- 9. Prepare documents, and/or reports as necessary for preliminary BCA assessment.
- 10. Assist the PM as requested, in liaison and negotiation with Approving Authorities and/or Private Certification Consultants regarding any matters relating to preliminary BCA assessment.
- 11. Develop the Business Case Concept Design, revised as necessary in accordance with the PM's instructions and to incorporate any redesign as necessitated by any estimated cost overrun.
- 12. Ensure coordination with Queensland eHealth in regard to specific ICT requirements.
- 13. Schematic Design documentation is to be produced in Trade Packages, and in any event shall include, but not necessarily be limited to:
 - 1. Site layouts to conform with land and geotechnical survey information, and recognising the requirements of such things as services, earthworks, landscaping, waterscaping, paving, and governing and critical dimensions (Scale 1:200 or larger)
 - 2. Floor plans (full set of General Arrangement Drawings) showing reduced levels, room layouts (including furniture, fittings), room data sheets (one per room) and any special requirements such as room loadings for equipment rooms (Scale 1:100)
 - 3. Requirements of building regulations and authority regulations and any similar requirements to be considered and incorporated in the design (Scale 1:100)
 - 4. Typical cross sections and elevations showing levels, ceiling heights, possible structure, design restrictions, and incorporation and coordination of services (Scale 1:100).
- 14. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 15. Ensure that developing designs are in accordance with the requirements of the Building Performance Evaluation (BPE) plan and conduct stakeholder management as necessary.

- 16. A key deliverable of this stage is the PPR report which is to be prepared by the Consultant and demonstrates that issues of planning, design, materials selection, construction and constructability, services integration and coordination, structural, civil, mechanical, electrical, hydraulic and energy services have been addressed and integrated into the report. The PPR Report and drawings shall include, as required:
 - site plan
 - 2. plans, sections and elevations
 - 3. developed room layouts
 - 4. critical construction sections
 - 5. coordinated reflected ceiling plans
 - 6. site works and landscaping layouts, including signage
 - 7. roof layout and drainage details
 - 8. equipment briefing schedules
 - 9. room data sheets
 - 10. asset management plan
 - 11. project specific asset maintenance information spreadsheet
 - 12. full services layouts external and internal
 - 13. full structural definition
 - 14. full civil definition
 - 15. full traffic plan definition
 - 16. full landscape definition
 - 17. ICT Requirements
 - door keying schedule
 - 19. signage schedule
 - 20. nurse call requirements
 - 21. Building, Engineering and Maintenance Services (BEMS)
 - 22. security
 - 23. communications
 - 24. evacuation plans
 - 25. summary of Environmental Sustainable Design provisions
 - 26. register of the spatial and design variations, including associated rationale, from the AHFG
 - 27. register of departures and associated rationale from the Capital Infrastructure Requirements
 - 28. list of assumptions which underlie the PPR report. The cost of these to be included in the cost plan
 - 29. summary of key Projects risks from the Project Risk Register
 - 30. Finalised FFE list with a Category 4 confidence level.
 - 31. a cost estimate at Category 4 will be prepared by the Project QS to demonstrate that the Project is still within budget.
- 17. Conduct any audits of FFE within existing facilities and liaise as necessary with existing user groups to coordinate and document the inventory of existing FFE for re-use within the new Project. Incorporate the results into FFE Schedules.
- 18. Further develop endorsed documentation from Preliminary Design phase to produce a highly detailed set of room data sheets, room layout sheets and a master schedule on an electronic database (CSV and PDF) for the purpose of FFE

- to facilitate the production of accurate lists of equipment requirements. This is a key performance requirement of the consultant.
- 19. Develop and maintain project 'C-sheets' from the room data sheets, room layout sheets and master schedule and keep them consistently updated and reflective of current FFE data.
- 20. Liaise with Queensland Health FFE Manager and FFE procurement officer to confirm their representation at user group sessions and ensure that final endorsement of proposed lists by the FFE Manager is received prior to the final release of the tender documentation to the market.
- 21. Consistently update all documentation to reflect changes to FFE master lists as a result of user group sessions.

2.3 Construction Delivery Stage

Key Deliverables:

- 1. Respond to RFIs within nominated project time frame reflective of the urgency relating to requests.
- 2. Assess and approve the quality and verify the content of the operational and maintenance manuals issued by the building contractor.
- 3. Participate in the monthly assessment of progress claims and provide supporting information where requested.
- 4. Support key project team members to facilitate the issue of project certification documentation to allow occupation of the facility upon completion.

Generally, by phase:

- This Stage commences on the acceptance of the tender and acceptance of a building contractor to carry out the works
 on site. Consultants will be required to assist the PM with the contract administration of the Project for the duration of
 the works and into the 12-month defects liability period. This stage also involves the appropriate commissioning of the
 building and managing relocation of users to the new or redeveloped facility.
- 2. Prepare explanatory drawings as reasonably requested by the PM and/or the Principal Building Contractor and promptly respond to RFI's as required.
- 3. Prepare drawings and information relevant to contract variations.
- 4. Inspect the works, and certify monthly and at practical completion, that the works as installed comply with the consultants' design and specification and prepare and issue defects notices to the Principal Building Contractor noting the items that do not comply.
- 5. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 6. Participate in surveys, checklists, evaluations and reports as required to complete the Building Performance Evaluation (BPE).
- 7. Review design drawings produced by the Contractor for the various elements of the Project and provide comments as necessary thereupon. The Consultant is to review the comments made by other consultants relative to the deign drawings and co-ordinate these and advise the Trade Contractors of all comments made upon the shop drawings.
- 8. Engineering Services Consultants are required to provide to the QS appropriate cost advice in regard to contractor's variations and claims.
- 9. Engineering Services Consultants are required to verify that the Asset Maintenance Information Spreadsheet has been fully completed by the construction contractor.

2.4 Practical Completion & Defects Liability Period

Key Deliverables:

- 1. As part of the greater consultant responsibilities of the phase, identify, monitor and close out any defects.
- 2. The Consultant is to review and approve all 'as built' drawings and operation Manuals.
- 3. The Consultant is to re-inspect and approve 'making good' of defective items noted at Practical Completion and subsequent to Practical Completion as required throughout the Defects Liability Period and at the issue of the Final Certificate.
- 4. Participate in surveys, checklists, evaluations and reports as required to complete the Building Performance Evaluation (BPE).
- 5. The Consultant is to inspect and prepare certification of the works for conformity to design, specification and fitness for purpose.
- 6. The Consultant is to assist and liaise with the PM and Queensland Health during Queensland Health's operational take-over of the buildings and throughout the defects liability period.

3.0 DESIGN & DOCUMENTATION

3.1 Deliverables

The Consultant will deliver to the PM within the time stipulated the copies of documents as required under the commission and any additional documents or copies required by the Client.

3.2 BIM Modelling

From 1 July 2019 BIM is required on Queensland Health projects, the following capital works project tiers have been defined as requiring BIM deliverables.

- 1. BIM Tier 1- Project value more than \$100 million
- 2. BIM Tier 2 Project value between \$10 million and \$100 million
- 3. BIM Tier 3 Under \$10 million (where the value of BIM is clearly demonstrable)

To support BIM implementation Queensland Health has developed the Project Information Requirements document for BIM which:

- 1. supports the existing Capital Infrastructure Requirements
- 2. is aligned with the international standard for BIM ISO19650 and the Digital Enablement for Queensland Infrastructure Principles for BIM Implementation policy
- 3. defines Queensland Health required uses of BIM and identifies the information required at specific stages

Compliance with the Project Information Requirements on a project is demonstrated through the creation of project specific BIM Execution Plan templates.

3.3 As-Built Drawings and Room Data Sheets

1. Provision of as-built drawings and room data sheets shall be the responsibility of the construction contractor. The carrying out of this work may be specified to the appropriate contractor or sub-contractor. Where that contractor or

- sub-contractor wishes to use the Consultant's documentation as the basis for as-built drawings and room data sheets, this is acceptable as long as the drawing is amended to suit reality. This is the responsibility of the relevant contractor.
- 2. It is the responsibility of the Consultant to verify all drawings and to ensure that they are produced. As-built drawings and room data sheets are to be made available at the end of the construction stage.

3.4 Asset Maintenance Information Spreadsheet

- 1. Provision of the completed Asset Maintenance Information Spreadsheet is the responsibility of the construction contractor.
- 2. It is the responsibility of the Consultant to ensure that the project specific Asset Maintenance Information Spreadsheet Template supplied by QLD health is included in the project documentation and completed by the construction contractor at practical completion.

3.5 Environmentally Sustainable Design

- 1. Ensure that the Building Contractor undertakes Building Performance Modelling and prepares a BCA Part J Compliance Report in accordance with the Building Certifier's programme.
- 2. Review and ensure that the Building Contractor:
 - 1. Conducts an analysis and make recommendations for Environmentally Sustainable Design (ESD) initiatives.
 - 2. Provides a report and lifecycle analysis and seek approval from the Client of proposed ESD initiatives.
 - 3. Undertakes the design of any approved initiatives.

3.6 Value Management studies and Risk Management Requirements

- Ensure that the Building Contractor undertakes a Value Management Study (VMS) for each component and stage of
 the Project and work through the recommendations arising from them. The Consultant shall allow for review and
 response to reports and option studies as appropriate, which shall be requested and considered for the VMS report.
- 2. Participate in the development and management of risks.

PORTION 3 – Scope of services for Construct Only procurement strategy

1.0 Principal Consultant Duties

The Principal Consultant Duties are those associated with the delivery of the Project via a Principal Contractor through a Traditional AS 2124 -1992 Form of contract.

1.1 Objectives, process and requirements of the Service

The Consultant shall undertake the role of Principal Consultant. The Consultant will be responsible for the day-to-day management of the design and documentation of the Project including coordinating the work of all other Sub-Consultants and Secondary consultants.

The Consultant will undertake all duties and responsibilities as outlined in the Terms of Reference, and will be responsible for maintaining the following objectives, processes and policy requirements:

- To ensure efficiency in building design to achieve Value for Money in capital and recurrent costs without compromising service provision. Simple, cost effective, functional design solutions and construction techniques are considered appropriate. Consideration must be given to the entire life cycle of the project including the ongoing maintenance and recurrent costs.
- 2. To consider Life Cycle Costing parameters for engineering systems, materials and finishes.
- 3. To ensure Building Design sympathetic with the existing facility / environment along with providing a high-quality environment that responds to the service needs and priorities on site, including patient privacy and security both internally and externally. Design should be fit for purpose and responsive to changing future needs.
- 4. To maintain delivery of fully functional adjoining facilities' services during the development and construction of the Project while minimising the impact of construction on Hospital staff, patients and public.
- 5. To develop and maintain a suitable communication and consultation process for the Project, and to communicate Project objectives to the relevant stakeholders.
- 6. To deliver the Project at the earliest time and within financial budgets.
- 7. The Consultant will ensure that designs comply with the Queensland Health Capital Infrastructure Requirements (CIR), and will ensure that all Secondary consultants and Sub-consultants fulfil their obligations under the CIR.
- 8. The Consultant will ensure that designs comply with and are benchmarked against the AHFG.
- 9. The Consultant will coordinate, complete and submit all CIR checklists relevant to the design in a timely manner, including coordinating input where required from all consultants, Secondary consultants and Sub-consultants assist the Project Director by expressly noting and summarising any deviations from the CIR, and make reference to the relevant clause within the checklists from which the deviation is made.
- 10. To ensure compliance with the current legislative requirements and consideration of proposed access code requirements and provisions of the Disability Discrimination Act.

1.2 The principal duties of the Consultant

- 1. Provide all the expert professional advice and skills required for the class of service which the Consultant has agreed to provide and ensure that only personnel possessing the necessary competence and professional expertise are used to provide those services.
- 2. Remain fully responsible for all work undertaken regardless of any review or acceptance of that work by or on behalf of the Queensland Health and be liable for any loss or damage suffered as a result of any negligent act, error, omission or statement on the part of Consultant or their employees, agents or sub-consultants.
- Accept responsibility for the technical and contractual accuracy of all documents produced by the Consultancy under the commission.
- 4. Carry out all responsibilities in accordance with recognised professional standards and applicable Government policy and procedures.
- 5. Certify that documentation has been properly and competently prepared and checked, by signing and dating the drawings and specifications, before submission to the Queensland Health.
- 6. Ensure that Queensland Health's and Users' functional requirements are met throughout the development including during the production of design and contract drawings, specifications and other contract documents.
- 7. Be the single point of official contact between all Sub-Consultants and the PM in respect of the Project.
- 8. The Consultant will ensure satisfactory coordination, integration and completion of the work of Sub-Consultants for the project within the program dates and budgets.
- 9. The Consultant is responsible for the performance of all Secondary and Sub-Consultants.
- 10. The Consultant will meet fortnightly or as required with the PM, or their nominated representative to report on progress of all parts of the Project and provide written status reports for those meetings.
- 11. Participate in all Steering Committees, Project Control Groups and Design meetings as necessary.
- 12. Participate in the evaluation of consultants and contractors as required.
- 13. Prepare monthly reports on progress and submit to the PM in accordance with the PM's reporting schedule.
- 14. Take all reasonable steps to ensure probity and compliance with all State Government Act, Regulations and guidelines and the specific Client requirements associated with the delivery of the Project.

1.3 Commissioning relationships

- 1. The Consultant will be commissioned by Queensland Health. The Consultant will report directly to and provide comprehensive support to the PM.
- Queensland Health has under a separate commission appoint a QS, PM, Programmer, Superintendent and SR to the Project.
- 3. The Consultant will be responsible for the following roles and may engage Sub-consultants to undertake these activities:
 - 1. Architect
 - 2. Structural / Civil Engineer

- 3. Mechanical Engineer
- Electrical Engineer
- 5. Hydraulics Engineer
- 6. Town Planner
- 7. Certifier
- DDA Consultant
- 9. Fire Consultant
- 10. Vertical Transport Consultant
- 11. Security / Audio Visual (AV) / ICT Consultant
- 12. Acoustic Consultant
- Landscape Architect
- 14. Interior Designer
- 15. Environmentally Sustainable Design Consultant (including for assessment and reporting under the provisions of Part J of the Building Code of Australia)
- 1. Other consultants as necessary including:
 - · Way finding/Signage Consultant
 - · FFE Consultant
 - Other specialist sub-consultants considered necessary to complete the Project, as it relates to its delivery.
- 4. The PM under a separate engagement will be required to procure and manage on behalf of Queensland Health a number of specialist sub-consultants that are required to provide input in the Project. These include but are not limited to:
 - 1. Geotechnical Engineer
 - 2. Land Surveyor
 - Asbestos Consultant
 - 4. Environmental Consultant
- 5. The Consultant will not be responsible for the PM's sub-consultants but may be required to coordinate and liaise with them as necessary in its undertaking of the Services.
- 6. Responsibility of managing the actual program and cost objectives of the Project lies with the PM with advice provided by the Consultant as required. The PM is required to take direction from the Queensland Health Project Director for final decisions regarding any aspect of the Project. The Consultant is required to take direction from the PM.

1.4 Outcomes and Deliverables

1.4.1 Certification and Checking

The consultant will ensure that:

- 1. All documents produced under the Project are checked for accuracy, completeness and compliance with the brief, all applicable statutes, regulations and by-laws, standards and drafting standards.
- 2. All drawings are to be signed by the Consultant's Representative as certification of accuracy, completeness and compliance with all items noted above.
- 3. Where necessary all investigations, calculations and designs for the Project have been approved by a suitably experienced professional Engineer or Surveyor registered in Queensland and provide their Certificates signed by the appropriate professionals in regard to their particular field of expertise and submit them with the final tender documentation.
- 4. The consultant will provide a brief report of compliance at the end of the Project to the client addressing contractor compliance with design and functionality through the delivery phase.
- 5. Payment for the contract documentation will be based on staged deliverables recommended by the PM and approved by Queensland Health upon satisfactory completion of each project phase (SD, DD, TE).

1.4.2 Room Data Sheets

- 1. The Consultant is to develop individual room data sheets (RDS) during the PDP stage in both CSV and pdf format (one data sheet per room) and include provision to recheck, update and reissue the sheets as necessary, particularly at the end of each of the design and documentation stages and as requested by the Client. Any changes to formats are to be agreed in advance by the client.
- 2. Room Data Sheets will be checked and approved by the PM and the Client prior to the PDP report being submitted. They will be subsequently used as the base level documentation for assessment of all design stages. These data sheets form the basic data for the preparation of schedules of equipment to be purchased by the contractor and the Client, and an updated version is therefore essential to ascertain estimated costs against the budget, and for asset management purposes. Note that the Room Data Sheets must be prepared in a CSV format which enables the easy extraction of data into MS Excel and the Queensland Health FFE Application for the purpose of ordering equipment.

1.4.3 Aconex Document Management System

The Consultant will utilise the document management system as nominated by Queensland Health for the complete duration of the project. The licence for the document management system will be provided by Queensland Health at *no cost to* the Consultant. The content and ownership of the document management system will remain with Queensland Health. Queensland Health do not provide training in this system. Training can be sought directly from Aconex in a variety of formats.

The consultant shall use the document management system in all capacities including but not limited to the following:

- 1. Documentation
- 2. Correspondence
- Project direction
- 4. RFI's
- 5. Contractual Notices

6. Connected Cost functions – including variations, cost reports, progress claims and cash flows

1.4.4 FFE

Generally, the consultant will perform the following functions during the design, acquisition and installation of FFE;

- 1. Assist the PM with integration of the scheduling, acquisition, delivery, storage and placement of unfixed furniture and equipment.
- 2. Coordinate furniture and equipment installation with other building activities to facilitate a structured and timely handover process.
- 3. Document all FFE including Group 1, Group 2, Group 3 and Group 4 as supplied to meet requirements:
 - 1. Group 1 supplied and installed by the Contractor
 - 2. Group 2 supplied by the Client and installed by the Contractor
 - 3. Group 3 supplied and installed by the Client
 - 4. Group 4 supplied and installed by the HHS (consumable items)

1.5 Local Content

- 1. The Queensland Government's Charter for Local Content is overseen by the Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP).
- 2. The Consultant will assist Queensland Health to fulfil its obligations under the Charter for Local Content by also ensuring that all consultants engaged on the Project are meeting their obligations with regard to the Charter and by assisting as necessary in undertaking the above listed requirements.
- 3. Full details of the Charter and its requirements can be found on the DSDMIP website http://www.statedevelopment.qld.gov.au/resources/charter-for-local-content.html

1.6 Code Compliance

- The Queensland Government's Code of Practice for the Building and Construction Industry (Queensland Code) and
 the Queensland Government's Implementation Guidelines to the Queensland Code of Practice for the Building and
 Construction Industry (Queensland Guidelines) apply to all publicly funded building and construction work exceeding
 \$2 million in value that is the subject of an expression of interest or request for tender by the Queensland Government.
- 2. A Workplace Relations Management Plan (WRMP) is required for publicly funded construction Projects exceeding \$10 million in value that are the subject of an expression of interest or request for tender and shall include those Projects assessed to be High Risk/Significant Projects under the PQC System, or other building construction Projects involving State Government funding exceeding \$10 million.
- 3. The Building Code 2013 (the National Code) applies to all federally funding Projects subject to the same Codes and Guidelines. The Queensland Code is to be interpreted in a manner that ensures that it does not contravene the National Code.
- 4. The Consultant will assist Queensland Health to fulfil its obligations under the Codes and Guidelines. In particular, the Consultant will be responsible for ensuring the application of, and compliance with, these Codes and Guidelines by:

- 1. ensuring that compliance with these Guidelines is an integral component of their contract management systems and procedures;
- 2. all expressions of interest, tender and contractual documents clearly set out the requirements specified in these Guidelines; and
- ensuring that the contractor and its subcontractors comply with the requirements of the Codes and Guidelines.

2.0 STAGES

2.1 Schematic Design

Key Deliverables:

- 1. Produce concept design 100% complete in line with project programme
- 2. Produce the Project Definition Plan
- 3. Produce the Schematic Design Report
- 4. Design reflects AHFG requirements, legislation and building requirements
- 5. Develop and maintain project 'C-sheets'

Generally, by stage:

- 1. This Stage involves the preparation of the Schematic Design (SD), based on the approved Gate 1: Preliminary Business Case, sufficient to permit the preparation of a P90 Cost Estimate for the Project. This applies to both architectural and engineering services design.
- 2. Consultants will be required to:
 - 1. Undertake a review of all documentation related to the Project;
 - 2. Site visit and analysis;
 - 3. Liaise with Queensland Health, user groups and other Government agency / Stakeholders to quickly gain understanding of the Project;
 - Assist in the engagement of consultants where required;
 - 5. Complete and review the functional design brief to ensure current planning is in line with Queensland Health, user groups and other Government agency / Stakeholders' requirements;
 - 6. The PM will be required to facilitate the briefing and to manage the process;
 - 7. Consider other consultants' advice, and the PM's and Queensland Health's comments, and adjust the design to the satisfaction of the PM / Project Director.
 - 8. Ensure coordination with Queensland eHealth in regard to specific ICT requirements.
 - 9. A QS will be appointed to prepare a cost plan to be incorporated into the Detailed Business Case to ensure the Project is within acceptable budget limits;

- 10. Assist the QS to provide a Cost Plan Budget acceptable to the PM, including cost budgets for finishes to all areas and including a 10 percent Contingency Allowance;
- 11. Produce a preliminary Specification for use by the QS in preparing the Cost Plan Budget; and
- 12. Develop budgets and programmes for each Project.
- The Project procurement method should be finalised during this Stage and the Schematic Design proposals should be consistent with the adopted Project delivery methodology.
- 4. A key deliverable of this stage is the Project Definition Plan (PDP) which is prepared by the Consultant in consultation with the PM and sub-consultants. The PDP report should articulate the service needs defined in the health service plan; infrastructure requirements; the processes and relationships which operationalise the service within the physical structure plus the architectural and engineering performance standards as outlined in the Capital Infrastructure Requirements. The PDP will define:
 - the scope of the development;
 - 2. current and new models of service delivery;
 - 3. accommodation and spatial planning requirements;
 - 4. design requirements and issues, including specific architectural and engineering performance;
 - 5. communication and information infrastructure requirements;
 - 6. significant FFE requirements;
 - 7. procurement strategy; and
 - 8. cost estimate category 2 confidence level aligned with Project cost plan.
- 5. A key deliverable of this stage is the Schematic Design (SD) report which is prepared by the Consultant. The SD report should demonstrate a thorough analysis of design and engineering service systems has occurred and ensures that the intent of the functional design brief is met by the Schematic Design. The building solution contained in the SD report must meet Project Budget parameters:
 - 1. outline the proposed conceptual design solution that supports the service delivery and operational needs identified in the PDP;
 - describe and illustrate the achievement of all defined functional relationships and outline any functional limitations requiring operational solutions;
 - 3. Compile a detailed set of coordinated room data sheets, including guidelines on the locations, heights and number of all fixtures and fittings;
 - 4. complete all site investigation and clearly articulate all early works packages;
 - 5. establish business continuity, staging and program solutions;
 - 6. demonstrate the Projects adherence with requirements of the relevant authorities;
 - 7. demonstrate adherence with all statutory requirements;

- 8. identify major plant and systems requirements for engineering services and structural, cladding and building elements;
- fully describe the proposed scope of works in architectural and engineering terms (i.e. plans and elevations);
- 10. include a register of the spatial and design variations, including associated rationale, from the AHFG;
- 11. include a register of exceptions and associated rationale from the Capital Infrastructure Requirements;
- 12. include a register of assumptions which underlie the SD Report the cost of these is included in the cost plan at SD; and
- 13. summary of key Project risks from the Project Risk Register.
- 6. Further develop endorsed documentation from Preliminary Design phase to produce a highly detailed set of room data sheets, room layout sheets and a master schedule on an electronic database (CSV and PDF) for the purpose of FFE to facilitate the production of accurate lists of equipment requirements. This is a key performance requirement of the consultant.
- 7. Develop and maintain project 'C-sheets' from the room data sheets, room layout sheets and master schedule and keep them consistently updated and reflective of current FFE data.
- 8. Split the Master Schedule into grouped items (Group 1, 2, 3 & 4) and assist the client by providing further information when required in the planned procurement of group items.
- 9. Liaise with Queensland Health FFE Manager and FFE procurement officer to confirm their representation at user group sessions and ensure that final endorsement of proposed lists by the FFE Manager is received prior to the final release of the tender documentation to the market.
- 10. Plan, coordinate, attend and chair all user group sessions as required to collect comprehensive information to produce project data. Tracked changes from the user group sessions are to be recorded and controlled for tabling at project control group meetings to ensure strategic financial and scope management is achieved.
- 11. Consistently update all documentation to reflect changes to FFE master lists as a result of user group sessions.

2.2 Detailed Design Stage

Key Deliverables:

- 1. Detailed design 100% complete in line with project programme
- 2. Design reflects AHFG requirements, relevant codes and legislation
- 3. Design documentation is fully coordinated with other disciplines
- 4. Aligns with HPW Capital Works Management Framework Estimate Categories and Confidence Levels

Generally, by phase:

This Stage involves the ongoing development and refinement of the approved Schematic Design by all consultants
and the incorporation of all authority requirements into the design. A further Cost Estimate will be prepared during this
Stage to demonstrate that the Project is still within budget.

- 2. Review and adjust the design to comply with PM's instructions.
- 3. Obtain other Consultants' advice and integrate it into the design ensuring all coordination issues are addressed and consolidated onto the Consultant's plan.
- 4. Organise and chair meetings of design consultants as considered necessary, or as directed by the PM, for Technical Coordination, and prepare and distribute minutes of all meetings promptly in the form of Action Statements.
- 5. Refine the specification, including a Schedule of Materials and Finishes, to a standard acceptable to the PM.
- 6. Work with the QS to ensure tight financial and scope control is achieved and maintained and where necessary value manage the design to maintain project budget. Value Management should be continually benchmarked against the PDP to ensure that minimal project deliverable compromise is required.
- 7. Prepare documents, and/or reports as necessary to lodge with Building Approval(s).
- 8. Assist the PM as requested, in liaison and negotiation with Approving Authorities and/or Private Certification Consultants regarding any matters relating to the Building Approval, to expedite its progress and early release of the Building Approval.
- 9. Develop the schematic design, revised as necessary in accordance with the PM's instructions and to incorporate any redesign as necessitated by any estimated cost overrun.
- 10. Ensure coordination with Queensland eHealth in regard to specific ICT requirements.
- 11. Building Approval documentation is to be produced in Trade Packages, and in any event shall include, but not necessarily be limited to:
 - Site layouts to conform with land and geotechnical survey information, and recognising the requirements of such things as services, earthworks, landscaping, waterscaping, paving, and governing and critical dimensions (Scale 1:200 or larger)
 - 2. Floor plans (full set of General Arrangement Drawings) showing reduced levels, room layouts (including furniture, fittings), room data sheets (one per room) and any special requirements such as room loadings for equipment rooms (Scale 1:100)
 - 3. Requirements of building regulations and authority regulations and any similar requirements to be considered and incorporated in the design (Scale 1:100)
 - 4. Typical cross sections and elevations showing levels, ceiling heights, possible structure, design restrictions, and incorporation and coordination of services (Scale 1:100).
- 12. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 13. Ensure that developing designs are in accordance with the requirements of the Building Performance Evaluation (BPE) plan and conduct stakeholder management as necessary.
- 14. A key deliverable of this stage is the Design Development (DD) report which is to be prepared by the Consultant and demonstrates that issues of planning, design, materials section, construction and constructability, services integration

and coordination, structural, civil, mechanical, electrical, hydraulic and energy services have been addressed and integrated into the report. The DD Report and drawings shall include:

- 1. site plan
- 2. plans, sections and elevations
- 3. developed room layouts
- 4. construction sections for facade, perimeter wall sections showing finishes at junctions of walls and floors, ceilings, etc.
- 5. coordinated reflected ceiling plans
- 6. site works and landscaping layouts, including signage
- 7. roof layout and drainage details
- 8. lift, stair and riser details
- 9. equipment briefing schedules
- 10. room data sheets
- 11. asset management plan
- 12. project specific asset maintenance information spreadsheet
- 13. full services layouts external and internal
- 14. full structural definition
- 15. full civil definition
- 16. full traffic plan definition
- 17. full landscape definition
- 18. ICT Requirements
- 19. schedules including:
- 20. door keying schedule
- 21. signage
- 22. nurse call
- 23. Building, Engineering and Maintenance Services (BEMS)
- 24. security
- 25. communications
- 26. evacuation plans
- 27. summary of Environmental Sustainable Design provisions
- 28. register of the spatial and design variations, including associated rationale, from the AHFG

- 29. register of departures and associated rationale from the Capital Infrastructure Requirements
- 30. list of assumptions which underlie the DD report. The cost of these to be included in the in the cost plan at DD
- 31. summary of key Projects risks from the Project Risk Register
- 32. Finalised FFE list with a Category 4 confidence level.
- 33. a cost estimate at Category 4 will be prepared by the Project QS to demonstrate that the Project is still within budget.
- 15. Conduct any audits of FFE within existing facilities and liaise as necessary with existing user groups to coordinate and document the inventory of existing FFE for re-use within the new Project. Incorporate the results into FFE Schedules.
- 16. Further develop endorsed documentation from Preliminary Design phase to produce a highly detailed set of room data sheets, room layout sheets and a master schedule on an electronic database (CSV and PDF) for the purpose of FFE to facilitate the production of accurate lists of equipment requirements. This is a key performance requirement of the consultant.
- 17. Develop and maintain project 'C-sheets' from the room data sheets, room layout sheets and master schedule and keep them consistently updated and reflective of current FFE data.
- 18. Split the Master Schedule into grouped items (Group 1, 2, 3 & 4) and assist the client by providing further information when required in the planned procurement of group items.
- 19. Liaise with Queensland Health FFE Manager and FFE procurement officer to confirm their representation at user group sessions and ensure that final endorsement of proposed lists by the FFE Manager is received prior to the final release of the tender documentation to the market.
- 20. Plan, coordinate, attend and chair all user group sessions as required to collect comprehensive information to produce project data. Tracked changes from the user group sessions are to be recorded and controlled for tabling at project control group meetings to ensure strategic financial and scope management is achieved.
- 21. Consistently update all documentation to reflect changes to FFE master lists as a result of user group sessions.

2.3 Tender & Contract Documentation Stage

Key Deliverables:

- 1. Construction 100% complete in line with project programme
- 2. Design complies with all relevant codes and legislation
- 3. Design reflects AHFG requirements
- 4. Design documentation is fully coordinated with other disciplines and fit to issue for construction

Generally, by phase:

 This Stage involves the development of properly coordinated documents, suitable for tendering and subsequent construction either as a lump sum or a number of contracts in accordance with the agreed procurement method. The

documents, and the Project, must have all relevant approvals in place. A pre-tender estimate will also be prepared to demonstrate that the Project remains within budget.

- 2. Ensure coordination with Queensland eHealth in regard to specific Queensland Health ICT requirements.
- 3. Unless otherwise approved by the pm, all contract documentation is to be produced in standalone Trade Package lots.
- 4. Verify general arrangement drawings and make design adjustments as necessary, and as approved by the PM in each instance of substantial or significant change.
- 5. Prepare Schedules of Finishes, Specification notes, Schedule of PC Items, Monetary Allowances and Provisional Sums, Special Conditions of Contract as appropriate to each Trade Package.
- 6. Prepare final working drawings for all site works and for all buildings, including all plans, elevations and sections (at 1:100 minimum scale, with principal sections and stair sections at 1:50 minimum scale), all services, fitments and fittings, and furniture and equipment layouts.
- 7. Information in each Trade Package is to be presented in a manner sufficient for a Building Contractor (Trade Contractor) to construct from, generally with supplementary detail, and certainly must provide no scope or grounds for claims for variations. Shop or production drawings are not included in this item. Drawing scales to be appropriate and satisfactory to the PM.
- 8. All services coordination is by the Consultant and must be completed to the satisfaction of the PM and to meet other documentation production program requirements of the services and structural consultants.
- 9. Provide technical direction and coordination and prepare any necessary explanatory drawings.
- 10. As required by the PM, prepare revised estimates of cost based on contract documents, and adjust documents as necessary to bring the contract sum(s) within the agreed budget(s).
- 11. Provide leadership to the Project team, exercising control and coordination and monitoring processes
- 12. Ensure that the design for the Works is carried out in accordance with the PDP, the program and the budget
- 13. Identify all events arising which impact contingently on the Project and the design, and ensure that options are developed for their management within the agreed program, budget and scope
- 14. Ensure that no change affecting the function, scope or quality of the Works is made without the formal approval of the PM
- 15. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 16. Ensure that developing designs are in accordance with the requirements of the Building Performance Evaluation (BPE) plan and conduct stakeholder management as necessary.
- 17. Adhere strictly to the policy of the Department to ensure that the whole of the work to be documented is fully designed and specified and that no work is included in the documents as a provisional sum or quantity without the prior written approval of the PM.

- 18. Engineering Services Consultants are required to provide detailed cost breakdowns to the QS during the design stages.
- 19. Engineering Services Consultants are required to provide a populated Asset Maintenance Information Spreadsheet as part of the contract documentation.
- 20. Update all FF&E documentation to reflect Request for Information and tender addendums during the tender phase.
- 21. Update all FF&E documentation to reflect unforeseen change requests from the client.
- 22. Liaise with Queensland Health FFE Manager and FFE procurement officer to confirm their representation at user group sessions and ensure that final endorsement of proposed lists by the FFE Manager is received prior to the final release of the "For Construction" documentation.

2.4 Construction Delivery Stage

Key Deliverables:

- 1. Respond to RFIs within nominated project time frame reflective of the urgency relating to requests
- Update all project documentation to reflect approved variations, RFI responses and details provided during the construction process
- 3. Provide documentation as basis for the as built documentation to the building contractor
- 4. Assess and approve the quality and verify the content of the operational and maintenance manuals issued by the building contractor.
- 5. Participate in the monthly assessment of progress claims and provide supporting information where requested.
- 6. Support key project team members to facilitate the issue of project certification documentation to allow occupation of the facility upon completion.

Generally, by phase:

- 1. This Stage commences on the acceptance of the tender and acceptance of a building contractor to carry out the works on site. Consultants will be required to assist the Superintendent and SR with the contract administration of the Project for the duration of the works and into the 12-month defects liability period. This stage also involves the appropriate commissioning of the building and managing relocation of users to the new or redeveloped facility.
- 2. Prepare detailed explanatory drawings, and drawings of particular construction details, as reasonably requested by the PM, Principal Building Contractor for the Trade Contractors and promptly respond to RFI's as required.
- 3. Prepare drawings and information relevant to contract variations.
- 4. Inspect the works, and certify monthly and at practical completion, that the works as installed comply with the consultants' design and specification and prepare and issue defects notices to the Principal Building Contractor noting the items that do not comply.
- 5. Prepare appropriate certificates where necessary to facilitate the release of the Certificate of Classification for the Project, or for parts thereof (if applicable).

- 6. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 7. Participate in surveys, checklists, evaluations and reports as required to complete the Building Performance Evaluation (BPE).
- 8. Review shop drawings produced by Trade Contractors for the various elements of the Project and provide comments as necessary thereupon. The Consultant is to review the comments made by other consultants relative to the shop drawings and co-ordinate these and advise the Trade Contractors of all comments made upon the shop drawings.
- 9. Engineering Services Consultants are required to provide to the QS appropriate cost advice in regard to contractor's variations and claims.
- 10. Engineering Services Consultants are required to verify that the Asset Maintenance Information Spreadsheet has been fully completed by the construction contractor.
- 11. Maintain the master set of room data sheets, room layout sheets and master schedule on an electronic database (CSV and PDF) for the purpose of FFE to facilitate the production of accurate lists of equipment requirements.
- 12. Maintain the master 'C-sheets' throughout the entire construction delivery phase and keep them consistently updated and reflective of current FFE data.
- 13. Maintain and make changes as necessary to item grouping (Group 1, 2, 3 & 4) and assist the client by providing further information when required in the planned procurement of group items.
- 14. Liaise with Queensland Health FFE Manager and FFE procurement officer to confirm their representation at any user group sessions and ensure that final endorsement of changes made during the delivery phase is received by the FFE Manager and the Project Steering Committee prior to being distributed to the building contractor.
- 15. Plan, coordinate, attend and chair all user group sessions as required to collect comprehensive information to produce project data. Tracked changes from the user group sessions are to be recorded and controlled for tabling at project control group and project steering committee meetings to ensure strategic financial and scope management is achieved.
- 16. Consistently update all documentation to reflect changes to FFE master lists as a result of any approved user group changes.
- 17. Consistently update all documentation to reflect changes to FFE master lists as a result of any approved change requested (client or building contractor).

2.5 Practical Completion & Defects Liability Period

Key Deliverables:

- 1. Complete and maintain Asset maintenance spreadsheets in a template provided by Queensland Health.
- 2. Coordinate any vendor training required as part of the operational commissioning of the facility

- 3. As part of the greater consultant responsibilities of the phase, identify, monitor and close out any defects associated to the FFE deliverable.
- 4. The Consultant is to review and approve all 'as built' drawings and operation Manuals.
- 5. The Consultant is to re-inspect and approve 'making good' of defective items noted at Practical Completion and subsequent to Practical Completion as required throughout the Defects Liability Period and at the issue of the Final Certificate.
- 6. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 7. Participate in surveys, checklists, evaluations and reports as required to complete the Building Performance Evaluation (BPE).
- 8. The Consultant is to inspect and prepare certification of the works for conformity to design, specification and fitness for purpose.
- 9. The Consultant is to assist and liaise with the PM and Queensland Health during Queensland Health's operational take-over of the buildings and throughout the defects liability period.

3.0 DESIGN & DOCUMENTATION

3.1 Deliverables

The Consultant will deliver to the PM within the time stipulated the copies of documents as required under the commission and any additional documents or copies required by the Client.

Unless advised otherwise in the Scope of Services, furnish the following documentation: -

Provide electronic drawing backgrounds sufficient to the Contractor so their Sub- Contractors can produce Work Shop
Drawings and As Built drawings.

3.2 BIM Modelling

From 1 July 2019 BIM is required on Queensland Health projects, the following capital works project tiers have been defined as requiring BIM deliverables.

- 1. BIM Tier 1- Project value more than \$100 million
- 2. BIM Tier 2 Project value between \$10 million and \$100 million
- 3. BIM Tier 3 Under \$10 million (where the value of BIM is clearly demonstrable)

To support BIM implementation Queensland Health has developed the Project Information Requirements document for BIM which:

1. supports the existing Capital Infrastructure Requirements

- 2. is aligned with the international standard for BIM ISO19650 and the Digital Enablement for Queensland Infrastructure Principles for BIM Implementation policy
- 3. defines Queensland Health required uses of BIM and identifies the information required at specific stages

Compliance with the Project Information Requirements on a project is demonstrated through the creation of project specific BIM Execution Plan templates.

3.3 As-Built Drawings and Room Data Sheets

- 1. Provision of as-built drawings and room data sheets shall be the responsibility of the construction contractor. The carrying out of this work may be specified to the appropriate contractor or sub-contractor. Where that contractor or sub-contractor wishes to use the Consultant's documentation as the basis for as-built drawings and room data sheets, this is acceptable as long as the drawing is amended to suit reality. This is the responsibility of the relevant contractor.
- 2. It is the responsibility of the Consultant to verify all drawings and to ensure that they are produced. As-built drawings and room data sheets are to be made available at the end of the construction stage.

3.4 Asset Maintenance Information Spreadsheet

- 1. Provision of the completed Asset Maintenance Information Spreadsheet is the responsibility of the construction contractor.
- 2. It is the responsibility of the Consultant to ensure that the project specific Asset Maintenance Information Spreadsheet Template supplied by QLD health is included in the project documentation and completed by the construction contractor at practical completion.

3.5 Environmentally Sustainable Design

- Undertake Building Performance Modelling and prepare a BCA Part J Compliance Report in accordance with the Building Certifier's programme.
- Conduct an analysis and make recommendations for Environmentally Sustainable Design (ESD) initiatives. Provide a report and lifecycle analysis and seek approval from the Client of proposed ESD initiatives. Undertake the design of any approved initiatives.

3.6 Value Management studies and Risk Management Requirements

- 1. Manage, participate in and contribute to Value Management Study (VMS) for each component and stage of the Project and work through the recommendations arising from them. The Consultant shall allow for reports and option studies as appropriate, which shall be requested and considered for the VMS report.
- 2. Responsible for developing and managing risks. This involves bringing together stakeholders and facilitation of a risk assessment of the Project including a development of risk evaluation and management matrix based on AS4360. This matrix will be reviewed and monitored during the life of the Project. The majority of the risk assessment will be done on a program basis but will include some site-specific risks where they are of sufficient magnitude.

PORTION 4 – Scope of services for Early Contractor Involvement procurement strategy

1.0 Principal Consultant Duties

The Principal Consultant Duties are those associated with the delivery of the Project via a 2 stage Early Contractor Involvement Contract.

1.1 Objectives, process and requirements of the Service

The Consultant will undertake all duties and responsibilities as outlined in the Terms of Reference, and will be responsible for the peer review of the contractor's design development which will ensure that the following objectives, processes and policy requirements are met by the building contractor during their early contractor involvement phase:

- 1. To ensure efficiency in building design to achieve Value for Money in capital and recurrent costs without compromising service provision. Simple, cost effective, functional design solutions and construction techniques are considered appropriate. Consideration must be given to the entire life cycle of the project including the ongoing maintenance and recurrent costs.
- 2. To consider Life Cycle Costing parameters for engineering systems, materials and finishes.
- 3. To ensure Building Design sympathetic with the existing facility / environment along with providing a high-quality environment that responds to the service needs and priorities on site, including patient privacy and security both internally and externally. Design should be fit for purpose and responsive to changing future needs.
- 4. To maintain delivery of fully functional adjoining facilities' services during the development and construction of the Project while minimising the impact of construction on Hospital staff, patients and public.
- To develop and maintain a suitable communication and consultation process for the Project, and to communicate Project objectives to the relevant stakeholders.
- The Consultant will ensure that they and all secondary and sub-consultants fulfil their obligations by ensuring that the design development includes compliance with:
 - The Queensland Health Capital Infrastructure Requirements (CIR); and
 - The Australian Health Facility Guidelines (AHFG) are benchmarked against them.
- The Consultant will coordinate with the Building Contractor to ensure they complete and submit all CIR checklists relevant to the design in a timely manner, including coordinating input where required from all consultants, Secondary consultants and Sub-consultants and assist the Project Director by expressly noting and summarising any deviations from the CIR, and make reference to the relevant clause within the checklists from which the deviation is made.
- To ensure compliance with the current legislative requirements and consideration of proposed access code requirements and provisions of the Disability Discrimination Act.

1.2 The principal duties of the Consultant

- 1. Provide all the expert professional advice and skills required for the class of service which the Consultant has agreed to provide and ensure that only personnel possessing the necessary competence and professional expertise are used to provide those services.
- 2. Remain fully responsible for any review or acceptance of that work by or on behalf of the Queensland Health and be liable for any loss or damage suffered as a result of any negligent act, error, omission or statement on the part of Consultant or their employees, agents or sub-consultants.
- 3. Review for the technical and contractual accuracy of all documents produced by the Builder under the commission.
- 4. Carry out all responsibilities in accordance with recognised professional standards and applicable Government policy and procedures.
- 5. Certify that documentation has been properly and competently prepared and checked, by signing and dating the drawings and specifications, before submission to Queensland Health.
- 6. Ensure that Queensland Health's and Users' functional requirements are met throughout the development including during the production of design and contract drawings, specifications and other contract documents.
- 7. The Consultant will meet fortnightly or as required with the PM, or their nominated representative to report on progress of all parts of the Project and provide written status reports for those meetings.
- 8. Participate in all Project Control Groups, Site meetings and Design meetings as necessary.
- 9. Participate in the evaluation of consultants and contractors as required.
- 10. Prepare monthly reports on progress and submit to the PM in accordance with the PM's reporting schedule.
- 11. Take all reasonable steps to ensure probity and compliance with all State Government Acts, Regulations and quidelines and the specific Client requirements associated with the delivery of the Project.

1.3 Commissioning relationships

- 1. The Consultant will be commissioned by Queensland Health. The Consultant will report directly to and provide comprehensive support to the PM.
- 2. Queensland Health has under a separate commission appoint a QS to the Project.
- 3. The Consultant will be responsible for the following roles and may engage Sub-consultants to undertake these activities as required for the <u>peer review</u> of Builders designs during stage 1 of the Early Contractor Involvement:
 - 1. Architect
 - Structural / Civil Engineer
 - 3. Mechanical Engineer
 - 4. Electrical Engineer
 - 5. Hydraulics Engineer
 - Town Planner

- 7. Certifier
- 8. DDA Consultant
- 9. Fire Consultant
- 10. Vertical Transport Consultant
- 11. Security / Audio Visual (AV) / ICT Consultant
- 12. Acoustic Consultant
- 13. Landscape Architect
- 14. Interior Designer
- 15. Geotechnical Engineer
- 16. Land Surveyor
- 17. Asbestos Consultant
- 18. Environmentally Sustainable Design Consultant (including for assessment and reporting under the provisions of Part J of the Building Code of Australia)
- 4. Other consultants as necessary including:
 - · Way finding/Signage Consultant
 - · FFE Consultant
 - Other specialist sub-consultants considered necessary to complete the Project, as it relates to its delivery.
- 5. Responsibility of managing the actual program and cost objectives of the Project lies with the PM with advice provided by the Consultant as required. The PM is required to take direction from the Queensland Health Project Director for final decisions regarding any aspect of the Project. The Consultant is required to take direction from the PM.

1.4 Outcomes and Deliverables

1.4.1 Certification and Checking

The consultant will ensure that:

- 1. All documents produced under the Project are checked for accuracy, completeness and compliance with the brief, all applicable statutes, regulations and by-laws, standards and drafting standards.
- 2. All drawings are to be signed by the Consultant's Representative as certification of accuracy, completeness and compliance with all items noted above.
- 3. Where necessary all investigations, calculations and designs for the Project have been approved by a suitably experienced professional Engineer or Surveyor registered in Queensland and provide their Certificates signed by the appropriate professionals in regard to their particular field of expertise and submit them with the final tender documentation.

4. The consultant will provide a brief report of compliance at the end of the Project to the client addressing contractor compliance with design and functionality through the delivery phase.

1.4.2 Room Data Sheets

- 1. As part of the stage 1 of the Early Contractor Involvement the Consultant is to review the developed individual room data sheets (RDS) in both CSV and pdf format (one data sheet per room) and include provision to recheck, update and reissue the sheets as necessary and as requested by the Client.
- 2. Room Data Sheets will be checked and approved by the PM and the Client prior to the finalisation of the Performance Specification. They will be subsequently used as the base level documentation for assessment of all design stages. These data sheets form the basic data for the preparation of schedules of equipment to be purchased by the contractor and the Client, and an updated version is therefore essential to ascertain estimated costs against the budget, and for asset management purposes. Note that the Room Data Sheets must be prepared in a CSV format which enables the easy extraction of data into MS Excel and the Queensland Health FFE Application for the purpose of ordering equipment.

1.4.3 Aconex Document Management System

- 1. The Consultant will utilise the document management system as nominated by Queensland Health for the complete duration of the project. The licence for the document management system will be provided by Queensland Health at no cost to the Consultant. The content and ownership of the document management system will remain with Queensland Health. Queensland Health do not provide training in this system. Training can be sought directly from Aconex in a variety of formats.
- 2. The consultant shall use the document management system in all capacities including but not limited to the following:
 - 1. Documentation
 - 2. Correspondence
 - 3. Project direction
 - 4. RFI's
 - 5. Contractual Notices
 - 6. Connected Cost functions including variations, cost reports, progress claims and cash flows

1.4.4 FFE

Generally, the consultant will perform the following functions for FFE:

- 1. Peer review all FFE including Group 1, Group 2, Group 3 and Group 4 as supplied to meet requirements:
 - 1. Group 1 supplied and installed by the Contractor
 - 2. Group 2 supplied by the Client and installed by the Contractor
 - 3. Group 3 supplied and installed by the Client
 - 4. Group 4 supplied and installed by the HHS (consumable items)

1.5 Local Content

- 1. The Queensland Government's Charter for Local Content is overseen by the Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP).
- The Consultant will assist Queensland Health to fulfil its obligations under the Charter for Local Content by also ensuring that all consultants engaged on the Project are meeting their obligations with regard to the Charter and by assisting as necessary in undertaking the above listed requirements.
- 3. Full details of the Charter and its requirements can be found on the DSDMIP website http://www.statedevelopment.qld.gov.au/resources/charter-for-local-content.html

1.6 Code Compliance

- The Queensland Government's Code of Practice for the Building and Construction Industry (Queensland Code) and
 the Queensland Government's Implementation Guidelines to the Queensland Code of Practice for the Building and
 Construction Industry (Queensland Guidelines) apply to all publicly funded building and construction work exceeding
 \$2 million in value that is the subject of an expression of interest or request for tender by the Queensland Government.
- 2. A Workplace Relations Management Plan (WRMP) is required for publicly funded construction Projects exceeding \$10 million in value that are the subject of an expression of interest or request for tender and shall include those Projects assessed to be High Risk/Significant Projects under the PQC System, or other building construction Projects involving State Government funding exceeding \$10 million.
- 3. The Building Code 2013 (the National Code) applies to all federally funded Projects subject to the same Codes and Guidelines. The Queensland Code is to be interpreted in a manner that ensures that it does not contravene the National Code.
- 4. The Consultant will assist Queensland Health to fulfil its obligations under the Codes and Guidelines. In particular, the Consultant will be responsible for ensuring the application of, and compliance with, these Codes and Guidelines by:
 - 1. ensuring that compliance with these Guidelines is an integral component of their contract management systems and procedures;
 - 2. all expressions of interest, tender and contractual documents clearly set out the requirements specified in these Guidelines; and
 - 3. ensuring that the contractor and its subcontractors comply with the requirements of the Codes and Guidelines.

4.

2.0 STAGES

2.1 Early Contractor Involvement

- 1. The Consultant will be required to produce tender documentation in the form of Concept Designs, which was a deliverable in Portion 1 of these scopes of services.
- 2. The Consultant shall further provide the following Services:

- Review and verification of tender documents to ensure they have been prepared in the appropriate format
 and their compliance with Queensland Health requirements and State Government guidelines, policies and
 legislation.
- 2. Participation in the tender process including but not limited to the tasks as listed in "Tender Stage"
- 3. Provision of professional advice at a hand over meeting between the Consultant's team and Contractor's Consultant team within 2 weeks of contract award.
- **4.** Provide professional advice / documentation required as a result of any errors or omissions on the part the Consultant produced during stage 1 of the ECI.
- 3. When the ECI contractor is appointed, the Consultant will be retained to provide ongoing services in a review and advisory role by Queensland Health. The Consultant will not be novated to the ECI Contractor (unless approval is provided by Queensland Health) and the ECI Contractor will be required to commission their own design team. The Consultant will undertake all duties outlined in the Terms of Reference to the extent necessary to ensure that the ECI contractor fulfils its design obligations under the contract and adheres to all Queensland Health Capital Infrastructure Requirements (CIR), Australian Health Facility Guidelines, Stakeholder Requirements, Queensland Health specific ICT requirements, BPE and the Project Brief. The Consultant's ongoing involvement in its review and advisory role will generally comprise:
 - 1. Ongoing stakeholder management ensuring that any development in the documentation meets the Project brief and end user's requirements;
 - 2. Extensive input and expert advice regarding the design, with iterative reviews to ensure that it is being developed in accordance with Queensland Health Guidelines, Frameworks and the CIR;
 - 3. Guidance on building aesthetics;
 - 4. Provide guidance to the ECI Contractor with regard to the process and procedures required under the CIR. Conduct a comprehensive review of the completed CIR checklists submitted by the D&C Contractor and provide expert analysis on any deviations.
 - 5. Undertake a comprehensive review of the finalised detail design and Detail Design report. The Consultant is required to certify that the design meets all Queensland Health Capital Infrastructure Requirements, Australian Health Facility Guidelines, Stakeholder Requirements, Queensland Health specific ICT requirements and the Project Brief;
 - 6. Monitor developing designs to ensure that they are in accordance with the requirements of the Building Performance Evaluation (BPE) plan.
 - 7. Attendance at design coordination meetings as necessary to fulfil the role;
 - 8. Site inspections of the construction work acting in the capacity of the Principal's Representative. These will be conducted during and at completion of the works for the primary purpose of verifying that the works are being undertaken in-line with the approved design.

2.2 Construction Delivery Stage

Key Deliverables:

- 1. Respond to RFIs within nominated project time frame reflective of the urgency relating to requests.
- 2. Assess and approve the quality and verify the content of the operational and maintenance manuals issued by the building contractor.
- 3. Participate in the monthly assessment of progress claims and provide supporting information where requested.
- 4. Support key project team members to facilitate the issue of project certification documentation to allow occupation of the facility upon completion.

Generally, by phase:

- 1. This Stage commences on the acceptance of the tender and acceptance of a building contractor to carry out the works on site. Consultants will be required to assist the PM with the contract administration of the Project for the duration of the works and into the 12-month defects liability period. This stage also involves the appropriate commissioning of the building and managing relocation of users to the new or redeveloped facility.
- 2. Prepare explanatory drawings as reasonably requested by the PM and/or the Principal Building Contractor and promptly respond to RFI's as required.
- 3. Prepare drawings and information relevant to contract variations.
- 4. Inspect the works, and certify monthly and at practical completion, that the works as installed comply with the consultants' design and specification and prepare and issue defects notices to the Principal Building Contractor noting the items that do not comply.
- 5. Complete CIR checklists as required. Submit checklists in a timely manner at completion of the stage. Submit checklists to the Queensland Health Project Director and expressly summarise any deviations from the CIR. Coordinate the work of Sub-consultants and Secondary consultants to ensure that they complete any checklists as required.
- 6. Participate in surveys, checklists, evaluations and reports as required to complete the Building Performance Evaluation (BPE).
- 7. Review design drawings produced by the Contractor for the various elements of the Project and provide comments as necessary thereupon. The Consultant is to review the comments made by other consultants relative to the deign drawings and co-ordinate these and advise the Trade Contractors of all comments made upon the shop drawings.
- 8. Engineering Services Consultants are required to provide to the QS appropriate cost advice in regard to contractor's variations and claims.
- Engineering Services Consultants are required to verify that the Asset Maintenance Information Spreadsheet has been fully completed by the construction contractor.

2.3 Practical Completion & Defects Liability Period

Key Deliverables:

- 1. As part of the greater consultant responsibilities of the phase, identify, monitor and close out any defects.
- 2. The Consultant is to review and approve all 'as built' drawings and operation Manuals.
- 3. The Consultant is to re-inspect and approve 'making good' of defective items noted at Practical Completion and subsequent to Practical Completion as required throughout the Defects Liability Period and at the issue of the Final Certificate.
- 4. Participate in surveys, checklists, evaluations and reports as required to complete the Building Performance Evaluation (BPE).
- 5. The Consultant is to inspect and prepare certification of the works for conformity to design, specification and fitness for purpose.
- 6. The Consultant is to assist and liaise with the PM and Queensland Health during Queensland Health's operational take-over of the buildings and throughout the defects liability period.

3.0 DESIGN & DOCUMENTATION

3.1 Deliverables

The Consultant will deliver to the PM within the time stipulated the copies of documents as required under the commission and any additional documents or copies required by the Client.

3.2 BIM Modelling

From 1 July 2019 BIM is required on Queensland Health projects, the following capital works project tiers have been defined as requiring BIM deliverables.

- 1. BIM Tier 1- Project value more than \$100 million
- 2. BIM Tier 2 Project value between \$10 million and \$100 million
- 3. BIM Tier 3 Under \$10 million (where the value of BIM is clearly demonstrable)

To support BIM implementation Queensland Health has developed the Project Information Requirements document for BIM which:

- 1. supports the existing Capital Infrastructure Requirements
- 2. is aligned with the international standard for BIM ISO19650 and the Digital Enablement for Queensland Infrastructure Principles for BIM Implementation policy
- defines Queensland Health required uses of BIM and identifies the information required at specific stages

Compliance with the Project Information Requirements on a project is demonstrated through the creation of project specific BIM Execution Plan templates.

3.3 As-Built Drawings and Room Data Sheets

- 1. Provision of as-built drawings and room data sheets shall be the responsibility of the construction contractor. The carrying out of this work may be specified to the appropriate contractor or sub-contractor. Where that contractor or sub-contractor wishes to use the Consultant's documentation as the basis for as-built drawings and room data sheets, this is acceptable as long as the drawing is amended to suit reality. This is the responsibility of the relevant contractor.
- 2. It is the responsibility of the Consultant to verify all drawings and to ensure that they are produced. As-built drawings and room data sheets are to be made available at the end of the construction stage.

3.4 Asset Maintenance Information Spreadsheet

- 1. Provision of the completed Asset Maintenance Information Spreadsheet is the responsibility of the construction contractor.
- It is the responsibility of the Consultant to ensure that the project specific Asset Maintenance Information Spreadsheet
 Template supplied by QLD health is included in the project documentation and completed by the construction
 contractor at practical completion.

3.5 Environmentally Sustainable Design

- Ensure that the Building Contractor undertakes Building Performance Modelling and prepares a BCA Part J Compliance Report in accordance with the Building Certifier's programme.
- 2. Review and ensure that the Building Contractor:
 - 4. Conducts an analysis and make recommendations for Environmentally Sustainable Design (ESD) initiatives.
 - 5. Provides a report and lifecycle analysis and seek approval from the Client of proposed ESD initiatives.
 - 6. Undertakes the design of any approved initiatives.

3.6 Value Management studies and Risk Management Requirements

- 1. Ensure that the Building Contractor undertakes a Value Management Study (VMS) for each component and stage of the Project and work through the recommendations arising from them. The Consultant shall allow for review and response to reports and option studies as appropriate, which shall be requested and considered for the VMS report.
- 2. Participate in the development and management of risks.