

Construction Management Plan

N224

Moree Hospital Redevelopment

13 November 2023

Revision History

Version	Date	Revision Description	Project Director Sign off
00	31/08/23	Review of Environmental Factors (REF)	Andrew Merriel
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1 Project Description

1.1 Project Scope and Site Description

Scope

The primary focus of this Project is to provide asset replacement, with a new health facility located on the existing site to support contemporary health service provision that supports the delivery of contemporary models of care.

The Project scope is to redevelop Moree Hospital in line with the current Clinical Services Plan (CSP) including the master planning and delivery of the following:

- ✓ Emergency care services;
- ✓ Overnight inpatient beds;
- ✓ Operating theatre;
- ✓ Birthing suites;
- ✓ Clinical support services;
- ✓ Landscaping;
- ✓ Modifications to existing carparking.
- ✓ Decommissioning & demolition of redundant existing facilities

Site

The Moree Hospital Redevelopment is located within the grounds of the existing Moree District Hospital on land described as Lot 11 DP 1113157 (the site).

The site is located centrally within the town of Moree. It sits on the southern side of the Mehi River with frontages to Victoria Terrace (to the north) and Alice Street (to the south) and is generally surrounded by residential uses to the south, the Whiddon Moree (previously Fairview Retirement Village) to the west, and recreational uses adjacent to the Mehi River to the east and north.

The site is located within the Moree Plains Shire Local Government Area (LGA).



Moree Hospital Site



Position of new facility on Moree Hospital Site

1.2 Construction Management Plan Application

This Construction Management Plan has been developed to provide a detailed description for construction and management of the project.

Figure 1 – Construction Management Plan & Sub-Plans



This plan provides specific information regarding procedures BESIX Watpac intends to implement to ensure the Works are executed safely, that there are no detrimental impacts to the environment, and there are no disruptions or unexpected and unnecessary inconveniences to NSW Health and their personnel.

Procedures within this plan will promote a productive and collaborative site culture, conducive to a successful project outcome.

A copy of this plan will be readily available to all project stakeholders, including subcontractors and will remain a reference document for BESIX Watpac project staff.

It is our experience that during the lifecycle of the project, this plan will be subject to amendment to address the refinement of design and planning.

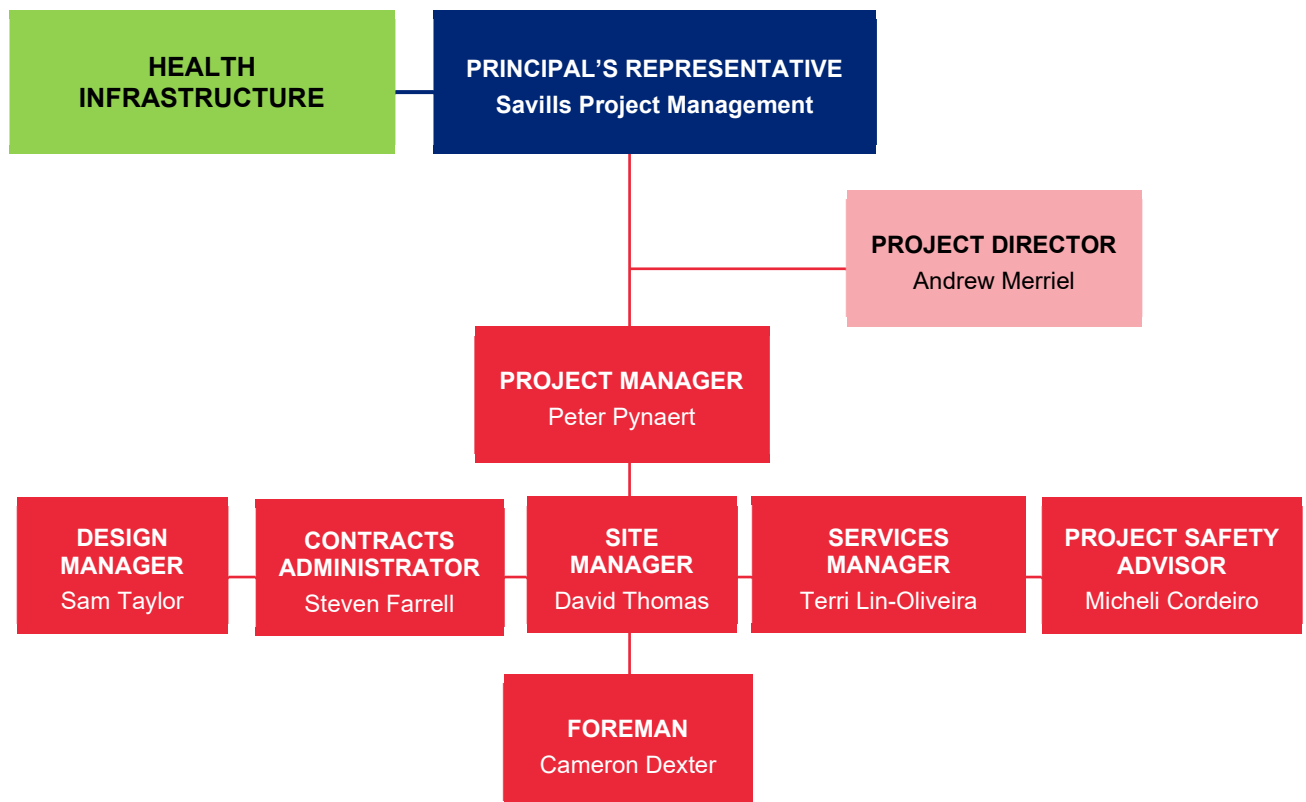
2 Project Team

2.1 Key Participants

Stakeholder	Contact Details
Client	Health Infrastructure Mohammad Ashari (Mohamad.Ashari@health.nsw.gov.au)
Client Representative	Savills Australia Michael McMahon (mmcmahon@savills.com.au)
End User	Hunter New England Local Health District
Principal Contractor	BESIX Watpac Andrew Merriel (amerriel@besixwatpac.com)

2.2 Organisation Chart

Figure 2 - Project Team Organisation Chart



3 Establishment

Following summarises site establishment for management of works..

3.1 General

Works will be delivered in two(2) main stages with modifications to the carparking and diversion of live services infrastructure carried out in the first stage and the delivery of the main building in the second.

3.2 Site Accommodation

Site amenities for BESIX Watpac and subcontractor personnel, including office, lunch, bathroom, and change facilities will be provided for the duration of the project. These amenities will be located at the eastern end of the site on the boundary of Victoria Terrace away from the main pedestrian access points to the hospital.

3.3 Fencing & Site Access (Vehicle & Pedestrian)

The general principle is to separate construction areas of work from the public, hospital staff and visitors. Where there is a cross-over, this will be managed to ensure safety of all persons and equipment.

Appropriate hoarding/fencing (as specified in Australian Standards and SafeWork NSW requirements) will be installed to prevent public and staff access and to maintain security for the various areas of the works.

Site Notices will be erected at the boundary of the site. The site notices will include details of; Principal Contractor details, name of Site Manager and 24-hour contact number, approved hours of work, and details of the Principal and other appropriate stakeholders. Safety related statutory signage will also be erected on the boundary of the site in accordance with statutory requirements.

Site, precinct information and traffic signage, and any temporary traffic measures required will be installed and maintained for the duration of the Works.

These public and property protection measures will be reviewed at the time of contract award and during monthly PCG meetings, to ensure alignment with proposed preferred methodologies and construction stages and to ensure that the safety of the public and staff is always maintained during the works.

3.4 Environmental Measures.

General

An Environmental Management Plan (EMP) that complies with environmental legislation will be developed by the BESIX Watpac. The EMP will describe the environmental strategy, methods, controls, and requirements for the execution of the Works. It will stand alone as the master document for site environmental activities.

The primary aim and objective of the EMP will be to provide a framework of procedures to minimise the impacts of the construction of the project on the environment. The environmental performance of the contractor will be monitored throughout the Works.

Noise & Vibration

Noise from the construction site shall not exceed the limits set out in the Interim Construction Noise Guidelines, EPA and Australian Standards. No machine work will occur outside the approved working hours set unless approval has been given through the Disruptive Works Notice (DWN) process.

The noise and vibration from the use of any plant equipment and/or building services associated with the premises shall not give rise to an offensive noise as defined under the provisions of the Interim construction Noise Guidelines, EPA and Australian Standards.

As part of noise mitigation for the project, the BESIX Watpac will be responsible for the management, checking of compliant maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the Works will be checked for defective exhaust systems and general servicing.

Guidelines for operational limits, identification of at-risk receivers and implementation of mitigation measures will be provided in a project Noise and Vibration Management Plan. The objectives of the Construction Noise and Vibration Management Plan will be to:

- ✓ Ensure that construction works do not significantly impact background noise levels around the hospital precinct, and those applicable guidelines and regulations are met;
- ✓ Ensure all equipment operates within the applicable noise levels;
- ✓ Ensure that construction works do not cause sufficient vibration to damage surrounding buildings, and comply with the applicable guidelines and regulations;
- ✓ Vibration does not affect occupiers of the adjoining buildings; and
- ✓ Ensure construction methodologies adopted minimise the impact of noise, dust and vibration

Note **Section 6** Communications in regard to complaints mechanism.

Odour Control

Odours associated with demolition for the site will be assessed and minimised. All plant and machinery involved in the Works will be regularly serviced and checked for exhaust emissions and catalytic converters are to be utilised.

Protection of Trees

BESIX Watpac will comply with Australian Standard 4970-2009: Protection of Trees on Development Sites to ensure the proper care and protection of trees retained and integrated into the construction project.

BESIX Watpac will implement procedures to protect trees at every stage of the development process.

Stormwater; Sediment & Dust Management

BESIX Watpac will develop and implement a strategy in accordance with statutory regulations for stormwater, sediment and dust control which will be included in the EMP. This strategy will include control measures and document how these measures are to be implemented and monitored.

Environmental measures including shaker grids and sedimentation fences will be installed, maintained and modified from time to time to meet the demands of an emerging construction activities to control the risk of sedimentation impacting the local environment.

Hazardous Materials

Site management controls including protocols to manage unexpected finds will be implemented during ground disturbance and demolition works.

4 Project Management

The following section outlines management of key elements within the delivery process.

4.1 Security

Security will be engaged to patrol the site outside of working hours.

During working hours, the site will be overseen by BESIX Watpac site personnel, who will not let anyone in without a site contact.

The Site Office should be notified of any suspicious person/s or activities.

4.2 Dilapidation/Existing Services Survey

Prior to commencing work on the site, BESIX Watpac will carry out a detailed dilapidation survey to identify and record salient features of the existing conditions on and adjacent to the site, of the adjacent buildings, and along the roadway around and leading to the site.

A narrative and photographic record will be produced and copied to the Principal's Representative for record purposes. A copy of this report will be maintained on-site by the Project Manager for the duration of the works.

Prior to commencing any construction work a review of the existing services information, including 'Dial Before You Dig' will be carried out, followed by physical pothole or vacuum excavation of certain areas to identify existing in ground services where our works will be carried out.

BESIX Watpac will prepare an overlay drawing of services and maintain that drawing in the induction room, noting that our induction procedures will address working with or near existing services.

4.3 Control of Employees on Site

Access to the site will be controlled through installation of perimeter fencing with lockable gates.

Way finding signage will be erected to direct workers to the site and site office which will also be appropriately and clearly signed.

All visitors will be either escorted onsite by an inducted member of the project or inducted by our site staff prior to going onsite. Right of entry provisions will be implemented, and any required notifications of entry advised to appropriate parties.

4.4 Site Induction Procedures

Each person working on the site will undergo a project specific induction. Regular visitors must also undergo this induction. Without exception, no person will be allowed unescorted on-site without first having completed this induction.

Prior to attending site specific induction training all subcontractors MUST have completed the statutory General Induction and be the holder of a 'Blue or White Card' or a mutually recognised interstate equivalent.

4.5 Vehicle & Pedestrian Management

Prior to construction works commencing, BESIX Watpac will develop a Construction Pedestrian and Traffic Management Plan which will detail how vehicle and pedestrian access will be managed during the construction works.

Traffic flows and vehicle/pedestrian separation are major considerations and pedestrian routes are to be maintained throughout construction.

Key issues for vehicle and pedestrian management during construction to be considered in the Construction Pedestrian and Traffic and Management Plan include, but is not limited to:

- ✓ Provide safe and uninterrupted access for pedestrians and vehicles accessing the construction site, hospital site and adjacent resident driveways;
- ✓ Ensure maximum safety of site personnel, pedestrians, and drivers; Minimise environmental nuisance and impact because of construction traffic.
- ✓ Ensure construction traffic does not unduly interrupt existing traffic flows on the local road network;
- ✓ Safe operation of buses and other transport services during construction on adjacent roads;
- ✓ Have no vehicles arrive at the site, without prior arrangement, outside the approved working hours;
- ✓ Timely and effective implementation of traffic management measures;
- ✓ Always maintain access for hospital and stakeholder's deliveries; and
- ✓ Fulfilling the requirements of statutory authorities.

4.6 Disruptive Works Notices

Any planned disruptive works to hospital operations will be managed through the process of Disruptive Works Notices (DWNs). For such stoppages, the DWN will describe the applicable works, timetable, issues, and risk management plans.

DWNs are submitted by BESIX Watpac to Savills, Health Infrastructure, and hospital stakeholders for approval. Depending on the nature of the works these may be required between 48hrs and 6 weeks prior to commencement of works.

4.7 Temporary Services

BESIX Watpac will install temporary services necessary for the proper conduct of the works including power, water, sewer, telephone and data communications.

4.8 Publication of Photographs/Images

Photographs and/or video footage of the works will be taken in accordance with contractual reporting requirements as agreed with the Principal's Representative.

Publication of any photographs and/or videos will be subject to review and approval with the Principal.

4.9 Site Maintenance and Cleaning

The site and surrounding areas will be maintained in a clean and tidy manner.

BESIX Watpac's Project Safety Advisor, BESIX Watpac's site management personnel and representatives of the Safety Committee will regularly review housekeeping, to ensure required standards are maintained.

Cleaning will be undertaken progressively and by all on-site to maintain standards. Waste material will be deposited in bins provided for the purpose.

4.10 Maintenance of Existing Services

The maintenance of existing services is a key issue requiring effective and timely management. To manage the installation process, we will implement protocols to ensure that building services are maintained, and when an alteration is contemplated that the work is planned to avoid operational dysfunction.

Site inductions note that our management strategies and protocols deal with the identification of all services, the process by which application must be made to affect proposed alterations, and the procedures that must be implemented prior to and during such alterations proceeding.

Our protocols include identification prior to digging and 'pot-holing' to accurately locate existing services within an excavation zone. These arrangements will be developed to contain project specific communication channels to keep stakeholders 'in the loop' when work such work is planned.

5 Archaeological Management

OzArk Environment & Heritage (OzArk) was been engaged by NSW Public Works Advisory on behalf of NSW Health Infrastructure to complete an Aboriginal due diligence heritage assessment for the Moree Hospital upgrade project (the project).

OzArk's Aboriginal Due Diligence Assessment Report dated October 2022 notes that:-

The undertaking of the due diligence process resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the project. This moves the project to the following outcome:

Aboriginal Heritage Impact Permit (AHIP) application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work, and notify Heritage NSW (02) 9873 8500 (heritagemailbox@environment.nsw.gov.au). If human remains are found, stop work, secure the site, and notify NSW Police and Heritage NSW.

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the Moree Hospital without further archaeological investigation provided that all land and ground disturbance activities are confined to within the study area. Should the parameters of the project extend beyond the assessed areas, then further archaeological assessment may be required.*
- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. If during works, however, Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the Unanticipated Finds Protocol (Appendix 1) should be followed.*
- 3) Inductions for work crews should include a cultural heritage awareness procedure to ensure they recognise Aboriginal artefacts (see Appendix 2) and are aware of the legislative protection of Aboriginal objects under the National Parks and Wildlife Act 1974 and the contents of the Unanticipated Finds Protocol.*
- 4) The information presented here meets the requirements of the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects*

6 Communications

To ensure that key stakeholders are accurately informed of our activities, we will proactively participate in the proposed meeting schedule set out in the Contract and ensure that the level of our representation is commensurate with requirements.

Establishing an effective communication structure at the outset with the Principal's Representative is an essential element to the management plan for the project and we would expect to initially manage this process through the Start-up / Induction meeting.

A comprehensive written monthly report will be published and distributed prior to each meeting as required. The Monthly Project Report will address at least the following:

- A comprehensive progress narrative supported by photographs
- RFI Register
- Programming and progress reporting detailing the state of work against the approved Contract Program, and anticipated key issues to be delivered / undertaken in the following month
- Summary of the numbers of workers on-site
- Financial reporting including variations, committed cost, cash flow forecast (and actual vs. predicted), forecast additional likely costs, and total estimated cost
- A summary of QA activity including NCR register, summary of test results and audit reports
- Evidence of compliance with the EMP and other project plans
- WHS including current and historical injury statistics (and outcomes vs. targets contained in PSMP), compliance with that plan, incident and or near miss reports including remedial action to prevent recurrence, audit reports
- Industrial relations
- Authorities
- Complaints / remedies
- Commissioning and Handover
- Defects rectification

In addition to the above, we will implement at least the following meeting processes.

6.1 Project Meetings

Site meetings provide a forum for regular and formal interaction between the consultants and our site management team.

The aim is to ensure that the participants initiate all necessary actions to maintain the quality and delivery requirements of the project.

These meetings will be minuted and will generally be held fortnightly, chaired by the Project Manager. It is an obligation of the participants that all actions arising from the meeting will be dealt with and closed out by the required action date recorded in the minutes.

We will address planning and coordination, services infrastructure management, traffic management, complaints, area access, fencing, handover and completion, decanting and occupation and the like in this forum.

6.2 Subcontractor Coordination Meetings.

Subcontractor meetings provide a forum for regular and formal interaction between our subcontractors and the site management team and will address issues including, but not limited to, site safety, quality management, environmental management, coordination between trades, programming, progress, technical issues, shop-drawings and sample submissions, Building Code 2016 requirements, interface coordination with Principal users and general industry matters.

These meetings will generally be held weekly on-site and chaired by the Project Manager.

Minutes will be taken by the Project Manager and distributed to all attendees within two days of the meeting. As with all meetings, it is an obligation of the participants that all actions evolving from the meeting will be dealt with and closed-out by the required action date recorded in the minutes.

6.3 Subcontractor Coordination Meetings

All meetings will be conducted in accordance with the requirements set out in detail in the PSMP and stipulated in legislation.

6.4 Completion and Commissioning Meetings

These meetings will be minuted and chaired by the Project Manager and will focus on the specifics of completion and commissioning activities.

Specific issues will include, but not be limited to, the tests required to be completed; testing programming; testing responsibilities; applicable standards; timing; acceptance criteria; witnessing requirements and the like. Additionally, we will address procurement of necessary certifications (consultants / building surveyor / Principal's Representative, and the provision of warranties, as built drawings, operation and maintenance manuals, all of which will be required to ensure we demonstrate that conformance with project requirements has been achieved.

These meetings begin early in the project and will focus on progressively preparing documents within a framework we will propose for agreement with the Principal's Representative.

6.5 Internal Team Meetings

We will conduct weekly internal team meetings that will focus on safety, quality, progress, coordination and key planning issues.

6.6 Issue Specific Meetings

We will conduct a range of issue specific meetings to address matters including but not limited to: quality; environmental and safety audits (internal, external and subcontract); planning; costing; variation; and information transfer (drawings, RFIs, shop drawings, manuals, approval and the like).

6.7 Toolbox Meetings

These meetings focus on issues ranging from individual subcontract work practices and planning, through to whole of site management / planning issues. Toolbox meetings are generally conducted on a weekly basis and records of the meeting are maintained.

6.8 Complaints Mechanism

Our aim is to carry out our activities in a manner that minimises our impact on the normal operations surrounding the site. Should any complaints be received, they will be logged in the project Complaints Register.

The Project Manager will be responsible to act on and manage all complaints. The Complaints Register will be updated to note the actions implemented to close-out each issue. This register will be reviewed as part of our Team Meeting processes.

6.9 HSEQ Communications

Where circumstances necessitate the communication of specific HSEQ information, a **S03-01-02 HSEQ Communication** or **S03-01-03 HSEQ Alert** is to be raised by the National/State Safety Manager, or State Quality & Environment Manager, and distributed to the relevant audience.

With the exception of occurrences of a confidential nature, where the HSEQ Communication or HSEQ Alert is applicable to the project, a copy is to be:

- Distributed to the relevant subcontractor/s;
- Displayed on the project notice board; and

Discussed as part of the next consultation arrangement on the project, being the project safety committee meeting, subcontractor meeting and/or toolbox talks. Site meetings provide a forum for regular and formal interaction between the consultants and our site management team.

The aim is to ensure that the participants initiate all necessary actions to maintain the quality and delivery requirements of the project.

These meetings will be minuted and will generally be held fortnightly, chaired by the Project Manager. It is an obligation of the participants that all actions arising from the meeting will be dealt with and closed out by the required action date recorded in the minutes.

We will address planning and coordination, services infrastructure management, traffic management, complaints, area access, fencing, handover and completion, decanting and occupation and the like in this forum.

APPENDIX 1

ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL

An Aboriginal artefact is anything which is the result of past Aboriginal activity. This includes stone (artefacts, rock engravings etc.), plant (culturally scarred trees) and animal (if showing signs of modification; i.e. smoothing, use). Human bone (skeletal) remains may also be uncovered while onsite.

Cultural heritage significance is assessed by the Aboriginal community and is typically based on traditional and contemporary lore, spiritual values, and oral history, and may also consider scientific and educational value.

Protocol to be followed if previously unrecorded or unanticipated Aboriginal object(s) are encountered:

1. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:
 - › Not further harm the object
 - › Immediately cease all work at the particular location
 - › Secure the area to avoid further harm to the Aboriginal object
 - › Notify Heritage NSW as soon as practical on (02) 9873 8500 (heritagemailbox@environment.nsw.gov.au), providing any details of the Aboriginal object and its location; and
 - › Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
2. If Aboriginal burials are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and Heritage NSW contacted.
3. Cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate:
 - › The recording and assessment of the find(s)
 - › The fulfilment of any legal constraints arising from the find(s), including complying with Heritage NSW directions
 - › The development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find(s).
4. Where the find(s) are determined to be Aboriginal object(s), recommencement of work in the area of the find(s) can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW (normally an Aboriginal Heritage Impact Permit).

APPENDIX 2

ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION

	
<p>A retouched silcrete flake</p>	<p>A quartz flake</p>
	
<p>Microliths (scale = 1 cm)</p>	<p>Volcanic flakes</p>
	
<p>Flake characteristics (scale = 1 cm)</p>	<p>A mudstone/tuff core from which flakes have been removed</p>