

# SOUTH EAST REGIONAL HOSPITAL DEVELOPMENT APPLICATION CONSTRUCTION MANAGEMENT PLAN

January 2013 | FINAL

## DOCUMENT ADMINISTRATION

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Prepared by: Ben Crompton

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## TABLE OF CONTENTS

<b>1.0</b>	<b>Introduction</b>
1.1	Proposed Works
1.2	Site Description
1.3	Prior to the Commencement of the SSD Works
1.4	Construction Management Plan Components
<b>2.0</b>	<b>Site Operations</b>
2.1	Legislative Requirements
2.2	Hours of Operation
2.3	Public Safety, Amenity and Site Security
2.4	Disruption Notices & Neighbour Management
<b>3.0</b>	<b>Environment and Amenity</b>
3.1	Noise and Vibration
3.2	Dust
3.3	Odour Control
3.4	Vegetation Protection
3.5	Stormwater and Sediment Control
<b>4.0</b>	<b>Traffic Management</b>
4.1	Construction Entry & Exit
4.2	Pedestrian Protection
<b>5.0</b>	<b>Waste and Materials Reuse Management</b>
5.1	Storage of Dangerous Goods
5.2	Waste Management / Recycling Principles
5.3	Waste Management during Geotechnical works

## 1.0 Introduction

The State Significant Development Works or ‘The Main Works’ described in this preliminary Construction Management Plan will be carried out by a Head Contractor on behalf of Health Infrastructure (HI).

This Plan is a preliminary Construction Management Plan submitted as part of the State Significant Development (SSD) submission. Once the Head Contractor has been appointed, a comprehensive Construction Management Plan will be prepared by the Head Contractor with specific details and strategies for the management of activities on-site.

HI will ensure that the Head Contractor complies with the minimum standards detailed in this Preliminary Construction Management Plan, as well as the requirements of the Bega Valley Council and Department of Planning and Infrastructure.

The Head Contractor’s requirements outlined in this preliminary Construction Management Plan will be specifically included in the contract.

### 1.1 Proposed Works

The Stage 2 Main Works will include:

Construction of a new 26,000m<sup>2</sup> 3-storey building to accommodate a new Maternity unit, Operating Theatre Suite, Drug & Alcohol and Mental Health Units.

In addition to the main building, associated services and infrastructure, there will be landscaping including a Helipad and geothermal system (ground source heat pump).

### 1.2 Site Description

The proposed development site covers an area of approximately 17.5 hectares. The new hospital will be built on a greenfield site known as 1614 (Lots 1, 2 & 3 of DP827161), Tathra Road, Bega, NSW and is situated to the north east of the intersection of Tathra Road and Boundary Road.

A site locality plan is presented in Figure 1-1 below.



Figure 1-1 Bega Site Locality

### 1.3 Prior to the Commencement of the Main Works

Prior to the commencement of Works on site, the following procedures will be undertaken:

Ascertain all relevant project information, applicable standards, statutory requirements and conditions, including authorities having jurisdiction over the Main Works;

Obtain all relevant insurances, permits and approvals and pay all associated fees, long service levies and deposits;

Undertake a dilapidation report that provides a photographic record of the site and surrounding areas and properties as well as a record of existing noise and dust levels for use as a base for ongoing monitoring; and

Retain a copy of the SSD Approval on site at all times during the duration of the Main Works. The Principal will notify the Consent Authority of proposed variations to project requirements and conditions where they are practicably foreseeable.

## 1.4 Construction Management Plan Components

This Plan covers the following areas of management:

**The operations of site management when undertaking the Main Works:**

- Legislative Requirements
- Hours of work
- Public safety, Amenity and Site Security
- Disruption Notices and Neighbour Management

**Mitigation to minimise amenity and environmental impacts:**

- Noise and Vibration Management
- Dust Management
- Odour Control
- Vegetation Protection
- Stormwater and Sediment Control

**Traffic/pedestrian management over the duration of the SSD Works.**

**Waste Management:**

- Storage of Dangerous Goods

**Service Disconnections and Shutdowns**

## 2.0 Site Operations

### 2.1 Legislative Requirements

The Main Works will be undertaken in accordance with the following legislative requirements and any others that must be complied with in undertaking the SSD Works as required:

Protection of the Environment Operations Act and Regulations;

Approved Methods for the Modelling and Assessment of Air Pollutants in NSW  
(EPA) Environmentally Hazardous Chemicals Act 1985;

Protection of the Environment Administration Act and Regulations;

Work Health & Safety Act 2012 and relevant codes of practice and Standards  
WHS Regulation 2012 and relevant codes of practice and Standards;

Australian Standard AS 2601-2001: Demolition of Structures;

Australian Standard AS 4970-2009: Protection of Trees on Development  
Sites; Australian Standard AS 4373-1996: Pruning of Amenity Trees;

WorkCover NSW and the National Occupational Health and Safety Commission (NOHSC) Code  
of Practice for the Safe Removal of Asbestos 2<sup>nd</sup> Edition [NOHSC:2002(2005)];

Code of Practice for Asbestos Work (Excluding Removal);

Guide to the Control of Asbestos Hazards in Buildings and Structures (NOHSC:3002  
(1998)); Resource and Recovery Act 2001; Environmental Planning and Assessment Act  
1979, including clause 109R for the compliance of the current Building Code of Australia

Heritage Act 1997; Local Government Act 1993;  
Disability Discrimination Act 1992 (DDA);

Disability (Access to Premises – Buildings) Standards 2010 (Premises Standard); Applicable aviation standards e.g. CASA requirements; and Soil Conservation Act 1983.

## **2.2 Hours of Operation**

The hours of construction site shall be restricted as follows as per Bega Valley Council's requirements:

Monday to Friday 7.00AM to 6.00PM

Saturdays 8.00AM to 4PM

No work or deliveries on Sundays and Public Holidays

Out of hours works may be required from time to time and will be coordinated with hospital requirements and BCA for Crown Certification. Deliveries of heavy machinery may be required out of the proposed hours of operation to conform to the overriding requirements of the Roads & Maritime Services (RMS).

## **2.3 Public Safety, Amenity and Site Security**

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

Vehicular access/egress gates will be erected as required. These gates will be manned by qualified traffic supervisors at the times of vehicular access and egress to the Site.

These public and property protection measures will be reviewed at the time of contract award for the Main Works to ensure alignment with proposed construction methodologies and to ensure that the safety of the general public is maintained at all times during the Main Works.

The Head Contractor will need to comply with their duty under WHS management in accordance with the legislative requirements listed in Section 2.1 of this document.

## **2.4 Disruption Notices & Neighbour Management**

### **Complaints Mechanism and Neighbour Management**

From the commencement of construction until completion of the Main Works, the Head Contractor will be required to maintain a community liaison officer on the project. This officer will be contactable by both a mobile phone and email and the contact details will be clearly advertised on site hoardings, community updates and the like.

The Head Contractor will be required to maintain a register of complaints and to report on the status of complaints on a monthly basis. For complaints that cannot be addressed by the Head Contractor, these will be presented to the appointed representative from the Hospital for resolution of the issues and for decisions to be made.

South East Regional Hospital will provide site signage that clearly indicates the relevant contact within the Hospital with responsibility for addressing complaints during the construction phase.

## 2.5 Phasing of Works

The construction works are split into two stages – Early works (highlighted in yellow) and Main construction works (highlighted in red). The Early works construction management plan forms part of the separate SSD application for Early works.

The main construction works consist of main building construction, helipad, adjacent car parking and some landscaping.

Figure 2-1 below identifies the locations of these works on the site plan

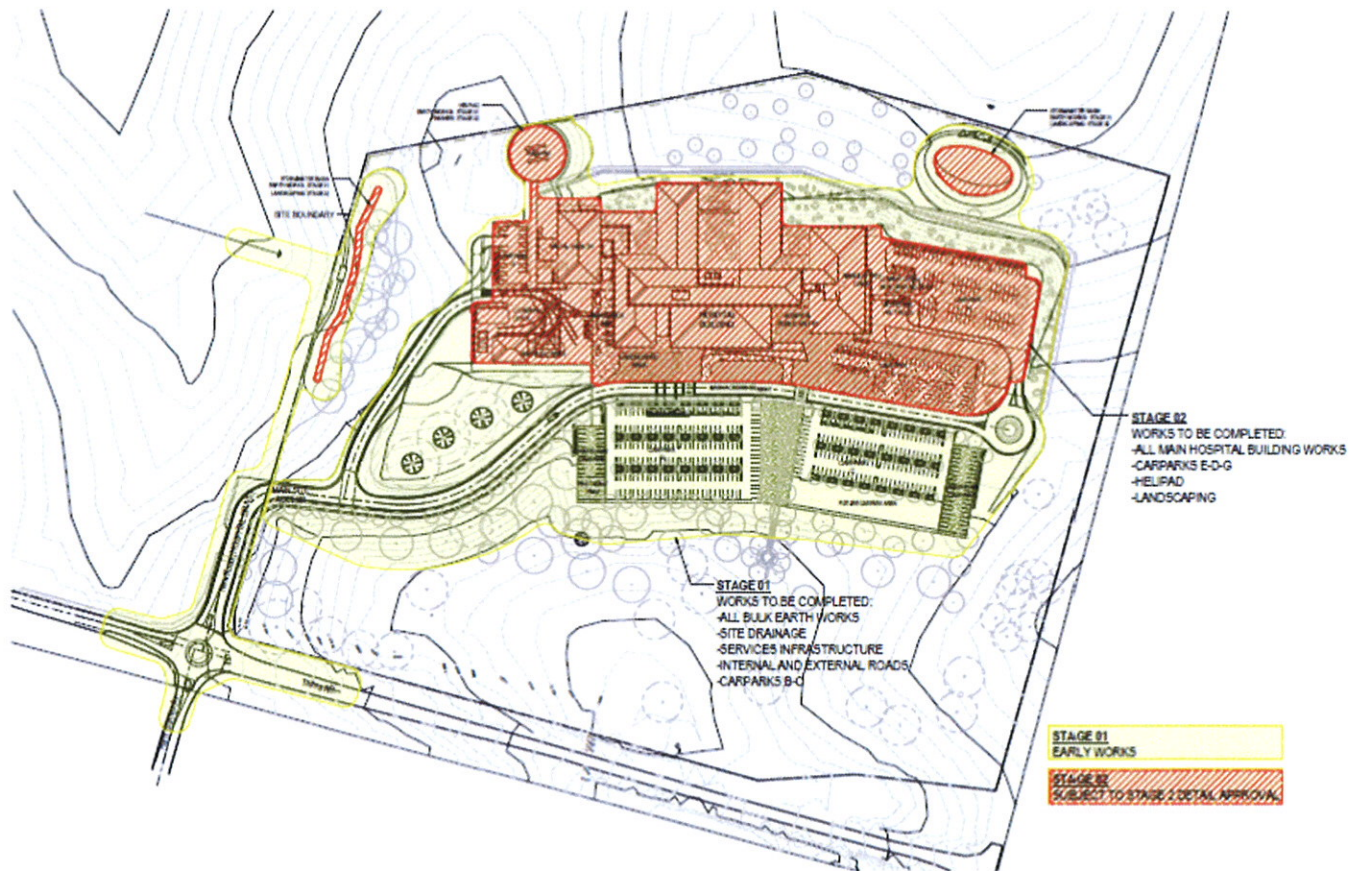


Figure 2-1 Main Works and Completion Works Packages to be approved under SSD Application

## 3.0 Environment and Amenity

The Head Contractor undertaking the Main Works will be required to submit for review a comprehensive Environmental Management Plan (EMP) to ensure that all elements of the plan meet all statutory requirements, NSW Ministry of Health (MoH) requirements and requirements as set out in Clause 6: Environmental Protection in the *GC21 Edition 2 Preliminaries* document.

As a minimum, the erosion and sediment controls for the Main Works shall be designed, installed and maintained in accordance with the requirements of *Managing Urban Stormwater: Soils and Construction "The Blue Book" 2004* (4th edition) and/or details provided by project engineering consultants.

The environmental performance of the Head Contractor will be monitored throughout the Main Works. The following specific environmental management principles will be implemented on site.

### 3.1 Noise and Vibration

All practicable measures will be taken to reduce the noise arising from the Main Works. Noise from the Site shall not exceed the limits set out in the Interim Construction Noise Guidelines (ICNG) and Environmental Protection Authority (EPA). No machine work will occur outside normal working hours unless approval has been given by the consent authority through the DN process.

The following measures are proposed with reference to the ICNG:

Use Noise Management Levels (NML's) to identify excavation and construction noise sources or scenarios that require engineering controls or administrative management;

Promote clear understanding of ways to identify and minimize noise from construction works;

Focus on applying all feasible and reasonable work practices to minimize construction noise impacts;

Provide flexibility in the selection of site-specific and reasonable work practices to minimize noise impacts;

Encourage construction work to be undertaken within approved standard hours where reasonably practicable with noise that is audible to other premises. Approval is required for works undertaken outside standard hours; and

The use of noise reduction techniques including, but not limited to, barriers, enclosures and silencers shall be employed to ensure compliance with construction noise criteria.

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

The benchmarks used to assess vibration impacts due to the construction works are documented in the Acoustic Assessment Report, prepared by SLR Consulting. This Acoustic Assessment Report documents recommendations and requirements for mitigation of noise and vibration during construction.

The noise mitigation treatment proposed by the Head Contractor will be included in the detailed Construction Management Plan.

### 3.2 Dust

To control dust generation where necessary, water will be sprayed at the source of origin and surrounding areas to prevent airborne dust particles migrating into the surrounding environment. Management of dust prevention is to be developed by the Head Contractor and agreed by the project stakeholders.

Additional precautions that will be implemented during the Main Works include the covering of all haulage trucks with tarpaulins, monitoring of weather conditions (including wind) and helicopter down draft. Management and contingency plans will be developed to prevent any foreseeable impacts from dust.

### **3.3 Odour Control**

Odour problems will be minimal for demolition activity on site. All plant and machinery involved in the Main Works will be regularly serviced and checked for exhaust emissions and catalytic converters.

### **3.4 Vegetation Protection**

The Head Contractor upon appointment will be required to prepare a detailed site-specific Construction Management Plan. This Plan will need to demonstrate the measures that will protect trees and vegetation being retained under the development works. Vegetation protection should be in accordance with Australian Standard 4970-2009, Protection of Trees on Development Sites.

Any tree damage that occurs to trees or tree roots during site works is to be treated by an experienced and qualified arborist. Where branch pruning works are required, all pruning works including the removal of deadwood are to be undertaken in accordance with Australian Standard AS 4373-1996 Pruning of Amenity Trees and the work is to be undertaken by an experienced and qualified arborist.

### **3.5 Stormwater and Sediment Control**

Appropriate elements of the drainage system on the Site will be cleaned out to remove sediments, prior to commencing the Main Works on site. Drainage of surface run-off will be allowed to flow along existing contours (down slope) with the existing drainage system on-site of kerbs, gutters, gully pits, pipes and stormwater runoff passing through installed filtration systems prior to being discharged off-site.

The site will be continually cleaned of rubble to minimise possible sediment flow during rainfall periods. Stormwater kerbs and drainage lines will have sediment controls in the form of hay bales or sedimentation socks.

Stormwater grate inlets surrounding works areas will be covered with geotextile fabric to allow water to enter into drains whilst retaining sediments.

Should external surface run-off flow into works areas, it may need to be diverted (using hay bales) to reduce sediment transportation. All drainage control devices will be regularly checked particularly during heavy rainfall periods.

Reference should be made to the Erosion and Sediment Control Plan produced by C&M Civil as part of the Stage 1 submission for stormwater and sediment control. The Head Contractor will be required to prepare a detailed Stormwater Management Plan which will cover all aspects of stormwater and sediment management and control during construction.

## 4.0 Traffic Management

As part of its Construction Management Plan, the Head Contractor will be required to submit a Construction Traffic Management Plan for approval prior to commencement of the Main Works.

During construction, the following equipment may be used:

- Bulldozers, backhoes and excavators; articulated and fixed trucks; mobile cranes; concrete delivery trucks; concrete pumps; man and material hoists; scissor and boom lifts, and forklift trucks

### 4.1 Construction Entry & Exit

It is proposed that construction works traffic will enter and the site via the new roundabout from Harry Scanes Avenue, with a vehicle access way constructed Hospital Drive and the hospital site. It is estimated that there will be up to 50 heavy vehicle movements per day. Details of service vehicle movements including likely arrival and departures have been assessed within the Preliminary Construction Traffic Management Plan produced by Sinclair Knight Merz (SKM) as part of the SSD submission.

Appropriate traffic management procedures will be adopted within the hospital grounds in accordance with the requirements of the Hospital and Local Health District.

The detailed Traffic Management Plan produced by the Head Contractor requires documentation of site emergency procedures. These procedures necessitate the incorporation of interaction with helicopter and ambulance access on site during emergency.

### 4.2 Pedestrian Protection

Pedestrian and vehicular passage to and around the site will be maintained, or alternate routes determined where necessary, and be defined by clear signage.

The Head Contractor will need to produce a detailed Traffic Management Plan which addresses pedestrian and vehicle activities at or near the site.

Fencing and/or appropriate hoarding appropriate to the interaction between pedestrians and construction works (as per WorkCover requirements and Australian Standards) will be constructed to prevent unauthorised access to the Site.

## 5.0 Waste and Materials Reuse Management

### 5.1 Storage of Dangerous Goods

Dangerous goods (such as petrol, diesel, oxy-acetylene, oils, glues etc) will be stored in a lockable compound with sufficient ventilation in accordance with relevant codes of practice and standards. Material safety data sheets on all of these flammable and potentially harmful liquids will be provided by the Head Contractor undertaking the Main Works.

Operational hazards (used in hospital activities) are outlined in a separate report, Operational Waste Management Plan, produced by the Space 2 Develop, who consulted with user groups and relevant representatives within NSW Health. A Preliminary Hazard Analysis report has been produced by Sinclair Knight Merz (SKM) to form part of the SSD submission.

### 5.2 Waste Management / Recycling Principles

The following measures will be adopted to encourage the management and reduction of waste to minimize the loss of natural resources and landfill space:

- Emphasise the importance of recycling and waste reduction;
- Encourage the use of recycled materials where it is reasonably practical;
- Minimise the use of packaging materials and recycle packaging materials where possible;
- Waste concrete to be sent to a concrete recycling plant where possible;
- Separate removed native vegetation from general construction waste, mulched and stockpiled for re-use; and
- Non-recyclable general waste will be disposed at an approved waste disposal facility.

Reference should be made to Bega Valley Council's waste management guidelines. The Head Contractor must comply with the requirements as set out in the *GC21 Edition 2 Preliminaries* document (Section 6.3 – Waste Management) in its waste management practices.

### 5.3 Waste Management during Geotechnical works

Produced geothermal fluids shall be collected in area AEC3 (silage pit on western portion of the site) and will be removed from site and transported to licensed off-site locations for disposal prior to the commissioning of the hospital. The district regional landfill accepts this waste stream.

Waste management will be a formal process during the construction period. A protocol will be established so that the constructor will be required to submit a project Waste Management Plan addressing the geothermal works. The guidelines for demolition and salvage, procurement and the combination of site collection and/or off site segregation will be measured and captured in monthly progress reports and a final overall report that includes all, MSDS, Certificates, Dockets, Photographs and any other evidentiary material at the end of the project.

It will also provide project construction waste metrics on the following key measures:

- Total Tonnage and/or Volume per waste stream
- % Recycled, Reused
- Land Fill Tonnage and/or Volume per waste stream