

Port Macquarie Base Hospital Expansion

February 2012

Prepared for



HEALTH INFRASTRUCTURE
NSW HEALTH



Major Project Application MP 11_0012
Environmental Assessment

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Quality Assurance

Reviewed by



.....
Michael Harrison FPIA FRAIA

Director
Architectus Group Pty Ltd

24 February 2012

.....
Date

This document is for discussion
purposes only unless signed.

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- A Architectural Drawings**
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- B Director-General's Requirements**
- C Capital Investment Value**
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- D Survey Plans**
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- E Part 3A declaration dated 27 January 2011**
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- F Land title**
- G Section 149 Certificate**
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- H BCA Report**
Prepared by Davis Langdon
- I Traffic and Parking Report**
Prepared by TTW
- J Arborist's Report**
Prepared by Naturally Trees
- K Ecological Assessment**
Prepared by ERM
- L Accessibility Report**
Prepared by Davis Langdon
- M Landscape Report and Plans**
Prepared by Hassell
- N Civil Engineering information**
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- O Hydraulic Engineering and Fire Services Engineering Report**
Prepared by Acor Consultants Pty Ltd

Email from Acor Consultants Pty Ltd on energy efficient appliances
- P Electrical Services Report**
Prepared by Wood and Grieve Engineers
- Q Geotechnical Investigation and Preliminary Contamination Assessment**
Prepared by Douglas Partners
- R Port Macquarie Airport ANEF zones**
Provided by Port Macquarie Airport

- S** **Port Macquarie Airport height limitations information**
Provided by Port Macquarie-Hastings Council
- T** **Acoustic Assessment**
Prepared by Acoustic Logic
- U** **Bushfire Report**
Prepared by BCA Check Pty Ltd
- V** **Waste Management Plan**
Prepared by Space 2 Develop
- W** **Minutes of pre-lodgement meeting with Port Macquarie-Hastings Council officers**
- X** **Fire Engineering Strategy**
Prepared by Umow Lai
- Y** **Preliminary Hazard Analysis**
Prepared by SKM

Statement of Veracity

Submission of Environmental Assessment:

Prepared under Part 3A of the Environmental Planning and Assessment Act, 1979 (As Amended).

Environmental Assessment prepared by:

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In respect of:

Port Macquarie Base Hospital Expansion, Project Application for Major Project MP 11_0012.

Certification:

I certify that we have prepared the content of this Project Application. To the best of my knowledge the information contained in this report is neither false nor misleading.



24 February 2012

(Signature and date)

Michael Harrison
Director
Architectus Group Pty Ltd

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Executive Summary

This report forms the Environmental Assessment (EA) to accompany a Part 3A Project Application, seeking approval for the expansion of the Port Macquarie Base Hospital building located at Wrights Road, Port Macquarie, New South Wales.

The Project Application seeks development consent for the addition of a 2-3 storey plus plant level building to the existing main hospital, located in the form of a large fourth clinical 'pod' and which accommodates the following:

- 30 bed Acute Medical Services Unit;
- 24 bed Critical Care Centre comprising 16 bed ICU and 8 bed Coronary Care;
- 15 bed Paediatric Inpatient unit;
- Peri-operative unit with 32 pre and post operative beds;
- 7 new operating theatres;
- 2 new procedure rooms;
- Area provision for a future 8th theatre (fit out as storage space until required);
- Cardiac Catheter Suite;
- Expanded Emergency Department with 26 treatment spaces (previously 14);
- Clinical Services Sterilisation Department;
- Storage;
- Support services;
- 12 bed Surgical Unit extension as refurbishment to existing ward;
- Fitout of existing Emergency Department as an Emergency Medical Unit / Emergency Community Care Centre (8 bays).

Overall, the design has responded to the site's physical attributes including a number of existing large established trees adjacent to the building expansion, current main hospital building layout and plan and the functional design and operational requirements of a medical and surgical facility.

The impacts that have been identified (including visual impacts, flora and fauna, noise and traffic) can be managed as set out in **Section 6** Environmental Assessment and **Section 7** Draft Statement of Commitments.

The Project Application represents an appropriate redevelopment of the site to accommodate the functional requirements of the Port Macquarie Base Hospital.

1 Introduction

1.1 Preliminary

This Environmental Assessment has been prepared by Architectus on behalf of NSW Health Infrastructure to accompany a Part 3A Project Application seeking approval for the proposed expansion of the Port Macquarie Base Hospital (PMBH), located at Wrights Road, Port Macquarie. The proposed expansion is essential to enable the Hospital to continue to provide the majority of specialist medical, surgical and other services within the Hastings Macleay Health Network.

The report is submitted to the NSW Department of Planning and Infrastructure by Architectus on behalf of NSW Health Infrastructure under Section 75F of the Environmental Planning and Assessment Act 1979 (EP&A). Refer to the application form provided under separate cover.

The Environmental Assessment is to be read together with the architectural drawings provided at **Appendix A** and the documentation, surveys and other plans provided at **Appendices B – Y**.

1.2 Structure of this report

The structure of this report is based on the General Requirements contained in the Director-General's Requirements (DGR's) (refer **Appendix B**) as follows:

- **Executive summary**

Provides a summary of the Environmental Assessment and a statement on the veracity of the Environmental Assessment, including qualifications of persons preparing the assessment.

- **Section 1 – Introduction**

Provides an outline of what is being sought for consent, includes a background to the development and a site history, describes the site and its location, summarises the DGR's and describes where in the Environmental Assessment each of the key issues are addressed, describes the consultation undertaken, and describes the project team who participated in the preparation of this Environmental Assessment. The introduction also identifies the relevant statutory requirements and policies, and the consent authority.

- **Section 2 – Site and contextual analysis**

A description of the site including cadastre and title details. Describes existing conditions of the site and provides an analysis of the site. Identifies the suitability of the site for the proposed development.

- **Section 3 – Description of the proposal**

Provides a description of the overall concept, describes the design approach and permissibility of the project. Describes the various components of the proposed development.

- **Section 4 – Strategic justification**

Provides project justification, consideration of alternative options for development and identifies the key environmental, social and economic benefits of the proposed development.

- **Section 5 – Regulatory context**

Consideration of the relevant State Environmental Planning policies, local planning instruments and legislation and policies, as they apply to the proposal.

- **Section 6 – Environmental assessment**

An assessment of the likely environmental impacts as well as the key assessment requirements.

- **Section 7 – Draft Statement of commitments**

Provides draft Statement of Commitments with detailed measures for environmental management and mitigation measures and monitoring for the project.

- **Section 8 – Conclusion**

Concludes the Environmental Assessment with a brief summary and provides recommendations for the determination of the Project Application.

1.3 Location, legal description and site ownership

Location

The subject site is located in the Port Macquarie Base Hospital site. This is located in the Port Macquarie-Hastings Local Government Area (LGA), in the Hastings Macleay Health Network. The site is located approximately 3km from the Port Macquarie CBD, and it is accessed via Wrights Road, off the Oxley Highway. The address of the Port Macquarie Base Hospital is 1 – 31 Wrights Road, Port Macquarie 2444.

The site location is shown in **Figure 1** below.

Legal Description

The legal description of the site is Lot 23 DP1099567. The site has an area of 9.247 hectares and is oriented in an approximately east-west direction.

Site Ownership

The owner of the land is identified as Health Administration Corporation. The land title is attached at **Appendix F**.



Figure 1. Location plan

1.4 Background to proposal

PMBH provides the clinical care hub for the services within the Hastings Macleay Health Network. It is the largest facility in the Network. Unlike metropolitan areas, there are no other Major Referral Hospitals in close proximity to PMBH thereby increasing the pressures on the facility. PMBH is the only facility in the Network that provides emergency operating theatres for all surgery, intensive care, coronary care and a range of diagnostic services that are available 24 hours a day. The majority of specialist medical, surgical and other services within Hastings Macleay Health Network are provided at PMBH.

PMBH has been under enormous demand with a high occupancy rate and continuing pressures driven by an ageing and growing population. Given the demand for the hospital services, a former NSW Minister for Health requested that a Master Development Plan be developed for the site. The PMBH Master Development Plan was completed in September 2006 which recommended the development of a fourth pod to expand the hospital.

In 2010, a Clinical Services Plan 2010 (CSP) for PMBH was prepared to determine the service needs and capacity requirements for the hospital over the next ten to fifteen years based on updated population projections and latest activity data. In September 2010, NSW Health commissioned the development of a Service Procurement and Project Definition Plan to support funding applications to NSW Treasury and the Commonwealth Health and Hospitals Fund to enable the prioritised service requirements identified in the CSP to be met. In response, a revised Master Plan was completed in November 2010. This 2010 Master Plan again supported the need for the expansion of the hospital.

The development proposal therefore provides expansion of the Port Macquarie Base Hospital to accommodate current and future demand for medical and surgical services in the Hastings Macleay Health Network,

and the wider mid north coast sub region.

1.5 Consent authority

A Clause 6 request was lodged with the Department of Planning [as it was then] on 22 December 2010 together with a Preliminary Environmental Assessment.

On 27 January 2011, the Minister for Planning wrote to Health Infrastructure (refer **Appendix E**) to inform that the Acting Director for Government Land and Social Projects, as a delegate for the Minister for Planning, formed the opinion that the proposed expansion of the Port Macquarie Base Hospital met the criteria in Schedule 1, Clause 18 of the Major Projects SEPP. Therefore, it is a project to which Part 3A of the Environmental Planning and Assessment Act 1979 applies.

On 23 February 2011, the Director-General's Requirements on which this Environmental Assessment report is based were provided to Health Infrastructure.

Accordingly, the NSW Minister for Planning and Infrastructure is the consent authority.

1.6 Other development works

A Review of Environmental Factors (REF) prepared under Part 5 of the EP&A Act was prepared for other development works on the site. The REF was approved by the Chief Executive of Health Infrastructure on 2 December 2011. These works include:

- Expansion of the existing car parking area in the eastern part of the Port Macquarie Base Hospital site to provide around 740 car parking spaces in total for the hospital which is in excess of the required amount of car parking spaces for the hospital;
- Relocation of the gas tanks area for medical gases and liquefied petroleum (LP) from the south west of the site to the east;
- Undergrounding of existing 33kV electricity cables in the western area of the hospital site and part of the adjoining land identified as 'crown public road';
- Provision of conduits for provision of future security points and boom gates in the car park;
- A block-work retaining wall of approximately 2 metres in height is proposed in the south-west corner of the new car park. There will be a galvanised steel handrail above the retaining wall;
- An existing gravel road from Toorak Court (to the north of the hospital site) through to the new car park expansion area may be used by some construction vehicles however further assessment of traffic and acoustic impacts of this potential access would be required;
- Boundary fencing;
- Associated demolition, construction, landscape and engineering works to facilitate the above.

Mitigation measures were provided as part of the REF approval to manage both the construction and operation of these. These works allow the hospital to continue to operate during other development on the site.

1.7 Site history

PMBH was constructed in 1994. Until January 2005, it was a private hospital contracted to provide public services. On 31 January 2005, PMBH was reinstated into the public sector. The restoration of the PMBH to the public sector has provided the opportunity for the North Coast Area Health Service (NCAHS) to examine the current and future role of the PMBH and its role in the Hastings Macleay Health Network.

1.8 Relevant planning instruments and strategies

The following planning instruments apply to the subject site and the proposed development:

Legislation

- Environmental Planning and Assessment Act 1979 (As Amended);
- Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011 No 22;
- Environment Protection and Biodiversity Conservation Act 1999;
- Threatened Species Conservation Act 1995; and
- Noxious Weeds Act 1993.

Environmental Planning Instruments (EPIs)

- State Environmental Planning Policy (Major Development) 2005;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No. 44 – Koala Habitat Protection.

Local Environmental Plan

- Port Macquarie-Hastings Local Environment Plan 2011.

Development Control Plan

- Port Macquarie-Hastings Development Control Plan 2011.

Other strategic planning policies

- NSW 2021 (State Plan);
- Mid North Coast Regional Strategy.

Section 5 of this report provides an assessment of the proposed development against the above relevant legislation, EPIs and policies.

1.9 Director-General's Requirements

The Director-General's Requirements (DGR's) for the proposal were provided to Health Infrastructure under Section 75F(2) of the EP&A Act 1979 on 23 February 2011. The DGR's are summarised below, including

reference to where they are addressed in this report.

A full copy of the DGR's is found at **Appendix B**.

Table 1. Director-General's Requirements

Director-General's Requirements	Section of report
<i>The Environmental Assessment (EA) must address the following key issues:</i>	
1. Relevant EPI's, policies and guidelines to be addressed	Section 5
2. Built Form and Urban Design	Section 6.2
3. Environmental and Residential Amenity	Section 6.3
4. Transport and Accessibility Impacts (Construction and Operational)	Section 6.4
5. Ecologically Sustainable Development (ESD)	Section 6.5
6. Contributions	Section 6.6
7. Flora and Fauna	Section 6.7
8. Bushfire	Section 6.8
9. Heritage	Section 6.9
10. Aboriginal heritage	Section 6.9
11. Drainage	Section 6.10
12. Utilities	Section 6.11
13. Staging	Section 6.12
14. Noise and Vibration	Section 6.13
15. Waste	Section 6.14
16. Hazards	Section 6.15
17. Consultation	Section 1.11
<i>General</i>	
<i>The Environmental Assessment (EA) must include:</i>	
1. An executive summary;	At start of report
2. A thorough site analysis;	Section 2 and Site Analysis Plan at Appendix A.
3. A thorough description of the proposed development;	Section 3
4. An assessment of the key issues specified above and a table outlining how these key issues have been addressed;	Section 1.9 (this table)
5. An assessment of the potential impacts of the project and a draft Statement of Commitments;	Sections 6 and 7
6. The plans and documents outlined below;	Appendices A - Y
7. A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading;	Refer Statement of Veracity (pg 6)

Director-General's Requirements	Section of report
8. A Quantity Surveyor's Certificate of Cost to verify the capital investment value of the project; and	Appendix C
9. A conclusion justifying the project.	Section 8
<i>Plans and Documents</i> <i>The following plans, architectural drawings, diagrams and relevant documentation shall be submitted:</i>	
1. An existing site survey plan	Appendix D
2. A site analysis plan	Appendix A
3. A locality / context plan	Section 1.3, Figure 1
4. Architectural drawings	Appendix A
5. Stormwater concept plan	Appendix N
6. Erosion and sediment control plan	Appendix N
7. Geotechnical report	Appendix Q
8. View analysis	Section 6.3
9. Landscape plan	Appendix M
10. Shadow diagrams	Appendix A

1.10 Preparation of the application

The following consultants were engaged to work on this project:

Environmental Assessment component	Company / consultant
Project Management	Aurecon
Architect	Hassell
Town Planner	Architectus Group
Surveyor	Hopkins Consultants
Transport and traffic consultant	TTW
Quantity surveyor	Altus Page Kirkland
Civil engineer	Enstruct
Hydraulic and fire services engineer	Acor Consultants Pty Ltd
Electrical services engineer	Wood & Grieve Engineers
Mechanical services consultant	Umow Lai
Structural engineer	Enstruct
Quantity surveyor	Altus Page Kirkland
BCA consultant	Davis Langdon

Accessibility consultant	Davis Langdon
Geotechnical engineer	Douglas Partners
Environmental engineer	Douglas Partners
Landscape architect	Hassell
Arborist	Naturally Trees
Ecological consultant	ERM
Bushfire consultant	BCA Check Pty Ltd
Fire Engineering consultant	Umow Lai
Acoustic consultant	Acoustic Logic
Hazardous Materials	Sinclair Knight Merz (SKM)
Waste management consultant	Space 2 Develop

1.11 Consultation undertaken

The Director-General requires that an “appropriate and justified” level of consultation is required in accordance with the Department’s *Major Project Community Consultation Guidelines October 2007*.

A pre-lodgement meeting was held with officers of the Port Macquarie-Hastings Council on 27 September 2011. Minutes of this meeting are attached at **Appendix W**. Issues raised including town planning matters, utilities issues including water and sewer, and engineering.

A neighbourhood meeting was held on 16 November 2011 at the hospital. All residents of Highfields Circuit, Toorak Court, Tamba Close and Deakin Close were invited to attend.

The proponent gave a presentation outlining the main aspects of the project (including the additional car parking), the clinical and economic benefits to the community at large, and the various time-lines for completion of the different phases of the project.

The attendees expressed their appreciation at being invited to the information evening and having the opportunity to express any concerns they have.

Issues raised by attendees included:

- The adequacy of the number of additional car parking spaces proposed. The number of additional car parking spaces was addressed by the Part 5 REF (discussed within this report).
- Concern about amenity impacts of a possible permanent second access road via or adjacent to Toorak Court. This is not part of this Part 3A Application and would require separate planning approval. (Note: A mitigation measure provided as part of the Part 5 REF Approval requires separate traffic and acoustic assessment of any *temporary* construction vehicle access to/from Toorak Court).
- Heavy vehicle traffic, noise and dust disturbance during construction. Attendees were advised that the noise would be time limited as required by legislation and that dust would be

managed to ensure disbursement to neighbouring properties is minimised.

- Concerns that the existing helipad light shines directly in to residential properties at the end of Toorak Court. The proponent will have this matter addressed by having a shield attached to the light source.
- Concerns about the safety of helicopter landing when approaching the site from the north and having to clear east west power lines on the hospital land immediately prior to landing. This matter is to be raised with the helicopter operators.
- Concern by residents of Highfields Circuit regarding rubbish left by staff on footpaths in front of homes, and staff and possibly others parking on footpaths in front of their residences. An instruction will be issued to all hospital staff in this regard.

2 Site and Contextual Analysis

2.1 Site characteristics

The characteristics of the site are described below in terms of:

- Topography, soils, slope stability and contamination;
- Hydrology and groundwater;
- Vegetation;
- Built form;
- Vehicle access;
- Parking;
- Buses and taxis;
- Pedestrian and bicycle access; and
- Land use zoning.

Refer to Site Analysis Plan at **Figure 2** and text following.

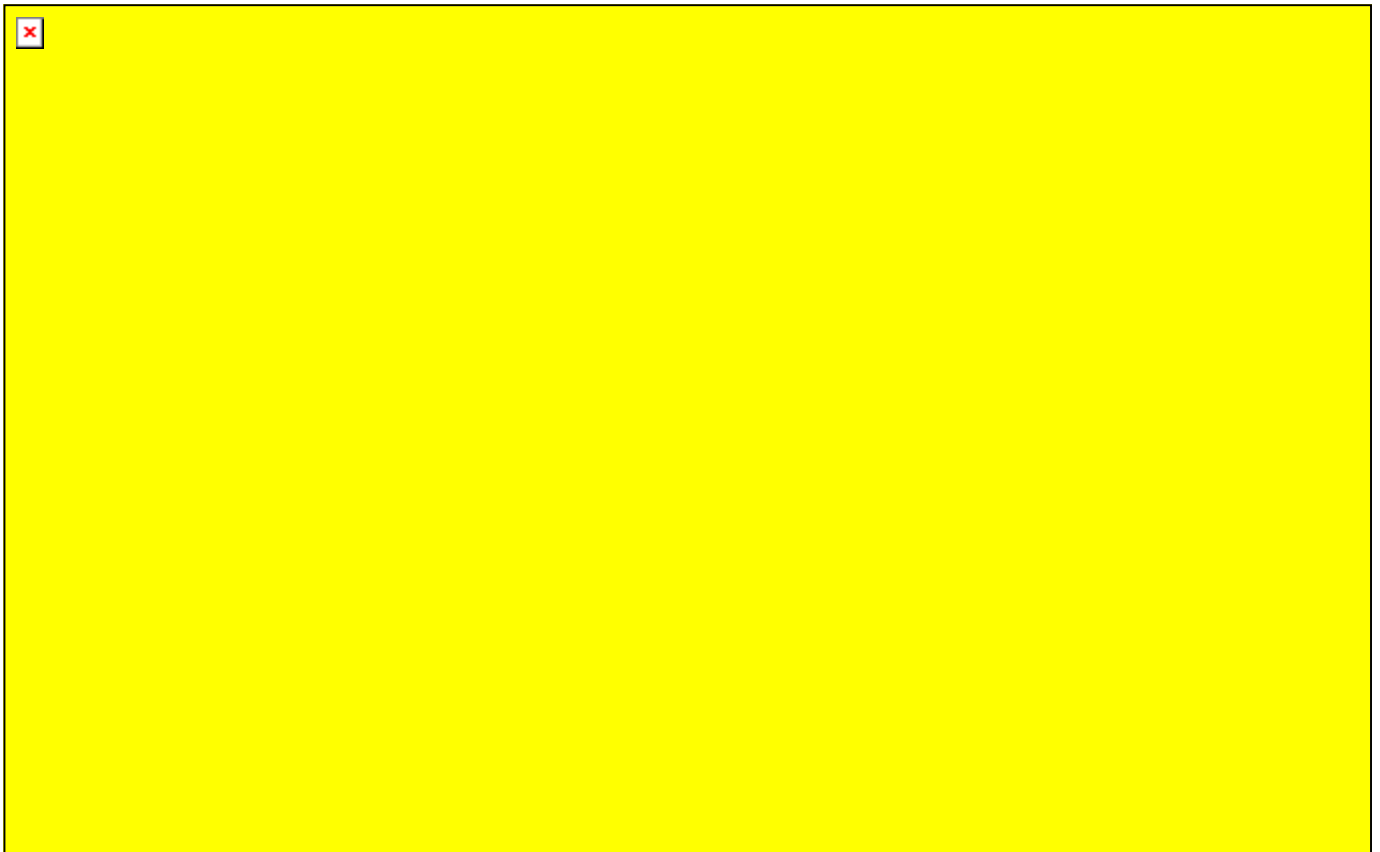


Figure 2. Site Analysis Plan

Topography, soils and geotechnical conditions

Topography

The site falls from the southern boundary to the north, with a gentle to moderate slope. The site lies between 10 to 20 metres Australian Height Datum (AHD).

The survey plans are attached at **Appendix D**.

Soils

Subsurface investigation undertaken at the site (refer Geotechnical Report at **Appendix Q**) indicated the predominance of clay filling and clay soil overlying bedrock at the site. A detailed assessment of soil permeability has not been undertaken at the site, however, based on the published geology and observed soil conditions, the soils at the site are considered to have low permeability.

The assessment undertaken in the Geotechnical Report indicates that the soils on the site are considered to pose a low salinity risk.

The exchangeable sodium percentage (ESP) testing undertaken on selected soils/fill within the site is a measure of sodicity (ie. exchangeable sodium) of the soil, which relates to likely dispersion and shrink/swell of soils upon wetting. The results of laboratory testing indicate generally non-sodic conditions in the soils tested, with the exception of the clay filling sample from Bore 6/1.0m. Sodicity can lead to poor drainage, hard setting soils and erosion.

The Geotechnical Report at **Appendix Q** suggests some measures to mitigate potential sodicity effects. The draft Statement of Commitments at **Section 7.2** of this EA includes a requirement to comply with the recommendations of the Geotechnical Investigation and Preliminary Contamination Assessment at **Appendix Q**.

Slope stability

No evidence of deep seated or overall slope instability was observed on the site or immediate surrounds. The south western car park is in an area of cut supported by concrete crib walls up to about 3m vertical height, which seemed in good condition.

Fill batters up to 5m vertical height with slopes typically about 15° to 17° and locally up to 21° are located to the north and west of the main building and the footprint of the proposed northern building will extend across this batter. The batters are likely to comprise clay filling (ranging in thickness at Bores 5 to 7 from 0.4m to 4.4m thick) overlying very stiff clay. Groundwater has been measured in Bore 7 about 2m below the base of the batter.

Based on site observations, regional topography and geology and results of subsurface investigation on site, a qualitative assessment of slope instability was undertaken using the methods outlined in Appendix G of Ref 13 of the Geotechnical Report at **Appendix Q**.

The following hazards are identified:

- Deep seated overall sliding. In the absence of known sliding in the area, with relatively gentle overall slopes and the presence of competent weathered bedrock at shallow depth this would be considered a rare event;
- Instability of existing retaining walls to south west of car park. The walls appear to be in good condition and failure is considered

unlikely;

- Failure of the fill batter slopes encroaching below the main structure which is set 10m back from the batter crest and at batter slopes about 20° or less. Such a failure would be considered rare and as the structure is supported on piles below the toe of the batter such a batter failure may have limited effect on the structure. Shallow slumping of the batters is considered possible in adverse wet conditions, however such slumping would only be expected to affect the landscaping;
- Failure of proposed new retaining wall and batters would be considered rare provided that they are designed in accordance with sound engineering principles and recommendations in Section 13.4 are taken into account.

A risk assessment undertaken in the Geotechnical Report has found that:

- The risk associated with deep seated instability is very low;
- The risk associated with the existing retaining walls in the south western part of the site is very low to low;
- The risk associated with failure of the northern and eastern fill batters is low to medium. This would normally be considered acceptable;
- The risk associated with new retaining wall and batters is considered no greater than low to medium, provided that they are designed in accordance with sound engineering principles and recommendations in Section 13.4 of the Geotechnical Report are taken into account.

Contamination

In the Section 149 Certificate obtained for the site from Port Macquarie-Hastings Council (refer **Appendix G**), the subject site is not identified as contaminated land.

The Geotechnical and Contamination Report at **Appendix Q** identifies that there is the potential for site contamination, however preliminary investigations have found that the soil is below recommended guidelines for a commercial / industrial land use. Therefore, the site is considered suitable for the proposed development with respect to contamination, provided that additional inspections are undertaken during construction to verify conditions with respect to contamination.

The Geotechnical and Contamination Report notes that if soils other than those observed during the investigation are encountered during development, or staining or odours are observed within excavated soils during development, additional investigation and advice should be sought. If additional contamination is identified then appropriate excavation and removal/disposal/capping of contaminated soil (followed by validation sampling and analysis to the requirements of SEPP 55 and NSW Office of Environment and Heritage) may be required.

Additional assessment, including inspections and possibly laboratory testing, will be required if soils are proposed to be reused for filling at another site. The draft Statement of Commitments at **Section 7.2** requires that the recommendations of the Geotechnical and Contamination Report at **Appendix Q** be complied with.

Hydrology and groundwater

The Geotechnical Report (refer **Appendix Q**) states that groundwater was encountered at depths ranging between 6.3m and 8.9m in weathered rock and can be expected to vary with time according to climatic conditions.

Shallow groundwater is generally not expected, apart from possible seeps/perched water in the filling which could occur, especially following rainfall, however would not be associated with the regional groundwater.

The presence of low permeability fill and clay indicate that minimal groundwater recharge to the regional groundwater would be expected to occur on the site.

Vegetation

The site is surrounded by natural bushland to the west, south west and north. This consists of established woodland planting (some supporting Koala habitat).

Beyond the main hospital building to the north, an existing detention basin forms a visual buffer to the residential development. Substantial and established planting around the detention basin forms an effective visual screen to dwelling houses in the residential area to the north. The detention basin setting also offers a distinct parkland character and pathway access for staff, patients and visitors to enjoy.

The original hospital car park comprises a well established and maintained amenity landscape. Along the entry/exit driveway areas, mature native tree plantings in medians between parking bays integrates the car park space with the natural character of the southern boundary, creating a pleasant, shady and leafy landscape experience.



Figure 3. View along western side of existing hospital buildings.
Tall trees and vegetation in backdrop.



Figure 4. View towards western end of site.
Building expansion will occur in this zone.

Built form

Port Macquarie Base Hospital is constructed on a large rectangular footprint with three connecting rectangular 'pods', each with a footprint of 820m². The height of the main hospital building is approximately 9 metres

(excluding the plant room located toward it's centre) and reads as 2 levels above ground. Stairwells project from the external façade, and have a more curvilinear form and provide visual interest along the length of the southern façade.

The current design appears 'contemporary' in style, with a flat roof and mix of metal finish (off white colorbond) and glass elevations. A tall lightweight shade structure is located at the main pedestrian entry, providing a visual marker when viewed from within the car park and also adjacent surrounds.

The hospital building is illustrated at **Figure 5** to **Figure 8** below.

The site also contains a separate two storey Cancer Care Centre building, located to the east of the main hospital building block. This has been constructed after the main building, however also appears contemporary in style and therefore complements the design appearance of the main hospital building.

In the south-east corner of the site is a single storey University of New South Wales Clinical School. Located on separate land title, it is also contemporary in architectural style and includes some dedicated hardstand parking. Adjacent is the two storey brick and metal roof Rotary Lodge is located immediately to the west of the UNSW Clinical School and it is also on a separate land title.



Figure 5. Looking towards the southern elevation of the existing hospital building.

The hospital is contemporary in style, with flat roofs, colorbond finishes and glass.



Figure 6. Port Macquarie Base Hospital main entrance.

The main pedestrian entrance is marked by a tall lightweight shade structure located on the south side of the hospital building. The main entrance will remain after the expansion.



Figure 7. North west area of existing hospital building.
Existing glass elevation on the northwest corner of the hospital building. The proposed extension will connect to this building area, removing this current car park.



Figure 8. South west area of existing hospital building.
The main hospital contains two levels. Ambulance bay and loading dock shown. The proposed extension will wrap around this area on the south.

Vehicle access

Vehicular access to the site is direct from Wrights Road, which connects to the Oxley Highway. Vehicle entry is controlled with a small roundabout at the intersection of Wrights Road, Highfields Circuit. A 50 kph speed zone applies along Wrights Road and Highfields Circuit.

Wrights Road connects to the Oxley Highway via a major (large) roundabout. A meeting with Hastings Council (12/10/2010) indicated that the existing roundabout would not need to be upgraded as a result of the proposed development considering its capacity and recent upgrade.

Data collection on vehicular traffic volumes and speed along Wrights Road and the main entry road to the Hospital were carried out for a period of one week between 10 and 17 December 2010.

The assessment of traffic volumes and speed along Wrights Road indicates an average daily vehicular traffic volume of 4622 for a 5 day period and 3858 vehicles per day (vpd) for a 7 day period. The 85 percentile speed is recorded at 47kph for both directions along Wrights Road (between Oxley Highway and the hospital roundabout).

Traffic volumes along the entry road to the Hospital Campus (between the hospital roundabout and the car parking area) is recorded at 2931 vehicles per day (for 5 day period) and 2420 vpd for a 7 day period. The 85 percentile speed is recorded at 38kph (36kph for eastbound and 40kph for westbound).

These results and other results of intersection counts which are detailed in the Traffic and Parking Report at **Appendix I** indicate that the street system operates at a good level of service with ample capacity based on traffic engineering terms/guidelines.



Figure 9. Oxley Highway.

The Oxley Highway is a major regional connector road. Established tall tree native planting along the eastern edge of the road carriageway (left side of image) screens view of the Hospital site whilst travelling along this road.



Figure 10. Wrights Road.

Vehicle access is limited to Wrights Road, connecting at the point/bend with Highfields Circuit. Wrights Road travels west a short distance to connect with the Oxley Highway.

Parking

The existing parking provision at the hospital has been recorded at some 528 spaces, including both temporary and informal spaces. From observation parking areas are generally at full capacity during the day. The proposed formalisation of the designated car parking areas across the Hospital site will result in around 740 parking spaces.



Figure 11. Car parking on the south east side of hospital buildings.

Car parking is generally at capacity during the day.



Figure 12. Car parking on the north side of hospital buildings.

Car parking approved under Part 5 of the EP&A Act will connect with this existing parking area (located north of the Cancer Care Centre on the left side of the image), and extend into open area to east (background of image).

Buses and taxis

Busways provide bus services to the hospital along: Wauchope (Bransdon St), Base Hospital, TAFE (Oxley Highway), Settlement City, Port Macquarie Town Centre and Private Hospital. Buses run every 1 hour

during the AM and PM peak hour periods and every 2 hours during weekdays with limited frequencies on weekends. The bus drop off and pick up point is outside the main hospital pedestrian entrance.

Taxi on call is also available from the hospital while patient transport and community transport provide services to their patrons.

Pedestrian and bicycle access

Pedestrian and bicycle access to the site is available via Wrights Road, although pedestrian access is constrained due to lack of pedestrian paths and connections to wider pedestrian networks.

Land use zoning

The site is zoned SP2 Infrastructure – Health Services Facility in the Port Macquarie-Hastings Local Environment Plan 2011. Refer Zoning Plan at **Figure 13** below.

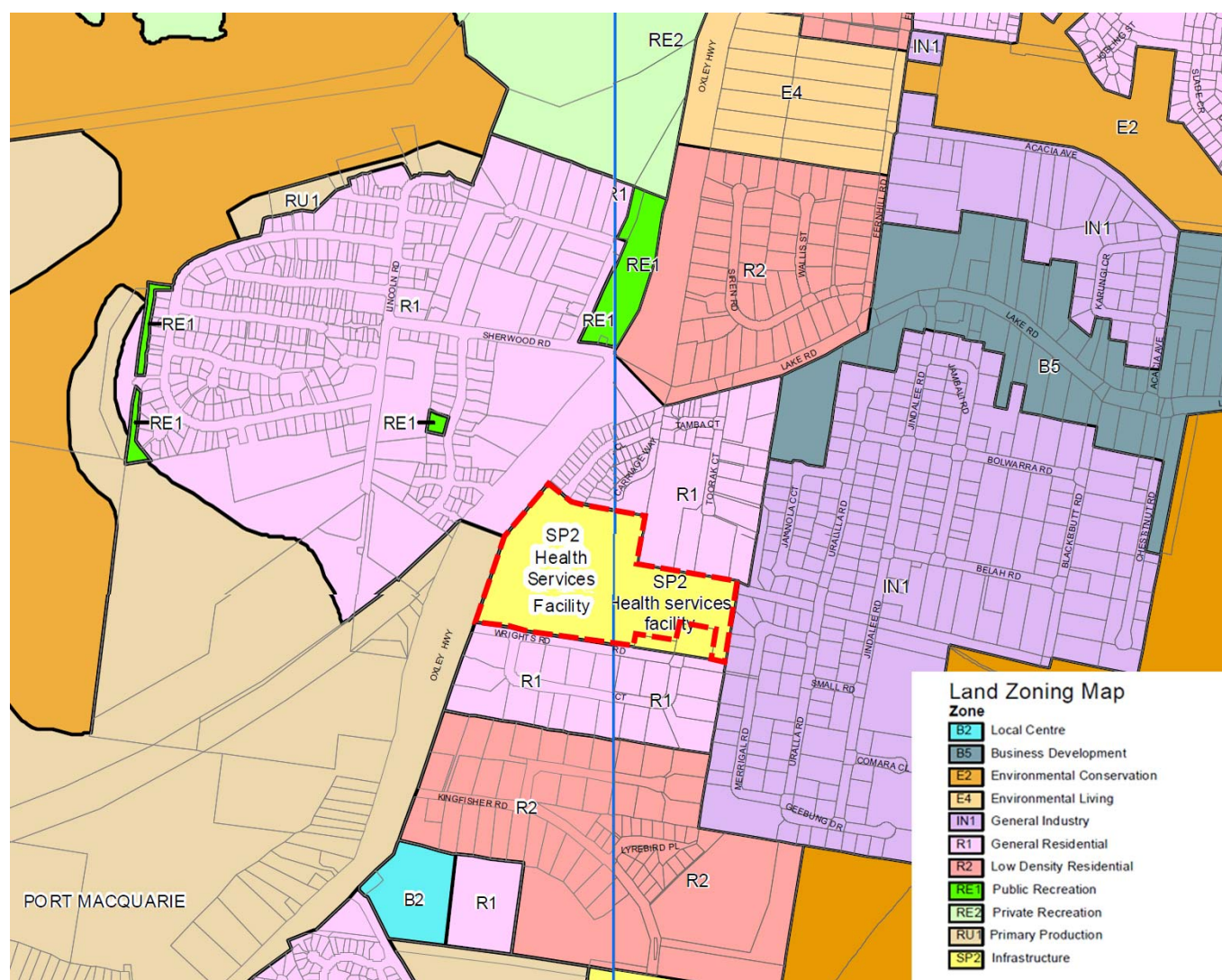


Figure 13. Zoning Plan extracted from Port Macquarie-Hastings Local Environment Plan 2011

2.2 Local context

Surrounding the development is a range of land use activities. To the north, south and west of the site are primarily residential areas with detached dwellings and some medium density in the form of townhouses and villa homes. Medical centres and doctors surgeries are interspersed with residential uses immediately south of the hospital site along Highfields Circuit (within the land use R1 zone). To the east is light industrial development (zoned IN1). Immediately to the western hospital boundary is a band of bushland separating the hospital site from the Oxley Highway.

2.3 Regional context

PMBH is located approximately 390km north of metropolitan Sydney and approximately 37 kilometres south of Kempsey. It is located within the mid north coast geographic region of NSW and located within the Port Macquarie Hastings Local Government Area.

The hospital is located approximately 3 kilometres south-west of the Port Macquarie town centre and east of the Port Macquarie Airport. The Oxley Highway provides vehicle connection to both the town centre and airport.

PMBH is the clinical care hub for the services within the Hastings Macleay Health Network and is the largest facility in that Network. The nearest other hospital to Port Macquarie is Wauchope District Memorial Hospital which is located 20km west of Port Macquarie Base Hospital. Other hospitals within the region include Kempsey Health Campus which is 55km to the north of PMBH, Manning Hospital which is 80km to the north, Coffs Harbour Base Hospital which is 160km to the north and John Hunter Hospital which is 245km to the south.

The hospital in context of its region is shown at **Figure 14** below.



Figure 14. Regional context

The subject site is located in the Port Macquarie-Hastings Local Government Area on the mid north coast of NSW.

2.4 Socio-economic context

The key demand drivers that support the expansion of the PMBH include:

- The mid north coast region of NSW has an expanding population base that is expected to grow by 6739 or 8.6% between 2011 and 2016. The North Coast Area Health Service (NCAHS) population is projected to grow by 6.2% in the same period.
- The Port Macquarie-Hastings LGA has an ageing population, with the growth rate for residents aged 65 years and over projected to be 20.3% between 2011 and 2016.
- The growth rate for the Port Macquarie-Hastings LGA paediatric population is projected to be 5.1% between 2011 and 2016.
- The NCAHS has a larger proportion of its population who are Aboriginal (3.8%) than the proportion of the Aboriginal population in NSW as a whole (2.1%).
- Using the Socio-Economic Indexes for Areas (SEIFA) scores for socio-economic status, the NCAHS is the most disadvantaged area in NSW.

3 Project Description

The proposal seeks consent from the Minister for Planning and Infrastructure for approval of the Project Application for the development as outlined in this section of the report.

3.1 Outline of the proposal

The proposal involves the construction of a 2 -3 storey plus plant level building located as a large 'fourth' pod connected to the western end of the existing main hospital building.

This fourth pod will comprises two wings and provide two new inpatient units, Critical Care Centre, seven operating theatres, two day procedures rooms and one cardiac catheter suite, with a Perioperative Unit with 32 patient bays and expanded emergency department.

The proposal also provides for the refurbishment of an existing ward to provide an additional 12 surgical inpatient beds. The Emergency Medical Unit and the Emergency Community Care Centre will utilise the existing Emergency Department and Critical Care unit.

The proposed extension is designed to be easily expanded to provide for a future Level 3 inpatient unit and also the ability to provide a new prefab helipad at a later date above the Emergency area. If and when these are required, these would be assessed as part of a separate planning process.

In detail, the Project Application seeks approval for the following development:

- 30 bed Acute Medical Services Unit;
- 24 bed Critical Care Centre comprising 16 bed ICU and 8 bed Coronary Care unit;
- Peri-operative unit with 32 pre and post operative beds;
- 15 bed Paediatric Inpatient Unit;
- 7 new operating theatres;
- 2 new procedure rooms;
- Area provision for a future 8th theatre (fit out as storage space until required);
- Cardiac Catheter Suite;
- Expanded Emergency Department with 26 treatment spaces (previously 14);
- Clinical Services Sterilisation Department;
- Storage;
- Support services;
- 12 bed Surgical Unit extension as refurbishment to existing wards;
- Fitout of existing Emergency Department as an Emergency Medical Unit / Emergency Community Care Centre (8 bays).

3.2 Design approach

The following design statement has been prepared by the Architect, Hassell, for the project application.

The relationship between the building and its context is the underlying idea and guiding principle for the project. Issues of site, place, climate, existing built form, existing built character and natural surroundings have all been addressed through the careful planning, the articulation of the exterior forms and façades, the selection of materials, and the detailing strategies.

The architectural manifesto is captured with the following aspirational statements:

- *A new extension that provides diversity and vitality to the campus whilst respecting the existing framework.*
- *The extension must engage harmoniously with the distinctive local landscape of Port Macquarie, maximising the site opportunities for natural light, and views to natural vegetation.*
- *To maintain and utilise existing quality Green Spaces for the benefit of all.*
- *The design will make use of sensible passive measures to modulate the internal environment: heating / cooling / sunlight.*
- *To create a building that is both robust and affordable.*

The above qualities are exemplified in the architecture solution in the following ways:

- *The plan provides a modular building that reflects a number of the existing hospital design concepts, in particular maintaining the central hospital street and providing views to landscaped courtyards and the surrounding woodlands. This reinforces the clarity of way-finding and provides access to quality landscaped courtyards and views.*
- *The connection of the building to the site is achieved by maximising the degree of openness of the building exterior. Large glazed areas to the north and continuous strip windows along the east and west façades provide continuous views out to the beautiful natural surroundings while at the same time providing the users of the building with plenty of natural light and sun. All patient rooms and habitable spaces such as operating theatres, treatment bays, and rooms used for working, training or administration have been planned around the perimeter of the building on Levels 1 to 3.*
- *Circulation corridors and waiting areas have been arranged to allow people to always encounter the outside world, either through light or views. An internal courtyard in the core of the building provides additional views from the staff rooms, circulation corridors and operating theatres which are located in the central zone of the building.*
- *Several outdoor areas have also been incorporated in the layout to further reinforce the connection between the interior and the exterior: two large terraces on Level 3, one to the north, one to the south west, a small outdoor deck on Level 1 to the north and a space between the new and existing building to the east which*

can be accessed from the internal atrium space.

- *The use of natural light is particularly important for the project and architectural intent. Both the sun and natural light are controlled, modulated and filtered through the use of external screens which provide protection from direct solar heat during summer months while allowing adequate sun light and heat to enter the interior spaces during the winter.*

These external elements, horizontal awnings on the north facade and vertical screens on the east and west facades, establish an architectural language for the building which revolves around the concept of filtering, enveloping, framing and layering with references to the existing hospital. At the same time these elements serve as access platforms and walkways for maintenance and cleaning.

- *Computerised solar and thermal analysis models were undertaken to review sun screen orientation and sizing to maximise passive solar shading systems and avoid over heating of the building, and in turn reduce the dependency on mechanical plant load and offset life cycle cost.*
- *To reduce the scale of the new extension in relation to the site and the existing hospital, a greater emphasis has been placed on horizontal lines and expression; the different parts of the building have been treated as simple, neutral forms: heavy, solid podium, two storey light weight façade and curtain wall, slightly recessed plant rooms and 'box' elements around the egress stairs and the entrance of the building echo the existing hospital pod 'fingers'.*
- *The approach to the Emergency Department entry is one of clean architectural form and materiality, in order to provide a clear, calm and ordered approach to those in distress and not to compete or confuse the existing main entrance to the east.*

3.3 Capital investment value (CIV)

The CIV for the proposed building expansion of the PMBH is **\$105.39M**.

A letter prepared by the quantity surveyors, Altus Page Kirkland, setting out the CIV is provided at **Appendix C**.

3.4 Demolition

The project will involve approximately 1,500m² of demolition. Refer to **Appendix A** for demolition plans.

As noted by the redevelopment and construction waste management plan at **Appendix V**, over 80% of demolished waste will be able to be recycled or reused.

3.5 Permissibility

The subject site is zoned SP2 Infrastructure – Health Services Facility in the Port Macquarie-Hastings Local Environment Plan 2011. Hospital uses are permissible with consent in this zone. The development is therefore permissible within the SP2 Infrastructure – Health Facility zone.

The services which are to be provided as a result of expansion of Port Macquarie Base Hospital are similar to, and an extension of, those which

currently exist at the hospital.

3.6 Building form, height, floor space and construction

The architectural drawings are provided at **Appendix A**. A materials and finishes board has also been provided under a separate cover with the application.

The building form is characterised by contemporary design style, with rectangular forms wrapping around the western end of the main hospital building.

Following the natural slope of the land from south to north across the site, building height is two storeys on the southern part of the extension, increasing to three storey plus part plant floor on the northern part.

The maximum height of the new fourth pod extension to the top of the lift motor room is 18.75 metres.

Approximately 12,500sqm of additional floor space is proposed.

A central courtyard space open to the sky is proposed within the northern part of the fourth pod extension to provide for natural light and outdoor amenity. A roof terrace is also proposed on Level 3 of the northern part of the expansion, with access from the paediatrics lounge and play area. This will be treated to accommodate outdoor facilities for children such as special seating.

Façade materials complement the current aesthetics of the hospital's existing contemporary façade palette and include off form concrete finish, powder coated metals, composite aluminium cladding panels and glass. These materials will also contribute to the modest expression of the building and its articulation.

Robust and hardwearing masonry elements will skirt the lower surfaces, while highly finished materials such as metal cladding will be placed well above head height. Wherever possible, the materials proposed have their own inherent finish and require minimal maintenance.

Illustrative views of the proposed extension are provided below.



Figure 15. Illustrative view looking north east, from near Wrights Road boundary.
The new Ambulance Bay and western elevation is shown.



Figure 16. Illustrative view looking south east from north boundary (western elevation)

Building height is shown. 2 storeys along the southern area (Ambulance and Emergency area) and 3 storeys and plant above toward the north.



Figure 17. Illustrative view looking south west (northern elevation and eastern elevations)

Extensive use of glass on the northern part of the extension will provide for views outside and solar penetration within the building. Sunshading devices on the eastern elevation will contribute to visual interest.



Figure 18. Illustrative view looking west (eastern elevation)

The extension will be contemporary in style and complement the aesthetic of the existing hospital building.

3.7 Building Code of Australia (BCA) requirements

A Building Code of Australia (BCA) Assessment has been undertaken of the proposal. The proposal is identified as a Class 9a Hospital Building. With design development following planning consent, the report identifies that the proposal can comply with the BCA, including Section C (Fire Resistance), Section D (Access and Egress), Section E (Fire Fighting Services and Smoke Hazard Management), Section F (Health and Amenity) and Section J (Energy) – pending alternative engineered solutions. Refer to **Appendix H** for the BCA Report prepared by Davis Langdon.

Section 7.12 of the draft Statement of Commitments requires compliance with the BCA.

3.8 Fire Engineering

A Fire Engineering Strategy has been prepared by Umow Lai and is attached at **Appendix X**. The report presents a fire safety strategy for the design of the proposed expansion to Port Macquarie Base Hospital. The Building Certifier has conducted a preliminary review of the building design and has indicated items requiring a fire engineered Alternative Solution. The draft Statement of Commitments at **Section 7.7** requires compliance with the Fire Engineering Strategy at **Appendix X** and any updates to this required at detailed design stage.

3.9 Vehicle access, parking and traffic

Refer to the Traffic and Parking Report prepared by TTW at **Appendix I**.

Access and traffic

Vehicle access to the hospital campus will remain from Wrights Road. As noted earlier, access is controlled with a small roundabout and this will remain to continue the provision of safe and efficient vehicular movements to and from the site.

Access to the gas cylinders in the north-west corner of the new eastern car park (approved under Part 5 of the EP&A Act) has taken into consideration the truck refill area and the appropriate approach road requirements. All truck access will continue from Wrights Road.

A new loading dock is being provided on the western boundary of the hospital site. The loading dock entry/exit will be from Wrights Road. The entry/exit will allow for access of all trucks up to 19m semi-trailers. All trucks will enter and exit the loading dock area in a forward direction, turning around within the site. Turning paths are shown in the Traffic and Parking Report at **Appendix I**.

Ambulance access will continue from Wrights Road, into the emergency access area. West of the emergency access and east of the new loading dock is a separate entry/exit ambulance parking area, which provides spaces for waiting ambulances.

The Traffic and Parking Report at **Appendix I** states that additional vehicular traffic generation for the site should not exceed 260 vehicles per hour (vph) during a peak hour period, as not all traffic arrive and depart at the same time. Considering a conservative measure of a maximum of 70% of arrival / departure in a one hour time period, it would result in traffic generation of 180 vph for in and out movements i.e. 90vph in each



Figure 19. Traffic Sign.

The sign will be relocated by Health Infrastructure closer to the intersection of Wrights Road and Oxley Highway as part of the development works.

direction.

Therefore, in traffic engineering terms the road system will continue to operate at a good level of service after the completion of the proposal, based on the available road network capacity and its level of service.

It is also noted that the traffic sign (**Figure 19**) towards the intersection of Oxley Highway and Wrights Road will be relocated further towards Oxley Highway as part of the works. This is required due to the location of the proposed new location of the Ambulance Bay entry from Wrights Road.

Car parking

The total parking demand for the existing situation at the hospital is 575 spaces.

The Clinical Service Plan for PMBH (September 2010) indicates a higher level of activity for the hospital by 2021, as detailed in the Traffic and Parking Report at **Appendix I**. The future parking demand is estimated at 700 spaces. Following development of the new eastern car park at the hospital (approved under Part 5 of the EP&A Act on 2 December 2011) and the works involved in the hospital expansion (subject of this Part 3A application), around 740 parking spaces will be provided.

This level of parking provision will improve the amenity for the hospital's users, considering that generally some 10% additional parking is desirable to reduce vehicular circulation within the campus and to meet the parking demand for special / unexpected occasions.

Pedestrian and bicycle access

Currently the hospital experiences some issues with pedestrian movements within the campus particularly access between the car parking areas on southern side of the campus and the main buildings.

As part of the design development process for the hospital expansion, pedestrian desire lines have been identified and are shown in Figure 5.2 of the Traffic and Parking Report at **Appendix I**. At a future stage, appropriate pedestrian facilities will be provided. Pedestrian access between the hospital site and the clinics and surgeries along Highfields Circuit is also recommended.

Introduction of bicycle parking at various locations within the hospital campus at a future stage will also provide additional amenities for the users of the hospital and would promote alternative transport means, particularly for hospital staff. Refer draft Statement of Commitments at **Section 7**.

Public transport

Proposed changes to bus access at the hospital and improvements to manoeuvrability of buses are shown in Figure 5.3 of the Traffic and Parking Report at **Appendix I**.

3.10 Accessibility

An Accessibility Statement for the proposed development has been prepared by Davis Langdon (refer to **Appendix L**) which identifies that access for people with disabilities will be provided to all public and relevant staff areas of the proposed development of an independent, functional and equal basis.

Detailed design elements, such as stair details, dimensions, door schedules and joinery details will require resolution during documentation phases to ensure compliance with the BCA (namely Section D) and the related intent of the Disability Discrimination Act 1992 (DDA).

As noted above, the draft Statement of Commitments at **Section 7.12** requires compliance of the development with the BCA.

3.11 Landscape treatment

The Landscape Report and Plans are at provided at **Appendix M**.

The proposed landscape design is guided by the following design principles:

- Retain and build upon the established successful landscape character;
- Minimise the impact of the new built development upon the existing landscape setting and ecological communities;
- Maintain the views and the experience of the landscape setting from within the hospital to surrounding vegetation where possible;
- Provide external and accessible pedestrian spaces at the building entry points;
- Retain the car park vegetation to maintain the character of the site.

These design principles are acknowledged and achieved through careful consideration of site planning, level design, material selection and plant species consideration.

The landscape proposals for the PMBH expansion works are summarised in the Landscape Report as follows:

- Hospital surrounds appropriate to the setting, required access and functions;
- Boundary treatments to the site to meet bushfire Asset Protection Zone and ecological restrictions;
- Supplement existing koala habitat areas as identified in the ecological report with appropriate koala feed trees;
- Entry sequence for all users – emergency/ visitors/ staff/ services;
- Pedestrian access around and into the building; and
- Internal courtyard space on Level 1 and terrace/outdoor space with paediatrics focus on level 3.

3.12 Stormwater management

An Outline of the Stormwater Design Principles for the Part 3A Application has been prepared by Enstruct and is attached at **Appendix N**. In

addition, plans showing stormwater drainage and sediment and erosion control plans have been attached at **Appendix N**.

The total area of the building works for the development will be constructed over existing areas of soft landscaping of approximately 4000m². These buildings are essentially located to the western and northern areas of the site and stormwater runoff will be directed to the existing detention basin located immediately to the north of the proposed extension.

3.13 Services

Refer to the Hydraulic and Fire Services Engineering Report at **Appendix O** and the Electrical Services Report at **Appendix P**.

Sewerage

The existing house sanitary drainage systems for the site connect to a 225mm diameter sewer connection to the Port Macquarie-Hastings Council sewer main located towards the north of the site. These are in good condition and there have been no reports of major failures.

Given the proposed additional capacity by the hospital expansion, Acor Consultants in their report at **Appendix O** note that the existing capacity will be not adequate. Upgrade works of the existing main infrastructure pipes and pumping plant is therefore required to accommodate increased loads.

Domestic water supply

Domestic water for the existing site is fed through a 200mm diameter water main extending west along Wrights Road from the Oxley Highway water main to the west. The site is fed by a 150mm diameter Council water meter. The Council water main is protected by the site containment reduced pressure zone device (RPZD) located immediately downstream of the meter.

An alternate water supply to the site is fed along the road reserve (undeveloped) section of the Wrights Road alignment from the main within Merrigal Street to the east of the site. The main is a 150mm diameter PVC main and is normally valved in the off condition. The valve is operated only by Council in case of emergency or loss of supply from the Oxley Highway main fed to the site from the west.

Domestic potable water supplies within the hospital are fed by a 50,000 litre domestic water storage tank that provides between six and eight hours of emergency storage based on the current bed population and usage.

The condition of existing services is good and there have been no reports of major failures.

The Acor Consultants' report at **Appendix O** states that the existing capacity is adequate. The existing water meter connection has sufficient capacity for the future development without the need for on-site storage.

Fire service water supply

Fire protection water supply for the existing site is fed through a 200mm

diameter water main extending west along Wrights Road from the Oxley Highway water main to the west. The site fire water supply is fed through a 100mm diameter fire brigade booster valve assembly. The council water main is protected by a double check valve located on the fire brigade booster assembly.

An alternate water supply to the site is fed along the road reserve (undeveloped) section of the Wrights Road alignment from the main within Merrigal Street to the east of the site. The main is a 150mm diameter PVC main and is normally valved in the off position. The valve is operated only by Council in case of emergency or loss of supply from the Oxley Highway main fed to the site from the west.

The site fire hydrant system is pressurised by a superseded / non complying fire hydrant pump set located within the services area.

The condition of existing services is good and there have been no reports of major failures.

The capacity of the existing water meter connection is sufficient for the future development without the need for on-site storage.

LP gases

Natural gas from a piped regional network is not available to the site. The hospital is currently supplied with 4 x 7500 litre LPG bulk storage cylinders that are filled on a weekly basis creating a 'farm' of LPG tanks. The tanks are located on the south west boundary of the site. The tanks are manifolded to supply gas at medium pressure (100kPa) through a 65mm diameter copper gas main to the building.

On entering the building at the services area the gas is reduced in pressure to 7kPa and fed through to the plant room appliances.

A 32mm diameter copper service also extends as a medium pressure service to the kitchen area where gas pressures are reduced by a 2nd stage regulator for kitchen gas appliances.

The North Coast Cancer Institute is fed completely independently off a 4500 litre LPG bulk storage tank located to the north east of the building.

The condition of existing services is good and there have been no reports of major failures or delivery issues. The tanks are generally 'topped up' on a fortnightly basis.

Due to the location of the proposed expansion works, the area for the tanks that supply the main hospital are to be relocated across to the eastern area of the site as part of the Part 5 approved works and gas services redirected once the building expansion is completed.

Electrical supply

Wood and Grieve Engineers have prepared a report on Electrical Services (refer **Appendix P**). The report states that Essential Energy supplies electricity to the site and they have advised that there is sufficient capacity in their network to supply the additional load generated by the proposed hospital expansion.

Two new 1000 kVA padmounted substations will be required on site. They will be located outside the building adjacent to the plant rooms on Level 1. A new main switchboard, power factor correction and standby generator will be provided for the new buildings within the Level 1 Plant

Room.

Outdoor car park and pedestrian pathway lighting

Outdoor car parks are designed to comply with both AS/NZS 1158.3.1 – Light for roads and public spaces, and AS/NZ 4282-1997 – Control of the obtrusive effects of outdoor lighting, as detailed in the report at **Appendix P**.

External lighting control

It is proposed that the light switching be controlled by a photo electric cell (PE Cell). This will allow the lights to remain on from dusk to dawn. The new car park lighting will be controlled together with the lighting in the existing car park areas.

Maintenance

Energy efficient lamps, control gear and luminaires will be selected generally utilising high efficacy LED sources. Vandal resistant luminaires and associated supporting facilities will be selected and ease of maintenance will be considered in the selection and design.

General internal lighting

The new building will be provided with internal lighting which complies with the requirements of AS/NZS 1680.2.5:1997 – Interior lighting, Hospital and Medical Tasks and NSW Health Technical Series TS 11.

Energy efficient fluorescent and LED luminaires will be utilised.

New exit and emergency lighting will be provided throughout the new building in accordance with AS/NZS 2293.

General power and miscellaneous services

The new building will be provided with general power provisions, voice and data provisions, nurse call system, duress alarm system, electronic security, access control and CCTV monitoring.

3.14 Lighting

Lighting is discussed in **Section 3.13** above under Electrical Supply.

3.15 Bulk earthworks

Enstruct have advised by letter (refer **Appendix N**) that the approximate earthworks volumes for the civil works associated with the main works at the western end of the site are as follows:

- Topsoil removal – 1200m³ approximately;
- Cut to fill – 3750m³ approximately;
- Cut to spoil – 1750m³ approximately.

Accurate values will be confirmed by detailed calculation during construction.

4 Strategic Justification

The following section provides the project justification, consideration of alternatives and key environmental, social and economic benefits of the proposed PMBH expansion.

4.1 Project justification

The background to the proposal at **Section 1.4** of this report sets out the basis for the need for the hospital expansion. To summarise, PMBH is under enormous demand for medical and surgical services, with a high occupancy rate and continued growth pressures to be driven by an ageing and growing population. A PMBH Master Development Plan was completed in September 2006 which recommended the construction of a fourth pod development.

In 2010, a Clinical Services Plan 2010 (CSP) for PMBH was prepared to determine the service needs and capacity requirements for the hospital over the next ten to fifteen years based on updated population projects and latest activity data. In September 2010, NSW Health commissioned the development of a Service Procurement and Project Definition Plan to support funding applications to NSW Treasury and the Commonwealth Health and Hospitals Fund to enable the prioritised service requirements identified in the CSP to be met. A revised Master Plan was completed in November 2010. The 2010 Master Plan supported the expansion of the hospital.

4.2 Consideration of alternatives

The 2010 Master Plan presented strategies for responding to the service demand projections for 2016 and 2021 and beyond. It detailed the potential for expansion on the site, including long term strategies for collocating of community health services, and expansion of other services at the hospital.

From the Master Plan a number of concept master plans were developed which detailed options for new and refurbished facilities which would enable the recommendations of the CSP to be met. In order to arrive at a recommended and preferred development option for the expansion of the PMBH it was necessary to identify possible staging scenarios based on different levels of target funding and taking into consideration the ranking of clinical service priorities.

The original expansion concept (identified in the prior 2006 Master Plan) was never funded. The current preferred concept, supported by the 2010 Master Plan, will be a significant driver to the achievement of the employment and infrastructure goals of the Mid North Coast Regional Strategy 2006 (refer **section 5.4** of this report).

4.3 Key environmental, social and economic benefits

The development has a clear social and economic benefit to the community, as follows:

Environmental

- The proposed hospital expansion is of a high standard of architectural design and uses long-lasting, good quality materials

to visually enhance the hospital site.

- Any impacts upon Koala habitat areas can be mitigated by appropriate tree planting through the landscape plans and off-site.
- Water and energy saving measures such as rainwater re-use systems, a solar hot water pre-heat system, and variable speed drivers for energy efficiency.

Social

- The PMBH expansion will improve the quality of health services for the population catchment of the hospital.
- The proposed development will address the need for an expansion of the hospital's health services, given the continuing growth and ageing of the population.

Economic

- The proposed hospital expansion will increase the number of jobs in the Port Macquarie area in the short and long-term. There will be **314 full-time equivalent operational jobs (additional to the existing 576.5) and 1200-1500 full-time equivalent construction jobs** created by the proposed development.
- The proposed hospital expansion will enhance the attractiveness of Port Macquarie and the surrounding area to potential existing residents as a result of the improvement in health services, and therefore community infrastructure.

5 Regulatory context

The following section outlines the statutory framework around which the application is to be assessed, and the proposal's level of compliance. The relevance of the legislation, environmental planning instruments and policies are explained followed by a comment as to how the proposed development satisfies these planning policies.

5.1 Planning legislation

The Acts of legislation applicable to the development proposal are the Environmental Planning and Assessment Act 1979 (EP&A Act) and the Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011 No 22. This application is submitted for determination under Part 3A of the EP&A Act.

Environmental Planning and Assessment Act 1979

The DGR's call for an assessment of the proposal against the Objectives of the EP&A Act 1979. The objectives in Clause 5 of the EP&A Act 1979 are as follows:

- (a) *to encourage:*
 - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iii) *the protection, provision and co-ordination of communication and utility services,*
 - (iv) *the provision of land for public purposes,*
 - (v) *the provision and co-ordination of community services and facilities, and*
 - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
 - (vii) *ecologically sustainable development, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

The proposed development is consistent with the objects of the EP&A Act, for the following reasons:

- it promotes the social welfare of the community;
- it allows for the orderly and economic development of land;
- it will not have any significant adverse impact on the natural environment;
- is consistent with the principles of ecologically sustainable development in that energy and water efficiency is optimised,

- it is development for public purposes and will facilitate the delivery of community health services; and
- the opportunity for public involvement and participation is to be provided through the statutory consultation processes under Part 3A of the EP&A Act.

On 1 August 2005, Part 3A was introduced to the EP&A Act. Part 3A and its accompanying Regulations and Guidelines contained the assessment and determination framework for major projects including health projects.

The Minister formed the opinion that the development to which this application relates was a project for the purposes of Part 3A of the EP&A Act 1979 (refer declaration dated 27 January 2011 at **Appendix E**). Therefore, the project application to which this Environmental Assessment relates is lodged pursuant to Section 75E of the Act, for approval of a project as defined in Part 3A of the EP&A Act 1979.

Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011 No 22

On 22 June 2011, Part 3A was repealed from the EP&A Act. However, transitional arrangements under Schedule 6A of the Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011 No 22 establish that Part 3A projects for which Director-General's Requirements (DGR's) were issued prior to the repeal of Part 3A will continue to be dealt with under Part 3A.

As the DGR's were issued on 23 February 2011, Part 3A of the EP&A Act remains applicable to the project.

5.2 Other relevant legislation

Other relevant legislation specifically related to the potential environmental impacts of the proposed activity include:

- Environment Protection and Biodiversity Conservation Act 1999;
- Threatened Species Conservation Act 1995;
- Native Vegetation Act 2003; and
- Noxious Weeds Act 1993.

Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The Commonwealth EPBC Act legislates the provisions for the assessment of actions likely to have a significant impact on Matters of National Environmental Significance (MNES) listed under the Act. An assessment of the potential impacts of the development on any MNES, including threatened and migratory species, is provided as part of the Ecological Assessment at **Appendix K**.

Threatened Species and Conservation Act 1995 (TSC Act)

The TSC Act identifies threatened species, populations and ecological communities in NSW and provides mechanisms for their conservation and recovery. The TSC Act aims to minimise impacts of development on such communities. An assessment of the impact of the proposed development on species occurring within and around the subject site is provided as part of the Ecological Assessment at **Appendix K**. With the measures proposed within the draft Statement of Commitments at **Section 7.9**, the

development is considered unlikely to have a significant impact on threatened species.

Native Vegetation Act 2003 (NV Act)

The NV Act provides mechanisms for the protection of native vegetation in regional NSW. The aims of the NV Act are to provide flexibility and incentive for the management of native vegetation, end large scale land clearing where there are no positive environmental outcomes, and encourage healthy and productive landscapes. As determined by the Ecological Assessment at **Appendix K**, the proposal is not subject to the provisions of this Act as the Act does not apply to development to which Part 3A of the EP&A Act applies.

Noxious Weeds Act 1993 (NW Act)

The NW Act aims to minimise the impacts of noxious weeds in NSW by preventing their establishment and restricting the spread and area of such weeds. Results and management measures for noxious weeds recommended for the proposed development are provided as part of the Ecological Assessment at **Appendix K**, and included within the draft Statement of Commitments at **Section 7.9**.

5.3 NSW 2021 (State Plan)

NSW 2021 (the State Plan) was released in September 2011. The Plan sets a strategic direction and goals for the NSW Government across a broad range of services and infrastructure. It is *“a 10 year plan to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen our local environment and communities.”*

There are 32 goals set out in NSW 2021 including one specifically in relation to hospitals, being:

“12. Provide world class clinical services with timely access and effective infrastructure.”

Targets to improve these goals include:

- Reduce hospital waiting times.
- Improve transfer of patients from emergency departments to wards.

One of the priority actions to achieve the targets is to make 1,390 beds available over the next four years to meet demand for hospital admissions.

The Port Macquarie Base Hospital expansion will assist in implementing solutions to these goals and targets. Specifically, the proposal will provide a significant extension of the services offered at the hospital including 111 additional beds (increasing total to some 272 beds). The proposal therefore seeks to provide expanded medical facilities for a growing and ageing urban population.

5.4 State and Regional Planning Instruments

The state and regional planning instruments applicable to the subject site are:

- State Environmental Planning Policy (Major Development) 2005;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- State Environmental Planning Policy No. 33 – Hazardous and Offensive Development;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No. 44 – Koala Habitat Protection;
- Mid North Coast Regional Strategy.

State Environmental Planning Policy (Major Development) 2005

As stated in **Section 5.1** of this report, Part 3A was repealed from the EP&A Act on 22 June 2011. However, transitional arrangements under Schedule 6A of the Environmental Planning and Assessment Act 2011 No 22 establish that Part 3A projects for which DGR's were issued prior to the repeal of Part 3A will continue to be dealt with under Part 3A. As the DGR's were issued on 23 February 2011, the project will continue to be dealt with under Part 3A of the EP&A Act.

Under Section 75B of the EP&A Act 1979, a project was taken to be a Major Project, to which Part 3A of the Act applied, if it had been declared by:

- A State Environmental Planning Policy; or
- An order of the Minister published in the Government Gazette.

SEPP (Major Development) 2005 was the relevant planning instrument with regard to the declaration of applications as 'Major Projects'. Under this SEPP the proposed expansion of Macquarie Base Hospital is a Major Project under Schedule 1 as it is hospital development with a capital investment value of more than \$15 million.

Refer to the declaration from the Minister for Planning dated 27 January 2011 (see **Appendix E**), which confirms acceptance of the proposal as a Major Project.

State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 requires the Consent Authority to consider whether sites, the subject of development proposals, are contaminated, and if required the proposed remediation activities necessary to make the site suitable for the proposed development.

Comment:

A Geotechnical and Contamination Report has been prepared by Douglas Partners (refer **Appendix Q**). The report has found that there are potential sources of contamination on the hospital site, including former market gardening and farming activities, possible on-site effluent disposal, an underground fuel storage tank to the east of the proposed western building envelope, aboveground fuel storage within the emergency generator in the eastern portion of the site, possible filling used to fill/level the site during initial construction of the hospital and possible use of pesticides/weed killer on the north-eastern site boundary.

The results of the chemical analysis found that the soil chemical analysis results were within the health based criteria for commercial / industrial land use (National Environmental Health Forum commercial/industrial levels) and NSW EPA sensitive landuse criteria for Total Recoverable Hydrocarbons (TRH) and Benzene, Toluene, Ethyl Benzene, Xylene (BTEX). The results of the assessment indicated that the materials tested are classified 'General Solid Waste', considering total and leachable contaminant concentrations.

The draft Statement of Commitment at **Section 7.2** requires that if any new contamination information or contaminants are identified during the undertaking of works which have the potential to alter previous conclusions about site contamination, then the Managing Contractor must be immediately notified and works must cease. Works must not recommence on site until the site is remediated in accordance with an approved Remediation Action Plan and a Validation and Monitoring Report together with a notice of completion of remediation pursuant to Clause 18 of State Environmental Planning Policy No 55 – Remediation of Land (as if that policy applied) have been submitted to and approved by DECCW.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

One of the aims of SEPP Hazardous and Offensive Development is to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact. In this SEPP, "potentially hazardous industry" is defined as follows:

"Potentially hazardous industry" means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

- (a) to human health, life or property, or
- (b) to the biophysical environment,

and includes a hazardous industry and a hazardous storage establishment."

Clause 12 of SEPP Hazardous and Offensive Development requires that a person who proposes to make a development application to carry out development for the purposes of a potentially hazardous industry must prepare (or cause to be prepared) a preliminary hazard analysis in accordance with the current circulars or guidelines published by the Department of Planning and Infrastructure and submit the analysis with the development application.

Comment:

A Preliminary Hazard Analysis has been undertaken by SKM for the proposed development and is attached at **Appendix Y**. The findings of the Preliminary Hazard Analysis are provided at **Section 6.15** of this EA.

State Environmental Planning Policy (Infrastructure) 2007

The proposed development is considered a 'health services facility' under the Infrastructure SEPP. Under Clause 57, development for the purposes of a 'health services facility' can be carried out with consent on land in a prescribed zone.

The SP2 Infrastructure zone is a prescribed zone and in the Port Macquarie – Hastings LEP 2011 the site's SP2 Infrastructure zone specifically provides for health services facilities on the site.

Clause 102 of the Infrastructure is considered not to apply to the project, as the site does not have a frontage to Classified Road.

Clause 104 of the Infrastructure SEPP, Traffic-generating development, does apply as the project is considered traffic-generating development specified under Schedule 3 of the SEPP. Hospitals or expansions to hospitals involving 200 or more beds with access to any road are traffic-generating developments. On completion of the expansion, the hospital will have some 272 beds, therefore is traffic generating development.

Before determining a development application for development to which Clause 104 applies, the consent authority must:

- (a) *give written notice of the application to the RTA within 7 days after the application is made, and*
- (b) *take into consideration:*
 - (i) *any submission that the RTA provides in response to that notice within 21 days after the notice was given (unless, before the 21 days have passed, the RTA advises that it will not be making a submission), and*
 - (ii) *the accessibility of the site concerned, including:*
 - (A) *the efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and*
 - (B) *the potential to minimise the need for travel by car and to maximise movement of freight in containers or bulk freight by rail, and*
 - (iii) *any potential traffic safety, road congestion or parking implications of the development.*

Comment:

The Traffic and Parking Report prepared by TTW (refer **Appendix I**) advises that the assessment of intersection operation at the entry to the hospital (the roundabout at the intersection of Wrights Road and Highfields Circuit) will continue to operate at a good level of service. Similarly, the assessment of the operation of the Oxley Highway and Wrights Road intersection with consideration of the future traffic volumes from the hospital and growth along the Highway indicate that the intersection will continue to operate at a good level of service. The road system that services the site will also continue to operate at good levels of service following completion of the expansion.

As intersections and the road network will continue to operate at good levels of service, it is envisaged that vehicle air emissions from cars should be acceptable as traffic will continue to flow at acceptable levels.

The Acoustic Assessment prepared by Acoustic Logic (refer **Appendix T**) states that the additional traffic as a result of the hospital expansion will increase noise levels on Wrights Road by less than 1dB(A) which will be barely perceptible and therefore will not create an adverse impact. It is noted that the section of Wrights Road from Oxley Highway immediately

affected by the hospital traffic contains non-residential uses.

As noted earlier under Section 3.9, car parking demand generated by the expansion of the hospital is estimated in the order of 700 spaces, based on application of the previous Port Macquarie Hastings DCP Number 18. (This DCP has been replaced by Port Macquarie Hastings Comprehensive DCP 2011, however no parking rate is provided for hospital uses under this). Around 740 spaces will be provided (with the expansion of parking provided on the eastern area of the site under the Part 5 REF approval). Accordingly, the provision of parking is acceptable.

The potential to minimise private car borne travel to and from the site will be further investigated through the preparation of Transport Management Plan, to be prepared by the Hospital during operation of the development (as noted under the Draft Statement of Commitments, **Section 7.13**).

State Environmental Planning Policy No. 44 – Koala Habitat Protection

This Policy aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:

- by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and
- by encouraging the identification of areas of core koala habitat, and
- by encouraging the inclusion of areas of core koala habitat in environment protection zones.

Part 2 of the SEPP contains a three (3) step process for the development control of areas of koala habitat. Step 1 (Clause 7) involves the Council being satisfied as to whether or not the land in question is a potential koala habitat based on information obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification.

If the Council is satisfied that the land is a potential koala habitat, then Step 2 (Clause 8) requires Council to be satisfied as to whether or not land is a core koala habitat based on information obtained by it, or by the applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management.

Step 3 (Clause 9) notes that before a Council may grant consent to a development application for consent to carry out development on land which is core koala habitat, a plan of management must be prepared. The Council's determination of the development application must not be inconsistent with the plan of management.

Comment:

An assessment of the potential for the proposed development to impact upon threatened species was undertaken in the preparation of the Ecological Assessment at **Appendix K**. The assessment found that the proposed development could impact upon the local foraging behaviour and resources of the Koala. However, with the adoption of recommended mitigation measures (refer draft Statement of Commitments, **section 7.9**) the proposal is considered unlikely to have a significant impact such that a viable local population would be placed at risk of extinction in the long

term.

Mid North Coast Regional Strategy 2006

Port Macquarie is identified as a major regional centre in the Mid North Coast Regional Strategy 2006. The Strategy identifies that major regional centres are suited to accommodate the majority of regional population growth and employment opportunities, and to deliver state and regional services to the entire region or within the centre's subregion.

The need for an additional 48,500 jobs to be created in the region is also identified by the Strategy, using work participation rates and population projections current at the time the Strategy was prepared. The creation of these jobs will create sufficient capacity to meet the service needs of the growing population and additional capacity to help encourage additional workers to the region and reduce the ageing of the population. Port Macquarie is identified as one of the centres which will take the majority of future commercial development.

Comment:

The expansion of PMBH is consistent with the Mid North Coast Regional Strategy. It will support the continued provision of critical medical and surgical services (community infrastructure) for the region and also support employment opportunities.

5.5 Local statutory context

The local statutory planning documents that apply to the site are:

- Port Macquarie – Hastings Local Environmental Plan 2011; and
- Port Macquarie – Hastings Development Control Plan 2011.

Comment is made assessing the proposal's ability to meet the objectives and controls within each document.

Port Macquarie-Hastings Local Environmental Plan (LEP) 2011

The relevant controls in the Port Macquarie-Hastings LEP for the proposed development are set out in **Table 2** below.

Table 2. Compliance with Port Macquarie-Hastings LEP 2011

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
Clause 1.2 Aims of Plan (2) The aims of the LEP are as follows: (a) to protect, conserve and sustainably manage the ecological biodiversity and natural environment of the Port Macquarie-Hastings area, (b) to facilitate a strong and diverse local economy within the Port Macquarie-Hastings area, (c) to manage and coordinate the orderly, equitable and economic use and development of land within the Port Macquarie-Hastings area, (d) to facilitate the provision and coordination of community services and facilities within the Port Macquarie-Hastings area, (e) to facilitate adaptive planning for natural hazards and risks, including flooding, erosion, inundation, land stability, bushfire risk and acid sulfate soils within the Port Macquarie-Hastings area,	Yes	The proposed hospital expansion is consistent with the aims of the LEP. Any potential environmental impacts of the proposed development are addressed in this EA and where necessary, the draft Statement of Commitments at Section 7 includes conditions to mitigate impacts. The expansion of the PMBH assists in the facilitation of a strong and diverse local and regional economy. The expansion of the hospital enables the orderly, equitable and economic use and development of the hospital site. The hospital expansion helps to facilitate the provision and coordination of community services and facilities within the Port Macquarie-Hastings area. Enstruct, civil engineers for the project, have confirmed that there is no flooding risk associated with the proposed hospital expansion. The Bushfire Report at Appendix U states that the

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
<p>(f) to reinforce the role of the Port Macquarie-Hastings area's settlement hierarchy, centred on Port Macquarie and supported by its surrounding towns and villages,</p> <p>(g) to ensure the effective management of public assets within the Port Macquarie-Hastings area,</p> <p>(h) to provide a land use framework for development within the Port Macquarie-Hastings area that is safe, inclusive and equitable, and caters for the housing, employment, entertainment, cultural, welfare and recreational needs of residents and visitors,</p> <p>(i) to ensure that development does not conflict with the hierarchy of business and retail centres in the Port Macquarie-Hastings area and the role of the Greater Port Macquarie Central Business District as the focal point for subregional functions and service delivery,</p> <p>(j) to identify and protect features of environmental, cultural or visual importance within the Port Macquarie-Hastings area.</p>		<p>development based on the recommendations in the Bushfire Report will create a safer environment during a bushfire event than currently exists.</p> <p>A Slope Stability Risk Assessment has been carried out (refer Table 16 of the Geotechnical Report at Appendix Q) and the risk evaluation for slope instability varies from very low to medium, which the report states is normally considered acceptable by owners and authorities.</p> <p>The hospital site is not identified as having Acid Sulfate Soils on the LEP Acid Sulfate Soils Map.</p> <p>The proposed hospital expansion reinforces Port Macquarie's place at the centre of the Port Macquarie-Hastings area's hierarchy.</p> <p>The proposed expansion is an efficient use of the hospital site and is therefore considered to contribute to effective management of the hospital as a public asset.</p>
<p>Clause 2.1 Land Use Zones</p> <p>The site is zoned SP2 Infrastructure.</p> <p>The objectives of this zone are:</p> <ul style="list-style-type: none"> To provide for infrastructure and related uses. To prevent development that is not compatible with or that may detract from the provision of infrastructure. <p>Activities permitted with consent are those with the purpose shown on the Land Zoning Map [Health Services Facility], including any development that is ordinarily incidental or ancillary to development for that purpose; and roads.</p>	Yes	<p>As the proposed development is for hospital expansion, it meets the objectives of the zone as it provides for infrastructure.</p> <p>The purpose of the proposed development comes within the specified activities for that site of 'Health Services Facilities'.</p>
<p>Clause 4.3 Height of buildings</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality,</p> <p>(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,</p> <p>(c) to minimise the adverse impact of development on heritage conservation areas and heritage items,</p> <p>(d) to nominate heights that will provide a transition in built form and land use intensity within the area covered by this Plan.</p> <p>(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.</p> <p>The maximum height for the land shown on the Height of Buildings Map is 14.5 metres.</p>	No	<p>The maximum height of the proposed building expansion is 18.75 metres (including lift overrun) above existing ground. This does not comply with the LEP's height limit for the PMBH of 14.5 metres.</p> <p>The area of non-compliance with the maximum height standard is illustrated at Figure 20.</p> <p>A claim for variation to the height standard is provided for under 5.5.1 at the end of this compliance table.</p>
<p>Clause 4.4 Floor space ratio</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to regulate density of development and generation of vehicular and pedestrian traffic,</p> <p>(b) to encourage increased building height and site amalgamation at key locations,</p> <p>(c) to provide sufficient floor space for high quality development for the foreseeable future,</p> <p>(d) to ensure that buildings are compatible with the</p>	N/A	<p>There is no floor space ratio shown for the land on the Floor Space Ratio Map in the LEP.</p>

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
<p>bulk and scale of the existing and desired future character of the locality.</p> <p>(2) The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.</p>		
<p>Clause 4.6 Exceptions to development standards</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,</p> <p>(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.</p> <p>(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.</p> <p>(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:</p> <p>(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and</p> <p>(b) that there are sufficient environmental planning grounds to justify contravening the development standard.</p> <p>(4) Development consent must not be granted for development that contravenes a development standard unless:</p> <p>(a) the consent authority is satisfied that:</p> <p>(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and</p> <p>(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and</p> <p>(b) the concurrence of the Director-General has been obtained.</p>	<p>Variation acceptable</p>	<p>As the proposed development exceeds the maximum height of 14.5 metres permitted for development on the subject site, Clause 4.6 – Exceptions to development standards is required to be taken into consideration.</p> <p>The provisions of this clause are addressed within the claim for variation under 5.5.1 at the end of this table.</p> <p>Circular PS 08-003 issued on 9 May 2008 informed Council that it may assume the Director-General's concurrence for exceptions to development standards.</p>
<p>Clause 5.9 Preservation of trees or vegetation</p> <p>(1) The objective of this clause is to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation.</p> <p>(2) This clause applies to species or kinds of trees or other vegetation that are prescribed for the purposes of this clause by a development control plan made by the Council.</p> <p>(3) A person must not ringbark, cut down, top, lop, remove, injure or wilfully destroy any tree or other vegetation to which any such development control plan applies without the authority conferred by:</p> <p>(a) development consent, or</p> <p>(b) a permit granted by the Council.</p>	<p>Yes</p>	<p>Development consent is sought through this Part 3A Major Project application for the removal of 83 trees to allow for the expansion of the PMBH (refer Section 6.7 of this EA and the Arborist's Report at Appendix J).</p>

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
<p>Clause 5.9AA Trees or vegetation not prescribed by development control plan</p> <p>(1) This clause applies to any tree or other vegetation that is not of a species or kind prescribed for the purposes of clause 5.9 by a development control plan made by the Council.</p> <p>(2) The ringbarking, cutting down, topping, lopping, removal, injuring or destruction of any tree or other vegetation to which this clause applies is permitted without development consent.</p>	Yes	Those trees which are not of a species or kind prescribed under clause 5.9 do not require development consent for removal or other works which may affect them.
<p>Clause 5.10 Heritage conservation</p> <p>(1) Objectives The objectives of this clause are as follows:</p> <p>(a) to conserve the environmental heritage of Port Macquarie-Hastings,</p> <p>(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,</p> <p>(c) to conserve archaeological sites,</p> <p>(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.</p> <p>(2) Requirement for consent Development consent is required for any of the following:</p> <p>(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):</p> <ul style="list-style-type: none"> (i) a heritage item, (ii) an Aboriginal object, (iii) a building, work, relic or tree within a heritage conservation area, <p>(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,</p> <p>(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,</p> <p>(d) disturbing or excavating an Aboriginal place of heritage significance,</p> <p>(e) erecting a building on land:</p> <ul style="list-style-type: none"> (i) on which a heritage item is located or that is within a heritage conservation area, or (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance, <p>(f) subdividing land:</p> <ul style="list-style-type: none"> (i) on which a heritage item is located or that is within a heritage conservation area, or (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance. 	Yes	<p>The subject site is not identified in Schedule 5 of the Port Macquarie-Hastings LEP and no relevant items are listed on the NSW State heritage register.</p> <p>The draft Statement of Commitments at Section 7.4 and 7.5 of this report includes a requirement for work on the site to stop should any items of archaeological interest be found. The NSW Office of Environment and Heritage is to be informed for non-Aboriginal items, and the National Parks and Wildlife Service (NPWS) to be informed for items of Aboriginal interest.</p>
<p>Clause 7.1 Acid sulfate soils</p> <p>(1) The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.</p> <p>(2) Development consent is required for the carrying</p>	Yes	The Acid Sulfate Soils Map does not identify the site as having acid sulfate soils.

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
out of works described in the Table to this subclause on land shown on the Acid Sulfate Soils Map as being of the class specified for those works.		
<p>Clause 7.2 Earthworks</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,</p> <p>(b) to allow earthworks of a minor nature without separate development consent.</p> <p>(2) Development consent is required for earthworks unless:</p> <p>(a) the work is exempt development under this Plan or another applicable environmental planning instrument, or</p> <p>(b) the work is ancillary to other development for which development consent has been given.</p> <p>(3) Before granting development consent for earthworks, the consent authority must consider the following matters:</p> <p>(a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,</p> <p>(b) the effect of the proposed development on the likely future use or redevelopment of the land,</p> <p>(c) the quality of the fill or the soil to be excavated, or both,</p> <p>(d) the effect of the proposed development on the existing and likely amenity of adjoining properties,</p> <p>(e) the source of any fill material and the destination of any excavated material,</p> <p>(f) the likelihood of disturbing relics,</p> <p>(g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.</p>	Yes	<p>The proposed earthworks are ancillary to the hospital expansion works for which consent is being sought through this Part 3A application.</p> <p>A report outlining the Stormwater Concept for the proposed hospital expansion is attached at Appendix N, as are Civil External Works drawings and Erosion and Sedimentation Control Plans.</p> <p>With respect to the likelihood of disturbing relics, refer to the discussion under Clause 5.10 Heritage Conservation above.</p>
<p>Clause 7.3 Flood planning</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to minimise the flood risk to life and property associated with the use of land,</p> <p>(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,</p> <p>(c) to avoid significant adverse impacts on flood behaviour and the environment.</p> <p>(2) This clause applies to:</p> <p>(a) land that is shown as "Flood planning area" on the Flood Planning Map, and</p> <p>(b) other land at or below the flood planning level.</p>	Yes	<p>The site is not identified as "Flood planning area" on the Flood Planning Map.</p> <p>Enstruct, civil engineers for the project, have confirmed that there is no flooding risk associated with the proposed hospital expansion.</p>
<p>Clause 7.4 Floodplain risk management</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) in relation to developments with particular evacuation or emergency response issues—to enable the evacuation of land subject to flooding above the flood planning level,</p> <p>(b) to protect the operational capacity of emergency response facilities and critical infrastructure during</p>	N/A	<p>The site is not identified as "Flood planning area" on the Flood Planning Map and it is not surrounded by the flood planning area. In addition, it is not land that is between the flood planning area and the line shown as the probable maximum flood level on the Flood Planning Map.</p>

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
<p>extreme flood events.</p> <p>(2) This clause applies to:</p> <p>(a) land between the flood planning area and the line that is shown as the probable maximum flood level on the <u>Flood Planning Map</u>, and</p> <p>(b) land surrounded by the flood planning area, but does not apply to land below the flood planning level.</p>		
<p>Clause 7.5 Koala habitat</p> <p>(1) The objective of this clause is to ensure that development is designed to retain koala habitat.</p> <p>(2) This clause applies to land that is shown as "Koala habitat area" on the Koala Habitat Map.</p> <p>(3) Development consent must not be granted for development on land to which this applies unless the consent authority is satisfied that the development is consistent with the relevant provisions of any adopted plan of management prepared pursuant to <i>State Environmental Planning Policy No 44—Koala Habitat Protection</i>.</p>	Yes	<p>Part of the site is identified as "Koala habitat area" on the Koala Habitat Map.</p> <p>As noted earlier, the Ecological Assessment by ERM (refer Appendix K) states that the proposal could impact upon the local foraging behaviour and resources of the Koala. However, with the adoption of mitigation measures recommended in the Ecological Assessment and included in the draft Statement of Commitments at Section 7.9 of this EA, the proposal is considered unlikely to have a significant impact on such threatened species.</p>
<p>Clause 7.7 Airspace operations</p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to provide for the effective and ongoing operation of the Port Macquarie Airport by ensuring that such operation is not compromised by proposed development that penetrates the Limitation or the Operations Surface for that airport,</p> <p>(b) to protect the community from undue risk from that operation.</p> <p>(2) If a development application is received and the consent authority is satisfied that the proposed development will penetrate the Limitation or the Operations Surface, the consent authority must not grant development consent unless it has consulted with the relevant Commonwealth body about the application.</p> <p>(3) The consent authority may grant development consent for the development if the relevant Commonwealth body advises that:</p> <p>(a) the development will penetrate the Limitation or the Operations Surface but it has no objection to its construction, or</p> <p>(b) the development will not penetrate the Limitation or the Operations Surface.</p> <p>(4) The consent authority must not grant development consent for the development, if the relevant Commonwealth body advises that the development will penetrate the Limitation or the Operations Surface and should not be constructed.</p> <p>(5) In this clause:</p> <p>Limitation or Operations Surface means the Obstacle Limitation Surface or the Procedures for Air Navigation Services Operations Surface as shown on the Obstacle Limitation Surface Map or the Procedures for Air Navigation Services Operations Surface Map for the Port Macquarie Airport under Commonwealth legislation</p> <p>relevant Commonwealth body means the body, under Commonwealth legislation, that is responsible for development approvals for development that penetrates the Limitation or Operations Surface for</p>	Yes	<p>The Obstacle Height Limitation for PMBH is 47.5m AHD. The maximum height (RL) of the proposed hospital expansion is 36.050RL therefore it will not penetrate the Obstacle Height Limitation for the Port Macquarie Airport.</p>

Port Macquarie-Hastings LEP 2011 Controls	Compliance	Comment
the Port Macquarie Airport.		
<p>Clause 7.8 Development in areas subject to aircraft noise</p> <ul style="list-style-type: none"> ○ This clause applies to development that: <ul style="list-style-type: none"> • is on land that: <ul style="list-style-type: none"> (i) is near an airport, and (ii) is in an ANEF contour of 20 or greater, and • the consent authority considers is likely to be adversely affected by aircraft noise. ○ Before determining a development application for development to which this clause applies, the consent authority: <ul style="list-style-type: none"> (c) must be satisfied that the development will meet <i>AS 2021 – 2000, Acoustics – Aircraft noise intrusion – Building siting and construction</i> with respect to interior noise levels for the purposes of: <ul style="list-style-type: none"> (i) if the development will be in an ANEF contour of 20 or greater – child care centres, educational establishments, entertainment facilities, hospitals, places of public worship, public administration buildings or residential accommodation. 	Yes	The PMBH is not within the ANEF contour of 20 or greater or any other ANEF zones. Refer Appendix R for the draft ANEF zones from the Port Macquarie Airport Masterplan 2010, and associated correspondence from Port Macquarie Airport.
<p>Clause 7.13 Essential services</p> <p>Development consent must not be granted to development unless the consent authority is satisfied that any of the following services that are essential for the proposed development are available or that adequate arrangements have been made to make them available when required:</p> <ul style="list-style-type: none"> (a) the supply of water, (b) the supply of electricity, (c) the disposal and management of sewage, (d) stormwater drainage or on-site conservation, (e) suitable road access. 	Yes	As set out at Section 3 of this Environmental Assessment, the services listed at Clause 7.13 are either available or arrangements have been made to make them available when required.

5.5.1 Claim for Variation – PMH LEP Clause 4.3 Height of Buildings

The proposed development exceeds the maximum height permitted under the Port Macquarie-Hastings LEP 2011 by 4.25m. The area of non-compliance is illustrated in the east, west, north and south block elevations at **Figure 20** below. The area of non compliance is limited to the plant level and lift overrun on the northern area of the extension.

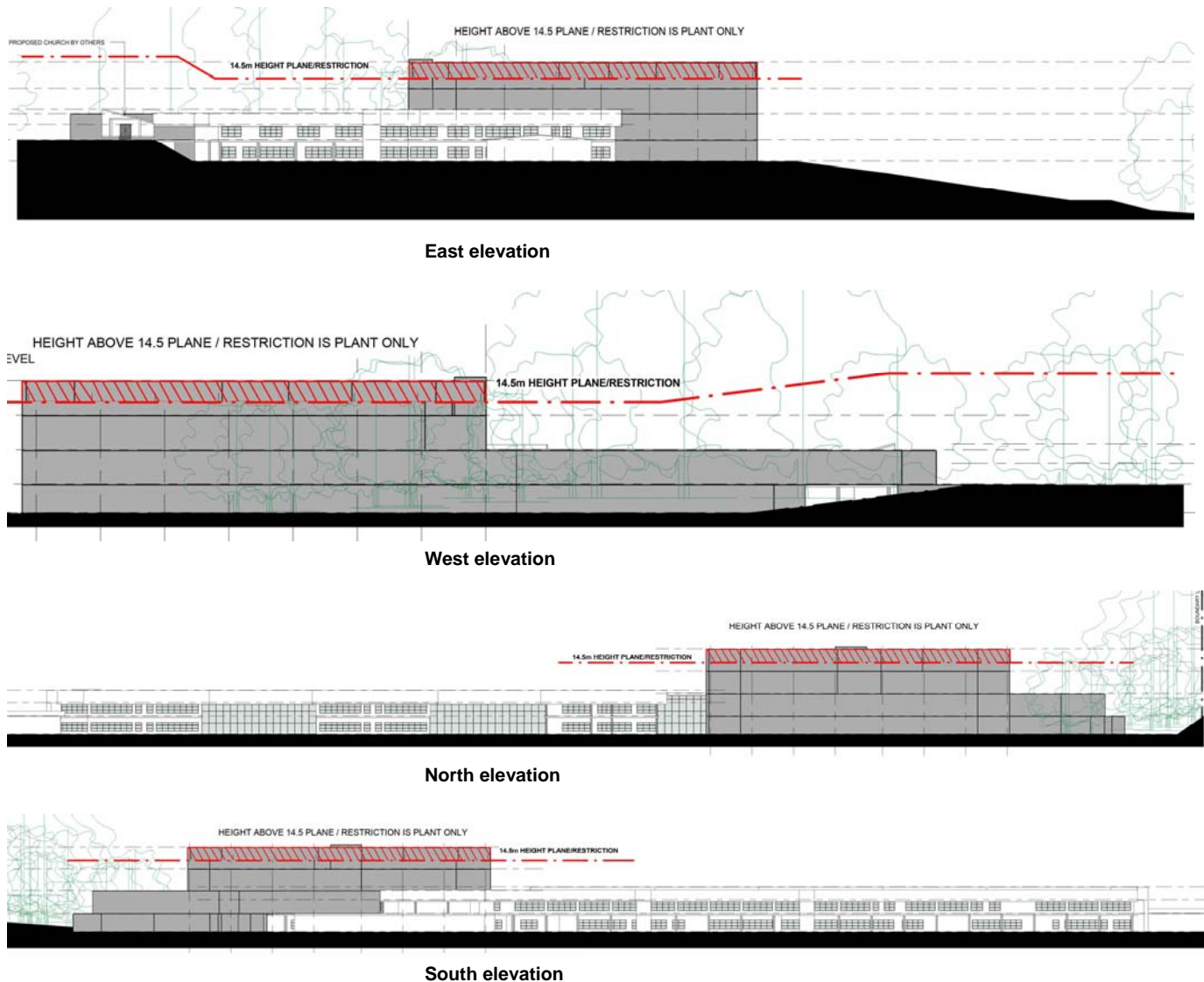


Figure 20. Non-compliance with maximum height limit of 14.5 metres.

The red line and hatched area denotes 14.5m height limit. The proposed hospital extension has a maximum height of 18.75 metres, 4.25 metres above the 14.5m PMH standard and limited to the Plant level.

The provisions of Clause 4.6 provide development to contravene a development control imposed by the Port Macquarie Hastings LEP 2011, unless specifically stated that the control is excluded from the operation of the Clause. Clause 4.3 – Height of Buildings is not specifically excluded from the operation of Clause 4.6. Accordingly, breach of the LEP height standard is requested to be considered by this Project Application.

Compliance with Clause 4.3 – Height of Buildings is considered unnecessary and unreasonable for the reasons provided below:

- The breach of the building height is limited and not across the full area of the extension, and comprises essential shelter and screening for building services being plant and lift motor room.
- The height supports the achievement of the expansion of the hospital which is in the wider public interest. The area of breach will combine to provide floor space for much needed health related facilities and services for the mid coast NSW;
- The height is responsive to medical and surgical facility requirements, where a greater floor-ceiling height is required to accommodate greater internal building services compared to that of a standard residential or commercial building. Strict compliance of the LEP building height control at this area of the site would not achieve the operational and user requirements of the expansion;
- The additional height is appropriately located, contained within the north west area of the site which is generally well screened by established tall tree planting on its boundaries and lower in topography than land at Wrights Road;
- The additional height maintains a transition in scale, as required by the LEP, with the taller elements contained to the west stepping down to lower areas to the east;
- The additional height will not create significant visual impacts. Discussed further under **Section 6.3** of this report, the additional height will be significantly screened by established tree planting when viewed from residential areas west of the hospital site, screened generally from view by trees from both the end of the cul-de-sac at Toorak Court and it's intersection with Lake Road, and generally screened by vegetation when viewed from Highfields Circuit. Its distance from industrial areas to the east will mean that the additional height is read as part of the building mass of the established main hospital. Residential streets immediately to the north of the building addition, being the Carriageway and Deakin Close, will have some exposure to the additional height, however the impact is considered acceptable as established tree planting adjacent to the north of the fourth pod should assist with screening most of the extension and residential homes in this street are well distanced from the hospital and there outdoor private domain areas are orientated away from view of the hospital campus;
- The additional height will not create any significant view loss to, from and or across this part of site from adjacent residential areas due to the scale of established trees on or near it's boundaries and the site not accommodating significant distant views to wider landmarks or natural features;
- The additional height will not create negative shadowing impacts to adjacent residential properties;
- The additional height will not create any impacts to the airspace operation of Port Macquarie Airport;
- The additional floor space/density created by the additional height will not create an unsatisfactory impact to the operational performance of traffic, access and drainage networks;

- The breach maintains compliance with the aims and objectives of LEP Clause 1.2 (Aims of Plan), 2.1 (Land Use Zones) and 4.3 (Height of Buildings)
- Contravention of the development standard should not raise any matter of significance to local, regional or state environmental planning.

Based on the reasons outlined above, it is considered by this Project Application that there is no statutory or environmental planning impediment to the granting of a building height variation in this instance.

Port Macquarie-Hastings Development Control Plan 2011

The relevant controls in the Port Macquarie-Hastings DCP 2011 for the proposed development are set out in **Table 3** below.

Table 3. Compliance with Port Macquarie-Hastings DCP 2011

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
1.4 Purpose This DCP is to support the objectives of the <i>Port Macquarie – Hastings Local Environment Plan 2011</i> . The objectives of the LEP are set out at Clause 1.2 in Table 2 above.	Yes	Refer to Table 2 above.
Part 3 – General Provisions		
COMMUNITY PARTICIPATION AND SOCIAL IMPACT ASSESSMENT		
Crime Prevention Objectives OB1 Development should be designed to deter crime and vandalism and facilitate: <ul style="list-style-type: none"> Personal and property security; Casual surveillance of public areas; Activity and interaction within public spaces and movement networks. Development Provisions DP1.1 The development addresses the generic principles of crime prevention; <ul style="list-style-type: none"> Casual surveillance and sightlines; Land use mix and activity generators; Definition of use and ownership; Basic exterior building design; Lighting; Way-finding; and Predictable routes and entrapment locations; as described in the Crime Prevention Through Environmental Design (CPTED) guideline.	Yes	The proposal supports Crime Prevention through the following measures as outlined below: <ul style="list-style-type: none"> Building elevations of the proposed extension include windows, openings (loading docks, pedestrian entrances), roof terraces therefore creating opportunities for casual surveillance and sightlines between the internal areas of the building to the immediate external areas; Location of the Emergency Department entrance closer to Wrights Road will support greater activation and surveillance to this street; External lighting will be provided around the proposed extension, operating from dusk to dawn, and include vandal resistant luminaires. Lighting will be provided in accordance with the applicable Australian Standards to ensure appropriate night time lumination and therefore safety; External lighting will also be extended across the site into the proposed car park expansion areas (as approved by the Part 5 REF); The fourth pod will be integrated as part of a wider hospital facility that is staffed/operates 24 hours a day 7 days a week. Accordingly, passive surveillance will be provided by this continuous operation; Internal security measures include extension of the Hospital's current security procedures, governed by NSW Health Policy and local security systems, with additional reference to Australian Standards. This includes: <ul style="list-style-type: none"> 24 hour in-house security provided by licensed health and Security Assistants; Duress Alarm Systems; Electronic secure access provided by an CARDAX systems issued to staff (with access controlled by the requirements of the staff position); Key Control controlled via a Bi-Lock System and restricted by the requirements of the position; and CCTV with recording capability, provided to high risk areas such as the Emergency Department. Landscaping and public domain around the proposed extension will include use of hardy materials and species to deter vandalism;

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
		<ul style="list-style-type: none"> With respect to the proposed car park, the Part 5 REF approval provided for a mitigation measure that light polls provided within the car park expansion include power for the installation of security call buttons for visitors and staff; Appropriate shrub height within pedestrian areas (and also proposed car park areas to the east under the approved REF) will support casual surveillance and avoidance of entrapment; Way finding to and from the fourth pod will be supported with external signage. Entrance definition to the Emergency Department will be provided through a distinguished 'clean' architectural form and materiality, to avoid confusion with the main existing hospital entrance located further east.
ENVIRONMENTAL MANAGEMENT		
Aboriginal and European Heritage and Archaeology Objectives OB1 To preserve and manage key areas of Aboriginal and European heritage and archaeological remains. OB2 To ensure other areas of Aboriginal and European heritage and archaeological remains are assessed prior to development proceeding. OB3 To retain and enhance heritage buildings and items, older items and places of significant character in the local area. Development Provisions DP1.1 Refer to Clause 5.10 of the Port Macquarie-Hastings Local Environment Plan 2011. DP2.1 Any work on land that is identified in Schedule 5 of the Port Macquarie-Hastings LEP must be accompanied by archaeological report prepared by a suitably qualified person and in accordance with the relevant guidelines. DP2.2 All development shall comply with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales. DP3.1 Any work on land identified in Schedule 5 of the Port Macquarie-Hastings LEP 2011 must be accompanied by Statement of Heritage Impact prepared in accordance with the NSW Heritage Branch guidelines.	Yes	<p>The subject site is not identified in Schedule 5 of the Port Macquarie-Hastings LEP and no relevant items are listed on the NSW State heritage register, therefore an archaeological report or Statement of Heritage Impact is not required.</p> <p>The draft Statement of Commitments at Section 7 of this report includes a requirement for work on the site to stop should any items of archaeological interest be found. The NSW Office of Environment and Heritage is to be informed for non-Aboriginal items, and the National Parks and Wildlife Service (NPWS) to be informed for items of Aboriginal interest.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>Cut and Fill and Regrading</p> <p>Objectives</p> <p>OB4 To ensure that any earthworks will not have a detrimental impact on environmental function and processes, neighbouring uses, heritage items and features of the surrounding land.</p> <p>To allow earthworks of a minor nature without separate development consent.</p> <p>Development Provisions</p> <p>DP4.1 For the purposes of clause 2.6(c)(2) of the LEP 'minor nature' is defined as "development that:</p> <ul style="list-style-type: none"> • Is for domestic purposes only, and • Located at least 900mm from each lot boundary, and • If a retaining wall: <ul style="list-style-type: none"> ○ Be not higher than 600mm (including the height of any batters) above ground level (existing), and ○ If it is on a sloping site and stepped to accommodate the fall in the land – be not higher than 800mm above ground level (existing) at each step, and ○ Have adequate drainage lines behind it, and • Not require cut or fill more than 600mm below or above ground level (existing), and • Not redirect the flow of surface water onto an adjoining property, and • Cause surface water to be disposed of without causing a nuisance to adjoining owners, and • Be located at least 1m from any registered easement, sewer main or water main, and • If the fill is more than 150mm deep – not occupy more than 50% of the landscaped area, and • If it is carried out, constructed or installed in a heritage conservation area or a draft heritage conservation area – be located in the rear yard, and • Be located at least 50m from a water body (natural). <p>Objective</p> <p>OB5 Development shall:</p> <ul style="list-style-type: none"> • Integrate the design of the building with the slope of the land. • Minimise the extent of site disturbance caused by excessive cut and fill to the site. • Ensure there is no damage or instability to adjoining properties caused by excavation or filling. • Ensure that there is no adverse alteration to the drainage of adjoining properties. • Ensure the privacy of adjoining dwellings and private open space are protected. • Ensure that adequate stormwater drainage is provided around the perimeter of buildings and that overflow paths are provided. 	<p>Yes</p> <p>Yes</p>	<p>The proposed hospital expansion earthworks are not considered earthworks of a 'minor nature' as they are not for domestic purposes.</p> <p>The design of the building expansion is integrated with the slope of the land.</p> <p>There will be no damage or instability to adjoining properties caused by excavation or filling as the proposed expansion is some considerable distance away from adjoining properties.</p> <p>The privacy of adjoining dwellings and private open space will not be affected by the proposed expansion.</p> <p>Adequate stormwater drainage and overflow paths are provided (refer civil engineering information at Appendix N) and the drainage of adjoining properties will not be adversely affected.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>Development Provision</p> <p>DP5.1 Development shall not exceed a maximum cut of 1.0m and fill of 1.0m measured vertically above the ground level (existing) at a distance of 1.0m outside the perimeter of the external walls of the building (this does not apply to buildings where such cut and fill is fully retained within or by the external walls of the building).</p> <p>Objective</p> <p>OB6 Retaining walls</p> <p>To ensure retaining walls are functional, safe and positively contribute to the development and/or the streetscape.</p> <p>Development Provisions</p> <p>DP6.1 The maximum height of a retaining wall along all road frontages is 800mm.</p> <p>DP6.2 Any retaining wall greater than 1.0m must be certified by a certified practising structural engineer.</p> <p>DP6.3 Where a combination of a fence and a wall is proposed to be greater than 1.2m high:</p> <ul style="list-style-type: none"> • be a maximum combined height of 1.8m above existing property boundary level; • be constructed up to the front boundary for a maximum length of 6.0m or 30% of the street frontage, whichever is less; • the fence component have openings which make it not less than 25% transparent; and • provide a 3m x 3m splay for corner sites, and <p>provide a 900mm x 900mm splay for vehicle driveway entrances.</p>		<p>A retaining wall is proposed to the west of the proposed expansion area in order to retain the RTA property to the west of the proposed ramp to the dockyard area. The ramp / retaining wall height will be no more than 4 metres in height.</p>
<p>Hollow Bearing Trees</p> <p>Objectives</p> <p>OB11 To assist with the conservation of biological diversity and promote ecologically sustainable development.</p> <p>To assist in preventing the extinction and promote the recovery of threatened species and populations.</p> <p>To protect the habitat of those threatened species and populations that are dependant on hollow-bearing trees for their survival.</p> <p>To assist in the elimination and/or management of processes that threaten the survival or evolutionary development of threatened species and populations.</p> <p>To ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed.</p> <p>To encourage the conservation of threatened species and populations by the adoption of measures involving co-operative management.</p> <p>To ensure that risk to people and property is minimised.</p> <p>Development Provisions</p> <p>DP11.1 All hollow bearing trees within the development area are to be accurately located by survey and assessed by an appropriately qualified ecologist in accordance with the PMHC HBT assessment protocol.</p> <p>DP11.2 Any tree that scores less than 8 using the PMHC HBT assessment protocol may be considered for removal subject to compensator measures specified below.</p>	Yes	<p>The Ecological Assessment prepared by ERM (refer Appendix K) states that hollows are identified in mature eucalypts (predominantly Blackbutts) to the west of the PMBH site potentially providing roosting and nesting habitat for birds, arboreal mammals and microchiropteran bat species.</p> <p>No visible hollows were observed within the trees on the site which require removal to allow for the hospital expansion. However, it is suspected that small hollows (5 – 10cm diameter) may be present in the upper branches of some of the large eucalypts in the south eastern corner of the PMBH site.</p> <p>It is considered probable that Rainbow Lorikeets and Galahs observed to the west of the PMBH site utilise tree hollows identified in mature eucalypts for nesting purposes.</p> <p>The Ecological Assessment recommends mitigation measures which, if adopted, will result in the proposed development being unlikely to have a significant impact on threatened species. These mitigation measures are included in the draft Statement of Commitments (section 7.9) in this EA.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>DP11.3 Any tree that scores 8-12 using the PMHC HBT assessment protocol may be considered for removal if management measures are 'impractical to allow retention'.</p> <p>DP11.4 Any tree that scores more than 12 using the PMHC HBT assessment protocol must be retained and afforded a development exclusion buffer or located within environmental lands.</p> <p>Where a development exclusion buffer is proposed it shall have a radius of 1.25 times the height of the tree measured from its base.</p> <p>Objectives</p> <p>OB12 To ensure that where a hollow bearing tree (HBT) cannot be retained and managed safely within the future developed landscape, satisfactory and effective ameliorative and compensatory measures shall be implemented prior to removal of the tree.</p> <p>Development Provisions</p> <p>DP12.1 A strategy for tree removal (timing and methodology) that minimises impacts on native wildlife shall accompany any development that proposes the removal of HBTs.</p> <p>DP12.2 The removal of HBTs is to be offset by the retention of recruitment trees.</p> <p>Compensatory recruitment trees shall be provided at the rate of two for one for trees that scored 8-12, and at the rate of one for one for trees that scored less than 8.</p> <p>A tree can be considered to be a compensatory recruitment tree under the following criteria:</p> <ol style="list-style-type: none"> 1. Does not have any major structural defects or is suffering from disease that would lead to premature death and; 2. Is from the same vegetation community and same genus and; 3. Are to be located within environmental lands and managed in accordance with a VMP and; 4. Have a DBH of 50cm or greater and do not possess hollows. 100cm for Blackbutt <i>Eucalyptus pilularis</i>. <p>DP12.3 The removal of HBTs are to be offset by the installation of nesting boxes of similar number and size as those to be removed.</p>		
<p>Koala Habitat</p> <p>Objectives</p> <p>OB13 To encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.</p> <p>Development Provision</p> <p>DP13.1 For koala habitat refer clause 7.5 of the Port Macquarie-Hastings LEP 2011.</p>	Yes	<p>Part of the site is identified as "Koala habitat area" on the Koala Habitat Map.</p> <p>The Ecological Assessment by ERM (refer Appendix K) notes the potential impact upon the local foraging behaviour and resources of the Koala. However, with the adoption of mitigation measures recommended in the Ecological Assessment and included in the draft Statement of Commitments at section 7.9 of this EA, the proposal is considered unlikely to have a significant impact on threatened species such that a viable local population would be placed at risk of extinction in the long-term.</p>
TREE MANAGEMENT		
<p>Tree Management – Private Land</p> <p>Objectives</p> <p>OB1 To specify the species or kinds of trees or other vegetation for the application of Clause 5.9(2) of the Local Environmental Plan.</p> <p>To ensure that proper consideration is given to trees and native vegetation in designing, planning and</p>	Yes	<p>The Arborist's Report states that there are 72 high category, AA and A, trees that will require removal by the proposal. These are important trees with a high potential to contribute to amenity and their loss will have a significant visual impact on local amenity, character and wildlife habitat in the wider setting. The arborist notes that a comprehensive landscaping scheme to mitigate these losses is proposed that will include the planting of new trees. The landscape plans and</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>constructing development.</p> <p>To minimise injury to or destruction of trees and native vegetation.</p> <p>To retain healthy individual trees of local amenity and aesthetic value.</p> <p>To facilitate the removal of undesirable exotics, noxious weeds, dangerous trees and any other inappropriate plantings, and to replace these with suitable local indigenous species which will positively contribute to visual and environmental amenity and ecological sustainability.</p> <p>To retain viable representative samples of native vegetation, which have an intact structure and complete floristics, wherever practicable.</p> <p>Development Provisions</p> <p>DP1.1 Clause 5.9(2) of the LEP applies to trees listed in Table 1 and any tree on private land that is;</p> <ul style="list-style-type: none"> • 3 metres or higher in height, or • Has a trunk diameter of 100mm measured at 1.0 metre above ground level; or • Is a mangrove or cycad. <p>DP1.2 Clause 5.9(2) does not apply to a tree where the nearside trunk is 3m from the nearest external wall of an existing, permanent dwelling and is located within the same property as the dwelling and may be removed without a permit or development consent.</p> <p>A dwelling does not include a detached garage, pergola, deck, caravan or relocatable home.</p> <p>Pruning must be undertaken in accordance with Australian Standard AS4373 <i>Pruning Amenity Trees</i>.</p> <p>DP1.3 An application for the removal of any tree listed in Table 1 must be accompanied by an Arborist's Report stating that the tree;</p> <ul style="list-style-type: none"> • Is dangerous; or • Is dying and remedial pruning would not improve the deteriorated condition of the tree; or • Has a history of branch fall (documented or photographic evidence to be provided); or • Is structurally unsound or; • Diseased. <p>unless assessed as part of development application and the Assessment Manager has agreed to forego the requirement.</p> <p>DP1.4 Where a tree listed in Table 1 is approved for removal it must be compensated with an advanced size koala food tree or habitat tree (primary Koala browse species) that meets NATSPEC <i>Specifying Trees</i>.</p> <p>The compensation tree is to be planted in a suitable location as determined by the Director of Infrastructure Services or his delegate.</p> <p>DP1.5 Removal of dead branches including palm fronts and the selective removal of branches up to and including a diameter of 50mm may be undertaken without a permit or development consent where the removal;</p> <ul style="list-style-type: none"> • Does not alter the canopy of the tree, and • Does not destroy the aesthetic appearance of the tree canopy; and • Does not alter the growth structure of the tree, and 		<p>associated report are attached at Appendix M.</p> <p>There are 11 category AA and A trees that could potentially be adversely affected through disturbance to their Tree Protection Zones (TPZs). The arborist states that for these trees, all or the majority of proposed works are outside of the TPZs of these trees and therefore adverse impacts are not expected. In the arborist's opinion, these trees could be successfully retained if appropriate protective measures are properly specified and controlled through the detailed Arboricultural Method Statement at section 4 of the Arborist's Report. The draft Statement of Commitment at Section 7.6 requires that the works comply with the Arboricultural Method Statement.</p> <p>Mitigation measures for habitat protection are provided at Section 7.9 of the draft Statement of Commitments.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>Is carried out in accordance with Australian Standard AS4373 <i>Pruning Amenity Trees</i>.</p> <p>DP1.7 Where a development is proposed adjoining Council controlled land, the plans must identify all trees that fall within 6.0m of the property boundary and any trees proposed to be removed, identified on that plan.</p> <p>DP1.8 Any pruning or removal of any tree on private land must be undertaken in accordance with Council's tree management specifications.</p>		
HAZARDS MANAGEMENT		
<p>Airspace Protection</p> <p>Objective</p> <p>OB2 To restrict the height of development within the vicinity of the airport in accordance with the Obstacle Limitation Surfaces plan.</p> <p>Development Provision</p> <p>DP2.1 Development complies with Clause 7.7 of the Port Macquarie-Hastings Local Environment Plan 2011.</p> <p>Objective</p> <p>OB3 To minimise the risk of obstacles to aircraft such as bird strike.</p> <p>Development Provision</p> <p>DP3.1 Development shall not result in land use or activities that attract flying vertebrates such as birds and bats within proximity of flight paths associated with airport operations.</p> <p>Objective</p> <p>OB4 To restrict development that results in emissions that may impair visual conditions in the vicinity of the airport.</p> <p>Development Provision</p> <p>DP4.1 Development shall not result in emission of airborne particulate or produce a gaseous plume with a velocity exceeding 4.3m per second that penetrates operational airspace. Refer Manual of Standards Part 139 – Aerodromes.</p>	Yes	<p>The development complies with Clause 7.7 of the LEP 2011 as the maximum height of the proposed hospital expansion is 36.050RL metres. The Obstacle Height Limitation for PMBH is 47.5m AHD (equivalent to RL) therefore the proposed hospital expansion will not penetrate the Obstacle Height Limitation for the Port Macquarie Airport.</p> <p>The hospital expansion is not an activity which will attract flying vertebrates such as birds and bats.</p> <p>The proposed expansion will not result in emission of airborne particulate nor will it produce a gaseous plume.</p>
<p>Bushfire Hazard Management</p> <p>Objectives</p> <p>OB6 To ensure appropriate protection of people and property through the provision of adequate separation of development and the bushfire hazard.</p> <p>Development Provision</p> <p>DP6.1 Development is to satisfy the requirements of the Planning for Bushfire Protection Guidelines 2006.</p> <p>Objectives</p> <p>OB7 To ensure bushfire management measures do not result in the loss of important habitat areas.</p> <p>To ensure that Council is not burdened with the ongoing costs associated with the maintenance of Asset Protection Zones.</p> <p>To provide a public interface to environmental assets.</p> <p>Development Provisions</p> <p>DP7.1 Asset Protection Zones are to be provided outside of environmental protection zones and wholly provided within private land.</p>	Yes	<p>As set out in the Bushfire Report at Appendix U, the existing development is not known to have any specific bushfire protection measures at the time of reporting with regard to construction standards apart from that required by Part C of the Building Code of Australia. A minimum asset protection zone (APZ) width of 22m to the north and 12m to the west and northwest of the proposed addition is capable of being maintained in accordance with PBP 2006. It is noted that the recommended (preferred) APZ to the west is to the boundary which is shown as being 16.9m – 28.9m from the proposed building addition.</p> <p>The proposed building works will not be capable of complying with Table A2.6 of Planning for Bushfire Protection (PBP) 2006 for a Special Fire Protection Purpose (SFPP) given the location of the western side boundary and the limitation to clearing on the subject site. Although the new building works will not comply with Table A2.6 of PBP 2006, the development does comply with the exceptional circumstance provisions of PBP 2006 and AS 3959-2009. In turn, compliance with Planning for Bushfire Protection 2006 has been demonstrated.</p> <p>The draft Statement of Commitments at Section 7.3 requires that the recommendations of the Bushfire Report are complied with for the proposed hospital expansion.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>Contaminated Land Objectives</p> <p>OB9 To ensure that changes of land use will not increase the risk to health or the environment from previous land uses.</p> <p>To avoid inappropriate restrictions on land use.</p> <p>To provide information to support decision making and to inform the community about contaminated lands.</p> <p>To remediate contaminated sites where applicable.</p> <p>Development Provisions</p> <p>DP9.1 Any application for the development of land for urban purposes shall consider the potential for the site to be contaminated from a previous or current land use.</p> <p>Land identified as being potentially contaminated shall be assessed in accordance with the provisions of SEPP 55 – Remediation of Land and Managing Land Contamination: Planning Guidelines (EPA 1998).</p>	Yes	<p>The Geotechnical and Contamination Report at Appendix Q states that there is the potential for site contamination, however preliminary investigations have found that the soil is below recommended guidelines for a commercial / industrial land use. Therefore, the site is considered suitable for the proposed development with respect to contamination, provided that additional inspections are undertaken during construction to verify conditions with respect to contamination.</p> <p>The Geotechnical and Contamination Report states that if soils other than those observed during the investigation are encountered during development, or staining or odours are observed within excavated soils during development, additional investigation and advice should be sought. If additional contamination is identified then appropriate excavation and removal/disposal/capping of contaminated soil, followed by validation sampling and analysis to the requirements of SEPP 55 and NSW Office of Environment and Heritage may be required. Refer to draft Statement of Commitments, Section 7.2 of this EA.</p>
<p>Flooding Objectives</p> <p>OB10 To maintain the existing flood regime and flow conveyance capacity.</p> <p>To enable evacuation of land subject to flooding.</p> <p>To avoid significant adverse impacts on flood behaviour.</p> <p>To avoid significant adverse effects on the environment that would cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of the river banks or watercourses.</p> <p>Development Provisions</p> <p>DP10.1 The development complies with clauses 7.3 and 7.4 of the Port Macquarie-Hastings LEP 2011.</p>	Yes	<p>The development does comply with clauses 7.3 and 7.4 of the LEP 2011 (refer Table 2 above).</p>
<p>Stormwater Objectives</p> <p>OB12 To control and manage all stormwater generated within the development.</p> <p>To control and manage all stormwater passing through the development from the surrounding catchment.</p> <p>To provide an effective legal point of discharge for all collected stormwater, from the development to a natural watercourse, Council's drainage system or approved outfall.</p> <p>To achieve these objectives without detrimentally affecting the environment, surface and subsurface water quality, groundwater infiltration characteristics, the adjoining landowners and other landowners downstream of the development.</p> <p>To provide a safe and convenient environment for pedestrians and traffic.</p> <p>To incorporate principles of ecological sustainable development.</p> <p>To provide detailed design provisions in line with ecologically sustainable development, water sensitive urban design and total water cycle management and principles.</p>	Yes	<p>The civil engineering information provided at Appendix N includes a report outlining the stormwater concept for the proposed expansion, civil external works plans and sediment and erosion control plans. Stormwater runoff will be directed to the existing detention basin.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>To provide an effective major and minor stormwater system that is cost effective and incorporates life cycle costs of investigation, design, operation, maintenance and replacement of stormwater infrastructure.</p> <p>Development Provisions</p> <p>DP12.1 All stormwater infrastructure is designed in accordance with the Council's Auspec Design Specification Documents.</p>		
TRANSPORT, TRAFFIC MANAGEMENT, ACCESS AND CAR PARKING		
<p>Parking Provision</p> <p>Objectives</p> <p>OB3 Adequate provision is made for off-street parking commensurate with volume and turnover of traffic likely to be generated by the development.</p> <p>To ensure no adverse impacts on traffic and road function.</p> <p>Development Provisions</p> <p>DP3.1 Off-street parking is provided in accordance with Table 2: Car Parking Requirements.</p> <p>DP3.2 Where a proposed development does not fall within any of the listed definitions, the provision of on-site parking shall be supported by a parking demand study.</p> <p>Hospitals are not specifically listed.</p> <p>Objective</p> <p>OB7 Parking areas and access-ways are easy and safe to use by vehicles and pedestrians without conflict.</p> <p>Development Provisions</p> <p>DP7.1 Visitor and customer parking shall be located so that it is easily accessible from the street.</p> <p>DP7.2 Internal signage (including pavement markings) should assist customers and visitors to find parking and circulate efficiently and safely through a car park.</p> <p>DP7.4 Parking design and layout is provided in accordance with AS2890.1 and AS2890.2.</p> <p>Objective</p> <p>OB8 Aged and disabled persons and persons wheeling prams or trolleys are provided with suitable access.</p> <p>Development Provisions</p> <p>DP8.1 Parking is provided in accordance with AS2890.1 and AS2890.2 and AS1428.</p> <p>DP8.2 Additional spaces may be required where Council considers the development will generate a higher volume of aged or disabled traffic.</p> <p>Objective</p> <p>OB9 Parking is provided for other forms of transport.</p> <p>Development Provisions</p> <p>DP9.1 Bicycle and motorcycle parking shall be considered for all developments.</p> <p>DP9.2 Bicycle parking areas shall be designed generally in accordance with the principles of AS2890.3.</p>	Yes	<p>The total parking demand for the existing situation at the hospital is 575 spaces.</p> <p>The Clinical Service Plan for PMBH (September 2010) indicates a higher level of activity for the hospital by 2021, as detailed in the Traffic and Parking Report at Appendix I. The future parking demand is estimated at 700 spaces. Following development of the new eastern car park at the hospital (approved under Part 5 of the EP&A Act on 2 December 2011) and the works involved in the hospital expansion (subject of this Part 3A application), around 740 parking spaces will be provided.</p> <p>This level of parking provision will improve the amenity for the hospital's users, considering that generally some 10% additional parking is desirable to reduce vehicular circulation within the campus and to meet the parking demand for special / unexpected occasions.</p> <p>Pedestrian desire lines have been identified and are shown in Figure 5.2 of the Traffic and Parking Report at Appendix I. At a future stage, appropriate pedestrian facilities will be provided.</p> <p>The Accessibility Report at Appendix L has taken into consideration the relevant standards for disabled parking.</p> <p>Introduction of bicycle parking at various locations within the hospital campus at a future stage will provide additional amenities for users of the hospital and promote active transport, particularly among staff.</p>
<p>Landscaping of parking areas</p> <p>Objectives</p> <p>OB12 Parking areas are visually pleasing and easily</p>	Yes	<p>The proposed landscaping of parking areas will meet the objectives of OB12.</p> <p>As demonstrated by the Landscaping Plans and Report at</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>accessible.</p> <p>Parking areas shall be landscaped to:</p> <ul style="list-style-type: none"> • Provide shade; • Improve the visual amenity of large, unrelieved hard stand areas; • Provide a buffer between the road and neighbouring land uses. <p>Development Provisions</p> <p>DP12.1 Landscaping areas shall be provided in the form of large tree planting, understorey plantings, mulch areas, mounding, lawns and the like.</p> <p>DP12.2 Landscaping shall be used throughout the car park and on the perimeters of the property where it addresses the public domain.</p> <p>DP12.3 Tree planting shall:</p> <ul style="list-style-type: none"> • Improve parking areas visually; • Provide shade; • Reflect the physical area in which they are located. <p>DP12.4 Understorey planting shall:</p> <ul style="list-style-type: none"> • Be used to both screen parking areas and provide a layering effect; • Not adversely interfere with sight lines for traffic on adjacent properties or streets; • Shall have reduced heights adjacent to entry/exit points. <p>DP12.5 Garden beds shall:</p> <ul style="list-style-type: none"> • Be a minimum of 3m in width between car parking areas and street boundaries; • Include improved garden soil to a minimum depth of 200mm; • Include mulching to a minimum depth of 75mm; and • Have sub grades ripped to allow drainage and proper root penetration. 		<p>Appendix M, the development provisions of this part of the DCP will be complied with.</p>
<p>Loading Bays</p> <p>Objectives</p> <p>OB19 Loading bays are provided to accommodate the maximum design vehicle likely to service the proposed development.</p> <p>To maintain traffic flow and parking on and off site.</p> <p>Development Provisions</p> <p>DP19.1 Off street commercial vehicles facilities are provided in accordance with AS 2890.2.</p> <p>DP19.2 Loading bays will be provided in accordance with the following requirements;</p> <ul style="list-style-type: none"> • Minimum dimensions to be 3.5m wide x 6m long. (This may increase according to the size and type of vehicle). • Vertical clearance shall be a minimum of 5m. • Adequate provision shall be made on-site for the loading, unloading and manoeuvring of delivery vehicles in an area separate from any customer car parking area. • A limited number of 'employee only' car parking spaces may be combined with loading facilities. • Loading areas shall be designed to 	Yes	<p>A new loading dock is being provided on the western boundary of the hospital site. The loading dock entry / exit is off Wrights Road. The entry / exit allows for access of all trucks up to 19 metre semi-trailers. All trucks enter and exit the loading dock area in a forward direction and turn around within the site. Turning paths are shown in Appendix D of the Traffic and Parking Report at Appendix I.</p>

Port Macquarie-Hastings DCP 2011 Controls	Compliance	Comment
<p>accommodate appropriate turning paths for the maximum design vehicle using the site.</p> <ul style="list-style-type: none"> Vehicles are to be capable of manoeuvring in and out of docks without causing conflict with other street or on-site traffic. Vehicles are to stand wholly within the site during such operations. <p>DP19.4 For external bays, one bay is required for 500m² of floor space or 1000m² of site area.</p> <p>Objectives</p> <p>OB20 Loading bays do not adversely impact upon the design integrity of the building or the streetscape.</p> <p>Loading bays do not impact on visual or acoustic privacy for nearby residents.</p> <p>Development Provisions</p> <p>DP20.1 The location and design of loading bays should integrate into the overall design of the building and car parking areas.</p> <p>DP20.2 Where visible from the public domain, loading bays are located behind the building.</p> <p>DP20.3 Where loading bays are located close to a sensitive land use, adequate visual and acoustic screening is provided.</p>		<p>The Acoustic Assessment prepared by Acoustic Logic (refer Appendix T) has found that the use of the western loading dock is unlikely to cause sleep arousal, even if a bedroom window facing the loading dock is left open.</p>
<p>Traffic Generating Development</p> <p>Objectives</p> <p>OB22 Developments that generate significant levels of traffic are referred to the RTA for consideration.</p> <p>OB23 Provision of sufficient parking spaces for different land uses.</p> <p>Development Provisions</p> <p>DP22.1 Traffic Generating Developments as defined under SEPP (Infrastructure) 2007 is referred to the RTA.</p> <p>SEPP (Infrastructure) defines hospitals of 200 or more beds as traffic generating development.</p> <p>DP23.1 On-site parking is provided in accordance with Table 2.</p>	Yes	<p>The proposed hospital expansion is defined as a Traffic Generating Development under SEPP (Infrastructure) 2007. Referral of this Part 3A Application to the RTA will be required. The REF under Part 5 including the eastern car park was referred to the RTA at which time no objection was raised by the RTA.</p> <p>As noted above, sufficient on-site parking is to be provided.</p>

6 Environmental Assessment

6.1 Introduction

This section of the report provides an analysis of the environmental issues for the project application. This Environmental Assessment is based on the Director-General's Requirements prepared for the proposed development by the Department of Planning and Infrastructure under Section 75F of the EP&A Act 1979.

The key issues from the DGR's are:

- Relevant EPI's, policies and guidelines (addressed in detail under Section 5 of this report)
- Built form and urban design (including visual impacts)
- Environmental and residential amenity
- Transport and accessibility impacts (construction and operational)
- Ecologically sustainable development
- Contributions
- Flora and fauna
- Bushfire
- Heritage
- Aboriginal heritage
- Drainage
- Utilities
- Staging
- Noise and vibration
- Waste
- Hazards
- Consultation (refer to **Section 1.10** of this report)

6.2 Built form and urban design

Design descriptions and approach have been discussed earlier under this report within **Section 3**. To summarise, the proposed extension is of 2 to 3 storeys, with plant level above. Building height ranges as it follows the slope of the land from south to north. To the south, building height is 2 storeys towards Wrights Road. As the land falls to the north, building height increases to 3 storeys with plant level above. Materials and finishes include masonry, glass and metal finishes. Areas around the extension will be appropriately landscaped with predominantly native species suited to the region. Refer to Architectural Drawings at **Appendix A**, Landscape Report and Plans at **Appendix M** and separate Materials and Finishes board.

The proposed extension is design responsive to the site, existing hospital building and adjoining development, and provides design quality and amenity, as described below.

With respect to the site, the proposed extension responds appropriately to the current site planning of a long rectangular building form with 'pods' or modular elements connecting to it. The proposed extension essentially provides a large fourth pod on the western end. Accordingly, its form will be complimentary to the current distribution of building bulk across the site. The building extension is also appropriately located as it is generally well screened by established tall tree planting on the western, north western and western boundaries of the site. The setback of the extension also responds to natural site planning requirements such as bushfire and minimising the number of trees to be removed, as much as practicable. Proposed distribution of building height and bulk is responsive to the natural topography, with greater height (and therefore building density) provided to the northern area of the building extension where it can be accommodated by the lower land level.

With respect to the existing hospital, additional to replicating the modular form of building elements attached to the main linear building, the use of proposed materials and finishes and contemporary design aesthetic will achieve a complementary built addition when read within the existing main hospital campus. The additional height provided by the extension will create an acceptable transition in building height from higher to lower from west to east across the site. The tallest elements on the site at present are the established tall tree planting located along the western and north western boundaries, with the lower elements located at the far eastern end more open area of the site. The additional height above the established 2 storeys hospital will therefore create a step down effect travelling west-east across the site.

Despite being complementary in style, it will also be well defined when seen from Wrights Road. The south west area of the proposed fourth pod will be projected forward of the main hospital building to create a street address, assisting to define this entrance from Wrights Road during emergencies. Clean design forms to this ambulance entrance will also create a clear visual marker when entering the hospital site. Full height sun shading devices on the western and eastern elevations will also assist to create visual definition to the extension when viewed within the hospital campus.

The design of the proposed extension will also be well integrated with the operation of the hospital as it has been developed in close consultation with staff through user group and design development meetings to create an integrated addition.

With respect to adjoining development, the proposed extension is considered responsive and does not achieve any significant impacts. To Wrights Road, it will create a positive impact with the Ambulance entrance located closer to Wrights Road improving streetscape address at this location. Currently, the Ambulance Bay is located further way and streetscape activity to Wrights Road is generally limited to it's southern side with single storey medical suites. As discussed further below, the proposal should not create significant impacts to both sunlight and visual amenity of adjacent residential developments.

The proposed extension will achieve a good degree of design quality and amenity. Building massing is horizontal in form complementing the existing rectangular and linear form of the hospital. Massing is modulated through simple façade treatments: on the northern elevation, the façade presents a more horizontal appearance with bands of glass and sunshading. On the east and west facades, there is a vertical band appearance created full height sunshade blades and facade elements. The projection of the two fire stairs on the northern elevation replicates the

current projection of these along the southern façade of the existing main hospital building, and will contribute to the visual interest of the northern façade.

A good degree of internal amenity will be provided for hospital staff, patients and visitors. Sunlight will penetrate the northern area of the extension due to the expansive use of glass on elevations and the full height central courtyard space open to the sky. Attractive views will also be provided to bushland, including those from the roof terrace.

Colours and materials will be neutral in palette complementing the existing hospital building. Landscaping provides a balance between natural passive spaces in the form of gardens around the extension with use of native species suitable to the local area, and more active spaces within the extension with the central courtyard space and roof top deck on Level 3 accessed from the paediatrics lounge and play area.

As noted under **Section 5** of this report, the proposal supports safer by design principles including active surveillance measures such as onsite security, lighting and CCTV surveillance and more passive aspects such as improved passive surveillance to Wrights Road from the new Ambulance Bay and grounds areas around the extension from windows and openings.

6.3 Environmental and residential amenity

Shadow diagrams are provided within the Architectural Drawings at **Appendix A**. The diagrams show that the proposal, even with a breach of the 14.5m Height Limit under PMH LEP 2011, will not reduce the amount of sunlight access to neighbouring properties, largely due to their distance from the hospital site.

With respect to acoustic privacy, commentary is provided under **Section 6.13**.

With respect to wind impacts, it is envisaged that there would be no substantial impact as the proposal does not result in a tall development outcome and is well separated area away from neighbouring properties therefore avoiding wind tunnel effects.

Environmental design initiatives, as far practicable for a hospital facility, are incorporated within the proposed extension and discussed further under **Section 6.5**.

With respect to view loss, it is not envisaged that neighbouring residential properties will be substantially impacted as the land area of the extension is screened by substantial tree planting and affected by lower topography in part, therefore does not provide or support any substantial or important views to/from or across this part of the site to regional areas, landmarks or distant natural features such as the coast.

With respect to the visual impact of the bulk and scale of the proposed extension when viewed from adjoining properties, this is addressed in detail below.

Visual impacts

Due to the breach in the height limit, and the scale of the proposed extension overall, an assessment of visual impact from adjacent areas has been prepared to determine whether there will be any substantial impact.

Ten camera shots have been undertaken, in anti-clockwise approach around the main hospital and proposed extension. The number and location of these shots are shown at **Figure 21**. The camera shots include Lincoln Road (Numbers 1 and 10), Oxley Highway (Numbers 2-9), Highfields Circuit (Number 3), Merringal Road (Number 4), Toorak Court (Numbers 5 and 6), The Carriageway (Number 7) and Deakin Close (Number 8).

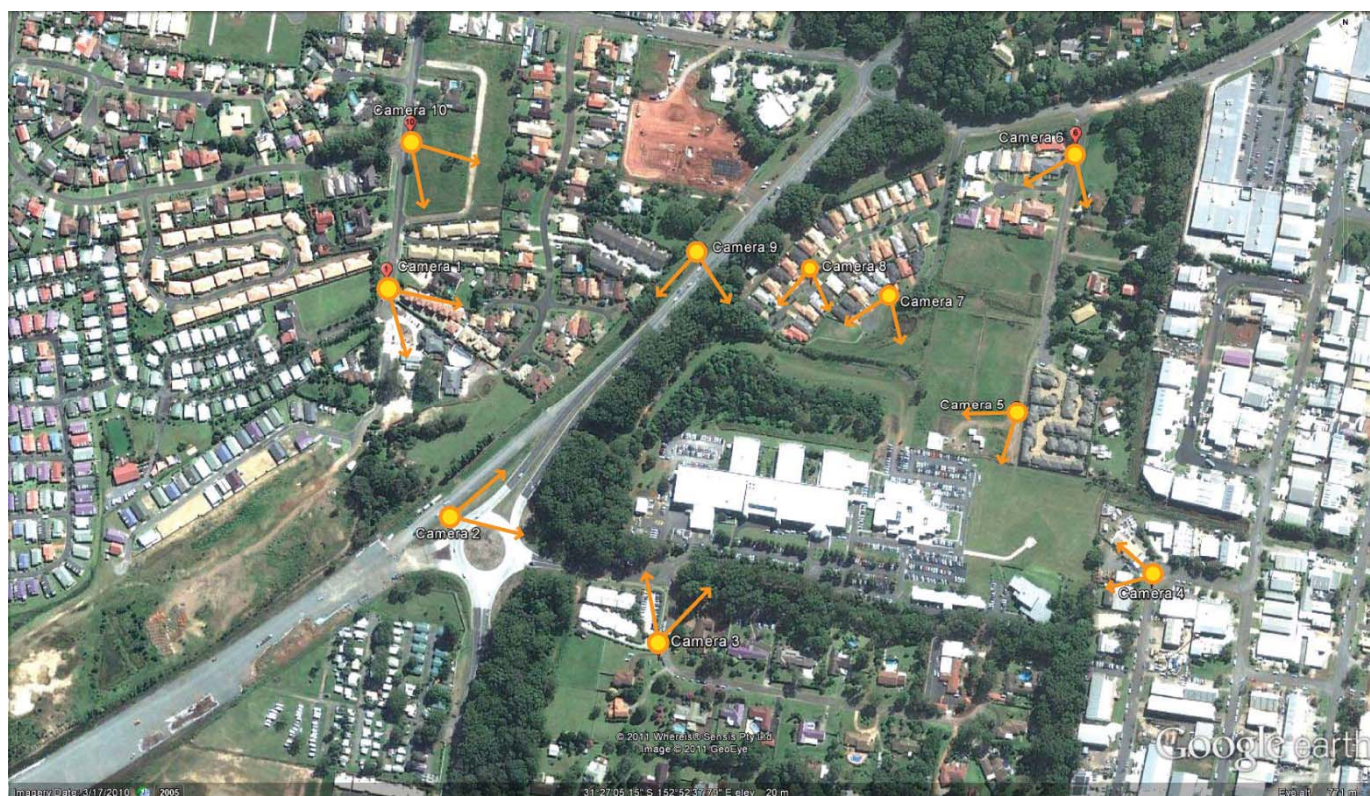


Figure 21. Visual impact assessment – camera locations.

10 views have been prepared, located around the land area of the proposed extension and wider hospital site.

Within each view, an outline of the proposal has been placed to illustrate the possible scale of the proposed extension when viewed, in context with its surrounds such as trees, buildings and structures.

The views are provided below with commentary on visual impact:

View 1 – west of site: Lincoln Road, south end.



Figure 22. Camera view 1.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Proposed extension will be substantially screened by tall tree planting located immediately west of the hospital site. Visual impact is therefore unlikely from this location.

View 2- south west of site: Oxley Highway, roundabout with Wrights Road.



Figure 23. Camera view 2.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Proposed extension will be substantially screened by tall tree planting located immediately west of the hospital site. Visual impact is therefore unlikely from this location.

View 3 – south of site: Highfields Circuit, looking north toward area of proposed extension.



Figure 24. Camera view 3.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Proposed extension would have some exposure, though generally be read as 1 to 2 storeys above the Wrights Road. Screening by shrubs and plantings would absorb impact. Positive visual benefit of providing a matching street address to properties on the south side of Wrights Road as the site currently appears inactive at this road section. Overall, low visual impact at this location.

View 4 – east of site: Merringal Road, looking west across main hospital campus toward proposed extension.



Figure 25. Camera view 4.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Main hospital building will absorb most of the visual bulk of the expansion. Some exposure of the upper floors may occur, though given the distance generally would be read as storey or part storey above the main hospital building. Areas of east of the hospital site are industrial, and therefore not considered of such immediate amenity concern compared with adjacent residential. Overall, low visual impact at this location.

View 5- north east of site: Toorak Court, toward cul-de-sac head.



Figure 26. Camera view 5.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Main hospital building and established tree planting on the northern boundary of the hospital will absorb most of the visual bulk of the expansion. Some exposure of the upper floors may occur where vegetation is not dense, however the extension will merge to read as part of wider hospital building as currently viewed from this location. Overall, low visual impact.

View 6 – north east of site: Toorak Court, toward intersection with Lake Road.



Figure 27. Camera view 6.
Illustrative outline of proposal noted by yellow dotted line.

Comment: Established tree planting on the northern boundary of the hospital will absorb most of the visual bulk of the expansion. Some exposure of the upper floors may occur where the vegetation is not dense, however this should only be limited to glimpses. Overall, low visual impact at this location.

View 7- north of site: Carriageway, toward end of cul-de-sac



Figure 28. Camera view 7.
Illustrative outline of proposal noted by yellow dotted line.

Comment: Vegetation on the northern boundary of the hospital will break most of the view and support screening. Where vegetation is not dense, part exposure of the proposed extension, particularly the upper floors, will occur. As noted earlier, only the plant level on the northern area of the extension is above the 14.5m LEP height standard. The wide separation between the proposed extension and Carriageway will also help to mitigate impact at this location. Moderate visual impact at this location.

View 8: - north of site: Deakin Close.



Figure 29. Camera view 8.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Established tree planting on the northern boundary of the hospital will absorb most of the visual bulk of the expansion. Some exposure of may occur where the vegetation is not dense, however this should only be limited to glimpses, and merge to read as part of the wider hospital building as currently viewed from this location. Overall, low visual impact at this location.

View 9: north west of site, Oxley Highway



Figure 30. Camera view 9.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Proposed extension will be substantially screened by tall tree planting located immediately north west of the hospital site. Overall, visual impact is unlikely at this location.

View 10: Lincoln Road, south end.



Figure 31. Camera view 10.

Illustrative outline of proposal noted by yellow dotted line.

Comment: Proposed extension will be substantially screened by tall tree planting located immediately north west of the hospital site. Visual impact is therefore unlikely at this location.

Based on the above assessment, the visual impact of the proposed expansion is generally nil to low onto adjacent areas, with exception to the Carriageway which is considered moderate.

Visual impact is unlikely for areas to the north west, west and south west due to established tall tree adjacent to the Oxley Highway. Some exposure will be provided to the south and east, however it should be absorbed and provide some positive visual benefits in locations such as an address to the northern side of Wrights Road.

Some visual impact will occur to the north and north east, though this should only be glimpses where there are gaps in the vegetation along the northern boundary of the hospital site and would be seen overall to be part of the wider hospital building, as currently viewed from these locations.

With respect to the Carriageway (View 7), the proposed extension will not be fully exposed or dominant at this location as it will be screened by vegetation in parts. The wider area north of the hospital already has a vista of hospital building exposure and some visual presence of the extension at this location will form part of this. Accordingly, the visual impact is considered acceptable.

It is noted that the Carriageway (and also Deakin Close), the two closest residential streets to the expansion, have their rear yards and front yards aligned in a north west south east orientation and therefore private domain

areas at these locations are directed away from view of the land area of the proposal. Visual impact should therefore primarily be limited to when travelling along these streets (public domain).

6.4 Transport and accessibility impacts (construction and operational)

Details of the transport and accessibility impacts are provided in the Traffic and Parking Report at **Appendix I**. Commentary on transport and accessibility has also been provided under **Section 3.9** and **Section 5.4** (SEPP Infrastructure 2007) of this report.

Around 740 car parking spaces are to be provided as part of other development works on the site (approved under the Part 5 REF). 700 spaces are calculated to be required; therefore on site parking will be adequate to match future demand.

The Traffic and Parking Report states that the existing road system and access arrangements operate at a good level of service and will continue to operate at a similar level of service once the redevelopment of the hospital has been completed.

As noted earlier in this report, bus services will continue to be provided to the hospital, with improvements to their access and movability within the site including new bus stop and waiting area located along the southern boundary. Refer to Figure 5.3 of the report at **Appendix I**.

Adequate truck access and manoeuvring for a 19 metre semi trailer and fire truck are provided within the site avoiding impact to operation of Wrights Road.

Construction traffic, including construction staff parking, will be appropriately coordinated via the Construction Management Plan to be prepared prior to commencement of development works, as provided by the draft Statement of Commitments at **Section 7.9**.

Measures to reduce private car usage and increase alternative transport measures such as bus, pedestrian and bicycle are provided within the Traffic and Parking Report prepared by TTW. Some of these have been provided within the Draft Statement of Commitments under **Section 7.11** to support reduction in car borne travel to and from the hospital.

6.5 Ecologically sustainable development

The Director General's Requirements call's for demonstration of how the development will achieve a minimum 4 Green Star rating, or any suitably accredited rating scheme. Discussions with the Department of Planning and Infrastructure have resolved that a 4 Green Star rating can be waived, if the development meets alternative requirements. In response, the development provides the following measures:

- The proposal will confirm to the Building Code of Australia Section J Alternative Verification Method JV3 or verification using a Reference Building for adequacy in relation to heat gain and insulation for the building performance in totality. The draft Statement of Commitments notes compliance with the BCA (**Section 7.11**);
- Engineering services and standards and requirements shall be designed in accordance with NSW Health Infrastructure TS11 Technical Standards, as required for all new health buildings. This

will ensure that benchmark minimum requirements are met as part of a sustainable strategy of the design documentation, delivery and performance of the service energy systems. The draft Statement of Commitments notes that the development is to comply with these (**Section 7.14**); and

- The architectural design places a strong design emphasis on passive shading systems, reducing heat load and subsequent mechanical cooling requirements.

Further, Acor have prepared a report entitled Hydraulic and Fire Protection Services: Environmentally Sustainable Design Initiatives, which is provided at **Appendix O**. The report notes the following environmentally sustainable initiatives for water and energy conservation.

Water conservation:

- Sanitary fixtures and tapware –
Minimum 4 star W.E.L.S rating for basins, water closets, urinals, tea sinks.
Minimum 3 star W.E.L.S rating for showers.
To be locally supplied where possible.
- Rain water re-use –
Roof to collect rainwater for storage and non potable re-use.
- Water flow monitoring –
Water flow monitoring of the main water meter and sub meters to monitor excessive wastage or leakage. These meters are to be pulse type meters wired back to the Building Management System.
- Fire hydrant test water re-use –
Fire hydrant annual flow test water to be captured and collected within roof rainwater re-use system.
- Minimise hot water “dead legs” –
Minimise pipe length of hot water branch lines to fixtures from main hot water flow piping, so as to minimise water wastage.

Energy conservation:

- Pumping equipment –
Pumping equipment for water services to incorporate variable speed drivers to reduce electrical energy consumption.
- Domestic hot water –
High efficiency LP Gas fired plant.
- Solar pre-heat for domestic hot water –
“Evacuated” tubes mounted on roof to pre-heat water using solar radiation to pre-heat water prior to gas fired plant to reduce gas usage.
- Chilled boiling water units –
To incorporate time clocks to allow automatic switch off during “out of hours” period.

6.6 Contributions

The Director General of the Department of Planning has requested that this Environmental Assessment address Council's Section 94 Contributions Plan and/or details of any Voluntary Planning Agreement that may apply to the site and the development.

The proposed development is an important piece of community infrastructure which will facilitate the delivery of vital health services to the local community and the wider North Coast region. As a result of the development, augmentation of the main sewerage pipes and pumping plant for the hospital will be required in order to accommodate increased loads. NSW Health will be responsible for the costs of these works (refer **section 3.13** of this report).

6.7 Flora and fauna

The Arborist's Report at **Appendix J** and the Ecological Assessment at **Appendix K** provide the assessments for this section of the EA.

The Arborist's Report states that there are 72 high category, AA and A, trees that will require removal by the proposal. These are important trees with a high potential to contribute to amenity and their loss may have a significant visual impact on local amenity, character and wildlife habitat in the wider setting. The arborist notes that a comprehensive landscaping scheme to mitigate these losses is proposed that will include the planting of new trees. The new trees should have the potential to reach a significant height without excessive inconvenience and be sustainable into the long term, significantly improving the potential of the site to contribute to local amenity and character. The landscape plans and associated report are attached at **Appendix M**.

There are 11 category AA and A trees that could potentially be adversely affected through disturbance to their Tree Protection Zones (TPZs). The arborist states that for these trees, all or the majority of proposed works are outside of the TPZs of these trees and therefore adverse impacts are not expected. In the arborist's opinion, these trees could be successfully retained if appropriate protective measures are properly specified and controlled through a detailed Arboricultural Method Statement. Such an arboricultural method statement is provided at Section 4 of the Arborist's Report at **Appendix J**. The draft Statement of Commitments at **Section 7.6** includes a requirement that the works comply with the Arboricultural Method Statement.

There are 11 category Z trees and four category ZZ trees that will be lost. The loss of these trees will have no significant impact on local character because they are small, display signs of structural defects and/or are in decline. The loss of the four category ZZ trees is not a direct consequence of this proposal because they should be removed for tree safety.

The Ecological Assessment states that no visible hollows were observed within the trees to be removed, however it is likely that small hollows (5-10cm diameter) may be present in the upper branches of some of the larger eucalypts in the south eastern corner of the PMBH site.

Eucalypt trees to be removed include recognised Koala feed tree species (Tallowwood, Forest Red Gum, Swamp Mahogany and Blackbutt) known to provide a suitable foraging resource for a viable local Koala population.

No threatened flora species were observed within the area of the

proposed development footprint and vegetation is not considered to be part of an Endangered Ecological Community under the NSW *Threatened Species Conservation Act 1995* (TSC Act) or Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

A total of eight threatened fauna species were recorded during field investigations including the Masked Owl, Koala, Grey-headed Flying-fox, Eastern Freetail-bat, Hoary Wattled Bat, Greater Broad-nosed Bat, Little Bentwing-bat and Eastern Bentwing-bat. These species are all listed as Vulnerable under the TSC Act and the Grey-headed Flying-fox is also listed as Vulnerable under the EPBC Act.

The potential for the proposed hospital expansion to impact upon threatened species has been assessed in accordance with the requirements of the TSC Act and the EPBC Act. An assessment was undertaken for the Grey-headed Flying-fox in accordance with *EPBC Act Policy Statement 1.1: Significant Impact Guidelines* (DEH 2006) (refer *Annex C* of the Ecological Assessment at **Appendix K**). Assessment showed that although the proposal would result in the removal of foraging habitat, it was not expected to have a significant impact on an 'important population' of this highly mobile species given the prevalence of similar vegetation within the locality, including the presence of higher quality foraging habitat surrounding Lake Innes Nature Reserve.

An assessment of the impact of the proposal on migratory species as listed under the EPBC Act has also been undertaken. Given the nature of the proposal and the fact that migratory species identified within the site are considered to be wide-ranging with generalist habitat requirements, it is determined by the assessment that the proposal is unlikely to have a significant impact on the Masked Lapwing as it was not considered to:

- substantially modify, destroy or isolate an area of important habitat for these species;
- result in harmful invasive species becoming established within the site; or
- seriously disrupt the life cycle of an ecologically significant proportion of a population of the species.

Consequently, further assessment under the EPBC Act is not required and a referral to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities is not warranted.

Assessment of the potential for the proposed hospital expansion to impact upon threatened species and Endangered Ecological Communities has been undertaken in accordance with the seven factors outlined in Section 5A of the EP&A Act (known as the '7-part test' or 'Assessment of Significance') (refer *Annex D* of the Ecological Assessment at **Appendix K**). The assessment identified that the proposal could impact upon the local foraging behaviour and resources of species as listed under *Table 6.2* of the Ecological Assessment, namely the Koala. However with the adoption of appropriate mitigation measures, as outlined in *Chapter 7* of the Ecological Assessment by ERM, the proposal would be unlikely to have a significant impact on threatened species such that a viable local population would be placed at risk of extinction in the long-term.

The mitigation measures as recommended by Ecological Assessment to reduce the potential for ecological impacts as a result of the proposed development have therefore been incorporated into the draft Statement of Commitments, provided at **Section 7.9** of this report.

6.8 Bushfire risk

A Bushfire Threat Assessment Report was prepared for the proposed hospital expansion by BCA Check Pty Ltd (refer **Appendix U**). The existing Port Macquarie Base Hospital is an approved Class 9a Health Care Building pursuant to Part A3.2 of the Building Code of Australia 2011. The proposed additions to the existing building are classified as Infill Special Fire Protection Purpose (SFPP) development as defined by the document *Planning for Bushfire Protection* (PBP) 2006. The existing SFPP facility was approved prior to 1st August 2002.

The current hospital development is not known to have any specific bushfire protection measures with regard to construction standards, apart from that required by Part C of the Building Code of Australia.

A minimum asset protection zone (APZ) width of 22m to the north and 12m to the west and northwest of the proposed addition is capable of being maintained in accordance with PBP 2006. It is noted that the recommended (preferred) APZ to the west is to the site boundary which is shown as being 16.9m – 28.9m from the proposed extension.

The proposed building works will not be capable of complying with Table A2.6 of Planning for Bushfire Protection (PBP) 2006 for a Special Fire Protection Purpose (SFPP) given the location of the western side boundary and the limitation to clearing on the subject site. Although the new building works will not comply with Table A2.6 of PBP 2006, the development however does comply with the exceptional circumstance provisions of PBP 2006 and AS 3959-2009. Accordingly, compliance with Planning for Bushfire Protection 2006 can be achieved by the proposed extension.

A number of recommendations are made in the Bushfire Report for the development which will create a safer environment during a bushfire event than currently exists. The draft Statement of Commitments at **Section 7.3** requires that the recommendations of the Bushfire Report are complied with for the proposed hospital expansion.

6.9 Heritage and Aboriginal heritage

The subject site is not identified in Schedule 5 of the Port Macquarie-Hastings LEP and no relevant items are listed on the NSW State heritage register, therefore an archaeological report or Statement of Heritage Impact is not required.

Draft Statements of Commitments at **Section 7.4 and 7.5** of this report require work on the site to stop should any items of archaeological interest be found. The National Parks and Wildlife Service is to be informed if any items of Aboriginal cultural heritage are found, and the NSW Heritage Office is to be informed if any items of non-Aboriginal cultural heritage are found.

6.10 Drainage

Site drainage and stormwater management is provided within the civil engineering drawings provided at **Appendix N**.

Stormwater runoff associated with the proposed extension will be directed to an existing detention basin, located north east of the proposed extension within the boundary of the hospital campus.

The proposed extension will represent an increase in the volume of flow to

be handled by the existing detention system of less than 10%. The existing detention basin is capable of handling this additional volume, as identified through previous investigations in 2005 associated with the construction of the radiotherapy facility on the site. These investigations (by the firm Walch and Roberts) indicated that there is ample capacity in the existing system to accommodate significant increases in the hard stand area on the site.

The stormwater system has been designed for storm events up to the 20 year ARI to be carried by the in ground stormwater network and typically for events up to 100 year ARI to be via overland flow. The exception to this is the existing services yard area and tributary areas which will become land locked due to the arrangement of the proposed addition and therefore overland flow to the detention basin cannot be achieved. Stormwater drainage for events up to 100 year ARI for this area are via an in-ground drain/culvert.

Preliminary discussions with Council officers on 16th November 2010 and further discussions with Council on 30th March 2011 and 20th October 2011 have confirmed the proposed drainage and stormwater management approach for the proposed extension to be acceptable.

It is noted that the proposed car park works approved separately under the Part 5 REF also included specific drainage and stormwater management measures, including a new detention basin located in the north east area of the site.

6.11 Utilities

Sewerage

Augmentation of the main sewerage pipes and pumping plant will be required to accommodate increased loads associated with the proposed extension.

Water Supply

The existing water meter connection has sufficient domestic and fire service water supply capacity for the proposed addition, without the need for on-site storage.

LP Gases

The condition of existing services is good and there have been no reports of major failures or delivery issues. The tanks are generally 'topped up' on a fortnightly basis. As noted in **Section 3.13** of this report, it is proposed to locate the area of the LP gas tanks from the south west to the eastern area of the site.

Electrical Supply

There is sufficient capacity in the network to supply the additional electricity load generated by the proposed hospital expansion.

6.12 Staging

The works that are the subject of the application will be undertaken in one stage.

6.13 Noise and vibration

Construction and operational noise associated with the proposed expansion of Port Macquarie Base Hospital have been assessed by Acoustic Logic (refer Acoustic Assessment at **Appendix T**).

Operational noise assessment:

- Operational noise (services noise, vehicle noise, loading dock and traffic generation) have been assessed with reference to relevant planning controls (DECCW Industrial Noise Policy).
- A survey of surrounding development has been undertaken, including an acoustic survey of existing ambient noise levels to determine noise emission goals.
- Based on the measured levels and modelling of predicted operational noise, compliance with noise emission goals will be achievable. Recommendations include:
 - Detailed acoustic design of all mechanical plant during the detailed design process to ensure all plant items have appropriate acoustic treatment.

Provided that the recommended acoustic treatments in section 7 of the Acoustic Assessment are implemented, there will be no adverse noise impact on nearby development. The draft Statement of Commitments at **Section 7.8** of this EA requires compliance with the recommended acoustic treatments from the Acoustic Assessment.

Construction noise/vibration assessment:

- A preliminary review of construction noise has been undertaken. Based on DECCW construction noise guidelines and a survey of ambient noise levels, noise and vibration emission goals have been determined. Although a detailed construction program has not been determined at this stage, excavation, asphaltting and concrete pouring have been identified as activities with the greatest potential to create noise impacts.
- Excavation will also create potential vibration impacts, particularly in the event that the existing hospital contains vibration sensitive equipment (medical imaging or similar).
- Where compliance with DECCW guidelines is not strictly achievable, noise management in accordance with AS2436 is recommended. In addition, consultation with the hospital prior to any excavation is recommended to ensure that appropriate monitoring can be implemented to prevent damage to vibration sensitive plant.

Detailed acoustic design of plant items, internal partitioning and reverberant noise will be undertaken as part of the detailed design phase, with noise and vibration treatments to be determined to ensure that noise within the hospital itself will comply with relevant Australian Standards and Health Facilities guidelines.

6.14 Wastes

A Waste Management Plan has been prepared by Space 2 Develop and provided at **Appendix V**.

The Waste Management Plan identifies operational waste streams and volumes as well estimated construction waste streams.

Key issues for waste management include:

- Demolition waste including reuse, recycle and hazardous waste from demolition
- Continuing efficient and safe waste operation of the hospital during the construction;

The management of these issues will be resolved in detail following approval via a demolition management plan, and waste management strategy (developed as part of the Construction Management Plan). The draft Statement of Commitments at **Section 7.10** and **Section 7.11** notes the requirements of these.

6.15 Hazards

A preliminary hazard analysis of the project was undertaken by Sinclair Knight Merz (SKM), in accordance with State Environmental Planning Policy 33 (Hazardous and Offensive Development) and Hazardous Industry Planning Advisory Paper (HIPAP) No. 6 Hazard Analysis Guidelines. A copy of the analysis is provided at **Appendix Y**. Three risk issues are identified:

- Infection prevention and control – waste spreads bacteria/disease if not treated and people come into contact with untreated waste;
- Waste storage fire – toxic smoke and runoff; and
- Transport accident – waste spreads bacteria/disease if not treated.

The hospital currently has strict controls in place to manage hazardous waste and therefore reduce risk of incidents. As a major medical facility, these controls will continue to apply as part of expansion, and therefore the inherent hazard risk of the proposed is regarded as low.

7 Draft Statement of Commitments

7.1 Introduction

The following commitments have been compiled based on the Environmental Assessment undertaken in the preparation of this report and following review and consideration of the issues raised in consultation with the Council, neighbouring residents and expert consultants.

They provide a commitment by Health Infrastructure and indicate the responsibilities required to implement measures to prevent potential environmental impacts that have been identified through the assessment.

This will ensure that the project is environmentally, socially and economically sustainable. The DGR's provide that a Draft Statement of Commitments is required to detail measures for environmental management and mitigation measures and monitoring for the project.

The commitments relate to the following issues:

- Geotechnical and contamination
- Bushfire protection
- Aboriginal cultural heritage
- Non-Aboriginal cultural heritage
- Arboricultural Method Statement
- Fire engineering
- Noise and vibration
- Habitat protection
- Demolition management plan
- Construction management plan
- BCA compliance
- Transport Management
- Compliance with NSW Health Infrastructure TS 11 Technical Standard.

7.2 Geotechnical and contamination

The recommendations of the Geotechnical Investigation and Preliminary Contamination Assessment at **Appendix Q** are to be complied with.

7.3 Bushfire protection

The proposed development is to comply with the recommendations of the Bushfire Threat Assessment Report prepared by BCA Check Pty Ltd and attached at **Appendix U**.

7.4 Aboriginal cultural heritage

If any Aboriginal archaeological relics are uncovered during the course of

the work, then all work shall cease immediately in that area and the National Parks and Wildlife Service (NPWS) shall be contacted. The Proponent shall comply with any requirement made by NPWS to cease work for the purpose of archaeological recording.

7.5 Non-Aboriginal cultural heritage

If any archaeological relics are uncovered during the course of the work, then all work shall cease immediately in that area and the NSW Heritage Office shall be contacted. Depending on the possible significance of the relics, an archaeological assessment and excavation permit under the NSW Heritage Act 1977 may be required before further works can continue in that area. The Proponent shall comply with any requirement made by the NSW Heritage Office to cease work for the purpose of archaeological recording.

7.6 Arboricultural Method Statement

The Arboricultural Method Statement at Section 4 of the Arborist's Report at **Appendix J** must be complied with.

7.7 Fire engineering

The proposed development is to comply with the Fire Engineering Strategy at **Appendix X** and any updates to this required at detailed design stage.

7.8 Noise and vibration

The proposed development is to comply with the recommended construction and operational noise controls and the vibration controls under Section 7 of the Acoustic Assessment at **Appendix T**.

7.9 Ecological protection

To reduce the potential for ecological impact, the proposed development is to comply with the following ecological protection measures as recommended by the Ecological Assessment Report at **Appendix K**.

- (a) Minimise vegetation clearance to the development footprint through delineation of designated construction areas and access tracks to protect native vegetation located adjacent to areas of impact.
- (b) Prior to and during removal of Koala feed trees, implement measures to avoid impacting on individuals including pre-clearance inspection of trees for Koalas.
- (c) Ensure an ecologist is present during vegetation removal to relocate any identified fauna to a safe location, conduct post-clearing inspection of potential tree hollows and rescue any injured fauna.
- (d) Implement erosion and sediment control measures in accordance with an Environmental Management Plan (EMP) to prevent sedimentation of surrounding vegetation.
- (e) Control weeds in accordance with an EMP during and following

construction to avoid the spread of weeds.

- (f) Compensatory planting of Koala feed trees at a minimum ratio of 2:1 and in a suitable location. Due to limited space availability within the PMBH site, an appropriate off-site location will need to be identified to accommodate compensatory planting that cannot be located within the confines of the PMBH. Details regarding the location, species and quantities of plantings may be developed in consultation with the Koala Preservation Society and other relevant authorities.

7.10 Demolition management plan

Demolition will be undertaken in accordance with the requirements of the relevant Australian Standard AS2601-2001. The demolition of structures is to be incorporated into the Occupational Health and Safety Act 2000 administered by Work Cover NSW.

A Hazardous Materials Management Plan will be prepared prior to demolition commencing.

The proponent commits to preparing a demolition management plan prior to the commencement of any demolition works on site. The demolition is to include measures to manage the following potential impacts:

- Demolition vehicle movements;
- Dust;
- Noise;
- Demolition waste including hazardous wastes.

Site erosion and sediment control in accordance with "Managing Urban Stormwater (EPA, NSW) and Soil and Erosion Control (The Institution of Engineers Australia).

7.11 Construction management plan

The proponent commits to preparing a construction management plan prior to the commencement of any construction works on site. The plan will include:

- Construction hours;
- Air Quality/dust control procedures;
- Noise Management procedures;
- Construction vehicle movements and construction staff parking;
- Waste Management Plan;
- Community safety plan;
- Arrangements for temporary pedestrian and vehicle access;
- Storage and handling of materials;
- Environmental training and awareness;
- Contact and complaints handling procedures; and
- Emergency preparedness and response.

7.12 BCA compliance

All works shall comply with the relevant sections of the Building Code of Australia (BCA).

7.13 Transport Management Plan

During the operation of the development, investigate future opportunities to reduce car usage to and from the site. This may include, but not necessarily be limited to:

- Provision of incentive schemes for hospital staff – for example subsidised bus tickets;
- Promotion amongst staff of the merits of walking and bicycle riding, particularly relevant for any staff that may live near the hospital;
- Discussions with local bus agencies for provision of more frequent bus services with faster and more direct destinations. For example, a shuttle bus between the Port Macquarie Town Centre and the Hospital;
- Establishment of a waiting list for parking space for new hospital staff. Therefore new staff will not have a space until one becomes available;
- Discussions with the local authority (Port Macquarie Hastings Council) on the possibility to improve pedestrian and cycle path connections to and from the site.
- Opportunity for bicycle parking and storage facilities.

7.14 NSW Health Infrastructure Technical Standard TS11

As part of sustainable measures for the design documentation, delivery and performance of service engineering systems the development shall comply with *NSW Health Infrastructure TS11 Technical Standards*.

8 Conclusion

This Project Application seeks approval for the expansion of the Port Macquarie Base Hospital. The proposal involves the construction of a 2-3 storey plus plant level surgical and medical facility, as described in detail by this report, located as a large fourth pod connected to the western area of the existing main hospital building, Wrights Road Port Macquarie NSW.

The Project Application Environmental Assessment has been prepared in accordance with the Director-General's Environmental Assessment Requirements provided at **Appendix B**, the attached drawings provided at **Appendix A**, and the additional plans and documentation provided at **Appendices C - Y**.

The proposed development will be beneficial to the Port Macquarie Base Hospital population catchment area. The expansion of the hospital will provide extended and improved health care services, essential to the facilitation of a healthy and vibrant population. The expansion will also facilitate additional opportunity for specialised and health-related employment for the region.

In light of the benefits of the proposed hospital expansion, its importance to the management of healthcare to the local and regional community, and given that there are minimal environmental impacts on the locality, it is recommended by this report that the Project Application be approved subject to the Draft Statement of Commitments.