

Environmental Assessment Report Project Application

Nepean Hospital - Derby Street, Kingswood Stage 3A - Integrated Mental Health Unit Development

Submitted to
The Department of Planning
On Behalf of NSW Health Infrastructure

September 2010 ■ 10486

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Executive Summary

Purpose of this report

This Environmental Assessment Report (EAR) in relation to the development of the new Integrated Mental Health Unit at Nepean Hospital is submitted to the Minister for Planning pursuant to Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (Major Development) 2005.

The proponent is NSW Health Infrastructure

Overview of Project

The proposal seeks approval for the following elements:

- The construction of a two to three storey building to accommodate the Integrated Mental Health Unit (IMHU). The building will have a gross floor area (GFA) of 5,611m²;
- Mental health accommodation units located on the first and second levels of the proposed building include:
 - 20 high dependency beds;
 - 24 acute treatment beds; and
 - 20 special mental health service beds for older people;
- Offices for mental health professionals and administration staff on Level 3 of the proposed building;
- Lounge areas and informal areas, dining areas, education/workshop areas, family meeting rooms, a gymnasium and multimedia entertainment and education rooms;
- Internal landscaped courtyards accessible from within the building;
- Ancillary plant and infrastructure; and
- Relocation of an existing Reconciliation and Memorial Garden and commemorative plaques from the north eastern portion of the site.

The Site

The development site is located within the Nepean Hospital Campus at the corner of Parker and Derby Streets, Kingswood in the Penrith City local government area (LGA). The development site is approximately 4,560m² in area, with an 85m primary frontage to Derby Street.

The Sydney West Area Health Service (SWAHS) owns the Nepean Hospital site which is comprised of a single allotment legally described as Lot 1 DP 1114090. The development site is currently occupied by the hospital's maintenance depot / department and administrative buildings related in part to the Sydney West Area Health Service's function on site.

Planning Context

Section 4.0 of this EAR considers all applicable legislation in detail. The proposal complies with all relevant planning controls.

The site is currently zoned Special Uses 5a under Penrith LEP 1998 (Urban Lands). The proposal is permissible with consent and meets the objectives of the subject zones.

Environmental Impacts

This EAR provides an assessment of the environmental impacts of the project in accordance with the Director-General's Environmental Assessment Requirements and includes a draft Statement of Commitments (see Section 6) which sets out the undertakings made by NSW Health Infrastructure to manage and minimise potential impacts arising from the development.

Conclusion

The proposal is entirely permissible under the planning controls for the site in Penrith LEP 1998 (Urban Lands).

The Draft Statement of Commitments has been prepared to inform the detailed design of the development and manage construction and on-going environmental impacts. The environmental assessment addresses the Director General's Requirements and demonstrates the impacts of the proposal can be satisfactorily managed and therefore the project should be approved.

Statement of Validity

Prepared under Part 3A of the Environmental Planning and Assessment Act, 1979 (as amended)

Environmental Assessment prepared by

Name	Nick Roberts
Qualifications	MURP
Address	Level 7, 77 Berry Street, North Sydney
In respect of	a Project Application


Project Application

Applicant name	NSW Health Infrastructure
Applicant address	Level 8, 77 Pacific Highway, North Sydney NSW 2060
Land to be developed	Part of Lot 1 DP 1114090 (Nepean Hospital)
Proposed development	New Integrated Mental Health Unit (see full description within this Environmental Assessment)

Environmental Assessment

Certificate	<p>An Environmental Assessment (EA) is attached.</p> <p>I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge:</p> <ul style="list-style-type: none">It is in accordance with the Environmental Planning and Assessment Act and Regulation.It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.
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Signature



Name	Nick Roberts
Date	17 / 09/ 2010

1.0 Introduction

This Project Application and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Project Application seeks approval for the construction of an Integrated Mental Health Unit (IMHU) to be accommodated in a two to three storey building at the Nepean Hospital at the corner of Parker and Derby Streets, Kingswood. The proposed development of the IMHU will require the demolition of an existing maintenance shed, landscaping and provision of utilities and stormwater drainage as well as other ancillary works. Demolition works necessitated by the development will be carried out as Development without Consent and so will be the subject of a separate application to NSW Health Infrastructure under Part 5 of the EP&A Act.

The report has been prepared by JBA Urban Planning Consultants Pty Ltd on behalf of the proponent, NSW Health Infrastructure and is based on information provided by Woods Bagot Architects and supporting technical documents provided by the expert consultant team (see Table of Contents).

This EAR describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Requirements (DGRs) under Part 3A of the EP&A Act. It should be read in conjunction with the information contained within and appended to this report.

These studies address the DGRs for the environmental assessment. They provide a technical assessment of the environmental impact of the proposed development and recommend proposed mitigation measures to manage potential environmental impacts associated with the proposal.

The report is structured as follows:

Section 1: Introduction, overview of the environmental assessment and approvals process, overview of the project, background, project team, and capital investment value.

Section 2: Site location and context, landownership, existing development, surrounding development, summary of opportunities and constraints.

Section 3: Description of the proposed development.

Section 4: Summary of Director General's Requirements

Section 5: Environmental Assessment of the Project Application.

Section 6: Draft Statement of Commitments.

Section 7: Conclusion

1.1 Overview of Approval Sought

This Project Application seeks approval for the construction and use of an IMHU building. In summary, the development involves:

- The construction of a two to three storey building to accommodate the IMHU. The building will have a gross floor area (GFA) of 5,611m²;
- Mental health accommodation units located on the first and second levels of the proposed building include:
 - 20 high dependency beds;
 - 24 acute treatment beds; and
 - 20 special mental health service beds for older people;
- Proposed accommodation to include Special Mental Health Services for Older Persons (SMHSOP) on level 1 of the new building;
- Offices for mental health professionals and administration staff on Level 3 of the proposed building;
- Lounge areas and informal areas, dining areas, education/workshop areas, family meeting rooms, a gymnasium and multimedia entertainment and education rooms;
- Internal landscaped courtyards accessible from within the building;
- Ancillary plant and infrastructure; and
- Relocation of an existing Reconciliation and Memorial Garden and commemorative plaques from the north eastern portion of the site.

Demolition works are required in order to enable the construction of the IMHU building. As discussed above, these demolition works are Development without Consent and are prescribed as such by clause 58 of State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP). The demolition works will be the subject of a separate Review of Environmental Factors by NSW Health Infrastructure under Part 5 of the EP&A Act and include:

- Demolition and removal of the existing demountable and permanent buildings and hardstand areas that accommodate the maintenance depot currently on the site; and
- Demolition of a car parking area and removal of landscaping from the site.

A new maintenance depot will be constructed within the northern extent of the Hospital off Barber Street. The construction of the new maintenance depot building(s) will also be the subject of Review of Environmental Factors by NSW Health Infrastructure under Part 5 of the EP&A Act.

1.2 Background

The Nepean Hospital campus is in the process of substantial redevelopment involving the expansion of existing facilities and the amalgamation and consolidation of existing facilities. The proposal forms part of this overall multi-stage development and compliments the existing medical and health services at the hospital through the provision of new contemporary mental health facilities.

Nepean Hospital is a major tertiary referral hospital serving an extensive catchment in western Sydney. The hospital provides high-level inpatient care and outpatient services including emergency care, critical care, acute medicine, planned and emergency surgery, maternity and neonatal services, paediatric medicine, minor surgery, aged care, rehabilitation services, drug and alcohol services, specialist outpatient and clinical services and mental health care.

Inpatient services at the hospital generally have the capacity to treat patients with highly complex conditions requiring specialist care. In its role as the major tertiary referral hospital for the Sydney West Area Health Service (SWAHS) Western Cluster, the Nepean Hospital provides a range subspecialty medical, surgical, neonatal and mental health services.

In March 2010, the Minister for Planning (the Minister) approved a Project Application under Part 3A of the EP&A Act for the construction of a new building within the Nepean Hospital known as the East Block.

The approved East Block is located directly north of the IMHU site and is a three storey building accommodating Ambulatory Procedure Care, including 6 operating theatres, 70 beds with space for a further 60 overnight surgical beds and surgical outpatients clinics. The Project Approval was also for upgrades and expansion of existing facilities in the hospital including an intensive care unit and renal dialysis centre.

The East Block is now under construction. At the time that the East Block Project Application was approved, funding for an IMHU at the Hospital was not available. However, the required funds have since been made available by State and Federal Governments. These funds include those from the Federal Stimulus Package – Health and Hospital Fund (HHF). In order to meet the requirements of the HHF, the proposed facility must be available for occupation by the end of March 2013.

1.3 Project Need and Alternatives

The catchment of the Nepean Hospital includes the Penrith, Blue Mountains, Hawkesbury and Lithgow Local Government Areas (LGAs) and the south-western portion of Blacktown LGA. Population projections for these LGAs are included in the *NSW Statistical Local Area Population Projections* (April 2010) released by the Department of Planning (DoP).

On the basis of DoP projections for the Penrith, Blue Mountains, Hawkesbury, Lithgow and Blacktown LGAs, the catchment of the Nepean Hospital will increase from 443,200 in 2011 to 484,800 in 2021, rising to 551,500 in 2036. The 24% increase in the population of the hospital's catchment to 2036 will result in an increased need for medical and health services generally. Accordingly, the need for specialist mental health care and accommodation will also proportionally increase during the same period.

Consideration of Alternative Locations for the Proposal

The proposal requires a location close to other medical and health services that can be provided alongside those that will be accommodated in the unit. Locating the Unit in the Nepean Hospital will enable it to benefit from the cross-utilisation of resources and the "knowledge sharing" opportunities that may result from clustering professional specialities. Considering these locational factors, should the building be located elsewhere in the hospital's catchment, its operations would be compromised and operational efficiencies diminished through the fragmentation of medical uses.

It is noted that Penrith City Council's (Council's) 'Penrith City - Centres Hierarchy' identifies Kingswood (in which the site is located and which includes the Nepean Hospital) as becoming a 'Specialised Centre' by 2031. Specialised centres are identified as performing vital economic and employment roles across the Metropolitan area. The hospital site is also located in the Department of Planning's North-West Subregional Strategy as part of Penrith Regional City.

One of the bases on which the site was selected for the proposed building is that it is one of the few remaining larger areas of land within the hospital that is not already developed with larger medical buildings. While the existing maintenance depot buildings are within the proposed development footprint they can be readily relocated to other parts of the site. The siting of the IMHU building allows key and critical access between co-related Departments of the hospital, where a co-relation with mental health exists.

1.4 Approval Process

State Environmental Planning Policy (Major Development) 2005 (SEPP Major Development) identifies development to which Part 3A of the EP&A Act applies and which therefore requires approval from the Minister for Planning ('the Minister').

Clause 6 of SEPP Major Development states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 of the SEPP, is declared to be a project to which Part 3A of the Act applies.

The project falls into the class of development described in clause 18 – 'Hospitals' of Schedule 1 of the SEPP. This includes:

- (1) *Development that has a capital investment value of more than \$15 million for the purpose of providing professional health care services to people admitted as in-patients (whether or not out-patients are also cared for or treated there), including ancillary facilities for:*
 - (a) *day surgery, day procedures or health consulting rooms, or*
 - (b) *accommodation for nurses or other health care workers, or*
 - (c) *accommodation for persons receiving health care or for their visitors, or*
 - (d) *shops or refreshment rooms, or*
 - (e) *transport of patients, including helipads and ambulance facilities, or*
 - (f) *educational purposes, or*
 - (g) *research purposes, whether or not they are used only by hospital staff or health care workers and whether or not any such use is a commercial use, or*
 - (h) *any other health-related use.*
- (2) *For the purposes of this clause, professional health care services include preventative or convalescent care, diagnosis, medical or surgical treatment, psychiatric care or care for people with disabilities, care or counselling services provided by health care professionals.*

The project constitutes a health facility providing professional health care services. It has an estimated Capital Investment Value is \$39,948,000, as detailed in Quantity Surveyors Statement prepared by Padgham Sweett (**Appendix A**), and is well in excess of the \$15 million threshold. It is therefore consistent with the classification in clause 18 of Schedule 1 of the SEPP.

In accordance with Section 75B of the EP&A Act and Clause 6 of the SEPP, the applicant sought the opinion of the Minister as to whether the project is of the kind to which Part 3A of the Act applies. On 12 May 2010, under delegation, the Minister formed the opinion that the project is a kind described in clause 18 of Schedule 1 of SEPP Major Development and declared it to be a project to which Part 3A of the Act applies.

Subsequently, the Director-General issued DGRs for the project under Part 3A of the Act on 9 June 2010. A copy of the DGRs is included at **Appendix B**. A table cross-referencing the location in this report where the requirements are covered is located in **Section 4.0**.

1.5 Project Team

An expert project team has been formed to deliver the project and includes:

Proponent	NSW Health Infrastructure
Project Manager	Savills Project Management
Urban Planning	JBA Planning
Architects/Landscape	Woods Bagot / 360 degrees
Quantity Surveyors	Padgham Sweett
Geotechnical & Contamination	Golder Associates
Civil Engineering / Infrastructure	Mott McDonald Hughes Trueman & WSP
CPTED	Lincolne Scott Woods Bagot
Stormwater	Mott McDonald Hughes Trueman
Environmental Sustainability	Built Ecology
Flora and Fauna	Total Earth Care
Traffic and Transport	TEF Consulting
European and Indigenous Heritage	Archaeological and Heritage Management Solutions
Surveyors	Vince Morgan Surveyors
Access	Accessibility Solutions (NSW) Pty Ltd
BCA	Blackett Maguire & Goldsmith
Noise	Acoustic Studio

2.0 Site Analysis

2.1 Site Location and Context

The subject site is located on the northern side of Derby Street within the Nepean Hospital site in Kingswood in the Penrith LGA. The site's location and context is shown in the Location Plan at **Figure 1** and is described below. An aerial photo of the site is shown at **Figure 2**

The context of the site is defined by its location within and use by a major tertiary referral hospital serving an extensive catchment in western Sydney. The subregional context of the Nepean Hospital is that of the largely residential area of Kingswood and the Hospital's location approximately 2km east of Penrith town centre. Nepean Hospital falls within the North-West Subregion of the Sydney Metropolitan area, as identified by the Department of Planning.

Penrith is classified as a 'Regional City' in the draft Subregional Strategy and as such provides a full range of business, government, retail, cultural, entertainment and recreational activities and is a regional focal point for goods, jobs and services. The site lies within the boundary of the Regional City.

The hospital is adjacent to the intersection of two major classified roads, being the Great Western Highway and Parker Street / Northern Road which provide connections with Penrith to the west, Cambridge Gardens and Windsor to the north, St Marys to the east and Campbelltown to the south. The site is located approximately 4km to the north of the intersection of Parker Street and the M4 Motorway, which provides a road transport connection to central Sydney. The nearest railway station is Kingswood (on the Western Line) immediately to the north of the hospital campus over the Great Western Highway. Local bus operator Westbus also operates numerous bus services past or near the site. (Public transport links surrounding the site are shown in **Figure 3**).

Nepean Hospital is roughly square in shape and is bound by the Great Western Highway and Barber Street to the north, Somerset Street to the east, Derby Street to the south and Parker Street to the west. The Hospital site is approximately 120,000m² in area. The Hospital's primary frontage is to Derby Street, from which it also gains its primary access to its main entrance. The Nepean Hospital as seen from Derby Street is shown in **Figure 4**.

The hospital is located on a natural highpoint. With the exception of excavated areas such as existing parking areas, the hospital land is generally subject to only a slight slope down from levels of up to around RL57.5 AHD around the main buildings in the south-west portion of the site down to around RL 50 AHD along the hospital's northern, eastern and western boundaries.



Figure 1 – Location plan



Figure 2 – Aerial photograph of the site and Nepean Hospital campus



Figure 3 – Public transport links to the site



Figure 4 – Some of the main buildings of the Nepean Hospital seen from Derby Street looking north

2.2 Site Description

The site of the proposed IMHU and the existing buildings on it form part of the Nepean Hospital's Derby Street frontage (as shown in **Figure 5**). The development site is approximately 4,560m² in area and is roughly triangular in shape (see site survey included at **Appendix C**).

The site's north-western boundary is defined by an internal access road into the hospital from Derby Street (**Figure 6**). The eastern boundary adjoins single storey SWAHS management and administration buildings and their curtilage. The land is subject to a slope, with levels around RL 57 AHD at the northern extent of the site down to around RL 52.7 AHD at the site's south eastern corner. This allows for the accommodation of building bulk partially below ground level within the northern and eastern portions of the site, thereby reducing the apparent bulk.



Figure 5 – The Nepean Hospital's Derby Street frontage showing the existing buildings on the site



Figure 6 – Main hospital entrance and Internal access road to the west of the site

Existing Development

As discussed in **Section 1.1**, the site currently accommodates a maintenance depot which comprises four demountable buildings and structures (see survey). These buildings are used for maintenance, repair and storage purposes (**Figure 7**). Adjacent to the maintenance depot is another demountable building that accommodates an SWAHS administration office (**Figure 8**).

The buildings are located within the southern portion of the development site. Adjacent to and between the buildings are hardstand areas used for parking maintenance vehicles and loading. Landscaping is located within the setback of the buildings from Derby Street to the south (**Figure 9**).

An ornamental garden dedicated to the Stolen Generation of indigenous Australian children and in memory of Doctor Chris Kohlenberg and Professor Brian Spurrett, who were involved in the improvement of Aboriginal women's and children's health is located in the eastern portion of the site (**Figure 10**). The garden comprises a circle of planted trees and shrubs with ornamental paving and a plaque mounted on a sandstone boulder explaining the commemorative purpose of the garden. The northern portion of the site comprises an at-grade open car parking area (**Figure 11**).



Figure 7 – Maintenance Depot building on the site



Figure 8 – SWAHS Administration Building on the site



Figure 9 – Landscaped area within the setback of the Maintenance Dept buildings from Derby Street



Figure 10 – Memorial garden on the site



Figure 11 – Existing car parking area within the northern portion of the site

2.3 Land Ownership

The development site is approximately 4,560m² in area and is part of the lot legally described as Lot 1 in DP1114090. (Lot 1 in DP 1114090 is a single lot that includes the entire Nepean Hospital campus in Kingswood). The land is owned by SWAHS.

2.4 Vegetation

Vegetation on the hospital campus comprises landscaped areas, areas of lawn and some remnant trees. Vegetation on the IMHU site comprises shrubs and other plantings within landscaped areas and mature trees in the setback of existing buildings from Derby Street and within the Memorial Garden. As discussed in **Section 5.11**, the IMHU site does not contain any threatened flora species of endangered ecological communities listed in the *Threatened Species Conservation Amendment Act 2002* or the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*.

It is noted that the removal of trees and other vegetation will be undertaken as part of the site preparation works that will be the subject of an application to the NSW Department of Health for Development without Consent Part 5 of the EP&A Act.

2.5 Surrounding Development

The site is surrounded to the north, east and west by the Nepean Hospital development and to the south by Derby Street. **Figure 12** shows a map produced by the SWAHS of existing buildings within the hospital campus. Immediately to the north of the site is the construction site of the new East Block building, which, as discussed in **Section 1.1** will be up to three storeys in height and accommodate Ambulatory Procedure Care facilities.

Immediately to the north-west of the site is the internal access road into the hospital from Derby Street (**Figure 6**), beyond which is South Block, one of the three main buildings that presently comprise the hospital. The main entrance to South Block (**Figure 13**) faces the development site. Three marked pedestrian crossings cross the internal access road from South Block to the existing buildings and car parks on the development site.

Immediately to the east of the site are single storey buildings accommodating SWAHS administration offices. Further east are hardstand car parking areas within the hospital site and the residential street of Somerset Street.



Figure 13 – South Block to the north west of the site

Derby Street to the south of the site is a two way road, with off street parking bays on either side of the carriageway. The section of Derby Street within which the proposed IMHU building is located is occupied by a range of medical uses, including the hospital itself and medical centres and consulting rooms opposite the site along the southern edge of Derby Street. Some of these uses support the medical and health services provided in the Nepean Hospital or else benefit from being part of a cluster that is centred on the hospital.

Referring to the aerial photograph at **Figure 14**, medical uses on the southern side of Derby Street include the Medical Centre building at 64 Derby Street (**Figure 15**), which accommodates a range of consulting rooms including those providing dental and plastic surgery and a pharmacy.

Adjacent and to the Medical Centre to the west is a vacant lot at 62 Derby Street (**Figure 16**), which is the site of an approved clinical school which will be part of the University of Sydney. The approved clinical school will be three storeys and approximately 11.6m in height with basement car parking. It will accommodate teaching space, consulting rooms, research facilities, administration offices and 27 car parking spaces. The setback of the approved clinical school from Derby Street is between 6.7m to 7.5m, consistent with the 6m average setback of the two neighbouring buildings.

A variety of medical consulting rooms are located within former dwelling houses at 58A, 60 and 60A Derby Street located directly opposite the proposed building. The western portion of Derby Street is occupied predominantly by one to two storey dwelling houses with some further medical consulting rooms.

To the west of the site is the entrance to the hospital from Derby Street, beyond which is a hardstand parking area.



Figure 14 – Aerial Photograph of the site and land uses to the south of Derby Street



Figure 15 – Medical Centre building at 64 Derby Street



Figure 16 – The site of the approved Sydney Medical School building at 62 Derby Street

2.6 Heritage

There are no listed heritage items on the Hospital campus or in the immediate surrounding area. Referring to the map of listed heritage items in the wider locality at **Figure 17**, there are no heritage items in proximity to the site. A more detailed discussion of heritage issues is included in **Section 5.7**.



Figure 17 – The site in relation to listed heritage items in the surrounding area

2.7 Utilities and Infrastructure

2.7.1 Water

The Hydraulic Services Report prepared by Warren Smith and Partners at **Appendix D** finds that, on the basis of enquiries with Sydney Water, water mains in the following streets serve the Nepean Hospital:

- Barber Avenue (225mm main);
- Parker Street (150mm main);
- Somerset Street (150mm main); and
- Derby Street (100mm main).

The above water mains interconnect to provide a ring main surrounding the site.

2.7.2 Sewer

As discussed in the Hydraulic Services Report, a 300mm diameter sewer main is located in Parker Street.

2.7.3 Power

The Electrical Utilities Report by WSP Lincolne Scott Australia at **Appendix D** notes initial load estimates indicate a maximum demand of approximately 600kVA for the proposal. An existing 500kVA rated kiosk substation is located adjacent to the proposed building and lacks sufficient capacity to service the proposal and existing surrounding buildings. The report recommends replacing it with a larger 1MVA substation.

2.7.4 Gas

Referring to the Hydraulic Services Report at **Appendix D** the hospital is currently served by two secondary 1,050kPa gas mains located in Parker and Derby Streets. The site could connect to the 100mm 1,050kPa main in Parker Street or be provided with its own incoming supply and meter from Derby Street.

2.8 Summary of Opportunities and Constraints

The site presents the following opportunities:

- The site is a sufficiently large (0.45ha), generally regularly shaped landholding in an urban context that does not immediately adjoin any residential dwellings;
- The site is located within a major existing medical and research hub;
- The site is located near a mix of ancillary medical related uses;
- The site can be easily prepared and remediated for the proposed use and displaced uses on the site can be suitably relocated within the Hospital Campus;
- The site's shape, size and location within a medical hub presents a valuable landholding, providing an ideal re-development opportunity (especially given the existing low scale/aged development on the site);
- The site has a good level of access to public transport, with buses passing by the site and Kingswood Railway Station located a short distance away;

- The built form of the surrounding area (existing and approved development) reflects low to medium density development (like the proposal); and
- The site is strategically located to contribute to the ongoing and expanded provision of high quality integrated health care.

The main constraining issue to development is as follows:

- Existing traffic and transport access and parking in and around the site. This issue is discussed in **Section 5.4** and will be addressed as part of the overall and ongoing development of the hospital campus.

3.0 Description of Development Proposal

This section of the report provides a detailed description of the proposed development.

3.1 Overview

The proposed IMHU will cater for the need for mental health services in the Nepean Hospital catchment. The provision of the IMHU is part of the current redevelopment of the hospital which is being undertaken in order to expand the services it provides. This expansion is being undertaken in order to meet the increasing needs of the growing population of the hospital's catchment.

The redevelopment of the hospital includes the construction of the East Block building (which is currently underway) and an Oral Health Unit building in the car park to the east of the East Block. The redevelopment is also being undertaken in order to consolidate and upgrade existing medical and health services and intensify development within areas of the hospital that are presently underutilised.

The IMHU will incorporate residential care beds, space for the provision of mental health therapeutic services and administration offices. The layout of the building has been designed around a series of internal courtyards that provide amenity for residents of the building through private open space, outlook and solar access.

The location of the proposed building has been selected on the basis that many of the clinical, administrative, and technical support services required for the operation of the IMHU are already provided within the hospital. This allows for cost efficiencies through the cross-utilisation of resources and other medical and health specialities located at the hospital. It also allows for the provision of a range of medical and health services in an integrated manner on a case by case basis.

The proposal will provide mental health services to recipients requiring long-term stays in the Unit. For this reason, the location for the building was determined in part by the need to provide an environment which is more residential in character. The Derby Street frontage was selected as it allowed the building to be situated within a residential street, separate from the main Nepean Hospital buildings, yet in sufficient proximity and connectivity to hospital facilities to allow for convenient access to them.

3.1.1 Development for Which Consent is Sought

This Project Application seeks approval for:

- The construction of a two to three storey building to accommodate the IMHU. The building will have a gross floor area (GFA) of 5,611m²;
- Mental health accommodation units located on the first and second levels of the proposed building include:
 - 20 high dependency beds;
 - 24 acute treatment beds; and
 - 20 special mental health service beds for older people;
- Offices for mental health professionals and administration staff on Level 3 of the proposed building;
- Lounge areas and informal areas, dining areas, education/workshop areas, family meeting rooms, a gymnasium and multimedia entertainment and education rooms;

- Internal landscaped courtyards accessible from within the building;
- Ancillary plant and infrastructure; and
- Relocation of an existing Reconciliation and Memorial Garden and commemorative plaque from the north eastern portion of the site.

Architectural drawings of the proposed development prepared by Woods Bagot are located at **Appendix E** and landscape plans prepared by landscape designers 360° at **Appendix F**.

3.1.2 Site Preparation

Demolition works are required in order to enable the construction of the IMHU building. These demolition works will be carried out a Development without Consent under clause 58 of State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) and so will be the subject of Review of Environmental Factors by NSW Health Infrastructure under Part 5 of the EP&A Act. These works include:

- Demolition and removal of the existing demountable and permanent buildings and hardstand areas that accommodate the maintenance depot currently on the site; and
- Demolition of a car parking area and removal of landscaping from the site.

A new maintenance depot will be constructed within the northern extent of the Hospital off Barber Street. The construction of the new maintenance depot building(s) will also be the subject of Review of Environmental Factors by NSW Health Infrastructure under Part 5 of the EP&A Act.

3.1.3 Numerical Overview

A numerical overview of the proposed development is included in **Table 1**.

Table 1 – Numerical Overview of the Proposal

Element	Quantum
Site Area	Approx 4,560m ²
Gross Floor Area (GFA)	5,611m ²
Floor Space Ratio (FSR)	1.23:1
Maximum building height	Approx 13.8m at it highest point as set back off Derby Street
Setbacks	Front: 1.5m (approx) Side: NA Rear: NA
Clinical Accommodation	20 high dependency beds; 24 acute treatment beds; and 20 special mental health service beds for older people.
Total medical, nursing, psychology and other staff (aggregate and anticipated in 2016 once building is fully utilised).	192 full time employees

3.2 Services Accommodated in the Building

The proposed IMHU will provide the patient-centred recovery and support model of care with an interdisciplinary team approach that involves the patient, carer and significant others in the provision of treatment and support. The facility will accommodate personnel within the SWAHS Consultation and Liaison Team, the Access and Acute Care Team and the Western Cluster Mental Health Management Team.

Key scheme details including proposed use and area of the various floors is described below in Table 2. See also the architectural and landscape plans at **Appendices E and F**.

Table 2 – Key scheme details

Element	Use / Details	GFA
Level 1	SMHSOP (Special Mental Health Service for Older Persons) Patient accommodation Offices Dining and Servery Rooms Consulting Rooms Lounge Courtyard Loading Dock Substation	1,737m ²
Level 2	Acute and HDU (High Dependency Unit) Patient accommodation Offices Dining and Servery Rooms Consulting Rooms Lounges Courtyards	3,331m ²
Level 3	Office Uses Offices Plant	543m ²

A possible future link to the Hospital's main entrance is contemplated. This does not form part of this application, and will be subject further design resolution and a separate application.

3.3 Staging

The Nepean IMHU project is to be completed in a single stage. The project forms part of Stage 3 of the planned redevelopment of the site to provide new and expanded health care services. Stages 1 (1993-1998) and 2 (1998-2002) are complete, and current Stage 3 works for the new East Block Building are presently underway.

3.4 Built Form

3.4.1 Layout

Referring to the Architectural Plans at **Appendix E**, the proposed building footprint is triangular in shape and reflects the angle formed by the corner of Derby Street and the internal access road into the hospital, on which the site is located. This response to the shape of the site is also made in the triangular form of the building's layout, which is centred on a series of angular and irregularly-shaped internal courtyards. The courtyards are a key element in the provision of amenity within the Mental Health Unit and define the internal character of the building. They are intended to fulfil the dual purposes of providing communal open space within the building, along with solar access to and outlook from the proposed accommodation units.

The function of the courtyards is further articulated in the Architectural Design Statement by Woods Bagot Architects at **Appendix E**, which sets out the design principles for the proposed development and states that:

"Extensive consideration is given to the idea of bringing the "home" into the scheme. Familiarity with one's surroundings is viewed as essential when creating an environment which is non-confrontational and unintimidating".

The Architectural Design Statement states that, in order to support the function of the courtyards in providing a sense of familiarity:

"Internal facades in the scheme are broken down in scale, expressing individuality rather than institutional values. Kinked courtyard surrounding walls as opposed to continuous flat facades, respond to the human scale".

The response to the site's triangular shape is also reflected in other elements of the building, such as the planter box incorporated into the steps to the main entrance from Derby Street.

3.4.2 Height, Bulk and Scale

The Architectural Design Statement by Woods Bagot Architects sets out the following principle:

"The south facade diminishes in scale addressing the existing residential streetscape along the property boundary".

In accordance with the above principle, the height of the proposed building at the Derby Street frontage is two storeys, or between 7m and 9.5m. Proposed bulk is concentrated to the north-west of the site, with the third storey located at the north-western edge of the building. The proposed third storey will be at least approximately 15m away from the site's boundary to Derby Street.

The Architectural Design Statement at **Appendix E** sets out the following principle:

“The proposal’s north, east and west facades are designed to respond to the civic scale of the adjacent hospital buildings”.

The northern and north-western facades of the building will, in accordance with the above principal, be of a greater height and scale than the southern facade, being predominantly three storeys (up to 10.3m) in height. The eastern elevation will present as two to three storeys (between 6.5m and 9.5m).

3.4.3 Facade Treatments, Colours and Materials

Referring to the elevations and photomontages include in the Architectural Plans and the Schedule of Colours and Materials at **Appendix E**, the building’s southern facade to Derby Street will comprise precast concrete panels coloured through the addition of oxides in neutral/copper tones and, perforated white metal screening.

In relation to the Derby Street facade, the Architectural Design Statement by Woods Bagot states that:

“This façade is proposed with vertical planting elements to soften the concrete panels adjacent the public sidewalk on Derby Street”.

Climbing plants will be planted within the building’s setback from Derby Street and will climb up metal supports affixed to the southern exterior walls. Stone cladding on green and grey tones will be installed on exterior walls around and above the main entrance. The proposed building identification comprises the letters ‘PMH’ within the external foyer at the main entrance from Derby Street.

The northern, eastern and north-western facades will feature precast coloured/oxidised concrete panels, perforated white metal screening, windows with exposed metal shading devices and grey metal cladding and louvres.

3.4.4 Landscaping

As discussed in **Section 3.4** the layout of the proposed building centres on several landscaped courtyards. The Landscape Design Statement by landscape designers 360° at **Appendix F** sets out the principles for the proposed landscape design. These can be summarised as follows:

- Courtyards are to be part of a private open space treatment that gives the appearance of a continuous landscape;
- Courtyards are to have *“a familiar, organic character with a tapestry of planting and varying degrees of meandering (or directed) paths, in accordance with the level of treatment for the respective courtyard”*;
- A variety of seating opportunities within courtyards create private spaces, or areas for communal gathering. The delineation of seating spaces is reinforced by variations in the adjacent planting character;
- Buffer planting is provided between windows in accommodation units and adjacent communal courtyards;
- Shade tree planting will combine evergreen and deciduous trees to maximise seasonal solar access; and
- Planting pallets and paving materials in each courtyard are dependent on the degree of care provided within the area of the building that has access to that courtyard. The reduced level of care required for patients receiving Special Mental Health Care for Older Persons allows for courtyards with greater varieties in planting and paving and the potential for water features. However, variety in planting and paving is reduced in the acute care and High Dependency Unit courtyards, where there is a greater emphasis on surveillance and safety and in which water features are not appropriate.

Referring to the landscape plans at **Appendix F**, proposed landscaping implements the above principles through the provision of courtyards incorporating meandering pathways that link different areas of the building and provide access to seating areas shaded by canopy tree species. Water features and variety in paving are provided as appropriate and tree plantings incorporate a variety of evergreen and deciduous plantings. The distribution of plantings and species on the proposed rooftop garden provides for visual connectivity between landscaped areas.

3.5 Environmentally Sustainable Development

The Environmental Concept Design Report by Built Ecology/WSP Lincolne Scott at **Appendix G**, recommends a range of Environmental Sustainable Development (ESD) solutions to be implemented in the proposed development. These will include measures to minimise consumption of resources, water and energy with the aim of providing a development that is capable of achieving a 4 Star rating under the Green Star Health Care Tool V1, administered by the Green Building Council of Australia such as:

- Solar access to reduce the requirement for artificial heating, cooling and lighting;
- Eaves and shading to reduce air conditioning requirements;
- Use of thermal mass to maximise effects of warming winter sun;
- High performance materials to prevent thermal losses and gains through the building envelope:
- A roof insulation R Value of at least 3.2 minimum and a wall insulation R Value of at least 2.7;
- Efficient lighting control strategies, lighting zoning and sensors to ensure that lighting is not on when it not required;
- Separate metering of lighting and power;
- Connection to a building monitoring system for more effective and accessible metering;
- Selection of an energy efficient air conditioning system;
- The option of supplementing air conditioning with a chilled and heated floor system to be investigated;
- Reduction of water consumption through water efficient practices and efficient fittings and fixtures (which result in the use of 18% less water compared to standard fixtures);
- Rainwater harvesting for use in toilet flushing and irrigation (approximately 175kL of rainwater per month will be available from the proposed roof);
- Promoting alternative forms of transport;
- Adequate storage for recyclable waste; and
- Appropriate building material selection and a target of 80% of construction and demolition waste to be re-used or recycled.

The effectiveness of the above measures in achieving a 4 Star rating under the Green Star Health Care Tool is assessed in **Section 5.5**.

3.6 Transport and Access

Vehicular Access

As the proposed IMHU will be part of the Nepean Hospital, access to it will be via existing vehicular ingress and egress points. Referring to the Traffic and Parking Impact Assessment by TEF Consulting at **Appendix H**, internal access roads intersecting with Somerset Street to the east and Derby Street to the south provide ingress and egress, with left and right turns permitted by traffic both entering and leaving the campus. Left in left out vehicular access is available via the vehicle crossing from Parker Street to the west.

Vehicles visiting the proposed IMHU will enter the campus via these existing access points and park in one of the car parks that are currently provided on the site, or are to be constructed as part of the East Block development.

Pedestrian Access

As indicated in the Traffic and Parking Impact Assessment, pedestrian access to the Hospital campus for staff and visitors is available via pedestrian footpaths along internal access roads that connect to with Somerset Street, Derby Street and Parker Street, as discussed above. Staff, visitors and patients of the proposed facility may enter the campus via these access points and make their way to the site. Pedestrian access into the IMHU for staff, visitors and patients will be via the main entrance on the northern elevation of the proposed building.

The building will also be accessible by staff, visitors and patients via the secondary entrance to the building on Derby Street.

Delivery and Servicing

A loading dock for delivery and service vehicles will be located in the eastern portion of the proposed building and will incorporate a waste storage and recycling area. The loading dock will be accessible via the additional vehicular access from Derby Street and the aisle through the car park to the east of the site.

Car Parking

Referring to the Traffic and Parking Impact Assessment by TEF Consulting at **Appendix H**, demand for car parking for the proposed facility will be provided by existing car parking areas on the site. The location of existing car parking spaces on the campus (other than parking areas 10 and 11, as these will be the subject of the IMHU and East Block developments respectively) is shown in **Figure 19**, which is reproduced from the TEF Consulting report.

It should be noted that parking lost from Areas 10 and 11 will be replaced as part of the current East Block development (see Figure 3 of TEF's Report at **Appendix H**). Car parking provision across the Nepean Hospital will be subject to the reconfiguration of existing parking areas as part of the ongoing development of the campus to accommodate evolving medical facilities and services.

Construction Traffic

The management of construction traffic on the site is still to be determined subject to the engagement of a building contractor, but will be subject to an integrated management strategy that will encompass construction on the site and the ongoing construction of the East Block. This will ensure that vehicle movements into and out of both construction sites will be effectively coordinated to ensure there are no adverse traffic, environmental, amenity or safety impacts. An Integrated Construction Traffic Management Plan for the site and East Block will be prepared subsequent to approval of this application. See also the Statement of Commitments at **Section 6.0** of this report.



Figure 18 – Existing car parking facilities on the Nepean Hospital campus

Source: Tef Consulting

Bicycle Facilities

The IMHU will include 10 bicycle parking spaces for use by staff and 5 visitor bicycle spaces, with the ability to lock bicycle wheels and frames. The spaces will be located in proximity to the main entrance to the building. Staff shower facilities will be provided in proximity to the bicycle spaces, with along with 10 lockers for use by staff travelling to and from the site by bicycle.

3.7 Water Cycle Management

As discussed in the Stormwater Report by Mott McDonald Hughes Trueman at **Appendix I**, while an existing detention system manages runoff from most of the hospital development, this system does not serve the land that comprises the site. Runoff from the site currently flows to a 300mm pipe running east along the boundary to Derby Street to the intersection of Derby and Somerset Streets. There, it flows to Council's stormwater system in Derby Street. The internal drainage system serving the site does not collect any stormwater flows from upstream of the proposed building.

As discussed in the Stormwater Report, Council has advised that post-development stormwater flows from the site should not exceed pre-development flows.

Mott McDonald recommends that a stormwater detention volume of approximately 85m³ is required to ensure post development flows are not greater than the pre-development situation.

Referring to the Stormwater Concept Plan also at **Appendix I**, detention tanks of the required capacity will be installed at the south-eastern and south-western corners of the site, connected to the proposed building and minor hardstand areas by pipes running along the eastern and north-western boundaries of the site. Gross Pollutant Traps (GPT's) will be installed at the ends of stormwater pipes, immediately prior to the proposed stormwater detention tanks. A rainwater retention tank with a capacity of 50m³ for the harvesting of rainwater for use in toilet flushing and irrigation is also located at the south eastern corner of the site. A section of existing stormwater pipe adjacent the Derby Street boundary will be relocated outside the footprint of the proposed building.

Overland flow in storm events that exceed the capacity of the proposed system will generally follow existing flow paths. These paths include one along the existing road between South Block and the proposed Mental Health facility to the west of the building and another through the separation between the proposed building and the existing SWAHS administration offices to the east of the site. This interface will need to be carefully treated to ensure that the existing building is protected from inundation from overland flows.

3.8 Services and Infrastructure

3.8.1 Potable Water

It is proposed that potable water will be supplied to the building via a connection to the 100mm main in Derby Street and 150mm main in Somerset Street, with an extension into the site.

3.8.2 Sewerage

It is proposed to connect to the Parker Street main.

3.8.3 Gas

The site has the potential to be connected to the 100mm 1,050kPa main in Parker Street or be provided with its own incoming supply and meter from Derby Street.

3.8.4 Electricity

As noted, the existing 500kVA rated kiosk substation located adjacent to the proposed building and lacks sufficient capacity to service the proposal and existing surrounding buildings. The project's consultants recommend replacing it with a larger 1MVA substation.

3.8.5 Communications

It is proposed that the new building will connect to the existing Hospital PABX system and Main Communications Room. New services will be reticulated in in-ground conduits.

3.8.6 Further Consultation with Providers

In addition to enquiries so far made with Sydney Water and Jemena Gas, further enquiries will be undertaken with utilities providers following approval of this application in order to verify the manner in which the site may be serviced.

3.9 Site Remediation

Referring to the Phase 1 and 2 Environmental Site Assessment by Golder Associates at **Appendix J**, the site is considered to have a low likelihood of extensive soil contamination and a low risk to human health. However, one of the layers of fill on the site was found to have asbestos. All material removed from this fill layer will be inspected by an appropriately licensed contractor to determine the extent of asbestos impacted material to be removed from the site. Any material identified as being impacted by asbestos will be removed from the site and disposed of by an appropriately licensed contractor and in accordance with WorkCover requirements.

3.10 Construction Management

A detailed Construction Management Plan will be prepared by the appointed contractor prior to commencement of works and will address (amongst other things):

- traffic and pedestrian construction routes;
- storage and handling of construction materials;
- waste handling procedures; and
- proposed hours of construction.

Hoardings, erosion and sediment control measures (as including at **Appendix K**), site fencing and tree and root protection zones will be installed as part of the construction process to ensure the site remains safe at all times.

Construction of Level 1 will require part of the site to be excavated. This will necessitate the installation of temporary shoring, batters and permanent retaining walls across the site. Excavated materials may be able to be reused on site as fill (subject to confirmation), whilst some material will require disposal at appropriate landfills.

3.11 Developer Contributions

As previously advised by Hassell in its response to the issue of contributions for the recently approved Part 3A Project Application for the East Block development, the relevant Penrith City Council contribution plans do not allow a contribution to be required for the proposed development, principally because the Plans target residential developments in their own right. It should be noted that residential development is prohibited within Zone 5(a) Hospital under the Penrith Local Environmental Plan 1998 (Urban Land).

This however doesn't preclude the Department (under the Part 3A approval pathway) and under section 94B(2) of the EP&A Act, in imposing a requirement for a contribution.

The imposition of a condition by the Department of Planning or by the Minister to require a contribution in relation to the new or additional demand upon services and infrastructure in the locality would be contrary to existing Government and Department policies and guidelines.

Hospitals (and ancillary uses) consistent with the uses permissible under Special Uses 5 zones or the SP2 – Infrastructure zone are routinely expected to be exempted from payment of contributions as a result of their significant contribution to social and essential infrastructure within the locality and region. This is consistent with existing legislation and the Department of Planning's existing policies and Circulars concerning Crown development.

The same Crown development principle applicable to Crown DAs has been regularly applied by the Department for applications under Part 3A of the EP&A

Act. Under the Department's policies and Circulars, Crown development is exempted from all contributions other than drainage, and local road upgrades and traffic management (at the site's entrance). Even then, there must be suitable nexus and apportionment principles applied to ensure equitable contributions ensue.

Being a key development within the hospital it will clearly facilitate delivery of important health services to both the local community, and the wider South West Sydney region. The purpose of contributions is to cover the demand for additional services and facilities resulting increased in employment or residential population. The proposed development will assist in the provision of services, rather than creating additional demand. Further, it has been demonstrated that the proposed development can be undertaken using existing physical infrastructure and services. See **section 5.10** below.

Due to the nature of the public amenities and services provided by the development of the Hospital, it is considered that no development contribution should be imposed for the development.

4.0 Director General's Requirements

On 9 June 2010, in accordance with Section 75F of the EP&A Act, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Project Application for the project. A copy of the DGRs is included in **Appendix B. Table 3** provides a detailed summary of the individual matters listed in the DGRs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 3 - Director General's Requirements

Requirement	Location in Environmental Assessment	
General		
Executive Summary	Page i	
Statement of Validity	Page ii	
Quantity Surveyor’s Certificate	Appendix A	
Site Analysis	Section 2.0	
Description of the Proposed Development	Section 3.0	
Assessment of the Key Issues	Section 5.0	
Draft Statement of Commitments	Section 6.0	
Conclusion and Justification	Section 7.0	
Key Issues	Report	Technical Study
Relevant EPIs, Policies and Guidelines to be addressed	Section 5.1	-
Built Form and Urban Design	Sections 3.4 and 5.2	Appendices E and F
Environmental and Residential Amenity	Section 5.3	Appendices E and F
Transport and Accessibility Impacts (Construction and Operational)	Sections 3.6 and 5.4	Appendix H
Ecologically Sustainable Development (ESD)	Sections 3.5 and 5.5	Appendix G
Contributions	Section 3.11	-
Contamination	Sections 3.9 and 5.6	Appendix J
Heritage and Aboriginal Heritage	Section 5.7	Appendix L
Drainage	Sections 5.8 and 5.9	Appendix I
Flooding	Section 5.9	-
Utilities	Sections 2.7, 3.8 and 5.10	Appendix D
Staging	Section 3.3	-
Flora and Fauna	Sections 2.4 and 5.11	Appendix M
Noise	Section 5.3	Appendix N
Waste	Section 5.12	Appendix O
Hazards	Section 5.13	-
Consultation	Section 5.16	-

5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the Project Application proposal. It addresses the matters for consideration set out in the DGRs (see **Section 4.0**). The draft Statement of Commitments complements the findings of this section.

5.1 Consistency with Relevant Strategic and Statutory Plans and Policies

The DGRs require the following legislation, strategies and planning instruments, to be addressed:

- NSW State Plan;
- The Sydney Metropolitan Strategy;
- Draft North-West Subregional Strategy;
- The Objects of the Environmental Planning and Assessment Act 1979 (EP&A Act);
- State Environmental Planning Policy (Major Development) 2005 (SEPP Major Development);
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55);
- State Environmental Planning Policy No. 33 - Hazardous and Offensive Development (SEPP 33);
- State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure);
- Penrith Local Development Plan 1998 (Urban Land) (LEP1998); and
- Penrith Development Control Plan 2006 (DCP 2006).

The Project Application's consistency with the relevant strategic and statutory plans and policies is demonstrated in **Table 4** below. Variations to, and non-compliance with the key standards and guidelines highlighted in the table are discussed in detail in the following sections of this environmental assessment.

With regard to the provisions of LEP 1998 that relate to permissibility, the application to the site of the 5(a) Special Uses Hospital zone to the Nepean Hospital Campus shown in the extract of the LEP zoning map at **Figure 19**. The extract of the zoning map at **Figure 19** also shows the 2(d) zoning that applies to the land on the opposite side of Derby Street to the south of the site.



Figure 19 – Extract from the zoning map that accompanies LEP 1998

Table 4 – Summary of consistency with key strategic and statutory plans and policies

Instrument / Strategy	Comments
Strategic Plans	
Sydney Metropolitan Strategy	The Project Application will support Penrith's role as a Regional City within the Sydney Metropolitan Area by furthering the Nepean Hospital's role as a major teaching hospital and an employer in proximity to central Penrith.
Draft North-West Subregional Strategy	<p>This Project Application will contribute towards the achievement of the draft Strategy's target of 98,764 additional jobs in the north-west subregion by 2031 (bringing the total to 346,500) and the target for the Penrith Local Government Area (LGA) of 28,000 additional jobs by 2031 (bringing the total to 86,000) through the provision of additional employment opportunities on the site.</p> <p>The expansion in medical services at the hospital that will result from the proposal will generally support the achievement of the target of 140,000 additional dwellings in the subregion by 2031 by meeting demand for such services that will result from increasing population.</p>
NSW State Plan	<p>By upgrading existing provision of mental health services in the Nepean Hospital Catchment, the proposal will support key objectives of the NSW State Plan including those for:</p> <ul style="list-style-type: none"> ■ Providing the highest quality care accessible to all; ■ Improving and maintaining access to quality healthcare in the face of increasing demand; and ■ Improving outcomes in mental health through new mental health facilities. <p>In addition, by locating an employment generating use within a residential area, the proposal will serve the State Plan objective of proving jobs closer to home.</p>

Instrument / Strategy		Comments
State Legislation and Planning Instruments and Controls		
Objects of the EP&A Act	<p>The proposed development is consistent with the Objects in Section 5 of the of the EP&A Act as it will:</p> <ul style="list-style-type: none">▪ Promote the orderly and economic development of land through the greater utilisation of the site and the concentration of health services within an existing hospital site;▪ Promote the provision and co-ordination of community services and facilities by locating the proposed IMHU in proximity to other medical services; and▪ Promote Environmentally Sustainable Design through the measures set out in the Environmental Concept Design Report at Appendix G.	
SEPP 55	<p>The Phase I and 2 Environmental Site Assessment prepared for the site (see Appendix J) demonstrates the site is suitable for the proposed development, subject to the appropriate removal of asbestos impacted fill material from the site (refer to Section 5.6.1)</p>	
SEPP Major Development	<p>As discussed in Section 1.4, the project falls into the class of development described in clause 18 of Schedule 1 of the SEPP. Under delegation, the Minister has formed the opinion that the development is of a kind referred to in Schedule 1 of the SEPP and has is declared it to be a project to which Part 3A of the EP&A Act applies.</p>	
SEPP 33	<p>The proposal does not fall within the definitions of “<i>potentially hazardous industry</i>” and “<i>potentially offensive industry</i>” in clause 3 of the SEPP, which is not of relevance to the Project Application.</p>	
SEPP (Infrastructure)	<p>The proposal does not fall within one of the classifications of Traffic Generating Developments in Schedule 3 of the SEPP, for which (under Clause 104), development applications must be referred to the Roads and Traffic Authority.</p>	
Local Planning Instruments and Controls		
LEP1998 (Urban Lands)	Clause 4 – Interpretation and Schedule 2 - Definitions	“ <i>hospital</i> ” means a building or place used for the purpose of providing professional health care services such as psychiatric care or counselling”.
	Clause 8 – Zoning	In accordance with clause 8 and the map accompanying LEP 1998, the site is zoned ‘Zone 5(a) Special Uses Hospital’.
	Clause 9 – Zone Objectives and Permissibility	In accordance with the land use table in clause 9, hospitals are permissible on the site (as the particular purpose indicated by lettering on the zoning map). Landscaping and utility installations are also permissible.

Instrument / Strategy	Comments
LEP1998 (Urban Lands)	<p>Clause 13 - Environmental performance</p> <p>Council must not grant consent to development applications unless such applications have considered noise impacts resulting from and the reduction of contaminated stormwater discharge from proposed developments. As discussed in the Acoustic Impact Assessment at Appendix N, the proposal will not result in adverse acoustic impacts. As discussed in Section 5.3.2, there will be no loss of water quality resulting from rainwater runoff from the proposal.</p>
	<p>Clause 14 Design Principles</p> <p>Developments must take into account:</p> <ul style="list-style-type: none"> ■ Topography and setting; ■ The reflection of the forms, features or qualities of traditional residential neighbourhoods; ■ Consistency or compatibility with the scale, design and amenity of neighbouring development; ■ Streetscapes and diversity of building forms; ■ The amenity dwellings; and ■ Preservation of significant vistas from public places. <p>The proposal is consistent with the above principles as:</p> <ul style="list-style-type: none"> ■ As discussed in Section 5.2, the proposal appropriately responds to the existing built form context and desired future character of the site; ■ Proposed height, bulk and scale are consistent with the design and amenity of the one to two storey residential character of Derby Street; and ■ As discussed in Sections 5.3, residential amenity and views will be appropriately preserved.
DCP 2006	<p>Section 2.2 Crime Prevention Through Environmental Design (CPTED)</p> <p>The proposal's consistency with Council's objectives and controls for CPTED is addressed in the CPTED Assessment by Woods Bagot Architects at Appendix P.</p>
	<p>Section 2.4 Erosion and Sediment Control</p> <p>Measures consistent with Section 2.4 of DCP 2006 are set out in the Erosion and Sediment Control Plan at Appendix K.</p>

Instrument / Strategy	Comments	
DCP 2006	Section 2.6 Landscaping	<p>The proposal is consistent with guidelines in Part D of Section 2.6 in that proposed landscaping will:</p> <ul style="list-style-type: none">▪ Include deciduous and evergreen species that will allow for shading and solar access in winter;▪ Utilise water efficient irrigation using harvested rainwater;▪ Incorporate appropriate species selection and provide tree planting in the planter box at the entrance to the building from Derby Street which will contribute positively to the streetscape; and▪ Provide internal courtyards with adequate communal private open space with equitable access.
	Section 2.9 Waste Planning	<p>Measures for waste management and for the reuse and recycling of wastes resulting from the construction and use of the development will be set out in a Construction Environmental Management Plan to be provided at Construction Certificate Stage.</p> <p>As discussed in Section 5.12, Sydney West Area Health Service implements waste management policies that satisfy Council’s objectives in this respect.</p>
	Section 2.11 Car Parking	<p>Section 2.1 requires the minimum provision of 1 space per 3 beds and 1 space per 3 employees for hospitals. Applying this rate to the proposed addition of 31 beds to the Hospital campus plus up to 51 additional employees on the site at any one time implies that 27 spaces will be required.</p> <p>No spaces are proposed.</p> <p>The acceptability of the proposal in this respect is discussed in Section 5.4 And demonstrated in the Traffic and Parking Assessment at Appendix H</p>

5.2 Built Form and Urban Design

5.2.1 Height, bulk and scale

As discussed in **Section 3.4.2**, the height of the proposed building at Derby Street is 2 storeys. This height is consistent with the character of Derby Street, which is defined by the one to two storey residential buildings opposite the site and the approved three storey (11.6m) high medical school building at 62 Derby Street.

By concentrating bulk in the three storey portion of the proposed building to the north (rear) of the site, away from Derby Street, the development will minimise the visual impact of the building on the street. While the site is zoned 5(a) Special Uses Hospital, the western side of Derby Street is zoned 2(d) Residential (Medium Density).

The objectives of the 2(d) Residential zone are:

- To reinforce the importance of natural landscape settings and areas with heritage conservation value, and
- To protect the character of traditional cottage development and streetscapes, and
- To consolidate population and housing densities, and
- to expand housing choices by allowing multi-unit housing up to a two storey appearance, and
- To promote a variety of housing types or forms upon each site, and
- To allow a range of compatible non-residential uses.

Considering the above objectives, the desired future character of the southern side of Derby Street can be taken to include an intensification of development that provides medium-density residential housing up to two storeys, while respecting the existing character of smaller single dwelling houses and cottages.

Consistent with the desired future character, the proposal observes the one to two storey building heights of existing buildings on the opposite side of Derby Street. As the desired future character envisages an intensification of development along Derby Street with allowance for non-residential uses, the proposed bulk and scale are appropriate, given the greater built form required to accommodate the types of non-residential uses required on the hospital site.

A greater built form accommodating non-residential uses, as envisaged by with desired future character for Derby Street is demonstrated by the approved medical school immediately opposite the site, which is also located within the 2(d) Residential zone. The proposed building is consistent with the approved medical school in terms of height and scale.

The northern and north-western facades of the proposed building will be of a slightly greater height and scale than the southern facade and will predominately present as three storeys (up to 10.3m). Proposed height, bulk and scale in the western and north-western frontages are appropriate to the building's institutional setting and the building's location on the periphery of the Nepean Hospital campus. At two to three storeys (6.2m to 9.5m) in height, the east elevation is also appropriate to its institutional setting.

Proposed building heights affect an appropriate transition from the one to two storey building heights to the west of Derby Street to the taller heights at the centre of the hospital. This transition is demonstrated by the 3D context models included in the Architectural Plan at **Appendix E**. One of the 3D context models has been reproduced as **Figure 20** and shows proposed building height stepping up from two storeys at Derby Street, where it is consistent with buildings on

the southern side of the street, to three storeys in north western portion of the building. Building heights across site step up again from the three storey portion of the IMHU to the four storey South Block.

The Streetscape Elevation also provided as part of the Architectural Plans at **Appendix E** shows the lesser height and scale of the proposed building compared with existing development on the site.

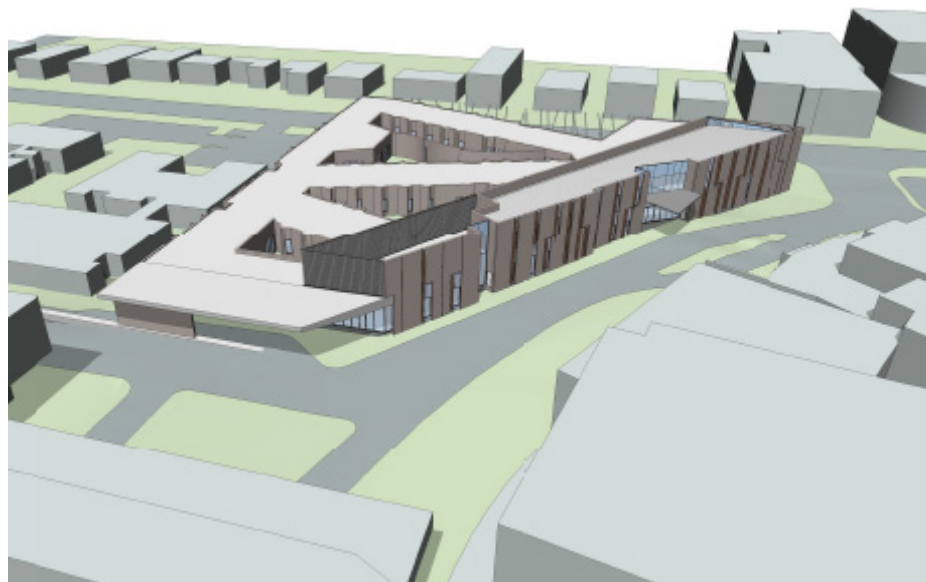


Figure 20 – 3D context model looking south over the proposed building to Derby Street

Source: Woods Bagot Architects

5.2.2 Open Space, Landscaping and Public Domain

As discussed in **Section 3.4.4**, the proposed landscaped courtyards are designed to provide private spaces, areas for communal gathering buffer plantings for accommodation units, shade and solar access. The proposal provides a high degree of internal amenity through quality open space with varied plantings that provide visual interest, areas screened from windows to internal areas, thereby allowing for privacy and amenity for communal spaces. The amenity of residential units will be significantly increased by the provision of outlook to the courtyards. The proposal therefore performs well in terms of private open space and internal landscaping.

The planter box of pollarded trees incorporated into the steps to the entrance to the building from Derby Street will contribute positively to the Derby Street streetscape.

5.2.3 Safety by Design

The CPTED Assessment by Woods Bagot Architects at **Appendix P** is made in accordance with principles for CPTED, as identified in the DoP's guideline titled *Crime Prevention and the Assessment of Development Applications* (2001) as follows:

- **Territorial Reinforcement:** The use of actual and symbolic boundary markers, spatial legibility and environment cues to 'connect' people with space and to encourage communal responsibility for public areas;
- **Surveillance:** This includes natural surveillance of spaces by people and technical surveillance using means such as closed circuit television (CCTV);
- **Access Control:** Use of physical and symbolic barriers to restrict pedestrian; and

- *Space / Activity Management:* Provision of well designed spaces which are well maintained (through site cleanliness, repair of vandalism and graffiti etc).

The CPTED Assessment finds that the proposed development fulfils the above CPTED principles as:

- The building's main foyer on Derby Street is not publically accessible and is supervised during business hours;
- The north western entrance to the building from within the hospital site is visible from South Block. The general level of activity around the South Block entrance and the north western entrance to the proposed building will promote passive surveillance of each of the entrances from the another;
- Solid edges to the perimeter of the site, will limit entry points to the building;
- External lighting for the building will be provided, consistent with current campus lighting strategy and will promote visibility and security at night;
- A security presence will be provided for the building, along with a back to base alarm monitored from the main campus of the hospital;
- Free access to the site will only be available to limited foyer areas of level two, which are visible from and monitored by reception desks during business hours. After hours access will be controlled by the use of security swipe cards. Access from the foyer areas to other areas within the facility will be access controlled;
- It is intended that security systems including CCTV used throughout the hospital campus will be extended to the new building; and
- The site will be subject to regular maintenance of external and internal areas including the prompt removal of graffiti.

Further to the findings of the CPTED assessment, the location of accommodation units overlooking Derby Street and the internal access road into the site will promote causal surveillance of the Street and access road, thereby promoting security. Present security issues identified on the site include altercations between people that take place near the intersection of Derby Street and the internal Access road. This will be addressed by the siting of the main entrance to the building on the corner. The level of activity around the main entrance will discourage antisocial behaviour.

5.3 Environmental and Residential Amenity

5.3.1 Solar Access and Overshadowing

Referring to the Shadow Diagrams at **Appendix E**, the proposed building does not overshadow living area windows of any residences on Derby Street at any time of year. The only sunlight access impacts to Derby Street residences is the overshadowing of a minor portion of the landscaping in the front setback of the townhouse development 56 Derby Street at around 9.00am on 21 June. Given the absence of impacts to residential amenity, the proposal is considered satisfactory in this respect.

The acceptability of the proposal is further supported by its consistency with the sunlight access controls in Sections 4.2, 4.4 and 4.6 of the DCP 2006. These controls requires that, between 9am and 3pm on 21 June, dwelling house and villa type developments must allow at least 3 hours of sunlight to living areas and 40% of the main private open spaces of adjoining dwellings. Residential apartments are required to allow 4 hours of sunlight access to the living areas of adjacent developments.

5.3.2 Acoustic Privacy

The Acoustic Report by the Acoustic Studio at **Appendix N** considers the noise impacts of the construction and operation stages of the proposed development. The Report considers long term noise monitoring data used to establish background noise levels at medical consulting rooms and residences in Derby Street residences. The data was collected as part of an Acoustic Assessment undertaken for the East Block development, adjacent to the site. The report notes that the findings of the Acoustic Assessment for the East Block are relevant to this Project Application. The Acoustic Report finds that local ambient noise levels relating to the site are dominated by train and traffic noise.

Demolition

The report makes recommendations for the reduction of noise levels resulting from construction in order to achieve compliance with the relevant guidelines and Australian Standard. These recommendations include:

- Use of quieter plant and equipment and construction methods and regular maintenance of equipment;
- Avoiding the use of reversing alarms on vehicles;
- Use of shielding in the form of existing structures or temporary barriers and the scheduling the construction of barriers and structures so they can provide shielding as early as possible;
- Consultation, notification, documented complaints handling and the provision of information to neighbours;
- Scheduling activities to minimise noise impacts and ensuring periods of respite are provided from unavoidable maximum noise levels events; and
- Designated truck routes, parking locations and delivery hours.

Construction working hours will be restricted to those set out in the Interim Construction Noise Guideline published by the Department of Environment, Climate Change and Water (DECCW) which are:

- Monday to Friday 7 am to 6 pm; and
- Saturday 8 am to 1 pm.

Operation

Potential sources of noise from the operation of the proposed facility are anticipated by the Acoustic Report to result predominantly from air conditioning plant and additional traffic movements in surrounding streets generated by the Mental Health Unit. The Report makes recommendation to ensure the operation of the proposed facility complies with the relevant guidelines. These recommendations include:

- Selection of quiet plant and location of plant so as to minimise noise emissions to adjacent buildings;
- Minimisation of air conditioning duct velocities and in-duct attenuation as required;
- Noise enclosures and barriers as required.

Compliance with the relevant noise criteria will be established through onsite measurements taken at adjacent buildings.

5.3.3 Visual Privacy

As the majority buildings on the southern side of Derby Street directly opposite the site accommodate medical consulting rooms, the proposed development will not result in adverse privacy impacts to these building.

The separation between the site and residences further to the west on the opposite side of Derby Street, combined with shading devices over windows in the southern facade of the proposed building that preclude outlook to the west, will ensure the proposal does not result in privacy impacts to dwellings.

5.3.4 Visual Impacts and View Loss

As discussed in **Section 5.2.1**, proposed height, bulk and scale will not result in adverse visual impacts to Derby Street.

Referring to the photomontage of the southern frontage of the building at **Appendix E** (reproduced at **Figure 21**), the proposed southern facade to Derby Street will incorporate oxidised textured concrete panels in neutral colours that reflect those of masonry used in the residences on the opposite side of the street. The lattice work screens installed around the Derby Street entrance will provide for a varied facade treatment and visual interest.

Lattice with climbing plants will be installed on the southern facade and will soften the appearance of the building. The lattice and climbing plants will extend above the height of the wall enclosing the southern internal courtyard of the IMHU. By extending above the top of the enclosing wall, the lattice and plants will soften the appearance of the upper level of the building as seen from Derby Street. Planting in the planter box incorporated into the stairs from Derby Street will contribute positively to the visual amenity of the street.

Considering the consistency in colour of the oxidised concrete panels with surrounding residences, the softening of the building's appearance with climbing plants and the positive visual amenity contribution made by plantings, the proposal is acceptable in terms of visual impact. Further, it will improve the effects of development on the site on the Derby Street streetscape (shown in **Figure 5**).

There are no view corridors from Derby Street over the existing buildings on the site and views around the buildings are not of significance. The proposal will not, therefore result in any adverse loss of views from residences or the public domain. Views out of the hospital into Derby Street that may be reduced by the proposal are not of significance.

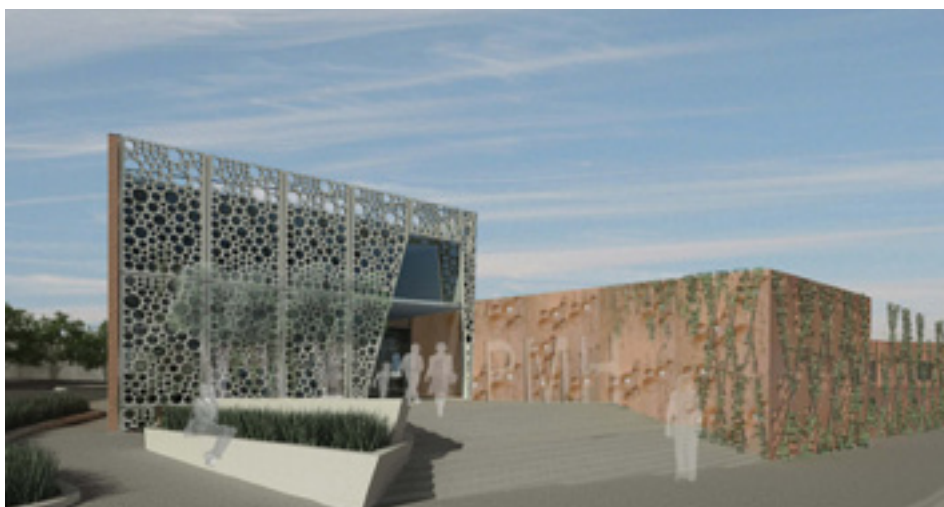


Figure 21 – Photomontage of the southern facade of the IMHU

Source: Woods Bagot Architects

5.3.5 Achievement of high level environmental and residential amenity

The positive contribution made to the Derby Street streetscape compared with the existing situation, as discussed in **Section 5.2.1** will result in an improvement in the amenity of the public domain of Derby Street.

Outlook from the proposed accommodation units to internal courtyards combined with access to landscaped open space also provided by the courtyards will imbue the proposed development with a high degree of internal amenity.

5.3.6 Wind Impacts

Considering the height of the proposed building (which is a maximum of 13.8m as set back off Derby Street), it is considered unlikely that it will cause any significant affect to existing wind conditions or create any new wind channelling that would result in adverse impacts to surrounding properties or to the amenity and safety of pedestrians on Derby Street and surrounding pedestrian circulation routes. In addition, trees to be retained to the east of the site and surrounding buildings will further act to shield or minimise wind impacts. It is noted that the proposal will replace in part buildings of a similar scale and setback off adjacent streets and internal thoroughfares.

The entry door to the IMHU from Derby Street is recessed into the facade of the building and so will be shielded from ground level winds. The main entrance from the internal access road to the north of the site is also shielded as it is recessed behind the building line. By locating the communal open space for the development within internal courtyards, the proposal promotes the shielding of such open space areas from any adverse surrounding wind conditions.

5.4 Transport and Accessibility

5.4.1 Traffic Generation

The Traffic and Parking Assessment by TEF Consulting at **Appendix H** considers intersection traffic counts, results of a site inspection, analysis of staff rosters, travel questionnaires of staff, patients and visitors, patient and visitor accumulation surveys and data from Hospital management relating to activities on the site.

The report includes data for anticipated morning and evening peak hour traffic volumes in streets surrounding the hospital following the completion of the East Block development. This data is included in **Table 5**, along with anticipated volumes on surrounding streets with the proposed IMHU in operation.

Table 5 – Existing traffic volumes on surrounding stress (including the approved East Block) compared with volumes resulting from the Project Application.

Road	Existing volume AM peak (inc. East Block) (veh/hour)	Existing volume PM peak(inc. East Block) (veh/hour)	Proposed volume AM Peak (veh/hour)	Proposed Volume PM peak (veh/hour)
<i>Derby Street</i>				
Eastbound	502	433	518	439
Westbound	187	355	191	359
<i>Parker Street</i>				
Northbound	1,328	1,262	1330	1266
Southbound	1,268	1,585	1275	1588
<i>Somerset Street</i>				
Northbound	257	210	258	211
Southbound	253	224	258	227

As demonstrated by **Table 5**, increases in traffic volumes on surrounding streets that will result from the proposed development will be minor, with the maximum increased being the addition of 16 vehicles per hour travelling east Derby Street in the morning peak period. Given the minor nature of the increases in traffic volumes that will result from the proposal, TEF Consulting concludes that additional traffic generated by the IMHU will not significantly affect the function of surrounding streets.

Intersection Performance

The TEF Consulting report includes an assessment of the performance of intersections surrounding the site following the completion of the East Block development. This assessment was completed using SIDRA software and is summarised in **Table 6**. **Table 7** summarises the performance of the subject intersections when the IMHU is in operation. A comparison of **Tables 6** and **7** concludes that the levels of performance of surrounding intersections in the morning peak period will not be affected by the proposal and will be either:

- Level of Service 'A', which is defined as 'Good'; or
- 'B', defined as 'Good with acceptable delays and spare capacity.

Average delays at the surrounding intersections in the morning peak will increase by a maximum of 0.9 seconds (this increase being at the Parker Street / Derby Street intersection).

In the evening peak period, levels of service at intersections remain at either 'A' or 'B', with the exception of the intersection of Parker and Derby Streets, which is reduced from 'B'/'Good' to 'C', defined as 'Satisfactory'. It is noted that this reduction in the level of service is accompanied by an increase of 0.9 seconds in the average delay at the intersection in the evening peak. This increase is considered minimal. TEC Consulting concludes that the effects of the proposal on surrounding intersections will be negligible.

Table 6 - Performance of surrounding intersections following the completion of the East Block

Intersection	AM Peak	Level of service	PM Peak	Level of service
	Average delay (seconds)		Average delay (seconds)	
	pre-development		pre-development	
Parker Street / Great Western Highway	27.2	B	44.3	D
Parker Street / Derby Street	24.3	B	28.2	B
Derby Street / Hospital Entrance	12.9	A	13.6	A
Great Western Highway / Somerset Street	14.7	B	20.2	B
Derby Street / Somerset Street	12.7	A	14	A

Table 7 - Performance of surrounding intersections with the operation of the IMHU

Intersection	AM Peak	Level of Service	PM Peak	Level of Service
	Average delay (seconds)		Average delay (seconds)	
	post-development		post-development	
Parker Street / Great Western Highway	27.2	B	44.7	D
Parker Street / Derby Street	24.6	B	29.1	C
Derby Street / Hospital Entrance	13	A	13.6	A
Great Western Highway / Somerset Street	14.7	B	20.4	B
Derby Street / Somerset Street	12.7	A	14.1	A

5.4.2 Car Parking

Existing Car Parking

Referring to the Traffic and Parking Assessment, following the construction of the East Block development, there will be a total of 1,358 parking spaces available on the Hospital campus. The distribution of parking areas currently on the site is shown in **Figure 18**. Changes to parking areas that will result from the East Block development are shown at Figure 3 of the TEF Consulting Report. The report notes that some informal parking also takes place on the site. The Assessment found that demand for off-street parking on the site currently peaks at around 2.00pm on weekdays, with 1,100 spaces occupied. Therefore, during times of peak demand, there are 258 car spaces (14% of the total) available on the site.

There are a total of 720 marked and unmarked on-street car spaces within walking distance of the site. As discussed in the Traffic and Parking Assessment, time restrictions apply to spaces within a short section of the southern side of Derby Street on the approach to the intersection with Parker Street. Other spaces within walking distance of the site are not time restricted. TEF Consulting found that peak demand for on-street parking surrounding the

site peaked 9.00am and 3.00pm, with 500 to 550 hospital related vehicles parked in on-street spaces.

Proposed Car Parking

As discussed in the Traffic and Parking Assessment, following the reconfiguration of car parking provision on site as part of the East Block development and this Project Application, a total of 1,274 spaces will be provided on the Nepean Hospital campus. This is a reduction of 84 spaces. The Assessment estimates that at least a further 100 spaces in surrounding streets will be available to staff and visitors to the hospital during times of peak car parking demand at the hospital.

As a result of the East Block and IMHU developments, the total number of employees present on the Nepean Hospital at any one time will increase from 1,600 to 1,833. This increase includes an additional 51 employees on the IMHU site over the existing numbers of staff at the maintenance depot and SWAHS offices on the site.

Comparison of the Proposal with Guideline Car Parking Rates

Applying the rate of 1 space per every employees plus one space per 3 beds recommended by DCP 2006 to the Nepean Hospital campus with the East Block and IMHU developments in operation, the Traffic and Parking Assessment finds that 779 car spaces will be required on the campus. As 1,274 spaces will be provided at the campus, provision of car parking at the hospital site will exceed Council's requirements by 495 spaces (or 38%). The proposal, as part of the overall redevelopment of the hospital, therefore complies with Council's requirements. The TEF Consulting assessment concludes that the proposal is satisfactory in relation to the provision of car parking to meet additional demand generated by the development.

Ongoing Parking Provision

While the quantum of parking to be provided across the hospital campus is considered adequate and is consistent with Council's requirements, car parking provision on the campus will be subject to reconfiguration and upgrading as part of the ongoing development of the hospital. Such upgrades and reconfiguration will be undertaken in accordance with a whole of campus Car Parking Strategy, which will be prepared in order to ensure the adequate and coordinated provision of parking in the long term. The strategy will be tied to future stages of the development of the hospital. It will include consideration of:

- Potential additional car parking spaces;
- Measures to improve efficiency of access and practical capacity;
- Additional measures to discourage car use; and
- Provision of a Work Place Travel Plan to promote the use of public transport by hospital staff.

The Car Parking Strategy is subject to the statements of commitment in **Section 6.0** of this report.

Car parking demand on the hospital and the adequacy of spaces to meet that demand will be subject to review 18 to 24 months following the commencement of IMHU operations.

This will include surveys of travel modes and car parking patterns of staff, patients and visitors and the identification of the efficiency of the parking demand measures discussed in the TEF Consulting Assessment at **Appendix H**. The findings of the 18 to 24 month review will inform the ongoing development of the Car Parking Strategy.

Recommendations for Reducing Car Usage

The Traffic and Parking Assessment recommends measures to promote increased use of public transport throughout the hospital with the objective of reducing traffic generation and parking demand. These recommendations include:

- The provision of 10 staff and 5 visitor bicycled parking spaces which, as discussed in **Section 3.6**, are to be provided as part of the proposed development;
- Upgrading of bus stops and the provision of signage and maps on the site to direct people to bus stops and the Kingswood Railway station;
- Improvement of employee induction programmes in relation to information regarding public transport and the provision of fare subsidies
- Provision of a Transport Action Guide, a user friendly leaflet type document to inform visitors and staff of public transport services; and
- Promotion of car pooling.

Loading and Servicing Arrangements

The Traffic and Parking Assessment concludes that loading and servicing arrangements for the proposed building are satisfactory.

5.5 Environmentally Sustainable Development

The measures set out in the Environmental Concept Design Report by Built Ecology/WSP Lincolne Scott at **Appendix G** and discussed **Section 3.5** will reduce energy and water consumption of the proposed development compared with a base case in which such measures are not implemented. The Lincolne Scott report assesses the proposal against the AGBR's Green Star Health Care Tool V1. In addition to energy and water efficiency, the tool considers other metrics for the overall sustainability of developments including the availability of public transport, thermal comfort and internal amenity, use of building materials with low embodied energy and potential air and water pollution.

The Green Star tool awards points for the implementation of technical and other measures to achieve more sustainable development outcomes. Points scored equate to a star rating. Developments with a score of 45 – 59 points are awarded a 4 star rating, which represents 'Best Practice'.

The Built Ecology/WSP Lincolne Scott report applies the Green Star tool to the IMHU development and concludes that it is capable of scoring 51 points. The 4 star 'Best Practice Rating' therefore applies to the proposal. Accordingly, the proposal is considered satisfactory in terms of ESD.

5.6 Contamination and Geotechnical

5.6.1 Contamination

As discussed in **Section 3.9**, and the Phase 1 and 2 Environmental Site Assessment by Golder Associates at **Appendix J**, the levels of contamination in soil samples from the site are below the applicable assessment criteria adopted by DECCW. The Golder Associates has confirmed that the Phase 1 and 2 Assessment has been prepared in accordance with the requirements of SEPP 55. The Assessment concludes that the site is considered to have a low likelihood of extensive soil contamination and a low risk to human health.

Golder Associates have also confirmed that, while asbestos impacts fill is present on the site, respirable fibres were not identified in laboratory tests. All material removed from the layer of fill on the site found to be impacted by asbestos will be inspected by an appropriately licensed contractor. Any asbestos impacted material will be removed and disposed of in accordance with

WorkCover requirements. Alternatively, asbestos containing material may be retained on site, providing it is managed to limit potential exposure

Accordingly, Golder Associates concludes that, conditional the appropriate removal or management of any asbestos impacted fill material encountered on the land, the site is suitable for the proposed use.

5.6.2 Geotechnical

A Geotechnical Assessment has been undertaken by Golder Associates and which included laboratory testing of borehole samples across the site is included at **Appendix Q**.

The Geotechnical Assessment found that that:

- Based on soil landscape mapping, natural soils on the site are a high soil erosion hazard and require suitable stormwater management measures to be during construction;
- The Salinity Hazard Map of Western Sydney (produced by the then Department of Planning and Natural Resources) indicates that the majority of the southern portion of the Nepean Hospital is subject to saline soils. Site investigations found saline soils on the IMHU site; and
- Highly sodic soils were found on the site.

In light of the above findings, Golder Associates recommend that:

- Soil salinity be taken into consideration in the design and construction of the development, particularly with regard to deeper built structures;
- Steps should be taken to minimise the exposure of sodic soils to surface runoff.

The above recommendations will be implemented in the detailed design of steel and concrete elements where appropriate (at construction certificate stage) and through appropriate erosion and sediment control and stormwater management measures during construction.

The Assessment considers subsurface conditions and their implications for the construction of the proposed building. Accordingly, Golder Associates makes recommendations for construction which will be implemented.

5.7 European and Aboriginal Heritage and Archaeology

5.7.1 Assessment of Heritage Significance

There are no known or listed heritage items, or European or Aboriginal archaeological items, on the Hospital campus. Further, there are no items situated within the campus or the immediate area which are currently listed on the State Heritage Register (SHR) or the subject of an Interim Heritage Order.

Similarly, the campus and the immediate area does not include any places currently listed on the National Heritage List (NHL), the Commonwealth Heritage List (CHL) or the Register of the National Estate (RNE). There are a handful of locally listed items in the generally vicinity of the site, but are not directly affected by the proposal.

An investigation was undertaken by Archaeology and Heritage Management Solutions Pty Ltd (AHMS) to assess the potential for archaeological items of significance to be uncovered on the site as part of the recently approved East Block Project Application. A new covering letter (with reference to the current application) by AHMS is provided to confirm that the findings of the earlier report are still current is provided at **Appendix L**.

In relation to archaeology, the report indicates that “Based on the pattern of historic occupation in the Kingswood area, it is likely that any earlier occupation (than the extant hospital) would have focussed along the Great Western Highway and have fronted that land and/or been associated with a particular industry, or agricultural/pastoral usage... these activities did not occur within the footprint of the current Study Area.” (AHMS, 2009:18)

With respect to Aboriginal archaeology, Aboriginal occupation is generally most intensive in locations within 200 metres of creeklines.

As the hospital site is over 400 metres from a low order, semi-permanent creekline, and the nearest higher order creekline is over 3.5 kilometres away (Werrington Creek to the east) and the Nepean River is approximately 3.5 kilometres from the site to the west, AHMS concludes that “the likelihood of extensive or significant archaeological materials in this location is low to nil” (AHMS, 2009:16).

The investigation indicates that the Hospital campus has been significantly modified as part of previous Hospital development since the 1950s, including excavation and filling works, and installation of underground services. The area where the new Mental Health Unit is to be sited is also highly modified.

The Archaeology Report concludes that “there are no known historical archaeological relics or sites and there is no potential for meaningful historical archaeological relics or sites” and “there are no known Aboriginal objects or sites and there is negligible potential for Aboriginal archaeological sites or objects to be found”. It should be noted that the ‘Aboriginal Garden’ is not a registered Aboriginal site nor a listed item. The garden serves as a remembrance garden with an Aboriginal motif as a centre-piece to its design. The garden is in itself a planted area and will be relocated consistent with staff consultation previously undertaken.

Therefore, consistent with recommendations from the Archaeology Report, no further investigation is proposed prior to development as the likelihood of the site containing any artefacts is minimal. However, should an item of archaeological significance be found during excavation or construction, work would cease immediately, the site would be closed and the Heritage Office and/or DECC (National Parks and Wildlife Service) would be informed. The draft Statement of Commitments includes this action.

5.8 Drainage and Water Cycle Management

5.8.1 Water Quality and Quantity

As discussed in the Stormwater Report by Mott McDonald at **Appendix I**, a detention volume of 85m³ is required in order to ensure that post-development stormwater flows do not exceed pre-development flows. In accordance with this recommendation, the two detention tanks to be installed in the south eastern and south western corners of the site are a total of 85m³.

In addition to the detention tanks, the 50m³ retention tank will be installed on the site to capture rainwater for use in toilet flushing and irrigation. The retention tank has the potential to contribute towards the reduction in the volumes of stormwater runoff from the site during storm events.

The Report concludes that the existing stormwater system on the site downstream of the proposed building has sufficient capacity to cater for the stormwater flows from the building. Council’s stormwater system also has sufficient capacity to accommodate runoff from the proposed development. The installation of GPTs to filter water entering detention tanks will remove ensure the removal of larger particulars from rainwater.

Overland flow paths to the east and west of the site are sufficient to ensure that the proposed development will not be adversely affected by storm events up to the 100 year Annual Recurrence Interval storm event. Accordingly, the proposed development is satisfactory with regard to water quality and quantity.

5.9 Flooding

The DGRs for the project require consideration of the NSW Floodplain Development Manual (2005) as well as the potential effects of climate change, sea level rise and increase in rainfall intensity.

The NSW Floodplain Development Manual applies to land that is flood liable and seeks to manage flood liable or flood prone land. Consultation with Penrith Council has confirmed that the site is not flood liable or flood prone.

The site sits at a natural high point between two major catchments (the Nepean River to the west and Werrington Creek / South Wianamatta Creek to the east) which is demonstrated on **Figures 22** and **23** below.

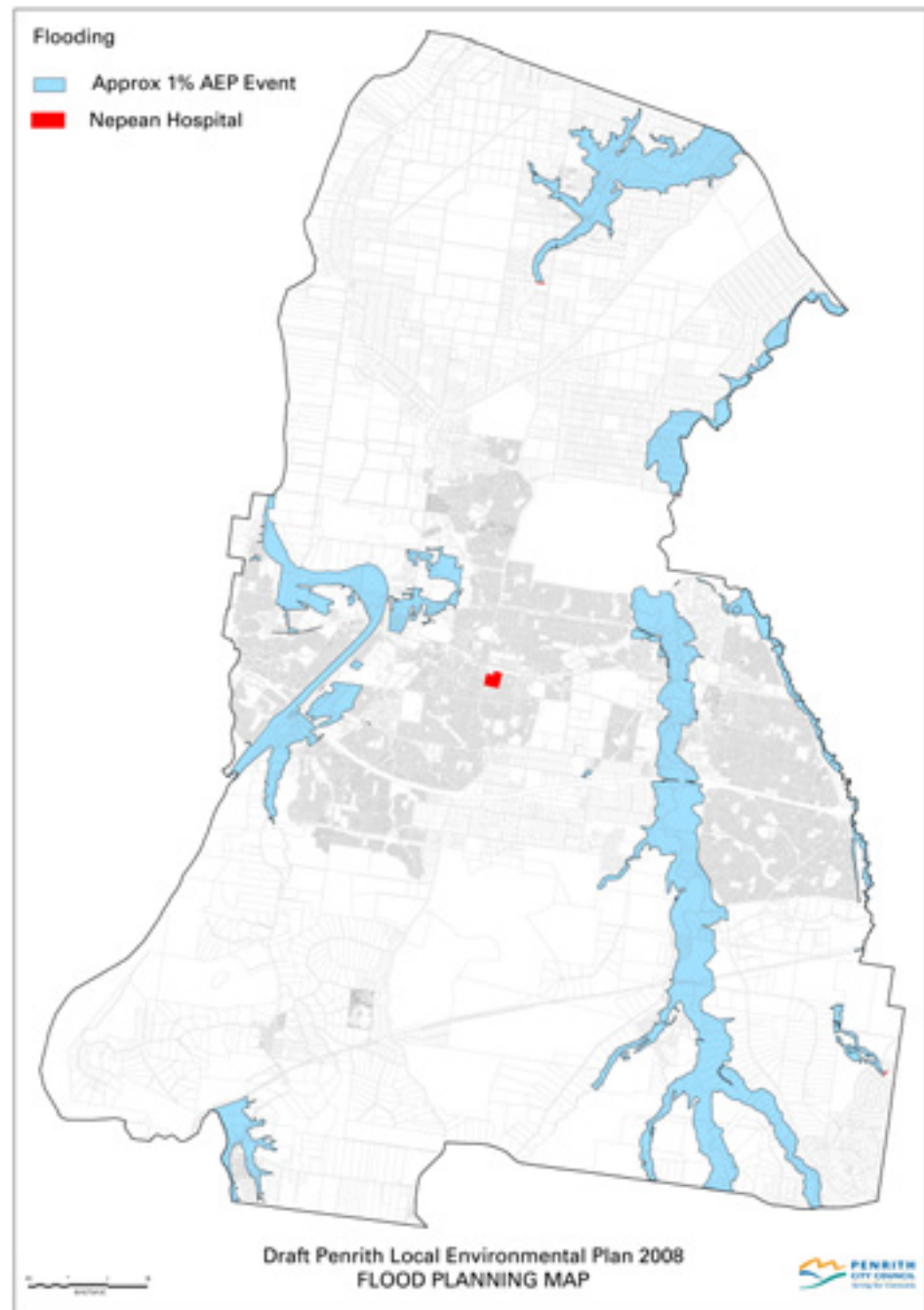


Figure 22 - Penrith LEP 2008 Flood Planning Map

Source: Penrith City Council

Further, Council's webpage also provides a map showing the highest recorded flood event (in 1867). Again, the site is located well outside of the impacts of this event. See **Figure 23** below.



Figure 23 – Extent of 1867 flood event within the Penrith LGA

Source: Penrith City Council and SES Floodsafe

The development site sits at a level of about 55m AHD to 57m AHD – see survey plans at **Appendix C**. JBA understands that the Nepean River floodplain generally sits at a variable level of 25m-28m AHD, with normal water levels within the nearby Penrith Lakes Scheme at between 10m AHD and 18m AHD. The Penrith Lakes Scheme can be defined as a complex water and flood management system devised to control and manage water flow through this part of the floodplain. The Scheme's lakes are interconnected through a series of culverts, lake-to-lake and lake-to-river weirs. In a 1:100 year ARI event the flood level is anticipated to range between 21.4m AHD and 25.1 AHD (source: Maunsell/Aecom Part 3A EA for the Nepean River Pump and Pipeline Project (August 2006) page 68).

Given the development site's elevation and high location between catchments, particularly the Nepean River floodplain, (being some 30m AHD higher than a 1:100 year ARI event) it is extremely unlikely that the site will be affected by a significant flood event, nor by the impacts of increased rainfall or sea level rise as a result of climate change. The site is situated well inland away from any coastal processes arising from sea level rise, including any king tides.

5.10 Utilities

Potable Water

The Hydraulic Services Utilities Report at **Appendix D** is informed by consultation with Sydney Water and finds that the development can be serviced with potable water via a connection to the 100mm main in Derby Street and 150mm main in Somerset Street, with an extension into the site (as discussed in **Section 3.8.1**).

Water for use by NSW Fire Brigade if required could be provided by the above mains, with any shortage of flow being made up by the installation of storage tanks in accordance with Building Code of Australia (BCA) standards.

In order to reduce demand for potable water, the Hydraulic Services Report makes recommends for the installation of an on-site potable water storage tank with a capacity of 10,000 litres installed on the roof of the building, rainwater harvesting tanks for irrigation and toilet flushing purposes and the installation of water efficient fixtures and fittings. These recommendations will be implemented.

Sewer

As discussed in the Hydraulic Services Report, which is informed by consultation with Sydney Water, the proposed development can be serviced with sewer utilities by a connection to the 300mm diameter sewer main in Parker Street. Sewer infrastructure will be designed in accordance with all relevant guidelines and standards, including Australian Standards.

Gas

The Hydraulic Services Report at **Appendix D** finds that, on the basis of consultation with Jemena Gas, the proposal is capable of being serviced with gas from the one of two secondary 1,050kPa gas mains located in Parker and Derby Streets. The site could connect to the 100mm 1,050kPa main in Parker Street or be provided with its own incoming supply and meter from Derby Street.

Electricity

As discussed in **Section 3.8.4**, the Electrical Utilities Report by WSP Lincolne Scott Australia finds that the existing 500kVA electricity substation requires replacement in order that the proposal can be serviced. WSP Lincolne concludes that the proposal will result in a demand of 600kVA and recommends that the development will be capable of being serviced if a new substation of 1MVA is installed. The new substation will be installed adjacent to the new building to the east, as indicated in the WSP Lincolne Scott report at **Appendix D**

WSP Lincolne Scott's assessment of the serviceability of the site is based on detailed consideration of existing electricity infrastructure on and serving the site with consultation with Energy Australia has yet to take place. Such consultation will be undertaken following the approval of the Project Application and prior to the issue of a Construction Certificate for the project.

Telecommunications

As discussed in Electrical Utilities Report, the new building is capable of being serviced with telecommunications via the existing Hospital PABX system and Main Communications Room.

5.11 Flora and Fauna

The Hospital Campus

A Flora and Fauna Assessment by Total Earth Care was carried out for the Part 3A application for the East Block building and considered the entire hospital campus as its study area. Total Earth Care identified Shale Plains Woodland as being present at several locations across the hospital campus. Shale Plains Woodland is a subset of Cumberland Plains Woodland (CPW), which is a threatened species under the *Threatened Species Conservation Amendment Act 2002* (TSC Act) and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The CPW identified comprised mainly of mature canopy trees characteristic of the community (including *Eucalyptus moluccana*, Grey Box and *Corymbia maculata* Spotted Gum). Total Earth Care concluded that, due to significant modification of the vegetative community, the likelihood that species characteristic of CPW will regenerate is minimal. Accordingly, no threatened flora species or populations were identified on the campus.

Six species of birds were identified on the site and are generally typical of urban, peri-urban and surrounding natural areas within the Sydney Basin BioRegion. These species are widespread and common or abundant within their ranges. No threatened fauna species or populations were identified on the subject site. The campus was found to have a poor level of fauna habitat value.

The IMHU Site

Total Earth Care undertook a further Flora and Fauna Assessment, the study area of which was restricted to the IMHU site (**Appendix M**). The IMHU Assessment found that vegetated areas of the site are generally dominated by native/exotic landscape areas including a fragmented canopy of planted and remnant eucalyptus species. Vegetation to be removed from the site as part of the development comprises 13 native and exotic trees and some densely planted shrubs and groundcover species, mainly within landscaped garden beds.

Trees of species characteristic of CPW were found to be present on the site, some of which are to be removed as part of the proposal. Assessments of significance in these areas by Total Earth Care have concluded that the potential impact of the proposed development is not significant and therefore a Species Impact Statement (SIS), or a Referral to the Commonwealth Environment Minister, is not required.

An area of CPW has been identified in the south eastern corner of the site during previous site investigations. However, ground truthing by Total Earth Care found that there were, in fact, no species characteristic of CPW in the south-eastern corner of the site. Total Earth Care considered that the previous identification of CPW in the south eastern corner was made on the basis of the projecting canopy of a stand of trees the east of the site that belong to the ecological community projects over the IMHU site. The stand of trees adjacent to the site that are characteristic of CPW (*Eucalyptus moluccana* (Grey Box) and *Corymbia maculata* (Spotted Gum)) will be retained and assessed by arborists prior to construction.

Total Earth Care found a planted *Syzygium paniculatum* (Magenta Lily Pilly) located within the commemorative garden to be relocated. *Syzygium paniculatum* is currently listed as vulnerable under the TSC Act EPBC Act. An assessment of significance has concluded that this plant is not significant, and therefore a Species Impact Statement is not required for its removal.

No locally occurring threatened flora species were identified on the site. No threatened fauna species were identified on the site.

Mitigation Measures

Total Earth Care concluded that potential impacts of the current proposal may include loss of shade and shelter resulting from tree removal and weed invasion and sedimentation resulting from the disturbance of soil. The Assessment notes that, in relation to loss of shade or shelter, the absence of a mid-storey and understorey means shade and shelter is already minimal. Total Earth Care recommends the following measures to mitigate the above impacts:

- Appropriate tree protection measures to be implemented during construction;
- The offsetting of the loss of the native plant species through landscaping or revegetation works within the Hospital campus that incorporate locally indigenous plant species characteristic of CPW. Offsets should result in at least two species planted for each one removed. If no suitable area for offsets is present within the hospital site, an alternate location within the locality (such as a Council reserve) should be considered;
- Appropriate sediment and erosion controls;
- Temporary fencing to exclude the passage of native fauna through construction or storage compounds to minimise opportunities for fauna to shelter in machinery or materials stockpiles;
- The cleansing of machinery of soil and debris before bringing it on site to reduce the potential spread of weeds;
- An assessment of the feasibility of transplanting the planted *Syzygium paniculatum* (Magenta Lily Pilly) located within the memorial garden; and
- Making good of the site following construction, with no excess construction materials or debris to remain on the site.

Total Earth Care's assessment of the IMHU site concluded that, being highly modified, it lost many of the natural habitat features and resources important to the maintenance of native fauna diversity and life cycles. Accordingly, the site has a poor level of fauna habitat value. While the proposal includes the removal of trees, including those characteristic of CPW, mitigation measures will aim to maintain or improve biodiversity values within the locality. The proposal will not reduce the long-term viability of species or ecological communities, is unlikely to significantly accelerate the extinction of species or ecological communities and will not adversely affect critical habitat.

5.12 Waste Management

The Sydney West Area Health Service (SWAHS) has existing policy that covers all SWAHS Hospitals, including the Penrith / Nepean Hospital, which also extends to the new building proposed under this development.

As the proposed development works are for the redevelopment of the existing Hospital, procedures for handling and storing waste are already in place and enforced by Hospital Management. Waste management is coordinated across the Sydney West Area Health Service (SWAHS) and is subject to the Waste Management Policy Manual - see **Appendix O**.

Further, as the proposed development represents an expansion of services provided at the Hospital, there will be increased waste associated with the operation of the facilities. It is important that adequate waste management procedures are in place to minimise any potential environmental impacts.

Sydney West Area Health Service (SWAHS) is committed to reducing to the minimum level possible the waste generated in the normal course of pursuing a high standard of health care. To meet this commitment SWAHS undertakes the following courses of action:

- Nomination of a Waste Coordinator to coordinate and oversee the Waste Management Program across SWAHS.
- Nomination of an officer at each unit of SWAHS to be responsible for the day-to-day management of waste activities, waste data collation and record keeping.
- Nomination of a committee that is responsible for waste minimisation strategies, monitoring and improving waste performance.
- Promotion and display of a Waste Commitment that clearly states SWAHS commitment to waste minimisation.

Implementation of a Waste Policy Manual that includes, but is not limited to:

- Definition of waste streams.
- Waste responsibilities.
- Legislative guidelines.
- Purchasing Policies.
- Waste tracking and monitoring systems.
- Correct segregation and disposal procedures.
- Transporting and storage requirements.
- OH&S waste related issues.
- Educational and promotional programs.

The Waste Management Policy Manual is based on a wide range of waste guidelines and has incorporated waste legislative requirements.

SWAHS has implemented various waste systems that aim to meet the expected outcomes below:

- Compliance with legislative and licensing requirements by ensuring that employees of SWAHS are aware of the guidelines and apply these as part of their normal work routine.
- Standardisation of Waste Management Programs across SWAHS facilities to ensure best practice systems are in place.

- Improved waste performance through the implementation of annual waste minimisation strategies that support efficient recycling programs and cost efficiencies.
- Be recognised as a waste leader by both internal and external organisations including the Australian Council on Healthcare Standards (ACHS), NSW Department of Health (DoH) and Occupational Health Safety and Risk Numerical Profile (OHS&R).
- Compliance with the NSW Health OHS&R Numerical Profile Indicative Evidence 2000.
- Purchasing policies that comply with the Waste Reduction and Purchasing Policy (WRAPP).
- All employees are educated on waste management and can demonstrate that knowledge through correct segregation and disposal methods.
- An effective promotional program that continually improves waste awareness and enhances employee involvement.

The operation of the new and refurbished facilities will be subject to standard Hospital procedures in regards to waste management, which include guidelines for meeting legislative requirements. Waste management is coordinated across the Sydney West Area Health Service (SWAHS) and is subject to the Waste Management Policy Manual, attached at **Appendix O**.

In terms of construction waste, the project will be aiming for a minimum 80% recycling of construction waste which is line with the Greenstar Healthcare v1 tool. All waste will be separated into different streams on site by the Contractor.

5.13 Hazards

Given the nature of the proposal, a new Mental Health Unit as part of the broader operations of a hospital, the development is not subject to the provisions of SEPP33 principally as it is not a 'potentially hazardous industry' or a 'potentially offensive industry' (as defined by the SEPP). A pollution control licence or approval is not required nor is the preparation of a Preliminary Hazard Analysis. The proposal will not result in the potential to either pollute or present a hazard to people, property or the environment – as classified under the terms of SEPP33.

The proposed storage, use and management of materials which may be considered to be hazardous or offensive will be consistent with existing NSW Health and SWAHS policies and guidelines. It is not expected that any hazardous or offensive materials will be stored, used or managed on-site, other than those used in the treatment of patients on-site.

5.14 Building Code of Australia

Referring to the Building Code of Australia (BCA) Assessment at **Appendix R**, the proposed development falls into BCA classifications 5 (administration and consultation) and 9a (healthcare). The BCA Assessment concludes that the proposed development is capable of satisfying the requirements of Sections B to F of the BCA that relate to structural engineering, health and amenity, fire resistance and compartmentation, access and egress, fire safety measures, health and amenity and energy efficiency. This compliance is subject to the provision of more detailed designs and specifications relating to the development and the implementation of design recommendations set out in the BCA Assessment.

5.15 Equitable Access

The Access Report by Accessibility Solutions Pty Ltd at **Appendix S** assesses the proposal in terms of equitable access into the IMHU building in accordance with the relevant provisions of the Disability Discrimination Act 1992 (DDA), the BCA and DCP 2006.

The Access Report finds that the proposal will provide accessible linkages to the main entrance to enable equitable access. Accessible setdown and pickup space at the main entrance will ensure appropriate safe, equitable and dignified access to the building. Lifts serving all levels will ensure appropriate access to satisfy BCA and DDA requirements, with corridors providing ample opportunity for two people to pass one another in wheelchairs. Two accessible parking spaces will be provided adjacent to the main entrance to ensure equitable access for people with mobility impairments. An ambulance drop-off point to the north of the building will also provide appropriate access.

The Access Report notes that the southern entrance from Derby Street will be accessible only by stairs, due to the topography of the site. While the stairs are not accessible by some mobility impaired people, the report finds that the proposal is nonetheless acceptable, given the close proximity to the stairs of the accessible main entrance and parking/drop-off point.

Accessible rooms and ensuite bathrooms will enable appropriate access for wheelchair users. Offices, conference room and associated areas shall be readily accessible in accordance with the relevant provisions and standards.

The Access Report concludes that the proposal will provide appropriate equitable access for patients, residents, staff and visitors in a manner that promotes appropriate health and living outcomes consistent with the DDA, BCA and DCP 2006.

5.16 Council and Agency Consultation

Extensive and ongoing consultation to inform the project is being undertaken with key agencies and stakeholders particularly within NSW Health, the SWAHS and the Nepean Hospital. Stakeholders that have been so far included in consultation include:

- Medical and health professionals, in particular those involved in mental health;
- SWAHS and hospital administration staff;
- Hospital and health service user groups;
- Executive and senior SWAHS personnel;
- Hospital and SWAHS operations and facilities management staff;
- Hospital / SWAHS Project Planning Teams and Development Committees;
- project management staff;

Consultation with the above stakeholders has involved correspondence, meetings and forums with Nepean Hospital staff, which have been held on a bimonthly basis.

There has been consultation at an officer level with Penrith City Council on at least two separate occasions with respect to the proposal. These meetings occurred on 16th December 2009 and 11th February 2010.

Further to this consultation, several of the specialists responsible for the preparation of the technical reports in support of this EAR have engaged in various consultations with relevant stakeholders, including the relevant utility providers.

A Community consultation strategy to include residents of the surrounding area and other community stakeholders will be devised, if required.

6.0 Draft Statement of Commitments

In accordance with the Director-General's Environmental Assessment Requirements, the proponent is required to include a Draft Statement of Commitments in respect of environmental management and mitigation measures on the site. The following are the commitments made by NSW Health Infrastructure to manage and minimise potential impacts arising from the project.

6.1 General Works

Notwithstanding any other commitment (condition of approval), the approval for the Project Application permits separate construction certificates and occupation certificates to be issued for the development approved by the consent in stages, provided that all commitments (conditions of consent) relevant to the development incorporated within each stage have been complied with prior to the release of the construction certificate or occupation certificate for that stage.

6.2 Construction Management

The following plans will be implemented during the construction phase of the development:

- Construction Environmental Management Plan (CEMP);
- Construction Traffic Management Plan (co-ordinated with the current East Block development);
- Waste Management Plan;
- Sediment and Erosion Control Plan; and
- Construction noise and vibration management control plan.

Trees to be retained in proximity to the area of works will be appropriately protected during construction. Measures will be included in the CEMP to prevent impacts on flora, such as the introduction of weeds from machinery brought on to the site, or the creation of an environment where weeds may flourish.

Soil Salinity and Erodible Soils

The following recommendations in the Geotechnical Report at **Appendix Q** will be implemented to ensure that soil and subsurface conditions do not result in structural or environmental impacts:

- Soil salinity will be taken into consideration in the design and construction of the development, particularly with regard to deeper built structures;
- A Salinity and Sodic Soils Management Plan will be prepared and implemented in the proposed construction to ensure no structural or environmental impacts result from the Project Application development; and
- Stormwater management and erosion and sediment control measures implemented on the site will ensure that highly erodible soils are adequately managed.

6.3 Car Parking

A campus wide Car Parking Strategy will be prepared in order to ensure the adequate and co-ordinated provision of parking in the longer term. The strategy will be tied to future stages of the development of the hospital and will include consideration of potential additional car parking spaces, displaced parking spaces, and reconfigured parking areas as well as measures to improve efficiency of access and practical capacity, and measures to discourage car use - including potential for a Work Place Travel Plan to promote the use of public transport by hospital staff.

Car parking demand on the hospital and the adequacy of spaces to meet that demand will be subject to review 18 to 24 months following the commencement of IMHU operations. The findings of the 18 to 24 month review will inform the ongoing development of the Car Parking Strategy.

6.4 Flora and Fauna

- A stand of *Eucalyptus moluccana* (Grey Box) and *Corymbia maculata* (Spotted Gum) adjacent to the site that are characteristic species of the Cumberland Plain Woodland vegetation will be retained and assessed by arborists prior to construction.
- The loss of the native plant species through landscaping will be offset through the planting of locally indigenous plant species characteristic of CPW. Offsets will result in a least two species planted for each one removed. If no suitable area for offsets is present within the hospital site, an alternate location within the locality will be considered.
- Temporary fencing will exclude the passage of native fauna through construction or storage compounds to minimise opportunities for fauna to shelter in machinery or materials stockpiles
- The cleansing of machinery of soil and debris will take place before bringing machinery on site to reduce the potential spread of weeds.
- An assessment of the feasibility of transplanting the planted *Syzygium paniculatum* (Magenta Lily Pilly) located within the memorial garden will be undertaken.

6.5 Geotechnical Conditions

Recommendations in the Geotechnical Report at **Appendix Q** for construction methods appropriate to the geotechnical conditions on the site will be implemented.

6.6 Construction Noise

- Recommendations set out in the Acoustic Report at **Appendix N** for the management of noise levels resulting from the proposed construction works will be implemented.
- Construction working hours will be restricted to those set out in the Interim Construction Noise Guideline published by the Department of Environment, Climate Change and Water (DECCW) which are:
 - Monday to Friday 7 am to 6 pm; and
 - Saturday 8 am to 1 pm.
- Recommendations in the Acoustic Report at **Appendix N** for the management of noise levels resulting from the proposed operation of the development will also be implemented. These include selection of quiet plant and installation of noise enclosures and barriers as required.

6.7 Environmentally Sustainable Development

- Technical measures set out in the Environmental Concept Design Report at **Appendix G** will be implemented in the construction and operation of the development. Accordingly, the development will be capable of achieving a 4 Star Green Star Health Care rating.
- An Integrated Water Management Plan will be prepared for the IMHU (as discussed in the Environmental Concept Design Report **Appendix G**). The Plan will implement efficiency solutions that will reduce potable water demand.

6.8 Stormwater Management

Volumes of rainwater runoff from the development that flow into Council infrastructure will not exceed pre-development flows.

6.9 Site Remediation

Fill material identified by the Stage 1 and 2 Environmental Assessment at **Appendix G** as having the potential to contain asbestos will be inspected by an appropriately licensed contractor to determine the extent to which it may be impacted by asbestos prior to removal from the site. Any material identified as being impacted by asbestos will be removed and disposed of by an appropriately licensed contractor and in accordance with WorkCover requirements.

6.10 Utilities

- Liaison will continue and necessary approvals obtained from all relevant service providers in regard to the provision of utility services to the site;
- Water for use by NSW Fire Brigade, should it be required, will be provided in accordance with the relevant BCA standards.
- An 10,000 litre potable water storage tank with sufficient capacity to supply water to the IMHU for up to 3 hours will be installed on the site. The purpose of the tank is to ensure a continuous supply of water to the facility, should mains supply be interrupted for any period;
- A rainwater retention tank to provide water for toilet flushing and irrigation will also be installed on the site with a capacity of 50m³.
- A 1MVA electricity substation will be installed on the site to meet additional demand for electricity resulting from the proposal.

6.11 Consultation

This Project Application commits to ongoing consultation throughout the process as considered relevant and that builds upon the findings and recommendations of the Project Application and supporting appendices.

A Stakeholder Consultation Strategy will be prepared and implemented throughout the detailed design and construction stage.

6.12 Aboriginal Heritage

In the event that any historical or Aboriginal relics are uncovered during excavations, all excavation and disturbance to the area will stop immediately and the Department of Environment and Climate Change will be informed in accordance with the *National Parks and Wildlife Act 1974*.

6.13 BCA and Accessibility

BCA

Development will be compliant with the BCA 2010 and in accordance with the recommendations outlined within the BCA Report at **Appendix R**.

Accessibility

Development will comply with the recommendations of the Access Report by Accessibility Solutions at **Appendix S** and will comply with the relevant provisions of the DDA and applicable Australian Standards.

Fire Safety

Constructing of the building will be in accordance with the BCA, and where required to developing alternative solutions which comply with the relevant performance requirements of the BCA 2010.

Energy Efficiency

Development will at a minimum comply with Part J of the BCA 2010.

6.14 Operational Waste Management

Waste management policies set out in the SWAHS Waste Management Policy Manual (**Appendix O**) will be implemented on the site.

7.0 Conclusion

This Project Application seeks approval for an Integrated Mental Health Unit that will provide patient-centred recovery and support care with an interdisciplinary team approach and accommodation for 64 beds. It will serve the growing demand for mental health services that will result from an anticipated increase of 24% in the population of the Nepean Hospital's catchment to 551,500 by 2036.

Locating the proposed facility within the Nepean Hospital will allow the continuing consolidation and upgrade of medical and health services at a major teaching hospital. The proposed location of the building will also promote cost efficiencies through the cross-utilisation of resources and allow for the provision of a range of medical and health services in an integrated manner.

By furthering the overall development of the Nepean Hospital, the proposal will support Penrith as a 'Regional City', consistent with the DoP's Metropolitan Strategy and draft North West Subregional Strategy. It will also serve the draft Subregional Strategy's targets for employment growth. NSW State Plan objectives relating to health care provision will also be fulfilled by the proposal, in particular those relating to improving outcomes in mental health through the provision of new facilities.

The site is of a sufficient size to accommodate the proposed facility and does not immediately adjoin any residential properties. As demonstrated in this report, the building will not result in any adverse impacts to residential amenity and is consistent with the desired future character of the street in which it is located.

There is no significant change anticipated to existing traffic volumes, peak flows, intersection performance or parking demand.

The Draft Statement of Commitments has been prepared to inform the detailed design of the development and manage construction and on-going environmental impacts. In light of the benefits of the proposed development and the absence of any adverse environmental impacts, we have no hesitation in recommending this Project Application be approved.