# Project Application
# Environmental Assessment Report

## Sydney Children's Hospital

High Street, Randwick

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

November 2010 ■ 10300

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JBA Urban Planning Consultants Pty Ltd operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by: Robert Stark

Signature  Date 03/11/10

This report has been reviewed by: Vivienne Goldschmidt

Signature  Date 03/11/10

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# Statement of Validity

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

| | |
|---|---|
| **Environmental Assessment prepared by** | |
| Name | Vivienne Goldschmidt |
| Qualifications | BA (Hons) MPIA CPP |
| Address | Level 7, 77 Berry Street, North Sydney |
| In respect of | Project Application for a Hospital Building |
| **Project Application** | |
| Applicant name | Health Infrastructure - NSW Health |
| Applicant address | Level 8, 77 Pacific Highway, North Sydney |
| Land to be developed | Sydney Children's Hospital, High Street, Randwick |
| Proposed development | Hospital Building |
| **Environmental Assessment** | An Environmental Assessment (EA) is attached |
| Certificate | I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge:<br>▪ It is in accordance with the Environmental Planning and Assessment Act and Regulation.<br>▪ It is true in all material particulars and does not, by its presentation or omission of information, materially mislead. |
| Signature |  |
| Name | Vivienne Goldschmidt |
| Date | 3 November 2010 |

# Executive Summary

This Environmental Assessment Report in relation to the development of a new building for the Sydney Children's Hospital (SCH) at Randwick is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* and State Environmental Planning Policy (Major Development) 2005 (the Major Development SEPP). The proponent is Health Infrastructure - NSW Health.

The SCH is located on High Street, Randwick, in the northern part of the Randwick local government area (LGA), within the north western portion of the Randwick Health Campus. The area of the site being developed is approximately 1,890m$^2$.

## Project Outline

The proposed development involves the construction of a five level hospital building (and associated car parking and landscaping) of approximately 4,660m$^2$ floor space area connected to the existing SCH building.

The objective of the development is to redress operational and accommodation inefficiencies within the hospital, and it is not intended to increase staff or patient numbers or create new services.

## Statutory planning considerations

Randwick LEP 1998 (Consolidation) is the principal planning instrument applying to the site and locality. The site is zoned 5 Special Uses 'Randwick Hospitals Complex' by the LEP, and hospitals are permissible in this zone. The development is consistent with the objectives of the zone and is generally consistent with the planning controls applying to the land under Council's LEP.

## Environmental Assessment

The Environmental Assessment concludes:

- The site is suitable for the proposed development in being located in close proximity to other complimentary medical facilities, having good accessibility to nearby public transport, having utility infrastructure available, and being of a size and configuration able to accommodate the facility, with no significant environmental constraints that are so sensitive as to preclude the development.
- The scale, bulk, height and setbacks of the proposed building can be supported having regard to the proposed use and the lack of significant impact on surrounding development.
- The form and architecture of the proposed new building has been designed to both maximise efficiency for SCH and minimise opportunities for the overlooking of residential development to the west.
- Suitable landscaping is provided around along the street frontage and within the proposed courtyards, so as to compliment the development and the public domain.
- No additional traffic will be generated by the proposed hospital extension.
- Delivery vehicles will be wholly accommodated on-site in the loading bays to minimise disruption to local traffic movements.

- A detailed construction management plan will be prepared in conjunction with the builder prior to works commencing to manage the potential impacts of construction activities in accordance with relevant standards including site security and safety, noise and vibration, construction traffic, soil and water management, dust and construction waste, and community consultation.
- The development will comply with the Building Code of Australia's deemed to satisfy provisions, and in some instances, performance-based measures.
- The proposal includes a draft Statement of Commitments on future actions by the proponent.

Given the planning merits above, the proposed development is justified and warrants the approval of the Minister for Planning.

# 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). This is to fulfil the Environmental Assessment Requirements issued by the Director General for the preparation of a Project Application for an extension to the Sydney Children's Hospital at Randwick.

The report has been prepared by JBA Urban Planning Consultants Pty Ltd for the proponent, Health Infrastructure - NSW Health, based on information provided by the proponent. It describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Environmental Assessment Requirements. It should be read in conjunction with the specialist assessments appended to this report (refer Table of Contents).

## 1.1 Background

Sydney Children's Hospital (SCH) at Randwick is a state-wide Level 6 tertiary teaching hospital for paediatrics and child health. It provides a comprehensive range of services and is the hub of an extensive and well developed clinical network. It is also a part of, and a lead agent for, the South Eastern Sydney Illawarra Area Health Service (SESIAHS).

The SESIAHS has identified over time that several services located within the SCH are not meeting the required standards for a Level 6 tertiary facility due to inferior physical accommodation and poor functional relationships. These are: Child and Adolescent Mental Health Services (CAMHS) - Inpatient Services; Short Stay and Ambulatory Care Services; and Paediatric Rehabilitation Services.

All facilities have undergone several operational reviews and some have been refurbished over the past years to maximise their effectiveness in their current locations but without significant capital investment. Following extensive review, strategic planning and options development it was determined that redevelopment would be the only way to address operational efficiencies and service improvements for the aforementioned services.

In planning redevelopment for the CAMHS, it was deemed sensible to combine this with the other services at the SCH that also need addressing in order to create one project and realise efficiencies in time, resources and capital planning.

The preferred option, the subject of this application, is considered to be a high priority by NSW Health, the SESIAHS and the Hospital. It has been subject to the internal review and approval processes of NSW Health and NSW Treasury, has been endorsed through both quantitative and qualitative assessment, and is documented in a Combined Services Procurement Plan/ Project Definition Plan[1].

A substantial proportion of the funding for the development is to come from private sector fundraising through the Sydney Children's Hospital Foundation, with the balance from the NSW Health Capital Program and a small grant from the Motor Accident Authority.

[1] Combined Services Procurement Plan/ Project Definition Plan for the Child & Adolescent Mental Health Inpatient Unit and SCH Clinical Services Development, December 2009

## 1.2 Environmental Assessment and Approvals Process

The State Environmental Planning Policy (Major Development) SEPP 2005 (the Major Development SEPP) identifies development to which Part 3A of the EP&A Act applies, and for which the Minister is the consent authority.

Clause 6 of the Major Development SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 (Classes of Development, Schedule 2 (Specified Sites) or Schedule 3 (State significant development) of the SEPP, is declared to be a project to which Part 3A applies.

Clause 18 of Schedule 1 of the Major Development SEPP states that the Minster may declare as a Part 3A development:

> *"(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."*

On 30 June 2010 and in accordance with Section 75B of the EP&A Act, and Clause 6 of the Major Development SEPP, JBA Planning on behalf of the proponent requested that the Minister:

- declare the project to be a Major Project subject to Part 3A of the EP&A Act; and
- issue Environmental Assessment Requirements for the Project Application.

On 11 August 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 the Project Application project.

A copy of the Director General's Environmental Assessment requirements for the Project Application is included in **Appendix A**.

## 1.3 Capital Investment Value

The estimated capital investment value is $25.772 million as detailed in the Quantity Surveyor's Certificate, attached at **Appendix B**.

## 1.4 Overview of Project

The objective of the development is to redress operational and accommodation inefficiencies within the hospital, and it is not intended to increase staff or patient numbers or create new services.

The project consists of the construction of a five storey purpose-built infill building on the SCH site, within the Randwick Health Campus. The building is designed to maximise the potential of the limited site area (1,890m$^2$) and will be constructed as a standalone structure with connections 'punched' into the existing SCH building.

The development will provide approximately 4,660 square metres of floor space for the following children's health services:

- CAMHS inpatient unit plus accommodation for health service personnel and administration;
- paediatric rehabilitation services;
- day only/ short stay (peri-operative) facility;
- treatment and consultation area for Respiratory Medicine; and
- consultation area for Child Protection Services.

Two courtyards are proposed for recreational and therapeutic activities, being a 'Mobility Courtyard' specially designed for rehabilitation activities and an 'Activity Courtyard' at Level 3 for use by children and adolescents with mental illness or behavioural issues.

## 1.5 Project Team

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

| | |
|---|---|
| **Project Manager** | APP |
| **Architecture** | BVN |
| **Urban Planning** | JBA Planning |
| **Land Surveyors** | Craig & Rhodes |
| **Landscape Architects** | 360 Degrees |
| **Traffic and Transport** | URaP - TTW |
| **ESD** | Steensen Varming |
| **Geotechnical** | Jeffery and Katauskas |
| **Infrastructure** | Steensen Varming and Steve Paul & Partners |
| **Stormwater** | TTW |
| **Wind** | Cermak Peterka Petersen |
| **Quantity Surveyors** | Slattery Australia |
| **Building Code of Australia** | McKenzie Group Consulting |
| **Accessibility** | Morris-Goding Accessibility Consulting |
| **Acoustic** | Norman Disney & Young |

# 2.0 The Site

## 2.1 Location and Context

The SCH is located on High Street, Randwick, in the northern part of the Randwick local government area (LGA), within the north western portion of the Randwick Health Campus (see **Figures 1** and **2**). The wider locality is largely occupied by medical and educational institutions and associated uses. The main institutions in the medical precinct - other than SCH - are the Royal Hospital for Women, the Prince of Wales Hospital, and Prince of Wales Private Hospital, as well as various medical/health related facilities situated in the southern part of the precinct, including the Ambulance station and the recently approved Neuroscience Research Precinct. The Randwick town centre is to the north east and the University of New South Wales to the west.

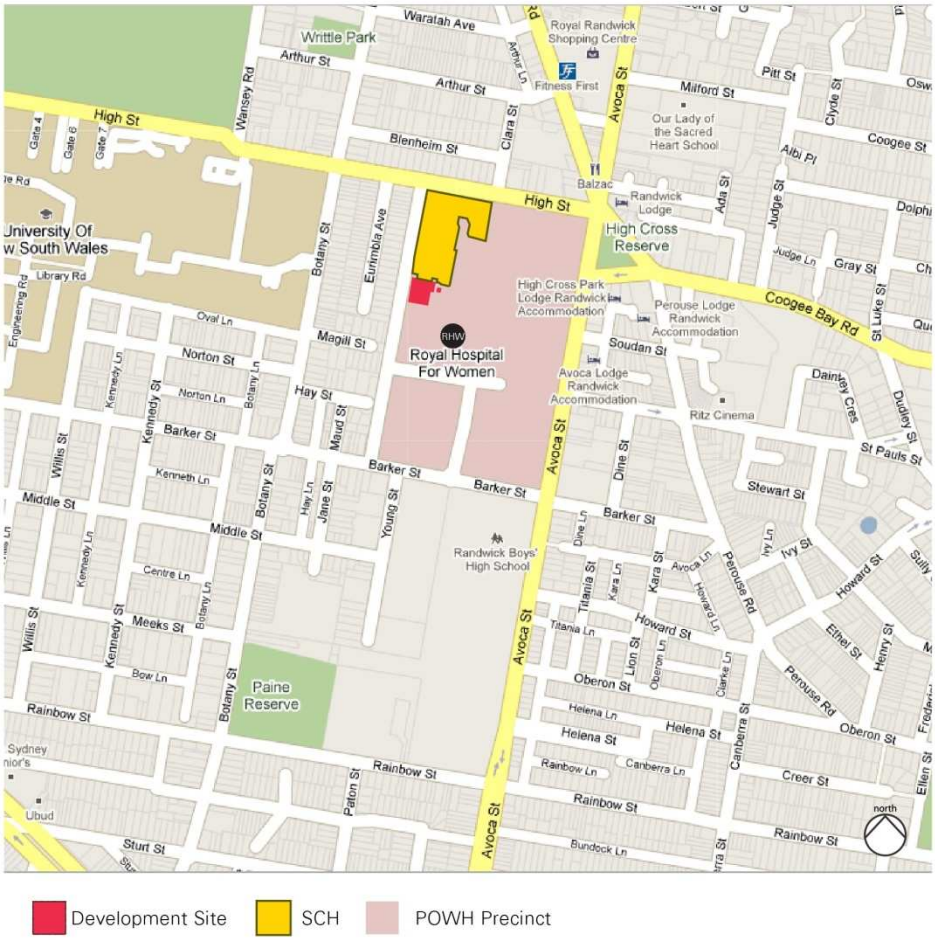


**Figure 1** – Locality Plan


**Figure 2 –** Site Plan, showing development site, Sydney Children's Hospital (SCH), the Royal Hospital for Women (RHW) and Prince of Wales Hospital (POWH).

## 2.2 Land Ownership and Zoning

The site for the proposed development is shown in **Figure 3** and in the site survey at **Appendix C**. The land is part of one large lot owned by the Health Administration Corporation legally described as Lot 1 in DP 870720.

The site is zoned 5 Special Uses 'Randwick Hospitals Complex' under the Randwick Local Environmental Plan 1998. Hospital development is permissible with consent in this zone.

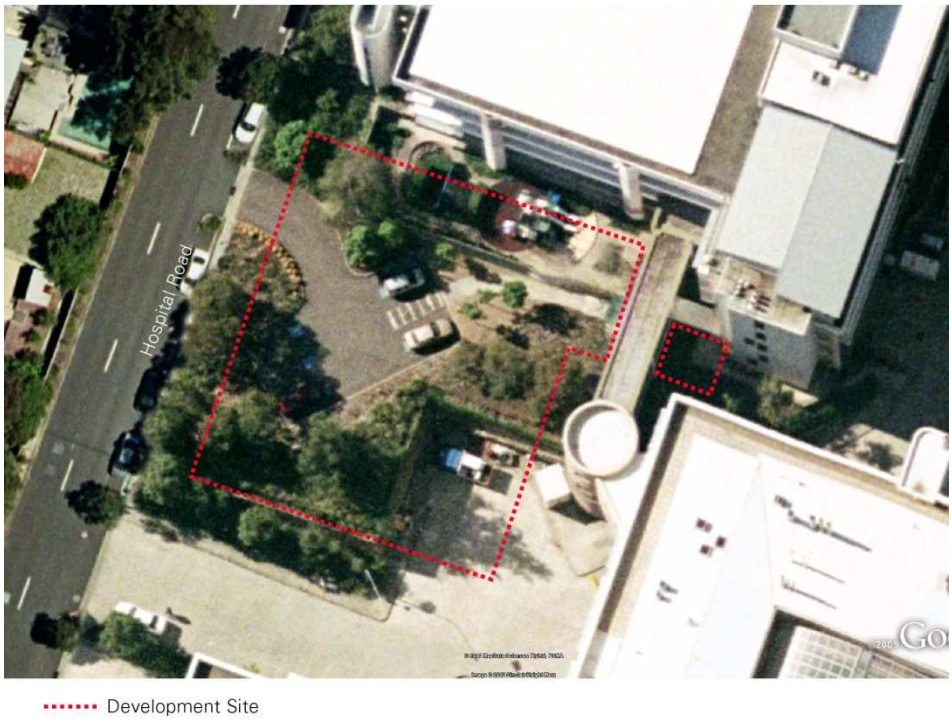


**Figure 3** - Aerial photo showing the development site

## 2.3 Surrounding Development

SCH fronts High Street and the development site is to the rear of the existing building along Hospital Road, a private road running north-south from High Street to Barker Street on the western edge of the Randwick Health Campus. With a footprint of 1,890 square metres in area and accessed to its west from Hospital Road, the development site is surrounded on three sides by existing hospital buildings, as follows:

- to the north: the rear of SCH, 4 storeys in height (see **Figure 4**);
- to the east: the Prince of Wales Public and Private Hospitals, 8 storeys (see **Figure 5**) and existing two storey walkway which links the SCH with the other hospitals on the site; and
- to the south: the rear of the Royal Hospital for Women, 6 storeys (see **Figure 6**).

As indicated above, the site is bounded to its west by a two lane private road (Hospital Road) which is mainly used for deliveries and for vehicles exiting the car park located on southern end of the Campus.

To the immediate west of the SCH, across Hospital Road, are the backyards of single dwellings located on Eurimbla Avenue. The Eurimbla Avenue frontage of several of these dwellings is shown in **Figures 7** and **8**.


**Figure 4** - Rear (southern) facade of Sydney Children's Hospital

**Figure 5** - Part western facade of Prince of Wales Hospital and Prince of Wales Private Hospital

**Figure 6** - Rear (northern) facade of Royal Hospital for Women

**Figure 7** - Residential dwellings at 21,23 and 25 Eurimbla Avenue, with Randwick Health Campus buildings beyond

**Figure 8** - Residential dwellings at 27 and 29 Eurimbla Avenue, with Randwick Health Campus buildings beyond

## 2.4 Existing Development

As shown in **Figure 3** and in **Figures 9** to **11** below, the area to be used for the extension is currently occupied by:

- an outdoor rehabilitation area;
- a parking /drop-off area for mobility impaired patients who can access the hospital through a door to the internal walkway;
- a sloping driveway which accesses the loading docks/delivery areas for SCH, POWH and RHW and a small service yard; and
- landscaping/plantings.

**Figure 9** - The site as viewed from the upper level of the existing Sydney Children's Hospital building.

**Figure 10** - Disabled access patient drop-off/parking

**Figure 11** - Delivery driveway

**Figure 12** - Service yard and driveway (to left)

## 2.5 Physical Characteristics

The site is highly modified and generally cleared of natural vegetation. Several mature trees are set amongst the garden bed areas that surround the car parking area. The garden beds contain low shrubs and ornamental grasses and are generally well maintained.

The geology of the site is characterised by shallow fill overlying aeolian sands with weathered sandstone bedrock below. The most significant topographical feature of the site is the 4 - 5 metre high retaining wall in the south eastern corner. A car parking area nominally for service vehicles, although often used for the long term storage of general construction materials, is located at the base of the wall. Other than this feature, the site is generally level.

The site is not identified as being flood prone. Accordingly, further flood investigations are not required in relation to the proposed development.

The Randwick Local Environmental Plan 1998 specifies heritage items and heritage conservation areas within Randwick LGA. The subject site does not include a heritage item and is not located within a conservation area. A search of the NSW Heritage Branch Database reveals that the site does not contain any items listed under the NSW *Heritage Act 1977*.

# 3.0 Proposed Project

The project consists of the construction of a five storey purpose-built infill building on the SCH site, within the Randwick Health Campus. The building is designed to maximise the potential of the limited site area (1,890m$^2$) and will be constructed as a standalone structure with connections 'punched' into the existing SCH building.

The development will provide approximately 4,660 square metres of floor space for the following children's health services:

- Children and Adolescent Mental Health Service (CAMHS) inpatient unit of eight (8) beds, plus accommodation for health service personnel and administration built to contemporary standards and regulations.
- Paediatric Rehabilitation Services to operate as a state-wide multidisciplinary team for the Brain Injury Program, Cerebral Palsy Service, School Therapy Team, inpatient rehabilitation services, Spinal Clinic, General Rehabilitation Clinic and the Limb Management Clinic, and the Gait and Motion Analysis Service.
- Day only/ short stay (peri-operative) facility consisting of 27 day bed spaces to consolidate multiple surgical and procedural functions from over five current locations.
- Treatment and consultation area for Respiratory Medicine and consultation area for Child Protection Services.

Two courtyards are proposed for recreational and therapeutic activities, being a 'Mobility Courtyard' specially designed for rehabilitation activities and an 'Activity Courtyard' at Level 3 for use by children and adolescents with mental illness or behavioural issues.

Put simply, the objective of the development is to redress operational and accommodation inefficiencies within the hospital, and is not intended to increase patient numbers or staff numbers, or create new services.

This section of the report provides a detailed description of the proposed development and should be read in conjunction with the Architectural Plans prepared by BVN for the proposed development at **Appendix D** and the Landscape Plan prepared by 360 Degrees included at **Appendix E**.

It is not proposed to stage the construction of the development.

## 3.1 Numerical Overview

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

**Table 1** – Numeric overview of the proposed development

| Component | Proposal |
|---|---|
| Floor space area | ▪ 4,660m$^2$ |
| Building height | ▪ 20.45 metres to Hospital Road frontage<br>▪ 25.81 metres to lower service court |
| Number of storeys | ▪ Five storeys |
| Car parking spaces | ▪ Ten plus two service vehicles |

## 3.2 Building Description

The proposed building has been designed to be experienced primarily from an internal perspective, with arrival from the existing SCH building. The facade of the building has been designed generate visual interest with an appropriate outlook from within. The use of bay windows projecting internally as well as externally is a result of this concept.

A grid of precast concrete fins sets out a modulated structure which is then articulated with bay windows that vary in size and function. These provide for both intimate retreats for one and larger communal areas for groups, as well as framed glancing views of the surrounding site and beyond.

The fins and slab will project to provide solar shading which will help maintain passive comfort and energy usage during the day, whilst also offering a solution to overlooking both to and from the development, particularly to the residential premises to the west.

Coloured panels and varying materials will bring interest and identity to the façade which will be transferred to the internal spaces, creating a playfulness related to the primary users of the facility.

The proposed building is located immediately to the west of the existing two storey link corridor that provides access between the SCH and Prince of Wales Hospital. The building will connect into this corridor at these lower levels, and an extension will be provided vertically to provide access between the new building and the existing SCH building. A new lift providing a connection between all levels will be located on the eastern side of the link corridor.

A level by level description is provided below:

- Ground Level (referred to as Level 00) contains a pedestrian entrance that provides direct access to a corridor that provides for circulation through to the existing link corridor. This floor contains a reception area, several waiting rooms, and a number of consultant rooms and offices. This level also contains store rooms and toilets.
- Level 1 accommodates 27 beds, in addition to staff rooms, offices, consultant rooms and store rooms.
- Level 2 provides further offices, consultant rooms and waiting areas.
- Level 3 will contain the children and adolescent mental health services in patient unit, including eight bedrooms, staff areas, lounges, a school room and a courtyard that is partly open to the sky.
- Level 4 contains several larger meeting rooms and plant rooms.
- At basement level, the only elements of the building are an egress from a fire stair and a room containing a 2,000 litre fuel tank for emergency plant.

## 3.3 Operational Details

The hospital will continue to operate 24 hours per day, seven days per week. As previously detailed, the building is intended to allow existing operations of the SCH to relocate into suitable accommodation rather than to facilitate the provision of new services. Accordingly, the number of staff and patients accessing the hospital will remain the same.

## 3.4 Landscaping

The landscape design has three key components, as follows:

- building entry;
- mobility courtyard; and
- through site link.

The intention of the landscaping for the building entry is to define a legible entry point for patients accessing the building from Hospital Road as well as clearly distinguishing between pedestrian and vehicle areas. Appropriate low shrubs and tall shade trees species have been selected that are both attractive and require little maintenance.

The mobility courtyard has been specifically designed to meet the requirements of occupational therapy and physiotherapy treatment. A variety of materials, forms and objects are used to create a lively space. Low maintenance planting is provided at each end of the courtyard to provide a sense of privacy, and retractable shade and outdoor heating is provided to promote year-round use

The courtyard at Level 3 has been designed to meet the requirements of the CAMHS unit, with fixed tables and seating combining with planter boxes to provide a visually attractive and usable space.

The landscaping proposed to the east of the link corridor is designed to enhance the existing through site link through the provision of a legible path and appropriate planting.

## 3.5 Car Parking

The proposed development includes the provision of ten right-angle car parking spaces along Hospital Road adjacent to the frontage of the building. Of these ten spaces, five have been designed to be accessible for people with a disability.

Two service vehicle spaces are located to the north of the building, with access to a small loading dock. These spaces are located so that service vehicles can park wholly within the site without obstructing Hospital Road or the pedestrian footpath.

## 3.6 Circulation

The main entrance to the proposed building is via the existing entrance on High Street. A minor entrance into the building will be provided from the Hospital Road frontage, primarily to be used by small number of patients with mobility difficulties who attend the hospital on a regular basis.

The proposed building has been designed to link into the existing Children's Hospital to the north at all levels, and also to the Prince of Wales Hospital to the south east at the lower two levels.

The circulation spaces within the building are designed in accordance with the specific needs of the hospital staff and patients, as well as the applicable codes and standards.

## 3.7 Ecologically Sustainable Development

The project will be designed to comply with the deemed-to-satisfy provisions of Section J - Energy Efficiency of the Building Code of Australia 2010. The development also incorporates ESD principles in the design. Furthermore, the ongoing operation phases of the building will be managed by the hospital in accordance with relevant maintenance manuals.

The environmental performance of the development will be assessed by using the *Environmental Performance Guide for Buildings*, developed by the NSW Government. This guide has been developed by the Policy Services Division of the NSW Department of Public Works and Services.

It is a mandatory regulatory requirement for all government buildings to provide an environmental performance report at the end of each design stage. This will be undertaken by the project team, and will address the following ESD categories:

- resource consumption;
- environmental loadings;
- quality of indoor environment;
- functionality; and
- wider planning issues.

## 3.8 Infrastructure

### 3.8.1 Stormwater Drainage

The stormwater drainage design involves piped connections to a rainwater recycling tank which overflows to an on-site detention tank, both located under the proposed mobility courtyard. The on-site detention tank then discharges to the existing stormwater system along Hospital Road. Further details of the stormwater system design are provided in the Stormwater Design Statement (refer **Appendix F**).

The design statement also details how flows from the site have been assessed in accordance with Randwick Council's requirements in relation to peak flows and water quality treatment. In summary, the system can accommodate storms up to and including the 100 year ARI event and a gross pollutant trap will be provided (with oil and silt capacity) to treat the stormwater discharge.

### 3.8.2 Utilities Services

Steensen Varming has reviewed the existing electrical and communication services in the vicinity of the site and the servicing requirements of the proposed building (refer **Appendix G**). Due to the scale of the proposed development and the nature of the existing services, significant service relocation will not be required.

Steve Paul & Partners have prepared a Hydraulic and Wet Fire Services Report that details the proposed hydraulic services (refer **Appendix H**). The report outlines the scope of works, design criteria, components and materials which shall be adopted for the project.

# 4.0 Director General's Requirements

**Table 7** provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirements (DGRs) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

**Table 2** – Director General's Environmental Assessment Requirements

| Requirements | Location in Report |
|---|---|
| **General Requirements** | |
| Executive Summary | Page 2 |
| Site analysis | Section 2 |
| Description of the proposed development | Section 3 |
| Assessment of potential impacts and draft Statement of Commitments | Sections 6 and 7 |
| Statement of validity | Page 1 |
| Compliance with BCA | Appendix P |
| QS Certificate of Cost | Appendix B |
| Conclusion and justification of suitability of the site for proposal | Section 8 |
| **Key Assessment Requirements** | |
| Relevant EPIs, policies and guidelines | Section 6.1 |
| Built Form and Urban Design<br>▪ Height, bulk and scale<br>▪ Campus permeability and connectivity;<br>▪ Proposed open space and landscaped areas<br>▪ Design quality | <br>Section 6.2<br>Table 3<br>Section 3.4<br>Section 6.2 |
| Environmental and Residential Amenity<br>▪ Impacts of the proposal on solar access, acoustic privacy, visual privacy, view loss and wind impacts on surrounding development; and<br>▪ Details of the measures to be implemented to achieve a high level of environmental amenity. | <br>Section 6.3<br>Sections 6.3 and 7 |
| Transport and Accessibility<br>▪ Travel choices<br>▪ Pedestrian and cycle movements and public transport<br>▪ Potential traffic impacts during the construction<br>▪ Sustainable transport<br>▪ Daily and peak traffic movements likely to be generated<br>▪ Proposed access, impacts on the existing parking provisions of the hospital and service vehicle movements<br>▪ Minimal levels of onsite car parking<br>▪ Clear demonstration that the project would not result in any new services, staff or patients | Section 6.4 and Appendix M |

| Requirements | Location in Report |
|---|---|
| Ecologically Sustainable Development<br>▪ Detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development<br>▪ Description of the measures that would be implemented to minimise consumption of resources, water and energy<br>▪ Demonstrate that the development can achieve a minimum 4 Green Star rating, or any other suitably accredited rating scheme | Section 6.5 and Appendix N |
| Contributions | Section 6.6 |
| Heritage | Section 6.7 |
| Drainage<br>▪ Including infrastructure management plan that identifies adequate stormwater and drainage infrastructure; and<br>▪ Detailed plans of the proposed erosion and sediment control measures during demolition, construction and operation. | Section 6.8 and Appendix F<br>Appendix Q |
| Flooding | Section 6.8 |
| Utilities | Section 3.7 |
| Staging | Section 3.0 |
| Noise and Vibration | Section 6.3.5 |
| Waste | Section 6.9 |
| Consultation | Section 5 |
| **Plans and Documents** | |
| ▪ Existing site survey plan | Appendix C |
| ▪ Site analysis plan | Appendix D |
| ▪ Locality/context plan | Appendix D |
| ▪ Architectural drawings | Appendix D |
| ▪ Stormwater concept plan | Appendix F |
| ▪ Erosion and sediment control plan | Appendix Q |
| ▪ Geotechnical report | Appendix I |
| ▪ Photomontage | Appendix D |
| ▪ Landscape plan | Appendix E |
| ▪ Shadow diagrams | Appendix D |

# 5.0 Consultation

In accordance with the Environmental Assessment Requirements for this project issued by the Director-General consultation must be undertaken with relevant public authorities, community groups and affected landowners. This section details the consultation undertaken by Health Infrastructure as part of the preparation of the proposal.

In preparing the DGRs for the Environmental Assessment, the Department of Planning consulted with relevant authorities. In particular, Randwick City Council provided a detailed response. This response was followed up with a meeting between the proponent and the Council on 17 June 2010. At this meeting Council officers expressed support for the development on the basis that it would support the ongoing operations of the SCH and the wider health precinct.

In particular, the following issues were raised by Council officers:

- built form and urban design;
- traffic and parking; and
- drainage.

The proponent has undertaken extensive consultation with the management of SCH and various user groups. The objective of this consultation was to provide information regarding the proposal and to seek feedback to the project team. The importance of SCH to being able to continue to operate and provide its patients with a continuous and seamless level of service throughout the redevelopment project was stressed.

Consultation with the neighbouring residents has also been undertaken, with a community consultation evening held in the hospital on 14 September 2010. Despite all relevant Eurimbla Avenue residents being invited to the session via a letter-box drop, no members of the public attended.

Service agencies have been consulted during the preparation of the application, including the following:

- Sydney Water;
- Energy Australia; and
- Jemena Gas.

# 6.0 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**).

The draft Statement of Commitments complements the findings of this section.

## 6.1 Consistency with Relevant Strategic and Statutory Plans and Policies

The DGRs require that the following legislation, strategies and planning instruments, relevant to the proposed development to be addressed:

- Objects of the EP&A Act;
- NSW State Plan;
- Sydney Metropolitan Strategy 'City of Cities';
- Draft East Subregion Draft Subregional Strategy;
- State Environmental Planning Policy (Major Development) 2005;
- State Environmental Planning Policy No.55 – Remediation of Land;
- State Environmental Planning Policy (Infrastructure) 2007; and
- Randwick Local Environmental Plan 1998 (Consolidation).

The Project Application's consistency with the relevant strategic and statutory plans and policies is located in **Table 3** below.

**Table 3** - Summary of consistency with key strategic and statutory plans and policies

| Instrument/Strategy | Comments |
|---|---|
| **State Legislation** | |
| **Environmental Planning and Assessment Act 1979** | The proposed development is consistent with the objects of the EP&A Act, particularly for the following reasons:<br>▪ it promotes the social welfare of the community;<br>▪ it allows for the orderly and economic development of land;<br>▪ it is development for public purposes and will facilitate the delivery of community services; and<br>▪ opportunity for public involvement and participation has been and will further be provided. |
| **Strategic Plans** | |
| **NSW State Plan** | The State Plan has been prepared by the NSW Government as a long term plan to deliver the quality services to the people of NSW. A section of the Plan is devoted to the delivery of 'Healthy Communities', and a key component of this is to improve and maintain access to quality healthcare facilities. The proposed development is evidently consistent with this aim of the State Plan. |
| **Sydney Metropolitan Strategy** | In December 2005, the NSW Government released the Sydney Metropolitan Strategy titled City of Cities – A Plan for Sydney's Future. The Metropolitan Strategy provides commentary and direction for the next 25-30 years at a regional level on issues such as land use, economic development, jobs, transport, innovation, centres and corridors, and residential areas within Sydney.<br>The Metropolitan Strategy sets the planning context for the provision of suitable health facilities in Sydney. Major health |

| Instrument/Strategy | Comments |
|---|---|
| | facilities are to be clustered around existing health precincts, including the Randwick Health Campus. The proposed development, supporting the viability of SCH, is consistent with this aim. |
| **Draft East Subregional Strategy** | The draft East Subregional Strategy was released in July 2007 and is a key part of the implementation of the 2005 Metropolitan Strategy. The Subregional Strategy is intended to guide land-use planning until 2031 in the Randwick, Botany Bay, Waverley and Woollahra local government areas.<br>The proposed development is consistent with a key relevant direction of the Draft Subregional Strategy, being to consolidate and strengthen the Randwick specialised health centre. |
| **State Planning Instruments and Controls** | |
| **SEPP 55** | A Phase I Environmental Site Assessment is currently being prepared for the site. Due to the past uses of the site and the shallow amount of fill on the site (as described in the Preliminary Geotechnical Report at **Appendix I**), it is anticipated that it will be demonstrated that the site is suitable for the proposed development. |
| **SEPP (Infrastructure)** | The aim of this Policy is to facilitate the effective delivery of infrastructure across the State, including providing for consultation with relevant public authorities about certain development during the assessment process. The proposed development does not trigger consultation with the RTA under the provisions of Schedule 3 of the SEPP. |
| **SEPP (Major Development)** | State Environmental Planning Policy (Major Development) 2005 (Major Development SEPP) together with EP&A Act provides the planning framework for the assessment of State and Regionally Significant projects.<br>As detailed in **Section 1.2**, clause 18 of Schedule 1 of the Major Development SEPP provides for development with a Capital Investment Value (CIV) greater than $15 million to be considered as a Major Project under Part 3A of the Act. The proposed development has an estimated CIV of $25.772 million. A copy of the quantity surveyors calculation is provided at **Appendix B**.<br>All development on the site has been declared a Major Project by the Minister. This EAR has been prepared in response to the Director General's Environmental Assessment Requirements in accordance with Part 3A of the EP&A Act. |
| **Local Planning Instruments and Controls** | |
| **Randwick Education and Health Specialised Centre Discussion Paper** | This discussion paper has been prepared to inform Randwick City Council's preparation of a comprehensive LEP and DCP. It investigates and provides strategies to accommodate and direct growth in ways that enhance the Centre and surrounds.<br>The Randwick Health Campus will strengthen its role as a centre of excellence in health services. The campus will need to plan for an additional 21% growth in floor space requirements for health services to 2031.<br>The proposed development is consistent with the use criteria defined in the discussion paper as follows:<br>▪ It is consistent with the core role of the campus as a health services facility;<br>▪ Its use is consistent with its location within the core clinical area of the campus;<br>▪ As the new building is physically separated from the existing hospital building, the potential to establish an enhanced east west link is maintained. (It should be also noted that this potential through site link is already |

| Instrument/Strategy | Comments | |
|---|---|---|
| | obstructed by several built elements and a busy loading dock.)<br>▪ If a substantial reconfiguration of Sydney Children's Hospital is proposed to allow the introduction of a major through site link, then significant changes will be required to both the proposed building and the existing SCH building.<br>▪ The proposed landscaping seeks to enhance the existing through site link, providing a clearly defined path and attractive planting. | |
| **Randwick Hospitals Campus - Masterplan Principles Review** | This review has been endorsed by South Eastern Sydney Illawarra Area Health Service, and is considered by Council to be consistent with the desired outcome for the overall health precinct. The relevant aspects of the review are addressed below:<br>▪ The review identifies the High Street and Avoca Street frontages of the campus as being suitable for 'high-turnover' activities such as outpatient services and clinics. Although the proposed development does include a small portion of these services, it is not practical to have these located remotely from the remainder of the hospital..<br>▪ The proposed works provide a suitable footpath along the whole length of the Hospital Road frontage.<br>▪ Although the new building incorporates an entry, the main entry to the hospital will remain as existing on High Street. The architecture of the building does not seek to highlight the proposed secondary entry.<br>▪ The proposed development includes an area of open space that has been designed as a mobility courtyard. An additional open space is provided via a courtyard at Level 3 of the building. | |
| **Randwick Local Environmental Plan 1998 (Consolidated)** | Clause 17 – Zone | The site is zoned 5 Special Uses 'Randwick Hospitals Complex'. Hospitals[2] are permissible in this zone. |
| | Clause 20E - Landscaped Area | There are no landscaped area controls for land zoned 5 Special Uses. |
| | Clause 20F – Floor Space Ratio | There are no floor space ratio controls for non-residential development on land zoned 5 Special Uses. |
| | Clause 20G – Building Heights | There are no building height controls for land zoned 5 Special Uses. |
| | Clause 37A – Development in Special Use Zones | Development is to be compatible with the character of the locality and not adversely affect the amenity of nearby development |

[2] **hospital** means a building or place used for providing professional health services (including preventative care, diagnosis, medical or surgical treatment or counselling) to people and includes:

(a) ancillary facilities for the accommodation of nurses or other health care workers, ancillary shops or refreshment rooms and ancillary accommodation for persons receiving health care or for their visitors, and

(b) facilities situated in the building or at the place and used for educational or 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.

## 6.2 Built Form

It is important to note that the proposed building is located on the only land available for the expansion of SCH. The proposed building has been designed to both meet the demands of the SCH and respond to its context within the wider health precinct. Its height, bulk and scale are proportionate to all the surrounding hospital buildings including the SCH, the Royal Hospital for Women and Prince of Wales Hospital. **Figure 13** below illustrates how the proposed building provides integration in terms of building massing between the SCH and the Royal Hospital for Women along Hospital Road.


**Figure 13** - Western (Hospital Road) elevation

## 6.3 Environmental and Residential Amenity

### 6.3.1 Privacy

#### Existing Conditions

To the west of the site are located a number of dwellings that address Eurimbla Avenue. The rear of these dwellings (including their rear yards) will be potentially overlooked by the proposed building.

#### Assessment

Various elements of the built form have been designed to minimise the potential for the overlooking of the rear of the dwellings to the west of the site. Projecting fins and slabs are provided across the facade. Smaller windows are provided for offices and at the end of corridors, with larger windows provided for bedrooms and meeting rooms. These larger windows are screened with fixed vertical louvres to ensure the privacy of the neighbouring dwellings is maintained.

Level 3, which will accommodate the CAMHS, has additional measures to increase privacy. The number of windows has been reduced to the minimum possible, with one for the school room and two for the activity courtyard. All these windows are screened by fixed vertical louvres, and the glazing to the courtyard windows will be translucent to eliminate any opportunities for overlooking the neighbouring dwellings.

To further increase the level of privacy for the neighbouring dwellings, landscaping will be provided along the western edge of Hospital Road. The existing planting in this area is in poor condition and unlikely to provide adequate future screening to neighbouring residential properties. The current planting of *Elaeocarpus reticulatis*

(Blueberry Ash) and *Lomandra longifolia* appears to have suffered due to unsuitable soil conditions, a lack of establishment maintenance and insufficient irrigation.

It is proposed to remove the current species and re-plant with *Banksia serrata* at 2 metre-spaced centres. This will provide sufficient screening but allow filtered views and sunlight to neighbouring properties. The species will grow approximately 1 metre per year to a mature height of 8 metres and a spread of 2.5 metres. The area will also be under planted with *Lomandra tanika*.

### Management

To ensure the viability of the replacement screening species, a maintenance inspection program will be prepared and the irrigation system upgraded. Furthermore, suitable organic material, fertilizer and mulch will be provided to improve the condition and moisture holding capacity of the soil.

## 6.3.2 Solar Access and Overshadowing

Shadow diagrams have been prepared by BVN that illustrate the impacts of overshadowing resulting from the proposed development. They are included as part of the architectural drawings at **Appendix D**.

### Existing Conditions

The existing SCH building and the Royal Hospital for Women building both overshadow the rear of dwellings that address the northern portion of Eurimbla Avenue and the eastern portion of Magill Street. The site itself does not currently accommodate a building and therefore it does not cast any existing shadows.

### Assessment

The shadow diagrams illustrate that the building will overshadow the dwellings and a portion of the rear yards of 39 - 47 Eurimbla Avenue at 9am at the winter solstice. However, it should be noted that by 9.30am the dwellings will no longer be shaded, allowing sunlight into any rear facing living rooms. The rear yards of these dwellings will not be overshadowed at all by the proposed building by 12 noon at the winter solstice.

The extent and impact of this overshadowing is considered acceptable on the basis that the overshadowing is only for a limited time, with more than three hours of sunlight between 9.00am and 3.00pm available to the rear yards of these Eurimbla Avenue properties.

It should also be reiterated that the built form of the proposed development is consistent with the surrounding buildings of the Hospital precinct and the proposed built form is required from an operational, functional and efficiency perspective.

## 6.3.3 Visual Impact

### Existing Conditions

Although the site is currently generally free of built structures, it is surrounded to the north, east and south by existing hospital buildings of up to eight storeys in height. These existing buildings dominate the skyline as viewed from the locality, particularly from Eurimbla Avenue to the west, as shown in **Figure 14**.

### Assessment

BVN has prepared a photomontage that demonstrates the impact of the proposed development as viewed from Hospital Road (refer **Figure 15**).

The form, height and proportions of the building are relative to its hospital precinct context. The building is of a similar or reduced scale to existing buildings in the locality, such as the Royal Hospital for Women. It should also be noted that the parapet of the

proposed building will generally be below the skyline of the existing buildings behind as viewed from Eurimbla Avenue.

**Figure 14** - Health Campus buildings behind Eurimbla Avenue dwellings

**Figure 15** - Photomontage of the proposed building

### 6.3.4 Wind

The impact of the proposed commercial building on local wind conditions has been assessed, and recommendations made to mitigate any unfavourable impacts. The assessment carried out by Cermak Peterka Petersen is included at **Appendix J**.

#### Existing Conditions

An analysis of the existing wind environment was undertaken using meteorological data from Sydney Airport. Key characteristics of the local wind climate are:

- prevailing winds come from the north east, south and west;
- winds from the north east tend to be summer sea breezes;
- winds from the south tend to be cold and can occur throughout the year; and
- winds from the west are strongest and can be cold or warm depending on inland conditions.

#### Assessment

The wind environment for the proposed development is consistent with that of any set of buildings of similar distribution and massing. For winds from the north-east and south, the building is shielded by the neighbouring buildings. Winds from the south will be marginally channelled along Hospital Road, but the proposed developed will have minimal influence on the local wind conditions. For winds from the west, the building is surrounded by similar sized building on three sides, with the ground level being sealed on three sides. The winds from the west will pass around the larger massing and will be relatively calm along Hospital Road.

With reference to the relevant comfort criteria, it is expected that the entire site would be classified for pedestrian standing. The courtyard areas to the north and on level three would be classified for pedestrian sitting. These wind conditions are appropriate for the proposed use and the building will have little to no effect on existing conditions.

### 6.3.5 Noise

A Acoustic Report has been prepared by Norman Disney & Young (refer **Appendix K**) that details the following:

- relevant input information including criteria, standards and engineering inputs (noise data, geographic survey information and the like);
- unattended noise logging at a nearby residential receiver considered representative of the most noise-affected receivers;
- calculation methodology including identification of noise sources, nearest potentially affected receivers and calculation procedures;
- presentation of potential demolition, construction, operational and traffic noise impacts arising from the proposed project; and
- recommendations of noise controls where exceedances of the established criteria and construction noise management levels are predicted.

#### Assessment

The acoustic assessment indicates that if acoustic protection measures were not implemented, then demolition and construction noise would exceed the established criteria. Similarly, an assessment of the likely operational noise generated by the development indicates that acoustic mitigation measures are required. Vibration during demolition and construction will also need to be controlled to prevent disturbances to the neighbouring residential and hospital uses.

As there is no proposed increase in traffic generation by the proposed development there will be no increase in traffic noise.

### Management

A Construction Noise Management Plan will be prepared that details the measures to be implemented to mitigate demolition and construction noise. These measures will include a solid construction hoarding around the site.

A Construction Vibration Management Plan will also be prepared, detailing minimum safe working distances to existing buildings and the selection of equipment and work methods that will reduce vibration.

The mitigation measures proposed to ameliorate operational noise are typical and will include the following:

- selection of appropriate plant items;
- judicious location of plant items and acoustic louvres;
- plant room acoustic linings;
- acoustic louvres;
- lined duct work; and
- acoustic silencers and barriers.

Particular attention will be given to the acoustic treatment of the proposed emergency backup power generator at rooftop level.

## 6.3.6 Accessibility

An Accessibility Review has been prepared by Morris-Goding Accessibility Consulting in relation to the proposed development (refer **Appendix L**). The review was undertaken to ensure that ingress and egress, paths of travel, circulation areas and toilets all comply with relevant statutory guidelines.

### Assessment

The review demonstrates that the proposed development has an appropriate degree of accessibility. The architectural drawings indicate that compliance with statutory requirements pertaining to site access, common area access, accessible parking and accessible sanitary facilities will be readily achieved.

# 6.4 Transport and Accessibility

A Traffic and Accessibility Impact Assessment has been prepared by URaP - TTW (**Appendix M**) to ensure that adequate parking has been provided on site to accommodate the proposed development and to assess the impact of the proposed development on the surrounding road network.

## 6.4.1 Traffic Generation

As the proposal does not increase the number of staff or activity of the Hospital, no significant change in travel patterns of visitors and staff to and from the Hospital is expected. Consequently, no additional vehicular movements will be generated as the result of the proposal and there would be no adverse impact on the street system or intersection operation of the surrounding road network.

## 6.4.2 Vehicular Access and Parking

The new structure over the existing service bay areas will result in the loss of one space for maintenance vehicles, however a new loading bay for two small rigid vehicles (SRV) will be provided off Hospital Road. If additional service vehicle parking is required, consideration could be given to the formalisation of the current parking on one side of the delivery driveway.

The five existing disabled spaces within the site are to be relocated onto Hospital Road and can comply with the relevant standards.

The vehicular access arrangement to SCH for all visitors patient pick up/set down and deliveries will remain as per the existing situation, with the exception of the two new SRV loading bays off Hospital Road.

### 6.4.3 Visibility and Pedestrian Safety

The SRV loading bays will have adequate sight lines for reversing vehicles. A pedestrian footpaths is to be maintained adjacent to the proposed building to provide a safe pedestrian environment. Access ramps will be provided for people with mobility difficulty or with prams.

### 6.4.4 Public Transport, Pedestrians and Cyclists

The site has a high level of public transport accessibility, with the Traffic and Accessibility Impact Assessment providing details of 13 bus routes that provide connections to the surrounding area and various transport interchanges.

The pedestrian and cyclist route network is well established around the Randwick Health Campus, and all streets in the locality have pedestrian footpaths.

## 6.5 Ecologically Sustainable Development

Steensen Varming has prepared a summary of the ESD initiatives that are to be incorporated into the development (refer to **Appendix N**). These initiatives related to the following aspects of the proposed building:

- electrical services;
- mechanical services;
- hydraulic services;
- architectural design; and
- structural design.

The environmental performance of the development will be assessed by using the *Environmental Performance Guide for Buildings*, developed by the NSW Department of Public Works and Services. Furthermore, the proposed development is consistent with the five accepted principles of ESD described below.

#### Integration Principle

The integration principle holds that decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations. The design of the building has been developed with reference to economic, environmental and social considerations for SCH.

#### Precautionary Principle

If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The proposal is supported by multiple environmental studies and technical reports which conclude that there are no environmental constraints that preclude the development of the site in accordance with the proposal, subject to appropriate management in future planning, design, construction and operational stages.

### Intergenerational Equity

The principle of inter-generational equity holds that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. The proposal as a whole will directly benefit current and future generations in that it contributes to the long term viability of SCH.

### Biological Diversity

Under the biodiversity principle, the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.

There is no significant natural vegetation on the site and it does not contain any threatened or vulnerable species, populations, communities or significant habitats. Construction and ongoing operations of the facility will be managed in accordance with the draft Statement of Commitments, ensuring no significant indirect impacts on the surrounding environment.

### Valuation and Pricing of Environmental Resources

Under this principle, improved valuation, pricing and incentive mechanisms should be promoted. The costs of infrastructure and measures to ensure an appropriate level of environmental performance on the site have been incorporated into the cost of development.

## 6.6 Contributions

The relevant contributions plan for the site is the *Randwick City Section 94A Development Contributions Plan*, effective since July 2007. The plan allows for a waiver from contributions to be considered for the a variety of uses, including public hospitals (clause 11.2). The proposed development will clearly provide a public benefit by augmenting an important public service, being a hospital.

It should also be noted that a significant portion of the funding for the development has been derived from public donations through the Sydney Children's Hospital Foundation, further suggesting that an exemption from contribution requirements should be granted.

## 6.7 Heritage

### Existing Conditions

The majority of the site is occupied by a car parking area, landscaped gardens and a large retaining wall. The construction of these elements would have resulted in significant disturbance to the soil on the site. Furthermore, the preliminary geotechnical assessment prepared by Jeffery and Katauskas (refer **Appendix I**) details that fill was found at a depth of 0.2 to 1.0 metres across the site.

No listed items of environmental heritage are located on or in the vicinity on the site, and therefore no assessment of built heritage is required.

### Assessment

Due to the previous disturbance to the site, it is not anticipated that any items of archaeological or Aboriginal cultural significance are located on the site.

## 6.8 Water Management

The Stormwater Design Statement prepared by TTW (refer **Appendix F**) details the proposed stormwater management system. The system includes the following elements:

- Provision of an on-site detention (OSD) system to ensure no negative impact on the existing stormwater drainage regime;
- Erosion and sediment control to minimise the effect of construction on the environment; and
- Gross pollutant trap for on-going water quality control.

As previously described, the site is not identified as being flood prone. Accordingly, further flood investigations are not required to be undertaken in relation to the proposed development.

## 6.9 Geotechnical Conditions

Jeffery and Katauskas have prepared a preliminary geotechnical assessment (refer **Appendix I**). The findings of this assessment is detailed below.

### Existing Conditions

Geotechnical fieldwork was undertaken, with four boreholes drilled across the site. The boreholes encountered pavements and shallow fill overlying aeolian sands above weathered sandstone bedrock at depths of 3.4 to 5.1 metres.

### Assessment

Based on the fieldwork results and site observations, the proposed development has been assessed as feasible for the subject site from a geotechnical perspective. Provided that the building is supported by footings within the underlying bedrock, the likelihood of instability is considered to be 'rare' to 'barely credible'.

## 6.10 Waste

The following indicates the procedures to be implemented to manage waste through the construction and operational phases of the development. A formal Waste Management Plan will be prepared prior to the commencement of works, (as reflected in the draft Statement of Commitments at **Section 7**), however it should be noted that that construction waste will be handled according to industry best practice and operational waste management will be incorporated into SCH's existing systems.

### Demolition and Site Preparation

No major demolition is required to accommodate the new building. Minor demolition works will be required to the existing SCH building and the link corridor to allow the proposed building to be integrated. Where appropriate, materials will be reused or recycled, including the following:

- concrete;
- steel;
- green waste;
- bricks and tiles;
- plasterboard; and
- timber.

Any material that cannot be recycled or reused will be disposed to an approved landfill facility. Any asbestos, hazardous materials and/or intractable wastes will be disposed of in accordance with Workcover Authority and EPA requirements to licensed off-site facilities.

## Construction

The long-term management of the site during the construction stage will be by the Head Contractor. The Head Contractor will prepare operating plans that will identify the following:

- environmental objectives;
- control systems supporting each objective;
- maintenance requirements for each control system;
- routine monitoring requirements for each control system;
- range of acceptable values for monitored parameters;
- action levels which trigger intervention in response to monitoring observation;
- a documentation protocol to record maintenance activities, monitoring results, non-conformances, and actions to rectify any non-conformance; and
- a reporting procedure to ensure effective communication of information.

## Operational Waste

The existing hospital currently generates the following streams of waste:

- clinical waste;
- co-mingled recycling;
- paper for shredding then recycling; and
- general sewage wastes.

The extension to the hospital will not generate any new streams of waste, rather more waste will be generated in each of these existing streams. It should be noted that SCH does not (and will not) use any nuclear materials for its operations, and as such collection for this material is not required.

The contaminated and biological waste system is not connected to the sewage discharge system and consist of solids and liquid containers for the retention of wastes. These containers are collected by a registered and approved biological hazards waste contractor. The existing collection arrangements will be extended to cover the expanded operations of the hospital.

General sewage will be connected to the Sydney Water sewer. Only general sewage articles will be permitted for discharge to the sewer. Measures to be adopted to ensure the appropriate disposal of waste will include:

- Training of staff to dispose of contaminated and potentially contaminated wastes (including biological hazard wastes) into the appropriate receptacles for collection by the biowastes and contaminated wastes contactor.
- Erection of signs all discharge points to sewer indicating that “Non-Hazardous Wastes Only” shall be discharged to sewer points.

The above procedures and actions in relation to the appropriate handling, storage and disposal of hazardous wastes are included within the draft Statement of Commitments as **Section 7**.

## 6.11 Construction Management

A Construction Management Plan has been prepared by APP (refer **Appendix O**). This plan details the following aspects of the construction management:

- project staging;
- construction activities;
- impacts on adjoining neighbours;
- consultation;
- risk and mitigation measures;
- occupational health and safety;
- traffic management;
- waste management; and
- noise management.

The plan also outlines what additional detailed construction management plans are required to be prepared prior to the commencement of works.

## 6.12 Hazardous Goods

No hazardous goods are to be stored within the proposed building extension. It should be noted that the existing hospital incorporates medical oxygen storage This oxygen is a dangerous good as defined under the provisions of the Australian Dangerous Goods Code. However, Class 2.2 gases (which includes oxygen) are not captured by State Environmental Planning Policy 33 - Hazardous and Offensive Development and as such no further assessment is required.

## 6.13 Economic and Social Benefits

The Randwick Health Campus is one of the major employers in the eastern subregion of Sydney. The expansion of SCH facilities will deliver a number of economic and social benefits for the region, including:

- Providing a modern, enlarged, high quality, and attractive hospital within a cluster of existing medical uses, further strengthening the medical role of the precinct;
- Improving the quality of medical facilities available to the public; and
- The creation of a number of construction jobs.

## 6.14 Site Suitability and Project Justification

The suitability of the site has been considered from a medical operational perspective as well as from a site, development and environmental capacity perspective. The site is considered suitable for the project for the following reasons:

- The subject site is currently used for medical related purposes, being the SCH;
- Buildings with large site coverage and of a relative scale are a feature within the medical precinct;
- The building will occupy the only parcel of vacant land available for SCH to expand;
- The site forms part of a medical and knowledge cluster that provides important economic and social benefits to the community;
- The provision of a new and modern medical facility will further support and strengthen the medical cluster of uses;

- The area and shape of the site allows for the provision of a new hospital building that meets the special design requirements of a medical facility, whilst not resulting in any significant adverse impacts on surrounding residential dwellings in terms of overshadowing or view loss; and
- The environmental investigations of the site and soil conditions demonstrate that the proposed use and design of the building is suitable for the site.

# 7.0 Draft Statement of Commitments

## 7.1 Ecologically Sustainable Development

The proponent commits to the preparation of a Building User's Guide prior to issue of an occupation certificate.

## 7.2 Landscape Screening

To increase screening to the residential properties to the west, the proponent commits to removing the current species and re-planting with *Banksia serrata* at 2 metre-spaced centres along the western edge of Hospital Road adjacent to the development. The area will also be under planted with *Lomandra tanika*. To ensure the viability of the replacement screening species, a maintenance inspection program will be prepared and a suitable irrigation system provided.

## 7.3 Construction Management

The proponent commits to implementing the following plans during the construction phase. The following documents will be prepared prior to the commencement of works:

- Construction traffic management plan;
- Construction waste management plan;
- Construction noise management control plan;
- Construction vibration management control plan;
- Construction dust management control plan; and
- Erosion and sedimentation control plan.

## 7.4 Waste Management

The proponent commits to the following:

- Preparation of a Construction Waste Management Plan prior to issue of a construction certificate; and
- Preparation of an Operational Waste Management Plan prior to issue of an occupation certificate.

## 7.5 Consultation

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

# 8.0 Conclusion

Health Infrastructure - NSW Health seeks approval for the construction of a five storey purpose-built infill building (with associated car parking and landscaping) to provide for the continued efficient and effective operation of the Sydney Children's Hospital, Randwick.

The development is permissible under within the 5 Special Uses 'Randwick Hospitals Complex' zone and is consistent with the State Government strategic planning documents for the site. The proposal is of significant merit and will provide an expanded modern hospital that guarantees the long term viability of the Sydney Children's Hospital.

The environmental impacts of the proposal including traffic generation and car parking; acoustic, wind impacts; contamination and geotechnical matters; stormwater, drainage, heritage; and construction are negligible or can be appropriately managed through the adoption of the sub-consultants recommendations and/or preparation of relevant plans of management.

The significant economic and social impacts including the creation of construction jobs, strengthening the role of the health campus as a key employment hub of the region; and improving the quality of medical facilities available to the public.

Having regard to the above, it is considered that the project will provide environmental, social and economic benefits and accordingly we recommend the Minister for Planning approve the application.