

RNSH

Royal North Shore Hospital and
Community Health Facility

Environmental Assessment and
Project Application - Final for
Public Exhibition

January 2009



InfraShore

urbis

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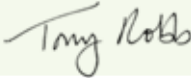
Statement of Validity

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Certification:

I certify that I have prepared the contents of the Environmental Assessment and to the best of our knowledge;
the information contained in this report is neither false nor misleading.

Signature	
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Date	09/01/2009

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EXECUTIVE SUMMARY

The proposed development is for the construction of a new Acute Hospital Building, Community Health Facility, multi-level car park and associated works on land known as the 'Royal North Shore Hospital Redevelopment' (RNSH) site.

This Environmental Assessment accompanies a Project Application, under Part 3A of the Environmental Planning and Assessment Act 1979. The Project has been declared a Major Project, and is identified as **MP 08_0172**.

The scope of the subject Project Application includes:

- Acute Hospital building.
- Community Health Facility.
- Multi-level car park for 576 vehicles.
- Refurbishment/alterations to the Douglas Building.
- Pedestrian bridge linking Hospital and Douglas Building.
- New roads associated with the development of the Hospital, Community Health Facility and car park.
- At grade parking and the temporary use of land for parking purposes during construction.
- Public Domain works including footpaths, lighting and street tree planting.
- Demolition of Buildings 1, 2, 10 and part 19 (demolition of all other buildings requiring demolition has already been approved).
- Landscaping.
- Civil works including storm water and drainage infrastructure, new roads and utilities.

The RNS Hospital redevelopment project, provides opportunity to enhance health services on site by:

- Locating acute clinical services in one building, with close links to rehabilitation services to improve accessibility, and enhance continuity between acute and rehabilitation services.
- Improving links between community and other health services on site.
- Providing consolidated research facilities and multidisciplinary educational facilities on site.
- Providing flexible building design to allow for future modification and expansion to meet changes in clinical practice.

The current proposal for the Hospital is to consolidate the clinical and ward facilities into a new facility east of Reserve Road. Of the existing hospital buildings, other than buildings warranting retention due to their heritage significance, only the relatively recent Douglas Building is proposed for retention.

The proposed health campus will form a new core health and research precinct, integrated with the Kolling Building, on the corner of Reserve Road and Westbourne Street, and the private hospital. The main entrance to the Acute Hospital is located on Reserve Road, in the centre of the health precinct.

The current Project Application retains the key buildings and functions as envisaged under the Concept Approval MP 06_0051 for the core health precinct, except that the Acute Hospital is moved further to the east, (allowing for the retention of Reserve Road), and the Community Health Building is moved further north to Precinct 6, (allowing for better connections with the Acute Hospital and consolidation of the core precinct). The proposal complies with respect to the earlier prescribed height limits and is consistent with MP 06_0051, in terms of the bulk and scale. It is considered that a superior design, town planning and operational outcome has been accomplished as a result of the variations incorporated within the subject Project Application.

Of the potential impacts likely to arise as a result of the proposed development, it is considered that those matters related to noise and vibration during the construction stages are of most significance. However, subject to the incorporation of relevant DECC Guidelines, the provisions of the Protection of the Environment and Operations Act and all relevant Australian Standards into a comprehensive (or stage specific) Construction Management Plan(s), such potential issues may be successfully mitigated.

No significant increase in traffic is expected as a result of the proposed development given the relatively marginal increase in on-site parking.

The proposed development will have significant public benefits, principally of course due to the construction of a world class hospital and community health facilities on the campus, and also the rationalization of services on the site. The proposal will also stimulate employment generation both during construction, during operation and, of course, employment multiplier effects resulting from the operations of the campus, in the form of further uses such as medical research and like industries. Further public benefits include a health campus with greater levels of pedestrian and visitor amenity, improved clarity of wayfinding, landscaped open areas and the identification and retention of buildings and elements of heritage significance resulting in a positive heritage outcome for the site.

The subject Environmental Assessment is considered to satisfactorily address those heads of consideration as provided in the DGRs and subject to the implementation of the Commitments made in Section 7 of this report, it is envisaged that no unreasonable or significant adverse environmental impacts will be introduced as a result of the proposed development.

It is recommended that approval be granted.

1 INTRODUCTION

The proposed development is for the construction of a new Acute Hospital, Community Health Facility, multi-level car park and associated works on land known as the ‘Royal North Shore Hospital Redevelopment’ (RNSH) site.

This Environmental Assessment accompanies a Project Application under Part 3A of the Environmental Planning and Assessment Act 1979, (the Act).

The scope of the subject Project Application includes:

- Acute Hospital building.
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- Multi-level car park for 576 vehicles.
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- Public Domain works including footpaths, lighting and street tree planting.
- Demolition of Buildings 1, 2, 10 and part 19 (demolition of all other buildings requiring demolition has already been approved).
- Landscaping.
- Civil works including storm water and drainage infrastructure, new roads and utilities.

This Report has been prepared to asses the above proposal in accordance with the assessment requirements provided by the Director General. Refer to Section 1.1.3

1.1 BACKGROUND

1.1.1 Concept Plan

A Concept Plan Approval was issued by the Minister for Planning on 9 February 2007, (Major Project Application No. 06_0051), which gave concept approval for the following hospital related components:

- Subdivision of the site into a hospital precinct and other development precincts.
- A maximum floor area of 178,370m² across the development precincts (maximum FSR are prescribed for each precinct)
- Minimum and maximum FSR for the various components of the proposal including residential, employment generating uses, nurses accommodation etc.
- The conceptual road design.
- Urban design, landscaping, open space and heritage concepts.
- Maximum heights.
- Car parking provision to be in accordance with Willoughby Council DCP.
- Improved servicing of the site.
- Staged re-opening of Westbourne Street to through traffic.

Project Application Approval was given for demolition works and site preparatory works to ground level.

On 31 January 2008, the Concept Plan and Project Application Approval was modified in so far as amendments to conditions related to agreements with public transport providers and with respect to the scheduling of a Traffic Management and Accessibility Plan (TMAP) (Conditions M9.1 and M10.1).

The Concept Plan and Project Application was further modified on 7 April 2008. The modification allowed for the erection temporary buildings and imposed relevant conditions.

1.1.2 Project Application

Further to the Concept Approval for the whole RNSH site, and along with it the identification of development precincts within the site, on 19 August 2008 a request was made to the Minister to declare the core medical precinct of the site a “Critical Infrastructure Project”, under Clause 6 of SEPP Major Projects 2005 (the SEPP), to permit the lodgement of a Project Application, under Part 3A of the Environmental Planning and Assessment Act 1979, (the Act).

The application was accompanied by a Preliminary Environmental Assessment, (PEA), for development within the core medical precinct and a request for any relevant Director-General's environmental assessment requirements.

On 30 September 2008, the Director-General Requirements, (DGRs), were issued by the NSW Department of Planning, under s.75F of the Act. The project has been declared a Major Project Application, (MP 08-0172).

1.1.3 DGRs

The following table provides the DGRs and a reference as to where they are addressed in the report:

Director-General Requirement	
Application No	MP 08_0172
Project	Major Project Application for demolition of the existing buildings and the erection of Acute Hospital and Community Health Facility and associated works, generally as described in the letter dated 28 August 2008 from the Chief Executive Health Infrastructure (NSW Health), and supporting Preliminary Environmental Assessment dated August 2008.
Site	Royal North Shore Hospital, St Leonards (Lot 21 & 22 DP 863329 and Lot 102 DP 1075748)
Proponent	NSW Health
CIV	\$700 million
Date of Issue	30 September 2008
Date of Expiry	If the environmental assessment is not exhibited within 2 years after this date, the applicant must consult further with the Director-General in relation to the preparation of the environmental assessment.

Issue	Director-General Requirement	Reference
General Requirements	The Environmental Assessment must include:	
	(1) An executive summary.	Page 5
	(2) A description of the proposal including:	
	▪ description of the site including cadastre and title details;	S.2 & APP C
	▪ a thorough site analysis and description of the existing environment;	S.2. & S.3
	▪ suitability of the site for the proposed development;	S.2.7
	▪ likely environmental impacts;	S.5
	▪ design, construction, operation, maintenance, rehabilitation and staging as applicable; and	S.3 & S.5
	▪ justification for undertaking the project, taking into consideration the environmental impacts of the proposal, the suitability of the site and whether or not the project is in the public interest.	S.2.8
	(3) A consideration of the following with any variations to be justified:	
	▪ any approved part 3A concept plan;	S.4.1
	▪ all relevant State Environmental Planning Policies; and	S.4.2
	▪ applicable local planning instruments and relevant legislation and policies.	S.4.3
	(4) A draft Statement of Commitments, outlining commitments to the proposal's management, provision of infrastructure, mitigation and monitoring measures with clear identification of who is responsible for these measures.	S.7
Key Assessment requirements	(5) A conclusion justifying the proposal, taking into consideration it's environmental and construction Impacts, mitigation measures to address these impacts, its cumulative impacts, suitability of the site and whether or not the project is in the public interest.	S.8
	(6) A signed statement on the validity of the Environmental Assessment, the qualifications of person(s) preparing the Assessment and that the information contained therein is neither false nor misleading.	Page 2
Urban Form and Design	The Environmental Assessment must address the following key issues:	
	Urban design, height, density, bulk and scale of the development and relation to surrounding development, landscape and topography;	
	▪ Site analysis and architectural plans;	S.2.3 & APP A
	▪ External materials and finishes, including a sample board;	S.5.1
	▪ Photomontages and view analysis;	S.5.3 & APP A
	▪ Details of proposed areas of landscaping and open space; and	S.3.3.5 & APP B
	▪ Measures to reduce visual impact of car parking structure including architectural treatments and opportunities for landscaping on the car park roof.	S.5.1.3

Issue	Director-General Requirement	Reference
Amenity Impacts	▪ Address the visual impact, privacy and overshadowing of the development on adjoining properties, with particular regard to any sensitive uses.	S.5.3
Heritage	▪ Existing heritage items should be identified, including significant heritage buildings, landscape elements, curtilages, setting and important views. Any impacts should be minimised and mitigated where appropriate. It is desirable that all significant historical components of RNSH be conserved and adaptively reused.	S.5.4 & APP G & P
Traffic, Transport and Accessibility	▪ Provide a traffic and transport study that addresses the following:	See S.5.5 APP F
	- Surrounding context and how the proposal fits within the overall hospital campus in terms of transport and traffic management;	
	- Measures to encourage mode shift to public transport and reduce reliance on on-site car parking;	
	- Identify existing public transport services in the site, together with other transport services offered by the hospital;	
	- Detail existing pedestrian and cycle movements within the vicinity of the subject site and determine the adequacy of the proposal to meet the likely future demand for increased pedestrian and cycle access. May include facilities for secure bicycle storage;	APP F
	- Identify Travel Demand Management (TDM) measures that will optimise the opportunity provided by the project site's proximity to public transport;	
	▪ Demonstrate compliance with the RTA Guidelines for Traffic Generating Development.	
	▪ Internal road and access arrangements including entry/drop off points, traffic management and hierarchy. The primary drop off area to the hospital and community health facility should be clearly identified and appropriate disability access provided in accordance with appropriate Disability Access Guidelines.	
Drainage, Stormwater and Groundwater Management	▪ Off street car parking provision and management of on-street parking.	APP F & S.5.5.2
	▪ Service delivery.	S.5.5.4
Geotechnical and Contamination	▪ Proposed emergency evacuation and public access.	S.5.10.4, S5.5.6 & APP N
	▪ Identify drainage, stormwater and groundwater management issues, including on-site stormwater detention, water sensitive urban design measures and drainage infrastructure.	S.5.7 & APP M
	▪ Geotechnical report assessing the suitability of the site for the structures with regard to slope stability, erosion hazard, proposed earthworks and retention methods.	APP E
	▪ Contamination report assessing the potential for contamination and the suitability of the site for proposed uses.	S.5.7 & APP L

Issue	Director-General Requirement	Reference
<i>Construction Impacts</i>	▪ Noise and vibration;	S.5.5.9
	▪ Soil and erosion control;	
	▪ Stormwater management;	
	▪ Waste management;	
	▪ Cut/fill and retaining structures;	
	▪ Traffic management; and	
	▪ Car parking for construction workers.	
<i>Operational Impacts</i>	▪ Address noise generated from plant and equipment;	S.5.3.6
	▪ Waste management including biomedical, infectious or toxic wastes, storage of any chemicals I hazardous materials;	S.5.10.1 & S.5.10.2
	▪ Site security;	S.5.10.3
	▪ Emergency and evacuation procedures;	S.5.10.4
	▪ Fire safety;	S.5.16 & APP Q
	▪ Lighting; and	S.5.10.5
	▪ Signage.	S.5.10.6
<i>Ecological Sustainable Development</i>	▪ Address proposed ESD measures including thermal massing, water sensitive urban design measures, energy efficiency, recycling and waste disposal.	S.5.11 & APP N
<i>Utilities and Services</i>	▪ Address capacity of utilities including water, sewer, stormwater, gas, power and telecommunications Infrastructure that will serve the project.	S.5.14
<i>Development Staging and Impacts on Existing Uses</i>	▪ The Environmental Assessment should include the proposed method of development staging and demonstrate that It is consistent with, and can accommodate, the future redevelopment of RNSH as well as operate independently.	S.5.12
	▪ Detailed plans and documentation should be submitted that articulates the status of existing buildings and how it is intended to relocate or displace existing uses temporary or otherwise, possible future expansion areas, vehicular car parking (location and numbers), access and delivery areas and proposed road closures.	S.5.9.6 & S5.12
<i>Telecommunications</i>	▪ The Environmental Assessment should identify and address any implications of the proposal on the use of the broadcast tower at 217A Pacific Highway, Artarmon and other telecommunications facilities in terms of the level of electromagnetic radiation environment, interference issues and existing microwave links.	S.5.13 & APP O

Issue	Director-General Requirement	Reference
Consultation Requirements	Provide written evidence of detailed and on-going consultation with the following parties Requirements during the preparation of the Environmental Assessment: ▪ Willoughby City Council ▪ NSW Roads and Traffic Authority ▪ NSW Ministry of Transport ▪ Railcorp Document all community consultation undertaken to date or discuss the proposed strategy for undertaking community consultation. This should include any contingencies for addressing any issues arising from the community consultation and an effective communications strategy.	S.6
Deemed refusal period	60 days (see Clause 8E of the Environmental Planning & Assessment Regulation)	
Landowner's Consent	The consent of the landowner is to be provided in accordance with s8F of the <i>Environmental Planning and Assessment Regulation 2000</i> .	
Documents to be submitted	Ten (10) hard copies of the EA with plans to be to scale and A3 in size Ten (10) copies of the Environmental Assessment and plans on CD-ROM (in PDF please ensure all files are less than 2Mb in size).	

This Environmental Assessment has been prepared with regard to MP 08_0172.

1.2 THE PROPONENT AND THE CONSULTANT TEAM

The proponent, Infrashore, consists of Thiess and ABN Amro.

The consultant team assisting the proponent includes the following key experts:

- Thiess – Development Management
- Cox Richardson – Architecture & Masterplanning
- Bligh Voller Neild – Architecture
- Urbis – Environmental Assessment, Statutory Planning, Community Consultation & CPTED Assessment
- Hyder – Infrastructure, Drainage, Civil Works, Traffic & Transport
- Graham Brooks and Associates – Heritage Conservation
- Taylor Brammer Landscape Architects – Heritage Landscape Assessment
- Oculus – Landscaping
- Arup – ESD, Acoustics & Noise
- Kordia – Telecommunications
- Morris Goding – Access
- BCA – Hendry Group
- Coffey - Contamination and Geotechnical

2 PLANNING CONTEXT AND SITE ANALYSIS

2.1 STRATEGIC PLANNING CONTEXT

The NSW Metropolitan Strategy and the Inner North Subregional Strategy clearly support the development of this critical infrastructure. The project will drive innovation and economic growth through investment and research in the medical and health sectors of the economy, thereby reinforcing the role of St. Leonard's in the 'Global Corridor' as a specialized medical centre with opportunities for further related employment. Refer to Figure 1 below.



Figure 1: Extract NSW Metro strategy 2005

Between 2001 and 2031, The Metro Strategy targets growth from 25,166 to 33,000 jobs in St Leonards, requiring the creation of an additional 7,834 jobs. The specialist medical facilities of the RNSH is expected to be a significant driver of this growth.

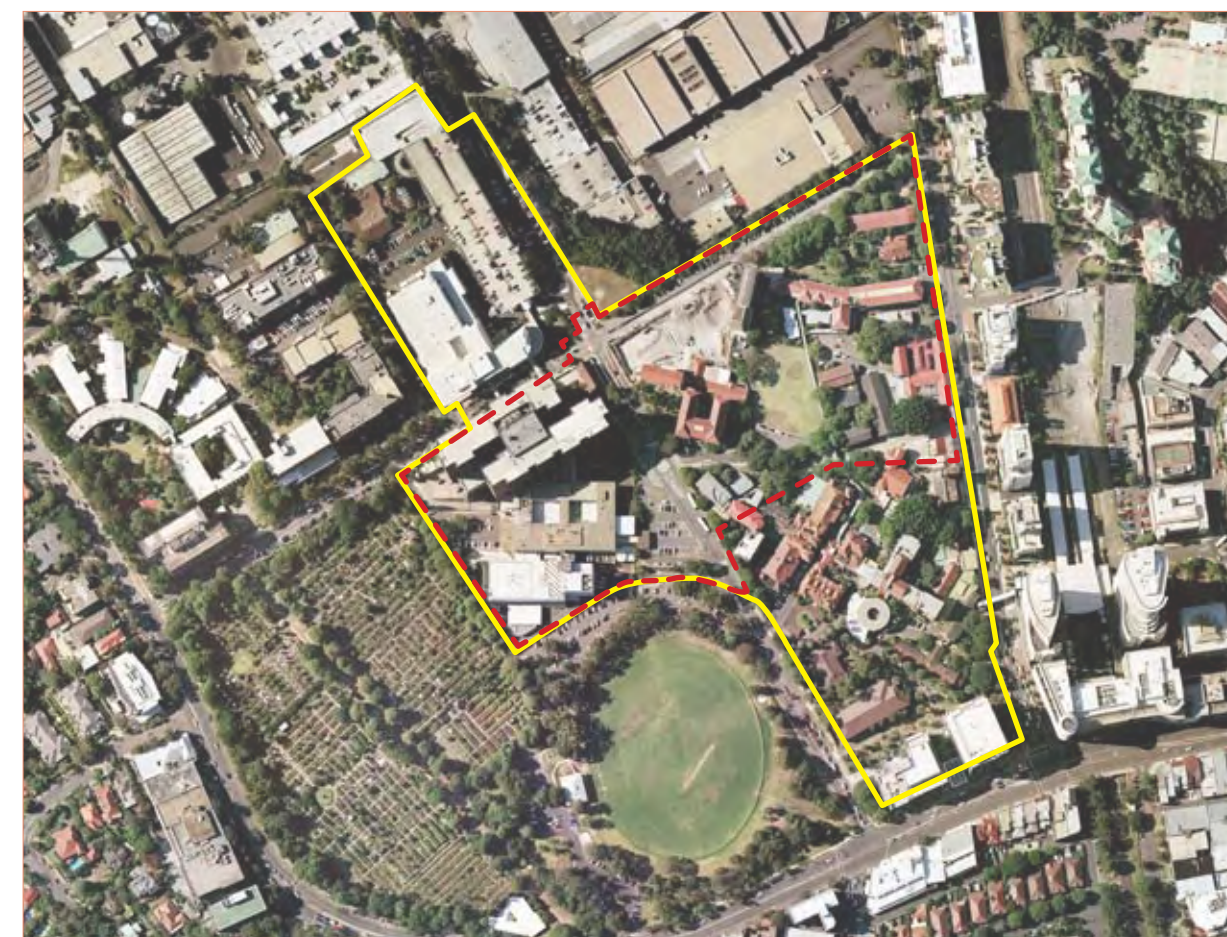
Opportunity exists on the RNS Hospital site to build on the site's strategic health, education and transport assets as a catalyst for employment and residential growth in line with the State Government's strategic plans for St Leonard's. Given the size of the campus, there is opportunity to provide employment for a significant portion of the anticipated 31% employment growth in St Leonards on the site. A large part of this employment potential will be in direct and indirect health-related services.

The site has convenient access to public transport, especially rail and bus routes on Pacific Highway. The redevelopment of the site in close proximity of St Leonards Railway Station will make a major contribution to the transit oriented development principles of the Metro Strategy.

2.2 THE SITE

The site has an area of approximately 13 hectares and is commonly known as the Royal North Shore Hospital site. It is owned by North Sydney Central Coast Area Health Service and is legally described as Lot 21 and 22 in DP 863329 and Lot 102 DP 1075748.

Refer to Survey and Title details at **Appendix C**.



— Royal North Shore Hospital Campus
- - - Subject Site

Figure 2 : Local Context – Existing Buildings, prepared by Urbis

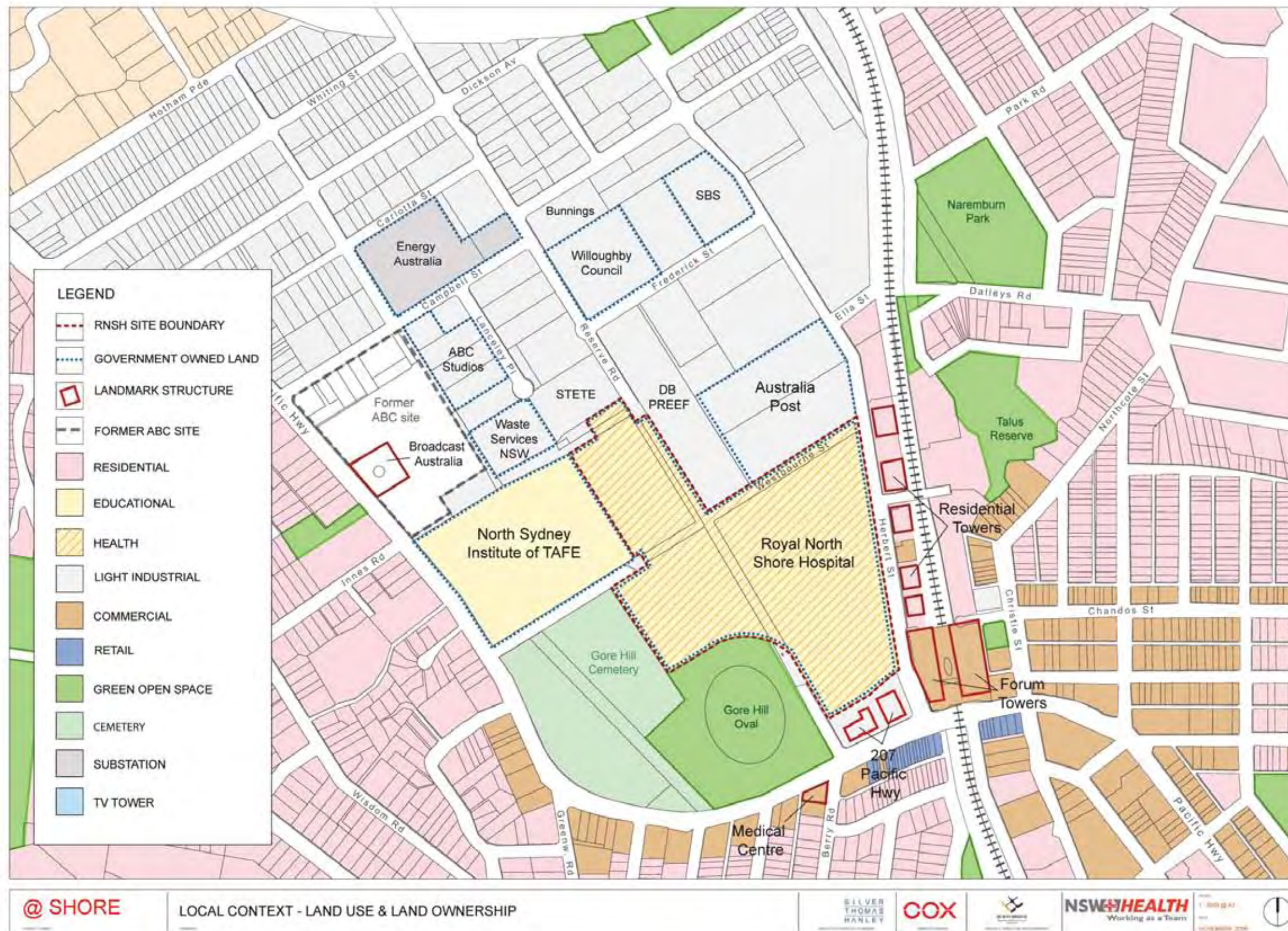


Figure 3: Local Context – Land Use & Land Ownership, prepared by Cox Richardson

2.3 SITE ANALYSIS

2.3.1 Topography

The site occupies a prominent ridge to the north of the Pacific Highway, and the main existing hospital building is a prominent landmark visible from many vantage points in the North Shore.

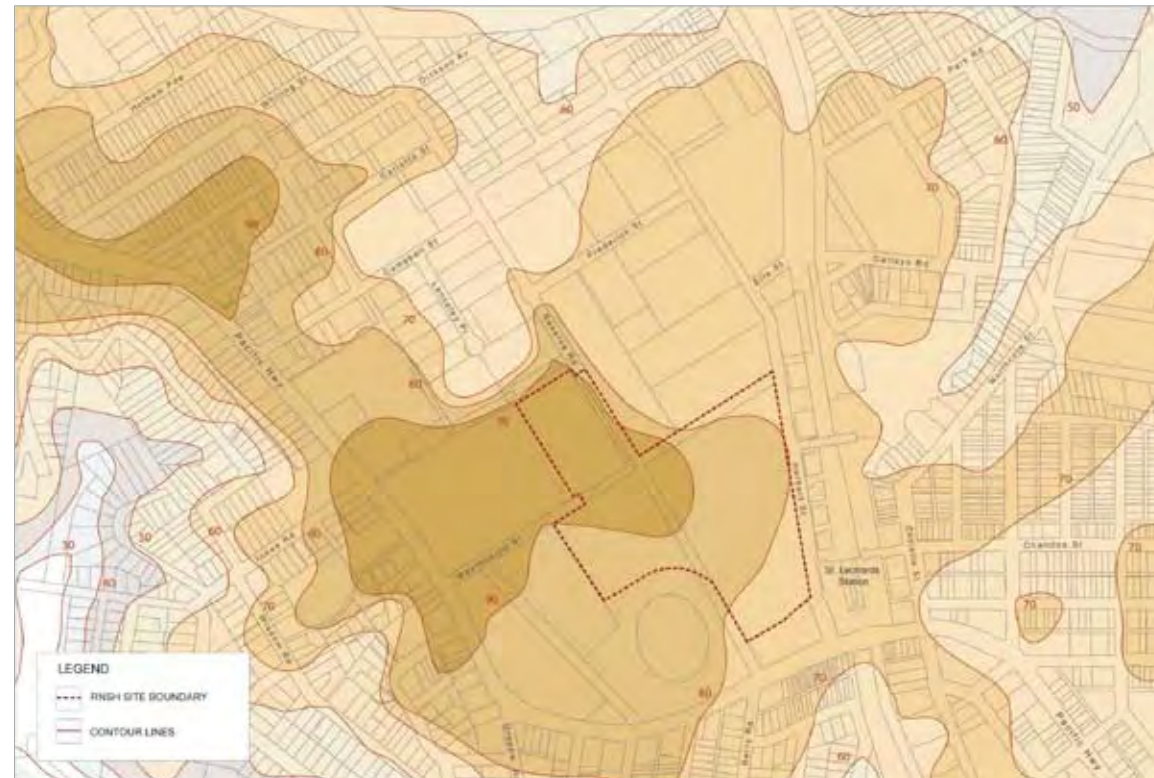


Figure 4: Local Context - District Topography, prepared by Cox Richardson

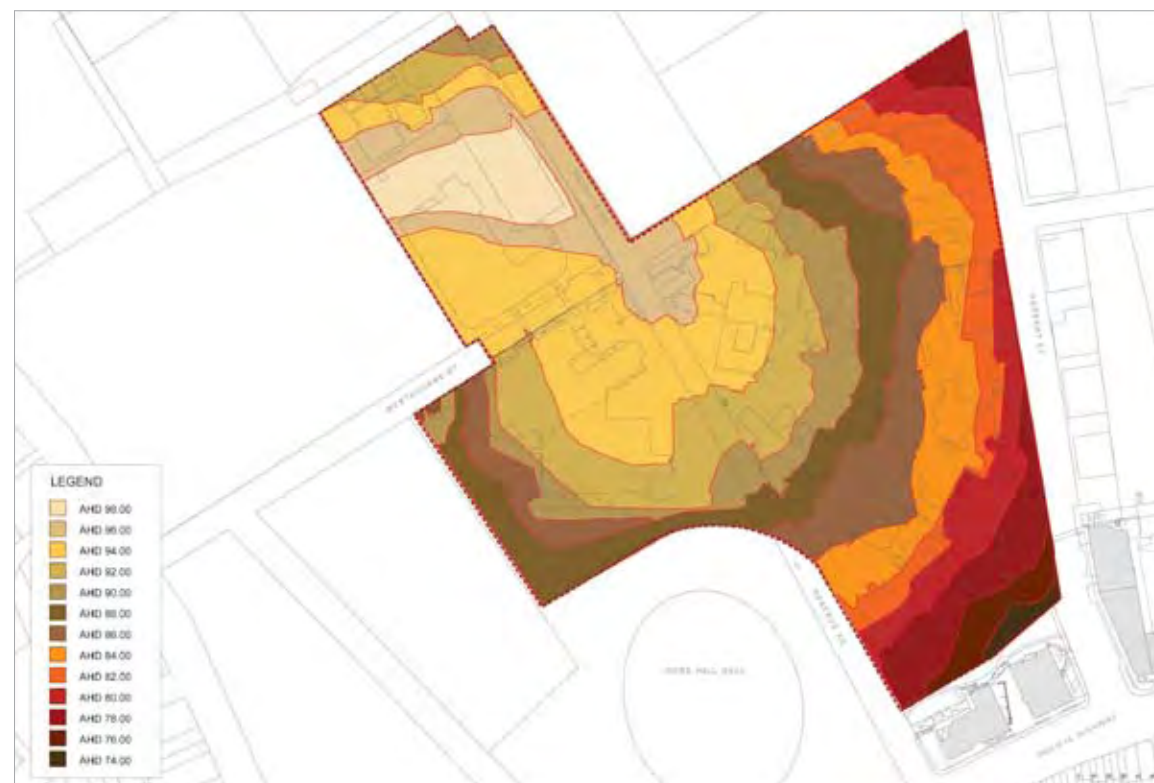


Figure 5: Local Context - District Topography, prepared by Cox Richardson

2.3.2 Views and Outlooks



Figure 6 : Local Context - Views and Vistas from Site, prepared by Cox Richardson



Figure 7: Local Context - Views in and around Site, prepared by Cox Richardson

2.3.3 Noise Sources

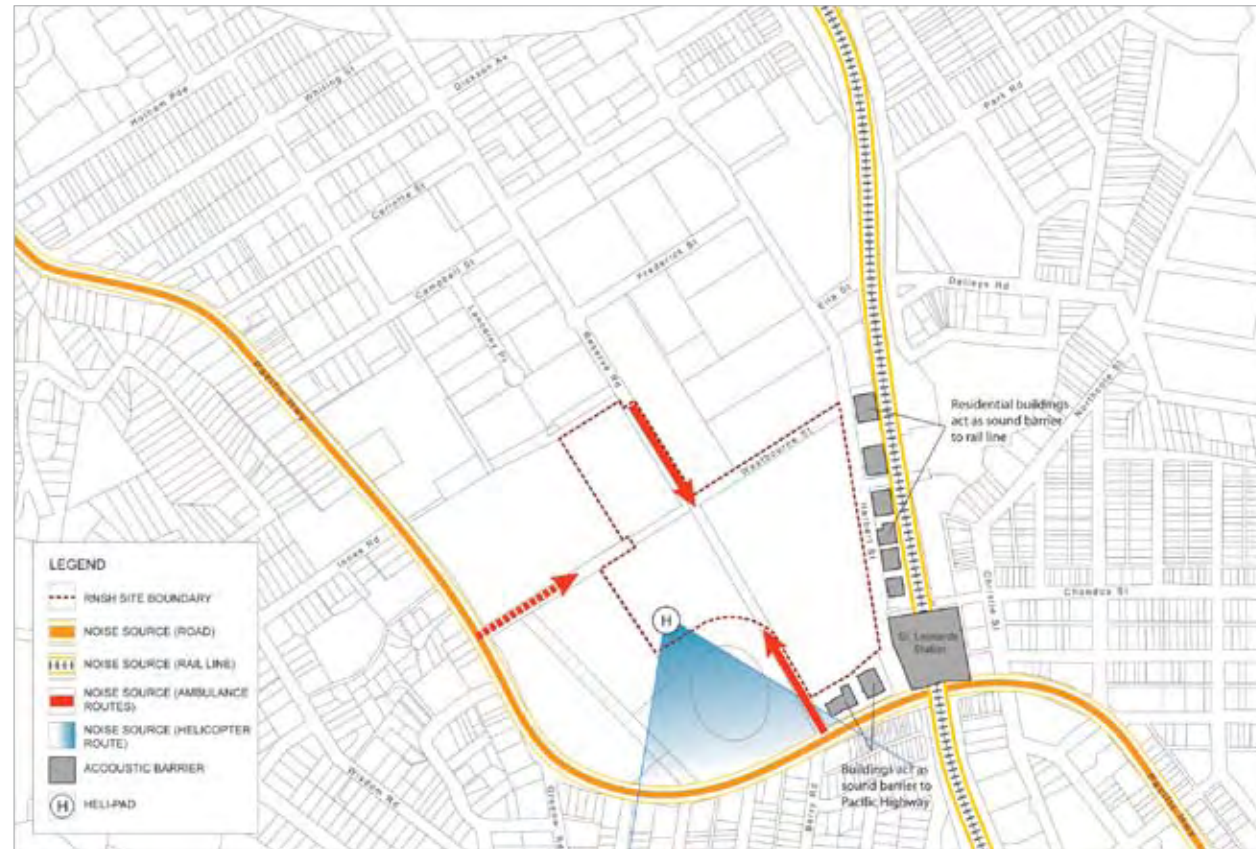


Figure 8: Local Context - Existing Noise Sources, prepared by Cox Richardson

2.3.4 Transport and Site Access

The site is in close proximity to St. Leonard's Rail Station and is serviced internally, as well as along the Pacific Highway, by public buses.

Vehicular access to the site is from the Pacific Highway to the south and the Gore Hill Freeway to the north. Service vehicle access is available from the western section of Westbourne Street. A complex internal road network provides vehicular access to the different hospital precincts and buildings.

2.4 GEOTECHNICAL CONDITIONS

A Geotechnical Assessment of the site, which supplements earlier similar investigations, has been prepared by Coffey Geotechnics, and is provided at **Appendix D**.

The site generally comprises, from surface down, a mixture of clay type soils, shale and then sandstone bedrock. The subterranean conditions and the relative depths of clay, shale and sandstone are considered to be beneficial in terms of limiting potential impacts during bulk excavation, as described in further detail at Section 5.9.



Figure 9: Local Context - Road Access, prepared by Cox Richardson



Figure 10: Local Context - Pedestrian Links, prepared by Cox Richardson

2.5 LOCAL CONTEXT ANALYSIS AND SURROUNDING DEVELOPMENT

The site has excellent access to the Sydney CBD. It is located within immediate proximity of St Leonards Railway Station, and lies on several major bus routes. It is within easy walking distance of transportation networks, shops, employment, open space and residential properties. It has convenient access to both the Pacific Highway and the Orbital Motorway (including the Gore Hill Freeway).

The high ridge that underlies St Leonards is reflected in the built form making the skyline an interesting and distinctive feature in the broader landscape, with the railway station marked by the highly visible 'Forum' development.

RNS Hospital is surrounded by a wide variety of land uses, including St Leonards CBD and high density housing to the east; residential development to the south and east; special uses (North Sydney TAFE, Gore Hill Memorial Cemetery and former ABC site) to the west; Gore Hill Park to the immediate south west and the Artarmon industrial area to the north. The current built form provides impediments to public pedestrian and vehicular access through the site, notwithstanding that a number of strong desire lines exist across the site (e.g. from the TAFE to St Leonards Station), and along Reserve Road.

2.6 EXISTING IMPROVEMENTS

The RNS Hospital site is a complex site consisting of a wide range of building types, styles and sizes ranging from small Queen Anne style buildings to the multi storey Hospital Building 2.

Hospital facilities on the site comprise separate public and private hospitals, with the public facilities located to the south of Westbourne Avenue, and the private facilities to the north.

2.6.1 The Public Hospital

The existing Royal North Shore public hospital is both a local and a major Referral/Tertiary Hospital for an area that extends north of Sydney Harbour across the Hawkesbury River to the southern shore of Lake Macquarie and West to Wiseman's Ferry, having a population in excess of 1,110,600 people.

It is also a major teaching and research hospital, and provides state-wide services for burns and spinal injuries. It also has a major emergency department and plays a significant role in the provision of specialist services for the Sydney metropolitan area, particularly in surgical, paediatrics, maternity and community services.

The hospital comprises in excess of 50 buildings scattered across the site, including 7 demountable buildings. However the principal facilities are housed in Building No. 1, Building No. 2 and the Douglas Building.

The Douglas Building is a 6 storey, 9,483m² building housing:

- Emergency
- Maternity
- Burns unit
- Paediatrics
- Sleep health and research
- Biomedical engineering
- Administration

Building No 2, the existing main hospital building, is a 13-storey, 54,451m² building housing:

- Main entry
- Loading stores
- Mortuary
- Records
- Kitchen
- IT
- Staff accom/facilities
- Cafeteria
- Shops
- Ambulatory care, operating theatres, intensive care (ICU), aged care and inpatients
- Pathology, Anaesthetics, pain management, rehabilitation and endoscopy
- Cardiology, spinal, neurosurgery, respiratory, cardiothoracic, orthopaedics, haematology and oncology
- Preoperative/Pre-Admissions and General Surgery

Building No.1 is a 5-storey, 19,515m² building housing:

- Pharmacy, stores, staff facilities and administrative offices
- Emergency and Medical Imaging
- Ambulatory care clinics and some ambulatory care facilities
- Pathology and biomedical

The Kolling Building used for educational and research purposes was occupied in October 2008.

The following smaller buildings are scattered across the site with a total floor area of 52,612m²:

- Chapel
- Diabetic Service
- Drug and Alcohol Service
- Lanceley Cottage
- Vindin House
- Vindin House - South Wing
- Aged Care and Rehabilitation
- Professional Development Centre
- Welcome Laboratory
- Laundry
- Maintenance Offices
- Boiler House
- Maintenance/Facility Planning
- Clinical Teaching Block
- Norman Lock Lecture Theatre
- Kolling Institute
- Wallace Freeborn Institute
- Day Surgery Recovery
- Day Surgery
- Hydrotherapy Pool
- Physiotherapy
- Social Work
- RMO's Quarters
- ANSTO Body Protein
- Orthotics/Dietetics
- CJ Cummins Unit
- Block 4 - North Wing
- Block 4 - East Wing
- Radiotherapy
- Child Care
- BreastScreen Centre
- Gore Hill Research Laboratory
- UTS Clinical Studies
- Centenary Lecture Theatre
- Demountable -Institute for Magnetic Resonance Research

The incremental manner in which these various facilities have developed over some 100 years has resulted in a highly inefficient operational environment and many outdated and inefficient facilities.

2.6.2 The Private Hospital

The private hospital has a floor space of 20,013m² comprising 5 hospital floors and 3 basement car parking levels. It accommodates modern operating theatres, radiology, wards and medical suites. A development application has recently been approved by Willoughby Council for a 8,952m² extension to the facility.

2.6.3 The Public Hospital & Surrounding Campus



Public hospital and chapel



Douglas Building



Heritage Precinct



Heritage Precinct



Reserve Road (Hospital in background)



Existing Public Hospital



Pedestrian overpass Westbourne Street



Reserve Road

Figure 11: Site Photos

2.7 SUITABILITY OF THE SITE

The site is considered to be particularly suited to the proposed development for the following reasons:

- Consistency with:
 - NSW Metropolitan Strategy and the Draft Inner North Subregional Strategy; and,
 - Major Project Concept Plan Approval MP 06_0051.
- The proposed development is firmly within the public interest and has significant positive social, public and community health benefits;
- The proposed development will not introduce any significant adverse environmental impacts on surrounding neighbouring properties;
- The site has favourable geotechnical conditions at levels where bulk excavation is proposed, where expected cut materials are clay-type soils and shale as opposed to the underlying sandstone bedrock, which is significant in terms of the future management and mitigation of potential noise and vibration impacts;
- No significant contamination issues are known to exist and contingency remediation methodologies will be included in any Remediation Action Plan to address any likely unforeseen circumstances; and,
- The site is suited given that no overall intensification of the use is proposed but rather a rationalisation of uses and consolidation of functions which will not result in any untoward cumulative impacts.

2.8 JUSTIFICATION FOR UNDERTAKING THE PROJECT

Given the suitability of the site for the development, the lack of envisaged environmental impacts and the underlying need to modernise this key health facility, the undertaking of the Project is considered to be fully justified.

3 THE PROJECT

3.1 THE VISION

Contemporary service delivery modes are changing the way in which health services are provided and arranged. The ageing population will require services that are patient-centres and organised in a way that make services easy to access. Whilst inpatient beds will be an important part of the redeveloped facilities, most people will not receive treatment in a traditional inpatient unit, but will be cared for on a day-stay, ambulatory or outreach basis.

The RNS Hospital redevelopment project, provides opportunity to enhance health services on site by:

- Locating acute clinical services in one building, with close links to rehabilitation services to improve accessibility, and enhance continuity between acute and rehabilitation services.
- Improving links between community and other health services on site.
- Providing consolidated research facilities and multidisciplinary educational facilities on site.
- Providing flexible building design to allow for future modification and expansion to meet changes in clinical practice.

The current proposal for the Hospital is to consolidate the clinical and ward facilities into a new building east of Reserve Road. Of the existing hospital buildings only the relatively recent Douglas Building is proposed for retention.

The consolidated hospital will be clearly defined, bound by Reserve Road, Red Road, Westbourne Street and Eileen Street. It will create a state of the art facility, with no consequent compromise in the health care planning. All core hospital services will be located in one building allowing for the delivery of first class health services.

3.1.1 Health and Research Precinct

The final health campus configuration will include:

- the new Acute Hospital building.
- the Douglas building west of Reserve Road (140 metres from the main entrance).
- a new car park west of Reserve Road (60 metres from the main entrance of the new Acute Hospital with level access for people with ambulant impairment).
- a new Community Health building between the hospital and Herbert Street (200 metres from the main entrance).
- the North Shore Private hospital diagonally opposite on Westbourne Street (140 metres from main entrance).
- emergency and other support services are concentrated along the southern edge of the new Acute Hospital along Eileen Street.
- Chapel.
- Kolling Building.
- Multi-storey car park.

The core precinct layout allows for:

- provision of a multi-deck car park convenient to Royal North Shore Hospital with level and direct access for staff and visitors.
- demolition of buildings 1, 2, 10 and part 19.
- opportunity for the future expansion of the Hospital.
- opportunity for development sites for hospital support functions such as staff amenity (child care, gymnasium and retail), visitor amenity (car parking, and retail) and medical research, medical suites and accommodation.

3.2 DEVELOPMENT FOR WHICH APPROVAL IS SOUGHT

The subject Project Application consists of the following principal components (as illustrated in Figure 12):

- Acute Hospital building.
- Community Health Facility.
- Multi-level car park for 576 vehicles.
- Refurbishment/alterations to the Douglas Building.
- Pedestrian bridge linking Hospital and Douglas Building.
- New roads associated with the development of the Hospital, Community Health Facility and car park.
- At grade parking and the temporary use of land for parking purposes during construction.
- Public Domain works including footpaths, lighting and street tree planting.
- Demolition of Buildings 1, 2, 10 and part 19 (demolition of all other buildings requiring demolition has already been approved).
- Landscaping.
- Civil works including storm water and drainage infrastructure, new roads and utilities.
- Construction hours as follows:
 - Between 7:00 am and 6:00 pm, Mondays to Fridays inclusive.
 - Between 7:00 am and 4:00 pm, Saturdays.
 - No work on Sundays and public holidays.

Development approval under Part 3A of the Act will be sought under separate new and amended Project Applications for early works and the re-development of the remainder of the site.



Figure 12 : Site plan prepared by Bligh Voller Neild

3.3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

The following section includes a detailed description of each of the key built form components of the Project, including sections 3.3.1 Acute Hospital Building, 3.3.2 Community Health Facility, 3.3.3 Multi-level car park, 3.3.4 Refurbishment/alterations to the Douglas Building, 3.3.5 Landscaping, 3.3.6 New roads and paving associated with the Project, 3.3.7 Car Parking and 3.3.8 Demolition.

Matters related to the operation of the site, construction and staging, and in the case of construction, how the development is to be managed to mitigate potential environmental impacts during that phase, are addressed below at Section 5 - Key Assessment Requirements.

3.3.1 Acute Hospital Building

As shown on the Site Plan at Figure 12, the new Acute Hospital building is to be located on land to the immediate east of the existing hospital building. The consolidated hospital building allows for the rationalisation of acute medical services on the campus.



Figure 13: Artist Impression, prepared by Cox Richardson

The building having an uppermost height of RL.126.35 comprises nine levels, (including one partial and one fully excavated level) and a Gross Floor Area of approximately 95,000sq.m. The form of the building responds to the topography of the site by following the natural slope of the site, as shown below at Figure 14.



Figure 14 : Western Elevation, prepared by Bligh Voller Neild

The design optimises changes in levels across the site to allow for separation of vehicular and pedestrian traffic. Vehicular traffic (transit pick-up, emergency drop off, and ambulance bays) is concentrated to the southern side of the building at Level 2, whilst the main pedestrian entry and arrival point is on the western side of the building at Level 3. The Acute Hospital includes a Mental Health Unit with a separate entry at the eastern side of the building.



Figure 15 : Southern Elevation, prepared by Bligh Voller Neild

The Acute Hospital building will generally include the following elements/functions:

- Level 1 (Basement):
 - Cancer Care Centre;
 - Radiation Oncology;
 - Main pharmacy;
 - Orthotics;
 - Biomedical engineering
 - Kitchen and linen services;
 - Engineering services;
 - Mortuary (with hearse entry off Red Road); and,
 - Staff amenities;
 - Loading dock and waste management area (ramp up to Eileen Street);
 - Cogeneration Plant (refer to **Appendix N**)
- Level 2 (Part excavated):
 - Medical imaging;
 - Mental Health Unit;
 - Emergency;
 - IT/records and admin;
 - Enclosed landscaped courtyards; and,
 - Vehicular service points (transit pick-up, emergency drop off, ambulance bays and Mental Health Unit pedestrian entry and vehicular drop off).
- Level 3:
 - Main entry and foyer;
 - Cafeteria;
 - Retail tenancies;
 - Nursing and patient services;
 - Mental Health Unit;
 - Acute Dialysis Unit;
 - Clinical consulting and administration offices; and,
 - Ambulatory Care Centre.
- Level 4:
 - Cardiology; and,
 - Operating Area.
- Level 5:
 - Pathology;
 - Staff amenities;
 - Sterilising services;
 - Links to Douglas Building and Research Building; and,
 - Hospital administration.

- Level 6:
 - In-patient rooms, ICU and HDU
- Level 7:
 - Inpatient therapies;
 - In-patient rooms; and,
 - Spinal Injuries Unit
- Level 8:
 - In-patient rooms;
 - Specialist wards;
 - Administration; and,
 - Laboratories.
- Level 9:
 - Administration; and,
 - Staff facilities/accommodation.

The Acute Hospital is to operate on a 24 hour/ seven days a week basis.



Figure 16 : Artist Impression of Main Foyer, prepared by Bligh Voller Neild

3.3.2 Community Health Facility

The proposed Community Health Facility is a seven storey building with one excavated basement level. The building has its principal address to Herbert Street, within Precinct 6. The vehicular drop off point, pedestrian access and vehicular access to the basement are all from Herbert Street. An ambulance drop off is also provided at the rear of the building on Red Road.

The proposed building has an uppermost height of RL113.0 and a Gross Floor Area of approximately 13,150sq.m.

The facade treatments of composite aluminium panels, polycarbonate and metal sheeting, brick and block-work, as well as the central section with full height glazing result in robust, contemporary building which draws from architectural sources from within the site, including the research facility to the north and the older components of the site within Precinct 3 and the existing hospital building itself. Refer to Figure 17.



Figure 17: Photo Montage Herbert Street Elevation, prepared by Cox Richardson

The “L-shaped” building has internal floor layouts to meet the needs of users, clients and visitors. The configuration of the building into two wings, one along the Herbert Street frontage, the other addressing Eileen Street to the northeast boundary of the precinct, provides flexible floor space on each level.

The building is accessed internally by two public lifts located in the main reception and corresponding reception areas on each level. This core access point is an easy way finding mechanism for users given the glazed facade treatment and articulation of this section of the building. Glazing is also used at entry points and to street front uses such as the retail café and meeting rooms.

As shown on the elevations in Figure 18, the building is finished at two different levels, with the Herbert Street wing being approximately 6m lower than the highest point of the Blue Road wing.

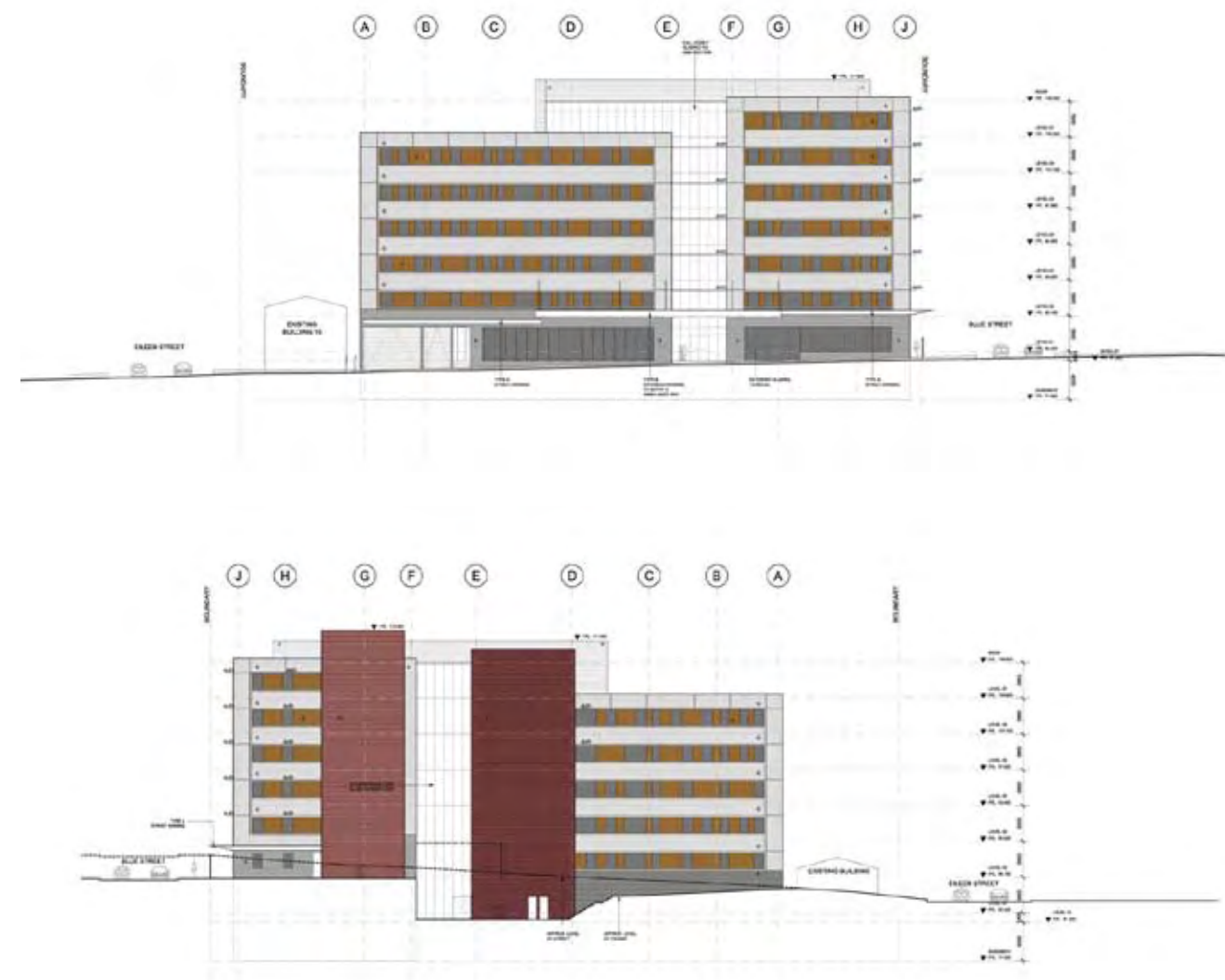


Figure 18 : Eastern & Western Elevations, Community Health Services Building, prepared by Cox Richardson

The Community Health Facility includes the following elements/functions:

- Basement:
 - 30 visitor car spaces (1 disabled, 1 designed for pram access);
 - Loading dock;
 - Public lift and goods lift; and,
 - Waste management and plant rooms.
- Ground floor:
 - Main entry and reception;
 - Cafe;
 - Aboriginal Health;
 - Group and meeting rooms;
 - Administration;
 - Children's play area; and,
 - Staff area.
- Level 2:
 - Drug and Alcohol Services;
 - Community Mental Health (with separate entry);
 - Partially covered courtyard; and,
 - Ambulance drop off;
- Level 3:
 - Renal Services
- Level 4:
 - Children and Family Services
- Level 5:
 - Aged care and rehabilitation
- Level 6:
 - Breast Screening;
 - Dental; and,
 - Translation services.
- Level 7:
 - Sexual Health;
 - Sexual Assault;
 - Health Programmes; and,
 - Roof over part Herbert Street wing
- Level 8:
 - Air handling units and associated plant

The Community Health Facility is to operate on a 24 hour/ seven days a week basis.

3.3.3 Multi-level car park

The car park will have a capacity of some 576 spaces over a total of seven levels and will incorporate a pedestrian bridge providing direct access to the new hospital and the Douglas Building. The car park has an uppermost height of RL106.35.

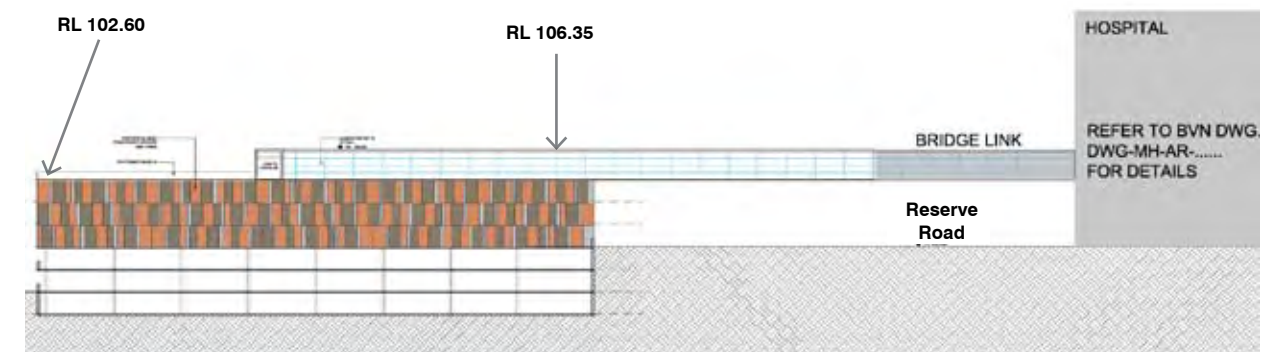


Figure 19: Southern Elevation, prepared by Cox Richardson

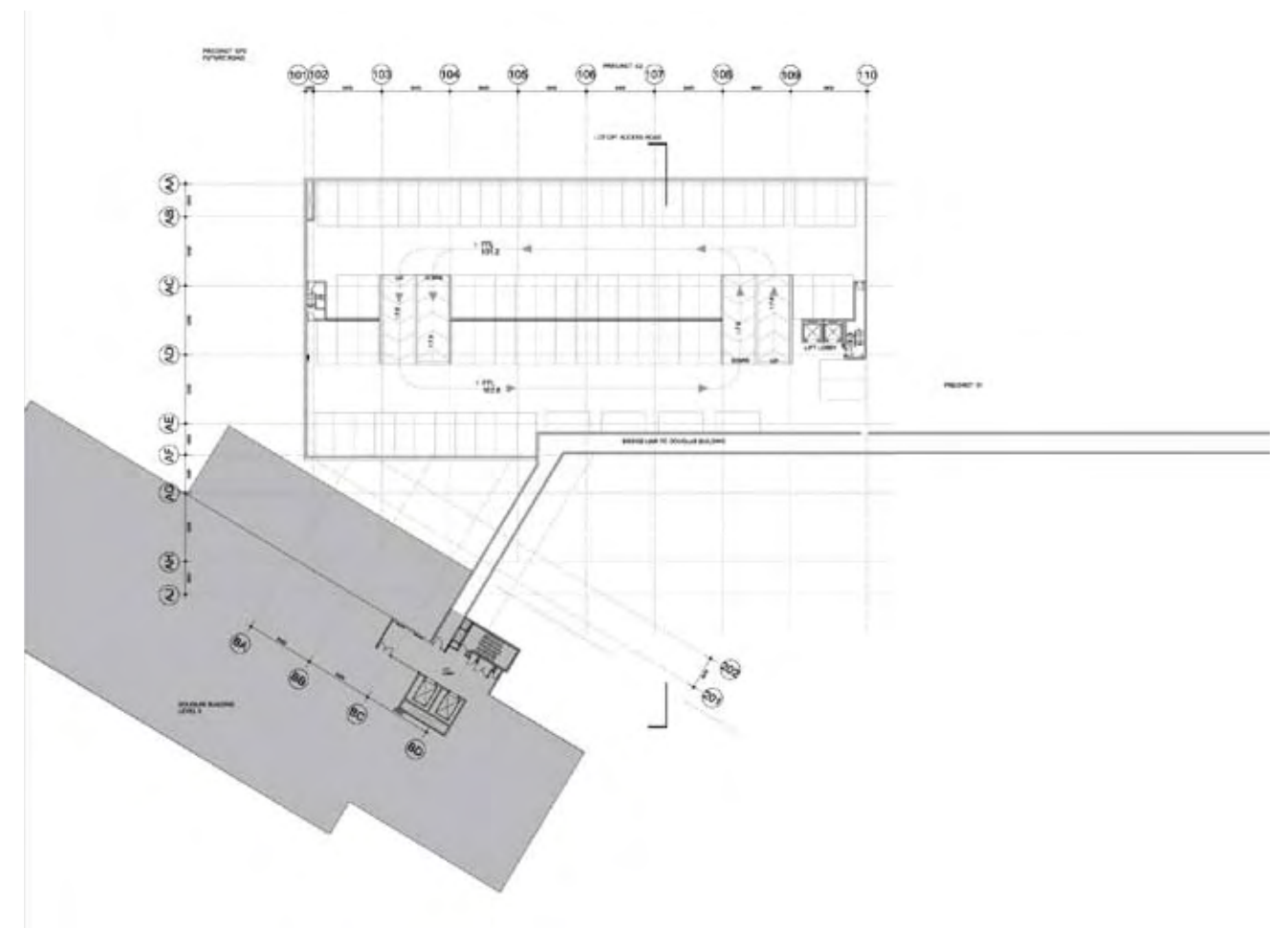


Figure 20 : Top floor car park showing pedestrian links, prepared by Cox Richardson

The new multi-level car park is intended primarily to provide Hospital staff and visitor parking. It has direct, immediate access for visitors traveling north-bound up Reserve Road from the Pacific Highway. Secondary entry and exit points will be provided on the western side of the new multi-level car park enabling management of peak traffic loads and a continuous circulation loop for vehicular traffic around the site, should either major car park be fully occupied at any time.

The building further comprises:

- separate lift access and associated disabled parking at each level;
- parking facilities and amenities for cyclists; and,
- an allowance for 70 Community Health staff pool cars.

On the completion of decanting from Building 1 into the new Acute Hospital, it is proposed to demolish the existing main hospital building and construct the new car park on the site. In doing so the car park has been designed to reuse the existing basement space resulting from the demolition.

The car park will be constructed while the demolition of building 2 is still underway with a four-metre clear zone between the northern edge of the car park and the southern edge of the demolition zone.

Visitors arriving from the north along Reserve Road may either enter the existing multi-deck car park, or they may continue in a loop around the campus to arrive at the new multi-level car park via the collector road as shown in Figure 22. The car park creates a clear and unambiguous line of travel between the retained Douglas Building and the new Acute Hospital at two levels:

- at ground level, to allow unrestricted public access between each of these facilities; and,
- from an service provision point of view, to maintain clinical relationships between respective functions in each building.

As described in further detail later in this report, it is proposed to temporarily use other areas within the site for at-grade parking until the hospital is demolished and the new car park is constructed.

3.3.4 Refurbishment/alterations to the Douglas Building.

The Project also includes alterations to the existing Douglas Building. The proposed works are concentrated on the Ground level of the building (Level 2) and will result in improved medical as well as visitor facilities, in the form of a café and retail outlet. The key function of this refurbished level of the building will be related to maternal-foetal medicine.

3.3.5 Landscaping

Landscape Architects OCULUS have prepared a landscaping and open space design strategy for the core area of the health campus to accompany this Project Application. Refer to **Appendix B**.



Figure 21: Site landscaping plans (oculus), prepared by OCULUS

The design philosophy and proposed landscaping are described by OCULUS as follows:

Introduction

The landscape design plays a key role in binding together the master plan for the Royal North Shore Hospital Campus, integrating the existing heritage buildings and plantings with the new buildings and open spaces.

It aims to incorporate the existing ‘layers’ of planting which have developed over time with the various stages of building development. The Tree Heritage Study prepared by Taylor Brammer identifies six main groups of significant existing vegetation on the site:

- *A partial avenue of Phoenix canariensis (Canary Island Date Palm) along the boundary between the ‘UTS Precinct’ and the ‘Old Hospital precinct’ in the southern part of the site.*
- *The trees and palms that make up the landscape curtilage to Building 31.*
- *A large and established Ficus macrocarpa var. ‘hillii’ (Hills Weeping Fig) to the southeast of the entrance of Building 10, and to a lesser extent the Cinnamomum camphor (Camphor Laurel) in the same location.*
- *The remaining vegetation of the former avenue planting to Reserve Road.*
- *The lines of Lophostomen confertus (Brushbox) to Reserve Road and Westbourne Street.*
- *The groups of Syncarpia glomulifera (Turpentine) trees immediately northeast of Buildings 28 and 29.*

The key principles of the landscape master plan are:

- *To ensure that the significant existing vegetation associated with the heritage of the RNSH is retained wherever possible and integrated with the design of the public domain.*
- *To ensure safe physical links to the new hospital building and key facilities. This is achieved via the pathway system and visual connections to the Douglas Building; the Community Health Building; the Commercial / Retail precincts and the neighbouring suburbs and facilities.*
- *To design a number of inter-related public and private open spaces based on best practice urban design principles using hard and soft landscape that contribute visual interest, shade, human scale and amenity.*
- *To design the series of courtyards, balconies and gardens associated with the new hospital building to meet a range of design objectives specific to the requirement of each associated user group. These provide outdoor, safe, healthy and therapeutic environments for patients, visitors and staff.*
- *To select plant species based on:*
 - *the existing ornamental and indigenous species to ensure the character of the existing and surrounding landscape is protected and enhanced*
 - *directing and framing views, providing privacy, reducing glare and reflection*

- *adaptability to site conditions and provision of shade*
- *visual amenity*
- *low maintenance, growth management and low watering requirements*
- *To design the hard landscape to provide continuity across the site and to meet the specific requirements of each space.*
- *To design / select street furniture that is coordinated across the site, meets the varied requirements of users, and is robust and easily maintained.*

Reserve Road/ Entry

The main entry to the site creates a campus feel through the use of hard and soft landscape rectangular banding which creates a legible sense of identity and structure for the entire site.

The new hospital and the Commercial / Retail precinct flank either side of Reserve Road to form a vibrant urban environment of outdoor dining and recreational areas for patients, staff and visitors to occupy and enjoy. Pedestrian use of this space is reinforced by reducing vehicular traffic along this main spine road making it easily accessible for pedestrians to transverse to and from the new hospital and commercial buildings.

Easement Spine

The hard and soft landscape rectangular banding expands over the Reserve Road easement. Removable concrete pavers and planting will allow services below to be easily accessed without compromising the landscape design. The design of the spine also comprises of a paving graphic that extends from the new hospital entry atrium. This graphic is formed through a mapping of desire lines and destination nodes, providing pedestrians with a direct path of access. This paving graphic and the rectangular banding provides safe pedestrian permeability along the spine and defines the café, retail and recreational spaces spatially.

Both the entry point and spine road reflect our commitment to designing strong Water Sensitive Urban Design through the use of water wise, drought-tolerant planting and the permeable kerbing which directs storm water runoff water from the roads into the planter beds.

Adjacent to the main easement spine is The Chapel, a permeable desired access line to the main hospital and future developments. This access line meets provides access for all and creates smaller more informal, retreat-like grassed and shaded areas alongside the existing chapel.

Level 1: Cancer courtyard – on natural ground

The design focuses on creating private intimate spaces, through planted screening and informal seating. The space is divided into private gathering points for patients and visitors to interact in an external tranquil environment. The design patterning creates a strong visual outlook for the levels above and also improves privacy.

Level 1: Mental health courtyards - on natural ground

This space has been designed according to the NSW Health facility guidelines on Mental Health Courtyards to ensure they are safe and secure places for patients and staff. The design intent for these adjoining courtyards is to create an informal seating arrangement for patients and to provide ample space for circulation and exercise. The space is made visually appealing for patients through the use of native grasses and climbers, providing a healthy sense of growth and colour. Privacy is provided along Westbourne Road via a screen wall that has been perforated to create a visually stimulating image. The screen wall will allow penetration of sunlight and natural ventilation.

Level 2: Secure courtyard – on natural ground

This space has been designed with a clear emphasis on safety for both patients and staff while also providing a pleasant retreat. Like the mental health courtyards this design creates enough space for circulation and exercise and allows for a central gathering space with fixed seating. The design of this space includes a laminated opaque glass screen wall with a printed image of tree trunks. This screen wall will provide privacy for the patients and allow air and light to circulate into the space. A grove of trees planted adjacent to this glass screen wall will cast tree shadows into the space creating an interesting changing environment throughout the day.

Level 2: Waiting courtyard one – on structure

This courtyard will be used as a retreat for both visitors and staff. A central sculptured mound planter creates a natural barrier between the new hospital private examination rooms and the public transit area. A large green canopy of climbers creates an enclosure of filtered light from within and a sculptural delight to view from surrounding rooms within the building. Seating is provided under this ‘green roof’ taking advantage of the shade and shelter provided.

Level 2: Waiting courtyard two – on structure

This space is designed to cater for three different uses, namely a café space, public seating and two private secure courtyards. A large green screen wall creates privacy for the secure courtyard in conjunction with the sculptural planter that defines the outdoor café space and acts as an informal seating wall. A vibrant use of planting also creates a habitable space that encourages visitors to use this space.

Level 6: ICU balcony – on structure

This balcony has been designed to provide the unique opportunity to allow patients who are restricted to beds access to the outdoor landscape. This design focuses on the patient’s view (looking up) creating a green canopy. The steel cable canopy structure will provide the space with soft filtered light and green foliage that will change and grow throughout the seasons. The courtyard is designed with a strong sense of patterning to create an interesting view from surrounding rooms within the building. The intent of this balcony is to create an external protected environment for patients and visitors to retreat and interact.

Lightwell

A green wall is proposed for this narrow space to treat the blank wall which is visible from the rooms opposite. Continuous rows of planters would be provided up the wall with a series of vertical steel cables running in front to support the climbers and maintenance walkways accessed by ladders behind. A variety of shade-tolerant climbing plant species would be used to provide interest.

The Community Health Centre

The design aims to create a multipurpose space catering for staff, clients, visitors and children. The planting within this site reinforces the design theme and identity of rectangular banding that is across the Hospital campus. The strong use of timber banding creates a private and shaded exterior space for a mental health courtyard as well as forming a sculptural timber structure for planting to grow over the staircase. At the base of the terraces the design includes an informal custom designed children's play ground. The heritage significant Fig and Camphor Laurel trees located in the southwest part of the site are retained.

The design for this centre includes an outdoor café design on the Herbert Street side that controls movement and permeability to encourage a useable exterior space. Raised planters with steel cables for vines and integral benches on the inside are provided to define the outdoor seating area. The vibrant blue flowering street tree, Jacaranda mimosifolia (Jacaranda), surrounds this site and extends up along Red Road to the Mental Health component of the new hospital to reinforce the connection to the rest of the Hospital campus. A staircase running along Eileen Street and Red Road ensures the Community Health Building is connected to the Main Hospital precinct.

Tree Protection

A tree protection specification will be included in all construction and demolition contracts. This specification will be based on Natspec's Tree Protection specification and will be tailored to the site by a suitable qualified and experienced arborist.

3.3.6 New roads and paving associated with the Project

The proposed site plan below shows new roads associated with the Project, including:

- Red Road.
- Blue Road.
- Eileen Street.
- West Side Road
- the partial re-opening of Westbourne Street.

The Concept Plan Approval, (MP06_0051), includes a Commitment to dedicate parts of these road reserves to Willoughby City Council.

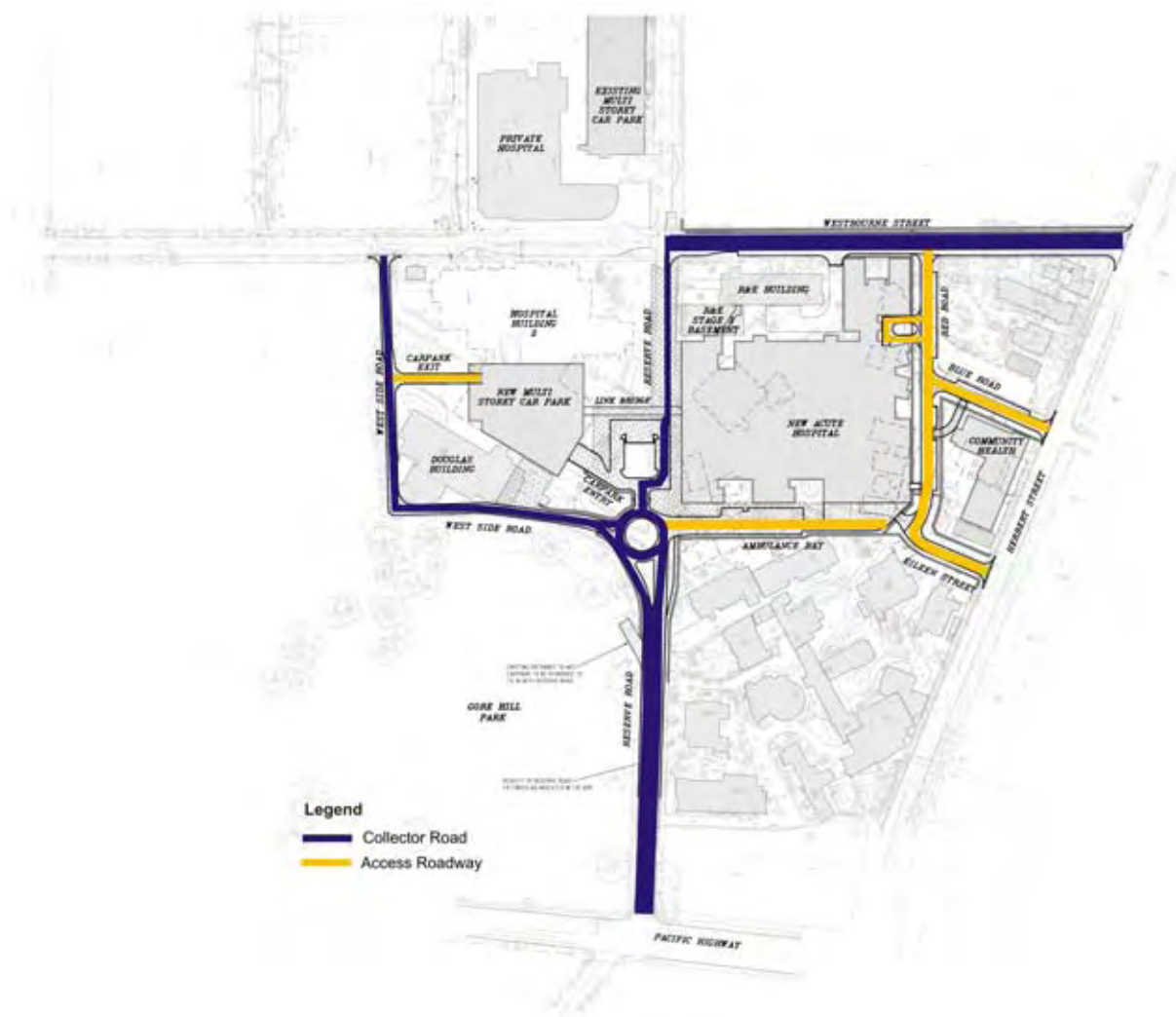


Figure 22: Road Hierarchy, prepared by Hyder Consulting

A plan containing proposed new paving associated with the project is provided within the Civil Works drawing at **Appendix L**.

3.3.7 Car Parking

As well as the parking incorporated in the Community Health Building and the new multi-level car park, consent is sought for temporary parking arrangements throughout the construction period.

The figures below demonstrate how on-site parking will be designated during construction and during operation of the development.



Figure 23: Carpark decanting during staged works, prepared by Hyder Consulting

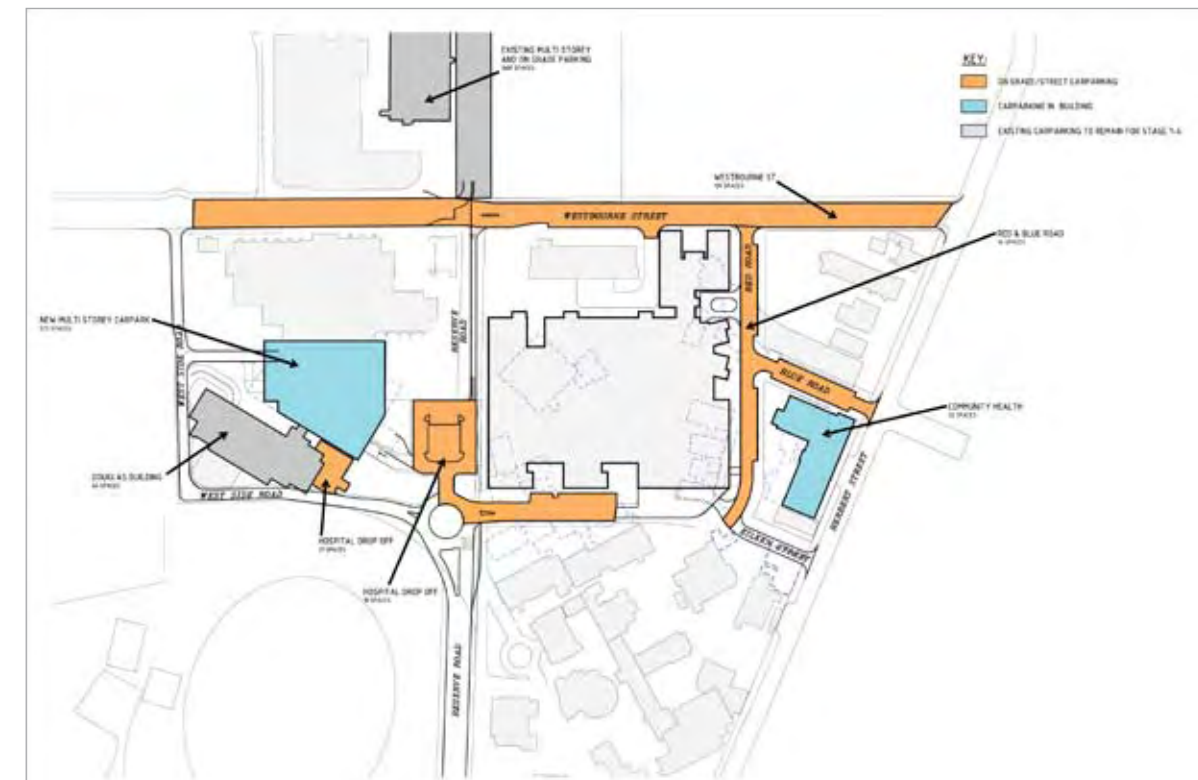


Figure 24: Carpark post development, prepared by Hyder Consulting

With reference to the Staging Plans provided at Section 5.13 below, the following table outlines the proposed temporary car parking arrangements:

Stage	Parking
1	Stage 1 site will be cleared. Temporary parking to be provided along approximately half the length of Westbourne Street (East). A new temporary staff parking area will be provided close to the intersection of Herbert Street and Westbourne Street (East).
1 and 2	The temporary parking along Westbourne Street (East) will be relocated to the Western portion of the Street to facilitate the staged reconstruction of Westbourne Street.
2	Staff and disabled parking spaces next to the existing hospital will be re-located to Westbourne Street and Reserve Road (North)
3 and 4	Disabled parking close to the existing hospital will be re-located to new Hospital
On completion	The temporary staff car park will be removed as will the parking available around the Oval. These losses will be addressed by the provision of the new multi-level car park.

It is proposed that 69 disabled spaces, 38 short term spaces and 16 emergency reserved spaces be made available throughout the construction process.

The proposed development will result in 2550 (existing 2197) on-site parking spaces.

The merits of the proposed parking strategy are discussed below at Section 5.5.2.

3.3.8 Demolition

As indicated at Figure 25, the demolition of all buildings required to accommodate the proposed development has been granted under MP06_0051, except for:

- Buildings 1 and 2;
- Building 10, (which will be removed during the clearance of Precinct 7 for temporary parking and the construction of Red Road); and,
- Part of Building 19.

Approval is therefore sought for the demolition of these buildings, the merit of which, in terms of buildings 10 & 19, are discussed at **Appendix F** Heritage Report.

The demolition of Buildings 1 & 2 is considered to be justified for the following reasons:

- Concept Approval has been granted for a new building on the existing footprints of these structures
- To minimise security issues with respect to the buildings being vacant
- Remove potential fire hazards; and
- To allow for the potential future expansion of the core uses.

Refer to Section 5.12 below for discussion related to the proposed staging and phasing of the development.

3.3.9 Drawings/Plans for which approval is sought

Drawings, detailing the proposed development for which approval is sought, are provided as follows:

- Appendix A** – Architectural;
- Appendix B** – Landscaping;
- Appendix E** – Traffic Report (New roads);
- Appendix L** – Stormwater Drainage, Erosion and Sediment Control Plan, Paving, Road Design and Bulk Excavation Plan; and,



Figure 25 - Demolition Plan, prepared by Cox Richardson

4 STATUTORY PLANNING

The following section addresses those matters of statutory planning relevance. The DGRs related to this General Assessment element require that any variation to the instruments or approvals be justified.

4.1 CONCEPT PLAN APPROVAL

The Terms of Approval issued under the Concept Approval, specifically condition M5, requires that all future applications for development are generally consistent with the Terms of Approval, which further require that the development be generally in accordance with approved plans and documents, (condition M2).

In this regard, whilst the proposed development includes some variations to the approved concept plan, it is considered that the works which are the subject of this application are generally consistent with that approval.

The table below includes those relevant Terms of Approval, made with respect to the Concept Approval and how such matters are to be addressed under the subject Project Application. Those requirements excluded from the table relate to land and/or works outside the parameters of the subject Project Application and development site.

Relevant Terms, Conditions and Commitments	Comments
M1 - Terms of Approval	
M1.1 Concept approval is given for: - Maximum height of building envelopes specified within Figures 28: Illustrative Master Plan, prepared by Cox Richardson, with the Preferred Project Report. - Staged re-opening of Westbourne Street to through vehicular traffic.	- All proposed buildings comply in this respect. Refer to Sections 5.1.1, 5.1.2, 5.1.3 and Appendix G, with respect to the maximum height of buildings. - The subject PA seeks to partially re-open Westbourne Street.
M2 - Approved Plans and Documentation	
M2.1 The development shall be generally in accordance with the following plans and documentation: (a) Royal North Shore Hospital Campus Redevelopment Concept Plan (including accompanying appendices) prepared by Urbis JHD for Burnsbridge Services on behalf of NSW Health dated July 2006. (b) Amended Concept Plan and Preferred Project Report (including supporting documentation) prepared by Urbis JHD for Burns bridge Services on behalf of NSW Health dated November 2006. (c) Statement of Commitments prepared by Urbis JHD for Burns bridge Services on behalf of NSW Health dated November 2006.	Refer to discussion below with respect to consistency between Concept Approval and Project Application. Commitments made in the Concept Approval related to this PA are addressed below in this table.

Relevant Terms, Conditions and Commitments	Comments
M5 – Future Applications	
M5.1 All applications for development on the subject site are to be generally consistent with the terms of this approval. M5.2 Pursuant to section 75P(1)(a) of the Environmental Planning and Assessment Act 1979 the following environmental assessment requirement applies to any subsequent applications (excluding temporary structures and fixtures - such as the operation of cranes) made under either Part 3A or Part 4 of the Environmental Planning Assessment Act 1979: (a) Where relevant and necessary, an assessment of the proposed development (buildings and/or structures) with particular attention to the implications it may have on existing and anticipated future: - Lines of sight of the microwave link's but only development located within Precinct 2 and where it exceeds RL 112; - Electromagnetic radiation (EMR) impacts upon human health and safety (including employees on-site, residents, construction workers etc); - Impacts of electromagnetic interference (EMI) upon electrical equipment and goods, particularly medical equipment and household goods; and Note: The objective should be to design buildings (through choice of materials and earthing) in an attempt to reasonably minimise EMI impacts as best as possible. iv. Mitigation of any potential ghosting and multi-path impacts to signals.	Refer to discussion below with respect to consistency between Concept Approval and Project Application. No adverse impacts are anticipated in these respects. Refer to Section 5.15 and Appendix O
M8 - Setbacks, Streetscape and Building Separation	
M8.1 A setback of at least 4 metres from the site boundary must be provided within those precincts adjacent to Herbert Street (i.e. Precincts 4, 5 and 6).	A setback of 4m is proposed in relation to the eastern building line of the Community Health Building and the eastern site boundary.
M8.3 Any subsequent applications for development within Precincts 4, 5, 6 and 7 should achieve the following urban design outcomes and principles: - Effective transition between public and private space. - Activation of the ground level streetscape. - Articulation and modulation of building facades. - Increased building separation in proportion to building height. - Creation of secondary upper level setbacks. - Minimisation of overshadowing into the streetscape. - Provision of street landscape character (including tree planting). - Any other matters required by the Director-General. (DG)	The urban design outcomes for the Community Health Building, now located in Precinct 6, are fully addressed at Section 5.1.2. Matters related specifically to overshadowing are addressed at Section 5.4.3.

Relevant Terms, Conditions and Commitments	Comments
M9 – Public Transport Provision	
M9.1a Any application for health related development shall detail arrangements to facilitate public transport use	Refer to Section 5.5.3 and Appendix E .
M10.1 Transport Management and Accessibility Plan (TMAP)	
M10.1 A detailed transport, traffic and accessibility study shall be submitted to and approved by the Director General prior to or concurrent with the lodgement of any project application for development of the acute hospital and/or community health building. The study shall contained sufficient detail to allow it to be used as part of the TMAP for the site.	Refer to Section 5.6 and Appendix E .
M12 – Heritage & Conservation	
M12.1 A Conservation Management Plan's) (CMP) shall be submitted to and approved by the Director-General, in consultation with NSW Heritage Office, prior to or concurrent with the lodgement of any application for development within Precinct 3 and submitted with any application for development within that precinct.	Refer to Section 5.4, Chapter 7 – Draft Statement of Commitments and Appendix F .
M12.2 The CMP's shall address, as a minimum, the following matters: (a) The historic development of the precinct, its constituent buildings and landscape elements. (b) Actions and strategies to mitigate impacts and protection of built and landscape heritage items. (c) Moveable heritage. (d) Principles and policies for future built development and landscaping (including palette of plant species). (e) Possible conflicts between footpaths, road works and other infrastructure works. (f) Effects on potential aboriginal and non-aboriginal archaeological items. (g) Any other matters requested by the Director-General. (DG)	
M12.3 Site Interpretation Prior to or concurrent with the lodgement of any subsequent application for development on the subject site, an Interpretation Strategy and/or Plan for the subject site should be produced by an experienced heritage practitioner to provide detailed information about the ways in which the heritage significance of the site can be interpreted. M12.4 Historic kerb and guttering should be identified and where its removal is unavoidable it should be retained for use in appropriate locations elsewhere on the site.	A preliminary Site Interpretation Plan may be prepared to inform the overall Interpretation Plan. Refer to Chapter 7 - Draft Statement of Commitments
M12.5 All subsequent applications for development shall be accompanied by a landscaping plan which identifies significant landscaping features and provides for their future management and maintenance.	Refer to Appendix F
M12.6 Appropriate planting should be provided to buffer proposed development from adjacent sites where necessary and appropriate (e.g. Gore Hill Memorial Cemetery).	Refer to Appendix P for Heritage Tree Study
	Refer to Section 3.3.5 and Appendix B .

Relevant Terms, Conditions and Commitments	Comments
M14 – Re-opening of Westbourne Street	
M14.3 The extent to which Westbourne Street shall be permitted to reopen will require detailed plans and documentation to be submitted to and approved by the Director-General.	Refer to Section 5.6 and Appendix E .
M14.4 The submitted plans and documentation will need to demonstrate where appropriate: (a) Vehicular traffic movements will not have a detrimental impact upon the existing local road network and will not cause unacceptable congestion at key intersections. (b) The reopening of Westbourne Street will not create a quicker or more desirable vehicular traffic route between the Pacific Highway/ Westbourne Street and the Westbourne Street/ Herbert Street intersections. (c) Justification for timing of each reopening stage as referred to above in the context of implementation of the concept plan. (d) Any other matters required by the Director- General.	
Concept Approval Statement Of Commitments	
Operation An Operational Environmental Management Plan will be prepared. The plan will address, but will not be limited to, the following matters: (a) Protection of flora and fauna and minimisation of anti-social behavior. (b) Visitor safety. (c) Site security. (d) Noise management. (e) Traffic and deliveries. (f) Storage of materials. (g) Emergency and evacuation procedures. (h) Fire safety. (i) Waste management and ESD initiatives. (j) Lighting. (k) signage. Timing: To be submitted prior to the opening of the hospital to the public.	An Operational Management Plan shall be prepared prior to the occupation of the subject buildings. Refer to Section 5.10 and Chapter 7 – Draft Statement of Commitments.
TRAFFIC AND TRANSPORT The design and construction of roads, car parking / loading facilities and other traffic devices and infrastructure will be designed and constructed in accordance with relevant Australian Standards and/or the requirements of Willoughby Council. All transport, traffic and access proposals will be consistent with the strategic transport policy objectives contained in the Metropolitan Strategy, where relevant.	Refer to Chapter 7 – Draft Statement of Commitments.

Relevant Terms, Conditions and Commitments	Comments
ACCESS AND MOVEMENT Access and Safety protocols will be included in an Access and Safety plan which will be prepared to maintain access and use of the site during the redevelopment of the hospital site to ensure the safety of staff, visitors and patients. The design of facilities will permit effective, appropriate and safe use by all people, including those with disabilities and will be in accordance with. (a) NSW Health Facility Guidelines, including Part B - Design for Access, Mobility, OH&S and Security. (b) DDS32 Improved Access for Health Care Facilities. (c) AS 1428. (d) The Building Code of Australia. Timing: To be documented in relevant project applications.	It is proposed that matters related to site access during construction will be addressed in a Construction Management Plan, to be prepared prior to the commencement of works. Refer to Chapter 7 – Draft Statement of Commitments.
TRANSPORT MANAGEMENT A Hospital specific 'Workplace Travel Agreement' will detail specific transport management measures to be implemented in association with redevelopment of the Hospital. Timing. To be submitted to the Director General for approval prior to project approval for the Hospital	Refer to Chapter 7 – Draft Statement of Commitments.
VEGETATION The proponent will seek to retain as many trees as possible within the site, and all trees on the site that are to be retained will be suitably protected by way of tree guards, barriers or other measures as necessary are to be provided to protect root system, trunk and branches, during construction and demolition. Stockpiling or storage or mixing of materials, washing of equipment, vehicle parking, disposal of liquids, machinery repairs and refuelling, disposal of building materials such as cement slurry, siting of offices or sheds will not occur within the protective fencing of the trees. Any branch or root pruning required will be carried out by a qualified arborist. Where mature trees are removed, consideration will be given to replacement with mature specimens where feasible. Timing: Landscape Plans will accompany all project Applications, as relevant.	A comprehensive landscaping plan for the development site accompanies the PA. Refer to Section 3.3.5, Appendix B and Chapter 7 – Draft Statement of Commitments.

Consistency with Approved Concept Design

The proposed development enhances the functional and aesthetic properties of the existing campus and its relationship with its surrounds and public domain. The proposed scheme is considered to be generally consistent with the Concept Approval for the following reasons:

- The uses and functions envisaged for the core health precinct do not change
- The development continues to conform with those design principles embedded in the concept approval
- The street grid connections running east-west and north-south are retained, with an additional north-south connection along Reserve Road; Red Road is east of the concept plan and Eileen Street is broken at Red Road by a change of level;
- The built-form townscape principles, streetscapes, public domain solar access controls and view corridors are retained and enhanced with the retention of Reserve Road.
- The proposed finished levels of the buildings remain within the prescribed height limits;
- Whilst the Community Health Building is located approximately 100m further north than anticipated under the Concept Approval, the proposed location will:
 - allow for better connectivity to the hospital;
 - reduce construction impacts by the consolidation of the construction site;
 - be closer to the mental health unit;
 - allow for the retention of the chimney in Precinct 5, (considered to be of heritage significance);
 - allow for the location of noise sensitive uses within the facility to be located further away from Eileen Street
 - that the principle of providing a consolidated community health facility in proximity to public transport, (as opposed to being spread across the North Shore Region), has been accomplished.

The proposed variations between the Concept Approval and the Project Application are fully supported. A superior design, town planning and operational outcome has been accomplished as a result of the variations incorporated within the subject Project Application.

4.2 STATE ENVIRONMENTAL PLANNING POLICIES

4.2.1 SEPP (Major Projects) 2005

The site is identified under Schedule 5 of the SEPP as being a “*Critical Infrastructure Project*”.

In the case of a *critical infrastructure project*, Section 75R of the Act excludes, with respect to the project, all environmental planning instruments (other than SEPPs that specifically relate to the project).

The relevant SEPP in this case is SEPP (Major Projects) 2005, which includes the following site-specific planning provisions under Schedule 5:

“**Royal North Shore Hospital redevelopment site**”

(1) *In this clause:*

RNSH redevelopment site means the land comprising the following:

(a) *lots 21 and 22, DP 863329,*

(b) *lot 102, DP 1075748.*

(2) *Development for the purposes of redeveloping the RNSH redevelopment site, including development for any of the following purposes:*

(a) *refurbishing or replacing the main hospital buildings and emergency service facilities,*

(b) *commercial premises along Herbert Street providing community health and primary care services and research and education facilities,*

(c) *other commercial uses (including for research and technology purposes),*

(d) *vehicular and pedestrian access to and from, and within, the site (including direct pedestrian access to St Leonards Station),*

(e) *accommodation for people receiving acute medical or other health-related services,*

(f) *retail and residential uses.”*

In light of Section 75R of the Act, the above site-specific controls replace the provisions of Willoughby LEP 1995.

The site of the proposed development is within Lot 21 and 22 in DP 863329 and Lot 102 DP 1075748. The proposed development includes a new acute (or main) hospital building, a community health facility, and other associated development ancillary to these purposes, such as roads, car parks, open space and public domain works. These works are listed above and therefore the proposal is permissible and otherwise consistent with the relevant provisions of the SEPP.

4.2.2 SEPP (Infrastructure) 2007

SEPP (Infrastructure) 2007 includes two parts of relevance to this application:

- Division 10 - Health Services Facilities; and,
- Division 17 - Traffic Generating Development.

Division 10 allows for specific hospital related development to be carried out under certain parameters. However, s.10 of SEPP (Major Projects) 2005 provides the following:

10 *Exclusion of certain exempt or complying development*

(c) *... the particular development is not carried out as part of or in conjunction with other development that is a project to which Part 3A applies*

The exempt development provisions under SEPP (Infrastructure) 2007 are therefore not available to the proponents of this project.

The proposed hospital, having more than 200 beds would attract a referral to the RTA under this Policy.

4.2.3 SEPP 55 – Remediation of Land

Under this SEPP, prior to the issue of consent, the consent authority needs to be satisfied that the site is suited to its intended purpose in terms of any potential soil or ground water contamination.

The issue of potential ground contamination is discussed below with respect to the Key Assessment Requirements. In summary, subject to the implementation of a Remediation Action Plan, to address localised contamination and weathered asbestos, the site is considered to be suited to its intended purpose in this respect.

4.3 APPLICABLE LOCAL PLANNING INSTRUMENTS, RELEVANT LEGISLATION AND POLICIES

The principal statutory mechanisms with which this Project Application is being administered is Part 3A of the Environmental Planning and Assessment Act 1979 and SEPP (Major Projects) 2005. As discussed above the provisions of Willoughby LEP 1995 do not apply.

Other relevant legislation and policies are considered in the context of the appended specialist reports.