### 4.1.2 Regional Environmental Planning Policies

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

This REP is aimed at ensuring better and consistent development decisions and includes such issues as ecological and scenic quality, built form and design, maintenance of views, public access and recreation and working harbour uses. The REP includes provisions relating to heritage conservation and wetlands protection and provides planning controls for strategic foreshore sites.

The Concept Plan for the Wahroonga Estate has been developed with regard to the aims and objectives of this REP. The site is a Catchment for the Lane Cove River which is in turn a catchment for Sydney Harbour, and the proposed development has been designed so as to protect, enhance and maintain the natural assets of the site.

## 4.1.3 Local Statutory Planning Policies

The following Environmental Planning Instruments, Development Control Plans (DCPs) and policy documents are applicable to the subject site.

- · Hornsby Shire Local Environmental Plan (LEP) 1994
- Ku-ring-gai Planning Scheme Ordinance

Hornsby Shire Local Environmental Plan (LEP) 1994

A small part of the site is within Hornsby Shire LGA. This area is zoned Residential A (low density) and relates to four (4) dwellings on Ferndale Avenue and one (1) dwelling on Nicholas Crescent, and the surrounding open space, at the far north of the site. No development is proposed on this parcel of land.

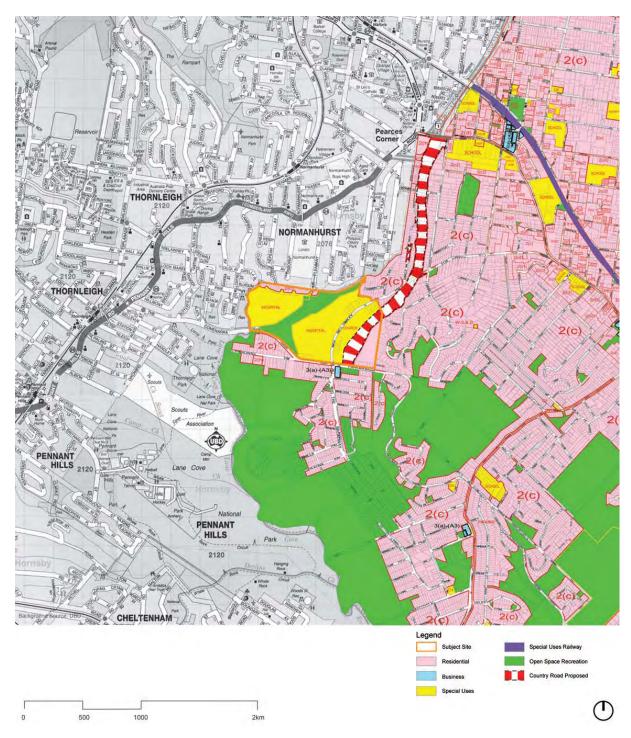


Figure 12 – Existing Site Zoning

The majority of the Wahroonga Estate is located within the Ku-ring-gai LGA. The relevant zonings include:

### East of Fox Valley Road

- Near the eastern boundary of the property is zoned Residential 2(c). Several dwelling houses have been developed along the Comenarra Parkway; however, the majority of the 2(c) land remains undeveloped bushland.
- Adjacent to Fox Valley Road the land is zoned Special Uses 5(a) (church)
- Between the 5(a) zone and the 2(c) zone is a corridor which is zoned for a proposed County Road for a future F3 / M2 link Road. However, it is understood that this corrridor has been abandoned.

### West of Fox Valley Road.

- Adjacent to Fox Valley Road and Mount Pleasant Avenue the site is zoned Special Uses 5(a)
   Hospital. The land under this zone is divided into two sections by the Coups creek corridor zoned part Recreation Private 6(b).
- There are parts of the site zoned Residential 2(c) adjacent to Mount Pleasant Avenue to the north and east of the site.
- Council owns a small public reserve with a frontage to Mt Pleasant Ave zoned Public recreation 6(a). This site is surrounded on three sides by the Recreation Private 6(b) zone on the Wahroonga Estate lands. This land is excluded from the application as no authority has been issued by Council for its inclusion and no works are proposed on this land.

### **Development Standards**

The KPSO contains standards for any developments in relation to access and parking considerations and to the consideration of aesthetic appearance for various open space zones. Waterways and main roads (Clause 33).

There are no specific standards in the KPSO or development control plans specific to hospitals or medical facilities.

Land uses which apply to a 2(c) site under KPSO are mainly dwelling houses and home occupations (cl 23). Key stands include:

- Minimum allotment sizes for subdivision and dwelling houses (cl. 56 and 43)
- Minimum height of dwelling houses and home occupancies (cl. 46)
- Maximum built upon area for dwelling house sites (cl. 60C)

### 4.1.4 Development Control Plans

- Ku-ring-gai DCP 14 Development in Business Zones
- Ku-ring-gai DCP 31– Access
- Ku-ring-gai DCP 38 Residential Design Manual
- Ku-ring-gai DCP 40 Construction and Demolition Waste Management
- Ku-ring-gai DCP 43 Car Parking
- Ku-ring-gai DCP 46 Exempt and Complying Development
- Ku-ring-gai DCP 47

  Water Management
- Ku-ring-gai DCP 48 Medium Density Residential Development
- Ku-ring-gai DCP 55 Railway / Pacific Highway Corridor and St Ives Centre
- Ku-ring-gai DCP 57 Child Care Centres

An assessment against these controls has been made in Section 9.1 of the report.

### 4.1.5 Other relevant statutory matters

### Draft LEP Template

On the 31st of March 2006 the NSW Government gazetted the Standard Instrument (Local Environmental Plans) Order 2006. The standard instrument sets out a template for the preparation of new LEPs in NSW using a standard set of zones, provisions and definitions. This requires all councils to prepare a new principal LEP for their local government area using the standard instrument within the next five years. Ku-ring-gai Council is required to have a standard LEP gazetted by 2011.

The Minister for Planning has indicated that the Wahroonga Estate site is a major project and will consider a request to list it as a State Significant Site under Schedule 3 of the Major Projects SEPP 2005. As such when Ku-ring-gai prepare their standard LEP the zoning will need to be consistent with any state significant listing under Schedule 3.

#### 117 Directions

Section 117 of the EP & A Act allows the Minister for Planning to issue Section 117 Directions which can be used to guide specific issues which must be considered and incorporated by Councils in LEP development and strategic planning documents. These directions allow the Minister for Planning to manage or control certain issues that arise. Section 117 directions do not apply directly to development, but are implemented through local Councils.

The following Ministerial Directions apply to the project:

- No. 17 Integrating Land Use and Transport
- No. 19 Planning for Bushfire Protection
- No. 21 Residential Zones
- No. 26 Special Area Zones and Recreation Zones

A description and an assessment of the proposed development in relation to each of these Ministerial Directions are included in **Table 8**.

# 5 CONSULTATION

## 5.1 Community Reference Group

The Minister for Planning directed the DoP to form a Community Reference Group (CRG) to provide information and gain input to facilitate the planning assessment process for the Sydney Adventist Hospital, Wahroonga proposal. The CRG has provided and will continue to provide a forum for stakeholders to access information so they can prepare detailed and informed submissions throughout the process.

The purpose and Terms of Reference for the CRG were:

- To provide a forum that allows key stakeholders with a diverse range of view in order to make a considered response to the proposal, and
- To assist the DoP gain a better understanding of key stakeholder concerns.

The CRG is not an assessment body; however it is linked to the assessment process and is separate to consultation being undertaken by JPG. The key achievement of the CRG thus far has been to set and refine the parameters for the Director General's Requirements. The CRG is intended to sit twice during the exhibition period to enable members to seek clarification about issues of interest as a means of informing their preparation of submissions.

## 5.2 Consultation with Government Agencies

Consultation, particularly with Ku-ring-gai Council, has occurred over a number of years regarding future development at the site. The ACA has previously made development applications [DA/1920/88 - Residential Dwellings and DA/596/99 - Seniors Living and Aged Care Retirement Living] and a rezoning submission (Precinct 6 B2/B3 Freeway Corridor, 2005) for elements similar to those in the proposed concept plan. These fragmented processes addressed issues (traffic, ecology, bushfire etc) that warrant a more comprehensive whole of site approach and in at least one case, were subject to Land and Environment Court proceedings. More recently, consultation regarding the Wahroonga Estate concept plan occurred with Hornsby and Ku-ring-gai Councils during 2007, prior to lodging the Part 3A application. The particular concerns of Ku-ring-gai Council are detailed in its Issues Paper (12/6/07).

Formal government and agency responses were provided to the DoP during input to the preparation of the DGRs. These have been considered in preparing the EA and concept plan. Additional dialogue and some formal correspondence occurred in preparing specialist reports. The following table identifies some specific meetings/correspondence relevant to the preparation of the EA and concept plan, with an emphasis on consultation undertaken since the Part 3A application was lodged in September 2007.

Consultation with the relevant Government agencies has been conducted in conjunction with the preparation of expert reports undertaken to date for the Project, as outlined in the following table (**Table 3**). Government Agencies that have been involved include: The NSW Roads and Traffic Authority, The Ministry of Transport (MoT), The NSW Department of Environment and Climate Change (DECC), Sydney Busses, State Rail, NSW Health, Heritage Council, Hornsby Council, Kuring-gai Council, the NSW Rural Fire Service (RFS) and the Federal Department of the Environment, Water, Heritage and the Arts (DEWHA).

Table 3 – Government agency Consultation

Agencies and other authorities	Item
Ku-ring-gai Council	Council issues paper – 12/6/07
	Representation on CRG – 25/2/08 & 15/5/08
Hornsby Council	Representation on CRG – 25/2/08 & 15/5/08
NSW Dept Water & Energy	Email - 26/5/08
NSW Health	Expansion of San facilities requires NSW Health involvement. Specific health related consultation will occur during preparation and submission of hospital related project applications.
NSW Ministry of Transport	Meeting – 21/5/08
NSW Roads and Traffic Authority	Meeting – 5/2/09
NSW Department of Education and Training	No response received to DoP referral or JPG follow up on 16/10/08.
NSW Dept Environment & Climate Change	Meeting – 21/1/09
NSW Rural Fire Service	Meetings - 4/7/08, 16/7/08 & 23/9/08
	Site inspection – 16/7/08
Commonwealth Dept of Environment, Water,	EPBCA referral – 17/9/08
Heritage & Arts	EPBCA referral notification – 5/11/08

# 5.3 Community Consultation

As outlined in the following table (**Table 4**) Johnson Property Group (JPG), the Australasian Conference Association (ACA) and the Sydney Adventist Hospital (San) conducted staff information and consultation sessions to assist preparation of the concept plan for the redevelopment of the Wahroonga Estate. This ensured that the Estate community and end users were informed of the proposal, and equally important, were able to provide the knowledge and opportunity for constructive feedback.

Table 4 – Community Consultation

Public	
Community Reference Group	Meetings - 25/2/08 & 15/5/08
Existing Users of the Site	Hospital information sessions – 26/2/08, 4/3/08 & 6/3/08
	ACA staff information session – 6/3/08
	Wahroonga School Meeting - 7/8/08
Surrounding Residents	Direct engagement of residents is scheduled during the public exhibition period. Notwithstanding this, local residents are represented on the CRG; some have attended information sessions; and others have provided feedback directly to the hospital, church and JPG in response to information disseminated through the community and the PAR available on the DoP website.

Feedback received through the consultation program was reviewed by the project design team and informed the concept proposal to balance site capability, user expectations, and operational requirements of the site. This program complemented the Department of Planning's Community Reference Group (CRG) and the statutory exhibition process.

A further detailed consultation program will be completed during the exhibition period and preparation of the preferred project report consisting of a combination of the following.

A full report on the consultation undertaken to date is included at **Appendix G**.

The schedule of information/consultation sessions is provided in the following **Table 5**:

Table 5 – Community Consultation Sessions

Date/Time	Item	Remarks
April 2008	PAR on DoP website	
Mon 25 Feb 08	CRG 1st meeting	
26 Feb 08	Hospital staff information session	
4 Mar 08	Hospital staff information session	
6 Mar 08	Hospital staff information session	
15 May 08	CRG 2nd meeting	
Ongoing	Consultation with government / service providers	Statutory and non-statutory consultation during preparation of the concept plan / environmental assessment and planning agreements.
TBA	Letterbox drop	Project summary, web addresses and JPG / DoP contact details.
ТВА	Public information day	Hold during statutory exhibition period  Promote through local media and SDA networks
TBA	Media coverage	During statutory exhibition period
TBA	CRG meetings	

#### DIRECTOR GENERAL'S REQUIREMENTS 6

An extract of the DGRs and reference to the location each requirement is addressed is included below.

Table 6 – Director General Requirements

General Requirements			
The Environment Assessment must include:			
Executive summary	i.		
Description of the proposal comprising:			
<ul> <li>Project vision, objectives and need;</li> </ul>	2.2		
Description of site, including cadastral and title details;	7.0		
Various precincts and staging (including infrastructure staging); and			
<ul> <li>Alternatives considered;</li> </ul>			
Consideration of:	4.0		
All relevant State Environmental Planning Policies;	9.1		
<ul> <li>Ku-ring-gai Planning Scheme Ordinance and any relevant DCPs;</li> </ul>			
<ul> <li>Metropolitan Strategy "City of Cities" and draft North Subregional Strategy;</li> </ul>			
Draft Statement of Commitments outlining:	10.0		
Commitments to public benefits including State and local infrastructure provisions or contributions, environmental management, mitigation and monitoring measures and clear indication of responsibilities;			
Signed Statement of the author of the EA confirming that the information is neither false nor misleading;	i		
Report from a quantity surveyor identifying the capital investment value of the Concept Plan;	1.4		
	Appendix E		
Key Assessment Requirements			
Site Analysis	2.3		
<ul> <li>Site Opportunities and Constraints, identifying natural and built environmental features within and adjoining the site;</li> </ul>	2.4		
Land Use			
- Identify proposed precincts, stages, timing, uses contained in each precinct, road and	4.1.4		
pedestrian networks;	8.2		
<ul> <li>Existing and proposed zones;</li> </ul>	8.3		
- Table outlining different land uses, FSR, development yield, site coverage for each use and	8.7		
total GFA for the development;	8.8		
	8.9		
Consider surrounding land use natterns, density and character and assess/resolve notantial	8.10		
<ul> <li>Consider surrounding land use, patterns, density and character and assess/resolve potential land use conflicts;</li> </ul>	9.5		

Ow	nership and Title	8.9		
-	<ul> <li>Identify proposed staging, ownership and titling arrangements for each of the proposed land uses;</li> </ul>			
_	Identify measures to ensure residential accommodation for hospital and church staff will be retained for that purpose;			
Urk	an Design – Built Form	8.4		
_	Typical plans (elevations and sections) and associated development controls identifying the height, bulk, scale, density and typologies of the proposed form in relation to existing development site, surrounding development and landscape;	8.7 9.3		
_	Typical plans and sections of the proposed public domain, identifying the proposed street network and car parking, pedestrian and bicycle linkages and landscape treatments;			
_	Assessment of any potential impacts using photomontages and view analysis;			
Не	ritage	9.4		
_	Heritage Impact Statement assessing impacts on the Adventist Administration Building (local Heritage Item under KPSO), Mahratta Urban Conservation Area, views from different sites along the ridge tops on either side of the Lane Cove River (e.g. Cheltenham and West Pymble) and timber framed houses north of Fox Valley Road for any significance;			
_	Assess the development against the Department of Environment and Climate Change's draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation;			
Tra	ffic, Transport and Car Parking	8.8		
_	Traffic Study in accordance with the Roads and Traffic Authority's Guide Traffic Generation Developments, with particular regard to:	9.6 Appendix J		
	<ul> <li>Existing Road Capacity, expected impacts on local and regional roads and any upgrade requirements;</li> </ul>			
	<ul> <li>Internal road layout and access arrangements</li> </ul>			
	<ul> <li>Pedestrian and bicycle linkages; and</li> </ul>			
	<ul> <li>Access for emergency vehicles.</li> </ul>			
-	Transport Management and Accessibility Plan (TMAP) for the entire site, in accordance with the Ministry of Transport's Interim TMAP guidelines, also including:			
	<ul> <li>Staging/ Sequencing Plan;</li> </ul>			
	Construction and Management Plan; and			
	<ul> <li>Voluntary Planning Agreement addressing MoT's requirements.</li> </ul>			
_	Car parking plans showing location and number of existing and proposed car parks, allocation to proposed uses and evidence confirming adequacy.			
Bu	shfire	9.8		
_	Demonstrate compliance with NSW rural Fire Service's Planning for Bush Fire Protection 2006, with particular regard to ensuring Special fire Protection purpose developments are located away form the bushland interface;	Appendix L		
_	Identify vegetation types, ownership and ongoing management of any proposed Asset Protection Zones;			

Bio	odiversity	9.7			
_	<ul> <li>Identify the location, extent and species of vegetation proposed to be cleared;.</li> </ul>				
-	<ul> <li>Assess the impacts of proposed vegetation clearing and development generally on critically endangered and endangered communities, identified threatened species, having regard to the Department of Environment and Climate Change's Threatened Species Assessment Guidelines;</li> </ul>				
_	<ul> <li>Biodiversity conservation strategy including offset and/or rehabilitation measures to avoid or mitigate impacts;</li> </ul>				
-	<ul> <li>Assess and mitigate impacts in edge effects, ecological corridors, watercourses and. associated riparian vegetation, existing rock outcrops and Lane Cover National Park;</li> </ul>				
_	Identify the location, extent, timing of dedication, intended ownership and long term. management of conservation lands;				
_	Comprehensively address potential impacts on, and proposed mitigation measures for listed threatened species under the Environmental Protection and Biodiversity Conservation Act (EPBC Act); (including Blue Gum High Forest and Turpentine Ironbark forest, Grey Headed Flying fox and Swift Parrot).				
Ec	ologically Sustainable Development	9.9			
-	Demonstrate how the development will satisfy ESD principles, including BASIX, waster sensitive urban design measures and, energy efficiency and recycling and waste disposal;	Appendix N			
Ge	otechnical and Contamination	9.10			
-	Geotechnical report assessing matters such as the suitability of the site for its proposed uses, slope stability, erosion hazard, proposed earthworks and retention methods;	Appendix O			
_	Access suitability of the site for proposed uses in accordance with SEPP 55;				
Uti	lities and Social Infrastructure	9.11			
-	Utility and Infrastructure servicing strategy, demonstrating the development can be adequately serviced for water supply, wastewater, stormwater, electricity, gas, communications and fire fighting;	9.12 Appendix I Appendix Q			
-	Demonstrate appropriate provision of social infrastructure and services to support expected population increase;	Appendix R			
_	Assess appropriateness of footprint size for the proposed school;				
Dr	ainage, Stormwater and Groundwater Management	9.12			
-	Identify drainage, stormwater and groundwater management issues, including riparian areas, topography, onsite water detention, water sensitive urban design measures and drainage infrastructure;	Appendix R			
_	<ul> <li>Identify and assess any potential flooding risk;</li> </ul>				
_	Identify the location of water control measures (eg basins) relative to existing bushland;				
De	veloper Contributions	9.13			
-	Scope and justification of developer contributions between the proponent and the State (via relevant agencies including the Roads and Traffic Authority, Department of Education and Ministry of Transport), based on Services generated by the development and Department of Planning Guidelines;	10.0			
-	Scope and Justification of developer contributions between the proponent and Ku-ring-gai Council, based on existing Section 94 Plans and Department of Housing Guidelines;				

Consultation Requirements			
An appropriate and justified level of consultation should be undertaken with the following relevant parties during the preparation of the environmental assessment, having regard to any previous consultation.			
- Agencies and other authorities;			
<ul><li>Ku-ring-gai Council;</li></ul>			
- Hornsby Council;			
NSW Department of Water and Energy;			
<ul><li>NSW Health;</li></ul>			
NSW Ministry of Transport;			
<ul> <li>NSW Roads and Traffic Authority;</li> </ul>			
Department of Education and Training;			
Department of Conservation and Climate Change;			
<ul><li>Rural Fire Service;</li></ul>			
Commonwealth Department of Environment and Water Resources; and			
All relevant utility providers;			
Agencies and other authorities	5.1		
Community Reference Group;	5.3		
<ul> <li>Existing users of the site;</li> </ul>	Appendix G		
<ul><li>Surrounding residents;</li></ul>			
<ul> <li>Document all community consultation undertaken to date or discuss the proposed strategy for undertaking community consultation. This should include and contingencies for addressing any issues arising from the community consultation and an effective communications strategy;</li> </ul>			
<ul> <li>The consultation process and the issues raised should be described in the Environmental Assessment.</li> </ul>			

# DESIGN OPTIONS / ALTERNATIVES

#### 7.1 The Design Brief

The design brief is to upgrade and expand the health facilities and services while increasing the total number of dwellings with a range of residential densities. Additionally, retirement living opportunities including independent living, a hostel and nursing home to allow aging in place are also accommodated on the site. The proposed development is incorporate expanded retail, commercial and active and passive recreation opportunities.

The design of the Comenarra Park Living Working Community incorporates best practice urban design with the following components:

- Upgrade and expand existing hospital facilities over the short to medium term by an additional 28,000sqm to take the total to 94,000sqm.
- A centralised church precinct catering for 3,200sqm floor space.
- A K-12 school of 9,000sqm for approximately 800 students.
- A mixed used centre, to accommodate for increased demand due to expansion of the hospital and residential on site, to create employment and to reinforce the Fox Valley neighbourhood centre.
- Commercial space of 10,000sqm to maintain existing functions and allow for limited expansion of existing and/or additional functions.
- An increase of residential dwellings including a 50% increase in aged care capacity and retention of existing retirement units.
- Faculty of Nursing dedicated facilities of approximately 3500sqm to alleviate demand on hospital space and provide facility to accommodate increase in government funded spaces.
- Improved public access and management of open space.

## The Design Process / Options

The following design process was undertaken in preparing and refining the concept plan:

The site analysis and concept plan parameters of the Preliminary Environmental Assessment (PEA) was tested and updated through more detailed environmental assessment. This was based on reports and mapping prepared by relevant specialist consultants. The testing exercise assisted in determining a final, unconstrained development footprint.

Four initial options were prepared and further refined based on specialist input and liaison with the ACA. Option 1 generally follows the PEA concept plan precincts and layout. Option 2 explores the opportunity of an alternative road layout that moved traffic to the edge of the central area. Option 3 is a further refinement of Option 1. Option 4 is a further refinement of Option 2.

Review of the PEA and each of the options was undertaken, concentrating on specific precincts and locations rather than the high level approach used in the PEA. This examined height and bulk of envelopes, identification and retention of high quality vegetation, provision of appropriate bushfire protection, access provisions, etc. and resulted in concept plan Option 5.

The options explore a mix of uses and layouts shown through indicative building envelope locations and represent a design evolution addressing how the built form concepts have been amended to respond to the site opportunities and constraints. Each option was built on the work done and assumptions used on the previous options.

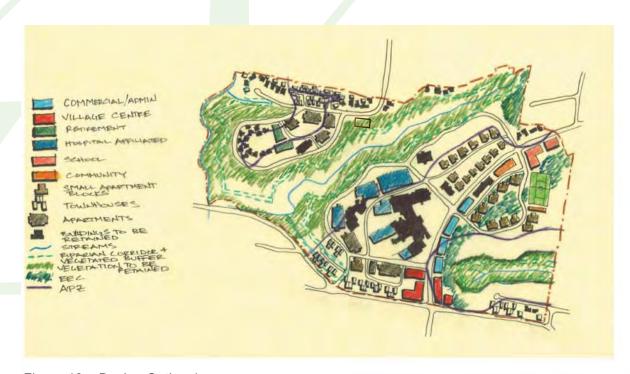


Figure 13 – Design Option 1

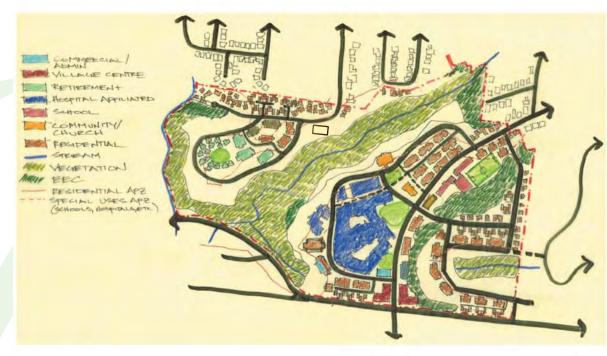


Figure 15 – Design Option 3



Figure 14 – Design Option 2

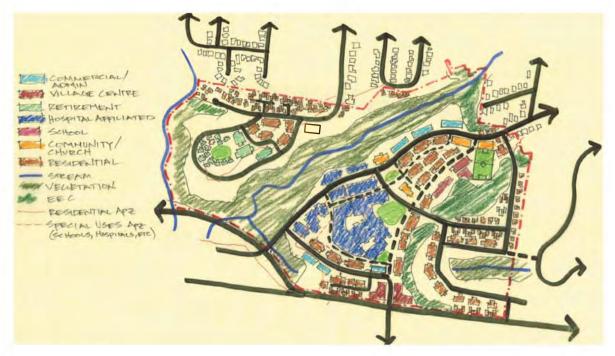


Figure 16 – Design Option 4



Figure 17 – Design Option 5

The main elements and variations of each option is as follows:

### Option 1

- Generally follows the PEA concept plan precincts.
- Conflict between the location of high quality vegetation and the proposed school location.
- Slope issues with placement of school oval.
- Bushfire issues along the Coups Creek riparian corridor that limits the ability to develop residential.
- High traffic volume along Fox Valley Road and bushfire prone land along Coups Creek riparian corridor result in an oversupply of land suitable for commercial development.
- Fox Valley Road bisects the main area of the site, making a cohesive layout difficult.
- Redevelopment options explored adjacent to the retirement area along Mt Pleasant Ave.

#### Option 2

- Road layout reconfigured to move traffic to edge of the central area, allowing for a campusoriented layout. Through-site movements on Fox Valley Road limited to busses and pedestrians.
- Oval location moved to flatter, more accessible land that does not interfere with high quality vegetation.

#### Option 3

- Option 3 is a further refinement of Option 1.
- APZs refined to account for special uses (i.e. schools, hospitals, etc.)
- The refined APZs limit the opportunities for the location of the school and faculty of nursing.
- Fox Valley Road retained as the primary through-site traffic link.
- School location moved to allow for a consolidated campus that is not bisected by Fox Valley Road and to keep it out of the special uses APZ.
- · Explored increased development in the southeast.

### Option 4

- Option 4 is a further refinement of Option 2.
- APZs refined to account for special uses (i.e. schools, hospitals, etc.)
- The refined APZs limit the opportunities for the location of the school and faculty of nursing.
- Reconfigured road layout to bypass central area of the site is further refined based on feedback from traffic consultant.

#### Option 5

- Option 5 is a synthesis of what was learned through the development of Options 1 4.
- Fox Valley Road is retained as the primary through-site traffic link due to traffic concerns.
- The school is located on a consolidated campus to the north/northwest of Fox Valley Road in order to protect high quality vegetation while locating the oval adjacent to a riparian corridor.
- Faculty of nursing is located adjacent to the hospital and the village centre to allow for easy connections for students.
- Redevelopment in precinct along Mt Pleasant Ave. limited due to bushfire constraints.
- Development area to the southeast is reduced to protect vegetation and mitigate slope issues.

The proposed concept plan is a further refinement of Option 5, with particular attention to ensuring the layout reflects principles that contribute to the creation of a sense of place within each precinct.

The options also consider the following:

### **Building Form**

The scale of the existing built form in and around the site was examined to integrate the proposed development through appropriate response and transition in the built form. Refining the development footprint allowed the site to be broken into designated precincts.

Through careful site planning and design a series of open spaces and building footprints were established to maximise solar access, minimise overshadowing and achieve adequate building separation. The building envelopes allow a transition of forms between the large mass of the hospital to the lower density residential development at the peripheries and adjacent to the site.

The built form treatment along Fox Valley Road reflects a transition in the scale of the hospital and the residential development adjoining the site. The proposed built form and public domain along Fox Valley Road reflects the level of activity in this area created by the redevelopment.

#### **Dwelling Diversity and Building Typologies**

The options critically address dwelling diversity through higher of resolution of building typologies than provided in the PEA. By adapting the building typologies, the concept plan provides a greater mix of housing types. Additionally building typologies reflect topography, orientation, relationship to other buildings, access and car parking requirements.

A higher resolution of the building footprint in option 5 allowed refinement of the yield and mix of dwellings. Visual impact and density considerations were explored particularly in relation to integrating buildings towards the edge of the site.

#### Access and Movement

Access and movement has been examined to ensure the integration of pedestrian and cycle priority with improved vehicular circulation and parking. The potential to improve the access and movement with and around the site has been incorporated into the road network.

#### Open Space and Landscape

Readily accessible open space is a key theme. A hierarchy of open space provides active and passive recreation opportunities with improved pedestrian, cycle and vehicular access.

Large areas of open parkland take advantage of the woodland setting, whilst residential courtyards provide intimate spaces for residents. Tree lined pedestrian avenues and boulevards further enhance movement around the site.

#### THE CONCEPT PLAN 8

#### 8.1 Introduction

The Concept Plan establishes the vision, planning framework and development parameters which will guide the future development of the site over the medium to long term. The Plan will be used by the consent authority in conjunction with the proposed SSSS to assess future development proposals within the Wahroonga Estate.

This section of the document establishes the key development objectives and outcomes that underpin the development of the Wahroonga Estate and recommends strategies to achieve these outcomes. These strategies result in actions which are detailed in the Statement of Commitments.

The Concept Plan is a blueprint for the future development of the Wahroonga Estate. It demonstrates, through a series of strategies, how the components of the project can lead to the sustainable development of the site.

The project aims to upgrade and expand the health facilities and services on the site. The hospital related scope of works (subject to project approval) includes a new 23-hour Ward, new Clinic, additional specialist suites and theatre expansion. The hospital itself is intended to grow by up to fifty percent from that existing.

The intention is that external investment in the commercial, residential and research components of the development will provide additional capital to fund the expansion and operation of the hospital and associated health facilities as required.

#### 8.2 The Concept Plan (for which approval is currently sought)

Approval is not currently sought for individual building designs. Rather, Concept Plan approval is sought only for the following key development parameters.

- A coordinated precinct plan outlining future growth areas for each user of the site;
- Conceptual road design and traffic management options;
- Maximum gross floor areas for each precinct;
- Broad land use distribution across the development allotments;
- Landscape, open space and public domain concepts; and
- General building heights, build-to lines and setbacks.

Approval for the final designs developed within these parameters will be obtained in the future under separate Project Approvals.

The overall Concept Plan for the site is shown in Figure 18.



Figure 18 - The Concept Plan



Figure 19 - Perspective looking north



Figure 20 - Perspective looking south east

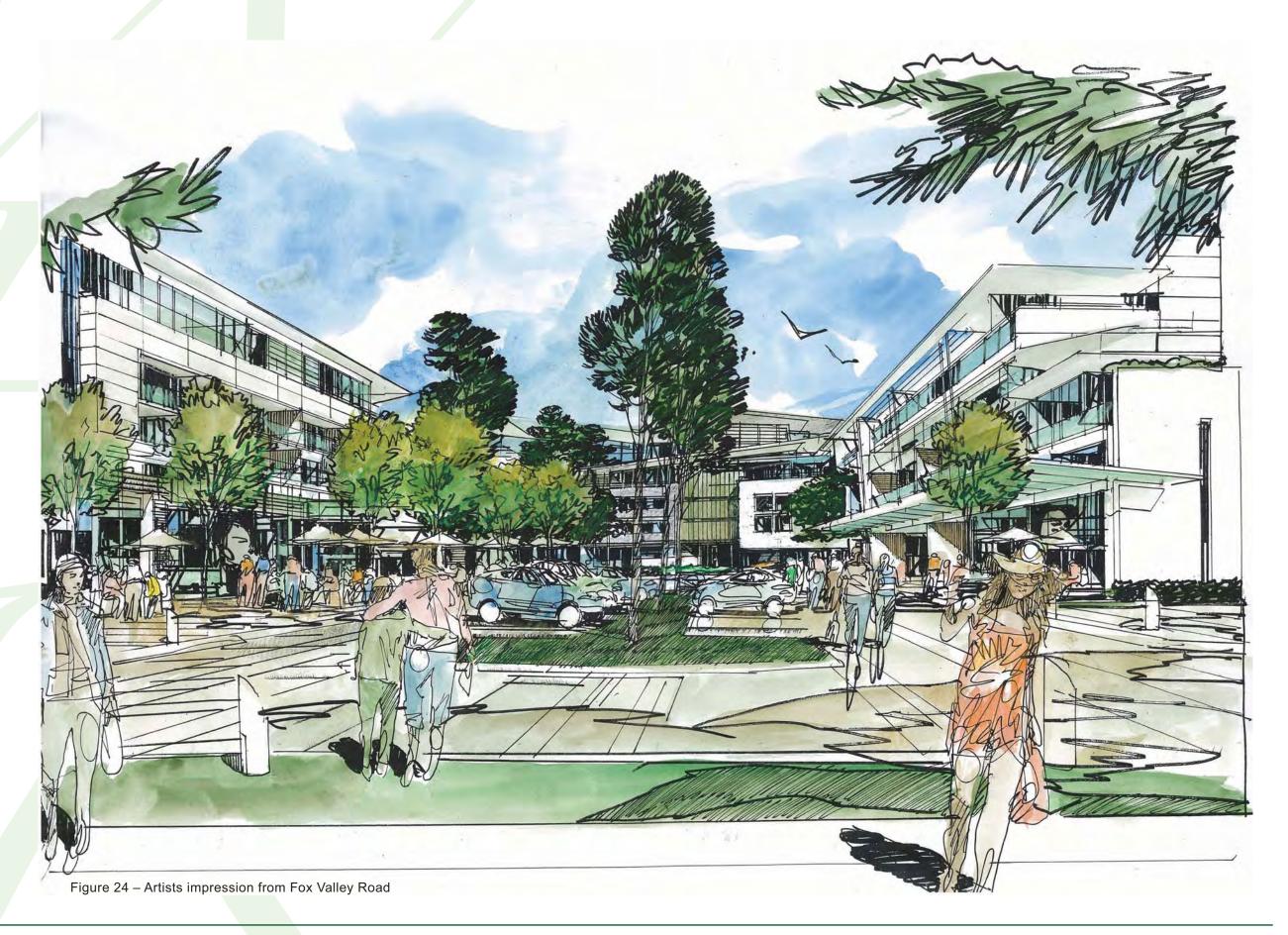


Figure 21 - Perspective looking west





Figure 23 – Artists impression of Central Residential Square



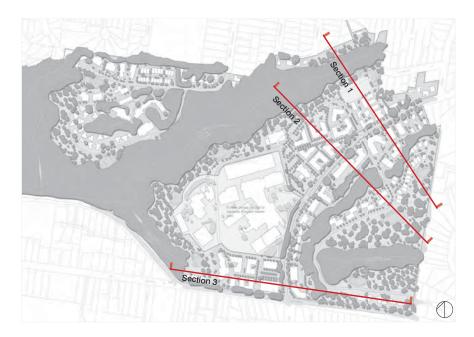


Figure 25 – Section locations (not to scale)

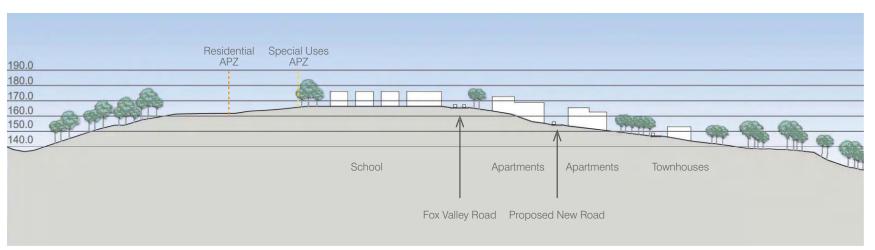


Figure 26 - Section 1

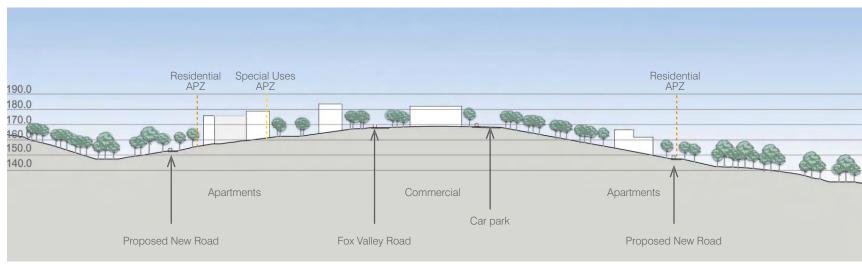


Figure 27 – Section 2



Figure 28 – Section 3

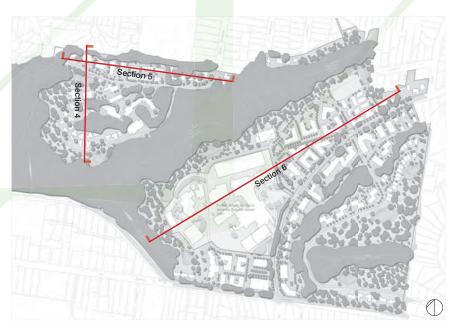


Figure 29 – Section locations (not to scale)

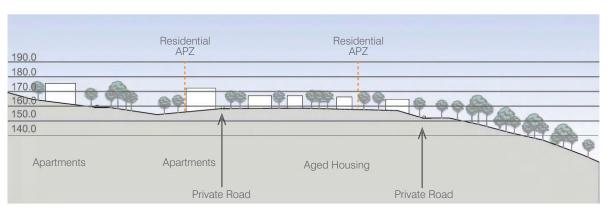


Figure 30 – Section 4



Figure 31 – Section 5

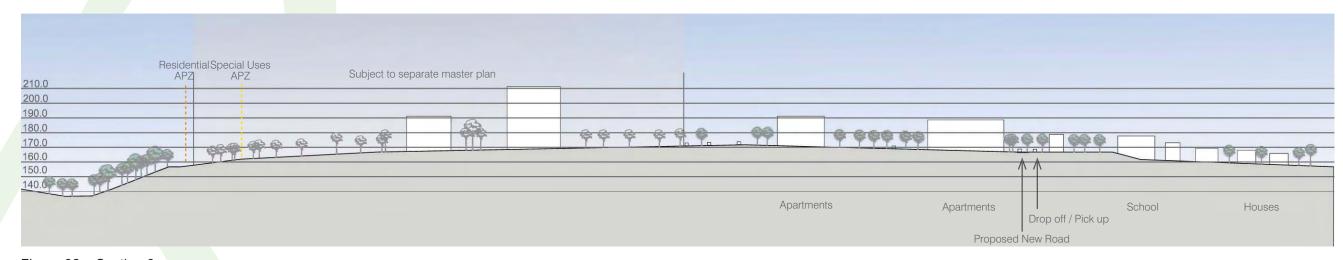


Figure 32 – Section 6

# 8.3 Land use and floor area

# 8.3.1 Land use

The proposed land usage in the Concept Plan has been grouped into precincts, as identified in Figure 33. Detail of the proposed land uses within each precinct, for which approval is sought, is identified in Table 7.



Figure 33 – Precinct Plan

Table 7 – The Concept Plan

Precinct	Type of use	Existing development	Proposed development
All	Open space, recreation and conservation	Informal use of undeveloped areas and existing bushland (privately owned land)	Approx 18 ha land to be zoned environmental conservation with improved public access and management. Clearly defined active and passive recreation areas throughout development precincts.
	Hospital	Sydney Adventist Hospital and facilities – 66,000m²  Inpatient beds – 345 beds Intensive care unit – 12 beds Coronary care unit – 11 beds Day beds – 96 beds Renal dialysis chairs – 14 Birthing – 8 suites Cardiac catheter laboratory – 3 Endoscopy theatres – 2 Operating theatres – 12 Clinical activities including dental care Faculty of Nursing including auditorium, conference space and library Australasian research unit Nurses residence Child care centre Chapel Staff cafeteria Staff amenities including swimming pool	Upgrade and expand existing facilities over the short to medium term by an additional 28,000m² – 94,000m² in total. Details to be subject of a separate application to follow.  Faculty of Nursing to be expanded to 3,500m² and relocated to within a dedicated facility within the Central Precinct
Central Hospital	Residential	Student Style Accommodation  240 student beds  Jacaranda Lodge - 30 rooms	Student Style Accommodation  90 studios 11 x 1 bedroom
		Dwelling Houses 6  High density (residential flat buildings) nil	200 student / hostel rooms Jacaranda to be refurbished – 30 rooms Mission to be relocated – 12 rooms  Dwelling Houses  3 in total  3 to be retained, refurbished or replaced  High density (residential flat buildings  91 in total  23 x 1 bedroom  45 x 2 bedroom

Precinct	Type of use	Existing development	Proposed development
	Education	Primary school of approx. 1,200m <sup>2</sup> and catering for approx. 200 students	K-12 school of 9,000m <sup>2</sup> relocated to Precinct 2 and catering for approx. 800 students
	Church	Two churches totalling 1,600m <sup>2</sup>	A centralised church precinct catering for 3,200m <sup>2</sup> floor space
	Retail	Minor retail (hospital support services including pharmacy, book store, San cafe) 1,000m <sup>2</sup> located in hospital precinct.	A total of 2,000m <sup>2</sup> of neighbourhood retail, that may include transferral of existing retail within the hospital building
Central	Residential	Dwelling Houses	Dwelling Houses
Church		19	7 in total
			7 to be retained, refurbished or replaced
		High density (residential flat buildings	High density (residential flat buildings)
		nil	302 in total 75 x 1 bedroom 152 x 2 bedroom 75 x 3 bedroom
Residential	Residential	Dwelling houses	Dwelling houses
East		4	9 in total
			4 to be retained, refurbished or replaced 5 new dwelling houses proposed
		Medium density (town houses)	Medium density (town houses)
		nil	16 in total
		High density (residential flat buildings)	High density (residential flat buildings)
		nil	72 in total 18 x 1 bedroom 36 x 2 bedroom 18 x 3 bedroom