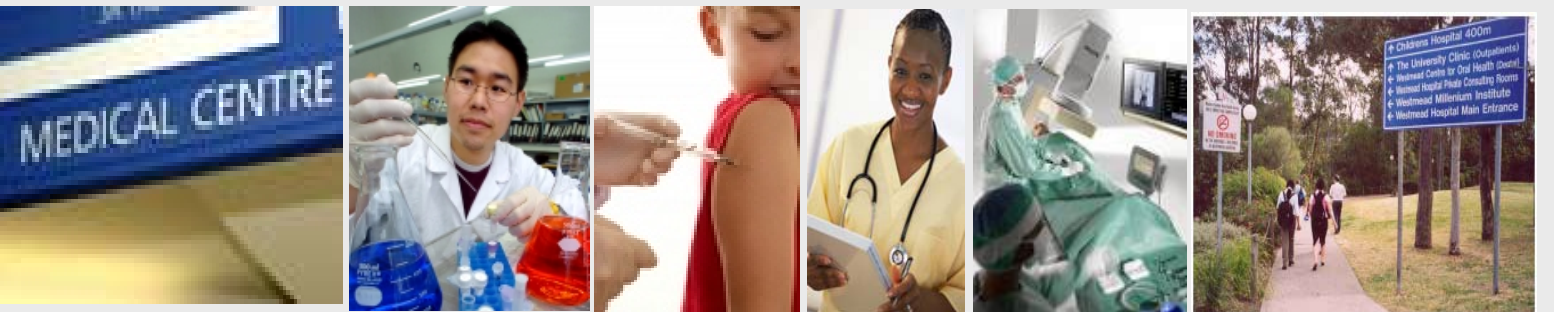

Westmead Health Campus



Preliminary Environmental Assessment



August 2006

Table of Contents

1	INTRODUCTION	1
2	Aims and objectives	3
3	Study Team	4
4	The Environment	5
4.1	Regional Context.....	5
4.2	Metropolitan Strategy	5
4.3	Local Context	6
4.4	SREP 28	7
4.5	Land Use and Ownership.....	9
4.5.1	Land Use	9
4.5.2	Land Ownership.....	10
4.6	Existing Development on Westmead health Campus.....	11
4.7	EP&A Act and Relevant Environmental Planning Instruments	11
4.7.1	EP&A Act	11
4.7.2	State Environmental Planning Policies	12
4.7.3	Parramatta Local Environment Plan.....	13
4.7.4	Parramatta DCP	14
4.7.5	Other Relevant Legislation.....	15
5	The Project	16
5.1	Description of Project	16
5.2	Aspects for which approval will be sought	17
5.3	Zoning rationale.....	17
6	Key Issues	18
6.1	Social and Economic Issues	18
6.2	Public Interest	18
6.3	Health facility Operations	18
6.4	Strategic Planning Context	19
6.5	Land Use	19

6.6	Transport	19
6.7	Car Parking and Access	20
6.8	Heritage	21
6.9	Public / Private Domain	21
6.10	Built Form / Urban Design	22
6.11	Flooding	22
6.12	Acoustics	23
6.13	Infrastructure	23
6.14	Site Contamination	23
6.15	Geotechnical	23
6.16	Surrounding Land Use Context and Potential Conflicts	23
7	Agencies to be Consulted	25
7.1	Agencies Consulted	25

List of Appendices

- Appendix 1 Potential Development Zones
- Health Facility Expansion, Decanting and Research Zone
 - Shorter Term Opportunities
 - Longer Term Opportunities
 - Green Corridors
- Appendix 2 Social and Economic Issues
- Appendix 3 Potential Movement Diagrams and Zones
- Vehicle Movement Diagram (Cumberland Highway Access)
 - Vehicle Movement Diagram (Westmead Health Campus)
 - People Movement Corridors (Westmead Health Campus)
 - Car Parking Zones (Shorter and Longer Term Opportunities)
- Appendix 4 Asbestos Survey

List of Figures

- | | |
|----------|----------------------------|
| Figure 1 | Major Land Owners |
| Figure 2 | Westmead Precinct Boundary |
| Figure 3 | Existing Land Use |
| Figure 4 | Heritage Sites |

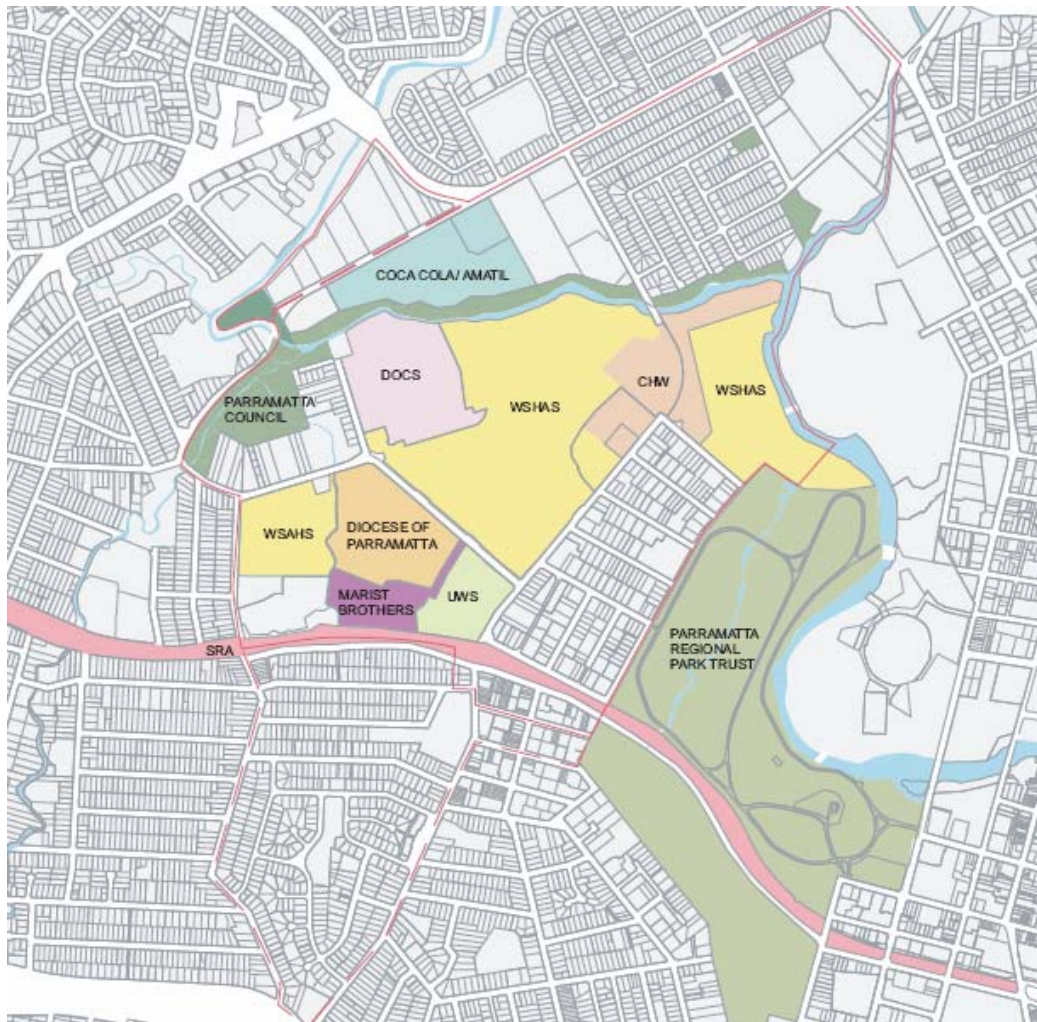
1 INTRODUCTION

This Preliminary Environmental Assessment (PEA) has been prepared to identify the key potential issues associated with the preparation of a Concept Plan for the redevelopment of the Westmead Health Campus (“the Campus”).

For the purpose of this Preliminary Environmental Assessment, the term Westmead Health Campus (or Health Campus) describes the land owned by the Health Administration Corporation, shown as WSAHS and CHW on Figure 1 below.

For the purpose of this Preliminary Environmental Assessment, the term Westmead Health Campus (or Health Campus) describes the land owned by Department of Ageing, Disability and Home Care (DADHC) shown as DOCS as shown on Figure 1 below.

Figure 1 – Major Land Owners



In accordance with Part 3A of the EP&A Act and associated guidelines, this assessment has been prepared to provide an overview of the Westmead Health Campus and to inform consultation with relevant agencies in a Planning Focus Meeting if required.

The project involves the development of new, expanded and refurbished facilities to meet changing clinical needs and an expansion of the Westmead Health Campus to foster the growth of healthcare, education, research, residency and amenity (including selected commercial activity) through a campus environment.

It is proposed that a core feature of the Westmead Health Campus redevelopment will be the establishment of an appropriate urban design theme. It is intended that the project will facilitate the continued development of Westmead Health Campus as a centre of health, education and research of international renown. While this will be fundamentally supported by modified and expanded facilities, it is intended that accessibility, security, amenity, comfort and aesthetics will be cornerstones of the project.

The key purposes of the redevelopment of the Westmead Health Campus are to respond to:

- a rapidly growing population in the western region of Sydney;
- an ageing population;
- new and emerging technology; and
- opportunities to continue to develop.

2 AIMS AND OBJECTIVES

The aims and objectives of the Westmead Health Campus redevelopment are to:

- provide new and expanded health facilities with high quality care standards;
- facilitate the delivery of improved healthcare, education, research, business and community facilities within a well functioning, vibrant precinct;
- provide improved access to (and between) the health and community services on site;
- provide a flexible building design to allow for future modification and expansion to meet anticipated growth in demand for services, a growth in population and changes in clinical practice;
- ensure the development embraces a series of sustainable development initiatives that will implement and demonstrate the NSW Government's principle policies in this area, including energy and water sensitive design;
- facilitate the broader redevelopment of the Westmead Precinct and the surrounding environment;
- facilitate a wide range of uses in the broader site context, given the site's proximity to the Westmead Train Station, including educational, commercial, retail and residential uses, whilst maintaining as a dominant feature, the hospitals and complementary health activities;
- provide a high quality urban environment through careful design of buildings and a well designed public domain;
- retain any significant heritage items, with a campus-wide strategy for adaptive reuse;
- enhance access to public transport, including walking, cycling, rail and bus networks;
- provide appropriate car parking on site;
- increase pedestrian use by making the precinct safer and better suited to pedestrian movement, while also contributing to a healthier community and social interactivity;
- encourage public transport use towards future achievement of a modal shift;
- provide a leafy, green environment;
- identify opportunities for the private commercial development to fund procurement and to accommodate new health related facilities.
- provide for the Westmead Health Campus to continue to develop as an international centre of sustainable health care and living, while making a substantial future economic contribution to the development of the Parramatta Region and Sydney as a whole.

3 STUDY TEAM

This Preliminary Environmental Assessment has been prepared on behalf of NSW Health, the proponent of the project. The consultant team for the project currently includes:

- Evans & Peck (Project Director Procurement Services);
- Bates Smart (Architectural, Facility Planning, Health Planning and Urban Design);
- Masson Wilson Twiney (Traffic and Access);
- EMF Griffiths (Site, Building and Health Services); and
- Urbis JHD (Property Valuation, Market Research).

4 THE ENVIRONMENT

4.1 REGIONAL CONTEXT

The Westmead Health Campus is located in the suburb of Westmead, in Greater Western Sydney, within the Parramatta Local Government Area (LGA). It is approximately 26kms west of Sydney's CBD, 1.5kms north west of the centre of Parramatta and 0.5kms north of Westmead Train Station. The Westmead Health Campus, by the nature of its operations, is a significant provider of health services and employment to the Sydney Metropolitan area.

The Westmead Health Campus is surrounded by the residential suburbs of Wentworthville, Northmead and North Parramatta and is connected by rail and bus services to the Sydney Metropolitan area. The Westmead Health Campus is immediately north of Westmead Train Station and it adjoins Darcy Road, which is currently being modified to accommodate the bus transitway between Parramatta and Rouse Hill.

4.2 METROPOLITAN STRATEGY

The Metropolitan Strategy is the NSW State Government's long term plan to maintain Sydney's role in the global economy and to plan for sustainable growth and change over the next 25 years. The Strategy is outlined within a document entitled "City of Cities – A Plan for Sydney's Future" which was released in December 2005. Subregional plans are to be prepared during 2006 to 2007 by groups of Local Councils led by the DoP to provide detail of how housing and employment targets in the Metropolitan Strategy will be achieved.

Sydney's population is projected to grow from its current level of 4.2 million to 5.3 million by 2031. To accommodate this growth, the State Government anticipates it will need to provide 640,000 new dwellings and 500,000 new jobs. The "West Central: sub region comprising the Auburn, Bankstown, Fairfield, Holroyd and Parramatta LGA Site is planned to accommodate an additional 95,000 dwellings and 35,000 jobs by 2013.

The Metropolitan Strategy supports higher density residential in and around centres, but does not set a specific target in regard to Westmead. Instead it sets a general target that 20% of all new dwellings expected to be constructed in Sydney's existing urban areas by 2031 will be accommodated within the broad scope of the global city, regional city and specialised centres.

The Metropolitan Strategy emphasises the government's recognition of the significance of the specialised centres to the metropolitan economy and states the following objective:

"This means ensuring that development controls (where appropriate) State Government business attraction and business initiatives, and the Government's own investment activities are directed to reinforcing the specialities in these centres. It also means that transport planning should focus on increasing connectivity to these centres, particularly rail transport."

The Metropolitan Strategy sets important targets and objectives, with which the development controls within the implementation plan must satisfy. The Metropolitan Strategy recognises that industry clusters are emerging, with Westmead together with Sydney Central and Randwick being the location of biomedical clusters in Sydney. While Sydney Central and Randwick are closely linked with higher education facilities, Westmead hosts the greatest cluster of health facilities. Smaller clusters of health and higher education facilities are dispersed throughout Sydney.

The Plan supports a metropolis made up of 6 key regional centres including Sydney's CBD, North Sydney, Parramatta, Liverpool, Penrith and Gosford and 9 other strategic centres. The specialised centres have been identified for the critical economic and employment role they play in the city's economy. Typically they contain concentrated business and research functions. Westmead is identified in the Plan as being one of the 9 specialised centres.

4.3 LOCAL CONTEXT

The Westmead Health Campus is somewhat isolated from the centre of Parramatta by Parramatta Regional Park and Parramatta Stadium to its east. While it has potential for a permeable boundary with residential areas west of Hawkesbury Road, the Westmead Health Campus has a relatively impermeable boundary with the UWS site and the schools to the south west, created by Darcy Road and its widening to create the bus transitway. Toongabbie Creek creates a significant boundary to the industrial development and residential areas to the north of the Westmead Health Campus while the connection to Parramatta River separates the Cumberland East portion from the balance of the Campus. The Cumberland East portion of the campus is also relatively impermeable due to its boundary on Darling Mills Creek (or Hunts Creek) and its boundary with Parramatta Prison. The Westmead Health Campus also includes the separate health accommodation site, located to the south west of the balance of the Campus, adjacent to Darcy and Bridge Roads.

In summary, the land uses surrounding Westmead Health Campus include:

- high density housing and significant residential areas to the north and south of the Westmead Railway Station;
- public open space (Toongabbie Creek which runs west to east and meets Parramatta River, and Parramatta Regional Park);
- educational (UWS and the Catherine McAuley and the Marist Brothers High Schools);
- health and community services (Ramsey Private Hospital and DADHC);
- some more recent office and business developments;
- limited retail, generally near to the Westmead Railway Station;
- industrial (Coca Cola Amatil located north of Toongabbie Creek); and
-
- certain portions of land surrounding the Campus are being contemplated for a variety of developments (including the UWS site to the south of the Campus and Coca Cola Amatil to the north).

The Westmead Health Campus is generally on relatively low or lower lying land than its surroundings. The Westmead Health Campus drains to Parramatta River and Toongabbie Creek. The Westmead Hospital and The Children's Hospital Westmead are on land sloping to the north and west from Hawkesbury Road. The Cumberland Hospital areas slope towards the bisecting Parramatta River while the health accommodation site slopes down to Darcy Road on its northern boundary. The existing health facilities are generally visible from the north west (along Old Windsor Road) but are visibly concealed from Parramatta (to the east) and from the south by other developments on higher ground.

Access to the Westmead Campus is generally provided by private cars, buses or trains. A predominance of health service professionals and visitors drive to the Campus. While roads around the Campus become somewhat congested in the morning and afternoon / evening peak, the Westmead areas is relatively accessible by road. The M4 Motorway (and the Great Western Highway) to the south provide access to Sydney (to the east) and the Blue Mountains (to the west). Victoria Road and Pennant Hills Road, both commencing in Parramatta, provide further access to and from the east. Hart Drive (Cumberland Highway) to the west provides access to the north and south. Road access to and from the north is also provided by Pennant Hills Road, Windsor Road and Old Windsor Road.

Parking is generally either within Campus carparks or on local streets. Public access to campus carparks is from Darcy and Hawkesbury Roads. Some employee parking is accessible from Institute Road and Redbank Road.

Westmead Railway Station is approximately 0.5kms from the entrance to Westmead Hospital and approximately 1.3kms from the entrance of the Children's Hospital Westmead. At this time, it is understood that express and longer distance trains predominantly stop at Parramatta but not Westmead, requiring train commuters to catch a local train or bus to reach Westmead.

A number of bus services, generally terminating at Parramatta, serve the Campus. Further bus services are expected when the transitway, which follows Darcy Street to the south of the Campus, is completed and commissioned.

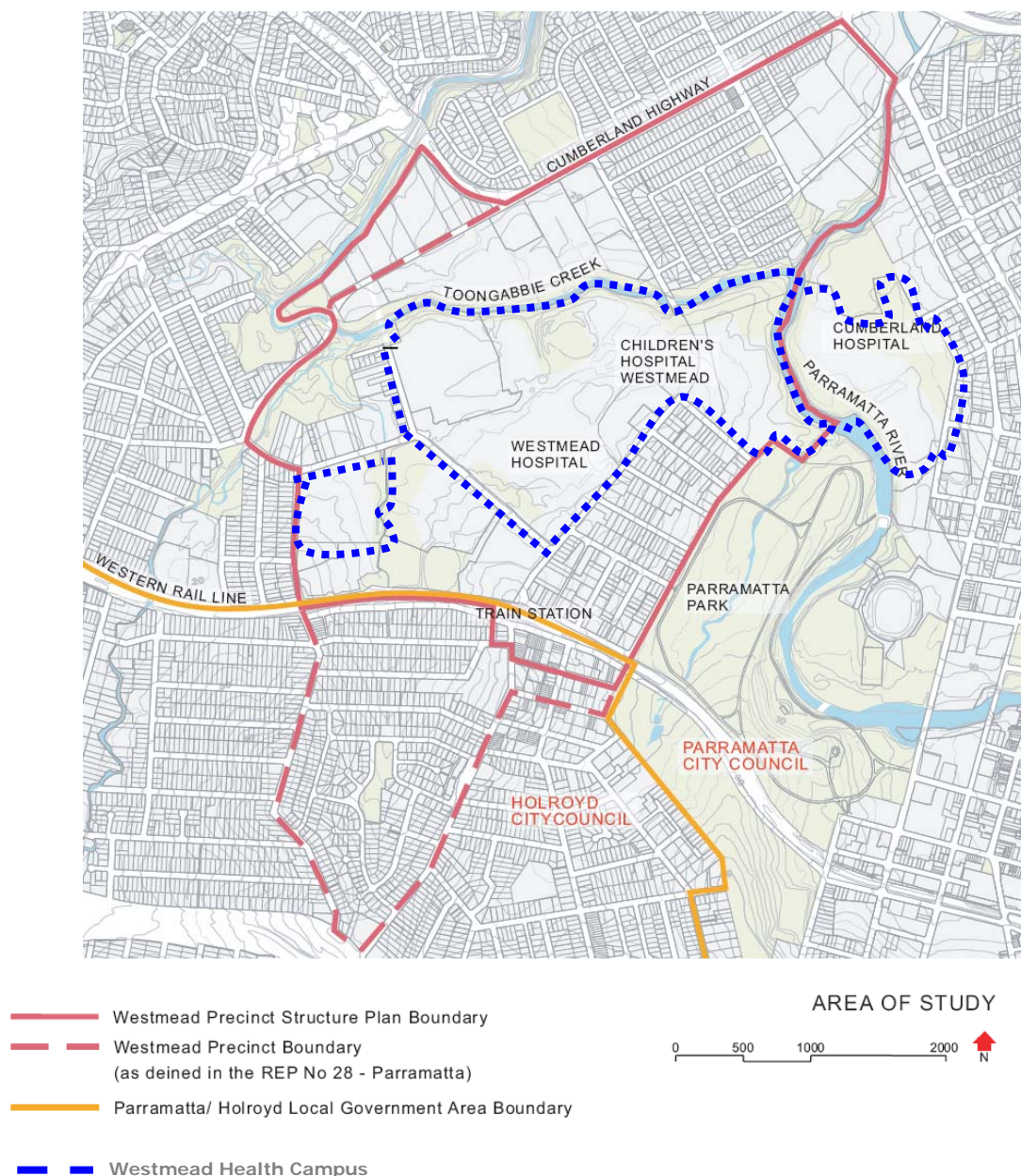
The redevelopment of the Westmead Health Campus is likely to be in parallel with a variety of developments in the area. Coca Cola Amatil is understood to be planning a significant redevelopment of its site to the north of the Campus. The Westmead Health Campus is continuing to generate local private and public sector development. Recent commercial and residential developments on Hawkesbury Road and the private hospital development on Darcy Road demonstrate private sector initiatives. The proposed development of the UWS site, on the corner of Hawkesbury and Darcy Roads, is an example of public sector initiative.

4.4 SREP 28

The Westmead Precinct is located approximately 1.5kms from the central business district of Parramatta. Parramatta provides accommodation for many major corporations and Government

agencies as well as being a centre for shopping, sport, dining, entertainment, legal, educational and healthcare. For the purposes of this Preliminary Environmental Assessment, the term “Westmead Precinct” or “precinct” is used to define the area surrounding the Westmead Health Campus as shown on Figure 2 below and is the area bounded by the M4 Motorway to the south, Bridge and Briens Road to the west and north and the eastern boundary of Cumberland Hospital and the western boundary of Parramatta Regional Park to the east.

Figure 2 – Study Area



Parramatta is expected to continue to rapidly develop as a centre of employment and recreation. The Westmead Health Campus is the largest health services centre in the southern hemisphere. In parallel with the continued development of Parramatta City, the NSW Department of Health aspires for the Campus to grow into a sustainable and vibrant multi-layered centre of excellence in health, research and education, supported by high quality facilities for staff, visitors and local residents.

The redevelopment of the Campus and complementary development within the broader Westmead Precinct will provide a unique opportunity to further develop an international centre for healthcare, allied business and education. Westmead Precinct has the capacity to deliver excellent quality working, living and recreational amenity. The opportunity now exists to apply a strategic approach as identified in the Parramatta Regional Environment Plan 28 that aims for Westmead Precinct to be a mixed use centre of retail, residential, commercial and community services.

One key element of this strategy is to create a common vision for Westmead as part of the future growth of the city of Parramatta.

4.5 LAND USE AND OWNERSHIP

4.5.1 Land Use

The Precinct has very large land holdings in single use, such as the Westmead Hospital and The Children's Hospital at Westmead. As a consequence, the majority of the Westmead Precinct is currently zoned Special Use (Hospital and School). The potential development is partly permissible under the current zoning arrangements and can be undertaken without rezoning.

The centre of pedestrian activity is concentrated around the Railway Station. A small number of shops and facilities which mainly serve the local residents, are located adjacent to the Railway Station in areas zoned Mixed Use. Residential development is divided between single residential lots that predominate in the residential areas to the north, west and east of the precinct. Recent zoning changes in the area to the north of the Toongabbie Creek and on the west of Bridge Road (adjacent to the Precinct) has seen the rapid consolidation of two to four house lots and development of three storey strata apartments.

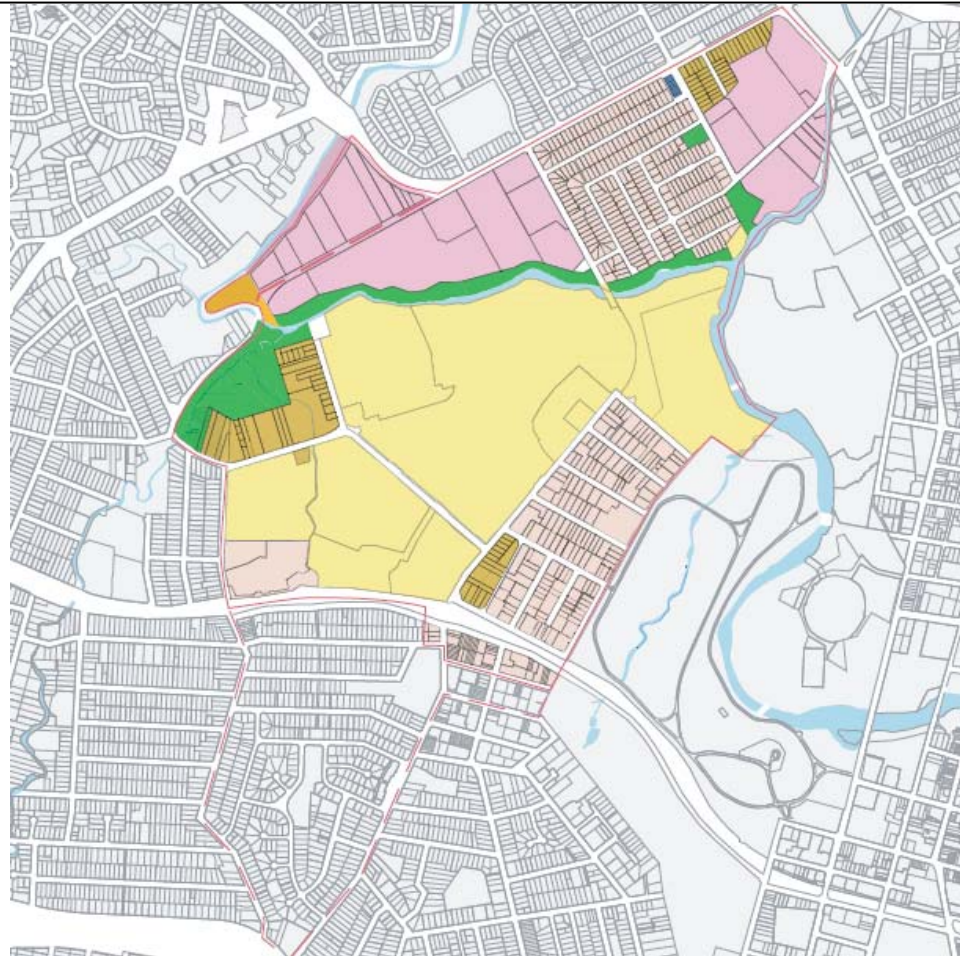
The residential area between Hawkesbury Road and Park Avenue consists almost exclusively of three storey strata developments.

The residential area to the north of Brien's Road and between Brien's Road and Toongabbie Creek has no centre and is very much isolated from activity in the Westmead Precinct.

The two major industrial areas are located north of Toongabbie Creek along Brien's Road.

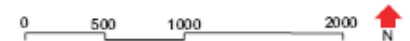
Certain areas along Toongabbie Creek and the upper Parramatta River are Public Open Space and Environmental Protection. The existing land use within the Precinct is shown on Figure 3 below.

Figure 3 - Existing Land Use



- Residential
- Special Use
- Employment
- Mixed Use
- Neighbourhood Business
- Public Open Space
- Environmental Protection (Bushland)

EXISTING LAND USE (PARRAMATTA LEP 2001)



4.5.2 Land Ownership

Principal land owners in the Westmead Precinct include large institutional holdings including the Heath Administration Corporation (occupied by Sydney Western Area Health

Service and The Children’s Hospital Westmead), DADHC, the University of Western Sydney, the Catholic Church, Diocese of Parramatta and the Marist Brothers. Large privately owned industrial holdings are located north of Toongabbie Creek. The largest of these is the Coca Cola Amatil site.

4.6 EXISTING DEVELOPMENT ON WESTMEAD HEALTH CAMPUS

The Westmead Health Campus, the subject of the Concept Plan, is approximately 50 hectares in area. It is predominantly owned by Sydney West Area Health Service, The Children's Hospital at Westmead and DADHC.

The largest facility on the Westmead Health Campus is Westmead Hospital, which is the major tertiary referral health facility in the Greater Western Sydney region and provides leadership in clinical care, teaching and research. In addition to dedicated research and education facilities, it has a major emergency department and plays a significant role in the provision of specialist services for the western Sydney metropolitan area, particularly in surgical and medical services, mental health, paediatrics, maternity and community services. The Children's Hospital at Westmead along with the Sydney Children's Hospital at Randwick is one of two major metropolitan children's hospitals

Redbank House is located on the campus and provides a range of child, family and adolescent inpatient and outpatient treatment and consultation. Cumberland Hospital (including Cumberland East) is located at the north east of the campus and provides a range of mental health services. The DADHC site accommodates the Marsden Centre which is used by the Department of Ageing, Disability and Home Care. DADHC provides transitional care and assists people with a disability, older people and their carers to live independently in their own homes.

The existing major health facilities on the Westmead Health Campus are generally limited to 4 or 5 stories and there are numerous single level facilities. This relatively low rise character of development has resulted in large building footprints and significant separation distances.

Carparking facilities extend along the eastern boundary of the Westmead Health Campus and provide a constraint to permeability (between the Campus and the residential areas) along the Hawkesbury Road boundary. Westmead Hospital and The Children's Hospital at Westmead (the two major health facilities) are sited relatively closely to Hawkesbury Road, further constraining permeability to the north west portion of the Westmead Health Campus which is occupied by a variety of special health, research and health support services. The northeast portion of the Campus, the Cumberland Hospital, accommodates mental health in one storey developments on the west side of the river and a combination of special health services and shared services within heritage buildings on the west side. The health accommodation site, located on Bridge and Darcy Roads, incorporates two level apartment style housing.

4.7 EP&A ACT AND RELEVANT ENVIRONMENTAL PLANNING INSTRUMENTS

4.7.1 EP&A Act

Part 3A of the EP&A Act came into force on 1 August 2005. It established new assessment procedures for various forms of 'major development' of state or regional significance. Such significance can be established in a number of ways, including being a

form of development listed at Schedules 1 & 3 of State Environmental Planning Policy (Major Projects). Group 7 of Schedule 1 includes *Health and Public Service Facilities – Hospitals*. NSW Health has written to the Department of Planning (DOP) to confirm its intention to seek approval under Part 3A of the EP&A Act on the basis that the development satisfies Group 7 Category 1 classification. NSW Health has requested that DOP confirm in writing that the development constitutes a ‘major project’ for which the Minister for Planning is the Consent Authority, and to which Part 3A of the Act applies.

Essentially, the Part 3A approval process provides for the Minister for Planning to undertake a coordinated whole of government assessment of the merits of the concept of a project of significance to the state, and to establish procedures for the subsequent approval of detailed aspects of the project.

NSW Health has requested that the Director General’s Environmental Assessment Requirements for the project. A concept plan will be prepared in accordance with the matters outlined in these requirements.

4.7.2 State Environmental Planning Policies

The relevant environmental planning policies are discussed below.

- State Environmental Planning Policy (Major Project) 2005

State Environmental Planning Policy (Major Project) 2005 came into effect on 25 May 2005 and was subsequently amended on 31 October 2005. This SEPP defines what development is state significant. Such determination is made by the Minister for Planning. NSW Health has requested that DOP confirm in writing that the development will be declared as a ‘Major Project’ pursuant to Clause 6 of State Environmental Planning Policy (Major Projects). NSW Health has also requested that the Minister rezone the subject land and have it listed as a ‘State Significant Site’ pursuant to clause 8 of the SEPP to facilitate the disposal of surplus land for residential, commercial and retail development.

- State Environmental Planning Policy 55 – Remediation of Land
SEPP 55 states that land must not be rezoned or developed unless contamination has been considered and, where relevant, land has been appropriately remediated.
- State Environmental Planning Policy 11 – Traffic Generating Developments
SEPP 11 aims to ensure that the Roads and Traffic Authority is made aware of and is given an opportunity to make representations in respect of certain types of development referred to in Schedule 1 or 2 of the SEPP.

The following are included in the Schedules to SEPP 11:

Schedule 1: (l) heliports, airports or aerodromes

Schedule 2: (o) the erection of a building for the purposes of a hospital with accommodation for 100 or more beds or the enlargement or extension of a building for the purposes of a hospital where that enlargement or extension provides accommodation for 100 or more beds.

- State Environmental Planning Policy 8 – Surplus Public Land
SEPP 8 aims to promote and co-ordinate the orderly and economic use of land in public ownership which is no longer required for the public purpose and is otherwise surplus to public needs.
- Draft SEPP 66 – Integration of Land Use and Transport
The Draft SEPP states that the consent authority must consider whether the future development of the site helps integrate land use and transport, and minimises the need to travel by private car.

4.7.3 Parramatta Local Environment Plan

The site is located within *5 Special Uses Zone* under provisions of the Parramatta Local Environment Plan 2001. The zoning provides for hospital, education and community type uses. Features of the Parramatta Local Environment Plan 2001 are as follows:

Zone Objectives

The Zone objectives are:

- (a) to facilitate certain development on land which is, or is proposed to be, used by public authorities, institutions or organisations, including the Council, to provide community facilities, services, utilities and transport facilities;
- (b) to allow other ancillary land uses that are incidental to that primary use of land within the zone; and

- (c) to provide flexibility in the development of sites identified for special uses by allowing development which is permissible in an adjacent zone.

Development that does not require consent

Exempt development does not require consent.

Development allowed only with consent

Development allowed only with consent includes those for the purpose of:

- car parking spaces
- centre based child care services
- community facilities
- depots
- drainage
- educational establishments
- hospitals
- housing for older people or people with a disability
- places of public worship
- public utility installations (other than gas holders and generating works)
- roads
- the particular land use indicated by black lettering on the zoning map
- demolition
- development that may be carried out on adjoining or adjacent land in the same zone or in a different zone
- subdivision

Prohibited development

Prohibited developments are those not included in Item 2 or 3 (above)

4.7.4 Parramatta DCP

The Parramatta Development Control Plan (DCP) 2005 (was adopted by Council on 31 October 2005 and came into effect on 14 December 2005. The DCP applies to all land within the Parramatta Local Government Area (LGA) that is zoned under the Parramatta Local Environmental Plan (LEP) 2001.

Land in the Parramatta LGA may be zoned under Parramatta LEP 2001 or Sydney Regional Environmental Plan No. 28 – Parramatta (SREP No. 28). In most cases, land is only subject to one of these Plans. However, certain areas within the LGA are zoned under the Parramatta LEP 2001 and are also subject to the board principles of SREP No. 28.

4.7.5 Other Relevant Legislation

Other relevant NSW Legislation includes:

- Roads Act 1993 (S. 138) – relating to consent to:
 - (d) erect a structure or carry out a work in, on, or over a public road, or
 - (b) dig up or disturb the surface of a public road, or
 - (e) remove or interfere with a structure, work or tree on a public road, or
 - (f) pump water into a public road from any land adjoining the road, or
 - (g) connect a road (whether public or private) to a classified road).
- Local Government Act 1993 (Section 68 approvals – relating to drainage works, carry out work/connect to Council water supply, carry out work/connect to Council's sewer).

5 THE PROJECT

5.1 DESCRIPTION OF PROJECT

The project will include the development of new and expanded health facilities on the Westmead Health Campus to meet expanding and changing clinical needs. The estimated development cost is for the project \$750 million. The estimated development cost includes immediate potential (Years 1 - 3) and intermediate potential (Years 2 - 8) only. Due to the level of uncertainty, development costs for long term potential (Years 7 - 19) is excluded.

Consolidation of health facilities will provide opportunities for the development of complementary health, research, education, commercial and residential development by the private sector to support and fund the procurement of the new health facilities.

The project will comprise:

- health facilities expansion, consolidation and rationalisation;
- future shared clinical services zone;
- new medical research hub;
- related health service / research industries;
- privately developed commercial, retail and related health facilities (private consulting rooms, child care facilities etc);
- expanded education facilities;
- medical conference centre;
- staged development of Cumberland East site;
- provision of accommodation for nursing and medical staff as well as students;
- accommodation for health patients and relatives;
- private residential accommodation;
- new pedestrian links;
- consolidated and new car parking facilities;
- development of existing roads to allow access for public transport;
- new emergency vehicle access;
- landscaping;
- new and re-developed courtyards;
- new health facility entry points; and
- new pedestrian walkways and green corridors.

A series of development options are currently under detailed evaluation and will be subject to Value Management Study process.

5.2 ASPECTS FOR WHICH APPROVAL WILL BE SOUGHT

Aspects for which concept approval will be sought include:

- land use distribution;
- heights;
- floor space ratios (FSR);
- road hierarchy/layout;
- open space networks;
- access networks;
- car parking numbers;
- landscaped areas (% of site);
- heritage re-use strategy; and
- construction staging.

Pursuant to the 'Concept Plan' provisions of Part 3A of the EP&A Act, the detailed design of buildings and works will be separately approved.

5.3 ZONING RATIONALE

The site is currently zoned *5 Special Uses Zone* under the Parramatta LEP 2001, there is an issue of zoning and permissibility of certain uses. Appendix 1 shows the potential development zones for the Westmead Health Campus. Uses within the potential development zones including commercial, retail, related health, hotel and accommodation are considered to be ancillary to hospital uses. The current zoning is subject to a study being completed by Planning as part of the Westmead Precinct Implementation Plan.

6 KEY ISSUES

6.1 SOCIAL AND ECONOMIC ISSUES

Appendix 2 provides an overview of the demographics in the Parramatta LGA. Unless otherwise stated, this information is taken from the Australian Bureau of Statistics (ABS) 2001 Census.

6.2 PUBLIC INTEREST

The issue of public interest as part of the Westmead Health Campus redevelopment project include:

- Consistency with the objectives for the EP&A Act (1979) and the Parramatta LEP;
- Encouraging the economic and orderly development of land;
- Minimising the impact on the natural and built environment;
- Incorporating best practice urban design and the principles of ecologically sustainable development;
- Consideration of risks to the safety and security of the surrounding community and public amenity; and
- Contribution toward meeting the health, employment and social needs of Sydney West Area Health Service region.

6.3 HEALTH FACILITY OPERATIONS

Contemporary service delivery modes are changing the way in which health services are delivered 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 Westmead Health Campus redevelopment project provides opportunity to enhance health services on site by:

- Improving links between community and other health services on site;
- Providing consolidated research facilities and multidisciplinary educational facilities on site; and
- Providing flexible building design to allow for future modification and expansion to meet changes in clinical practice.

6.4 STRATEGIC PLANNING CONTEXT

With a population of nearly two million, Greater Western Sydney is Australia's fastest growing region. The Westmead Health Campus provides the primary medical facility within this region and acts as the district health facility for the surrounding community. The predicted steady growth of health service demands (including those related to the ageing population and significant predicted residential growth in Sydney's north west) and emerging health technology create the need to develop the health facilities on the Westmead Health Campus. The needs of the health service providers and their expectations create the need to provide facilities, amenities and access.

The Government Metropolitan Strategy forecasts that Parramatta will experience significant employment growth between the present and 2021. It is anticipated that the Health Campus is likely to experience parallel growth patterns due to increased health service demands and through the proposed development of further education and research facilities and the growth of related medical industries.

6.5 LAND USE

Significant opportunity exists to develop facilities that continually support the evolution of Westmead as a health, research and education Campus of international renown and preferred employment. In terms of land use, key strategies are:

- to ensure that existing health and research based facilities continue to be accommodated within the Campus;
- to allow for the expansion, reconstruction, refurbishment and decanting of health and research facilities;
- to improve amenity and character through the creation of permeable boundaries, green corridors, courtyards and squares;
- to provide opportunity for the development of health related services, education and training; and
- to provide opportunity for appropriate private sector commercial developments used to fund the expansion, reconstruction, refurbishment and decanting of health and research facilities.

6.6 TRANSPORT

Westmead Health Campus is served by both rail and bus. However, the availability and convenience of public transport results in a high percentage of staff, patients and visitors arriving by private motor vehicle. The development of transport strategies which facilitate access to the site and encourage a reduced reliance on the private motor vehicle are an essential part of the Campus redevelopment. Appendix 3 shows potential movement and

zoning diagrams for traffic, transport, access and car parking for the Westmead Health Campus.

The traffic and transport issues for consideration will be:

- opportunities for bus access to the site (via Redbank and Institute Roads);
- impact of the Transitway on the site (currently under construction);
- pedestrian connections and transport within the site; and
- management strategies to promote the use of public transport.

Helicopter transport to the site is also provided by Childflight for NETS and Careflight for adult trauma retrieval. The helicopter transport issues for consideration will be:

- helicopter access flight paths;
- location of helicopter landing pads; and
- location of helicopter depots.

6.7 CAR PARKING AND ACCESS

The Campus is bounded by Toongabbie Creek to the north, Darcy Road and the Transitway to the south and Hawkesbury Road to the east. Above ground parking is predominately located above ground along Darcy Road and Hawkesbury Road. Appendix 3 shows potential movement and zoning diagrams for traffic, transport, access and car parking for the Westmead Health Campus.

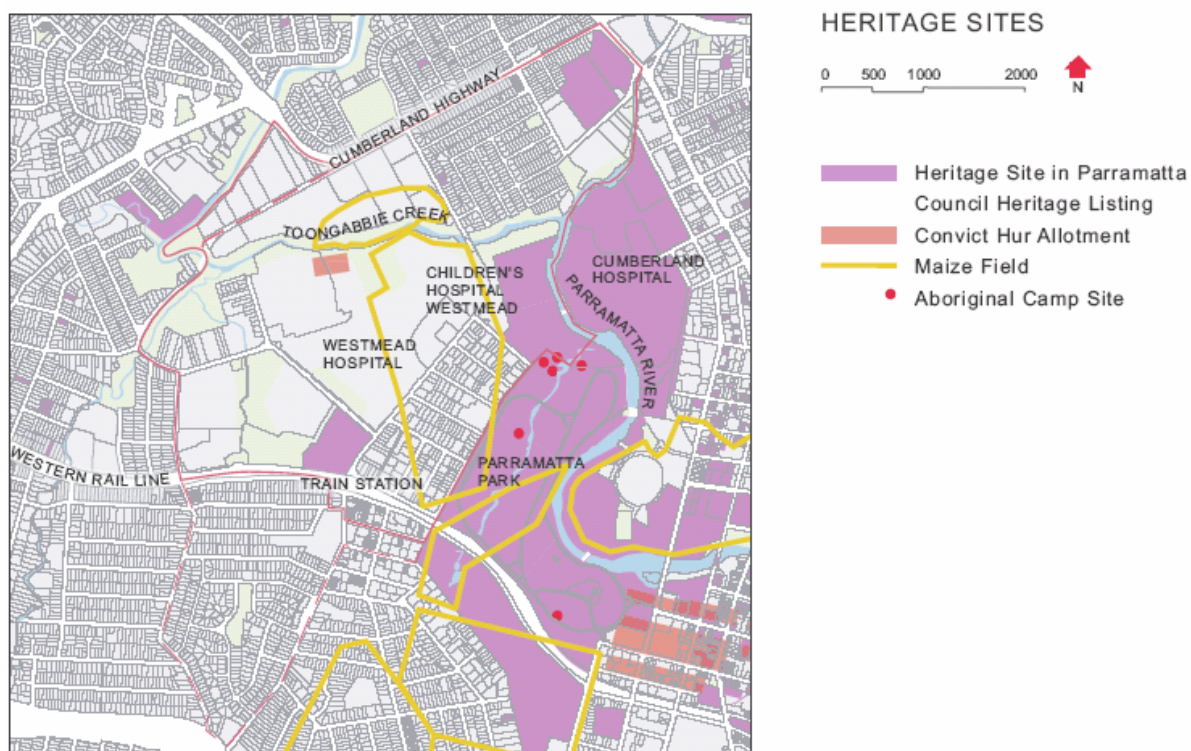
The vehicle access and car parking issues for consideration will be:

- traffic impacts on the local road system;
- impacts on road intersections;
- provision of service and emergency access;
- development of existing roads to allow public transport access;
- relocation of existing car parks along Hawkesbury Road from above ground to below ground;
- opportunities to develop new car parking facilities to the North and South of the Campus;
- management strategies to increase the effective utilisation of staff car parking (e.g. car pooling strategies);
- demand management for on street parking (e.g. parking permit system);
- way finding and signage strategy; and
- provision of walking and cycling tracks.

6.8 HERITAGE

Five Aboriginal campsites are noted in the GML Heritage study of 2000 in the area along Domain Creek close to Parramatta River. This area is close to the border of the Westmead Precinct. Figure 4 below shows heritage sites within the Precinct.

Figure 4 – Heritage Sites



In the Parramatta Aboriginal Heritage Study the different areas within the precinct are listed in relation to their sensitivity and potential archaeological value. It is noted that the areas along the waterways, including Toongabbie Creek and Parramatta River, are areas of high sensitivity. Any development there will have to be preceded by thorough archaeological investigations.

Toongabbie Creek is listed as a key heritage item in the Parramatta Regional Planning Strategy, 1999. The Cumberland Hospital site (including Cumberland East) is a site of considerable heritage significance and is the subject of a number of previous planning, heritage, archaeological and conservation studies.

6.9 PUBLIC / PRIVATE DOMAIN

Whilst the Westmead Health Campus is owned by SWAHS, DADHC, The Children's Hospital Westmead, general public access to much of the site is limited. Public access will

be improved through new public spaces, green corridors, cycle tracks, walking paths and the creation of a permeable boundary along Hawkesbury Road.

6.10 BUILT FORM / URBAN DESIGN

The key issues to be considered in determination of the built form include:

- heights – relationship to topography and diverse range of surrounding heights;
- FSA – with particular regards to infrastructure capacity;
- street edge – with regard to existing and desired townscape character of the area;
- shadows – with particular regard to public domain space;
- views – consideration of existing and potential view lines, sky lines and legibility of the area;
- activation – in particular the pedestrian and street system, in order to create a vibrant precinct and vital, safe circulation system for campus users at all times of the day;
- sense of place – desire to create a memorable, contemporary, distinctive public domain that celebrates the inherent qualities of the site heritage, topography, landscape and social history;
- connectivity – for pedestrians, public and private transport in moving through the campus and linking with adjacent educational, recreational, employment and residential land uses;
- address – the need for a clear sense of address and identity to the various functional zones on site; and
- planning controls – with particular regard to recent specific planning controls such as SEPP 65.

Detailed heritage investigations are required to ensure that landscape heritage values on the site are identified and the most significant elements protected and appropriately managed. A specialist Arborist Consultant will also be engaged to assess condition and anticipated impact of development on existing vegetation.

6.11 FLOODING

Based on the Flood Risk Precincts as adopted from the Upper Parramatta River Catchment FRMP 2003 the area adjacent to Toongabbie Creek and Parramatta River is designated Low Flood Risk. The FRMP provides a number of specific recommendations which are relevant to the Westmead Precinct, inclusive of the following:

- New "Sensitive Use and Facilities" (inclusive of hospitals and educational facilities) should be discouraged from locating within the flood plain (i.e. either the Low, Medium or High Flood Risk Precincts). Where such uses exist, additions and redevelopment could be acceptable subject to compliance with various criteria generally directed towards reducing flood risk to property and persons. Most other forms of development would be permissible in either Low or Medium Flood Risk Precincts.

6.12 ACOUSTICS

The Westmead Health Campus is subject to from a range of sources including noise associated with traffic along Hawkesbury Road and Darcy Road. Noise associated with the site includes vehicles entering and leaving the site, emergency vehicles travelling along Hawkesbury Road and helicopter movement to and within the site. In addition there is noise associated with the current WIN Stage 1 construction program and the construction of the Transitway on Darcy Road. A significant increase in the number of buses using the Transitway is planned.

An acoustic assessment will be undertaken measuring the effect from noise from traffic, ambulances, sirens and helicopters and how it proposed to mitigate any negative impact on the amenity of the immediate area.

6.13 INFRASTRUCTURE

The proposed usage of the site could increase the services loads including water supply, sewer, stormwater, electricity and gas. The respective utilities will be consulted to allow them to plan for any infrastructure augmentation required.

6.14 SITE CONTAMINATION

A detailed site contamination study is not currently available. Appendix 4 shows the results of an asbestos survey completed for the Westmead Health Campus. An asbestos management plan will need to be implemented. A site contamination study will be undertaken.

6.15 GEOTECHNICAL

A detailed geotechnical study is not currently available. A geotechnical study will be undertaken.

6.16 SURROUNDING LAND USE CONTEXT AND POTENTIAL CONFLICTS

The Westmead Health Campus is adjacent to a range of residential, retail, educational, industrial and open space with potentially conflicting functions.

Health is aware that both the University of Western Sydney and Coca Cola Amatil are making applications for development under Part 3A.

A key planning issue will be to ensure that the mixed use character of the potential development fits and interfaces appropriately with surrounding developments.

7 AGENCIES TO BE CONSULTED

A range of agencies have been to date, both in group consultation and individual consultations with relevant agency officers. Consultations have ranged from broad strategic issues to specific service infrastructure issues.

7.1 AGENCIES CONSULTED

The Agencies consulted to date include:

- NSW Department of Health
- Sydney West Area Health Service
- NSW Premiers Office
- Department of Planning
- University of Western Sydney
- Ministry of Science and Medical Research
- Parramatta City Council
- Western Sydney Region Organisation of Councils (WSROC)
- Macquarie University
- University of Sydney
- Department of Commerce (NSW)
- Department of Ageing, Disability and Home Care
- Department of Mental Health
- Department of Corrective Services
- Heritage Office

Based on consultation with NSW Health and Sydney West Area Health Service there is a need to provide expanded health care and related services at the Westmead Health Campus. This need is driven by an increasing population, a change in the demographics (particularly the ageing population), changes in models of care, new technology and the age of existing infrastructure.

A centralised coordination process (initially between Planning and Health) to coordinate the Westmead Precinct has been agreed with Planning. Planning will integrate the interrelationship between the Westmead Health Campus and other proposed major developments including Coca Cola Amatil and UWS. Health has consulted Coca Cola Amatil and UWS on a range of planning issues.

Based on consultation with the Department of Planning and Parramatta City Council, connectivity with Parramatta CBD is a key strategic issue for the future development of the Campus. Parramatta City Council and the Heritage Office support a strategy of optimised adaptive re-use for the Cumberland East site

The Ministry of Science and Medical Research supports the development of Research Hub at the Westmead Health Campus. The proposed Research Hub will consolidate research functions on the Campus into a single co-located facility.

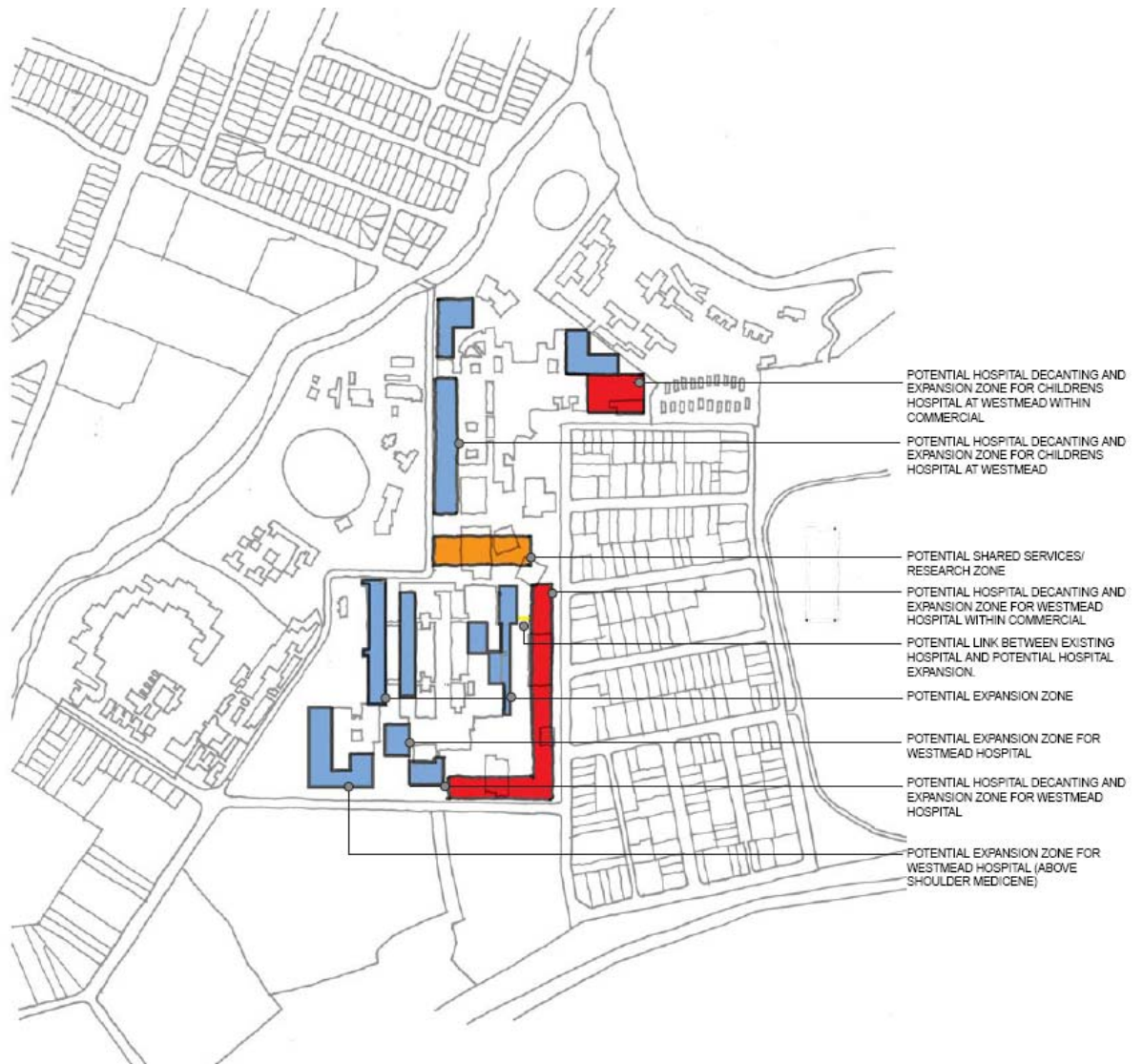
The Department of Ageing Disability and Home Care is not currently considering or investigating any options that involve disposal or part disposal of the Marsden site. Marsden is considered to be a long term and strategic asset by DADHC.

Based on consultation with Corrective Services, the Government is seeking to dispose of a number of sites adjacent to the Cumberland East site. These include the Norma Parker Correctional Centre and Kambala.

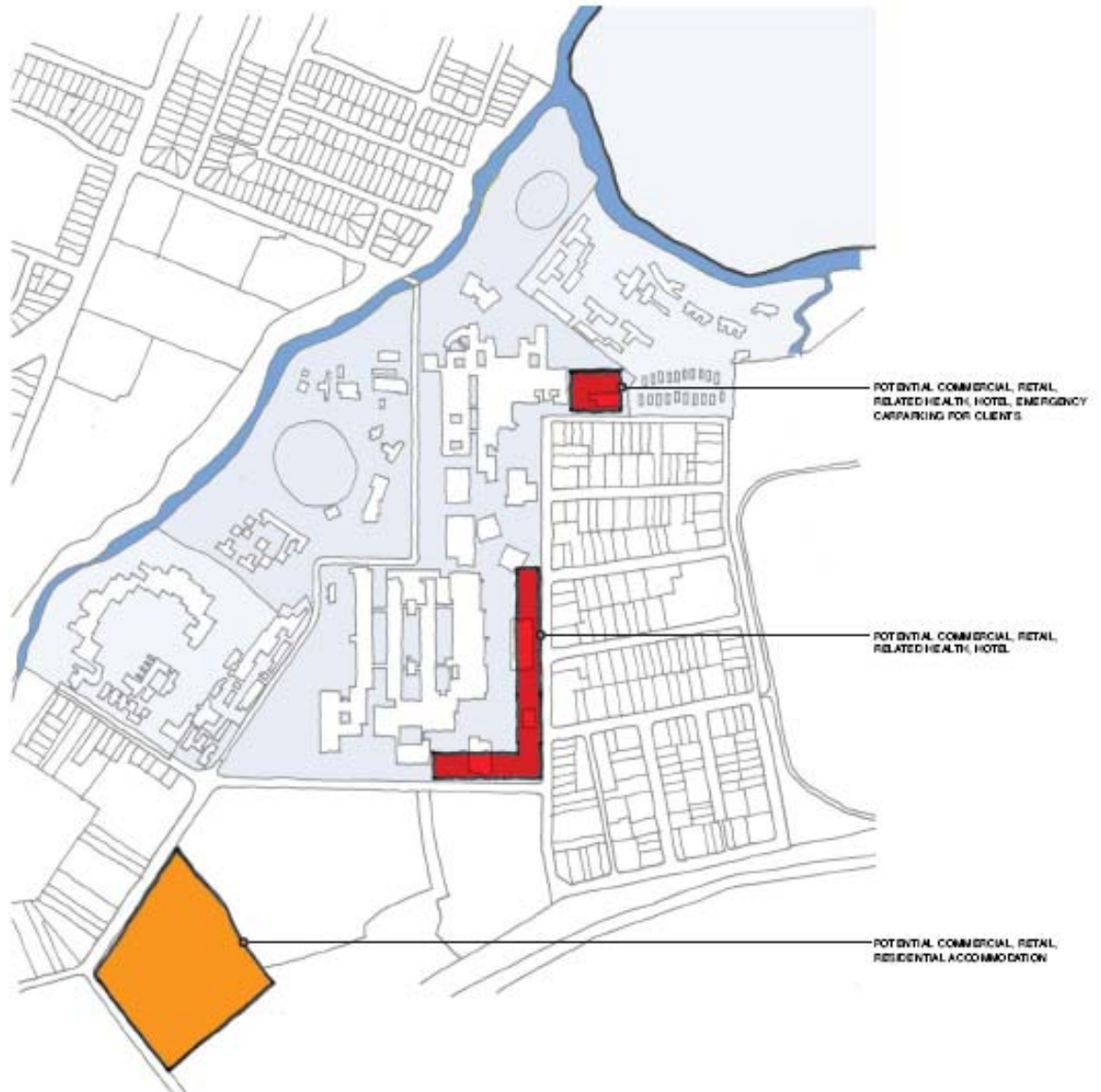
APPENDIX 1

POTENTIAL DEVELOPMENT ZONES

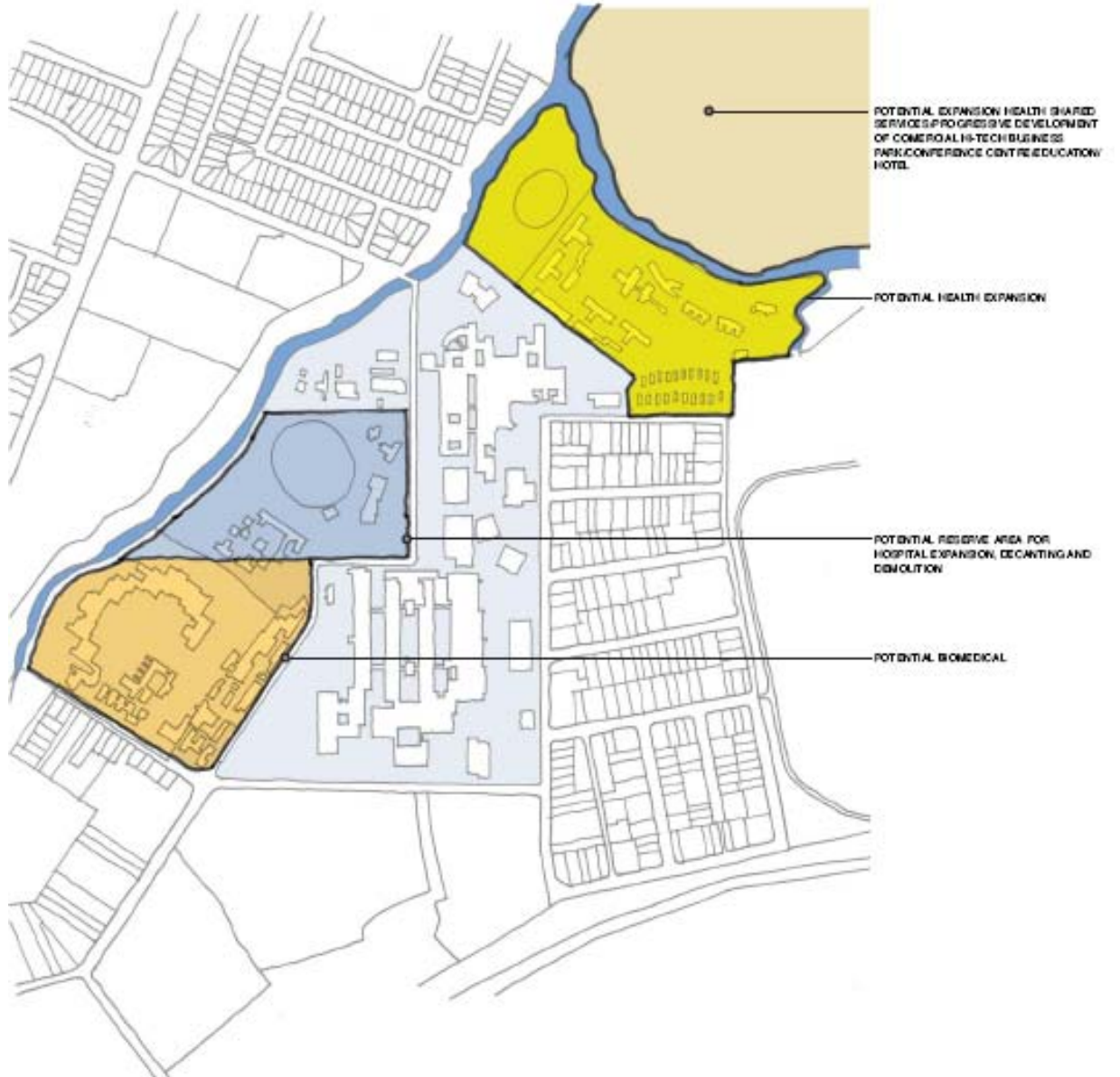
(HEALTH FACILITY EXPANSION, DECANTING AND RESEARCH ZONE)



POTENTIAL DEVELOPMENT ZONES (SHORTER TERM OPPORTUNITIES)



POTENTIAL DEVELOPMENT ZONES (LONGER TERM OPPORTUNITIES)



POTENTIAL DEVELOPMENT ZONES (GREEN CORRIDORS)



APPENDIX 2

SOCIAL AND ECONOMIC ISSUES

Table 1 – Selected Characteristics

	Males	Females	Persons
Total Persons	71,939	72,551	144,490
Aged 15 years and over	56,988	58,588	115,576
Aged 65 years and over	7,452	10,479	17,931
Aboriginal	526	507	1,033
Torres Strait Islander	29	31	60
Both Aboriginal and Torres Strait Islander	27	27	54
Total Indigenous Persons	582	565	1,147
Indigenous Persons aged 18 years and older	355	340	695
Born in Australia	39,618	40,687	80,305
Born overseas	26,384	26,249	52,633
Speaks English only	38,694	39,650	78,344
Speaks other languages	27,561	27,744	55,305
Australian citizen	57,282	59,075	116,357
Australian citizen aged 18 years and over	42,724	45,191	87,915
Enumerated in private dwelling	69,028	69,888	138,916
Enumerated elsewhere	2,911	2,663	5,574
Overseas visitors	665	682	1,347

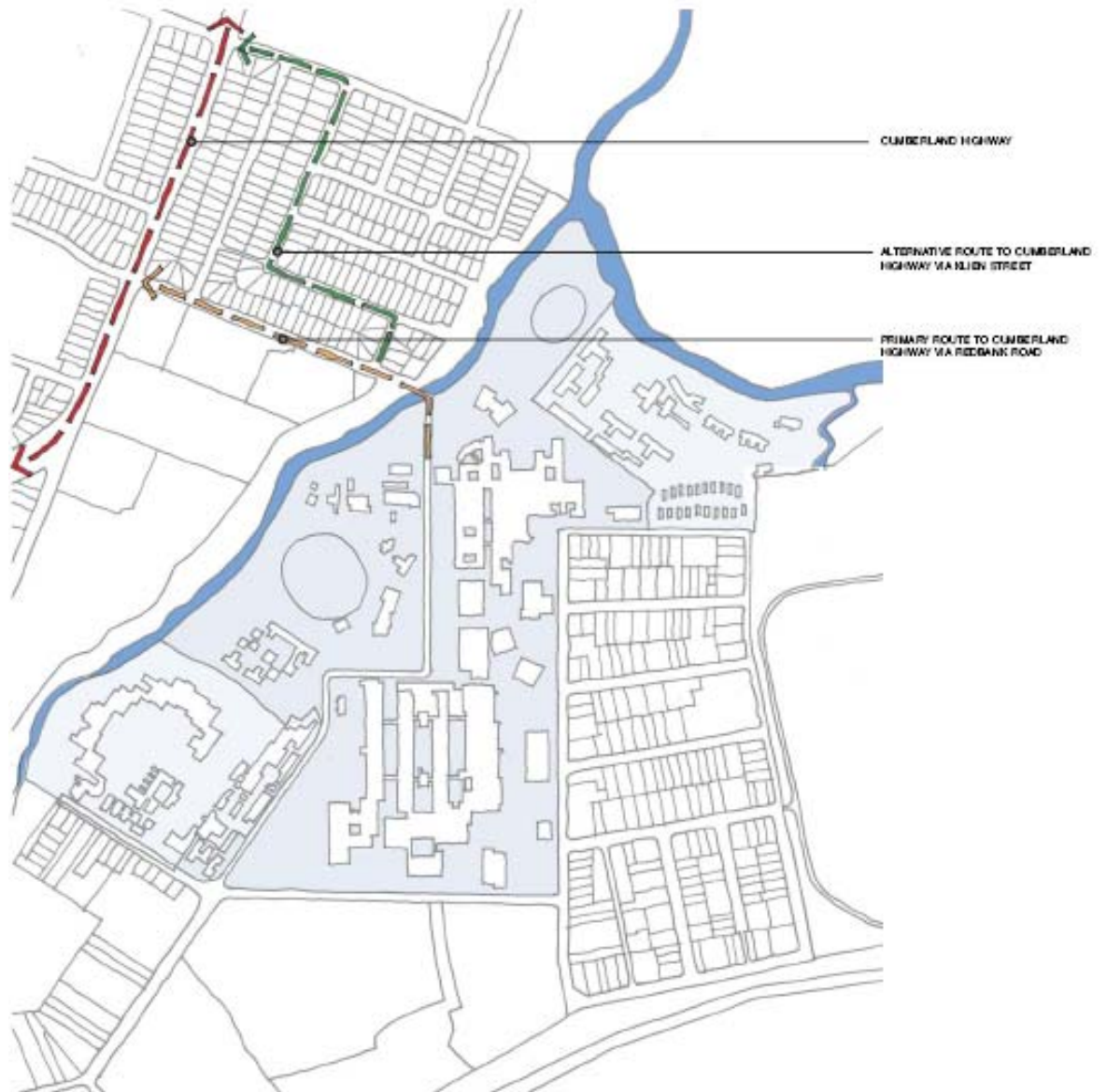
Source: ABS 2001 Census Population and Housing

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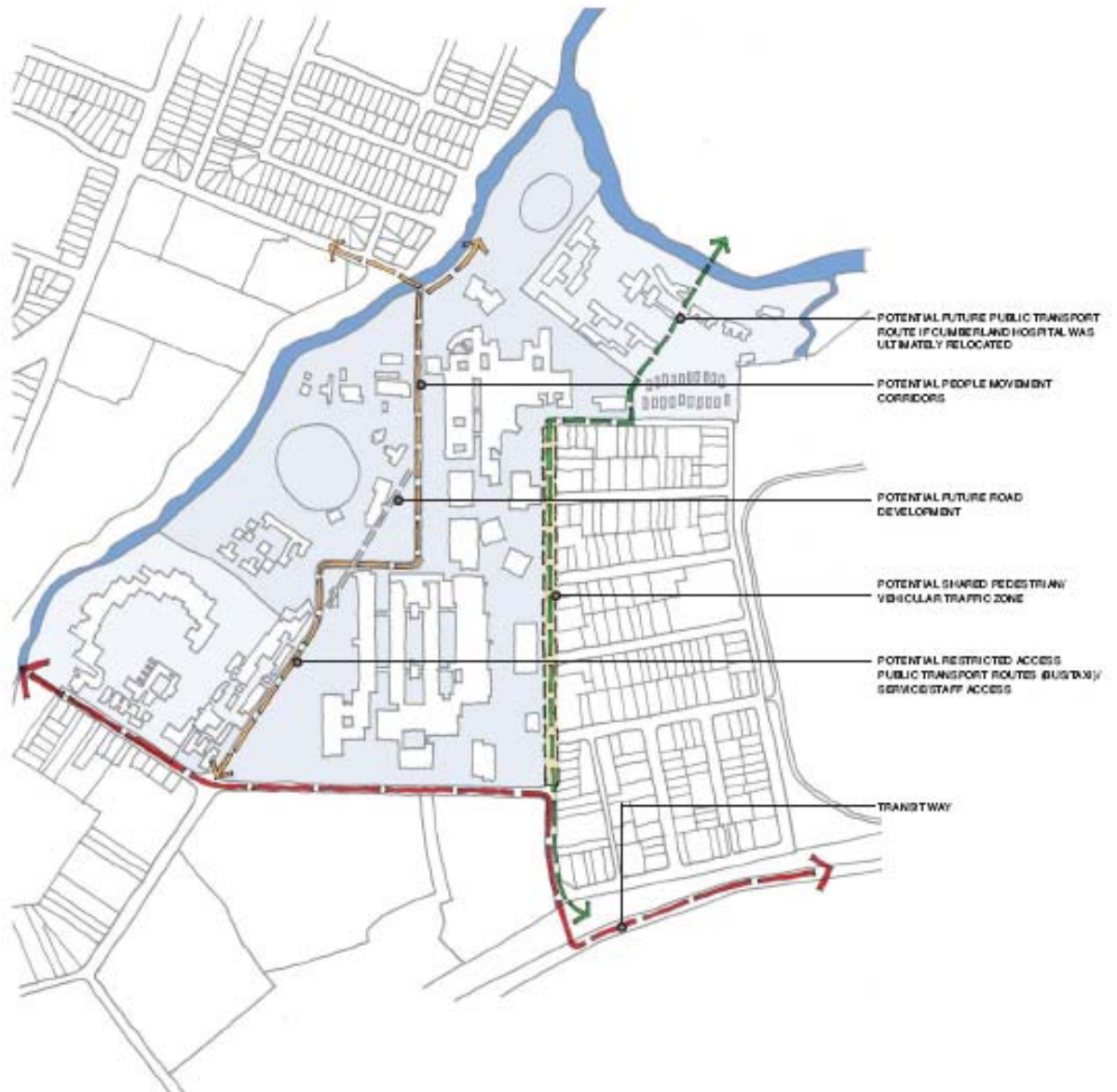
	Persons	% of Total Pop
Age 0-4	10 012	7
Age 5-14	18 754	13
Age 15-24	19 807	14
Age 22-54	64 740	45
Age 55-64	12 106	8
Age 65+	17 724	12

APPENDIX 3

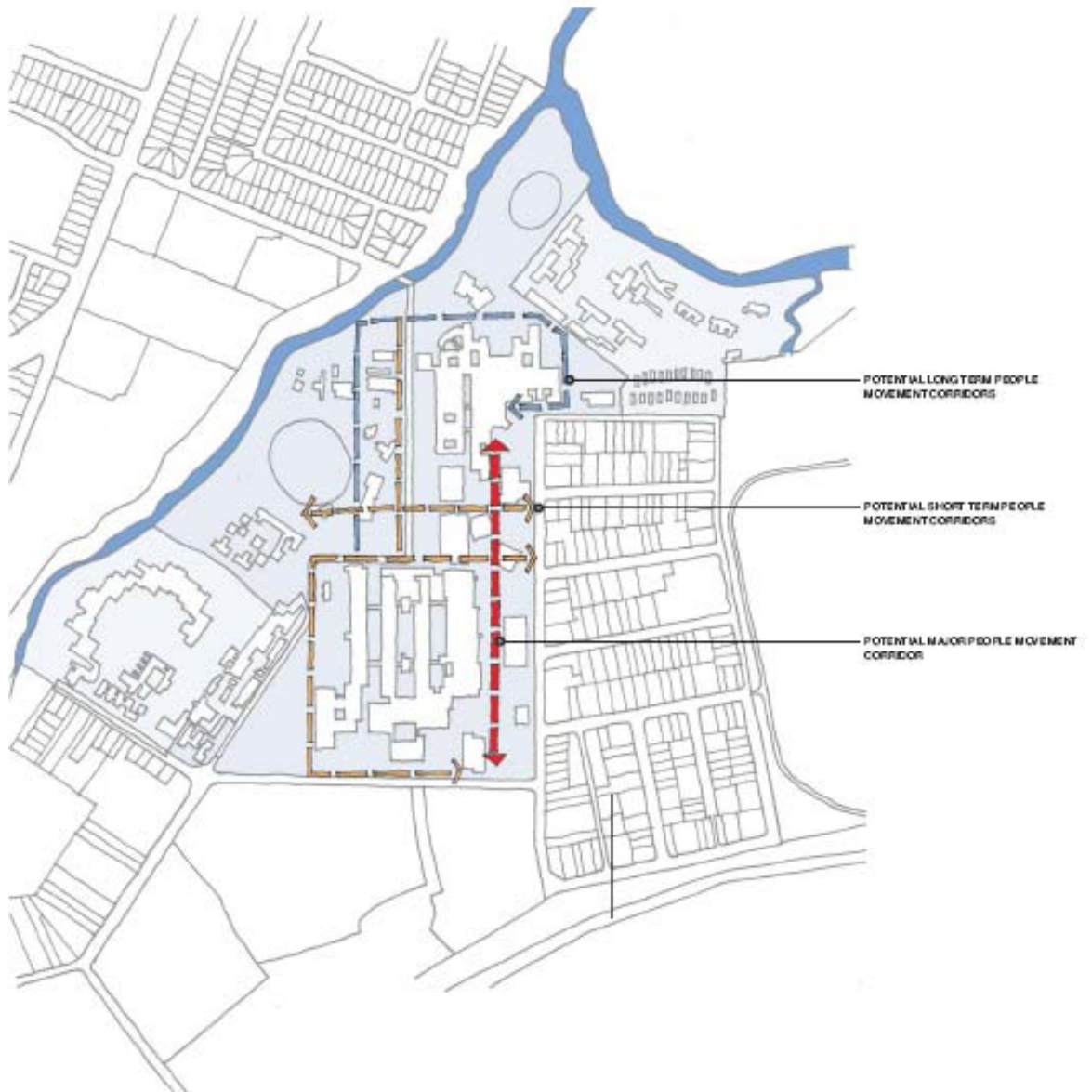
POTENTIAL VEHICLE MOVEMENT (CUMBERLAND HIGHWAY ACCESS)



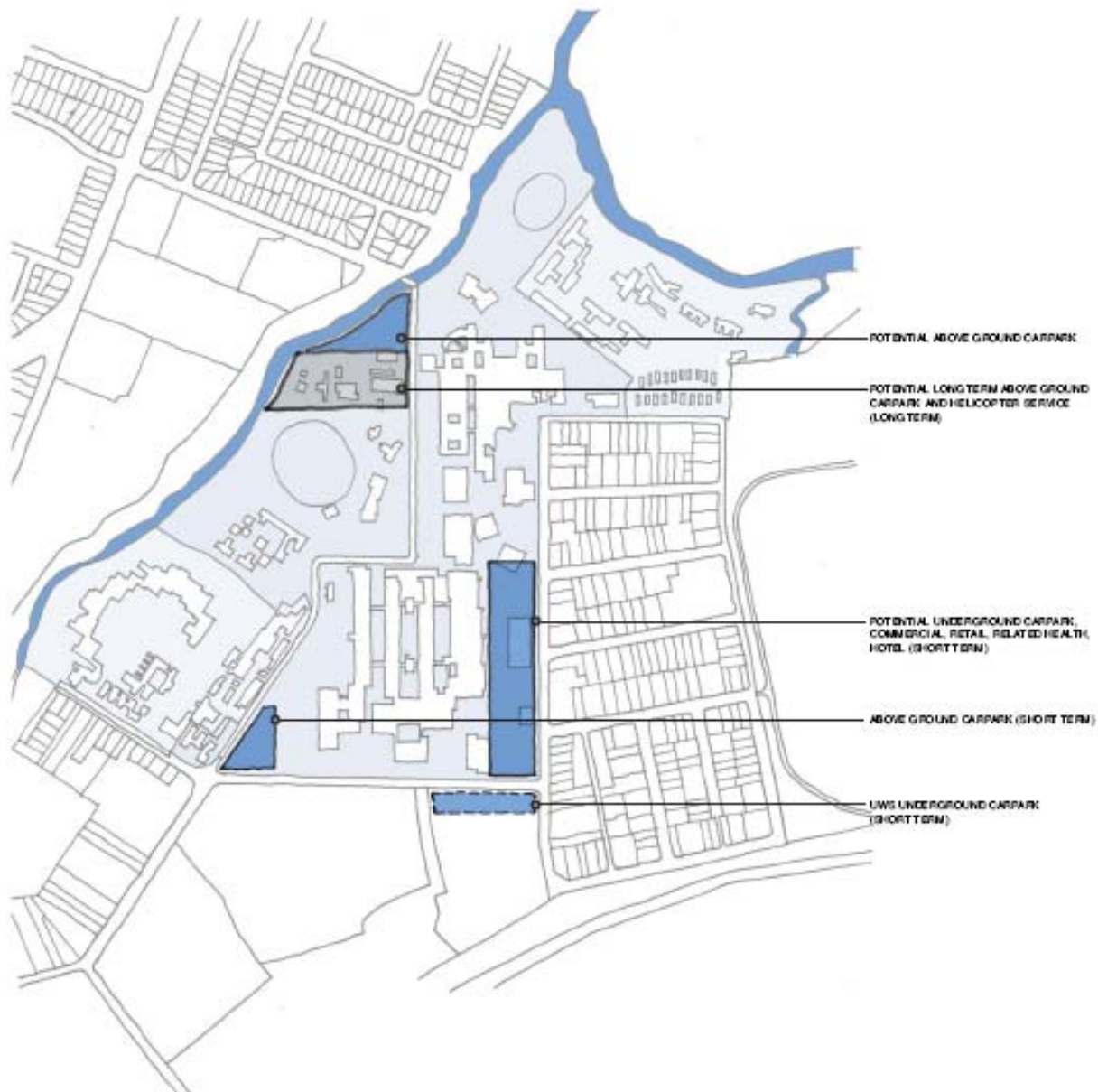
POTENTIAL VEHICLE MOVEMENT DIAGRAM (WESTMEAD HEALTH CAMPUS)



POTENTIAL PEOPLE MOVEMENT CORRIDORS (WESTMEAD HEALTH CAMPUS)



**POTENTIAL CAR PARKING ZONES
(SHORTER AND LONGER TERM OPPORTUNITIES)**



APPENDIX 4

ASBESTOS SURVEY

(To be inserted)