

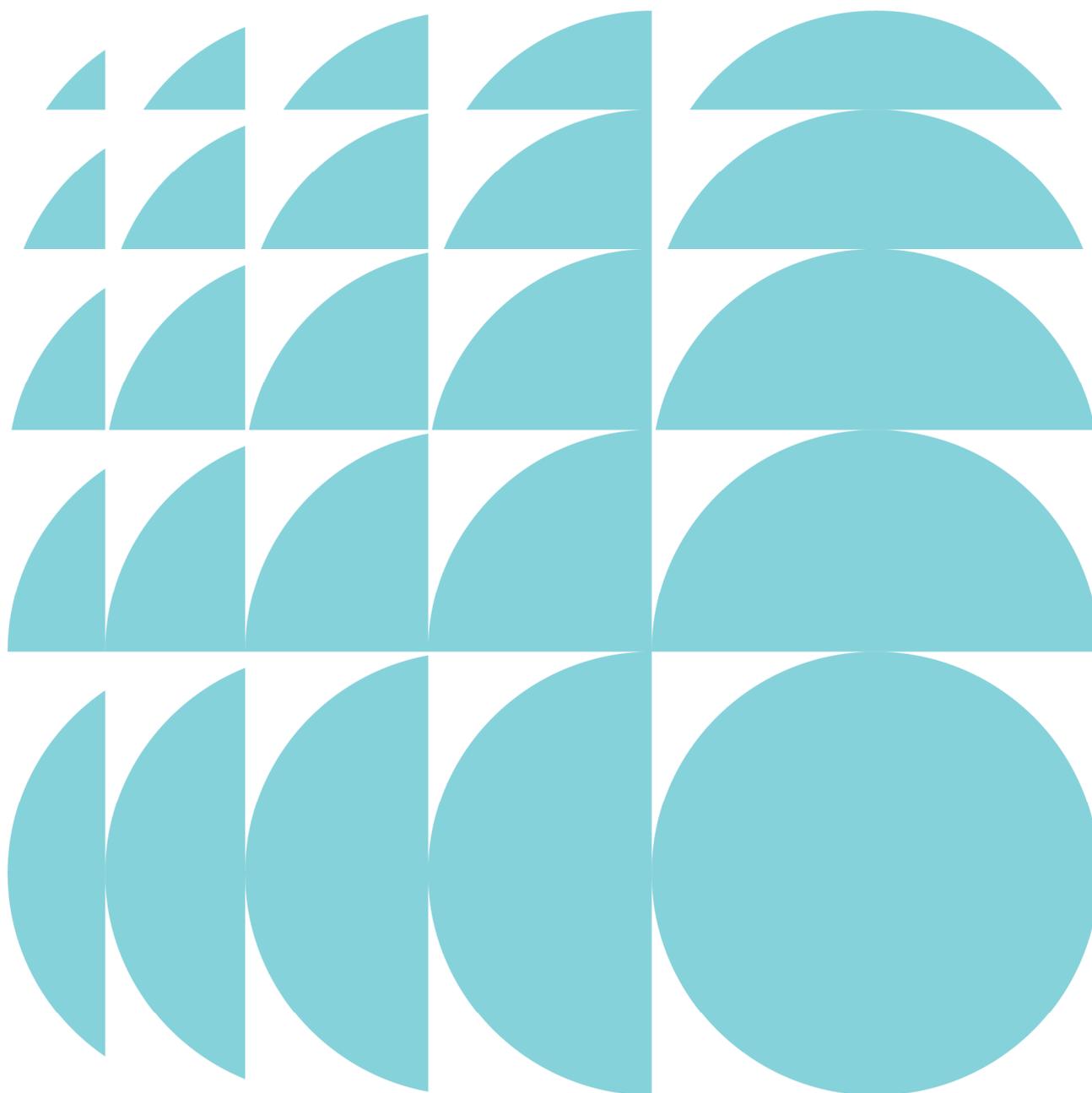
# ETHOS URBAN

## Environmental Impact Statement

Campbelltown Hospital Redevelopment  
Therry Road, Campbelltown

Submitted to Department of Planning and  
Environment

On behalf of Health Infrastructure NSW  
10 August 2018 | 17653



---

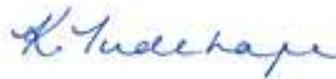
**CONTACT**

Kate Tudehope Associate Director ktudehope@ethosurban.com 9409 4932

Reproduction of this document or any part thereof is not permitted without prior written permission of Ethos Urban Pty Ltd.

This document has been prepared by: Chris McGillick

This document has been reviewed by: Kate Tudehope



Chris McGillick

10 August 2018

Kate Tudehope

10 August 2018

Reproduction of this document or any part thereof is not permitted without written permission of Ethos Urban Pty Ltd. Ethos Urban operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed, it is a preliminary draft.

---

VERSION NO.	DATE OF ISSUE	REVISION BY	APPROVED BY
Final Issue	10 August 2018	Chris McGillick	Kate Tudehope

---

Ethos Urban Pty Ltd  
ABN 13 615 087 931.  
www.ethosurban.com  
173 Sussex Street, Sydney  
NSW 2000 t 61 2 9956 6952

---

# Contents

---

Statement of Validity	6
1.0 Executive Summary	7
2.0 Introduction	9
2.1 Overview of Proposed Development	9
2.2 Background to the Development	9
2.3 Objectives of the Development	11
2.4 Analysis of Alternatives	11
2.5 Secretary's Requirements	12

---

3.0 Site Analysis	19
3.1 Site Location and Context	19
3.2 Land Ownership	20
3.3 Campbelltown Hospital Campus Description	20
3.4 Surrounding Development	27

---

4.0 Description of the Development	29
4.1 Design Principles	30
4.2 Numerical Overview	30
4.3 Demolition and Site Preparation	30
4.4 New Clinical Services Building (CSB)	31
4.5 Landscaping and Public Domain	37
4.6 Tree Removal	38
4.7 Car Parking and Access	38
4.8 Services and Utilities	40
4.9 Construction Staging and Job Creation	41
4.10 Construction Hours	41

---

5.0 Consultation	42
6.0 Environmental Assessment	44
6.1 Relevant EPIs, Policies and Guidelines	44
6.2 Built Form and Urban Design	49
6.3 Environmental Amenity	49
6.4 Transport and Accessibility	54
6.5 Heritage	58
6.6 Aboriginal Heritage	59
6.7 Biodiversity	59
6.8 Tree Removal	60
6.9 Waste	60
6.10 Hazards and Risks	61
6.11 Flooding	63
6.12 Water Cycle Management	64
6.13 Noise and Vibration	64
6.14 Bushfire	68
6.15 Sediment and Erosion Control	68
6.16 Geotechnical	68
6.17 Groundwater	68
6.18 Contamination	69
6.19 Acid Sulfate Soil	69

# Contents

6.20	Building Code Compliance	69
6.21	Accessibility	69
6.22	Structural Adequacy	70
6.23	Construction Management	70
6.24	Ecologically Sustainable Development	71
6.25	Public Benefit	72
6.26	Contributions	73
<hr/>		
7.0	Environmental Risk Assessment	74
8.0	Mitigation Measures	76
9.0	Conclusion	77

## Figures

Figure 1	Car park development under separate approvals	10
Figure 2	Internal link road (subject to separate approval)	11
Figure 3	Location Plan Figure Caption	19
Figure 4	Aerial Photograph	20
Figure 5	Existing Buildings on Site	21
Figure 6	View of Building B across Car Park 6. Development site in foreground	22
Figure 7	Building A - Emergency Department Drop off	22
Figure 8	Car Park 6 in the foreground and Building A in the background	22
Figure 9	View of Building D (left) across Car Park 8. Emergency Department and Building A to the right	23
Figure 10	Cancer Therapy Centre (CTC) and Building D to the right	23
Figure 11	Existing On-Site Car Parking	25
Figure 12	Main Hospital entrance off Parkside Crescent and Central Road (Main Entry)	26
Figure 13	Left in/left out access to Appin Road	26
Figure 14	Existing Site access	26
Figure 15	Campbelltown Private Hospital and Campbelltown Hospital access from Parkside Crescent	27
Figure 16	Marsden Park	27
Figure 17	Macarthur Square Shopping Centre	28
Figure 18	Photomontage of the proposed new CSB	29
Figure 19	Section view of CSB	30
Figure 20	Level 00 Floor Plan	31
Figure 21	Level 2 Floor Plan and Main Entry drop off arrangements	32
Figure 22	Level 3 Floor Plan	33
Figure 23	Elevation view of the Level 3 pedestrian bridge	33
Figure 24	Hospital Spine	34
Figure 25	Eucalyptus dye sampling colours	36
Figure 26	Western Car Park Landscape Plan (Level 00)	37
Figure 27	Main Entry and Breakout Zone (Level 2)	38

# Contents

Figure 28	Proposed internal road and car park layout adjoining the CSB	38
Figure 29	Proposed Southern Car Park and new Therry Road connection	39
Figure 30	Proposed Appin Road connection	39
Figure 31	Shadow Diagram, 21 June 9am	50
Figure 32	Shadow Diagram, 21 June 10am	50
Figure 33	Shadow Diagram, 21 June 3pm	51
Figure 34	Existing and proposed views from Central Road roundabout	51
Figure 35	Existing and proposed views from opposite Marsden Park	52
Figure 36	Existing and proposed views from Appin Road (north)	52
Figure 37	Existing and proposed views from Appin Road (south)	52
Figure 38	Site Monitoring Locations and Receiver Locations	65
Figure 39	Risk Assessment Matrix	74

## Tables

Table 1	Secretary's Requirements	13
Table 2	Summary of Existing Buildings	21
Table 3	Existing On-Site Car Parking	24
Table 4	Key development information	30
Table 5	Floor by Floor summary	35
Table 6	NSW Government Architect comments	43
Table 7	Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines	44
Table 8	Car Park Assessment	55
Table 9	Intersection Modelling Results	55
Table 10	Ecosystem credits required	60
Table 11	Dangerous Goods Summary and SEPP 33 Screening Assessment	62
Table 12	Construction Noise Emission Goals	66
Table 13	Mitigation Measures	76

# Contents

## Appendices

**A** Secretary's Environmental Assessment Requirements

*Department of Planning and Environment*

**B** Consultation Summary

*NSW Health Infrastructure*

**C** Survey

*LTS Lockley*

**D** Architectural Drawings

*Billard Leece Partnership*

**E** Architectural Statement

*Billard Leece Partnership*

**F** Landscape Plans

*Arcadia*

**G** Environmental Wind Assessment

*Arup*

**H** Traffic Impact Assessment

*PTC*

**I** Green Travel Plan

*PTC*

**J** Heritage Report

*Biosis*

**K** Aboriginal Heritage Report

*Biosis*

**L** Biodiversity Report and BDAR

*Eco Logical*

**M** Arboricultural Impact Assessment

*Eco Logical*

**N** Waste Management Plan

*Space 2 Develop*

**O** Civil Report and Statement

*Enstruct*

**P** Integrated Water Management Plan

*Donnelley Simpson Cleary Consulting Engineers*

**Q** Acoustic Assessment

*Arup*

**R** Bushfire Statement

*Eco Logical*

# Contents

- S** Geotechnical Investigation  
*Douglas Partners*
- T** Detailed Site Investigation  
*Douglas Partners*
- U** BCA Compliance Capability Statement  
*Blackett, Maguire and Goldsmith*
- V** Access Report  
*I Access Consultants*
- W** Structural Design Statement  
*Enstruct*
- X** Preliminary Construction Management Plan  
*Health Infrastructure*
- Y** ESD Statement  
*Arup*
- Z** Electricity Supply Requirements  
*JHA Consulting Engineers*
- AA** Hydraulic and Fire Services Infrastructure Report  
*Donnelley Simpson Cleary Consulting Engineers*
- BB** Fire Engineering Statement  
*Arup*
- CC** Aviation Report  
*AviPro*

Provided under separate cover

CIV statement prepared by *Aecom*

## Statement of Validity

<b>Development Application Details</b>	
<b>Applicant name</b>	Health Infrastructure NSW
<b>Applicant address</b>	Level 14, 77 Pacific Highway, North Sydney, NSW 2060
<b>Land to be developed</b>	Campbelltown Hospital, Therry Road, Campbelltown NSW 2560
<b>Proposed development</b>	This application seeks approval for the development of a new 15 storey Clinical Services Building and associated works to the existing hospital described in Section 4.0 of this Environmental Impact Statement
<b>Prepared by</b>	
<b>Name</b>	Chris McGillick
<b>Qualifications</b>	BPlan (Hons)
<b>Address</b>	173 Sussex Street, Sydney
<b>In respect of</b>	State Significant Development - Development Application
<b>Certification</b>	
	<p>I certify that I have prepared the content of this EIS and to the best of my knowledge:</p> <p>it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000;</p> <p>all available information that is relevant to the environmental assessment of the development to which the statement relates; and</p> <p>the information contained in the statement is neither false nor misleading.</p>
<b>Signature</b>	
<b>Name</b>	Chris McGillick
<b>Date</b>	10/08/2018

## 1.0 Executive Summary

### Purpose of this Report

This submission to the Department of Planning and Environment (the Department) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It relates to the redevelopment of Campbelltown Hospital to construct and operate a new Clinical Services Building (CSB).

The redevelopment of Campbelltown Hospital is identified as State Significant Development (SSD) in accordance with Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). Development for hospitals with a capital investment value of more than \$30 million is SSD for the purposes of the EP&A Act. As the proposed development will have a capital investment value greater than \$30 million it is SSD.

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 3 April 2018. Accordingly, the SEARs were issued on 18 April 2018. This submission is in accordance with the Department's guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

### Overview of the Project

The Development Application (DA) seeks approval for the following development:

- Demolition of existing structures;
- Partial excavation of the site (due to the sloping topography);
- The construction of a new 13 storey (two of these levels are partially below ground) Clinical Services Building containing:
  - An Emergency Department;
  - Operating Theatres;
  - Intensive Care Unit;
  - Mental Health;
  - Birthing and Speciality Care Nursery;
  - Surgical and Medical Beds;
  - Helipad facilities; and
  - An Ambulance Bay.
- Construction of a new Hospital Spine and connections to existing hospital buildings;
- Construction of augmented and new internal hospital access roads and links, including a connection to Appin Road and Therry Road;
- Construction of an at-grade car park;
- Tree removal; and
- Associated building services.

### The Site

Campbelltown Hospital is located at Therry Road, Campbelltown. It is approximately 1km southeast of the Macarthur Railway Station and is within the LGA of Campbelltown City Council.

The hospital campus is legally described as Lot 6 of DP1058047.

## **Planning Context**

**Section 6.0** of the EIS considers all applicable legislation in detail. The proposal is consistent with the requirements of all relevant SEPPs. The site is zoned SP2 – Infrastructure: Health Services Facilities under the *Campbelltown Local Environmental Plan 2015* (CLEP 2015). The proposal is permissible with consent and meets the objectives of the zone.

## **Environmental Impacts and Mitigation Measures**

This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by Health Infrastructure NSW to manage and minimise potential impacts arising from the development.

## **Consultation**

**Section 5.0** of the EIS details the consultation that has been undertaken with various project stakeholders including Campbelltown Council, Government Architect NSW, Roads and Maritime Services (RMS), Transport for New South Wales (TfNSW), Campbelltown Hospital user groups and the public. The outcomes of the consultation process have been considered in the design of the project.

## **Conclusion and Justification**

The EIS addresses the SEARs, and the proposal provides for the extension of hospital services at Campbelltown Hospital. The potential impacts of the development are acceptable and can be managed. Given the planning merits of the proposal, the proposed development warrants approval by the Minister for Planning and Environment.

## 2.0 Introduction

This EIS is submitted to the Department of Planning and Environment pursuant to Part 4 of the EP&A Act in support of an application for SSD for the construction and operation of a new 13 storey CSB.

Development for the purposes of a hospital with a capital investment value of more than \$30 million is identified in Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* and is therefore declared to be SSD for the purposes of the EP&A Act. A CIV Statement has been prepared by Aecom that confirms the project has a CIV for greater than \$30 million and is provided under separate cover.

The report has been prepared by Ethos Urban on behalf of Health Infrastructure NSW, and is based on the Architectural Plans provided by Billard Leece Partnership (BLP) (see **Appendix D**) and other supporting technical information appended to the report (see Table of Contents).

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and the SEARs for the preparation of the EIS, which are included at **Appendix A**. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

### 2.1 Overview of Proposed Development

This application seeks approval for the following development:

- Demolition of existing structures;
- Partial excavation of the site (due to the sloping topography);
- The construction of a new 13 storey (two of these levels are partially below ground) Clinical Services Building containing:
  - An Emergency Department;
  - Operating Theatres;
  - Intensive Care Unit;
  - Mental Health;
  - Birthing and Speciality Care Nursery;
  - Surgical and Medical Beds;
  - Helipad facilities; and
  - An Ambulance Bay.
- Construction of a new Hospital Spine and connections to existing hospital buildings;
- Construction of augmented and new internal hospital access roads and links, including a connection to Appin Road and Therry Road;
- Construction of an at-grade car park;
- Tree removal; and
- Associated building services.

### 2.2 Background to the Development

Campbelltown Hospital has been in operation since 1977. The development of the Clinical Services Building follows the 2012 development of the Acute Services Building (now known as Building D) on site under SSD\_5003.

SSD\_5003 sought consent for the first stage of the hospital redevelopment for the Acute Health Services (AHS) Building, located in the south-eastern corner of the site between Parkside Crescent and the Block A building. It included an additional 15,400m<sup>2</sup> of new floor space over six levels and was approved on 21 November 2012.



## 2.2.4 Internal Link Road

An internal link road in the south-east of the site is proposed to be constructed by Health Infrastructure via a separate approval under Part 5 of the EP&A Act. The link road would be in place prior to commencement of construction of the CSB and will allow for vehicle circulation during the construction phase. The indicative location of the internal link road is shown at **Figure 2**.



**Figure 2 Internal link road (subject to separate approval)**

Source: BLP

## 2.3 Objectives of the Development

The overall objective of the Campbelltown Hospital Redevelopment is to develop a new, purpose built Clinical Services Building. It is intended that this redevelopment will in turn:

- Expand the provision of services to meet the significant growth in population, age profile and complexity of disease and poor health;
- Improve service access and patient flows, providing the right care for the right people at the right location;
- Address significantly high rates of preventable hospitalisation; and
- Improve self-sufficiency of the hospital and local health district.

## 2.4 Analysis of Alternatives

### Strategic Need for the Proposal

Significant population growth is occurring in the Macarthur region, whereby Campbelltown's population is expected to grow to 273,500 people by 2036. The existing facilities are at capacity based on the current population of 163,000. This includes an expected growth of 144% for Macarthur residents aged 70+, and a growth of 58% in children aged 0-14 years.

Due to population increases in the region, Campbelltown Hospital is required to expand the services that it provides. Health Infrastructure NSW estimates that the proposed redevelopment will provide an increase in capacity and

capability across a broad range of services including emergency care (+80%), adult surgical inpatient (+17%), adult surgical day only (>6 fold), adult medical inpatient beds (+32%), medical oncology (+150%), paediatrics inpatient (+220%), mental health inpatient (+30%), maternity (+107%), renal (+69%) and ambulatory/outpatient services.

Part of the focus of the redevelopment is to provide facilities and programs which address the significantly high rates of preventable hospitalisation. This will be achieved by an overall increase in service capacity with specific increase to the services of mental health, maternity, cancer, renal, ambulatory care and outpatients.

The project will improve the self-sufficiency of the hospital and local health district by providing a suitable range of services. This is particularly with regards to the provision of acute medical and surgical services and will address the current situation where local residents travel out of the region for 40% of their inpatient care and 50% of surgical care.

The key driver for the proposal is to transition from a Level 4/5 to a Level 6 tertiary hospital facility. In order to reach this level, Campbelltown Hospital is required to offer evolving models of care, sustainable services and greater service integration and collaboration.

### Alternative Options

Three options are available to Health Infrastructure NSW in responding to the identified need for the redevelopment of their facilities.

#### Option One – Do Nothing

Under the 'do nothing' scenario, the existing infrastructure at Campbelltown Hospital and the local health district would need to continue to provide services to cater for the health needs of the region. This would not adequately respond to strong population growth in the region and would potentially lead to a decline in health outcomes. Not undertaking the work would be an inappropriate outcome for a project of this nature, which will facilitate much needed health infrastructure for the region.

#### Option Two – Alternative Designs

Health Infrastructure NSW has explored a number of options for the location and layout of the new facility during the concept design phase. During this process a preferred masterplan was adopted with nominated principles that would inform the design alternatives. Options for the ongoing expansion of the Campbelltown hospital campus included a number of different design scenarios including various built form arrangements at distinct locations. Options to integrate other forms of development including car parking and relocation of hospital functions were also considered in the options analysis. Considering all of the analysis undertaken, it was decided that the proposed development (i.e. Option Three) was the most effective proposal to meet the objectives of the project.

#### Option Three – The Proposal

Option Three involves undertaking the proposed redevelopment as outlined in this SSD DA (as described in **Section 4.0**). It responds to a larger masterplan for the ongoing evolution of the campus. The proposal will facilitate the efficient construction of a high-quality building on the site that responds to the strategic need identified above. The proposal also aligns with a budget allocation of \$632 million announced by the NSW Government in the 2017-18 State Budget.

## 2.5 Secretary's Requirements

In accordance with section 4.39 of the EP&A Act, the Secretary of the Department of Planning and Environment issued the requirements for the preparation of the EIS on 18 April 2018. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix A**.

**Table 1** provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

**Table 1 Secretary's Requirements**

Requirement	Location in Environmental Assessment	
<b>General</b>		
The Environmental Impact Statement (EIS) must address the <i>Environmental Planning and Assessment Act 1979</i> and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.	Environmental Impact Statement	
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	<b>Section 7.0</b>	
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: <ul style="list-style-type: none"> <li>adequate baseline data;</li> <li>consideration of potential cumulative impacts due to other development in the vicinity (completed, underway or proposed); and</li> <li>measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.</li> </ul>	<b>Section 6.0</b> <b>Section 7.0</b> <b>Section 8.0</b>	
The EIS must be accompanied by a report from a qualified quantity surveyor providing: a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; <ul style="list-style-type: none"> <li>an estimate of the jobs that will be created by the future development</li> <li>during the construction and operational phases of the development; and certification that the information provided is accurate at the date of preparation.</li> </ul>	<b>Section 4.9</b>	
<b>Key Issues</b>	<b>Report / EIS</b>	<b>Technical Study</b>
The EIS must address the following specific matters:	-	-
<b>1. Statutory and Strategic Context</b> – including: Address the statutory provisions contained in all relevant environmental planning instruments, including:	-	-
<ul style="list-style-type: none"> <li>State Environmental Planning Policy (State &amp; Regional Development) 2011;</li> </ul>	<b>Section 6.1</b>	-
<ul style="list-style-type: none"> <li>State Environmental Planning Policy (Infrastructure) 2007;</li> </ul>	<b>Section 6.1</b>	-
<ul style="list-style-type: none"> <li>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development;</li> </ul>	<b>Section 6.1</b> <b>Section 6.9</b> <b>Section 6.10</b>	<b>Appendix N</b>
<ul style="list-style-type: none"> <li>State Environmental Planning Policy No. 55 – Remediation of Land;</li> </ul>	<b>Section 6.1</b> <b>Section 6.18</b>	<b>Appendix T</b>
<ul style="list-style-type: none"> <li>Draft Remediation of Land SEPP;</li> </ul>	<b>Section 6.1</b>	-
<ul style="list-style-type: none"> <li>State Environmental Planning Policy No. 64 – Advertising and Signage; and</li> </ul>	N/A	-
<ul style="list-style-type: none"> <li>Campbelltown Local Environmental Plan 2015.</li> </ul>	<b>Section 6.1</b>	-
<i>Permissibility</i>	<b>Section 6.1</b>	-
Detail the nature and extent of any prohibitions that apply to the development.	<b>Section 6.1</b>	-
<i>Development Standards</i>	<b>Section 6.1</b>	-
Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.	<b>Section 6.1</b>	-
<b>2. Policies</b>		
Address the relevant planning provisions, goals and strategic planning objectives in the following:		
<ul style="list-style-type: none"> <li>NSW State Priorities;</li> </ul>	<b>Section 6.1</b>	-
<ul style="list-style-type: none"> <li>A Metropolis of Three Cities – The Greater Sydney Region Plan;</li> </ul>	<b>Section 6.1</b>	-
<ul style="list-style-type: none"> <li>Western City District Plan;</li> </ul>	<b>Section 6.1</b>	-

Requirement	Location in Environmental Assessment	
• Future Transport Strategy 2056 and supporting plans;	Section 6.1	
• Crime Prevention Through Environmental Design (CPTED) Principles;	Section 6.3.6	Appendix E
• Planning Guidelines for Walking and Cycling;	Section 6.1	Appendix H
• Healthy Urban Development Checklist, NSW Health; and	Section 6.1	Appendix H
• Better Placed – An integrated design policy for the built environment of NSW 2017.	Section 6.1	Appendix E
<b>3. Built Form and Urban Design</b> Address the height, density, bulk and scale, setbacks of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.	Section 4.2 Section 4.4 Section 6.2 Section 6.2.1 Section 6.2.2	Appendix E
Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, heritage significance, materials, colours and Crime Prevention Through Environmental Design Principles.	Section 4.4 Section 6.1 Section 6.2 Section 6.3.6	Appendix E
Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	Section 4.8 Section 6.9	Appendix E Appendix H Appendix N
Demonstrate how high-quality design will be achieved with reference to Better Placed – An integrated design policy for the built environment of New South Wales and in accordance with a strategy developed in consultation with the Office of the Government Architect NSW.	Section 5.0 Section 6.1	Appendix E Appendix B
<b>4. Environmental Amenity</b> Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing, reflectivity from building facades and wind impacts. A high level of environmental amenity for any surrounding residential land uses and areas of public open space must be demonstrated.	Section 6.3.1 Section 6.3.2 Section 6.3.3 Section 6.3.5 Section 6.11	Appendix D Appendix E Appendix G Appendix Q
<b>5. Transport and Accessibility</b> Include a transport and accessibility impact assessment, which details, but not limited to the following: <ul style="list-style-type: none"> <li>accurate details of the current daily and peak hour vehicle, public transport, pedestrian and cycle movement and existing traffic and transport facilities provided on the road network located adjacent to the proposed development;</li> <li>an assessment of the operation of existing and future transport networks including the bus network and their ability to accommodate the forecast number of trips to and from the development;</li> <li>details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips;</li> <li>the adequacy of public transport, pedestrian and bicycle networks and infrastructure to meet the likely future demand of the proposed development;</li> <li>the impact of the proposed development on existing and future public transport infrastructure within the vicinity of the site in consultation with Roads and Maritime Services and Transport for NSW and identify measures to integrate the development with the transport network;</li> <li>details of any upgrading or road improvement works required to accommodate the proposed development;</li> <li>details of travel demand management measures to encourage sustainable travel choices and details of programs for implementation;</li> <li>the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for upgrading or road improvement works, if required (note: traffic modelling is to be undertaken with scope to be agreed by TfNSW and RMS in advance);</li> <li>the proposed active transport access arrangements and connections to public transport services and surrounding walking and cycling networks;</li> </ul>	Section 6.4	Appendix H Appendix I

Requirement	Location in Environmental Assessment	
the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones;		
measures to maintain road and personal safety in line with CPTED principles;		
details of the proposed number of car parking spaces and compliance with appropriate parking codes and justification for the level of car parking provided on-site and measures to discourage staff from parking on surrounding residential streets (including the formulation of a Green Travel Plan for the hospital campus);		
details of the proposed number of bicycle parking spaces (in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance) and the provision of end-of-trip facilities		
details of emergency vehicle access arrangements;		
an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures;		
service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times);		
<p>in relation to construction traffic:</p> <ul style="list-style-type: none"> <li>• assessment of cumulative impacts associated with other construction activities;</li> <li>• an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;</li> <li>• details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;</li> <li>• details of anticipated peak hour and daily construction vehicle movements to and from the site;</li> <li>• details of access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle;</li> <li>• details of temporary cycling and pedestrian access during construction;</li> <li>• details of proposed construction vehicle access arrangements at all stages of construction; and</li> <li>• traffic and transport impacts during construction, including cumulative impacts associated with other construction activities, and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact (which must include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/construction activities).</li> </ul>		
<p>Relevant Policies and Guidelines:</p> <ul style="list-style-type: none"> <li>• Guide to Traffic Generating Developments (Roads and Maritime Services)</li> <li>• EIS Guidelines – Road and Related Facilities (DoPI)</li> <li>• Cycling Aspects of Austroads Guides</li> <li>• NSW Planning Guidelines for Walking and Cycling</li> <li>• Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development</li> <li>• Standards Australia AS2890.3 (Bicycle Parking Facilities)</li> </ul>		
<p><b>6. Ecologically Sustainable Development (ESD)</b> Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development.</p>		
Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice.	<b>Section 6.24</b>	<b>Appendix Y</b>
Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.	<b>Section 6.24</b> <b>Section 6.9</b>	<b>Appendix Y</b> <b>Appendix P</b> <b>Appendix O</b>
<p><b>7. Heritage</b> Include a Heritage Impact Statement that addresses the significance of, and provides</p>	<b>Section 6.5</b>	<b>Appendix J</b>

Requirement	Location in Environmental Assessment	
an assessment of the impact on the heritage significance of any heritage items on the site and in the vicinity, and/or conservation areas and/or potentially archaeologically significant areas, in accordance with the guidelines in the <i>NSW Heritage Manual</i> .		
<b>8. Aboriginal Heritage</b> Where relevant, address Aboriginal Cultural Heritage in accordance with the <i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW</i> (OEH, 2011) and <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> .	<b>Section 6.6</b>	<b>Appendix K</b>
<b>9. Biodiversity</b> Address biodiversity impacts related to the proposal.  <i>Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report.</i>	<b>Section 6.7</b>	<b>Appendix L</b>
<b>10. Noise and Vibration</b> Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. Relevant Policies and Guidelines: <ul style="list-style-type: none"> <li>• Noise Policy for Industry 2017 (EPA)</li> <li>• Interim Construction Noise Guideline (DECC)</li> <li>• Assessing Vibration: A Technical Guideline 2006</li> <li>• Development Near Rail Corridors and Busy Roads – In term Guideline (Department of Planning 2008)</li> </ul>	<b>Section 6.13</b>	<b>Appendix Q</b>
<b>11. Sediment, Erosion and Dust Controls</b> Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. Relevant Policies and Guidelines: <ul style="list-style-type: none"> <li>• Managing Urban Stormwater – Soils &amp; Construction Volume 1 2004 (Landcom)</li> <li>• Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)</li> <li>• Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</li> </ul>	<b>Section 6.15</b>	<b>Appendix O</b>
<b>12. Contamination</b> Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. Relevant Policies and Guidelines: <ul style="list-style-type: none"> <li>• Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)</li> </ul>	<b>Section 6.18</b>	<b>Appendix T</b>
<b>13. Utilities</b> Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure.	<b>Section 4.8</b>	<b>Appendix Z Appendix AA</b>
Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	<b>Section 6.12</b>	<b>Appendix O Appendix P</b>
<b>14. Contributions</b> Address Campbelltown City Council Section 94A Levy Development Contributions.	<b>Section 6.26</b>	-
<b>15. Drainage</b> <ul style="list-style-type: none"> <li>• Detail drainage associated with the proposal, including stormwater and drainage infrastructure.</li> <li>• Detail measures to minimise operational water quality impacts on surface waters and groundwater.</li> </ul> Relevant Policies and Guidelines: Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)	<b>Section 6.12</b>	<b>Appendix O</b>

Requirement	Location in Environmental Assessment	
<b>16. Flooding</b> Assess any flood risk on site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	Section 6.10	Appendix O
<b>17. Waste</b> Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Section 6.9	Appendix N
<b>18. Construction Hours</b> Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	Section 4.10 Section 6.13	Appendix Q Appendix X
<b>19. Staging</b> Detail proposed staging of the hospital redevelopment and the transient impacts of staging on built form and urban design, car parking, transport and accessibility.	Section 4.9	Appendix H Appendix X
<b>Plans and Documents</b>	Report	Technical Study
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.		
<ul style="list-style-type: none"> <li>• Architectural drawings including but not limited to the following requirements:               <ul style="list-style-type: none"> <li>– dimensioned and including RLs and MGA coordinates;</li> <li>– plans, sections and elevations of the proposal;</li> <li>– site and context plans that demonstrate active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links; and</li> <li>– detailed annotated wall sections that demonstrate typical cladding, window and door details, including materials and general construction quality;</li> </ul> </li> </ul>	-	Appendix D
<ul style="list-style-type: none"> <li>• Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries;</li> </ul>	-	Appendix C
<ul style="list-style-type: none"> <li>• Site Analysis Plan;</li> </ul>	-	Appendix D
<ul style="list-style-type: none"> <li>• Stormwater Concept Plan;</li> </ul>	-	Appendix O
<ul style="list-style-type: none"> <li>• Sediment and Erosion Control Plan;</li> </ul>	-	Appendix O
<ul style="list-style-type: none"> <li>• Shadow Diagrams;</li> </ul>	-	Appendix D
<ul style="list-style-type: none"> <li>• View Analysis / Photomontages, including from public vantage points;</li> </ul>	-	Appendix D
<ul style="list-style-type: none"> <li>• An integrated Landscape Plan/Strategy (including identification any trees to be removed and trees to be retained or transplanted);</li> </ul>	-	Appendix F Appendix M
<ul style="list-style-type: none"> <li>• Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures;</li> </ul>	-	Appendix X
<ul style="list-style-type: none"> <li>• Geotechnical and Structural Report;</li> </ul>	-	Appendix S Appendix T
<ul style="list-style-type: none"> <li>• Accessibility Report; and</li> </ul>	-	Appendix V
<ul style="list-style-type: none"> <li>• Schedule of materials and finishes.</li> </ul>	-	Appendix D Appendix E
<b>Consultation</b>		
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups including local Aboriginal land councils and registered Aboriginal	Section 5.0	Appendix B

Requirement	Location in Environmental Assessment	
<p>stakeholders and affected landowners. In particular, you must consult with:</p> <ul style="list-style-type: none"> <li>• Campbelltown City Council;</li> <li>• Transport for NSW;</li> <li>• Roads and Maritime Services; and</li> <li>• Government Architect NSW (through the NSW State Design Review Panel process).</li> </ul> <p>Consultation with the Government Architect NSW, TfNSW and RMS should commence as soon as practicable.</p> <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>		

### 3.0 Site Analysis

#### 3.1 Site Location and Context

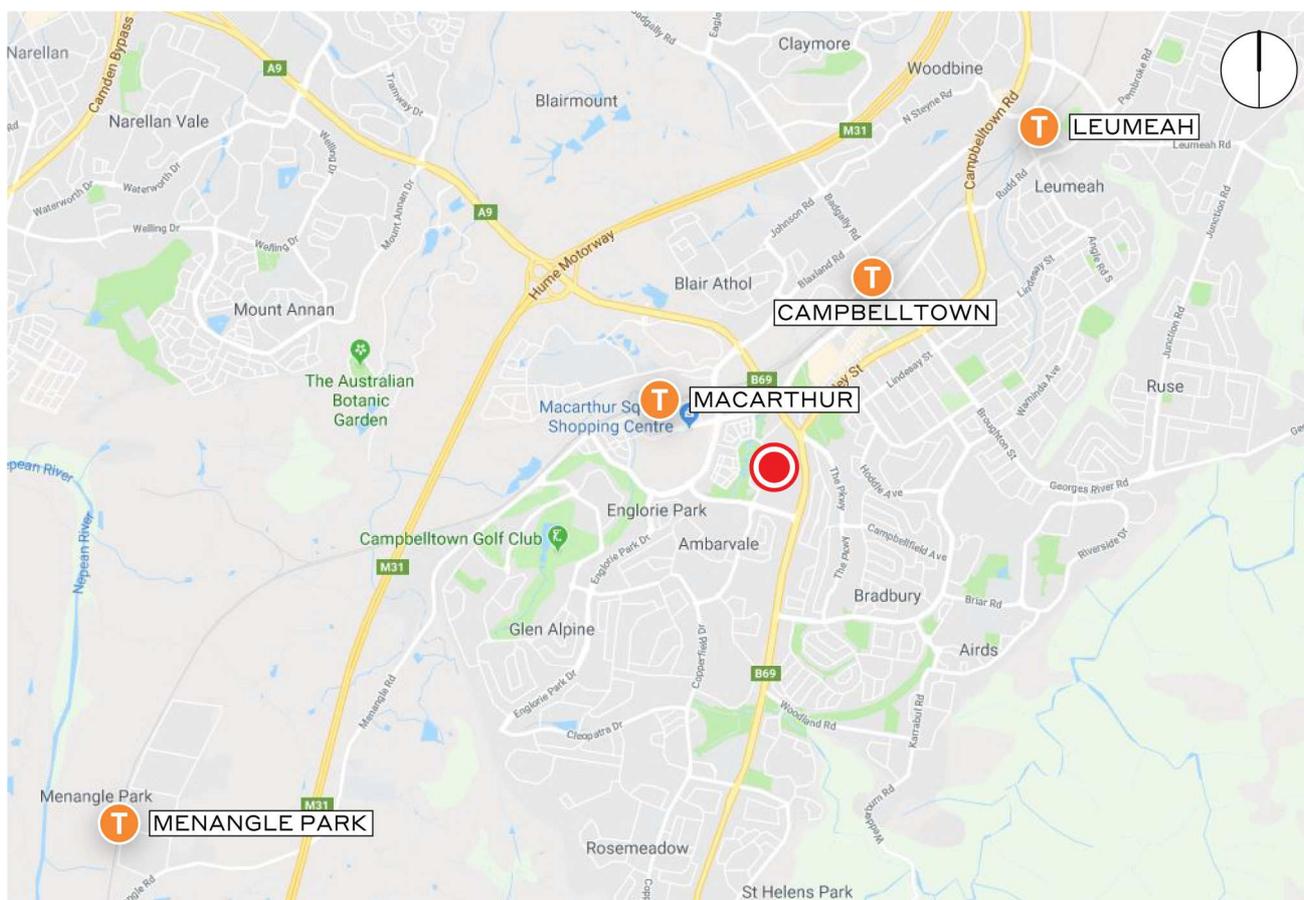
Campbelltown Hospital is located on Therry Road, Campbelltown, within the Campbelltown Local Government Area, approximately 51km southwest of Sydney’s Central Business District. Campbelltown is within the Macarthur Region of Sydney, which is a region covering the local government areas of the City of Campbelltown, Camden Council and Wollondilly Shire.

The site is serviced by and is in close proximity to transport services and key road links including the M5 South Western Motorway off Appin Road. The hospital site is located in close proximity to Campbelltown and Macarthur railway stations, the closest station being Macarthur approximately 1km north west of the hospital site.

Campbelltown Hospital forms part of the South Western Sydney Local Health District (SWSLHD). It is located immediately adjacent to Marsden Park, which is a public open space with a large open water body and riparian system.

The Macarthur Square retail precinct is within walking distance from the hospital’s north-west boundary. The Western Sydney University Campbelltown Campus is located further north of Macarthur Station, which provides a tertiary facility for education and research linked to the hospital.

The site’s locational context is shown at **Figure 3**.



 The Site

**Figure 3** Location Plan Figure Caption

Source: Google maps and Ethos Urban

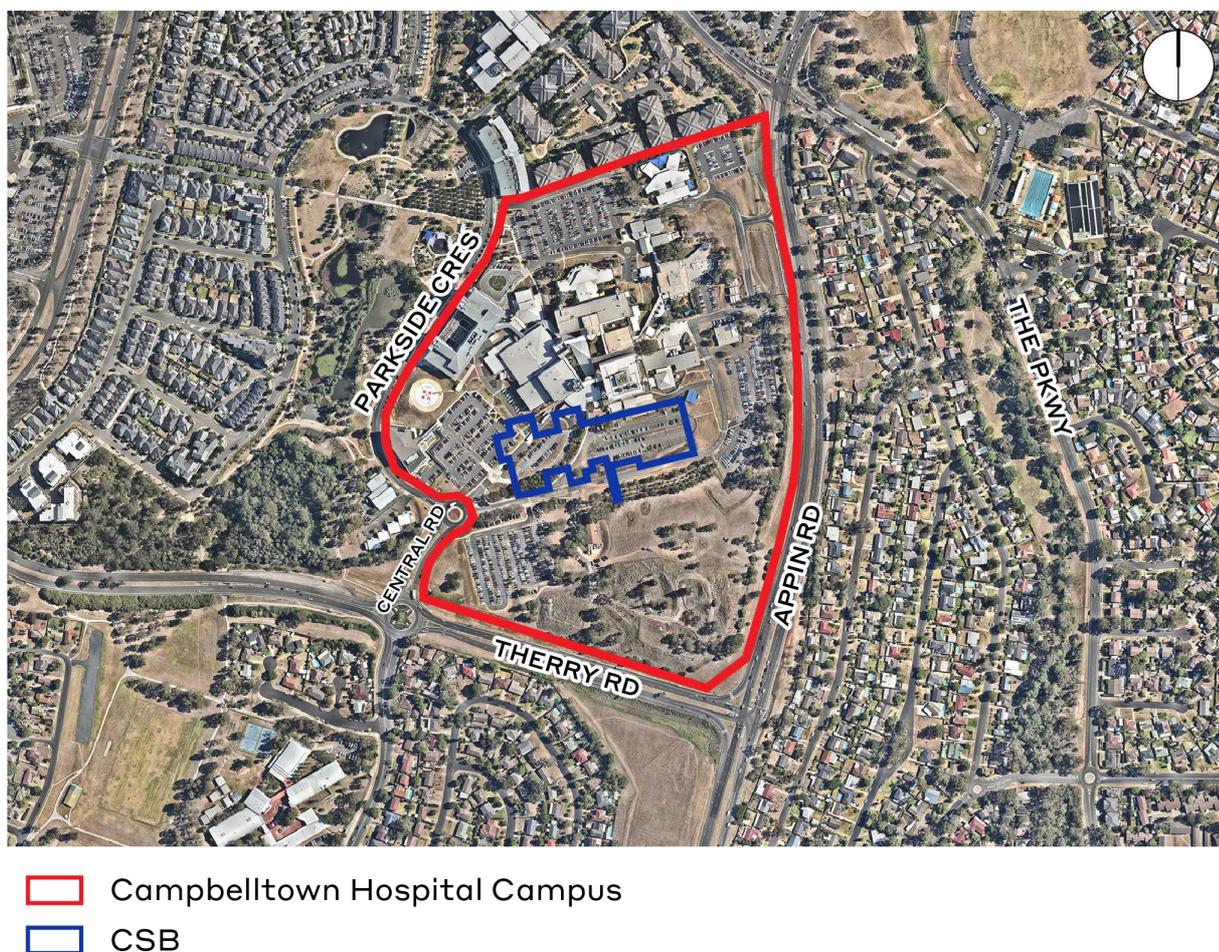
### 3.2 Land Ownership

The site is legally described as Lot 6 in DP1058047. The land is owned by NSW Department of Health.

### 3.3 Campbelltown Hospital Campus Description

The site has an approximate area of 19.33 hectares and is generally bound by Appin Road, Therry Road and Parkside Crescent. The proposed development site is located within the centre of the hospital campus at the location of the existing Car Park 6 and 7 as referenced under **Section 3.3.1**.

A survey plan is located at **Appendix C**. An aerial photo of the hospital campus is shown at **Figure 4**.



**Figure 4** Aerial Photograph

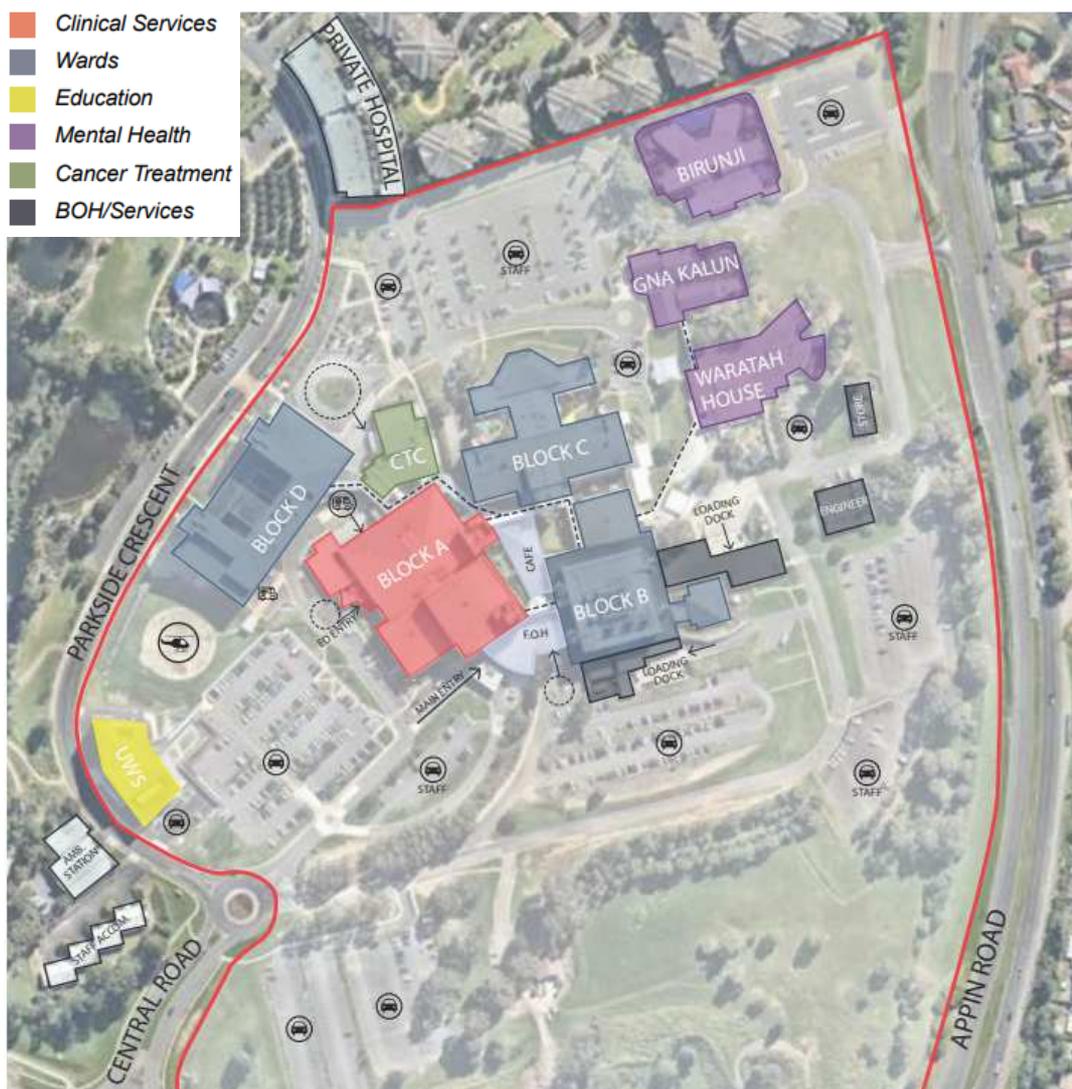
Source: Ethos Urban

#### 3.3.1 Existing Development

Campbelltown Hospital is a 417-bed major metropolitan hospital co-located with a mental health in-patient service and is also a teaching campus for the Western Sydney University Clinical School. It provides a range of emergency, medical, surgical, maternity, intensive care, renal and other health services to the Macarthur region of South Western Sydney.

The hospital campus is currently occupied by several interconnected main buildings known as Building A, B, C and D. There are also several small and associated buildings scattered across the hospital site. The existing main entry to the hospital is located between Building A and B, while the emergency department and emergency drop off is located at the western end of Building A.

A plan showing the arrangement of the existing hospital is provided at **Figure 5**. A summary of existing buildings is provided in **Table 2**.



**Figure 5 Existing Buildings on Site**

Source: BLP

**Table 2 Summary of Existing Buildings**

Building	Floors	Current Department/Function
Building A	5	Emergency Department, Imaging, Theatres, Clinics, Intensive Care Unit, Outpatients Clinic, X-ray services, Dialysis
Building B	4	Administration, Back of House, Mortuary, Allied Health, Kitchen, Loading Dock, Stores
Building C	3	Paediatrics, Birthing, Maternity, Stroke, Cardiac, Coronary Care Unit
Building D	6	Pathology, Allied Health, Ambulatory Care, Medical Records, Surgical
Cancer Centre	1	Oncology, Bunkers
WSU Clinical School	4	Education
Waratah House	2	Psychiatric Unit
Birunji	1	Youth Mental Health
Gna Ka-Lun	1	Adolescent Mental Health

Photos of the existing development on site are shown in **Figure 6 to Figure 10**.



**Figure 6** View of Building B across Car Park 6. Development site in foreground

Source: Ethos Urban



**Figure 7** Building A - Emergency Department Drop off

Source: Ethos Urban



**Figure 8** Car Park 6 in the foreground and Building A in the background

Source: Ethos Urban



**Figure 9** View of Building D (left) across Car Park 8. Emergency Department and Building A to the right

Source: Ethos Urban



**Figure 10** Cancer Therapy Centre (CTC) and Building D to the right

Source: Ethos Urban

### 3.3.2 Topography

The site slopes from the south-east corner to the north-west corner with a cross fall of approximately 30 metres. The steepest part of the site is the south-east corner bounded by Appin and Therry Roads and the existing main entry to the south-east corner of the site. This topography is typical of the surrounding area, whereby relatively steep rises and falls lead to a ridgeline across the western side of the Hume Highway.

### 3.3.3 Vegetation

The site has a number of trees scattered throughout, however is comprised of mainly open grassed areas and paved car parks. Clusters of trees are located south of Car Park 6 and in the sloping areas near to the corner of Appin Road and Therry Road.

### 3.3.4 Helipad

A helipad provides aerial access to the hospital site and is located at ground level between Building D, the MCS and Car Park 8.

### 3.3.5 Road Network, Vehicle Access and Parking

Therry Road (a Regional road) and Appin Road (a State road) are both four lane roads providing regional connections from Campbelltown Hospital. Primary access to the hospital is off Therry Road, which connects to Parkside Crescent and Central Road to the south of the site. Parkside Crescent is a two-lane road that borders the site's western boundary. Appin Road forms the eastern boundary of the hospital.

The hospital campus has four existing access points:

- Two access points from the roundabout intersection of Parkside Crescent / Central Road (main entrance) (refer to **Figure 12**);
- A left in / left out access point from Appin Road (refer to **Figure 13**); and
- A left in / left out access point from Parkside Crescent (refer to **Figure 14**).

There are currently a number of on-grade car parks across the campus with a total of 1,280 car spaces distributed as outlined in **Table 3** and **Figure 11**.

**Table 3 Existing On-Site Car Parking**

Map Code	Car Park	Bays
CP1	Birunji	82
CP2 Staff / Public	Cancer Therapy Centre	240
CP3	Block C	20
CP4/4A	Warratah House	37
CP5A	Engineering Office	6
CP5	Staff Car Park 2	248
CP6	Visitor Car Park 2	121
CP7A	Main Entrance	2
CP7	Staff Car Park 1	38
CP8A	In front of Emergency	10
CP8	Visitor Car Park 1	197
CP9	Staff Car Park 3	257
Drug	Drug Advisory Building	22
<b>Total</b>		<b>1,280</b>



**Figure 11 Existing On-Site Car Parking**

Source: PTC

A bus stop is located in Car Park 7 adjacent to Building A. The stop services the following routes:

- 870: Campbelltown to Liverpool;
- 871: Campbelltown to Liverpool via Glenfield;
- 872: Campbelltown to Liverpool via Macquarie Fields; and
- 888: Campbelltown to St Helens Park via Ambervale and Rosemeadow.

There are two loading docks that service the hospital campus. Both are connected to Building B. The kitchen has a dedicated loading dock for food delivery. The other dock is used for all other deliveries and dispatches and is located to the east of Building B.

Emergency vehicles access the campus from Central Road to access the Emergency Department located at Building A.

A diagram showing the campus site access arrangements is provided at **Figure 14**.