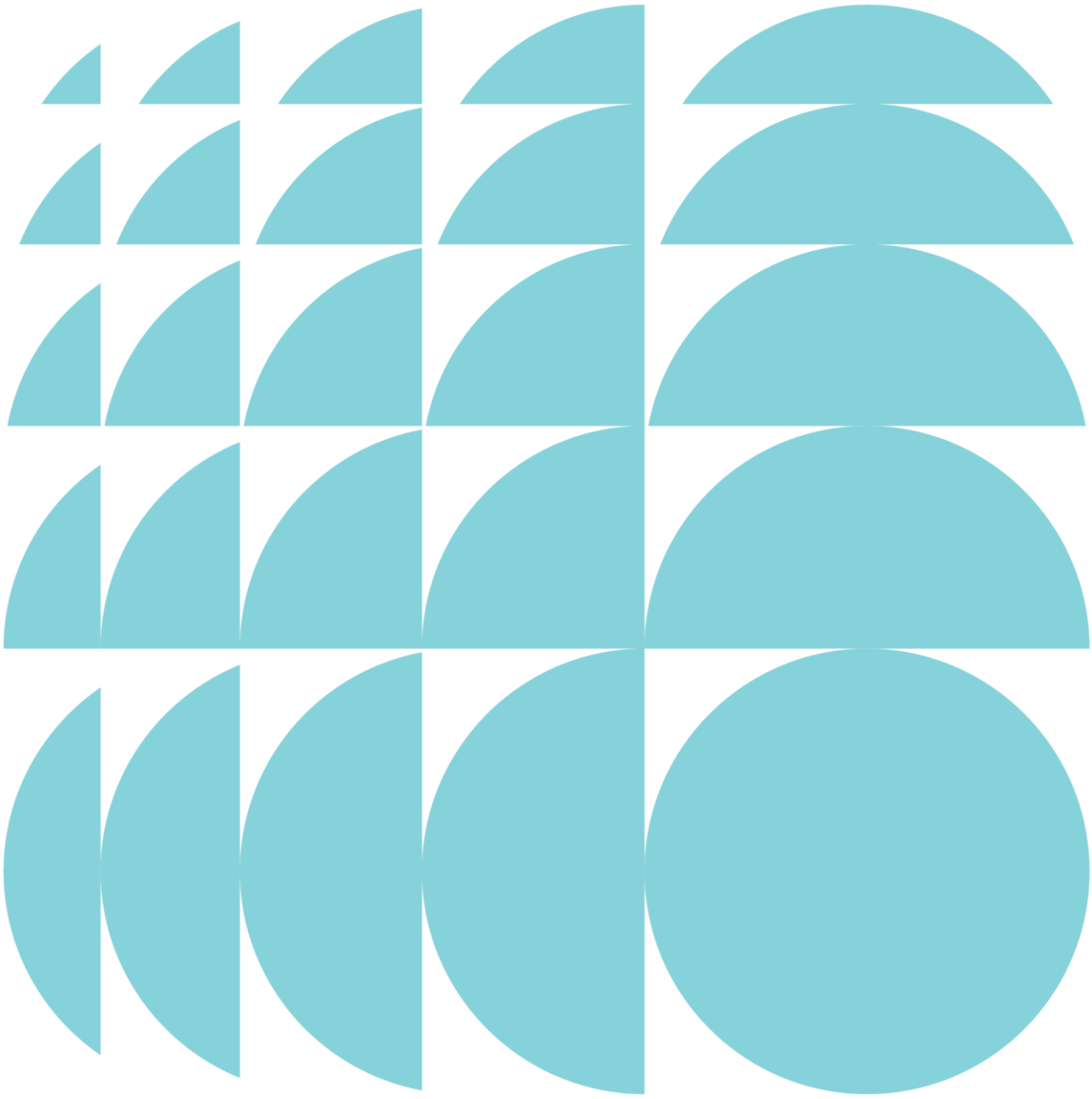
ETHOS URBAN

Crown Development Application
Statement of Environmental Effects

158-164 Hawkesbury Road, Westmead
Mixed Use Development

Submitted to City of Parramatta Council
On behalf of Western Sydney University

30 November 2018 | 218313



CONTACT

Chris Ferreira | Principal | cferreira@ethosurban.com | (02) 9956 6962

This document has been prepared by:

Luke Feltis and Chris Ferreira
29/11/2018

This document has been reviewed by:

James Harrison
30/11/2018

VERSION NO. 1	DATE OF ISSUE 30.12.2018	REVISION BY	APPROVED BY JH

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

Executive Summary		7
1.0	Introduction	9
1.1	Crown Development Application	9
1.2	Background	10
1.3	Western Sydney University and Charter Hall	14
1.4	Consultation	15
2.0	Site Analysis	16
2.1	Site Location and Context	16
2.2	Site Description	17
2.3	Infrastructure and Services	20
2.4	Surrounding Development	20
3.0	Description of Proposed Development	24
3.1	Development and Urban Design Principles	24
3.2	Numerical Overview	26
3.3	Site Preparation Works	27
3.4	Site Layout and Built Form	27
3.5	External Materials and Finishes	28
3.6	Land Use and Floor Space	29
3.7	Transport, Access and Parking	31
3.8	Public Art	32
3.9	Waste Management	32
3.10	Environmentally Sustainable Design	33
3.11	Infrastructure and Services	33
4.0	Assessment of Environmental Impacts	34
4.1	Environmental Planning Instruments	34
4.2	Development Control Plans	40
4.3	Westmead Innovation District Master Plan	43
4.4	WSU Westmead Precinct Major Works (DA571/2014)	45
4.5	Built Form and Urban Design	46
4.6	Impact on Adjoining Properties	52
4.7	Transport and Accessibility	54
4.8	Heritage	56
4.9	Geotechnical	57
4.10	Structural Adequacy	57
4.11	Contamination	57
4.12	Wind Impact	58
4.13	Water Cycle Management	58
4.14	Waste Management	59
4.15	Noise and Vibration	59
4.16	Tree Removal	60
4.17	Crime and Public Safety	60
4.18	Environmentally Sustainable Development	61
4.19	Aeronautical Impact	62
4.20	Construction Impacts	62
4.21	Building Code Compliance	62
4.22	Economy and Employment	63
4.23	Site Suitability	63
4.24	Public Interest	63
5.0	Conclusion	65

Figures

Figure 1: WSU Westmead precinct approved major works concept (DA/571/2014) 12
Figure 2: Stage 1 Early Works 13
Figure 3: Stage 1 Public Domain Works 13
Figure 4: Approved DA/571/2014 layout on Lot 2 (the site – left) the wider precinct (right), looking south from Darcy Road 13
Figure 5: Site location 16
Figure 6: Site aerial map 17
Figure 7: Site view from the south east corner 18
Figure 8: Site view from the eastern boundary 18
Figure 9: Site view from the northern boundary 18
Figure 10: Site view from the western boundary 18
Figure 11: T-way on Darcy Road to the north 19
Figure 12: Westmead Rail Station to the south east 19
Figure 13: Surrounding context of the site 20
Figure 14: Westmead hospital to the north 21
Figure 15: Westmead hospital to the north 21
Figure 16: Mixed use building to the east 21
Figure 17: Local retail uses to the east 21
Figure 18: St Vincents and Farmhouse building to the south 22
Figure 19: St Vincents building to the south 22
Figure 20: St Vincents and Farmhouse building to the south 22
Figure 21: Farmhouse building to the south 22
Figure 22: Public open space and Lot 5 construction site to the south 22
Figure 23: Photomotage of the future development within Lot 5 22
Figure 24: Sales suite to the west on Lot 4 23
Figure 25: Photmontage of the future development on Lot 4 23
Figure 26: Photomontages of the proposed development 25
Figure 27: Proposed site layout 27
Figure 28: Transition in scale to the south west 27
Figure 29: Proposed material finishes 28
Figure 30: Proposed awning locations shown in orange 28
Figure 31: Proposed landscape scheme 31
Figure 32: Pedestrian connectivity 31
Figure 33: Height map extract 36
Figure 34: LEP map and subdivision overlay 36
Figure 35: FSR map extract 37
Figure 36: LEP Map and subdivision overlay 37
Figure 37: Photomontage of the approved building massing under DA/571/2014 45
Figure 38: Floor space redistribution (approved DA/571/2014 massing and the proposed massing) 46
Figure 39: Building height variations within a precinct context 47
Figure 40: Northern elevation showing the transition in building heights to the south west of the precinct 47
Figure 41: Base alignment in relation to the heritage significant building on Lot 1 48
Figure 42: Base alignment from the Hawkesbury Road and Darcy Road intersection 48
Figure 43: DA/571/2014 limited connection to Lot 1 49

Figure 44: View line from the public plaza to the St Vincent's building 50
Figure 45: Façade elements relationship with the St Vincents building 51
Figure 46: Winter Solstice shadow diagrams 53
Figure 47: Lot 4 interface with Lot 2 54
Figure 48: Heritage map extract 56
Figure 49: Curtilage of the Buildings of Heritage Significance within Lot 1 56

Tables

Table 1: DA/571/2014 summary 11
Table 2: Key development information 26
Table 3: Level by level description of the proposal 29
Table 4: Proposed signage zones 30
Table 5: Parking Schedule 32
Table 6: End of Trip facilities summary 32
Table 7: Summary of consistency with key statutory plans and policies 34
Table 8: SEPP No. 64 – Advertising and Signage Controls 38
Table 9: Summary of consistency with statutory plans 40
Table 10: Westmead Precinct Principles response 43
Table 11: Parking rates and proposed quantum 55

Appendices

A Architectural Drawings

Architetcus

B Design Report

Architectus

C Response to Council's Pre-DA feedback

Ethos Urban

D Western Sydney Local Health District Cover Letter

Western Sydney Local Health

E Site Survey

Usher & Company

F Geotechnical Report

Douglas Partners

G Infrastructure Services Report

Floth

H Arboricultural Impact Assessment

The Ents Tree Consultancy

I Childcare Centre Test Fit out Plan and Design Statement

Gardiner

J Landscape Drawings

Oculus

K Landscape Design Statement

Oculus

L Public Art Statement

UAP

M Waste Management Plan

Mack Group

N ESD report

Floth

O Site Audit Statement

JBS&G

P QS Statement

WT Partnership

Q Request to Vary a Development Standard – Maximum Building Height

Ethos Urban

R Request to Vary a Development Standard – Floor Space Ratio

Ethos Urban

S Heritage Impact Statement

NBRS Heritage

T Civil Engineering Report and Drawings

Robert Bird Group

U Acoustic Impact Assessment

Floth

V Childcare Guideline Response Table

Gardiner, Architectus, Ethos Urban

W National Quality Framework Assessment Checklist

Gardiner, Architectus, Ethos Urban

X Construction Management Plan

Solutions Consulting Australia

Y Ecologically Sustainable Development Report

Floth

Z Accessibility Report

Morris Goding Access Consulting

AA Crime Prevention Through Environmental Design Report

Barker Ryan Stewart

BB Traffic Impact Assessment

PTC

CC Structural Report

Robert Bird Group

DD Wind Impact Assessment

Windtech

EE Aeronautical Impact Assessment

Landrum & Brown

FF BCA Report

Steve Watson Partners

GG Fire Engineering Statement

Wood and Grieve

HH Council Flood Advice Letter

City of Parramatta Council

II Green Travel Plan

PTC

Executive Summary

Purpose of this Report

This Statement of Environmental Effects (SEE) is submitted to the City of Parramatta Council (Council) on behalf of Western Sydney University (WSU) in relation to a Crown Development Application (DA) for the redevelopment of 158-164 Hawkesbury Road, Westmead, also known as Lot 2 within the WSU Westmead precinct.

Background

The redevelopment of the WSU precinct commenced in 2011, with the submission of a Planning Proposal to rezone the precinct from SP2 Special uses to B4 Mixed use, also permitting building heights up to 45m and FSRs up to 4:1. Following the gazettal of the Planning Proposal, WSU lodged a major works DA which included the subdivision of the site into 5 allotments and the carrying out of essential works including demolition, remediation, public domain, civil, road and associated infrastructure works.

In order to inform an appropriate subdivision layout for the site, the major works DA was accompanied by an urban design analysis that established conceptual building envelopes and a Gross Floor Area (GFA) for each of the developable lots. This development consent departed from the LEP and site specific DCP provisions established by the 2011 Planning Proposal. In supporting these departures, Council accepted that the variations were reasonable and were due to a sub-optimal concept plan being the primary tool to inform the LEP and site specific DCP controls.

This DA commences the next phase of the precinct's regeneration, which follows two detailed development applications for residential apartment buildings comprising 900 apartments on the lots to the west and south west of the site. These approved applications successfully demonstrated that further departures from the LEP, DCP and the envelopes established with the major works DA were required to realise the development potential of the precinct in a manner that did not create unacceptable environmental impacts.

Whilst WSU is the applicant for the subject Crown DA, the redevelopment of the site will be delivered as a joint venture between WSU and Charter Hall. As such, the site represents an opportunity for the joint venture partners to immediately further the urban regeneration of the site in accordance with its strategic importance. The proponents aspire to establish a benchmark mixed use development, with an emphasis on health and well-being. This project aims to bring together key WSU Institutes and provide opportunities for colocation and collaboration with the Westmead Precinct Partners as well as complementary commercial partners. Through the proposed development, WSU will leverage its distinctive education and research strengths and serve as a focal point for co-creation, exchange and translation with business, industry and community.

Development Site

The site is located at 158-164 Hawkesbury Road, Westmead within the City of Parramatta Local Government Area. Council has identified the site as part of the Westmead Strategic Precinct which has a primary function as a health, research and education hub. The site is currently vacant and is legally described as Lot 2 in DP 1227281. The site has a total area of 5,694m^2 and is bound by Darcy Road to the north, Hawkesbury Road to the east and the recently developed Farmhouse Road to the south and west. The site experiences a cross fall of 7.5m from the southern boundary and is located in a rich heritage context which includes the St Vincent's building and Farmhouse building local heritage items on the adjoining lot to the south.

Proposed Development

The proposed development includes:

- Site preparation works including bulk excavation and tree removal;
- Construction and use of two basement levels;
- Construction and use of an eight storey building ('east building') comprising:
  - Ground level retail tenancies;
  - Three commercial levels;
  - The dual use of use of three full levels (1-3), and one partial level (level 7) as tertiary education or commercial floor space (allowing the flexibility for either use);

  - Rooftop terrace;
- Construction and use of an eleven storey building ('west building') comprising:
  - Lower ground and ground level retail tenancies;
  - Level 1 child care centre;
  - Eight commercial levels and a partial ninth commercial level; and
  - Rooftop terrace;
- Landscaping and public domain works including the provision of a public plaza running north to south through the site, connecting Darcy Road to the north through to Farmhouse Road to the south;
- Signage zones (including top of building signage and business identification signage); and
- Extension and augmentation of services and infrastructure as required.

The proposed built form and massing across the site is the result of a detailed analysis of the site specific DCP, the approved envelopes under the major works DA and the desired future character of the Westmead precinct as a vibrant health and education hub demonstrating consistency with transit-oriented development principles.

The proposed development does not seek to achieve additional floor space beyond that allocated to the lot under the major works DA. The approved GFA allocated to Lot 2 is 30,700m^2 and the proposed development seeks approval 30,700m^2 of GFA. The floor space has been redistributed to create a feasible development including two towers defining a central public plaza with a strong visual connection from the central plaza to the heritage significant buildings on Lot 1 to the south.

Environmental Impact

The SEE provides an assessment of the environmental impacts of the project. Key environmental assessment considerations identified include:

- Built form and urban design;
- Impact on adjoining properties;
- Transport and accessibility;
- Heritage;
- Geotechnical and structural conditions;
- Contamination;
- Wind impacts;
- Water cycle management;
- Waste management;
- Acoustic impact;
- Tree removal;
- Crime and public safety;
- Environmentally sustainable development;
- Aeronautical impacts;
- Construction impacts; and
- BCA, fire and accessibility.

All identified impacts are addressed in this SEE and are capable of being ameliorated through the implementation of appropriate mitigation measures as detailed within the supporting documentation.

Conclusion

The SEE considers the planning issues relevant to the proposed development and provides an assessment of the relevant matters prescribed in section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Given the planning merits and the significant public benefits associated with the proposed development, it is recommended that this application be approved.

1.0 Introduction

This Statement of Environmental Effects (SEE) is submitted to the City of Parramatta Council (Council) in support of a Crown Development Application (DA) prepared on behalf of Western Sydney University for a mixed-use development at 158-164 Hawkesbury Road, Westmead. The DA seeks approval for:

- Site preparation works including bulk excavation and tree removal;
- Construction and use of two basement levels;
- Construction and use of an eight storey building ('east building') comprising:
  - Ground level retail tenancies;
  - Three commercial levels;
  - The dual use of use of three full levels (1-3), and one partial level (level 7) as tertiary education or commercial floor space (allowing the flexibility for either use);
  - Rooftop terrace;
- Construction and use of an eleven storey building ('west building') comprising:
  - Lower ground and ground level retail tenancies;
  - Level 1 child care centre;
  - Eight commercial levels and a partial ninth commercial level; and
  - Rooftop terrace;
- Landscaping and public domain works including the provision of a public plaza running north to south through the site, connecting Darcy Road to the north through to Farmhouse Road to the south;
- Signage zones (including top of building signage and business identification signage); and
- Extension and augmentation of services and infrastructure as required.

This SEE has been prepared by Ethos Urban and is based on the Architectural Plans (**Appendix A**) and Design Report (**Appendix B**) prepared by Architectus and other supporting technical information appended to the report (see Table of Contents).

This report describes the site, its environs, the proposed development, and provides an assessment of the environmental impacts and identifies the steps to be taken to protect or lessen the potential impacts on the environment.

1.1 Crown Development Application

Clause 226(1) of the *Environmental Planning and Assessment Regulation 2000* provides that a development carried out by an Australian University (under the meaning of *Higher Education Act 2001*) is a Crown development. Western Sydney University is recognised as an Australian University under Schedule 1 of the *Higher Education Act 2001* and so the development is a Crown development for the purpose of Part 4 of the EP&A Act.

Under the special provisions for Crown developments, the DA cannot be refused (except with approval of the Minister for Planning and Environment), Council cannot impose conditions of consent without the applicant's agreement, the applicant has the opportunity to review the draft conditions, and, if the consent authority fails to determine the application within the prescribed period, the application may be referred to the Minister for determination.

1.2 Background

1.2.1 Planning Proposal 158-164 Hawkesbury Road and 2A Darcy Road

In 2011, WSU submitted a Planning Proposal to rezone the land at 158-164 Hawkesbury Road and 2A Darcy Road. The Planning Proposal included a series of supporting studies including a master plan prescribing zoning and development standards. The LEP amendment was gazetted in 2013, achieving:

- Rezoning from SP2 Special Uses (Educational Establishment) to B4 Mixed Use permitting commercial, retail, residential and community uses including education;
- Building heights ranging from 31-48m; and
- Floor Space Ratios (FSRs) ranging from 1.5-4:1, with a FSR of 3:1 over the overall site when all FSR's are combined.

Whilst the master plan prepared at the time informed the planning controls (including the LEP height and FSR controls and the site specific DCP controls), subsequent DAs on the site have been approved which departed from these controls, in some cases to a large degree. This is a result of further work and analysis at the particular DA stages which Council have acknowledged have resulted in superior urban design outcomes on the individual development sites. These are discussed further below.

1.2.2 WSU Westmead Precinct Major Works (DA/571/2014)

In August 2014, WSU lodged a major works DA which included the subdivision of the site into 5 allotments and the carrying out of essential works including demolition of five buildings, remediation, public domain works, roadworks, civil and associated infrastructure works. The DA was accompanied by an urban design analysis that established conceptual building envelopes and allocated a Gross Floor Area to each of the developable lots. The current application applies to Lot 2 in the subdivision.

On 11 February 2015, the Sydney West Joint Regional Panel approved DA/571/2014. In approving the DA, the Panel accepted large variations to the maximum building height and FSR development standards established under the preceding Planning Proposal. The variations were accepted on the basis that:

- the non-compliances were a result of a sub-optimal concept plan being the primary tool to inform the LEP controls and the site specific DCP for the precinct;
- the revised concept was a result of design development and rationalisation of the DCP and resulted in an improved built form outcome;
- the GFA proposed complied with the permissible maximum precinct-wide GFA; and
- supporting Clause 4.6 Requests to Vary the Height and FSR development standards demonstrated that compliance was unreasonable and unnecessary, there was sufficient environmental planning grounds and the variations were in the public interest.

A summary of each of the approved developable lots is summarised in **Table 1** below. The approved major works concept is illustrated in **Figure 1** and the early works are illustrated in **Figure 2** and **Figure 3**.

Table 1: DA/571/2014 summary

Component	Approved
Lot 1	
Area	7,682m^2
Use	Education
GFA/FSR	5,753m^2 or 0.65:1
Building Height	As existing
Lot 2 (The site)	
Area	5,753m^2 (refer to discussion below)
Use	Commercial, retail, health and serviced apartments
GFA/FSR	30,700m^2 or 5.33:1
Building Height	Min 3 storeys and Max 9 storeys
Lot 3	
Area	2,635m^2
Use	Commercial
GFA	16,000m^2 or 6.03:1
Building Height	8 storeys
Lot 4	
Area	6,588m^2
Use	Residential
GFA	28,825m^2 or 4.37:1
Building Height	Min 6 storeys and Max 12 storeys
Lot 5	
Area	9,389m^2
Use	Residential
GFA	42,470m^2 or 4.52:1
Building Height	Min 6 storeys and Max 15 storeys

Figure 1: WSU Westmead precinct approved major works concept (DA/571/2014)

Source: Cox

Figure 2: Stage 1 Early Works

Source: Cox

Figure 3: Stage 1 Public Domain Works

Source: Cox

Lot 2 – The Site

As shown in **Figure 4**, under DA/571/2014 two building envelopes were established on the subject site, allowing for a 'U-shaped' development framing a central plaza with podiums up to three storeys high oriented to the central plaza and towers up to nine storeys.

The envisaged land uses included commercial, retail, health and serviced apartments and the site has an approval for 30,700m^2 of GFA which equates to an FSR of 5.33:1.

It should be noted that development consent DA/571/2014 was not a consent under Section 83B – Concept Development Applications of the EP&A Act. As a result, subsequent detailed DAs are not required to conform to the concept building envelopes associated with the development consent. This is reflected in the approved developments on Lot 4 and Lot 5 which have been approved with substantial variations to the major works concept envelopes as discussed in **Section 1.2.3**.

Figure 4: Approved DA/571/2014 layout on Lot 2 (the site – left) the wider precinct (right), looking south from Darcy Road

Source: Cox

1.2.3 Lot 4 and Lot 5 Development Applications (DA/1271/2016 and DA/968/2016)

The redevelopment of the precinct has progressed since the major works DA/571/2014 approval, including the approval and commencement of residential developments located on Lot 4 and Lot 5, with the Lot 5 development under construction at the time of writing. The approved developments are summarised below.

Lot 5 – DA/968/2016

On 6 September 2017, the Sydney West Central Planning Panel approved DA/968/2016 for the construction of two residential flat buildings comprising:

- Building A: part 4, part 12 storey building comprising 118 residential apartments;
- Building B: part 9, part 24 storey building comprising 438 residential apartments; and
- 5 levels of car parking including a lower ground level and 4 basement levels with a total of 704 parking spaces.

Lot 4 – DA/1271/2016

On 1 November 2017, the Sydney Western City Planning Panel approved DA/1271/2016 for the construction of 'U-shaped' development including three attached residential flat buildings comprising:

- Building D: part 7, part 20 storey building containing 199 residential apartments;
- Building E: part 9, part 10 storey building containing 75 residential apartments;
- Building F: part 4, part 11 storey building containing 70 residential apartments; and
- 5 levels of car parking including a lower ground level and 4 basement levels with a total of 414 parking spaces.

In recommending these developments for approval, Council's Urban Designers, City Architect and Design Excellence Advisory Panel (DEAP) maintained that the current FSR and height controls applying to the site under the LEP and DCP were not well resolved and that a detailed development proposal could not accommodate the maximum GFA allocated to the lots under the DA/571/2014.

Council supported the detailed urban design analysis provided by the applicant that demonstrated further departures were required to realise the development potential for the site in a manner that did not unduly impact on the quality of the final outcome, and which was consistent with the general principles within the DCP for the precinct. As a result, the developments on Lot 4 and 5 achieved significant departures from both the FSR and height development standards, as well as the concept envelopes prepared under the major works DA.

Importantly, height variations of 8 storeys (80.3% variation to the 40m height control) and 9 storeys (69.3% variation to the 48m height control) were approved on Lots 4 and 5 respectively, however the developments did not exceed the GFA allocated to each lot.

1.3 Western Sydney University and Charter Hall

Whilst Western Sydney University (WSU) are the applicant for the subject DA, the redevelopment of the site will be delivered as a joint venture between WSU and Charter Hall. The Westmead precinct is one of the largest health, education, research and training precincts in Australia and a key provider of jobs for the greater Parramatta and Western Sydney region. As such, the site represents an opportunity for the joint venture partners to immediately further the urban regeneration of this precinct through the lodgement of this DA.

WSU is one of Australia's largest universities, with its mission to be a university of international standing and outlook, achieving excellence through scholarship, teaching, learning, research and service to local and international communities, beginning with the people of Greater Western Sydney. Ranked amongst the top three per cent of universities in the world, WSU is globally focused, research-led and committed to making a positive impact at a regional, national and international level.

WSU is embarking on a large-scale transformative program that will bring the highest quality educational opportunities and world-class research expertise to Western Sydney. WSU is reshaping its campus network, to combine existing campuses with vertical campuses and is committed to developing campus precincts that connect with and embed business, industry and community partners. WSU's vertical campuses deliver high amenity, technology-rich facilities for education and research, supporting innovation, improving community well-being and providing greater accessibility across the region.

WSU aspires to establish the Westmead Campus as a benchmark research hub with an emphasis on health and well-being. This project aims to bring together key WSU institutes, provide opportunities for collaboration within the Westmead Health Precinct and colocation with complementary commercial partners. Through the proposed new facility, the WSU will leverage its distinctive education and research strengths and serve as a focal point for co-creation, exchange and translation with business, industry and community.

1.4 Consultation

1.4.1 City of Parramatta Council

A pre-lodgement meeting was held with Council staff on 11 July 2018 to discuss the proposed development and gain preliminary feedback. Council officers provided written feedback on 1 August 2018 regarding specific variations to development standards as well as other design considerations. This feedback has been addressed in the design where possible, and a full response has been provided at **Appendix C,** each comment is further considered in more detail throughout this SEE.

1.4.2 Transport for New South Wales

Pursuant to Council's pre-DA feedback, the applicant engaged with Transport for New South Wales (TfNSW) to discuss the proposal's relationship with the future Parramatta Light Rail network, the alignment of which is proposed to pass through Hawkesbury Road adjacent to the site (as part of Stage 1). The Applicant met with TfNSW on 3 October 2018. The key outcome of this consultation was broad agreement that further utility services meetings would be held between TfNSW and WSU to coordinate the location of utilities being installed to limit any abortive works when the Parramatta Light Rail is constructed. The TfNSW meeting minutes can be provided to Council upon request.

1.4.3 Westmead Precinct Partners

WSU has worked closely with the Westmead Precinct Partners throughout the redevelopment of the precinct and during the design development of the proposal. As well as WSU, the Westmead Precinct Partners include:

- Western Sydney Local Health District;
- The Children's Hospital at Westmead;
- Westmead Private Hospital;
- Westmead Institute for Medical Research; and
- Children's Medical Research Institute.

WSU presented the proposed development to the Westmead Precinct Partners on the 9 October 2018. The cover letter prepared by the Western Sydney Local Health District at **Appendix D** confirms that the feedback from the partners was extremely supportive of the proposed development. Specifically, it is noted that:

> *"The proposal provides significant improvements to the public amenity, permeability and responds to the heritage significance of the St Vincents building"*

Further to this, the cover letter references the broader Westmead Innovation District Master Plan which is being developed concurrently with this application. The draft master plan currently sets principles that have been endorsed by the Westmead Alliance following extensive consultation with the partners as well as a number of government agencies and special interest groups. The cover letter also acknowledges the proposal is in strong alignment with these principles and presents a great opportunity to realise the overall vision for the precinct. The proposals consistency with the endorsed principles is detailed at **Section 4.3.**

2.0 Site Analysis

2.1 Site Location and Context

The site is located at 158-164 Hawkesbury Road, Westmead within the City of Parramatta Local Government Area. Council has identified the site as part of the Westmead Strategic Precinct which has a primary function as a health, research and education hub.

The site is approximately 175m north west of Westmead Railway Station and is directly to the south of Westmead Hospital. The site is also in the vicinity of a number of regionally significant land uses and features such as the Parramatta CBD, Parramatta Parklands and the Parramatta River.

Significant infrastructure investment has been made by the NSW State Government in proximity to the site including construction of Parramatta Light Rail (Stage 1) and the Sydney Metro West project. Further locational context is shown in **Figure 5**.

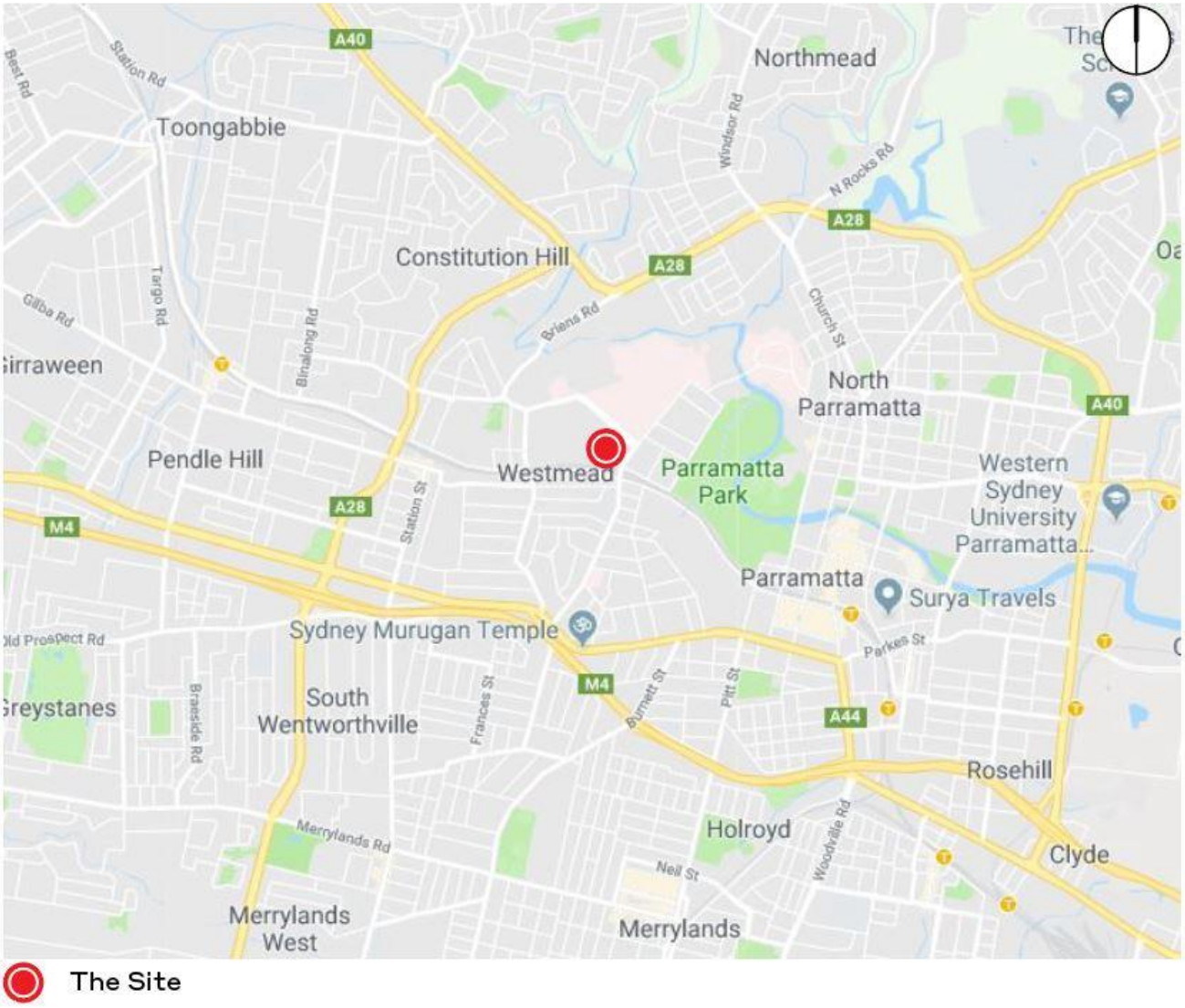


Figure 5: Site location

Source: Google Maps and Ethos Urban

2.2 Site Description

The site is irregular in shape and is legally described as Lot 2 in DP 1227281. The site has a total area of 5,694m^2 and is bound by Darcy Street to the north (90m frontage), Hawkesbury Road to the east (40m frontage) and the recently developed Farmhouse Road to the south (75m frontage) and west (75m frontage). A recent survey of the site has revealed that the site area is 59m^2 less than the area shown on the subdivision plan associated with DA/571/2014.

As the early works under DA/571/2014 have been carried out, the site is currently vacant and free of existing vegetation. Approximately 21 street trees are scattered around the periphery of the site with the more mature trees located at the Darcy and Hawkesbury Road frontages.

The site has a fall of approximately 7.5m from the southern boundary down to the northern boundary at its lowest point. The site has a high point of RL 33.7 at the south-eastern corner and a low point of RL 26.01 at the north-western corner as illustrated in the site survey in **Appendix E.**

An aerial photo of the site is shown in **Figure 6** and site photographs are provided in **Figure 7** to **Figure 10.**

Figure 6: Site aerial map

Source: Nearmap and Ethos Urban

Figure 7: Site view from the south east corner

Figure 8: Site view from the eastern boundary

Figure 9: Site view from the northern boundary

Figure 10: Site view from the western boundary

2.2.1 Access and Connectivity

Vehicular Access and Parking

The site is situated at the intersection of two major roads, being Hawkesbury Road and Darcy Road. Both roads are linked via a local circulation road known as Farmhouse Road (delivered under DA/571/2014) and vehicle access to the site is currently gained via an informal crossing over the site's western boundary leading to an unsealed car park. Vehicle access to Farmhouse Road from Hawkesbury Road is restricted to a left in/left out. Vehicle access from Darcy Road is also restricted as a four-arm signalised intersection.

Pedestrian Access

Hawkesbury Road and Darcy Road are both well-established pedestrian routes, with Westmead Station, the main entrance to Westmead Hospital and Marist Brothers school (located to the north of the site) being major generators of footfall traffic along and through the site. There are currently three signalised intersections around the site that facilitate movement between the station and hospital in particular. Access to gates into Parramatta Park to the west is via Park Parade and Queens Road.

Public Transport

A bus stop for T-Way and other localised bus services is located within the median on Darcy Road (refer to **Figure 11**). Buses service Rouse Hill to the north, Wentworthville to the west and Parramatta Station and CBD to the south.

Westmead Train Station is located approximately 175m south-east of the site and is easily accessible via the existing pedestrian network (refer to **Figure 12**). The station is serviced by the Western, Cumberland and Blue Mountains Lines which provide access to locations throughout Sydney. Services run every 3 to 10 minutes during peak periods.

The Parramatta Light Rail will terminate at Westmead and the Sydney West Metro Station is likely to be located in the vicinity of the site. The Light Rail stop located opposite the site on Hawkesbury Road.

Figure 11: T-way on Darcy Road to the north

Figure 12: Westmead Rail Station to the south east

Cycling

Local cycle routes also run along both the Hawkesbury Road and Darcy Road frontages connecting to Parramatta Park in the east and to Wentworthville in the west.

2.2.2 Heritage

The site, being Lot 2, as well as all other lots of the Precinct, are together listed as an item of local heritage significance on Schedule 5 of the *Parramatta Local Environmental Plan 2011,* being the Western Sydney University (I628) and Victorian Residence (I629) local items. Notably, the listings do not take into consideration the recent subdivision of the site. The heritage buildings within the precinct are contained wholly on Lot 1 to the south. The heritage significance of the items on Lot 1 and its identified heritage curtilage are further discussed in **Section 4.8.**

2.2.3 Soil and Ground Conditions

A preliminary Geotechnical Investigation has been carried out by Douglas Partners and is included in **Appendix F.** The report presents the findings of a desktop study, which determines the likely geotechnical and soil characteristics of the site. The report also draws upon previous geotechnical investigations carried out at the Westmead Precinct in making its assessment.

The Geotechnical investigations have indicated that the site is underlain by the Triassic aged Ashfield Shale. The Ashfield Shale typically comprises black to dark grey shales and laminite. Residual soils over these formations typically comprise a residual clay profile. The Geotechnical investigation has identified the following soil profile:

- topsoil to a depth of 200mm, underlain by
- various types of fill materials encountered at depths of 1.85m, underlain by
- Natural silty clay to a depth of 2.2m, underlain by
- Shale bedrock to a depth of 9m.

The standing water levels were reportedly measured in the standpipes were at 4.0m to 6.75m below ground level (bgl) or RL 23.05 to 25.8m, relative to Australia Height Datum (AHD).

2.3 Infrastructure and Services

An Infrastructure Services Report has been prepared by Floth and is provided in **Appendix G**. Floth has determined that there is an existing network of services running to and surrounding the site including:

- Endeavour Energy - high-voltage and low-voltage network assets lie within Darcy Road and Hawkesbury Road.
- There are fibre optic and duct communications networks located outside the site in both Darcy Road and Hawkesbury Road that are suitable for servicing the development.
- Sydney Water - sewer mains including 225 mm PVC sewer main in the south-west corner of the site.
- Sydney Water - water mains in Hawkesbury Road, Darcy Road, and the new local circulation road.
- Jemena - natural gas main in Hawkesbury Road.

The extension and augmentation of these services is further detailed at **Section 3.11.**

2.4 Surrounding Development

Westmead represents Australia's largest concentration of health services co-located with world leading education and medical research. The Westmead area is currently presented with opportunities for renewal and urban transformation which reflects the precinct's strategic and locational attributes, including the provision of a future Sydney Metro West station and a light rail stop. Key land uses within the surrounding area are illustrated in **Figure 13**, and the site's immediate surrounding context is outlined below.

Figure 13: Surrounding context of the site

Source: Architectus

North

Development to the north of the site on the opposite side of Darcy Road includes the Westmead Hospital Campus (refer to **Figure 14** and **Figure 15**). The campus is currently subject to major upgrades that will transform the Westmead health, education and research precinct and deliver an innovative, integrated facility.

Figure 14: Westmead hospital to the north

Figure 15: Westmead hospital to the north

East

Development to the east of the site on the opposite side of Hawkesbury Road comprises a range of uses including residential, medical and commercial buildings (refer to **Figure 16** and **Figure 17**). The Westmead neighbourhood centre is located directly opposite the Westmead rail station.

Figure 16: Mixed use building to the east

Figure 17: Local retail uses to the east

South

The adjoining lot to the south contains the heritage significant St Vincents and Farmhouse buildings (refer to **Figure 18** and **Figure 19**) as discussed in **Section 2.2.2.** The site is provided with a large separation to these buildings due to the provision of a new local road and the existing at grade car park to the north of the heritage buildings on Lot 1.

Lot 5 within the Westmead precinct is also located to the south west of the site. Lot 5 is currently under construction (refer to **Figure 22**) and once completed will include two residential flat buildings containing 556 apartments. Building A comprises a part 4 storey and part 9 storey building, and Building B comprises a part 8 storey, part 15 and part 24 storey building as illustrated in **Figure 23.** Lot 5 adjoins the main public open space within the precinct which is bound by an internal circulation road.

Figure 18: St Vincents and Farmhouse building to the south

Figure 19: St Vincents building to the south

Figure 20: St Vincents and Farmhouse building to the south

Figure 21: Farmhouse building to the south

Figure 22: Public open space and Lot 5 construction site to the south

Figure 23: Photomotage of the future development within Lot 5

Source: Turner

West

The adjoining lot to the west is identified as Lot 4 within the Westmead precinct. This site is currently occupied by a display suite and at grade car parking (refer to **Figure 24**). The site is subject to a development approval for the construction of a residential flat building containing 344 units with heights ranging between 6-20 storeys as illustrated in **Figure 25.**

Figure 24: Sales suite to the west on Lot 4

Figure 25: Photmontage of the future development on Lot 4

Source: Turner

3.0 Description of Proposed Development

This chapter of the report provides a detailed description of the proposed development. Architectural Drawings prepared by Architectus detailing the proposed building design are provided at **Appendix A** and are described further in the Architectural Design Report provided at **Appendix B.**

This Crown Development Application seeks approval for a new mixed-use development. Specifically, the proposal involves:

- Site preparation works including bulk excavation and tree removal;
- Construction and use of one full level and one partial basement level;
- Construction and use of an eight storey building ('east building') comprising:
  - Ground level retail tenancies;
  - Three commercial levels;
  - The dual use of use of three full levels (1-3), and one partial level (level 7) as tertiary education or commercial floor space (allowing the flexibility for either use);
  - Rooftop terrace.
- Construction and use of an eleven storey building ('west building') comprising:
  - Lower ground floor and ground floor retail tenancies;
  - Level 1 child care centre;
  - Eight commercial levels and a partial ninth commercial level; and
  - Rooftop terrace.
- Landscaping and public domain works including the provision of a public plaza running north to south through the site, connecting Darcy Road to the north through to Farmhouse Road South to the south;
- Signage zones (including top of building signage and business identification signage); and
- Extension and augmentation of services and infrastructure as required.

3.1 Development and Urban Design Principles

The redevelopment of the site has the potential to be a premier transit oriented development that will bring added value to the broader community through the creation of new jobs and facilities to support the local community. The planning and design principles adopted for the proposed development of the site are as follows:

- Create a development that is consistent with transit-oriented development principles, to reflect the scale and density appropriate for a site in proximity to the future Sydney Metro station and Parramatta Light Rail station;
- Provide a new mixed-use development that attracts commercial partners to the Westmead health and education precinct, reaffirming Westmead as one of the largest health, education, research and training precincts in Australia;
- Create a development that attracts staff, students, residents, researchers and visitors from all over the world to present significant employment opportunities for the Greater Parramatta and Western Sydney region;
- Deliver an identifiable architectural language for the building form, which is immediately recognisable and commensurate with the site's highly visible location;
- Establish a built form and massing which enhances view lines, responds to the immediate context and provides a transition between scales;
- Deliver buildings and a public domain which achieves a high level of amenity;
- Maximise opportunities for street activation and amenity for occupants and visitors;
- Incorporate sustainability principles, including building design that maximises energy efficiency; and

- Ensure that pedestrian safety and occupant security is maximised through the use of lighting, materials, activation, passive and active surveillance and access control.

Photomontages of the proposed development are provided at shown in **Figure 26** below.

Figure 26: Photomontages of the proposed development
Source: Architectus

3.2 Numerical Overview

The key numeric development information is summarised in **Table 2**.

Table 2: Key development information

Component	Proposal
Overall Development	
Site area	5,694m²
GFA approved under DA/571/2014	30,700m²
Proposed GFA Total: • Commercial • Tertiary education / commercial (dual) • Retail • Child Care • Other	30,700m² • 19,044m² • 5,225m² • 2,383m² • 1,441m² • 2,607m²
FSR	5.39:1
Maximum Building Height	52.5m (RL 78.95)
Boundary Setbacks (approx.) • North • South • East • West	 • 0m-4m • 0.5m • 1m • 2m-3m
Car space Total: • Retail/Commercial • Child Care	• 137 • 112 (including 5 accessible) • 25
Bicycle Parking Total: • End of trip • Visitor	• 180 • 134 • 46
End of Trip	619m²
Public Plaza	1,672m² (to retail façade line)
Landscape and Public Domain: • Soft (including plaza lawn) • Soft (excluding plaza lawn)	• 2,969m² • 716m² • 564m²
East Building	
Height in storeys	8
Maximum Building Height	39.1m (RL 67.7)
GFA Total: • Commercial/Educational • Retail	12,151m² • 11,169m² • 982m²
West Building	
Height in storeys	11
Maximum Building Height	52.5m (RL 78.95)
GFA Total: • Commercial • Retail • Child Care • Other	17,872m² • 13,928m² • 1,400m² • 1,441m² • 1,103m²

3.3 Site Preparation Works

Earthworks

It is proposed to erect suitable site protection and fencing to secure the site ahead of the commencement of early works. It is then proposed to conduct excavation and earthworks within the site to accommodate the proposed basement structure. Underground infrastructure is proposed to be removed, relocated or augmented as necessary during this phase of works. Cut and fill plans have been provided at **Appendix T**.

Tree Removal

The proposal will result in the removal of 11 trees located at the Hawkesbury, Farmhouse and Darcy Road frontages. The majority of the street trees planted under the major works DA will be retained. Further detail is provided in the Arboricultural Statement at **Appendix H.**

3.4 Site Layout and Built Form

The proposed development is articulated into three main components being the eastern building and the western building framing a central public plaza, as illustrated in **Figure 27.** The eastern building anchors the main Hawkesbury Road and Darcy Road street corner and rises to a maximum height of eight storeys. The scale of the built form then transitions up to a maximum of eleven storeys at the western building, which is consistent with the WSU precinct context of stepping the height of buildings up to the south-west and peaking near the rail line (refer to **Figure 28**). This transition is further emphasised by the proposed stepped upper levels of the two buildings.

The buildings have been designed to address the street frontages with ground level setbacks ranging from 0m to 4m due to the site's irregular shape. The building mass has been broken through a large physical separation including 28m at the northern opening, tapering to 12m at the southern opening. Removing mass from this portion of the site presents a large public plaza opportunity through the centre of the site, comprising approximately 1,672m^2 and allows the development to frame north-south sight lines from the plaza to the heritage significant St Vincent's building.

The built form has been designed to respond to the site's topographical constraints. Notwithstanding the 7.5m cross fall from the southern boundary to the north western corner of the site, the site maintains street front activation through the provision of a lower ground floor with a retail tenancy within the western building and the stepped landscaped escarpment to the northern plaza entry.

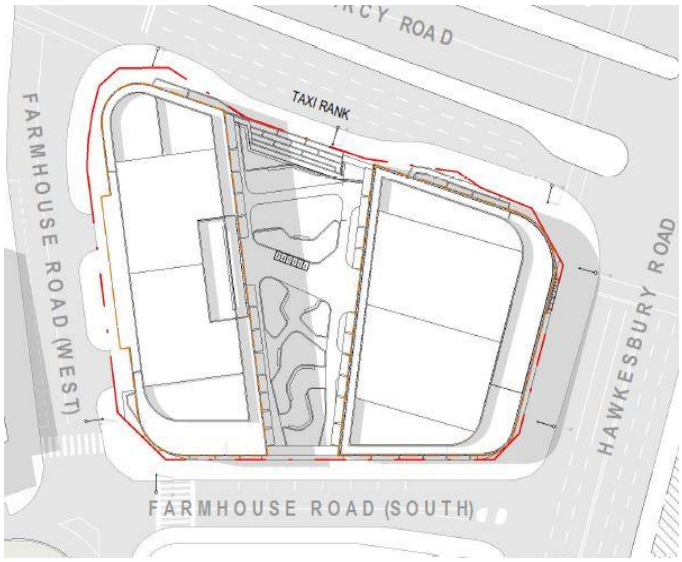


Figure 27: Proposed site layout

Source: Architectus

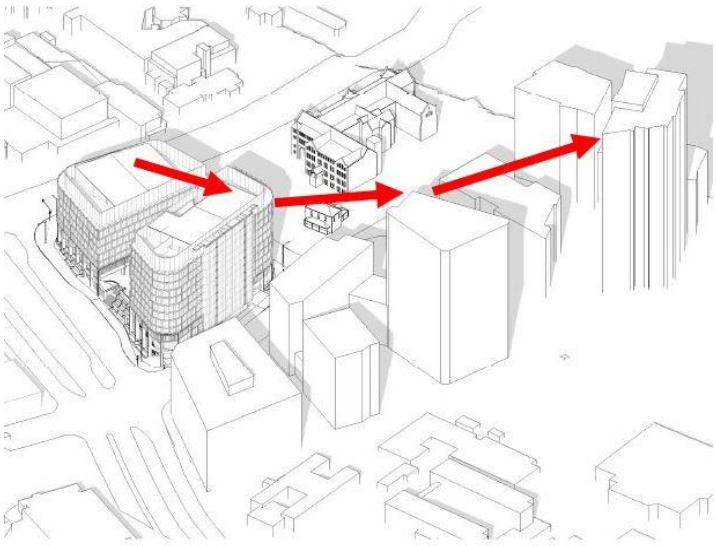


Figure 28: Transition in scale to the south west

Source: Architectus

3.5 External Materials and Finishes

The external materials and finishes are shown on the materials schedule at **Appendix B**. The proposed buildings volume has been defined by the materiality, creating a distinct base and tower treatments. The materials most prominent in this proposal include exposed concrete, glazing, coloured aluminium screening and glassfibre reinforced concrete (GRC) (refer to **Figure 29**).

At the lower levels, the portal and structural elements are expressed as honed concrete with a smooth finish. The upper portions of the portals are treated with anodised aluminium screening to emphasise the transition between the base and tower. The retail tenancies and lobbies are primarily treated with full height glazing allowing for visual permeability and active frontages.

The upper levels of the tower are treated as a glass curtain wall system, with integrated infill panes to break up the glazed elements and give the buildings a distinct identity. The materials and façade strategy is further detailed by Architectus in the Design Report at **Appendix B**.

Figure 29: Proposed material finishes

Source: Architectus

3.5.1 Awnings and Colonnades

The proposed development incorporates an awning and colonnade strategy to address the public domain and manage pedestrian amenity. As illustrated at **Figure 30**, awnings front the public plaza and colonnades line the street interfaces. The awning comprises a blade design with a solid panel soffit at approximately 4m in clearance height. The colonnades provide a more integrated design response. In addition to expressing the building base, the colonnades emphasise the building entries as well as create areas of the public domain that are protected from the weather year-round. The awning and colonnade strategy is further detailed by Architectus in the Design Report at **Appendix B**.

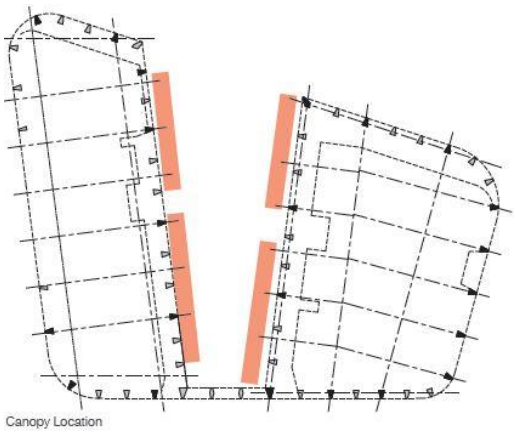


Figure 30: Proposed awning locations shown in orange

Source: Architectus

3.6 Land Use and Floor Space

A level by level summary of the proposed development is provided in **Table 3**. The design of each level is illustrated on the Architectural Drawings in **Appendix A.**

Table 3: Level by level description of the proposal

Level	East building use	West building use
Basement	Parking, loading bay, storage, plant and services, end of trip facilities	
Lower Ground Level	N/A	1 x retail tenancy
Ground Level	5 x retail tenancies, public domain	5 x retail tenancies, public domain
Level 1	Tertiary education / commercial	Child care centre
Level 2	Tertiary education / commercial	Commercial
Level 3	Tertiary education / commercial	Commercial
Levels 4-6	Commercial	Commercial
Level 7	Tertiary education / commercial, plant, terrace	Commercial
Levels 8-9	N/A	Commercial
Level 10	N/A	Commercial, plant, terrace

3.6.1 WSU Floor Space

The proposal seeks approval for the dual use of use of three full levels (Levels 1-3), and one partial level (level 7) of the east building as tertiary education or commercial floor space, allowing the flexibility for either use to be taken up. This floor space is to be occupied by a new WSU research hub with an emphasis on health and well-being research. WSU will occupy approximately 5,000m^2 of floor space (NLA) within the eastern building for the MARCS Institute for Brain, Behaviour and Development and the Translational Health Research Institute.

The joint venture partner's vision is to create truly collaborative workspaces bring together key WSU institutes, providing opportunities for collaboration within the Westmead Health Precinct and colocation with complementary commercial partners. Through the design of the base buildings, WSU will be afforded maximum internal flexibility to ensure the space is innovative in its design and future proofed to meet evolving workplace and educational requirements.

3.6.2 Retail Tenancies

The proposed development includes eleven retail tenancies across the lower ground and ground level to activate the ground plane and service the future employment population. The lower ground level contains a double height floor to ceiling due to the slope of the site and provides a prominent retail and lobby entry at this street corner. The retail tenancies range from 80m^2 to 490m^2 in size, but have the potential to be further subdivided. The specific fit out and uses will be undertaken via separate approval.

3.6.3 Child Care Centre

The proposed development includes an above ground child care centre on Level 1 of the western building. The Level 1 floor plate contains 1,603m^2 of GFA of which 1,441m^2 has been allocated as childcare floor space. The child care centre has undergone preliminary design testing to ensure that sufficient floor space and support facilities have been included to cater for a total of 100 children from 0 to 5 years of age.

Of the 1,441m^2, the child care centre achieves 325m^2 of indoor unencumbered floor space and 750m^2 of outdoor unencumbered floor space.

Above ground child care centres are becoming more common in mixed use precincts. Recent above ground child care centres with simulated outdoor play areas include:

- Australian Technology Park Building 3 – Level 3, 90 children
- 21 Harris Street Pyrmont – Level 1, 90 children
- Darling Exchange Building, Level 3 and Level 4 – 90 Children
- Barangaroo Tower 1, Level 1

The fit out illustrated in **Appendix I** is indicative only. Approval for the use and fit out of the space will be sought via a separate application once a child care operator has been appointed. Further discussion is provided within the Design Report at **Appendix I**.

3.6.4 Signage

The proposal seeks approval for top of building signages zones and business identification signage zones across the buildings, as identified on the signage plans in **Appendix A.** Specifically, the proposal identifies 19 signage zones across the two buildings applied to building plant, parapets, corners and entrances as specified in **Table 4**.

The signage zones are commensurate with the scale of the building and will set a signage strategy for future detailed signage proposals. Details of the signage typology, content, materiality, and illumination within these zones will be the subject of a subsequent application. Further discussion is included in the Design Report in **Appendix B**.

Table 4: Proposed signage zones

Zone	Size	Number
Plant	2.3m (h) x 14m (l)	6
Parapet	3.5m (h) x 14m (l)	8
Croner	2.1m (h) x 4.4m (l)	3
Entrance	0.6m (h) x 7m (l)	2

3.6.5 Landscaping and Public Domain

A Landscape Design Statement and Landscape Drawings have been prepared by OCULUS and are provided in **Appendix J** and **Appendix K.** Landscaping has been developed in two integrated zones including the street frontages and the central public plaza (refer to **Figure 31**). The proposal contains 2,969m^2 of landscaping and public domain, of which 564m^2 is calculated as 'landscaped area' in accordance with Council's DCP definition (excludes lawn area shown in **Figure 31**).

The landscape scheme is both responsive to the existing site conditions and heritage, but also integrates and supports the new buildings and other site enhancements. It is noted that that no landscaping is proposed within the rooftop terraces, as this landscaping will form part of any subsequent tenant fit outs.

As the site contains a reasonably steep slope to the north, the level change has been identified as an opportunity to provide a stepped landscape escarpment at this frontage. The proposed landscaping within this zone includes tiered concrete retaining walls with mass planting which effectively softens the street address.

Transitioning from the landscaped escarpment to the south is the central public plaza which comprises 1,626m^2. The central plaza includes two open lawn spaces as well as on slab planters containing raised garden beds and deciduous tree planting. The varied and irregular shape of the planters create interest as well as seating and circulation space. The central plaza includes paved areas consistent with Council's public domain guidelines and also incorporates feature paving surrounding the southern planters to define the passive zones.

To proposal seeks to replant street trees lost through the construction phase, including five along the Darcy Road frontage, one along the Farmhouse Road frontage and two along the Hawkesbury Road frontage.

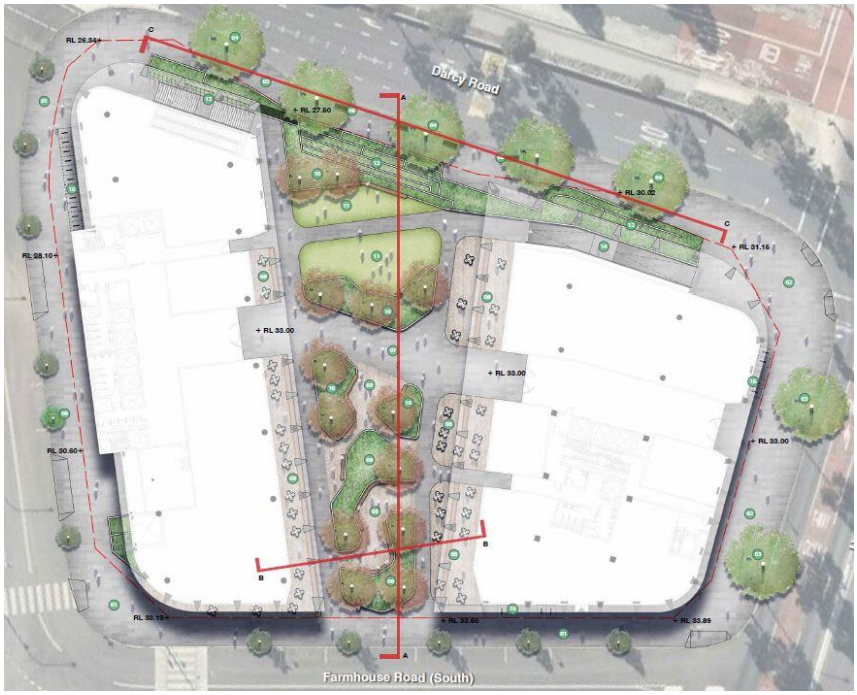


Figure 31: Proposed landscape scheme

Source: OCULUS

3.7 Transport, Access and Parking

3.7.1 Pedestrian Access

Pedestrian footpaths are provided on both sides of all streets adjoining, and in the vicinity of the site. The ground plane has been designed to enhance permeability including a central north south connection, as well as a cross site connection through the eastern building lobby for east-west connectivity. Central lift cores provide vertical access to each tenancy within the building. The proposed pedestrian access points are further illustrated in **Figure 32** below.

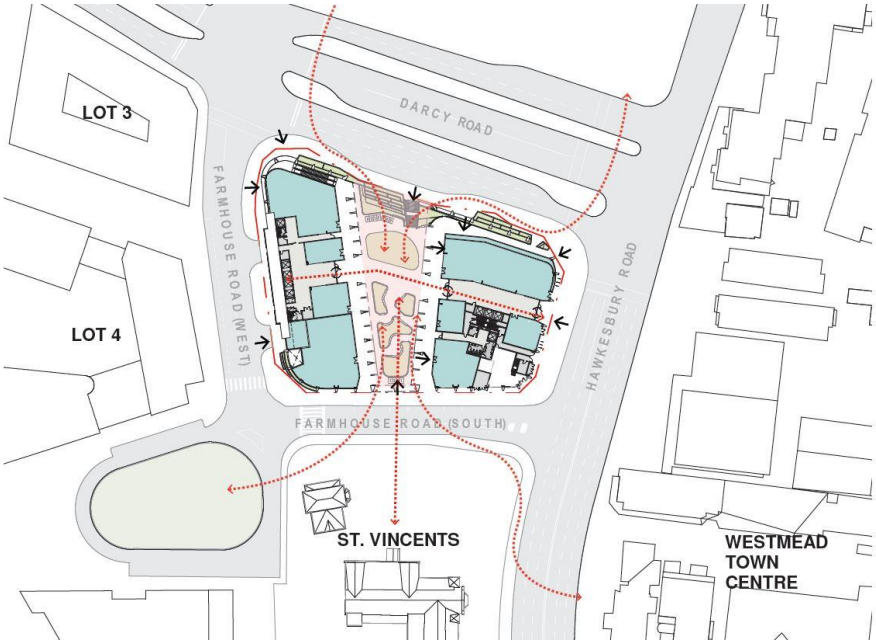


Figure 32: Pedestrian connectivity

Source: Architectus

3.7.2 Vehicular Access and Parking

Vehicular access to the proposed development is provided via a driveway located at the south western portion of the site. The driveway will provide a security controlled two-way ramped entrance to the retail, commercial and childcare parking spaces located in the basement. The development provides 137 car parking spaces across two basement levels and the parking allocation is detailed in **Table 5**.

Table 5: Parking Schedule

Type	Number or Spaces
Commercial/Retail	112 (including 5 accessible)
Child Care	25
Motorcycle	6
Bicycle	180

3.7.3 Loading and Servicing

The proposed development has a separate loading and service vehicle entry 20m north of the car park entry. accessed from the local circulation road via a driveway located at the south western portion of the site. This entry is directed to a loading dock that can accommodate up to two Medium Rigid Vehicles (MRVs). The loading dock has been designed so that service vehicles can enter and exit in a forward direction. In addition to spaces within the loading dock, two courier parking spaces have been provided within Basement Level 1.

3.7.4 End of Trip

To maximise tenant wellbeing and building amenity, the proposed development includes two end of trip (EOT) facilities located at Basement Level 1 to service the future tenant population. The proposed EOT facilities are summarised in **Table 6** below:

Table 6: End of Trip facilities summary

Component	Eastern Building	Western Building
Access	Darcy Road	Local Road
Bicycle spaces	55	74
Showers	10	12
Lockers	66	90

3.8 Public Art

The Applicant has engaged UAP to prepare a detailed public art strategy. UAP specialises in the development and commissioning of site-specific public art works for major developments.

As detailed in **Appendix L,** UAP has investigated local, cultural, social and environmental contexts and identify ways in which art can encapsulate these themes within the site. The strategy proposes a curatorial framework and themes for the art and cultural experience and articulate ways in which art and culture can reinforce the architectural principles and support the brand ambitions of the project team and the regional locality.

The public art strategy nominates appropriate zones around the site to locate public art and the final provision of public art will be developed in consultation with Council's public domain staff.

3.9 Waste Management

A Waste Management Plan (WMP) has been prepared by Mack Group and is provided at **Appendix M**. The WMP details various provisions for waste management within the proposed development. Based on Mack Group's calculations, the expected weekly quantity of waste generated by the proposed development will be 41,218L of general waste and 32,849L of recyclable waste.

The waste will be initially collected in bins located within each tenancy. The tenants will be responsible for providing suitable store areas in the design of their fit-out. The tenants will transfer waste to the main waste storage area which is located within Basement Level 1. A private collection contractor will access the site via the designated service entry off Farmhouse Road. It is anticipated the proposal will require four to seven waste collections per week.

3.10 Environmentally Sustainable Design

The incorporation of Environmentally Sustainable Development (ESD) principles into the proposal has been ongoing during the preliminary design of the building and will continue through the detailed design. An ecologically sustainable development report has been prepared by Floth and is provided at **Appendix N.** The report addresses the ESD principles and outlines the sustainable development initiatives that will be incorporated into the future development, including:

- Energy: Reduce energy use and greenhouse gas emissions. The buildings' envelopes and services have been integrated to ensure the building is controlled to maintain the desired conditions whilst optimising the energy efficiency of the complex;
- Indoor Environmental Quality: Design the buildings to maximise occupant comfort addressing issues of thermal and visual comfort and indoor air quality;
- Water: Minimize potable water consumption and optimise the water efficiency of the development;
- Materials: Minimize waste, encourage reuse and recycling of materials and use low environmental impact materials;
- Transport: Encourage more energy efficient and less polluting forms of transport to and from the site; and
- Benchmarking: The buildings are to be designed to achieve a minimum NABERS performance requirement of 4 star rating and an aspiration target of 5 stars.

3.11 Infrastructure and Services

As outlined at **Section 2.3**, the site is well serviced by existing infrastructure, however Floth has confirmed the following infrastructure and service upgrades or connections are required to accommodate the density of the proposed development:

- Electrical Services: The existing low-voltage Endeavour Energy assets are not adequate to service the development. A new indoor substation will be established by the proponent to Endeavour Energy's requirements. Endeavour Energy have advised that the Westmead zone substation has adequate capacity to supply the development.
- Communications Services: The site is capable of being serviced by multiple carriers with AARNet, NBN, Nextgen, Optus and Telstra all having assets in the vicinity. The existing services are considered adequate to service the proposed development and can be connected to by tenants as necessary.
- Sydney Water: The probable sewer connections size for the development will be at least 150mm. The likely point of connection to the sewer will be the existing 225 mm PVC sewer in the south-west corner of the site. No augmentation works are likely to be required. In terms of potable water connections, the probable potable water connection size for the development will be at least 150 mm diameter and is likely to be from the existing 200 mm uPVC main on the south side of the site. In addition, a minimum 150 mm diameter connection to the existing 200 mm uPVC main on the south side of the site will be required to meet the fire services demands for the site.
- Gas Mains: The likely point of connection will be in the south-east corner of the site. A Jemena volume boundary regulator and meter will be provided adjacent to the connection point.

All services infrastructure connection requirements will be confirmed with the relevant authorities prior to construction certificate, with the exception of telecommunications services which tenants will confirm with their carrier of choice once the development is complete.

4.0 Assessment of Environmental Impacts

This section considers the planning issues relevant to the proposed development and provides an assessment of the relevant matters prescribed in section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

4.1 Environmental Planning Instruments

The DA's consistency and compliance with the relevant statutory plans and policies is located in **Table 7** below. Variations to, and non-compliance with the key standards and guidelines highlighted in the table are discussed in the following sections of this environmental assessment.

Table 7: Summary of consistency with key statutory plans and policies

Plan	Comments
Strategic Plans Instruments	
The Greater Sydney Region Plan 'A Metropolis of Three Cities'	The Sydney Region Plan is the current metropolitan planning strategy that establishes a vision for the future growth of Sydney to 2056. The proposal broadly supports the ten directions and objectives outlined in the Strategy in that it: - Support's Greater Parramatta's economy by contributing world-class health, education and research institutions; - Provides high quality commercial floor space and public domain; - Co-locates employment generating uses with housing and public transport; - Supports the economic sectors that contribute to investment and business; and - Assists in re-balancing opportunities across the Greater Sydney Region in accordance with the GPOP vision.
Central City District Plan	The vision for Greater Sydney as a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. The site is located within the Central City District. The proposal supports the objectives of the Central City District in that it: - Reinforces internationally competitive health, education, research and innovation precincts; - Creates opportunities for an expanded office market; - Facilitates urban renewal of Westmead East as a mixed-use precinct; and - Provides services and public domain to support the local community.
State Environmental Planning Policy Number 55 – Remediation of Land	The site has been remediated and is the subject of a Site Audit Statement (and report). The Site Audit Report prepared by JBS&G at **Appendix O** demonstrates the site has been made suitable for the proposed use. Further discussion is provided in **Section 4.11**. In summary, the land is considered suitable for the proposed uses.
State Environmental Planning Policy (Infrastructure) 2007	Refer to **Section 4.1.3.**
State Environmental Planning Policy No 64—Advertising and Signage	Refer to **Section 4.1.4.**
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	Refer to **Section 4.1.5.**
State Environmental Planning Policy (State and Regional Development) 2011	As the proposal is a class of development described in Schedule 4A of the EP&A Act, being a development that has a capital investment value of more than $20 million (see **Appendix P**), Part 4 of the State and Regional Development SEPP applies to the DA. Under Part 4 of the SEPP the Council's consent function is exercised by the Sydney Central City Planning Panel (SCCPP). Whilst the development contains tertiary education floor space, **Section 4.1.6** confirms that the development is not State Significant Development (SSD) for the purpose of the EP&A Act.
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	The site is not located in the Foreshore & Waterways Area, is not a strategic foreshore site, and is not 'zoned' under the SREP, where the majority of the plan's aims/provisions apply. The proposal is consistent with the aims of the SREP in that the development will: - Create a high quality and ecologically sustainable urban environment on the site; - Ensure a healthy, sustainable environment by effectively managing all environmental impacts associated with the development (erosion, sediment control, stormwater, etc.);

Plan	Comments
	- Contribute to the vibrancy of Westmead through the provision of mixed-use facilities with active publicly accessible spaces at ground level; - Will not impede public access to the foreshore; and - Maintains a high-quality urban environment through urban design and will not detract from long distance views and vistas that may be available from the surrounding public domain to and from the harbour.
Parramatta Local Environmental Plan 2011	
Clause 2.2 – Land Use Zone	The site is zoned B4 Mixed Use. The proposed retail, commercial, educational and child care uses are permissible with consent and consistent with the zone objectives, including: - Providing a mixture of compatible uses in a highly serviced location close to public transport nodes; - Activates a currently vacant site; - Creates vibrant public domain and pedestrian links; and - Provides uses to support the daily needs of the community.
Clause 4.3 – Height of Buildings	The proposal will have a maximum building height of 52.5m which varies the site's maximum building height control of 31m by 21.5m. Notwithstanding this, a request to vary the maximum building height development standard under Cause 4.6 has been provided in **Appendix Q**. Further discussion is provided in **Section**
Clause 4.4 – Floor Space Ratio	The proposal will have a maximum FSR of 5.39:1 which varies the site's maximum Floor Space Ratio of 3:1. Notwithstanding this, a request to vary the Floor Space Ratio development standard under Cause 4.6 has been provided in **Appendix R.** Further discussion is provided in **Section 4.1.2.**
Clause 5.10 - Heritage Conservation	The site forms part of a wider site which is listed as an item of local heritage significance on Schedule 5 of the *Parramatta Local Environmental Plan 2011* as Western Sydney University (I628) and Victorian Residence (I629). Notwithstanding this, the listings do not take into consideration the subdivision of the site. A Heritage Impact Statement has therefore been prepared by NBRS and is provided in **Appendix S.** The report assesses the potential impacts of the proposal in the context of the surrounding heritage listed items. Further discussion is provided in **Section 4.8.**
Clause 6.1 – Acid Sulfate Soils	The site is mapped as class 5 Acid Sulfate Soils. Accordingly, an Acid Sulfate Soils Management Plan is not required to be prepared.
Clause 6.2 – Earthworks	The extent of earthworks is detailed in the Bulk Earthworks plan contained within the Civil Drawings prepared by RBG and provided in **Appendix T**. The proposal is consistent with the objectives of Clause 6.2 in that the proposed earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.
Clause 6.3 – Flood Planning	The site is not identified as flood prone land however the Overland Flow Assessment and Stormwater Management Report identifies that the site is affected by overland flow. Refer to **Appendix T** for more information.
Clause 6.10 – Development on certain land at Westmead	Whilst the site itself is not mapped as a key site under this clause, no residential development is proposed, and the development contains a total 30,700m^2 of retail, commercial and tertiary institution floor space, and as such, the proposal is compliant with this provision.

4.1.1 Maximum Building Height (PLEP 2011 Clause 4.3)

The height of buildings development standard for the site and the broader WSU Westmead Precinct is established by Clause 4.3 of the PLEP 2011. The maximum height of building across the precinct varies from 31m to 48m with the subject site allocated a maximum height of 31m, as illustrated in **Figure 33** and **Figure 34.**

The proposed development exceeds the 31m height control by 8.1m with the east building and 21.5m with the west building. Notwithstanding this, throughout the assessment of DA/571/2014, DA/968/2016 and DA/1271/2016, Council has maintained that the current PLEP 2011 FSR and building heights are a result of a suboptimal concept plan being the primary tool to inform the LEP controls for the site specific DCP. This is reinforced by the significant height variations approved on Lot 4 (up 80.3%) and Lot 5 (up to 69.3%).

Further justification is provided within the Clause 4.6 Variation Request in **Appendix Q**.

Figure 33: Height map extract

Source: PLEP 2011

Figure 34: LEP map and subdivision overlay

Source: Cox

4.1.2 Floor Space Ratio

The FSR controls for the site and the broader WSU Westmead Precinct are established by Clause 4.4 of the PLEP 2011. The permissible FSR across the precinct varies from 1.5:1 to 4:1 with the subject site allocated an FSR of 3:1 as illustrated in **Figure 35** and **Figure 36**.

In relation to the subject site (Lot 2), DA/571/2014 approved a building envelope with a height of between three storeys and nine storeys, and with a total GFA of 30,700m^2 to be used for commercial, retail, health and serviced apartment uses. This approved building envelope results in an FSR for Lot 2 of 5.33:1.

The Clause 4.6 request that was submitted (and approved) at this time outlined the fact that the precinct as a whole benefited from a total permissible GFA of 122,995m^2 and proposed that this total permissible floor space should be allocated across the developable lots. The justification for the approved variance of the FSR development standard outlined the fact that the newly created lots within the precinct do not correspond with the LEP FSR boundaries as illustrated in **Figure 36**, and also that the FSR boundaries do not take into account the spatial requirements of roads, open space, and other areas of the site that cannot accommodate built form but that are necessary for the successful functioning of the precinct.

DA/571/2014 allocated 30,700m^2 to the subject site which equates to an FSR of 5.33:1. The proposal maintains consistency with the approved development comprising 30,700m^2 of GFA. As discussed in **Section 2.2,** a recent survey of the site has determined that the site area has been reduced by 59m^2 from 5,753m^2 to 5,694m^2. As such, the proposed FSR has increased, albeit maintaining consistency with the approved GFA allocated to the site. Further detail and assessment is provided within the Clause 4.6 Variation Request in **Appendix R.**

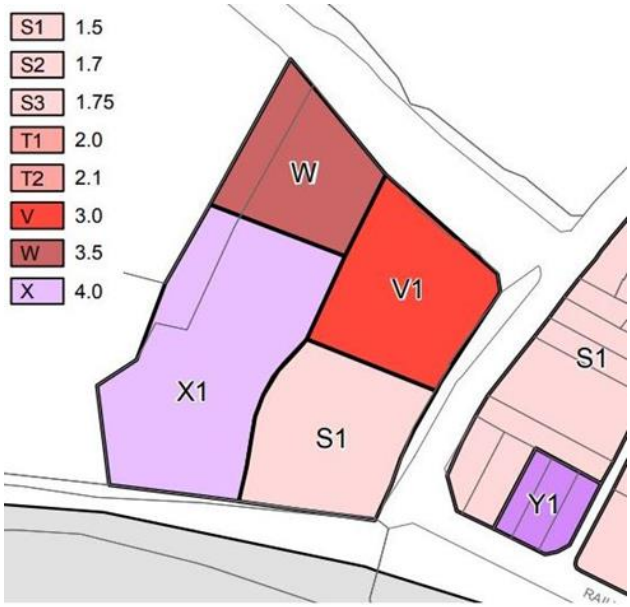


Figure 35: FSR map extract

Source PLEP 2011

Figure 36: LEP Map and subdivision overlay

Source: Cox

4.1.3 State Environmental Planning Policy (Infrastructure) 2007

Clause 45 Determination of development applications—other development

The application is subject to clause 45 of the Infrastructure SEPP as the proposed works are within the vicinity of electricity infrastructure. Accordingly, the application will need to be referred to Endeavour Energy for comment.

Clause 85 Development adjacent to rail corridors & Clause 86 Excavation in, above, below or adjacent to rail corridors

The site is not directly adjacent to a rail corridor and does not propose excavation beyond a depth of 2m within 25m of a rail corridor, as such the provisions under Clause 85 and 86 of the Infrastructure SEPP do not apply to the proposed development.

Clause 87 Impact of noise or vibration on non-road development

In accordance with clause 87 of the Infrastructure SEPP, the 'Development Near Rail Corridors and Busy Roads – Interim Guideline' has been addressed within the Noise Impact Assessment prepared by Floth (**Appendix U**).

Clause 104 Traffic generating development

The proposed development is deemed to be 'traffic generating development' under Part 3 Clause 104 of the Infrastructure SEPP as it seeks approval for commercial premises greater than 10,000m^2 in area. The application therefore needs to be referred to Roads and Maritime Services (RMS) for comment.

4.1.4 State Environmental Planning Policy No 64 – Advertising and Signage

The proposal seeks approval for building identification and business identification signage zones across the buildings, as identified on the signage plans included in **Appendix A.** Specifically, the proposal identifies 19 signage zones across the two buildings applied to building plant, parapets, corners and entrances.

SEPP 64 applies to all signage that under an environmental planning instrument can be displayed with or without development consent and is visible from any public place or public reserve. Schedule 1 of SEPP 64 contains a range of assessment criteria which are matters for consideration by the consent authority in assessing applications incorporating signage. Whilst this application seeks consent for signage zones only, a high-level assessment against the SEPP 64 assessment criteria is provided in **Table 8** below.

Table 8: SEPP No. 64 – Advertising and Signage Controls

Assessment Criteria	Comments	Compliant
1. Character of the area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signage zones will be occupied by the anchor tenant, Western Sydney University. The site is located within the Westmead health and education precinct and the signage will represent an educational use, as such it is consistent with the existing and desired future character of the area.	Yes
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	Signage within the broader locality is predominantly characterised by commercial/retail tenant signage. Accordingly, the proposal will remain consistent with the characteristics of the locality by supporting fully integrated signage that corresponds to the building design and surrounding area. The proposed signage zones will facilitate signage for the building's future tenants, reinforcing the proposed use of the building.	Yes
2. Special areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposal does not detract from the visual quality of any surrounding heritage items and has been carefully designed to include high-quality materials that contribute to the aesthetic quality of the area. In addition, the signage allows an appropriate functional balance by supporting the future use of the site for renewed commercial and educational use. The signage does not detract from the heritage item due to its physical separation. It is noted that existing WSU signage is located within Lot 1.	Yes
3. Views and vistas		
Does the proposal obscure or compromise important views?	The proposed signage zones are located on the building elevations and do not project off the building envelope, therefore will not obscure or compromise any important views.	Yes
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signage zones are commensurate with the size of the building envelopes and will be integrated with the architecture of the building, and therefore will not reduce the quality of vistas.	Yes
Does the proposal respect the viewing rights of other advertisers?	Since the proposed signage zones are of a similar nature to signage within the broader locality, it will not impact on the viewing rights of any of the surrounding advertisers.	Yes
4. Streetscape, setting or landscape		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, form and proportion of the proposed signage zones are appropriate for the setting and will support signage that will contribute to the visual interest and commercial viability of the site. The proposed signage zones are consistent with other large signs in the broader locality and will achieve a consistent and high-quality streetscape.	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage zones will be occupied by fully integrated signs and with the high quality design of the new building, featuring a contemporary yet not ostentatious design that will positively contribute to the streetscape.	Yes
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	N/A	N/A
Does the proposal screen unsightliness?	Whilst the proposal does not directly screen unsightliness, it will provide appropriate signage zones to improve the physical presentation of the building.	Yes
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage zones do not protrude above buildings, structures or tree canopies in the area or locality.	Yes
Does the proposal require ongoing vegetation management?	The proposal does not require any ongoing vegetation management.	Yes
5. Site and building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed signage zones have been carefully developed to be compatible with the scale, proportions, and presentation of the building. The scale of the proposal is considered to be appropriate for the context of the site and will support the educational, commercial and health precinct character of the area.	Yes

Assessment Criteria	Comments	Compliant
Does the proposal respect important features of the site or building, or both?	The proposal is respectful in its design and will not dominate the surrounding locality or detract from any of the important features of the building.	Yes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposal provides signage zones that will be occupied by signage that will be of a high-quality and will contribute to the character of the public domain.	Yes
6. Associated devices and logos with advertisements and advertising Structures		
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	N/A	N/A
7. Illumination		
Would illumination result in unacceptable glare?	No illumination is proposed at this stage. Future signage typologies may include illumination however consent for specific typologies will be sought via a separate DA.	N/A
Would illumination affect safety for pedestrians, vehicles or aircraft?		
Would illumination detract from the amenity of any residence or other form of accommodation?		
Can the intensity of the illumination be adjusted, if necessary?		
Is the illumination subject to a curfew?		
8. Safety		
Would the proposal reduce the safety for any public road?	Due to the placement, scale, and intensity of the proposal, it will not reduce road safety.	Yes
Would the proposal reduce the safety for pedestrians or bicyclists?	Due to the placement, scale, and intensity of the proposal, pedestrian or cyclist safety will not be reduced.	Yes
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	As discussed above, the proposal will not obscure sightlines, and thus will not reduce safety for pedestrians.	Yes

4.1.5 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

The Education and Child Care SEPP aims to ensure once a child care centre is approved and built it can meet the physical requirements for the subsequent service approval application. The Education and Child Care SEPP absorbs key requirements from the National Quality Framework for Early Childhood Education and Care Facilities into the NSW planning system and will supersede local planning controls that are inconsistent with the National regulations. The Education and Child Care SEPP contains:

- a requirement to take Part 2, Part 3 and Part 4 of the Child Care Planning Guideline into consideration when assessing development applications; and
- the establishment of grounds on which a development application for a centre based child care centre cannot be refused by the consent authority.

Part 2 contains seven Design Quality Principles that establish the broad design context guide for all new proposals. Part 3 covers Matters for Consideration that support the Design Quality Principles and must be considered by the consent authority when assessing a DA. Essentially if a proposal is consistent with the Matters for Consideration, the proposal will satisfy the Design Quality Principles. Part 4 contains the guidance on how to apply the National regulations to development proposals.

Appendix V provides an assessment against Part 2, Part 3 and Part 4 of the Child Care Guideline and **Appendix W** includes the National Quality Framework Assessment Checklist to demonstrate that the development is designed to achieve the requirements of Part 4.3 Physical Environment of the Education and Care Services National Regulations. For absolute clarity, Gardiner has provided a Design Statement verifying that the proposal has been designed in accordance with the Child Care Planning Guideline (refer to **Appendix I**).

4.1.6 State Environmental Planning Policy (State and Regional Development) 2011

As the proposed development is partially occupied by a tertiary institution use, it has been considered against *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) to determine if the proposal is State Significant Development (SSD) for the purpose of the EP&A Act. Specifically, whether:

- the tertiary institution use does or does not have a Capital Investment Value (CIV) of more than $30million in accordance with clause 14 of Schedule 1 of the SRD SEPP; and
- the remainder of the development is or is not sufficiently related to the tertiary institution use in accordance with clause 8(2)(a)) of the SRD SEPP.

The proposed development contains 30,700m^2 of GFA and WSU has committed to leasing approximately 5,000m^2 of floorspace (NLA) in the eastern building (Levels 1-3,7) to establish a health and well-being research-focussed hub. Given the proposal will only contain approximately 17% of tertiary education floor space and the total CIV of the proposal is $106,739,000 it is determined that the educational use does not meet the threshold criteria for classification as SSD on the basis of its CIV. Accordingly, the proponents are of the view that the proposed development is not classified as SSD and is a development to be assessed by the City of Parramatta Council and determined by the Sydney Central City Planning Panel.

4.2 Development Control Plans

The DA's consistency with the Parramatta Development Control Plan 2011 (DCP) is assessed in **Table 9** below. The proposed development is generally consistent with the objectives of the DCP. As required under Section 4.15(3A) of the EP&A Act, a consent authority is required to apply DCP provisions flexibly and allow reasonable alternative solutions that achieve the objects of those standards. Where alternate solutions to the provisions are proposed, they are identified in the table and discussed in the following sections of this environmental assessment.

Table 9: Summary of consistency with statutory plans

Control	Comments
Part 2 – Site Planning	
2.4.1 Views and Vistas	The site is not identified as having significant views and vistas, which is consistent with Council's written pre-da advice dated 1 August 2018.
2.4.2 Water Management 2.4.3 Soil Management	Stormwater, Erosion and Sediment Control Plans have been prepared by RBG and are provided in **Appendix T.** Refer to **Section 4.13** for further discussion.
2.4.4 Land Contamination	Refer to **Section 4.11** for further discussion.
2.4.5 Air Quality	A Construction Management Plan has been prepared by Solutions Consulting Australia and is provided in **Appendix X.** Air quality is potentially affected by dust generation throughout the construction process. Dust control will be implemented in areas of all active construction to maintain worker safety and minimise amenity impacts on the surrounding area.
2.4.6 Development on Sloping Land	A Site Survey has been prepared by Usher and Company and is provided in **Appendix E.** The survey illustrates that the site has a fall of approximately 7.5m from the southern boundary down to the northern boundary. The site has a high point of RL 33.7 at the south-eastern corner and a low point of RL 26.01 at north-western corner. The proposed development is responsive to the site's slope as detailed at **Section 3.4** and **Section 4.5.**
2.4.8 Public Domain	Landscape Plans have been prepared by Oculus and are provided in **Appendix K.** The proposed development incorporates landscape and public domain elements which have been designed to ensure it is attractive, safe, interesting, comfortable, readily understood and easily accessed. Refer to **Section 4.5.3** for further discussion.
Part 3 – Development Principles	
3.1.3 Preliminary Building Envelope Tables	The site-specific built form provisions are contained within Part 4 of the DCP and are addressed below. Refer to **Section 4.5**.

Control	Comments
3.2.1 Building Form and Massing	
3.2.2 Building Facades and Articulation	The proposed building facades and articulation is addressed in **Section 4.5.2**
3.2.3 Roof Design	The proposal incorporates a stepped roof which is a deliberate design response to emphasise the transitioning height to the south west associated with the wider precinct.
3.2.4 Energy Efficient Design	An Ecologically Sustainable Development Report has been prepared by Floth and is provided in **Appendix Y.** The ESD report confirms the buildings are to be designed to achieve a minimum NABERS performance requirement of 4 star rating and are capable of achieving 5 stars. Further discussion is provided in **Section 4.18.**
3.2.5 Streetscape	The proposal is generally consistent with the streetscape controls for development in the B4 zone as it: - Contains active and accessible retail uses at ground floor; - Involves minimal use of solid walls at ground level, incorporating glazing elements for activation and transparency; - protects pedestrian amenity by incorporating a colonnade strategy (refer to **Section 3.5.1**); and - ground level uses are directed to the central plaza.
3.3.1 Landscaping	The basement envelope is generally built to boundary, therefore this limits the opportunity for deep soil planting. Notwithstanding this, the proposal contains a comprehensive landscape scheme including deep planters, street trees to soften the built form and enhance the natural amenity of the site. The site is also complemented by the public open space delivered to the south west of the site under D/571/2014. Refer to the Landscape Drawings in **Appendix K.**
3.3.4 Acoustic Amenity	The acoustic amenity of nearby sensitive receivers will be preserved, as discussed in the Acoustic Impact Assessment prepared by Floth in **Appendix U.** Further discussion is provided in **Section 4.15.**
3.3.5 Solar Access & Cross Ventilation	The floor to floor heights are typically 3.7m and the building has a large northern frontage, therefore the development allows ample solar access to the building.
3.3.6 Water Sensitive Urban Design	A WSUD strategy is proposed and is discussed and detailed in the Stormwater Management Plan in **Appendix T** and **Section 4.13.**
3.3.7 Waste Management	Refer to the Waste Management Plan in **Appendix M** and **Section 4.14** for further discussion.
3.4.1 Culture and Public Art	A public art plan is required for all new development having a CIV of over $5m in the Westmead special precinct B4 zone. Accordingly, UAP have been commissioned to prepare a Public Art Plan as confirmed in **Appendix L**. This will be provided to Council in due course.
3.4.2 Access for People with Disabilities	Refer to Accessibility Report at **Appendix Z.** The proposed drawings demonstrate that accessibility requirements, pertaining to external site linkages, building access, common area access, sanitary facilities and parking can be readily achieved.
3.4.4 Safety and Security	Safety and security principles have been considered as part of the design of the proposal. Refer to the CPTED Assessment Report in **Appendix AA** and **Section 4.17.**
3.5 Heritage and Archaeology	An assessment of the proposal's impact on heritage items is provided in the Heritage Impact Statement (**Appendix S**) and further discussion is provided in **Section 4.8.** The site is identified as being of Low significance by Council's Aboriginal Heritage Sensitivity Database.
3.6 Movement and Circulation	An assessment of the proposal's traffic impacts (and movement and circulation) is provided in the Traffic Impact Assessment in **Appendix BB**, and further discussion is provided in **Section 4.7**.

Control	Comments
Part 4 – Special Precincts – Section 4.3 Strategic Precincts	
4.3.4.1 158-164 Hawkesbury Road and part of 2A Darcy Road, Westmead	
Desired Future Character	The proposed development is consistent with the desired future character of the area as it is a true mixed use development which will support the existing concentration of health services in the wider Precinct. Specifically, the proposed educational component of the proposal will provide opportunities for collaboration within the Westmead Health Precinct and colocation with complementary commercial partners. The proposal acknowledges the opportunity for a transit-oriented development and provides employment generating uses and public domain in the form of a significant public plaza in proximity to residential areas and existing and future public transport links. The proposed scale and density is considered commensurate with the site's strategic location and is not out of character with the recently approved development within the WSU Westmead precinct. The proposed height of the proposal has been chosen having regard to orientation, overshadowing, the scale of retained heritage buildings and views/vistas to Parramatta Park to the east. Built form fronting Hawkesbury and Darcy Roads will locate active uses on the ground floor to increase the vibrancy of the Westmead Precinct as a whole.
Building Form and Massing	The proposed built form and massing is compatible with the desired future character of the area in terms of building bulk and scale, as discussed in **Section 4.5.** The proposal also responds to the topography of the land which steeply slopes down to the north and has been designed having regard to the heritage item in the vicinity of the site.
Building Height	The proposed development varies the PLEP 2011 maximum building height of 31m. Notwithstanding this, the proposed variation is reasonable and justified in the circumstances of the site as detailed with the Clause 4.6 variation request in **Appendix Q.** The DCP identifies that for buildings within Lot 2, the street wall height fronting Hawkesbury Road will be limited to a maximum height of 14-16m (4 storeys) and the street wall height fronting Darcy Road will be limited to a range of between 16m (4 storeys) at Hawkesbury Road rising to 27m (7-8 storeys). As outlined in **Section 3.4**, the proposal departs from the site specific DCP built form requirements as well as the approved envelopes. Notwithstanding this, **Section 4.5** demonstrates that the proposal presents superior urban design outcome for the site.
Floor Space Ratio	The proposed development varies the PLEP 2011 FSR control of 3:1. Notwithstanding this, the purposed variation is reasonable and justified in the circumstances of the site as detailed with the Clause 4.6 variation at **Appendix R.**
Open Space	The proposal does not contain deep soil planting, which is consistent with the major works concept under D/571/2014. The provision of on-site detention will minimise the need for infiltration through deep soil zones and the extensive area of playing fields adjoining the site will more than adequately allow infiltration for groundwater recharge in the precinct. The proposal contains a comprehensive landscaping plan including stepped landscaping to the northern boundary, a central public plaza and street trees.
Heritage	An assessment of the proposal's impact on heritage items is provided in the Heritage Impact Statement (**Appendix S**) and further discussion is provided in **Section 4.8.**
Traffic & Transport	Detailed traffic and parking modelling has been provided within the Traffic Impact Assessment in **Appendix BB.** Further discussion is provided in **Section 4.7.**
Part 5 Other Provisions – Child Care Centres	
5.2.3.1 Site Selection	The site is in a safe location with convenient access by private vehicle or public transport. The centre will be embedded in a mixed-use precinct, facing the plaza and not the dwellings to the west. The fit-out plan in **Appendix V** illustrates that any future fit out and operation of the child care centre is capable of providing adequate access, circulation spaces and play areas. Further to this, the fit out plan confirms the childcare centre can accommodate a capacity of 100 children allowing for a minimum of 3.25m^2 of unencumbered indoor space and 7m^2 of unencumbered outdoor space per child in the form of simulated outdoor space.
5.2.3.3 Child Care Centres in Other Zones	The proposed child care centre is located on Level 1 within the western building, as such it is categorised as an above ground child care centre. This arrangement allows the ground plane to be highly activated with retail uses, and the above ground child care centre is considered to provide additional safety and privacy to the children.

Control	Comments
	The design of the child care centre is capable of complying with the NSW Childcare Guideline as detailed in **Appendix V.**
5.2.3.4 Access and Parking	On site car parking is to be provided at the rate of a minimum of 1 parking space per 4 child care places. Parking for people with a disability is to be provided at the rate of 1 space in every 10 spaces. If the car parking required is less than 10 spaces then at least 1 space must be provided. The proposal allocates 25 basement car parking spaces to the child care use. 13 of these spaces are allocated for staff and 12 are allocated as drop off / pick up spaces.
5.2.3.5 Acoustic and Visual Privacy	Internal and external acoustic amenity has been considered and assessed within the Acoustic Impact Statement prepared by Floth in **Appendix U**. The proposal is capable of minimising the noise generation impacts generated by child care centres on the amenity of neighbouring residential properties and minimising the intrusion of noise on child care centres from external sources.
5.2.3.6 Indoor Areas	The proposal makes provision for the fit out of the childcare centre to comply. Further assessment will be provided with a subsequent DA for the fit out and use of the childcare centre.
5.2.3.7 Outdoor Areas	The proposal makes provision for the fit out of the childcare centre to comply. Further assessment will be provided with a subsequent DA for the fit out and use of the childcare centre.

4.3 Westmead Innovation District Master Plan

As discussed in **Section 1.4.3**, WSU has worked closely with the Westmead Precinct Partners throughout the redevelopment of the WSU precinct and during the design development of the proposal. The broader Westmead Precinct master plan is being developed concurrently with this application. The draft master plan currently contains set of precinct principles that have been endorsed by the Westmead Precinct Partners following extensive consultation with the partners as well as a number of government agencies and special interest groups. The final master plan is then the foundation for delivering and achieving the established principles.

The cover letter prepared by the Western Sydney Local Health District at **Appendix D** supports that the proposed development is consistent with the endorsed principles. The proposal's consistency with the principles is also addressed within **Table 10** below.

Table 10: Westmead Precinct Principles response

Westmead Precinct Principle	Response
1. Innovative: Dynamic, Exceptional, Competitive, Challenging, Productive	Westmead's success as a world class innovation, health and education precinct is dependent on industry growth and investment. The proposal represents a significant opportunity to enable a mixed-use development integrating commercial, educational and retail uses. This large contribution of 30,700m^2 of GFA will stimulate other investment in the locality and encourage new business to locate in the Westmead precinct. Specifically, with WSU as a major anchor tenant, this increases the attractiveness of the development for other innovative businesses to work collaboratively with WSU.
2. Healthy: Lifestyle, Life Cycle, Healing, Liveable	The proposed development is to be partially occupied by a new WSU research hub with an emphasis on health and well-being research. It is the joint proponents' vision to create truly collaborative workspaces bring together key WSU institutes, providing opportunities for collaboration within the Westmead Health Precinct and colocation with complementary commercial partners. Further to the use, the proposal encourages healthy behaviours locating a large employment generating development in close proximity to public and active transport nodes. A comprehensive retail and landscape scheme has been prepared to provide tenants with break out opportunities. In addition, the site is approximately 450m from Parramatta Parklands, therefore tenants have great access to an expanse of quality open space within short walking distance.
3. Resilient: Agile, Responsive	Flexibility has been a key design direction driving the development. In this way the proposed buildings and the floor plates they contain are considered optimal to attract and maintain key tenants. The floor plates are large, open and capable of achieving internal vertical separation or subdivision.

Westmead Precinct Principle	Response
	As such, the buildings are future proofed to manage the evolving workplace and educational teaching space design strategies. In terms of building sustainability, the proposal will have a minimum NABERS requirement of 4 stars, and an aspiration to achieve a five star NABERS rating, thereby assisting in the delivery of an ecologically sustainable precinct.
4. Attractive: Magnetic, Welcoming, Active, Talent	The success of Westmead is dependent on the increasing the attractiveness of the precinct to students and tenants both at a domestic and international scale. In this regard, the proposal enables a world class mixed use campus anchored by WSU. Not only does the proposal provided integrated and collaborative use opportunities, it provides a high-quality public domain including the provision of a central public plaza. The public plaza is provided with framed views of the rich heritage context to the south of the site and will be well activated by the retail tenancies and pedestrian flows through the site. The proposal also offers premium End of Trip Facilities and a childcare centre, as a means of demonstrating a responsibility for the health and well being of the future tenants.
5. Inclusive: Accessible, Social, Legacy, Heritage, Diversity	The proposal is a true mixed use development, offering public spaces for both tenants and the broader community to meet and interact. By providing an activated ground floor with a mix of retail tenancies and public space, it offers a destination site to encourage cohesion and human connectivity.
6. Cultural: Unique, Identity, Demography, Place, Creativity, Heritage, Arts, Crafts, Design	The proposal celebrates the site's rich heritage context, namely the St Vincent's building to the south of the site. It was a key design move to open the site to Farmhouse Road to allow quality sight lines from the central public plaza to the heritage significant St Vincent's building. The highly activated ground plane presents an opportunity for authentic place making and cultural exchange.
7. Connected: Partnerships, Walkable, Accessible, Multi-modal, Regional, Global, Destination	The proposal is in proximity to a number of regionally significant land uses including the Westmead Hospital and the Parramatta CBD. Through the delivery of the Parramatta Light Rail and the Sydney West metro , these significant land uses will become truly connected. The proposal also recognises that there are workers and visitors that are reliant on private vehicle transport, therefore the proposal includes basement car parking. The basement also contains two large end of trip facilities to encourage cycling, as the site is connected to existing cycle networks.
8. Playful: Vibrant, Active, Fun, Events, Recreation, Family, Community	The proposal creates meeting and gathering spaces for students, staff, workers and residents within the surrounding community. The proposal provides a highly activated ground plane and increases site permeability therefore enhancing the pedestrian experience. The site is also in proximity to Parramatta Parklands which offers occupants more active recreational opportunities.
9. Green: Green, Environment, Water, Trees, Energy, Habitat, River	The proposal will complement the existing natural green space by providing a comprehensive landscaping scheme. The stepped planters fronting Darcy Road will soften this road interface and invite pedestrians through the site. Further, the central plaza is provided with planters and turfed areas with a northern orientation to allow solar access to this area.
10. Intelligent: Smart, Lifelong Learning, Excellence, Research, Talent, Thought Leaders	As noted, the proposed development is to be partially occupied by a new WSU research hub with an emphasis on health and well-being research. It is the joint proponents' vision to create truly collaborative workspaces bring together key WSU Institutes, providing opportunities for collaboration within the Westmead Health Precinct and colocation with complementary commercial partners. This attractive and vibrant development contributes to the attractions of the precinct, thereby encouraging further researchers and entrepreneurs to locate within Westmead.
11. Entrepreneurial: Brand, Ambition, Success, Productive	The proposal is consistent with the entrepreneurial vision for Westmead, and WSU the joint proponents fully support the direction the precinct partners have established.

4.4 WSU Westmead Precinct Major Works (DA571/2014)

As discussed in **Section 1.2.2,** the current approval under DA/571/2014 consented to, amongst other elements, concept building envelopes and gross floor areas for the developable lots within the subdivision. Under this development consent, two building envelopes were established on the subject site, allowing for a 'U-shaped' development framing a central plaza with podiums up to three storeys and towers up to nine storeys containing a total GFA of 30,700m^2 (or 5.33:1 FSR).

It is noted that the approved development exceeded the site's maximum 31m height control and 3:1 FSR control and departed from the site-specific DCP controls contained under Part 4 of the DCP. In recommending approval, Council's assessment report noted that:

> *"The Urban Design Unit are supportive of the proposed non-compliances of Height and FSR across the site. Most non-compliances are a result of a suboptimal concept plan being the primary tool to inform the LEP controls for the site specific DCP"*

Further to the discussion in **Section 3.4**, the following sections demonstrate that the proposed development provides a better outcome and is therefore a reasonable alternative solution to the site specific DCP built form provisions as well as the consent under DA/571/2014 . It also demonstrates, in conjunction with the Design Report in **Appendix B**, that the established site-specific principles have been respected, despite the proposed variations to the existing consent.

Figure 37: Photomontage of the approved building massing under DA/571/2014

Source: Cox

4.5 Built Form and Urban Design

The proposed built form and massing across the site is the result of a detailed analysis of the site specific DCP, the approved envelopes under DA/571/2014 and the desired future character of the Westmead precinct as a vibrant health and education hub demonstrating consistency with transit-oriented development principles.

The proponent recognised that whilst the approved proposals on Lot 4 and Lot 5 achieved significant departures from the site specific DCP and varied the concept envelopes, these variations and departures resulted in superior urban design and amenity outcomes for the Precinct, ensuring the precinct would be more distinct in its built form. This is consistent with Section 4.15(3A) of the EP&A Act, which states that a consent authority is required to apply DCP provisions flexibly and allow reasonable alternative solutions that achieve the objects of those standards.

The proposed development does not seek to achieve any additional floor space beyond that allocated to the lot under development consent DA/571/2014. For absolute clarity, the approved GFA allocated to Lot 2 is 30,700m^2 and the proposed development seeks approval 30,700m^2 of GFA. The floor space has been redistributed to create a feasible development including two towers defining a central public plaza with a strong visual connection from the central plaza to the heritage significant buildings on Lot 1 to the south. The proposed massing redistribution is illustrated in **Figure 38** below and the merits of the proposal are discussed within the following sub sections.

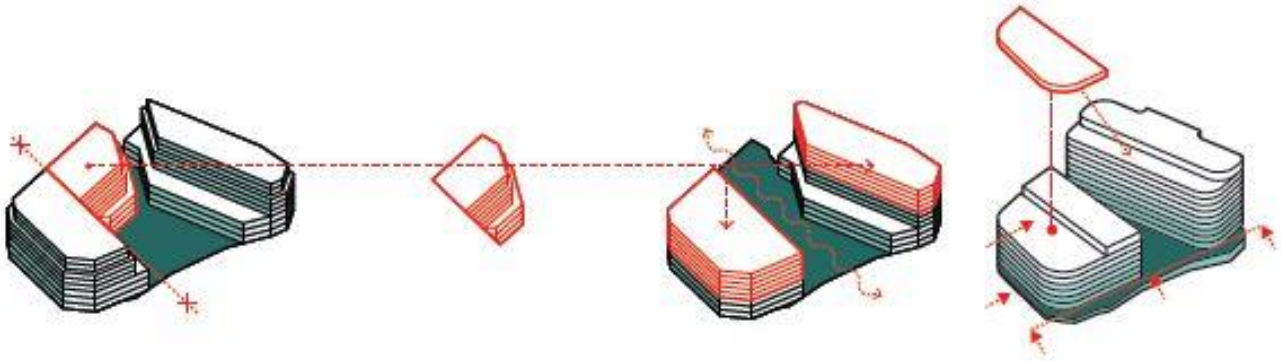


Figure 38: Floor space redistribution (approved DA/571/2014 massing and the proposed massing)

Source: Architectus

4.5.1 Building Height, Street Wall and Setbacks

The site specific DCP built form controls require the provision of the following:

- Maximum building height:
  - 31m (consistent with PLEP 2011)
- Hawkesbury Road street wall:
  - 14-16m (4 storeys)
- Darcy Road street wall:
  - limited to a range of between 16m (4 storeys) at Hawkesbury Road rising to 27m (7-8 storeys)

As discussed in **Section 4.1.1**, the proposed development has departed from the 31m building height control by redistributing the floor space allocated to the lot under the approved envelopes to facilitate the significant central plaza from the northern portion of the site through to the south. In isolation, this represents a large numeric variation, however in the WSU Westmead precinct context, this is not inconsistent with the approved height variations on Lots 4 and 5 as illustrated in **Figure 39**.

By anchoring the main street corner with an 8 storey building and a setback upper level, then transitioning to an 11 storey building also with a setback upper level, the proposal emphasises the precinct's principle of stepping building heights to the south west of the site, where towers of 12, 20 and 24 storeys are located (refer to **Figure 40**). In this regard, the proposal contributes varied building heights to ensure a positive relationship with the surrounding buildings and avoids two 'paired' tower forms located at a prominent street corner site.

Figure 39: Building height variations within a precinct context

Source: Architectus

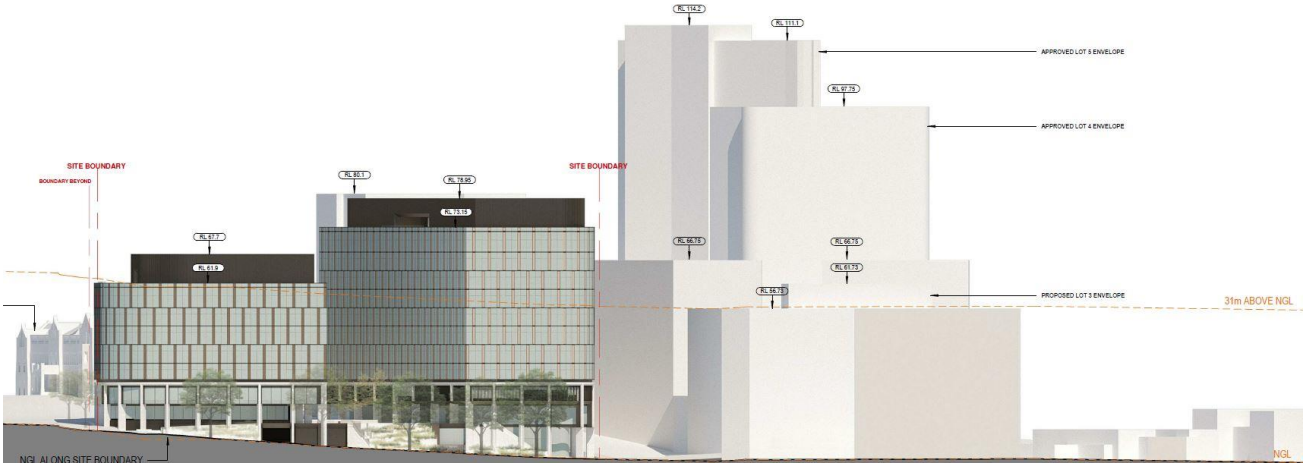


Figure 40: Northern elevation showing the transition in building heights to the south west of the precinct

Source: Architectus

In relation to the provision of street walls, both the site specific DCP and the DA/571/2014 envelopes envisage a podium and tower development on the site. The proposed development provides an alternate response by establishing a generally consistent tower to ground relationship with only the upper building levels set back from the eastern parapets. In developing this response, it has been determined that the street frontage heights within the locality are mixed due to the retention of surrounding heritage buildings, differing setback applications and varied building forms. As such, there is no prevailing street wall along Hawkesbury Road or Darcy Road for the development to respond to. Notwithstanding the street wall variations, the proposal establishes an appropriate relationship with the surrounding development through an alternate design solution.

In lieu of a predominant street wall height, the volume of the buildings is defined by the materiality and finishes. The 'base' of the towers reads as a two to three storey scale through façade articulation and expression of base materials. At the lower levels, the portal and structural elements are expressed as honed concrete with a smooth finish. The upper portions of the portals are treated with anodised aluminium screening to emphasise the base of the towers. Whilst the significant site cross fall restricts the opportunity for a perfect alignment, the base of the towers has been designed to have a general relationship with the datum of the St Vincent's and Farmhouse buildings as illustrated in **Figure 41**. The result from a prominent view point within the public domain is illustrated in **Figure 42**.

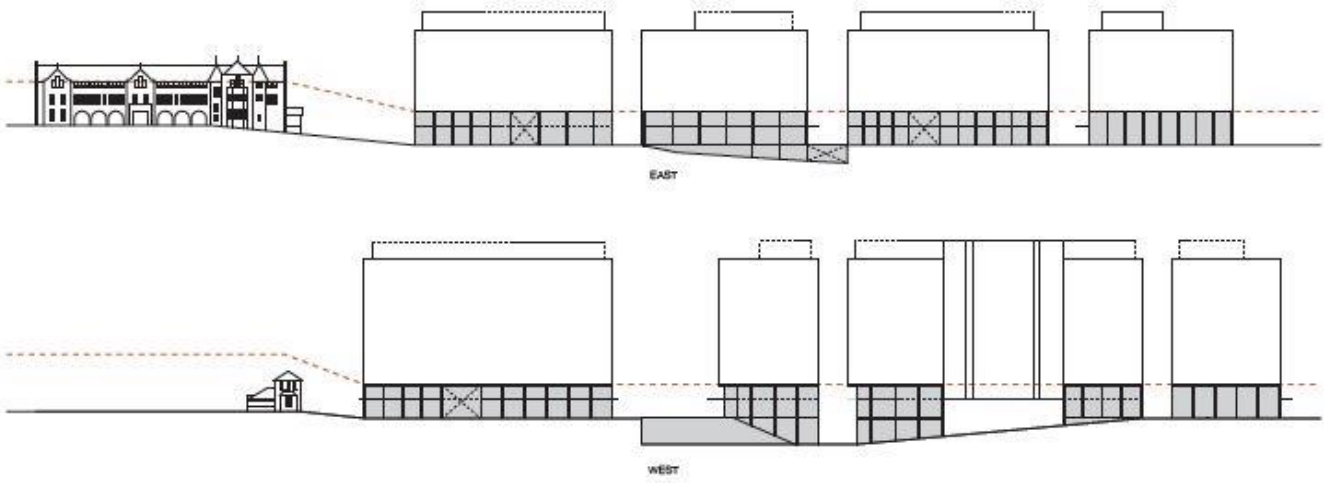


Figure 41: Base alignment in relation to the heritage significant building on Lot 1

Source: Architectus

Figure 42: Base alignment from the Hawkesbury Road and Darcy Road intersection

Source: Architectus

In developing the proposed scheme, Architectus identified several limitations with the current approval and opportunities to provide a development that better responded to the surrounding development as well as the needs of the future tenants. These key drivers are further discussed below.

Connection to the St Vincent's Building and Amenity of the Public Plaza

As illustrated in **Figure 43**, the current approval does not present a strong visual or physical connection to the St Vincent's building. The sight lines are obstructed by the southern wing of the eastern building and the only views available from the plaza are to the highly trafficked Darcy Road. Further to this, the current approval creates a narrow and disjointed pedestrian connection to Farmhouse Road which closes the public plaza to the development at the south of the site.

As illustrated in **Figure 38** above, the proposed development removes and redistributes the floor space from the southern wing of the eastern building to open the plaza to Farmhouse Road. As a result, the proposal achieves 1,672m^2 of publicly accessible plaza area with a direct north and south visual connection. The proposed design provides a 28m building separation at the northern entrance, tapering to 12m at the southern entrance of the plaza. This effectively frames the St Vincent's building (refer to **Figure 44**) whilst maximising solar access to the turfed area of the plaza at the northern entrance.

In addition to improving visual connectivity, this design move also enhances the permeability of the development. The southern building entry is now easily identifiable and will encourage pedestrian flows through to the plaza creating an active and vibrant ground plane.

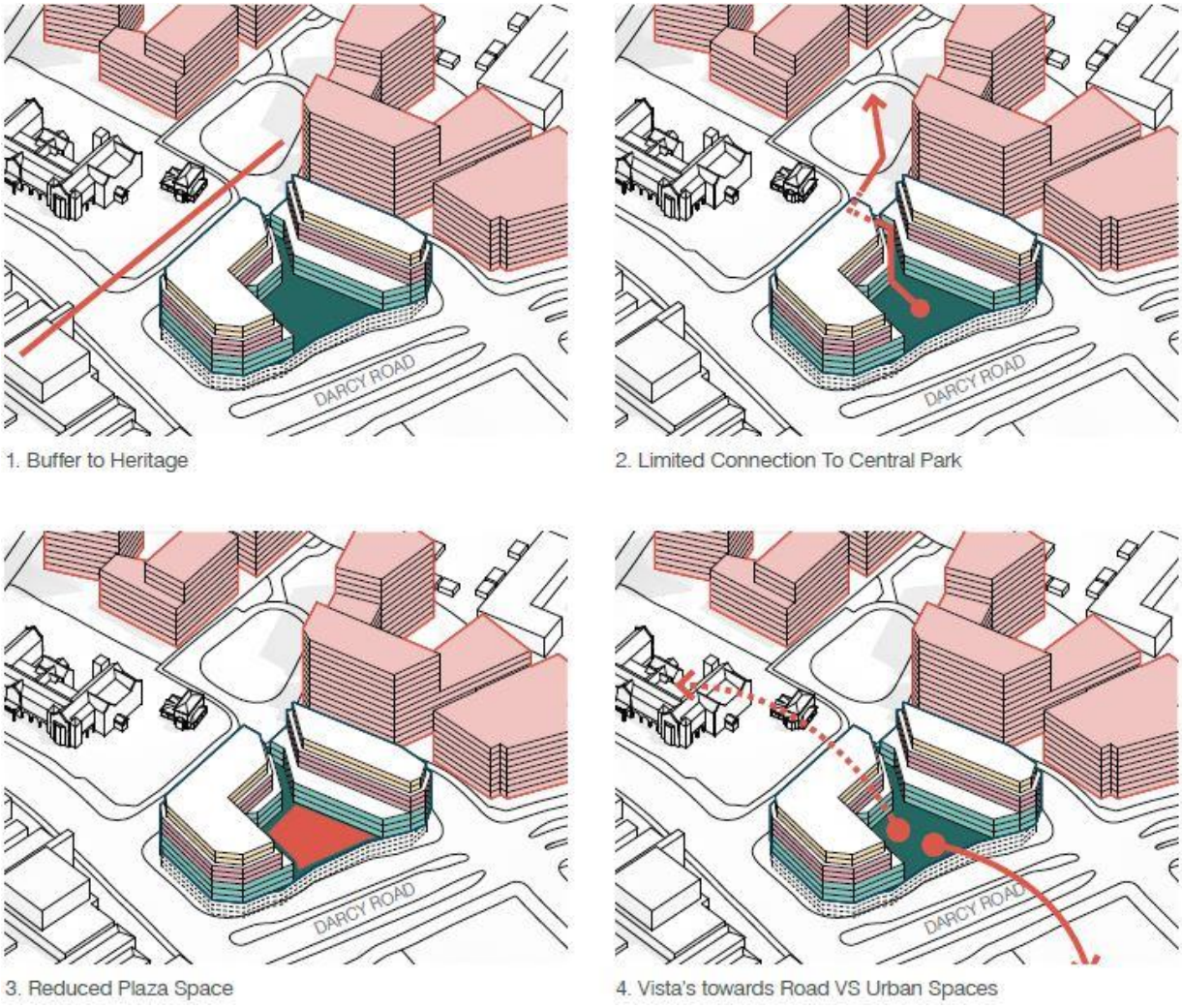


Figure 43: DA/571/2014 limited connection to Lot 1

Source: Architectus

Figure 44: View line from the public plaza to the St Vincent's building

Source: Architectus

Market Appropriate Floor Plates

The proposed massing of the development has also been driven by the delivery of market appropriate floor plates. Through the release of The Greater Sydney Region Plan 'A Metropolis of Three Cities' and the Central City District Plan, it is abundantly clear that the GSC in conjunction with the NSW State Government is prioritising the growth of Greater Western Sydney through the delivery of internationally competitive health, education, research and innovation precincts.

The proposed development seeks to provide 30,700m^2 of commercial, educational and retail floor space, which is a significant contribution to the growth and transformation of Westmead and Greater Western Sydney at large. As detailed in **Section 3.6.1,** WSU has committed to four levels within the eastern building and is seeking to bring together key WSU institutes and provide opportunities for colocation with health, education and commercial partners.

In developing the proposed floor plates, Architectus has noted that workplace and educational teaching space design and strategy is constantly evolving, as such floor plates must be future proofed to attract and maintain key tenants. Key future proofing strategies that have driven the proposed floor plates include:

- Large Contiguous Spaces;
- Ability to Subdivide;
- Ability to Connect Vertically; and
- Access to Outdoor Spaces.

In light of these principles, the current approved envelopes (accommodating the same 30,700m^2 of GFA) were considered sub-optimal and therefore warranted such departures.

4.5.2 Building Facades and Articulation

A building façade strategy has been developed by Architectus and is detailed within the Design Report at **Appendix B**. The building facades and expressions have undergone design development in consultation with NBRS Heritage to ensure the proposal appropriately responds to the heritage significant items in the vicinity of the development, namely the St Vincent's building.

As illustrated at **Figure 41** and **Figure 42** above, the building base design has been defined by its materiality and the base zone generally aligns with the datum of the St Vincent's building, understanding that perfect alignment could not be achieved with the steep site cross fall.

As noted in the Design Report at **Appendix B**, the articulation of the towers has developed through the lens of both the taxonomy research and the site genealogy. As noticed from the street, the modular pattern stretches and shifts over two floors respective of the surrounding heights and once again acknowledging an interpretation of St Vincents building. The colourisation of the solid modules is given two subtle yet distinct tones, reinterpreted from St Vincents building brick façade and terracotta roof tiles (refer to **Figure 45**).

Whilst the proposal has taken cues from the St Vincents building, the site's prominent street corner location warrants buildings with their own identity. Accordingly, the proposal presents a contemporary and quality architectural language that will make a positive contribution to the Westmead streetscape.

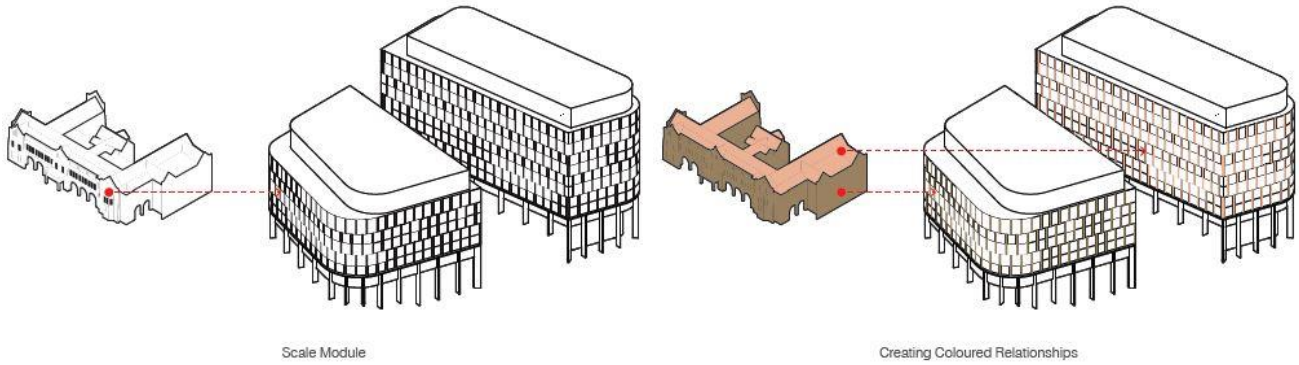


Figure 45: Façade elements relationship with the St Vincents building

Source: Architectus

4.5.3 Landscape and Public Domain

A detailed Landscape scheme has been prepared by OCULUS and is illustrated in the Landscape Plans in **Appendix J** and the Landscape Design Report in **Appendix K.** The landscape scheme has been designed to integrate with the future open space network and enhance the proposed built form.

The DCP stipulates that landscaped areas shall constitute a minimum of 40% (including deep soil) of the site area and deep soil landscape area shall constitute a minimum of 30% of the site area. It is noted that this control is in relation to the entire site area within the WSU Westmead Precinct (Lots 1-5).

As illustrated on the Architectural Drawings in **Appendix A,** the basement largely extends to the boundary of Lot 2, which limits the opportunity for effective deep soil. This is however consistent with the current approval in which no deep soil was envisaged for Lot 2. The provision of on-site detention will minimise the need for infiltration through deep soil zones and the extensive area of playing fields surrounding the site will allow infiltration for groundwater recharge in the precinct.

The proposal makes a significant contribution to the public domain through the provision of a public plaza. The proposed plaza contains 1,672m^2 of publicly accessible area and includes 2,967m^2 of landscaping and public domain. Of this area, 564m^2 is considered landscaped area in accordance with Council's DCP definition or 716m^2 if the turfed areas within the plaza are included. The orientation of the public plaza with an open northern and southern linkage ensures the space is permeable, achieves good solar access and views and vistas internally and externally of the site. The landscape quality of the development will be further enhanced through the provision of landscaped rooftop terraces to be delivered as part of the tenant fit out approvals.

4.6 Impact on Adjoining Properties

The scale of the proposed development does not result in any unreasonable impacts on the surrounding properties in terms of overshadowing, views and privacy. This is further discussed below with supporting analysis in the Design Report at **Appendix B.**

4.6.1 Overshadowing

Architectus has prepared a shadow analysis of the proposal which is provided in **Appendix A.** This analysis illustrates the shadow cast by the proposal on winter solstice at hourly intervals between 9am and 3pm, therefore demonstrating the worst-case scenario. The shadow analysis also overlays the shadow cast by the approved building envelopes for comparison.

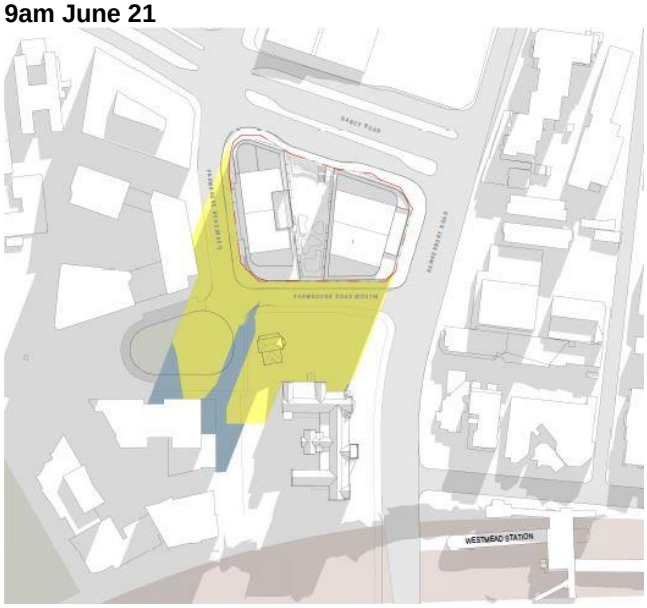
The shadow diagrams demonstrate that the proposal will be acceptable from an overshadowing perspective as:

- it does not contribute to any significant additional overshadowing to the surrounding area when compared to the approved building envelopes;
- the overshadowing of the public open space to the south west is largely consistent with the approved building envelopes;
- it does not overshadow the residential development on Lot 5 from 10am onwards, therefore has a minimal impact on the solar access amenity to the future residential apartments on this lot;
- it will not preclude a high level of solar access to the central plaza; and
- the Heritage Impact Statement prepared by NBRS (**Appendix S**) concludes that the extent of additional overshadowing will not impact upon the heritage significance of the St Vincent's building and it's surrounds (refer to **Section 4.8**).

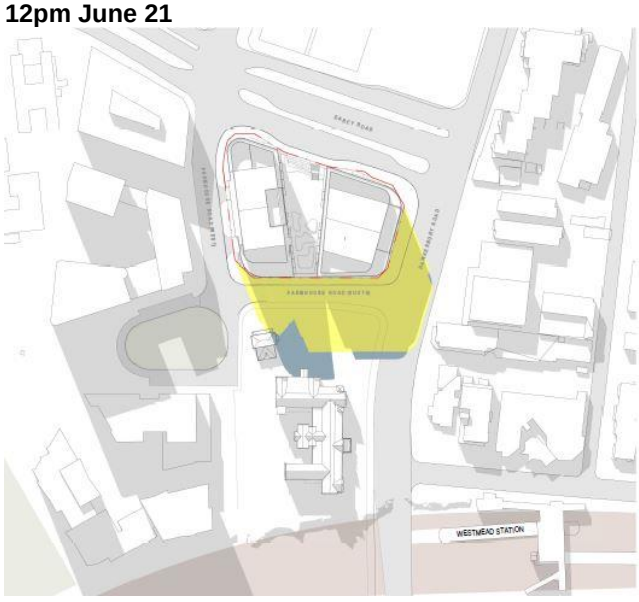
It is also noted that the area of Westmead is in a period of urban transition and new development is being stimulated by the provision of a future Westmead Metro Station and Light Rail Station. As such, it is not unreasonable to expect additional overshadowing as the area densifies in accordance with its strategic potential.

On the whole, the overshadowing impact of the proposal on surrounding properties external to the site is considered reasonable in the circumstances and in line with expectations to deliver a world class innovation, health and education hub. Considering the site's future high-density context, the minimal increase in overshadowing from the approved envelopes and the absence of any significant additional overshadowing to significant public places or buildings, shadow impacts are neither significant nor unreasonable in the circumstances.

9am June 21



12pm June 21



3pm June 21

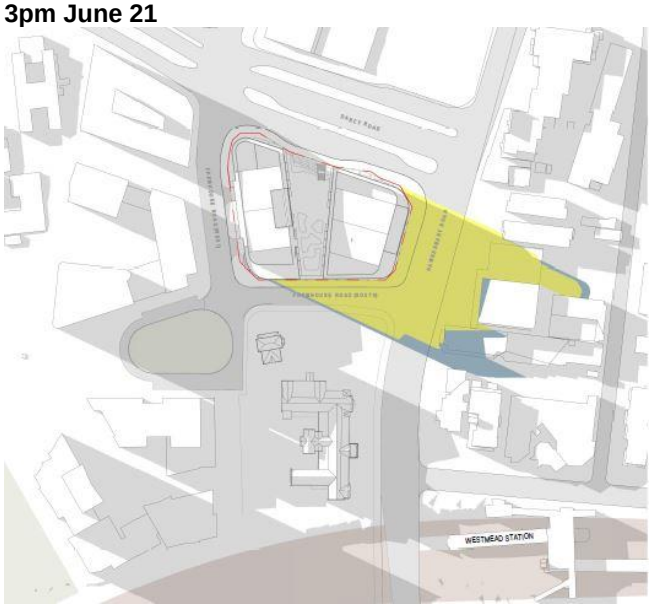


Figure 46: Winter Solstice shadow diagrams

Source: Architectus

4.6.2 Privacy and Views

The proposed development is commercial in nature, and the buildings are provided with a separation ranging from 12m-28m. As such, privacy impacts internal to the site are considered negligible. The nearest residential development will be delivered on Lot 4 to the west of the site. The approved development on Lot 4 under DA/1271/2016 includes residential apartments with an eastern outlook to the proposed development, as illustrated at **Figure 43**.

The approved building on Lot 4 extends to a maximum height of 21 storeys with the eastern component comprising 10 storeys. It is noted that this development achieved a building height up to 72.15m or an 80.3% variation to the 40m height control.

This building benefits from an approximate 23m separation to the proposed western building due to the road reserve and the approved eastern boundary setback. Both the site specific DCP and the current approval allow for a development to be built to the western boundary. Considering the approximate separation is 23m from a residential to a commercial use, it is determined that the proposal will allow for an appropriate degree of separation and reasonable levels of external and internal visual privacy to the future residential units.

Whilst Lot 2 is currently vacant, it is not reasonable nor the intent of the applicable planning controls for this site to remain vacant, and therefore allowing private views across the site. It is considered that the proposal will have an overall positive visual impact on the locality, providing a vibrant mixed-use campus of high architectural quality, thereby contributing to the Westmead urban transformation. Furthermore, the proposal is a significant visual improvement on the current site situation which includes vacant land being used as an informal car park.

Figure 47: Lot 4 interface with Lot 2

Source: Turner with additions

4.7 Transport and Accessibility

A Traffic Impact Assessment has been prepared by PTC and is provided at **Appendix BB.** The assessment includes an assessment of the operational traffic generation including cumulative impacts. A summary of the assessment and proposed mitigation measures are provided below.

4.7.1 Existing Traffic Conditions

Key intersections within the surrounding road network comprise:

- Darcy Road / Westmead Hospital Entrance / Farmhouse Road – Four-arm signalised intersection;
- Hawkesbury Road / Darcy Road – Three-arm signalised intersection; and
- Hawkesbury Road / Farmhouse Road – Unsignalised T-intersection.

These intersections were selected based on proximity and the intended route of travel to and from the site. The operational performance of the key surrounding intersections under the existing traffic flows, geometry and traffic signal phasing circumstances has been assessed using SIDRA modelling. PTC's modelling indicates that during morning and afternoon peak periods, surrounding key intersections are at good operation, with acceptable delays and spare capacity.

4.7.2 Traffic Generation

Based on the trip generation rates specified in the RMS "Guide to Traffic Generating Developments", PTC has determined that the proposal will generate:

- 388 Morning peak hour vehicle trips; and
- 291 Evening peak hour vehicle trips.

In accordance with RMS "Guide to Traffic Generating Developments", the vehicle trips generated are based on the total floor space allocated to each use within the development. Notwithstanding this, PTC has determined that a more accurate representation of the post development traffic generation should be based on the number of parking bays provided in the proposal, or 137 car parking spaces, which equates to:

- 58 Morning peak hour vehicle trips; and
- 44 Evening peak hour vehicle trips.

The projected traffic generations and distribution have been applied to the surveyed intersections and intersection modelling has been undertaken using SIDRA modelling which concludes that during both the morning and afternoon peak periods, the key intersections identified above will continue to operate similar to the existing situation, whereby the level of service for all sites remain at B rating Level of Service (good operation, with acceptable delays and spare capacity). In summary, the proposed development is not expected to generate any noticeable impact on the operation of the road network in the context of the existing and proposed traffic activity.

In addition to the above, traffic generation is considered to be further ameliorated as:

- Westmead Station, which is located within immediate walking distance of the site and is serviced by the Western, Cumberland and Blue Mountains Lines which provide access to locations throughout Sydney. Services run every 3 to 10 minutes during peak periods;
- The Westmead Stop on the Parramatta Light Rail line is located opposite the site on Hawkesbury Road and the future Westmead Metro station will be in the vicinity of the site; and
- The proposal provides two large End of Trip facilities to encourage future tenants to use more sustainable forms of transportation such as cycling.
- A Green Travel Plan has been prepared by PTC to provide a series of measures promoting and reducing the reliance of private car usage and encourage the uptake of daily business in a more sustainable way.

4.7.3 Parking

The parking provision assessment has been undertaken in accordance with the site specific DPC. Further, the provision requirements for accessible parking spaces have been referenced from the Building Code of Australia (BCA) 2006. It is noted that unlike the main body of the DCP, the site specific DCP sets **maximum** car parking rates for the site, reflecting the highly serviced nature of the precinct. The applicable car parking rates and the proposed parking is set out within **Table 11** below.

Table 11: Parking rates and proposed quantum

DCP Parking Rate	Required	Proposed
Commercial: 1 space every 100m² of GFA	243 spaces (max)	107
Retail: 1 space every 30m² of GFA	66 spaces (max)	
Childcare: 1 space every 4 children	25 spaces (max)	25
Accessible 1 accessible space every 100 car parking spaces	5	5
Motorcycle: 1 per 25 car parking spaces	6	6
Bicycle: Retail 1 per 200m^2 GFA; Childcare 1 per 25 children in attendance; and Commercial 1 per 200m² GFA.	132	180

4.7.4 Access

The access and parking arrangements have been designed in accordance with the requirements of Section 2 of AS2890.1. The car park entrance is ideally located to maximise its distance from key intersections with Hawkesbury Road and Darcy Road, and has been assessed to comply with the required distances to accommodate vehicles into and out of the site safely.

The car park is intended to serve the occupants and visitors of the commercial, childcare, and costumers of the retail component of the development. An access control system is envisioned to be put in place by way of boom gates, ticket machines, and access card systems.

4.7.5 Loading and Servicing

A loading dock with a capacity of accommodating 2 Medium Rigid Vehicles (MRVs), which can be up to 8.8 metres in length and 3.5 metres in height, is located at the lower ground level of the development, accessed via Farmhouse Road (West). Sufficient room is provided to allow the manoeuvre of the service vehicles into the loading dock and enter and exit the site in a forward manner.

In addition to the 2 MRV bays within the loading dock, 2 courier spaces are also provided within the car park located at the mezzanine level. These 2 spaces can accommodate a B99 delivery van (up to 6.0m long). These can be accessed via the car park driveway on Farmhouse Road (West). It is noted that the proposed development's waste collection shall be serviced by a private contractor. The servicing of the development, including waste collection, will be undertaken by vehicles up to 8.8m in length, and 3.5m in height.

4.8 Heritage

A Heritage Impact Statement (HIS) has been prepared by NBRS and is provided at **Appendix S.** The HIS includes a description of the history of the site, the established significance of the locality and important heritage items and an assessment of the potential heritage impact of the proposal on surrounding items of heritage significance, with particular emphasis on the relationship with the St Vincent's Building and the Farmhouse building within Lot 1 to the south.

As outlined at **Section 2.2.2**, the site is listed as an item of local heritage significance on Schedule 5 of the PLEP 2011 as Western Sydney University (I628) and Victorian Residence (I629) (refer to **Figure 47**). The listings do not take into consideration the subdivision of the site and the subject site is also mapped. Notwithstanding this, the DCP identifies the heritage curtilage for the heritage significant items (refer to **Figure 48**).

Figure 48: Heritage map extract

Source: PLEP 2011

Figure 49: Curtilage of the Buildings of Heritage Significance within Lot 1

Source: PDCP 2011

Following a thorough review of all aspects of the proposal, NBRS has determined that the proposed development will not result in any adverse impacts to the heritage significance of the surrounding heritage context and will in fact provide ongoing benefits to the setting, particularly considering the current site situation.

Specifically, NBRS conclude that the proposal will have an acceptable impact for the following reasons:

- The open space between the two proposed buildings and the colonnade area on the ground floor form a strong visual connection between the proposed site and the adjacent heritage buildings by framing the views to the building from the site;
- The proposed buildings are located away from the heritage buildings, separated by a new road allowing for a minimum separation to the heritage curtilage of approximately 22m;
- The separate lot with the heritage buildings has enough curtilage to retain a landscape setting;
- The approved envelopes under DA/571/2014 overshadow the heritage items within Lot 1, therefore partial overshadowing is not considered to create any unacceptable impacts to the heritage value of the items and its surrounding curtilage.

Accordingly, NBRS recommends that Council should have no hesitation supporting the application on heritage grounds.

4.9 Geotechnical

A preliminary Geotechnical Investigation has been carried out by Douglas Partners and is included as **Appendix F.** The Report presents the findings of a desktop study, which determines the likely geotechnical, soil and groundwater characteristics of the site. The report also draws upon previous geotechnical investigations carried out at the Westmead Precinct in making its assessment.

Douglas has considered the potential impacts of the development, namely the basement structure on the ground water table. It is noted that the proposed basement (RL 26.7) and expected bulk excavation level (about RL 26.2) are generally above the measured water level in the wells both on and within 50 m of the site. The exception is MW2 (Geotechnique, 2012), which is located 45 m upslope, as it recorded a level of RL 27.5.

Based on this, Douglas determine that groundwater is not expected to be encountered in the bulk excavation on site during periods of 'normal' rainfall. Groundwater may be encountered in the deepest excavations (i.e. lift pits) following periods of sustained high rainfall, when the groundwater level may temporarily rise. It is expected that minor seepage flows may enter the basement excavation, however this would be mitigated with sump and pump systems and therefore a drained basement is suitable for the site without adverse impacts to surrounding groundwater systems.

Douglas recommend that the new groundwater monitoring wells be installed on the site to 3m below the proposed bulk excavation level and continuous monitoring of water levels will be undertaken throughout the detailed design phase.

4.10 Structural Adequacy

A Structural Report has been prepared by RBG to assess the structural adequacy of the new building and also assess any potential impacts of the construction of the building on existing rail infrastructure in the vicinity of the site (refer to **Appendix CC**). RBG conclude that the proposed works are structurally feasible.

4.11 Contamination

The site has been subject to comprehensive assessment, remediation and validation from 2008 to 2016 as described in the Site Audit Statement (SAS) prepared by JBS&G provided at **Appendix O**. Previous environmental site investigations identified potential contaminants resulting from past and present activities, as well as the presence of fill materials, included the following:

- Metals;
- Total petroleum hydrocarbons (TPH);
- Benzene, toluene, ethylbenzene and xylenes (BTEX);
- Polycyclic aromatic hydrocarbons (PAHs);
- Volatile organic compounds (VOCs);
- Organochlorine pesticides (OCPs);
- Polychlorinated biphenyls (PCBs); and
- Asbestos.

Accordingly, Remedial Action Plan (RAP) was prepared in 2012 and site validation works were carried out in 2016 to ensure the site was suitable for future use. The SAS confirms that remediation was carried out in accordance with the RAP, and the site was validated to the standards required by that RAP. Furthermore that:

- There were no levels of contaminants of potential concern (i.e., metals, TPH, BTEX, PAHs, VOCs, OCPs, PCBs and asbestos) in soil and groundwater identified at the subject site, which require remediation or management under the proposed residential with minimal soil access, commercial and open space land use;
- There is no evidence of migration of contaminants from the site which is likely to result in any unacceptable risks to surrounding human or ecological receptors;
- The site is considered suitable for the proposed land use (i.e. residential with minimal soil access, commercial and open space); and
- The land use suitability is not subject to any ongoing monitoring or managements requirements.

Whilst the Site Audit Statement does not make specific reference to a child care centre use, it is noted that the proposed child care centre is on Level 1 of the Western Building and the outdoor play area is contained within the building envelope.

4.12 Wind Impact

A Wind Impact Assessment has been prepared by Windtech and is provided at **Appendix DD**. This assessment has studied the existing wind conditions in the locality and the potential effect of the proposed building. In particular, Windtech have examined the likely effect of wind on the various trafficable outdoor areas within and surrounding the site.

The results of the wind analysis have confirmed that it is not expected that the wind conditions at the site will pose any safety risks to pedestrians in the area. However, several factors will impact on the pedestrian comfort within the surrounding footpaths, building corners and central plaza. As a result, Windtech recommends treatments such as:

- Provision of pedestrian awnings along the eastern and southern sides of the western building, and along the western and southern sides of the eastern building; and
- Street tree planting and plaza landscaping including trees capable of growing to a height of 4m with a 4m wide canopy.

As illustrated on the Architectural Drawings at **Appendix A** and the Landscape Drawings at **Appendix K**, these mitigation features have been incorporated into the proposed design, as such suitable wind conditions are expected to be experienced by pedestrians in and around the site.

4.13 Water Cycle Management

An Overland Flow Assessment and Stormwater Management Report has been prepared by RBG (**Appendix T**) which provides a full assessment of the proposed water cycle management methodologies for the site in conjunction with the proposed development. The key sections of these reports are addressed below.

4.13.1 Stormwater

The majority of the runoff from the development is to be captured and detained by an On-Site Detention (OSD) system using gravity flow. This system is comprised of rainwater outlets, pipes and pits. In accordance with Council standards, the OSD system has been designed to cater for all storm durations up to and including the 1% Annual Exceedance Probability (AEP).

The proposed OSD design follows the Council's guidelines, with the OSD sizing calculated using the "On-Site Detention Calculation Sheet for Upper Parramatta River Catchment HED Secondary Outlet" Spreadsheet, provided by the City of Parramatta. A key set up to this design has been implementing the City of Parramatta's recent approach to combined OSD's and WSUD devices. That is by designing a separate chamber for the WSUD device, capable of treating and holding the flow from a 3-month storm.

4.13.2 Water Quality

A proprietary water quality treatment system has been utilised to ensure that the development improves the quality of stormwater leaving the site. Modelling of the proposed treatment train performance has occurred using the computer software "MUSIC". A filter system is proposed for the detention tank which is effective at removing total suspended solids, total phosphorus, and total nitrogen to reach the reduction targets. As per Council's recent approach, the filter system will be installed into a separate chamber within the OSD capable of treating a 3-month flow.

To maintain water quality during the construction of the project, erosion and sediment control measures will be installed. Soil management measures shall follow the Landcom guidelines "Managing Urban Stormwater Runoff: Soils and Construction ("Blue Book")", City of Parramatta DCP and Drainage Standards. Refer to the Erosion and Sediment Control plan included in **Appendix T** for more information.

4.14 Waste Management

An Operational Waste Management Assessment has been prepared for the development by Mack Group (**Appendix M**). The report outlines the anticipated amount of waste and recycling generated by the proposal and discusses the management of waste removal. The report has been prepared having regard to the City of Parramatta Council's DCP 2011 - Waste Management Guidelines 2016. It also makes reference to the Department of Environment & Climate Change "Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities", in particular their waste rates.

In summary:

- In line with the type of development being proposed there will be one waste management system in place. The waste stores are located on the lower ground level. The waste collection trucks will enter the site from Farmhouse Road West and will proceed to the waste loading zone near the waste stores.
- The Centre management will provide guidelines to the tenants which will outline the waste management procedures. These will include the management of recyclable waste, waste separation and waste minimization.
- The waste will be initially collected in waste stores located within each tenancy. The tenants will be responsible for the design of a fit-out that incorporates their waste storage. The waste will be transported by the tenants' cleaners, via the lift, to their dedicated waste area at the loading dock.
- A cool room for organic waste will be provided. Oil waste will be collected in mobile units in each tenancy. Nappy waste will be held in dedicated bins in the Childcare Centre and will be collected by a separate contractor. Some medical waste and office waste will need to be held in secure bins to be collected by a separate contractor.
- A shared bin wash space will be provided.
- The Centre management will arrange for the collection of the different types of waste. The waste will be collected by private contractors.

4.15 Noise and Vibration

A Noise Impact Assessment has been prepared for the proposed development by Floth (**Appendix U**). The assessment provides key acoustic considerations for the development based on the surrounding environment and local recorded acoustic conditions. The noise intrusion assessment showed that the dominant noise sources affecting the proposed development are road traffic noise and noise from the future Parramatta Light Rail network. Glazing recommendations to achieve satisfactory internal noise levels specified in AS/NZS 2107 have been provided within the report.

The report determines that the environmental noise emission sources from the proposed development will consist of:

- Mechanical plant and equipment on the rooftop and rooftop plant rooms;
- Entertainment noise associated with any patronage noise from retail tenancies (e.g. potential outdoor alfresco dining);
- Potential noise impact on surrounding noise sensitive receivers from additional road traffic associated with the proposed development,
- Noise emission from the proposed childcare external play area to surrounding noise sensitive receivers.

The noise predictions contained within the noise impact report show that the mechanical plant noise emissions can be controlled to acceptable levels at the nearest noise sensitive receivers using standard design practices. Detailed noise predictions will be conducted during the detailed design phases of the project to ensure that the mechanical plant noise emissions satisfy the noise limits at the noise sensitive receivers.

Noise emission from future outdoor dining areas associated with the ground level retail tenancies was found to comply with the daytime limits (i.e. 7am to midnight) as defined by the NSW Office of Liquor, Gaming and Racing, even for a 'worst-case' noise scenario. However, it was found that the noise criteria during the night period (i.e. midnight to 7am) was predicted to be exceeded for this 'worst-case' noise scenario, and as such, the report recommends that any outdoor dining be limited to 7am to midnight unless an acoustic assessment is conducted during the fit-out that considers additional noise control measures.

Noise from additional traffic on local roads associated with the proposed development was found to be negligible. Finally, noise emissions from the external play area of the proposed child care centre were found to be acceptable at the surrounding noise sensitive receivers and commercial premises. In conclusion, the noise impact assessment has shown that compliance with the relevant long-term noise criteria can be achieved.

4.16 Tree Removal

An Arboricutural Impact Assessment has been prepared by The Ents Tree Consultancy and is provided at **Appendix H**. Currently, the site has 21 street trees located at the periphery of the site. The street trees along the new internal road were planted as part of DA/571/2014, with the more mature trees located at the Darcy Road and Hawkesbury Road frontages having been planted some time ago.

To facilitate construction access and the proposed development, this application seeks consent to remove 11 of the existing 21 trees, specifically those located along the Darcy Road and Hawkesbury Road frontages. The Ents Tree Consultancy has identified these trees as 'Average' health and structure rating with an 'L' IACA Landscape value and S.T.A.R.S rating in which the trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.

The trees to be removed will be offset by a comprehensive landscape scheme including street tree planting as illustrated on the Landscape Plans at **Appendix J**. The proposed landscaping scheme will maintain and embellish the landscape character of the area.

The trees nominated to be retained, will be retained using sympathetic building activities to allow the works to proceed. Tree's that are nominated to be retained will be kept in good condition for the duration of the works using the Australian Standard AS4970 2009 Protection of trees on development sites for the basis of all tree management practices.

4.17 Crime and Public Safety

A Crime Prevention Through Environmental Design (CPTED) assessment has been undertaken by Barker Ryan Stewart and is provided at **Appendix AA**. This report assesses the elements of crime, and the fear of crime that may be associated with the redevelopment of the site to accommodate the proposal. The following tasks were undertaken in the preparation of this assessment:

- Collection and analysis of local and NSW State crime statistics from the Bureau of Crime Statistics and Research; and
- A crime risk assessment, in accordance with the current NSW policy and practice, of the following regulation and assessment principles:

  1. Surveillance
  2. Access Control
  3. Territorial reinforcement
  4. Space Management

The assessment finds the proposal suitable with regard to crime prevention and public safety, subject to recommendations. These recommendations relate to specific detailed design components to mitigate the impacts of crime and ensure occupants of the development are accommodated in a safe and positive environment.

- Surveillance:
  - Lighting should be in accordance with Australian Standards;
  - Landscaping should be well maintained to a height that will not allow offender concealment; and
  - CCTV to be implemented at entry points and use of transparent glazing for ground level tenancies.
- Access Control:
  - Provide bollards, planter boxes or architectural features to prevent vehicular ram raid;
  - Avoid planting large trees next to buildings or terraces to prevent “natural ladders”;
  - Use of swipe cards and locks at appropriate locations as well as signage to reinforce restricted access; and
  - Ensure use of high-quality locking systems and reinforced glass to all windows and doors.
- Territorial Reinforcement
  - Engage contractors to maintain landscaping and communal areas
  - Clearly delineate the car park area through signage, boom gates, physical separation and other security measures
  - Provide signage to users of the building and surrounds which identify public areas and intended places of gathering, restricted areas and way finding through the building.
- Space Management
  - Implementation of an on-going maintenance plan for waste, vandalism, toilets, community facilities, landscaping, fencing and lighting.
  - Facilities manager to develop an operational plan of management.

Overall it is considered that the proposed mixed-use development, which will generate additional retail activity and foot traffic in the immediate vicinity of the site, will make a positive contribution to security and perceptions of safety in the local area. The recommendations listed above and detailed further within the CPTED Report will be reviewed and integrated into the detailed design of the development where appropriate.

4.18 Environmentally Sustainable Development

The incorporation of Environmentally Sustainable Development (ESD) principles into the proposal has been ongoing during the preliminary design of the building and will continue through the detailed design. Arup has prepared an Energy Efficiency Report addressing the principles and ways in which sustainable development initiatives will be incorporated into the future development (refer to **Appendix Y**).

The development is targeting a 5 Star Green Star rating and will achieve a minimum 5 Stars NABERS Energy rating for the base building.

Based on the current design strategy, Floth has confirmed that the development will achieve a minimum performance requirement of 4 star rating and is capable of achieving the 5 star Green Star rating. The use of specific ESD initiatives in the future construction and operating of the building will be subject to further detailed design.

4.19 Aeronautical Impact

An Aeronautical Impact Assessment has been prepared by Landrum & Brown and is provided at **Appendix EE.** The development site is located within the Visual Approach Area (Helicopter (VAAH)) associated with the instrument flight procedures published for the Westmead Hospital. Based on an assessment of the surrounding aeronautical operations, Landrum and Brown conclude that the proposal:

- will not infringe the approach and departure flight paths associated with the Westmead Hospital;
- will not infringe the PANS OPS surfaces for Westmead Hospital;
- will not infringe the BRA for navigation aids at Sydney or Bankstown Airports;
- will not infringe the OLS and PANS OPS surfaces for Sydney or Bankstown Airports, or any other airport in the vicinity;
- will not infringe the ATC Radar clearance planes; or
- will not infringe the RTCC protection surface above the site.

A separate notification to Westmead Hospital should be made at a later date for the construction of cranes, once height requirements and duration of operations are established.

4.20 Construction Impacts

A Construction Management Plan has been prepared by Solutions Consulting Australia and is included at **Appendix X**. The CMP details the full range of actions and staging of construction to be undertaken in order to ameliorate potential impacts on the relevant stakeholders whilst maintaining a safe, productive and efficient construction site. In summary, the CMP addresses:

- Materials handling;
- Site access, accommodation and amenities;
- Protection of surrounding buildings;
- Public amenity, safety and pedestrian management;
- Community management;
- Workplace health and safety;
- Traffic management; and
- Environmental management.

The CMP will be a responsive document which continues to be refined throughout the construction phases of the proposed development.

4.21 Building Code Compliance

The following reports confirm that the proposed development is capable of achieving compliance with the requirements of the Building Code of Australia (BCA) and other relevant codes and standards:

- BCA Report prepared by Steve Watson Partners (see **Appendix FF**);
- Access Report prepared by MGA (see **Appendix Z**); and
- Fire Engineering Statement prepared by Wood and Grieve (see **Appendix GG**).

4.22 Economy and Employment

Through the release of The Greater Sydney Region Plan 'A Metropolis of Three Cities' and the Central City District Plan, it is clear that the GSC in conjunction with the NSW State Government are prioritising the growth of the Greater Western Sydney through the delivery of internationally competitive health, education, research and innovation precincts.

Westmead represents Australia's largest concentration of health services co-located with world leading education and medical research. The Westmead area is currently presented with opportunities for renewal and urban transformation to deliver growth in employment and the economy of Greater Western Sydney. The proposed development aligns with the GSC's and the NSW Governments strategic vision by delivering a benchmark commercial campus incorporating a research hub with an emphasis on health and well-being.

The provision of retail, commercial and educational floorspace for one of Australia's largest universities, in this location will help underpin the economic success of the health, education and service sectors and will have significant positive flow on effects to all aspects of the State's economy.

WSU are a major employer within the precinct. The development will help lift the profile of Westmead as a diverse provider of educational and professional floorspace for highly skilled and collaborative industries. Further, the project will generate on-going financial and economic benefits for the surrounding precinct and for Sydney in general.

4.23 Site Suitability

Having regard to the characteristics of the site and its location, the proposed development is considered suitable for the site as it:

- will contribute to urban renewal of Parramatta's CBD fringe area;
- will contribute to the on-going development of a diverse and vibrant education, research and health precinct;
- is capable of being developed in a manner that will minimise impacts to the natural, historical, and environmental qualities of the setting;
- will not result in any adverse environmental impacts and any impact can be appropriately managed and mitigated;

The site is considered suitable for the proposed development in that:

- the location of the site in the vicinity of existing and future transport, other professional, health and educational institutions is considered to be an optimal location for development;
- the site is currently vacant, underutilised and are in need of urban renewal and improved connections and integration with the surrounding locality;
- it is well served by frequent existing and planned public transport; and
- it is in close proximity to high quality public open space to foster a good lifestyle for new workers within the precinct.

4.24 Public Interest

In additional to delivering a world class educational and research workplace, the project is also a major urban renewal undertaking that will deliver significant public benefit as it will:

- Contribute to on-going redevelopment of the Westmead precinct to strengthen it as one of Australia's leading health, research and education precincts;
- Deliver world-class working, learning, training and collaboration space for the anchor tenant of WSU;
- Enhance connectivity around and through the precinct and optimise the quality of the public domain;
- Improve the relationship between the central plaza and the heritage significant buildings within Lot 1 by opening up sight lines;

- Demonstrate excellence in design and environmental sustainability;
- Facilitate high levels of public transport usage for workers and visitors of the precinct;
- Maximise the direct and indirect economic benefits to NSW from the project;
- Deliver a rejuvenated WSU precinct that preserves and embraces the adjoining rich heritage;
- Create a more vibrant and activated precinct that provides a range of day to day services and offerings for employees, visitors and the local community; and
- Create new jobs during the construction and operation phases of the development.

5.0 Conclusion

The proposed development seeks approval for:

- Site preparation works including bulk excavation and tree removal;
- Construction and use of two basement levels;
- Construction and use of an eight storey building ('east building') comprising:
  - Ground level retail tenancies;
  - Three commercial levels;
  - The dual use of use of three full levels (1-3), and one partial level (level 7) as tertiary education or commercial floor space (allowing the flexibility for either use);
  - Rooftop terrace;
- Construction and use of an eleven storey building ('west building') comprising:
  - Lower ground and ground level retail tenancies;
  - Level 1 child care centre;
  - Eight commercial levels and a partial ninth commercial level; and
  - Rooftop terrace;
- Landscaping and public domain works including the provision of a public plaza running north to south through the site, connecting Darcy Road to the north through to Farmhouse Road to the south;
- Signage zones (including top of building signage and business identification signage); and
- Extension and augmentation of services and infrastructure as required.

The proposed development is largely consistent with the relevant environmental planning instruments and does not give rise to any adverse environmental impacts in respect to overshadowing, privacy, traffic, heritage, contamination, stormwater, waste, noise, crime, ESD, construction impacts, access and fire safety impacts. Where variations from the building height and FSR development standards provided by the PLEP are requested, these variations are well supported and are not inconsistent with the scale of the variations associated with other recently approved developments within the WSU Westmead precinct.

The proposed development that is the subject of this development application has planning merit in the following respects:

- It is permissible with consent and meets the objectives of the relevant planning controls for the site;
- It will not result in unreasonable or unmanageable environmental impacts;
- It will revitalise a significantly underutilised site within the Parramatta LGA;
- It contains large employment generating uses in proximity to both existing a planning transport infrastructure, consistent with transit oriented development principles;
- It generates a significant public benefit through the provision of a large public plaza with a strong visual connection to the site's rich heritage context;
- It generates market appropriate floor plates to encourage tenants to locate within the Westmead precinct;
- Design excellence has been achieved through a high quality architectural design accompanied by a well-considered selection of materials and a highly resolved built form which responds to the opportunities and constraints of the site;
- It will contribute to the on-going redevelopment of the Westmead precinct to strengthen it as one of Australia's leading health, research and education precincts; and
- It provides high-quality spaces and public services including the landscaped public plaza and child care centre and retail tenancies available to tenants and the surrounding community.

In light of the merits of the proposed development and in the absence of any significant environmental impacts, it is without hesitation that we respectfully recommend this application for development consent.