ENVIRONMENTAL IMPACT STATEMENT

Wee Hur Student Housing
90-102 Regent Street,
Redfern

Prepared for
THE TRUST COMPANY (AUSTRALIA) LIMITED ATF
WEE HUR REGENT TRUST
4 November 2020

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Jennifer Cooper
Consultant	Georgia McKenzie
Project Code	P0009731
Report Number	Final

urbis.com.au

CONTENTS

FIGURES

PICTURES

TABLES

SIGNED DECLARATION

SUBMISSION OF ENVIRONMENTAL IMPACT STATEMENT

Environment Assessment prepared by:

Names:	Jennifer Cooper, Bachelor of Town Planning (Honours), University of New South Wales Georgia McKenzie, Bachelor of City Planning (Honours), University of New South Wales
Address:	Urbis Pty Ltd Level 8, 123 Pitt Street Sydney NSW 2000
In respect of:	SSD-10382: Student Accommodation at 90-102 Regent Street, Redfern

Applicant and Land Details:

Applicant:	The Trust Company (Australia) Limited ATF Wee Hur Regent Trust
Applicant address	39 Kim Keat Road, Wee Hur Building, Singapore 328814
Land to be developed:	90- 102 Regent Street, Redfern NSW 2016
Legal description:	Lot 1, Section 2, DP3954; Lot 2, Section 2, DP3954; Lot 3, Section 2, DP3954; Lot 1, DP184335; SP57425
Project Summary	Demolition of existing buildings and structures and construction of an 18-storey mixed use development including ground floor retail premises and student accommodation including 408 beds, indoor and outdoor communal spaces, bicycle parking and ancillary facilities

We certify that the content of the Environmental Impact Statement, to the best of our knowledge, has been prepared:

- In accordance with the Schedule 2 of the Environmental Planning and Assessment Regulation 2000;
- Contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which that statement relates; and
- The information contained in this statement is neither false nor misleading.

Name/Position:	Jennifer Cooper, Director	Georgia McKenzie, Consultant
Signature:		
Date:	4 November 2020	4 November 2020

GLOSSARY AND ABBREVIATIONS

Reference	Description
ACHAR	Aboriginal Cultural Heritage Assessment Report
AQIA	Air Quality Impact Assessment
ARH SEPP	*State Significant Environmental Planning Policy (Affordable Rental Housing) 2009*
ARI	Average Recurrence Interval
BAM	Biodiversity Assessment Method
BCA	Building Code of Australia
BC Act	*Biodiversity Conservation Act 2016*
BC Reg	*Biodiversity Conservation Regulation 2017*
BDAR	Biodiversity Development Assessment Report
BEP	*Redfern Waterloo Built Environment Plan Stage 1*
CEMP	Construction Environmental Management Plan
CMP	Construction Management Plan
CPTED	Crime Prevention Through Environmental Design
CTMP	Construction Traffic Management Plan
DCP	Development Control Plan
DPIE	NSW Department of Planning, Industry and Environment
DSI	Detailed Site Investigation
DTS	Deemed to Satisfy
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
ESD	Ecologically Sustainable Development
GANSW	Government Architect NSW
GTP	Green Travel Plan

Reference	Description
LEP	Local Environmental Plan
LSPS	*Local Strategic Planning Statement*
MNES	Matter of National Environmental Significance
NCC	National Construction Code
NPW	*National Parks and Wildlife Act 1974*
ODC	On-Site Detention Tank
OEMP	Operational Environmental Management Plan
OMP	Operational Management Plan
PAD	Potential Archaeological Deposit
PBSA	Purpose-built student accommodation
PMF	Probable Maximum Flood
POM	Plan of Management
RAP	Remediation Action Plan
RMS Guide	RMS *Guide to Traffic Generating Developments*
SAC	Site Assessment Criteria
SDRP	State Design Review Panel
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 55	*State Environmental Planning Policy No 55 – Remediation of Land*
Site	Lot 1, Section 2, DP3954; Lot 2, Section 2, DP3954; Lot 3, Section 2, DP3954; Lot 1, DP184335; SP57425.
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2011*
SSP SEPP	*State Environmental Planning Policy (State Significant Precincts) 2005*
SSD	State Significant Development
SSDA	State Significant Development Application
TIA	Traffic Impact Assessment
TPC	Travel Plan Co-ordinator
TRH	Total Recoverable Hydrocarbons

Reference	Description
TTPP	The Transport Planning Partnership
UDP	*Redfern Centre Urban Design Principles*
VIA	Visual Impact Assessment
VOC	Volatile Organic Compounds
Wee Hur	The Trust Company (Australia) Limited ATF Wee Hur Regent Trust
WMP	Waste Management Plan
WSUD	Water Sensitive Urban Design

EXECUTIVE SUMMARY

The Environmental Impact Statement (**EIS**) has been prepared on behalf of The Trust Company (Australia) Limited ATF Wee Hur Regent Trust (**Wee Hur**) in support of a State Significant Development Application (**SSDA**) for a mixed use development comprising retail premises and student accommodation with ancillary facilities and works at 90-102 Regent Street, Redfern.

The SSDA seeks consent for the demolition of existing buildings and structures and the construction of an 18 storey mixed-use building accommodating ground floor retail premises and 408 bed student housing accommodation with indoor and outdoor communal spaces, on-site bicycle parking and ancillary facilities.

The proposed development has an estimated capital investment value of $51 million and accordingly, is classified as a State significant development (**SSD**) under Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**).

This EIS has been prepared to support the SSDA and responds to the relevant matters listed within the Secretary's Environmental Assessment Requirements (**SEARs**) issued on 27 November 2019.

Figure 1 Photomontage (Source: Virtual Ideas, 2020)

BACKGROUND

Wee Hur provides quality purpose-built student accommodation (**PBSA**) to tertiary students. Their existing and proposed facilities are strategically located close to universities, public transport and amenities within major capital cities. Their developments are designed based on the needs of students, providing a range of indoor and outdoor communal open spaces for students to interact and supporting amenities with create a conducive living environment.

Wee Hur is delivering over 5,700 beds of PBSA within Australia, including completed projects in Adelaide and Brisbane and additional developments planned for Canberra, Melbourne and Sydney. This includes a SSDA which was recently approved by the Department of Planning, Industry and Environment (**DPIE**) for 11-23 Gibbons Street, Redfern.

Wee Hur progressively purchased the properties at 90-102 Regent Street from mid-2019 to mid-2020. The amalgamated site benefitted from SEARs issued on 30 July 2018 for a mixed-use development, including 667m^2 ground floor retail and 114 residential apartments, with three levels of basement car parking. However, a new set of SEARs were requested to leverage the site location and its access to universities, public transport and existing services and its redevelopment for a mixed-use development comprising retail and student housing.

SITE DESCRIPTION

The SSDA applies to 90-102 Regent Street, Redfern. The legal description of the site is summarised in the table below.

Table 1 Site Description

Street Address	Legal Description
90 Regent Street, Redfern	Lot 1, Section 2, DP3954
92 Regent Street, Redfern	Lot 2, Section 2, DP3954
94 Regent Street, Redfern	Lot 3, Section 2, DP3954
96 Regent Street, Redfern	Lot 1, DP184335
98-102 Regent Street, Redfern	SP57425

The site is currently occupied by a continuous row of shop-top housing which range in height from two to four storeys. Existing development is built to the street frontage with a pedestrian awning and associated business signage. Primary pedestrian access is provided along Regent Street, with secondary vehicle and service access provided from William Lane. The site is connected to all necessary services including electricity, gas, water, communications, drainage and sewerage.

The site is located within Redfern, approximately three kilometres south of the Sydney CBD. The immediate locality is undergoing significant redevelopment and gentrification, with a mixture of land uses, building typologies and housing stock.

DEVELOPMENT DESCRIPTION

The key features of the proposal are summarised below:

- Demolition of the predominantly two storey and four-storey retail/commercial and residential buildings and ancillary structures.
- Construction of an 18-storey building comprising a total of 9,015m^2 gross floor area with a mix of land use activities including:
  - Basement levels: 90 bicycle parking spaces, loading and waste management facilities, on-site stormwater detention and ancillary services and facilities.

  - Ground (Level 1): 67m^2 of retail floorspace along the Regent Street frontage, 294m^2 of common space for the student accommodation along the Marian Street frontage and ancillary facilities to service both the retail and student housing components, including 44 bicycle spaces.
  - Upper levels: student accommodation providing a total of 408 beds, including a mix of single and twin occupancy studios and single rooms with ensuite bathrooms, with indoor and outdoor communal spaces on Level 2 and common rooms on Levels 9 and 15.
- Hard and soft landscaping within the outdoor communal terraces on the roof-top of the podium level including outdoor cinema, BBQ facilities, seating areas and landscaped planter beds.
- Public domain improvements including dedicated pedestrian access with associated paving and edge seating along William Lane and street trees along Regent Street, Marian Street and William Lane.
- The proposed hours of operation for the retail premises are 7:00am to 10:00pm. The student housing component will operate 24 hours per day, seven days per week, with restricted hours for the outdoor terraces.

PLANNING CONTROLS

This EIS considers the relevant regulatory framework applicable to the site and the proposal and contains an assessment of the proposal against the following statutory controls and regulatory instruments:

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*
- *State Environmental Planning Policy (State & Regional Development) 2011*
- *State Environmental Planning Policy (State Significant Precincts) 2005*
- *State Environmental Planning Policy (Urban Renewal) 2010*
- *State Environmental Planning Policy (Affordable Rental Housing) 2009*
- *State Environmental Planning Policy (Infrastructure 2007)*
- *State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)*
- *State Environmental Planning Policy No 64—Advertising and Signage*
- *State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development*
- *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*
- *Redfern-Waterloo Built Environment Plan (Stage One) August 2006*
- *Redfern-Waterloo Development Contributions Plan 2006*
- *Redfern-Waterloo Affordable Housing Contributions Plan 2006*
- *Redfern Centre Urban Design Principles.*
- *Sydney Local Environmental Plan 2012*
- *Sydney Development Control Plan 2012*

The proposal has also been assessment in accordance with its consistency with the key planning objectives, priorities and actions outlined within relevant strategic land use and transport planning policies including:

- *NSW State Priorities*
- *Future Transport Strategy 2056*
- *Better Placed – An integrated design policy for the built environment of New South Wales*
- *Guide to Traffic Generating Developments (RMS)*
- *Development near Rail Corridors and Busy Roads – Interim Guideline*

- *Greater Sydney Region Plan – A Metropolis of Three Cities*
- *Eastern City District Plan*
- *Towards our Greater Sydney 2056*
- *Sustainable Sydney 2030*
- *Central to Eveleigh Urban Transformation Strategy*

IMPACTS AND MITIGATION MEASURES

This EIS assesses the proposed development in relation to relevant planning instruments and policies and considers the likely environmental impacts of the proposal as listed in the SEARs and including:

- **Design Excellence**: the proposed development was refined in response to ongoing feedback from the State Design Review Panel (**SDRP**) during the preparation of the SSDA. A Design Excellence Strategy has been prepared and submitted with the EIS to demonstrate how the proposal will achieve design excellence.
- **Built Form and Urban Design**: a Design Report has been prepared by the project architects which provides a comprehensive description of the proposal, including the design approach, site analysis and the design features. The Architectural drawings have been developed in collaboration with the landscape drawings and public art proposal to provide a well-considered and holistic response to the site features and the local context.
- **Building Use**: the EIS and supporting reports provide a detailed description of the proposed land use activities. Including the future retail premises on the ground floor and the student housing on the ground and upper floors. An Operations Management Plan provides a comprehensive outline of the way in which the student housing will be managed to provide a safe and secure building for its occupants and minimise its potential impacts on the locality.
- **Amenity**: the EIS is accompanied by specialist plans and reports which detail the way in which the building has been sited and designed to minimise its potential impacts on the locality, including view loss, sunlight/overshadowing and reflectivity, visual and acoustic privacy, lighting and wind. A Crime Prevention Through Environmental Design (**CPTED**) report has been prepared which the relevant principles have been satisfactorily incorporated into the final proposal.
- **Visual Impacts**: a Visual Impact Assessment (**VIA**) has been prepared to accompany the EIS and outline the potential impacts of the proposed building from a series of vantage points within the locality. The VIA concludes the proposal is consistent with the transition of development within the locality and will not result in any unacceptable visual impacts.
- **Transport, Traffic, Parking and Access (Construction and Operation)**: the Transport Impact Assessment concludes the site location and bicycle facilities will provide students with realistic and attractive mode choices for public and active transport. The proposal will generate little to no net increase in site-generated traffic and is not expected to cause adverse traffic impacts on the surrounding local network. A Green Travel Plan (**GTP**) will be implemented to facilitate the achievement of the mode split targets.
- **Signage**: the building elevations and photomontages identify the proposed signage zones at the ground level and the upper level of the building. The upper-level signage zones will provide for business identification signage associated with the primary use of the mixed-use building for student accommodation. The ground floor signage will identify the proposed retail premises and provide way-finding for the two entries to the student accommodation.
- **Heritage and Archaeology**: a Statement of Heritage Impact (**SoHI**) has been prepared which concludes the proposal will not have any direct (physical) impacts on the listed heritage items and heritage conservation area. Further, the proposal would not have any significant visual impacts on the heritage items and conservation areas within the vicinity of the site. Mitigation measures are recommended to avoid impacts during the construction process and recognise the historic fabric within the existing buildings. Other recommendations will mitigate the archaeological impacts of the proposed works.
- **Aboriginal Cultural Heritage**: an Aboriginal Cultural Heritage Assessment Report has been prepared which concludes the site has low archaeological potential. The vicinity of the study area has substantial Aboriginal cultural heritage values which will be incorporated into the development through the proposed

Aboriginal artwork and use of native plantings. Appropriate mitigation and management measures will be adopted to accommodate unexpected finds during the site preparation and construction process.

- **Public Domain and Public Access**: the Landscape DA Report prepared and lodged with the EIS outlines the way in which the proposed development has responded to the site context, including the retention of existing street trees and adoption of design principles which seek to provide a strong connection between the public and private domains. The widening of William Lane and its planned extension to Margaret Street will improve pedestrian and cycle connectivity and activation of the local street network.
- **Noise and Vibration**: the Acoustic Report submitted with the EIS confirms the proposed development has been designed to comply with the relevant State and local planning requirements and Australian standards and guidelines. A glazing schedule has been provided to reduce potential noise impacts associated with external noise intrusion, including traffic noise along Regent Street.
- **Air Quality, Waste and Odour**: the Air Quality Impact Assessment identifies the management and mitigation measures which will be implemented to minimise the potential impacts from the construction process and avoid any unacceptable environmental or health impacts. It also confirms there are no unacceptable air quality and odour impacts from the adjoining service station. Waste management plans have been prepared for the demolition, construction and operational phases to minimise and manage waste generated by the proposed development.
- **Drainage and Flooding**: the Stormwater Management Report outlines the proposed stormwater quantity and quality treatment, including an on-site detention tank in the basement and Filterra planter on Level 3. The Flood Assessment Report confirms the proposed development is compatible with the flood hazard of the land and is unlikely to impact on the flood affectation of the surrounding properties.
- **Soil and Water**: the geotechnical investigations completed in association with the preparation of the SSDA have identified the detailed matters that will need to be addressed in the construction of the building to manage potential impacts, including compliance with Transport for NSW and Sydney Metro requirements associated with the underground rail line. The soil and erosion control plan details the measures to be implemented during construction to avoid soil sediment from entering the drainage system.
- **Biodiversity**: a waiver has been obtained for the preparation of the Biodiversity Development Assessment Report (**BDAR**) for the site. The proposed development is unlikely to have any significant impact on biodiversity values based on the site context and absence of threatened species habitat or vegetation. An Arboricultural Impact Assessment Report has been prepared which demonstrates the impacts of the development on the existing street trees can be satisfactorily managed.
- **Ecologically Sustainable Development (ESD)**: the ESD assessment report outlines the way in which the ESD principles will be an integral consideration throughout the development, with sustainability targets delivered through an integrated and staged approach to minimise energy consumption and deliver high levels of environmental performance.
- **Contamination**: a Detailed Site (Contamination) Investigation (**DSI**) report and Remediation Action Plan (**RAP**) were prepared which confirm the site can be suitable for the proposed land use if the RAP is followed and the remediation of land is successfully completed and validated as per the procedures and requirements outlined in the RAP.
- **Developer Contributions**: the EIS includes details of the relevant developer contributions that will be payable in accordance with the relevant requirements of the development contribution plans for Redfern-Waterloo.
- **Building Code of Australia and the *Disability Discrimination Act***: the siting and design of the building was refined during the preparation of the SSDA to ensure the proposed development will comply with the Building Code of Australia (**BCA**) and access requirements. The ground floor of the mixed-use development was amended to ensure that equitable access was provided from both the Regent Street and Marian Street/William Lane entrances to the building.
- **Services and Infrastructure**: the Infrastructure Report lodged with the EIS confirms that adequate services are available (or will be made available) to meet the forecast demands of the proposed development. Ongoing consultation is being undertaken with Sydney Metro to confirm the final detailed design will meet their relevant requirements.

- **Land Ownership and Tenure**: the EIS includes details of the current land ownership and operational management procedures for the proposed student housing development.

Each of the recommended mitigation measures has been reviewed in detail and it is considered that they can be incorporated as conditions of consent and implemented during the demolition, construction and operational phases of the development.

STAKEHOLDER CONSULTATION

Wee Hur and the consultant team consulted with relevant State and local government authorities, agencies, service providers and local Aboriginal groups during the preparation of the SSDA. Elton Consulting led the community engagement including direct engagement and consultation with adjoining land owners and occupants and local community groups.

The outcomes of the stakeholder and community have been incorporated into the final architectural drawings and the supporting specialist plans and reports lodged in accordance with the SEARs.

CONCLUSION

The proposed development is considered appropriate and reasonable based on the following:

- The proposal satisfies the applicable state planning policies, and relevant environmental planning instruments that apply to the site:
  - The proposed uses are permitted with consent and meet the objectives of the Business Zone - Commercial Core in accordance with the State Significant Precincts SEPP.
  - The proposal complies with the 18 storey maximum height control. A Clause 16A Variation Request has been submitted which justifies the proposed variations to the maximum building height controls along the Regent Street and Marian Street frontages.
  - The proposal complies with the 7:1 maximum floor space ratio control.
- The proposal is aligned with the strategic policy objectives as it will contribute to a 30-Minute City and facilitate reduced reliance on private vehicles and increased use of public transport and active transport.
- The specialist plans and reports detail the way in which the building has been sited and design to optimise its potential and minimise its potential impacts on the locality. A Design Excellence Strategy has been prepared to demonstrate how the proposal will achieve design excellence.
- The proposal will have an acceptable level of environmental impact for the following reasons:
  - The proposal has no unacceptable traffic impacts and will facilitate increased use of walking, cycling and public transport as a means of travel.
  - The proposal is sympathetic to the heritage items in the vicinity of the site, including St Luke's Presbyterian Church.
  - Overshadowing impacts to the surrounding properties, including 104-116 Regent Street, is minimised by the proposed narrow building footprint to the south.
  - Ground level activation is delivered through the retail tenancy, communal spaces and public domain improvements along the street frontages to increase interaction with the street and passive surveillance of the public domain.
- The proposal will support the tertiary education sector, one of Australia's major international exports, by delivering additional student housing close to major institutions. The proposal will also support local employment during the construction and operation phases and contribute to increased local spending, economic growth and development of the precinct.
- The site is suitable for the proposed use and will contribute to the ongoing revitalisation of the locality, including activation of the streetscape and public domain improvements.
- The development can be adequately serviced by essential infrastructure without unreasonable demands on existing networks.

- The issues identified during the stakeholder consultation have been incorporated into the final concept design and detailed works and can be implemented in the construction and operation of the proposed development.

Based on the above, it is submitted that the proposal is in the public interest and is recommended for approval subject to appropriate consent conditions.

1. INTRODUCTION

1.1. PROJECT OVERVIEW

This EIS is submitted to the Department of Planning, Industry and Environment (**DPIE**) on behalf of The Trust Company (Australia) Limited ATF Wee Hur Regent Trust and in support of an application for SSD application number 10382 at 90-102 Regent Street, Redfern.

Figure 2 Site Plan (Source: Urbis, 2020)

The SSDA seeks consent for demolition of the predominantly two storey and four-storey retail/commercial and residential buildings and ancillary structures and construction of an 18-storey building accommodating a ground floor retail premises and student accommodation, including indoor and outdoor communal spaces, bicycle parking, associated building services and facilities and public domain improvements.

The proposed development is located within the Redfern-Waterloo Sites as listed under Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**). The proposed development is considered a State Significant Development (**SSD**) under the general provisions of clause 2 which state:

> *Development that has a capital investment value of more than $10 million on land identified as being within any of the following sites on the State Significant Development Sites Map:*

The proposed development has an estimated capital investment value of $51 million (refer to the Capital Investment Value at **Appendix A**) and accordingly, the site is considered an SSD.

The Minister is the consent authority for the proposal in accordance with section 4.5 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act)**. Accordingly, this DA is being lodged with the DPIE as an SSDA seeking development consent for the proposed mixed use development comprising retail premises and student accommodation with ancillary facilities and works at 90-102 Regent Street, Redfern.

This EIS has been prepared to support the SSDA and responds to the relevant matters listed within the SEARs issued on 27 November 2019 (refer to **Appendix B**).

1.2. PROJECT OBJECTIVES

Wee Hur provides quality purpose-built student accommodation (**PBSA**) to tertiary students. Their existing and proposed facilities are strategically located close to universities, public transport and amenities within major capital cities. Their developments are designed based on the needs of students, providing a range of indoor and outdoor communal open spaces for students to interact and supporting amenities with create a conducive living environment.

Wee Hur is delivering over 5,700 beds of PBSA within Australia, including completed projects in Adelaide and Brisbane and additional developments planned for Canberra, Melbourne and Sydney. This includes a SSDA which was recently approved by the DPIE for 11-23 Gibbons Street, Redfern.

Wee Hur progressively purchased the properties at 90-102 Regent Street from mid-2019 to mid-2020. The amalgamated site benefitted from SEARs issued on 30 July 2018 for a mixed-use development, including 667m^2 ground floor retail and 114 residential apartments, with three levels of basement car parking. However, a new set of SEARs were requested to leverage the site location and its access to universities, public transport and existing services and its redevelopment for a mixed-use development comprising retail and student housing.

The key objectives for the proposed development and the way in which these have been achieved are summarised in the following table:

Table 2 Project Objectives

Project Objective	**Proposed Development**
To provide high-quality accommodation to tertiary students which are strategically located close to major universities, public transport and amenities.	The site is ideally located within walking distance of the University of Sydney and University of Technology Sydney. It is less than 200 metres walking distance from Redfern railway station which provides access to the Sydney metropolitan rail network. The site is also within close walking distance of numerous bus stops along Regent Street, Gibbons Street and Redfern Street, which provide access to the eastern, southern and inner-western suburbs. The traditional main streets along Regent Street and Redfern Street provide access to existing retail, commercial, entertainment and community uses
To grow the Wee Hur PBSA portfolio and contribute to the delivery of 5,000 beds across Australia and generate stable recurring income.	The proposed development at 90-102 Regent Street will deliver an additional 408 beds, including 348 studio rooms, 27 twin studio rooms and six accessible rooms. The proposal will complement the Wee Hur proposal at 13-23 Gibbons Street which seeks to provide 419 rooms, including 55 ensuite rooms, 352 studio rooms and 12 accessible rooms.
To develop PBSA with large communal spaces for students to interact and supporting amenities to create a conducive living environment.	The proposed development includes a variety of indoor and outdoor communal spaces for students to socialise and interact, as well as study. These include large internal spaces on the ground and first floors (332m^2 and 212m^2) with smaller internal spaces on Level 9 and Level 15 (44m^2 each). The indoor spaces are complemented by three roof-top

Project Objective	Proposed Development
	terraces above the podium level which are landscaped to create their own character and uses, including BBQ facilities, outdoor cinema and recessed seating nooks.

The proposal will address the principles of ESD in accordance with the requirements of the *Environmental Planning and Assessment Regulation 2000* (**EP&A Regulation**) and as outlined below

Precautionary Principle

The precautionary principle relates to uncertainty around potential environmental impacts and where a threat of serious or irreversible environmental damage exists, lack of scientific certainty should not be a reason for preventing measures to prevent environmental degradation.

This EIS has not identified any serious threats of environmental damage that cannot be adequately mitigated or addressed based on current scientific standards and best practices. In this regard, the proposed development can be considered generally consistent with the precautionary principle.

Intergenerational Equity

Intergenerational equity ensures the needs of future generations are considered in decision making and that environmental values are maintained or improved for the benefit of future generations.

The proposed development is intended to benefit both the current and future generations and incorporates adequate environmental protection and impact mitigation measures to ensure environmental values are maintained and improved as a result of the development.

Conservation of biological diversity and ecological integrity

The conservation of biological diversity and ecological integrity is to be a fundamental ESD consideration.

The proposed development will not have any impacts on biological diversity and ecological integrity. A BDAR Waiver Application has been submitted which demonstrates the proposed development is unlikely to have any significant impact on biodiversity values based on the site context and absence of threatened species habitat or vegetation

Improved valuation, pricing and incentive mechanisms

This requires the holistic consideration of environmental resources that may be affected as a result of the development including air, water and the biological realm. It places a high importance on the economic cost to environmental impacts and places a value on waste generation and environmental degradation.

The EIS is supported by specialist reports which provide a comprehensive assessment of the potential environmental impacts of the proposed development, including demand for services and waste generated during the demolition, constructional and operational phases. Appropriate mitigation and management measures are recommended to avoid unacceptable impacts.

1.3. PROJECT HISTORY

The Aboriginal Cultural Heritage Assessment report (**Appendix C**) details the historical occupation of land by the Gadigal people for at least 20,000 years prior to the European arrival in 1788. It also details the ongoing occupation of land and employment of Aboriginal people within Redfern from the development of the area as an industrial hub in the mid 1800s and through-out the 20th century. By 1960, the Aboriginal population in Redfern was estimated at 12,000, increasing to 35,000 in the 1970s.

The Statement of Heritage Impact (**Appendix D**) recognises the Aboriginal histories of the locality, however, it primarily focusses on the ongoing development of the site since the European settlement. This includes the early land grants and subdivisions, as well as the development driven by the introduction of the railway line and station in the mid-late 1800s. A detailed description is provided regarding the existing buildings and structures, including the former pub building at 90 Regent Street, the row of traditional two-storey shops at 92-96 Regent Street and the 3-4 storey mixed use development at 98-102 Regent Street.

Most of the existing buildings are currently vacant. A small area is currently occupied as a site office on a temporary basis in association with the adjoining construction site at 11 Gibbons Street.

Only one recent development consent is recorded for the subject site on the City of Sydney DA Tracker as described in the table below (DA/2004/1438). It appears the development consent was not acted upon and has since lapsed. The Detailed Site Investigation submitted with the EIS (and discussed in detail within **Section 6.18**) identifies additional detailed historic applications from a GIPA search, including various fit-outs and occupations of the ground-floor tenancies for a variety of retail and professional service uses.

Table 3 Development Approvals – Subject Site

DA Reference	Address	Description	Determination
DA/2004/1438	90 Regent Street, Redfern	Demolition of the existing plant room to the rear of an existing medical centre and the construction of a new 4 storey residential building containing five (5) apartments with ground level parking for four (4) vehicles.	Approved 1 September 2005

Source: City of Sydney, https://online2.cityofsydney.nsw.gov.au/DA, downloaded 11 September 2020

The land to the north and south along Regent Street and Gibbons Street is being progressively transformed from a low-rise traditional main street to a higher-density mixed-use environment. The land to the west along Regent Street is also being redeveloped in a similar manner. **Table 4** provides a list of the SSDAs which have been (or are being) assessed by DPIE within the immediate locality.

Table 4 Development Approvals and Proposals – Surrounding Land (DPIE)

DA Reference	Address	Description	Determination
SSD-9516	56-58 Regent Street, Redfern	21 storey hotel including 112 hotel suites and 2 residences, bar and gaming area, lounge, rooftop breakfast bar	SEARs issued 29 August 2018 Updated SEARS issued 31 August 2020 EIS being prepared
SSD-6724	60-78 Regent Street, Redfern	Mixed Use Student Accommodation and Retail Development ▪ Partial retention of Regent Street facades and demolition of existing buildings within the site ▪ Construction of an 18 storey building including a student accommodation for 370 students ▪ Ground floor retail and commercial tenancies; and ▪ Associated signage, streetscape improvements and landscaping, and extension of services and infrastructure	Approved 25 August 2015 Last modified 29 March 2018
SSD-7080	80-88 Regent Street, Redfern	Construction of an 18 storey mixed use development comprising 56 residential	Approved 22 November 2017

DA Reference	Address	Description	Determination
		apartments, commercial and retail floor space, a child care centre and associated basement car parking spaces	
SSD-9275	80-88 Regent Street, Redfern	18 storey mixed use student accommodation building comprising: ▪ 265 student accommodation beds within 185 units ▪ Communal student facilities, including study areas, rooftop terrace and laundry facilities ▪ Three ground floor retail tenancies ▪ One commercial tenancy ▪ Landscaping and public domain works ▪ Extension of services and infrastructure	Approved 4 October 2019 Last modified 16 June 2020
MP08_0112	7-9 Gibbons Street, Sydney	Construction of an 18-storey mixed use development comprising retail and commercial uses, a supermarket and residential apartments	Approved 22 October 2010 Last modified 18 April 2018
SSD-7749	11 Gibbons Street, Redfern	Construction of an 18-storey mixed-use development comprising 160 social and affordable housing apartments, and ground floor commercial/retail, office and common facilities, and lot consolidation	Approved 10 September 2019 Modification to construction hours under assessment
SSD-9194	13-23 Gibbons Street, Redfern	Demolition of existing structures and construction of an 18-storey student accommodation building comprising: ▪ 419 student accommodation beds ▪ communal student facilities, including lounge areas, games room, gymnasium and external terraces on levels 2, 3 and 4 ▪ one ground floor retail tenancy ▪ new through-site link, public domain and landscaping works.	Approved 6 October 2020

Source: DPIE, https://www.planningportal.nsw.gov.au/major-projects/projects, downloaded 11 September 2020

Additional DAs have been assessed and determined by the City of Sydney for surrounding land go the east and south as outlined in **Table 5** on the following page.

Table 5 Development Approvals and Proposals – Surrounding Land (City of Sydney)

DA Reference	Address	Description	Determination
D2018/1282	118 Regent Street, Redfern	Use as a commercial kitchenware and hospitality equipment retail showroom with ancillary office and associated alterations	Approved 8 January 2019 Last modified 21 May 2020
D/2018/452	16-24 Cope Street, Redfern	Demolition of all structures, remediation of the site and construction of a new 5 storey affordable housing (boarding house) development.	Refused 7 November 2018

Source: City of Sydney, https://online2.cityofsydney.nsw.gov.au/DA, downloaded

The proponent for this application at 90-102 Regent Street (Wee Hur) is also the proponent for the approved student accommodation development at 13-23 Gibbons Street, Redfern (SSD-9194). Each of the sites were selected by Wee Hur based on their location within walking distance of major universities and high-frequency public transport. The built form controls also provided an appropriate scale and density to support the development of PBSA, with the opportunity to deliver operational efficiencies across the combined sites.

1.4. PROJECT ALTERNATIVES

Three project alternatives were considered in respect to the identified need for the student accommodation. Each of these options is listed and discussed in the following table.

Table 6 Project Alternative

Option	Assessment
Option 1 - Do Nothing	An option to leave the site in its current condition was considered and dismissed. This option is inconsistent with the project objectives to: ▪ *To provide high-quality accommodation to tertiary students which are strategically located close to major universities, public transport and amenities.* ▪ *To grow the Wee Hur PBSA portfolio and contribute to the delivery of 5,000 beds across Australia and generate stable recurring income.* ▪ *To develop PBSA with large communal spaces for students to interact and supporting amenities to create a conducive living environment.* The existing buildings are inadequate to accommodate the needs and expectations of international and domestic tertiary students for modern, well-designed accommodation. It would be difficult to reconfigure the existing internal spaces to accommodate student rooms and the existing outdoor spaces are not suitable for communal areas associated with purpose-built student accommodation. Further, the 'do nothing' approach would result in an underutilisation of a highly accessible site that is well-suited to contribute to the delivery of

Option	Assessment
	strategic planning policy objectives, including the revitalisation of the precinct to support housing and employment growth.
Option 2- Proceed with existing SEARs	The previous owners obtained SEARs on 30 July 2018 for a mixed-use development with basement parking, 667m^2 of ground floor retail and 114 residential apartments above. (SSD 18_9454). An EIS could have been prepared seeking development consent for the development proposed within the SEARs. However, it was considered the use of the site for student housing would better meet the demand for student housing within the locality and optimise the use of a highly accessible and well-located site close to Redfern Station and major universities.
Option 3 - Alternative Building Design	Earlier versions of the proposed mixed-use development sought to deliver a building with an FSR of approximately 8:1 with a total height of 18 storeys plus an additional internal mezzanine level. The DPIE advised the site was not eligible for an FSR bonus in accordance with the ARH SEPP. Further, the SDRP advised they would not support the 'additional' floorspace above the 7:1 FSR based on the potential visual impacts of the building. The SDRP also advised they would not support the proposed mezzanine level based on the definition of a 'storey'. It was resolved not to pursue an alternative building design based on the perceived additional risks and likely protracted timeframes in pursuing a development that was not supported by the DPIE or SDRP.

1.5. SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

A Scoping Report was prepared by Urbis dated 24 October 2019 which was lodged with DPIE requesting SEARs in accordance with clause 3(1), Part 2, Schedule 2 of the EP&A Regulation. A copy of the SEARs dated 27 November 2019 are attached as **Appendix B**.

A table identifying the section where the relevant SEARs requirements are addressed within the EIS and/or the appendix reference for the associated technical report is attached as **Appendix E**.

1.6. STRUCTURE OF THE EIS

The EIS provides the following sections:

- **Section 2:** describes the site and the proposed development.
- **Section 3:** details the strategic context including the planning policies and guidelines relevant to the site and the proposal.
- **Section 4:** provides a detailed assessment of the State, regional and local strategic planning policies and the development contributions framework.
- **Section 5:** details the community and stakeholder engagement undertaken by the applicant as part of the preparation of this EIS.
- **Section 6:** provides a comprehensive assessment of the existing environment, potential impacts and mitigation measures for each of the key issues identified within the SEARs.

- **Section 7:** provides a summary of the potential health impacts identified within the specialist assessment and the way these matters will be addressed.
- **Section 8:** lists the recommendations and mitigation measures based on the technical studies undertaken as part of this application.
- **Section 9:** provides an assessment of the proposal against the matters of consideration listed in Section 4.15 of the EP&A Act 1979.
- **Section 10:** provides concluding statements and a recommendation for determination of the application.

1.7. PROPONENT DETAILS

This EIS has been prepared on behalf of Wee Hur Capital Pty Ltd. A range of specialist consultants were engaged by Wee Hur to assist with the preparation of plans and technical documentation, including:

Table 7 Project Team

Discipline	Consultant
Statutory Planning	Urbis
Architecture, Built Form, Urban Design	AJ+C
Public Art	Nicole Monks
Landscape	Turf Design
Arboricultural Impacts	Urban Arbor
Biodiversity	Green Tape Solutions
BCA Compliance	McKenzie Group
Accessibility	Accessible Building Solutions
Ecologically Sustainable Development	Vipac Engineers & Scientists
Light Spill, Glare & Reflectivity and Wind Impacts	SLR Consulting
Crime Prevention through Environmental Design	Elton Consulting
Visual Impact	Urbis
Aboriginal Heritage	Artefact
European Heritage	Artefact
Transport and Traffic	The Transport Planning Partnership
Noise and Vibration	Northrop Consulting Engineers
Air Quality Impact Assessment	Wilkinson Murray
Stormwater and Flooding	JHA Consulting Engineers
Utility and Building Services	Arcadis
Geotechnical Investigation	Douglas Partners

Discipline	Consultant
Detailed Site Investigation	Douglas Partners
Waste Management	Waste Audit and Consultancy Services
Quantity Surveyor	WT Partnership
Community Consultation	Elton Consulting

2. PROJECT DESCRIPTION

The SSDA has been lodged as a State Significant Development (**SSD**) under section 4.36(2) of the *Environmental Planning and Assessment Act 1979* (**the EP&A Act**) and Schedule 6 of the SSP SEPP. The key features of the proposed development are summarised in the table below.

Table 8 Numeric Overview of Proposal

Descriptor	**Proposed**
Site Location	90-102 Regent Street, Redfern
Site Area	1,287m^2
Land Use	Student accommodation and retail
Gross Floor Area	9,015m^2
Floor Space Ratio	7:1
Residential Apartments	408 beds, including 338 studio rooms (including six accessible studio rooms), 27 twin studio rooms and 16 single en-suite rooms
Height of Building	Maximum 59.3 metres (or 18 storeys)
Landscape Area	▪ Level ground - paving area: 161m^2 ▪ Level 2 - softscape area: 46m^2 ▪ Level 2 - paving area: 345m^2 ▪ Level 3 - softscape area: 77m^2 ▪ Total softscape area: 123m^2 ▪ Total external paving area: 506m^2
Deep Soil Landscaping	Nil
Transport and Access	Redfern Train Station is approximately 200 metres walking distance. Multiple bus stops are located within the immediate vicinity along Regent Street, Redfern Street and Gibbons Street. Pedestrian access to the site will be via Regent Street and Marian Street/William Lane.
Parking Spaces	Nil
Bicycle Parking	134 spaces
Construction Staging	The proposed development will be constructed in a single stage
Construction Hours	In accordance with the DPIE conditions of consent
Operational Details	The proposed development will operate 24 hours per day, seven days per week
Number of Employees	220 jobs during construction and five jobs during the operational phase

2.1. THE SITE

The street address is 90-102 Regent Street, Redfern. The legal description of the site is summarised in the table below.

Table 9 Site Description

Street Address	Legal Description
90 Regent Street, Redfern	Lot 1, Section 2, DP3954
92 Regent Street, Redfern	Lot 2, Section 2, DP3954
94 Regent Street, Redfern	Lot 3, Section 2, DP3954
96 Regent Street, Redfern	Lot 1, DP184335
96-102 Regent Street, Redfern	SP57425

A site survey showing the geographic features and contours of the site is provided in **Appendix F**. A Site Location Map is provided below.

Figure 3 Site Location Map (Source: Urbis, 2020)

The site currently comprises a former pub building on the corner of Regent Street and Margaret Street, with a row of commercial premises with shop-top housing and a residential flat building immediately to the south. The existing buildings are built to the primary street frontage along Regent Street and range in height from two to four storeys. Secondary vehicle and service access is provided from William Lane to the rear. The site

is connected to all necessary services including electricity, gas, water, communications, drainage and sewerage.

Figure 4 Current Site Condition

Source: Urbis

Source: Urbis

2.2. SURROUNDING CONTEXT

The site is located within Redfern, approximately three kilometres south of the Sydney CBD. The immediate locality is undergoing significant redevelopment and gentrification, with a mixture of land uses, building typologies and housing stock.

The site is located along the primary north-south commercial spine which extends along Regent Street parallel to the adjacent railway line. Surrounding land uses include:

- **North:** the land immediately to the north of Marian Street along Regent Street comprises recently completed and approved mixed-use buildings, similar to this proposal, with active retail and commercial uses on the ground floor with student housing above. Redfern railway station is located to the north-east along Gibbons Street.
- **East:** development to the east primarily consists of attached buildings between two to four storeys in height, with commercial uses on the ground floor. Redfern Fire Station, community oval and community room are located further east of the site.
- **South:** to the immediate south is a vacant BP petrol station which shares a lot boundary with the site. Further south of Margaret Street comprises a heritage-listed church and two-storey mixed use terraces with commercial uses along the ground floor.
- **West:** the site to the west on the corner of Marian Street and Gibbons Street is an affordable rental housing development currently under construction. The site on the corner of Margaret Street and Gibbons Street is also owned by Wee Hur and currently accommodates a residential apartment building. Approval has recently been issued for its redevelopment as an 18 storey mixed-use building with retail and student accommodation. Gibbons Street Reserve is located further west and comprises public open space with landscaping and public furniture.

The site is well-serviced by public transport, due to the proximity to Redfern Station, the future Sydney Metro station at Waterloo and multiple bus stops located along Regent Street, Gibbons Street and Redfern Street.

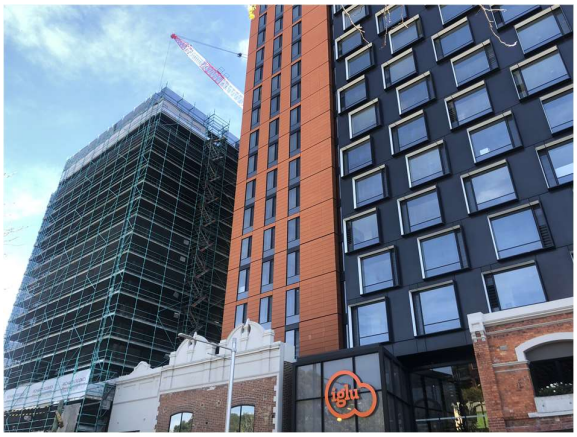
Figure 5 Surrounding Development

Picture 1 - Low Density Development opposite the site on Regent Street

Source: Urbis

Picture 2 - Unused BP petrol station adjoining the site

Source: Urbis



Picture 3 - Iglu Development to the north of the site

Source: Urbis

Picture 4 - 11 Gibbons Street under construction to the west of the site

Source: Urbis

Picture 5 - William Street to the rear of the site

Source: Urbis

Picture 6 - Redfern Train Station

Source: Urbis

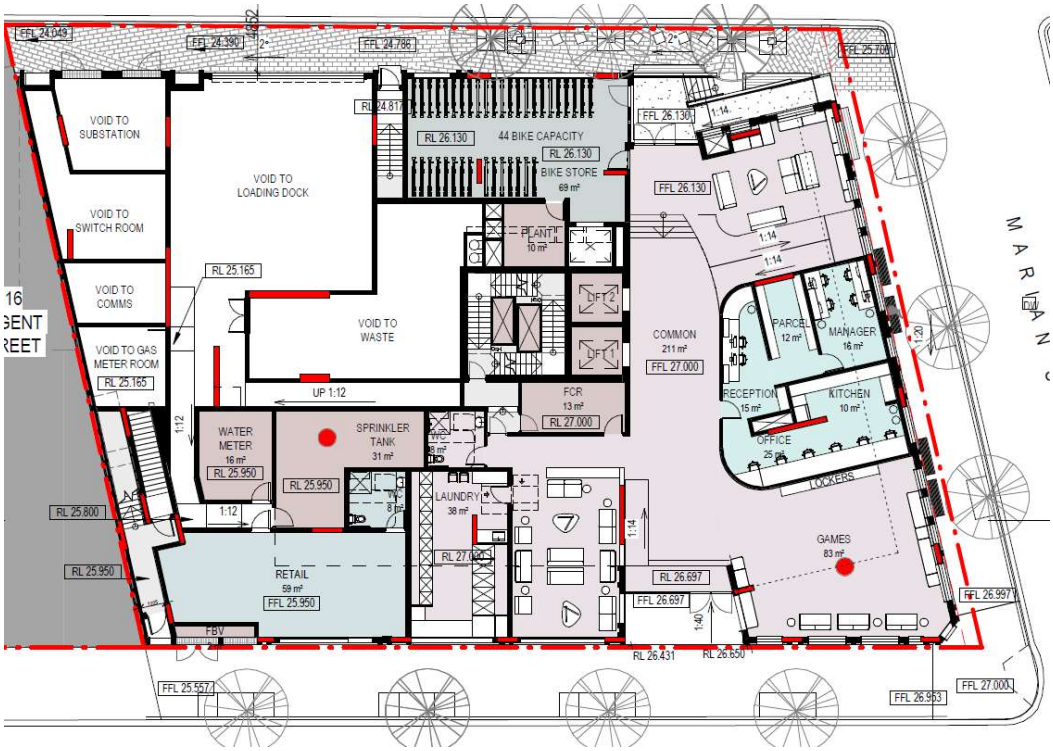
2.3. DEVELOPMENT PROPOSAL

The proposal comprises the redevelopment of the site as summarised below:

- Demolition of the predominantly two storey and four-storey retail/commercial and residential buildings and ancillary structures.
- Construction of an 18-storey building comprising a total of 9,015m^2 gross floor area with a mix of land use activities including:
  - Basement levels: 90 bicycle parking spaces, loading and waste management facilities, on-site stormwater detention and ancillary services and facilities.
  - Ground (Level 1): 67m^2 of retail floorspace along the Regent Street frontage, 294m^2 of common space for the student accommodation along the Marian Street frontage and ancillary facilities to service both the retail and student housing components, including 44 bicycle spaces.
  - Upper levels: student accommodation providing a total of 408 beds, including a mix of single and twin occupancy studios and single rooms with en-suite bathrooms, with indoor and outdoor communal spaces on Level 2 and common rooms on Levels 9 and 15.
- Hard and soft landscaping within the outdoor communal terraces on the roof-top of the podium level including outdoor cinema, BBQ facilities, seating areas and landscaped planter beds.
- Public domain improvements including dedicated pedestrian access with associated paving and edge seating along William Lane and street trees along Regent Street, Marian Street and William Lane.
- The proposed hours of operation for the retail premises are 7:00am to 10:00pm. The student housing component will operate 24 hours per day, seven days per week, with restricted hours for the outdoor terraces.

The Architectural Drawings is attached as **Appendix G** and the Design Report attached as **Appendix H**. Plan extracts are provided below which show the ground floor and typical tower floor. The following sub-sections detail the development phases and core features of the proposed development.

Figure 6 Ground Floor Plan



Source: AJ+C Architects

Figure 7 Typical Lower Floor Plans

Source: AJ+C Architects

2.3.1. Demolition and Remediation

The proposal includes the demolition of all buildings and structures on the subject site, including the former pub building on the corner of Regent Street and Margaret Street and the two and four storey mixed-use developments along Regent Street. Demolition waste will be reused, recycled or disposed of in accordance with the Demolition and Construction Waste Management Plan (refer to **Appendix I)**.

The deconstruction of the buildings will be undertaken in stages to avoid unexpected impacts on native fauna. A qualified fauna spotter will assess each area prior to demolition to confirm there are no impacts on native fauna. Any native fauna would be relocated or allowed to self-disperse (refer to **Section 4.2**).

The site will be remediated in accordance with the Remediation Action Plan (refer to **Appendix NN)**. This includes disposal to landfill (in areas requiring bulk excavation for extension of the existing basement) and a cap and contain approach with an appropriately designed barrier for the remaining areas of environmental concern (**AEC**).

The remediation action works will be documented and a validation undertaken to confirm the remediation of the site in a Validation Report. The validation works involve site inspections, sampling and documentation, including a post-demolition asbestos clearance, validation of excavated material, capping and footprint of temporarily stockpiled impacted material and documentation of all remediation works.

2.3.2. Site Preparation and Civil Works

The existing split level basement will be extended to the north to provide a basement floor level of RL 22.8 metres, with excavation depths of up to 3.5 metres. Sediment and erosion control measures will be implemented across the site, including sandbags at kerb inlet pits and temporary sediment fencing constructed of geotextile filter fabric.

A new 1MVA mini chamber substation will be installed to facilitate the delivery of electrical services to meet the forecast demands of the proposed development. Telecommunications services will be delivered via new lead-in cabling and a communications room within the basement. Water and sewer services will be delivered via new connections to the existing Sydney Water infrastructure in Regent Street and William Lane.

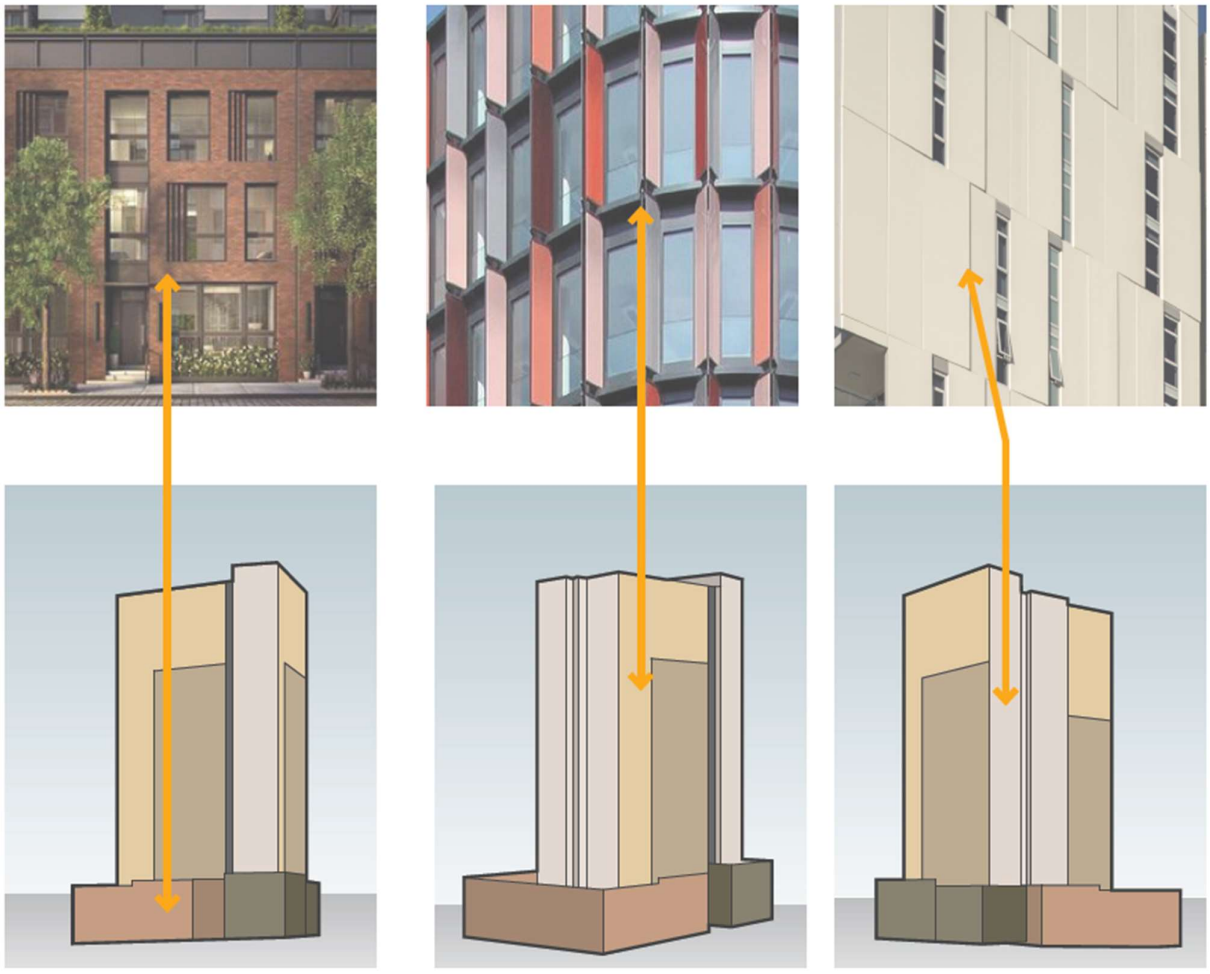
2.3.3. Building Construction

An 18 storey mixed-use development is proposed to be constructed which comprises ground floor retail and purpose-built student accommodation comprising a total of 381 rooms and 408 beds with indoor and outdoor communal spaces, bicycle parking and ancillary facilities.

The proposal incorporates high quality materials and finishes, as detailed in the schedule prepared by AJ+C in the Design Report at **Appendix H**. Key features of the proposed materials and finishes are summarised below:

- **Podium Façade Materiality**: Redfern has a strong tradition of brick residential, retail and industrial buildings. Buildings are typically built to the street alignment, or with a small set back in the case of residential terrace houses. The form and materiality of the podium will compliment this character, using the depth of the facade to provide a degree of protection and privacy to the openings facing Regent Street. The podium will also provide an awning over the footpath, in keeping with the Redfern character and providing pedestrian amenity and protection.
- **Tower Façade Materiality**: the tower facade will be a modern design with contemporary fenestration patterns. Large windows will be provided for the bedrooms, with well-considered sun shading providing protection to the glazing and a finer layer of detail to the facade. The building form will be clad in a combination of glazing, metal panels and precast concrete, which will provide a well finished, high-quality, durable finish to the building as well as being rapidly buildable and non-combustible. The roof top plant and servicing areas will be concealed with screening.

Figure 8 Building Finishes Plan



Source: AJ+C Architects

2.3.4. Access, Parking and Loading

Pedestrian access to the site will be via the two entrances located on Regent Street and the corner of Marian Street and William Lane. Access will be controlled by electronic door locking systems which require key cards to enter.

On-site parking for 134 bicycles is provided on the ground floor and basement level. No car parking is proposed to be provided on-site based on the nature of the proposed use and to avoid additional traffic impacts. Service vehicle loading for deliveries and waste collection will be via William Lane.

2.3.5. Landscaping and Public Domain

A Landscape Plan has been prepared by Turf Design Studio (**Appendix K**) which incorporates the landscape treatment of the podium roof-top and public domain improvements along the Regent Street, Marian Street and William Street frontages.

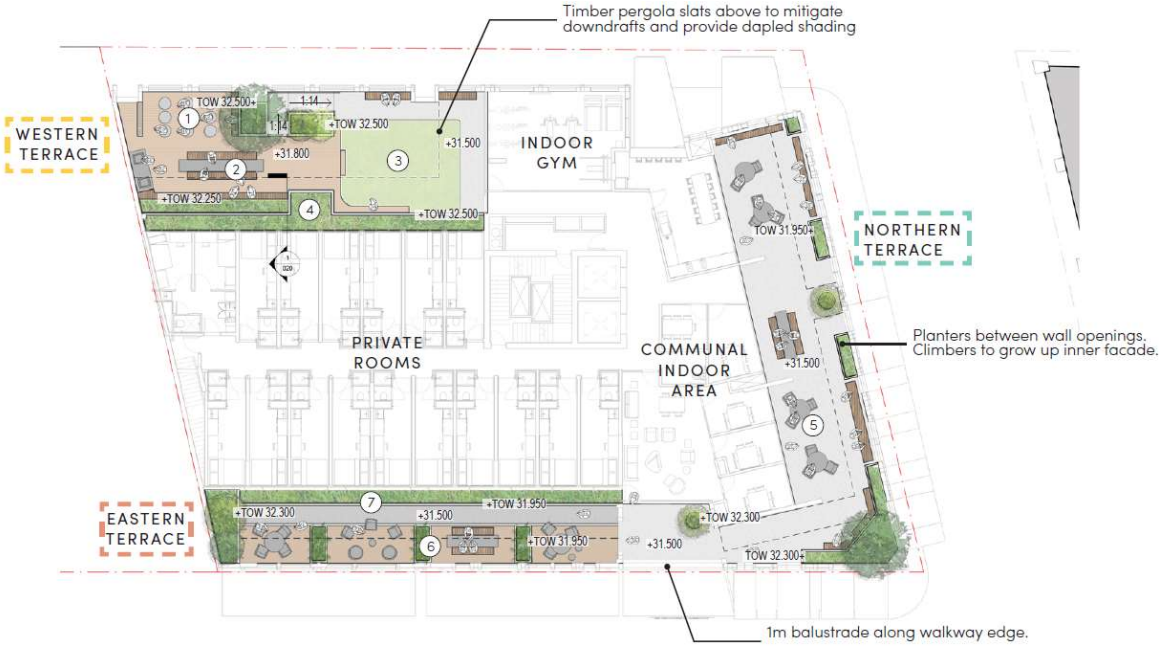
The three existing street trees on Regent Street and Marian Street will be supplemented with additional street tree planting along Regent Street, Marian Street and William Lane in accordance with Council requirements.

The public domain improvements also include a dedicated pedestrian accessway along William Lane with a new breakout space adjacent to the building entry on the corner of Marian Street and William Lane. The paving treatment along Marian Street and Regent Street will be updated, with bench seating to activate the street. The break-out space on William Lane includes sandstone seating blocks under the new trees and edge seating next to the entry stair.

The outdoor communal areas on Level 2 will be landscaped to provide for an attractive green streetscape, visual privacy between the site and the surrounding developments and a high-level of amenity for the future building occupants. The proposed landscaping across the three terraces includes:

- **Western Terrace**: outdoor cinema with informal beanbag seating, BBQ and alfresco dining area, adaptable open space and raised planter boxes.
- **Northern Terrace**: seating and outdoor study opportunities with views over Marian Street.
- **Eastern Terrace**: recessed seating and low free-standing planter boxes with raised planted edge to provide visual privacy between student rooms and the communal terrace.

Figure 9 Proposed Landscaping on Level Two



Source: Turf Studio

The proposed development also incorporates an inaccessible roof garden on the western side of Level 3 which will include a mix of indigenous grasses and groundcovers visible from William Lane. A dense planting strip and pergola structure is proposed on the southern side of the building, providing a visual buffer of services from Regent Street and existing and likely future buildings in the surrounding area.

Figure 10 Level Three Landscape Plan – William Lane

Source: Turf Studio

2.3.6. Public Art

'Muding Magura' has been designed by award winning artist Nicola Monks and will be delivered in collaboration with Luke Russell, Gadigal Elders and the local community. The artwork celebrates the continuous connection of Aboriginal people with the land, water and sky. Fishing is a matter of cultural practice and is informed by traditional knowledge.

Three works are proposed across the proposed development which will celebrate the diverse and vibrant Aboriginal community that are connected to Redfern. These include:

- A stylised three-dimensional spear fixed to the north eastern corner of the tower.
- Stylised fish embossed into the cladding of the north eastern corner of the tower.
- Graphical overlays to upper floor common room and ground floor glazing.

The work is scaled to suit both landmark and human scale, connecting us with the site from a distance but also at ground level as the layers unfold from different vantage points. The consultation process included a workshop with the Metro Local Aboriginal Lands Council, local elders and Aboriginal individuals and groups. The fishing spear artwork will be made from Iron Bark, grass tree, Sinew and Gymea Lily.

The proposed public art will create a landmark that celebrates the diverse and vibrant Aboriginal community that are connected to Redfern.

Figure 11 Proposed Artwork at William Lane

Source: Nicole Monks and AJ+C Architects

Figure 12 Proposed Artwork at Regent Street

Source: Nicole Monks and AJ+C Architects

2.3.7. Signage

Indicative signage zones are proposed at the ground level to identify the site and the main building entry on Regent Street (refer to plan extract below at **Figure 13**). These include a fascia sign on the awning above the building entry and window signage immediately to the south of the Regent Street entry.

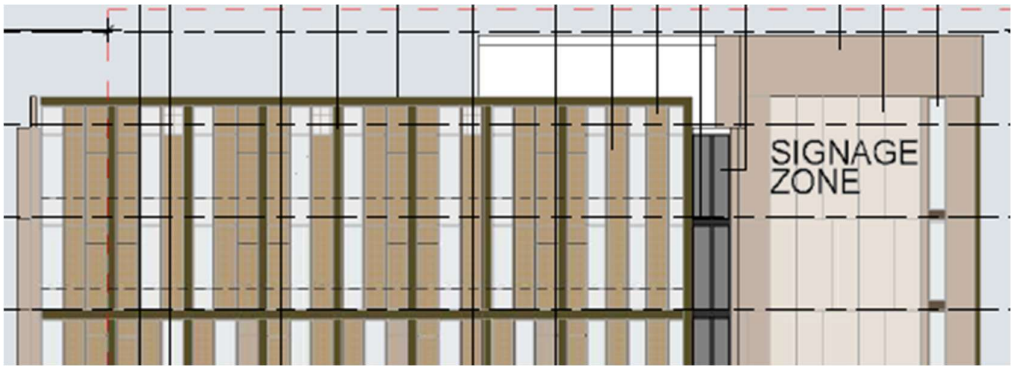
Indicative signage zones are also proposed on the upper levels to identify the building within the emerging skyline (refer to plan extract at **Figure 14**). The location of the top-of-building signs are listed below:

- North-eastern corner facing east (Regent Street elevation)
- North eastern corner facing north (Marian Street elevation)
- North western corner facing west (William Lane frontage)

Figure 13 Regent Street ground floor entry signage

Source: AJ+C Architects

Figure 14 Regent Street top-of-building signage



Source: AJ+C Architects

2.3.8. Operational Details

Development approval is sought for the operation of the retail premises between 7am and 10pm.The student housing component will operate 24 hours per day, seven days per week, with additional restrictions on the outdoor communal spaces in accordance with the Operational Management Plan (refer below). The proposed development will generate 220 jobs during construction and five jobs during the operational phase.

An Operational Management Plan (**OMP**) prepared by Wee Hur is provided at **Appendix L**. The external terraces will be limited to resident use between 8am to 10pm Sunday to Thursday and 8am to 12 midnight on Friday and Saturdays and the evening before a public holiday. Access to the building will be via Regent Street and William Lane/Marian Street, with electronic door locking systems which require key cards to enter.

An Operational Waste Management Plan (**OWMP**) has been prepared by Waste Audit (**Appendix M**). A storage room with areas for residential and retail waste and recycling will be located on the basement level. Waste collection trucks will access the loading area from William Lane, with on-site staff responsible for the turntable operation and maintenance of the bin storage room.

3. STRATEGIC CONTEXT

The strategic planning policies identified in the SEARs that need to be addressed include:

- *NSW State Priorities*
- *Future Transport Strategy 2056*
- *Better Placed – An integrated design policy for the built environment of New South Wales*
- *Guide to Traffic Generating Developments (RMS)*
- *Development near Rail Corridors and Busy Roads – Interim Guideline*
- *Greater Sydney Region Plan – A Metropolis of Three Cities*
- *Eastern City District Plan*
- *Towards our Greater Sydney 2056*
- *Sydney Local Environmental Plan 2012*
- *Sydney Development Control Plan 2012*
- *Sustainable Sydney 2030*
- *Central to Eveleigh Urban Transformation Strategy*
- *Redfern-Waterloo Built Environment Plan (Stage One) August 2006*
- *Redfern Centre Urban Design Principles*

The proposal is consistent with the following planning strategies, plans and policies as detailed below.

3.1. NSW STATE PRIORITIES

The NSW Premier's Priorities comprise a set of 15 priorities that aim to deliver on key policy matters, including:

- A strong economy
- Highest quality education
- Well connected communities with quality local environments
- Putting customer at the centre of everything we do
- Breaking the cycle of disadvantage.

One of the Priorities includes 'Greening Our City' including an increase in the tree canopy and green cover across Greater Sydney. The proposed development includes the introduction of new street trees and on-site landscaping which will contribute to this priority.

3.2. NSW FUTURE TRANSPORT STRATEGY 2056

The NSW Future Transport Strategy 2056 (**Transport Strategy**) sets the 40-year vision, directions and outcomes framework for transport mobility in NSW, to guide long-term transport investment. The Transport Strategy aims to response to the significant contemporary changes affecting transport and customer mobility in Sydney. These include the increasing automation of public transport networks, data sharing, mobile integration of services and the rise of ridesharing in NSW.

The Transport Strategy aims to preserve optionality for future users and travel behaviours and repurpose existing infrastructure and corridors to optimise their performance and maximise carrying capacity, whilst also facilitating the planning for future transport improvement and infrastructure networks. The vision and objectives relevant to the site and the proposed development as outlined on the following page.

Encouraging active travel (walking and cycling) and using public transport

The proposed development seeks to deliver student accommodation close to existing and proposed rail services and existing bus services. 134 bicycle spaces will be provided on-site in lieu of car parking to reduce reliance on private vehicles and increase the use of active and public transport.

Connecting people to jobs, goods and services in our cities and regions

The proposed development supports the 30-minute city concept, where people can conveniently access jobs and services within 30 minutes by public or active transport. The proposal provides student accommodation development in an area which is well served by public transport, jobs, goods and services.

3.3. BETTER PLACED

Better Placed was prepared by the Government Architect NSW (**GANSW**) to deliver good design outcomes through desired architecture, public places and environments across NSW. The policy provides best practice design processes which align with a clear set of established objectives to achieve the best possible outcomes. A response to the seven applicable objectives is outlined below:

Better Fit: Contextual, local and of its place

Section 03 of the Design Report prepared by AJ+C (refer **Appendix H**) provides a comprehensive assessment of the urban context, including the way in which the proposed built form, height, bulk and scale, setbacks and interface responds to the existing, approved and likely future development within the surrounding locality and the public domain.

The key urban design matters which informed the design are:

- Podium setback to William Lane which responds to the setbacks for 11 Gibbons Street and provides for the future pedestrian connection from Marian Street to Margaret Street.
- Public domain improvements integrated with the proposed building design to activate the streetscape while accommodating the required building services and fire egress requirements.
- Podium setback along Marian Street to provide for footpath widening in accordance with the UDP consistency with other recent approvals.
- Zero setback to Regent Street which is consistent with the setbacks to the existing and approved developments to the north.
- Provision of satisfactory upper-level setbacks to the southern boundary to provide for the potential future development to the south at 104-116 Regent Street, including adequate solar access and outlook
- Southern windows on the southern facade to provide additional natural daylight, with angled blades to maintain visual privacy for the future development to the south.

Better Performance: Sustainable, adaptable and durable

The proposal aims to maximise indoor environmental quality outcomes, such as waste reduction and low environmental impact materials, while maintaining energy efficiency and providing easy access to transport and on-site bicycle facilities.

The materiality of the podium and the tower components are explored in Section 08 of the Design Report (**Appendix H**), including the way in which the selected façade treatments respond to the locality, environmental factors such as solar access and wind, and the amenity of the future occupants. The proposed materials and finishes for each of the building elevations are described in detail on pages 77-79.

The ESD report (**Appendix R**) and waste management plans (**Appendix I** and **Appendix M**) include a comprehensive range of initiatives to reduce energy consumption through the careful selection of materials and management measures to reduce potential waste generation.

The development will have a low reliance on private vehicles, being located within a highly accessible location and with no on-site car parking to be provided. The site is well-located close to employment precincts, high-frequency public transport and existing local services, facilitating the delivery of the Green Travel Plan which seeks to provide for a high level of walking and cycling.

Better for Community: Inclusive, connected and diverse

The proposed mixed-use development includes retail uses and common spaces for the student accommodation on the ground level and two building entries on Regent Street and the corner of Marian Street and William Lane to activate the interface of the building with the street frontages.

The building design is complemented by the proposed public domain improvements which include new street trees, paving and seating along all three street frontages to contribute to the activation of the public spaces and social interaction between the building occupants and the locality.

Better for People: Safe, comfortable and liveable

A Crime Prevention Through Environmental Design (**CPTED**) Assessment has been prepared by Elton Consulting (**Appendix HH)**. The CPTED Assessment makes recommendations relating to crime prevention elements and treatments to be incorporated in the development design to minimise risk or opportunities for crimes to occur.

The Environmental Wind Tunnel Test Report prepared by SLR Consulting (**Appendix CC**) provides a quantitative assessment of the wind conditions on the ground and podium levels of the proposed development. Furthermore, wind mitigation measures are recommended at areas that experience elevated wind impacts to satisfy pedestrian comfort and safety.

Better Working: Functional, effective and fit for purpose

The design supports a fine grain urban form, where places are walkable of human scale with a mix of land uses including social infrastructure and local services. The proposed student accommodation will enable residents to live close to public transport, jobs and services.

The Design Report prepared by AJ+C provides a comprehensive assessment of the environmental amenity outcomes for the proposed building, including access to natural daylight and ventilation, acoustic separation and access to landscape and outdoor spaces. Additional detailed information regarding these matters is provided within the Acoustic Report prepared by Northrop (**Appendix O**) and the Landscape Report prepared by Turf Design (**Appendix K**).

Better Value: Creating and adding value

The proposed development will provide 381 rooms and 408 beds available to students, close to major tertiary education campuses. The proposal will contribute to the development of a more accessible and walkable city and integrates land uses with public transport. The proposal will contribute to the ongoing renewal of the Redfern-Waterloo precinct, with ground floor retail and active frontages along Regent Street, Marian Street and William Lane.

Better Look and Feel: Engaging, inviting and attractive

The proposal will provide for communal spaces for residents to interact with landscaping that enhances the streetscape and the appearance of the site. The proposal also includes public domain improvements, including street tree planting, paving and seating to contribute to active frontages along Regent Street, Marian Street and William Lane.

In summary, the final design seeks to deliver a built form that is sustainable, functional and sensitive to its context as encouraged by objectives of Better Placed. The consistency of the proposal with the relevant objectives and principles is demonstrated in the Design Report and as discussed in detail in **Section 5.1**, **Section 6.1**, **Section 6.2** and **Section 6.4** of this report.

3.4. GUIDE TO TRAFFIC GENERATING DEVELOPMENTS (RMS)

The RMS *Guide to Traffic Generating Developments* (**RMS Guide**) prescribe the traffic generation considerations relating to major developments. The Guide establishes the grounds for traffic impact assessment in terms of daily traffic volumes and peak traffic volumes for the residential and retail land uses.

The SSDA is accompanied by a Traffic and Transport Impact Assessment prepared by The Transport Planning Partnership (refer to **Appendix N**) which assesses the potential traffic impacts of the proposed development in accordance with the RMS Guide. No specific traffic generation rates are provided for student accommodation, however, the assessment recognises the proposed development is targeted at student who do not own private vehicles and will walk to nearby universities.

Based on the above, the proposed development will not generate traffic and is considered acceptable based on its accessibility to pedestrian and cycle connections and existing and future high-frequency public transport. A Green Travel Plan has been prepared to facilitate the implementation of the desired travel behaviours.

3.5. DEVELOPMENT NEAR RAIL CORRIDORS AND BUSY ROADS – INTERIM GUIDELINE

Development Near Rail Corridors and Busy Roads aims to facilitate the effective planning, design and assessment of development in or adjacent to rail corridors and busy roads. It addresses potential noise and vibration and air quality impacts from roads and railways, as well as safety, excavation, earthworks and other construction related issues.

The SSDA is accompanied by an Acoustic Report prepared by Northrop (**Appendix O**) and an Air Quality Impact Assessment prepared by Wilkinson Murray (**Appendix P**) which assess the potential noise and air quality impacts associated with the site proximity to Regent Street and the traffic volumes along this busy road.

The recommended mitigation measures within each of these reports have been incorporated into the proposed development, including minimum glazing thicknesses to achieve the required noise criteria. Each of these matters are discussed in further detail within **Section 6.12**and **Section 6.13**.

3.6. GREATER SYDNEY REGION PLAN: A METROPOLIS OF THREE CITIES

The Greater Sydney Region Plan provides the overarching strategic plan for growth and change in Sydney. It is a 20-year plan with a 40-year vision that seeks to transform Greater Sydney into a metropolis of three cities - the Western Parkland City, Central River City and Eastern Harbour City. It identifies key challenges facing Sydney including increasing the population to eight million by 2056, 817,000 new jobs and a requirement of 725,000 new homes by 2036.

The Region Plan provides broad Priorities and Actions which focus on four key themes - infrastructure and collaboration, liveability, productivity and sustainability. The Directions and Objectives of relevance to the site and the proposed development and the way in which they have been responded to within the proposal are outlined below:

Objective 8: Greater Sydney's communities are culturally rich with diverse neighbourhoods

The proposed student accommodation will provide housing diversity in a highly accessible location. The site is within 200 metres walking distance to Redfern railway station which provides transport to a range of employment, entertainment and recreation destinations. The proposal will provide communal spaces for residents to socialise and will contribute to active frontages along Regent and Marian Streets.

Objective 10: Greater housing supply

The Plan recognises the importance of housing supply and demand by responding to needs, choice and demographic characteristics of the existing and future community. The proposed development seeks to deliver 408 student housing beds within the Redfern to Eveleigh urban renewal corridor and in close proximity to a range of services, by active or public transport.

Objective 11: Housing is more diverse and affordable

The proposed development will provide 332 rooms and 408 beds available to students in proximity to major tertiary education campuses. The proposal will contribute to the development of a more accessible and walkable city and integrates land uses with public transport.

Objective 12: Great places that bring people together

The Plan supports a fine grain urban form, where places are walkable of human scale with a mix of land uses including social infrastructure and local services. The proposed student accommodation will enable residents to live close to public transport, jobs and services.

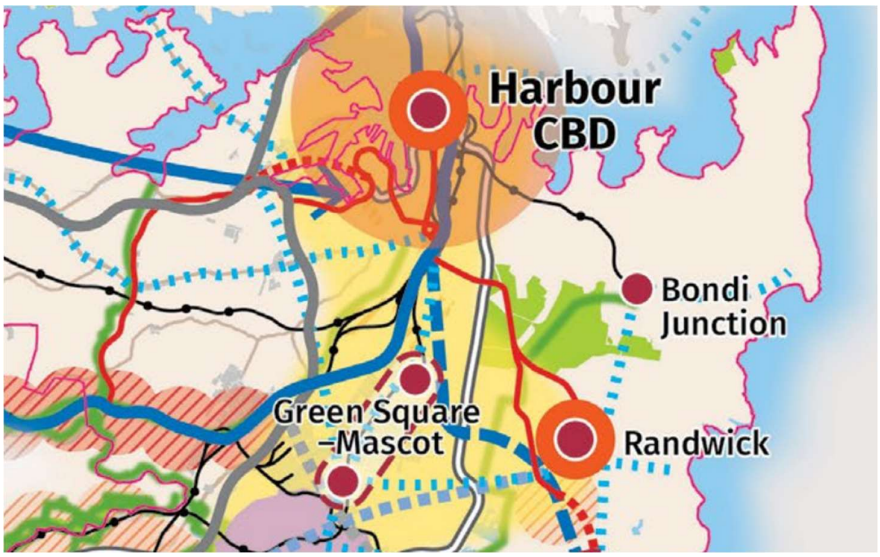
Overall, the proposal broadly supports the directions in the Greater Sydney Region Plan by increasing the supply of housing for students in proximity to major tertiary education campuses. It contributes to the development of a more accessible and walkable city by integrating land uses with public transport and the urban renewal of the Redfern-Waterloo precinct.

3.7. OUR GREATER SYDNEY 2056: EASTERN CITY DISTRICT PLAN

The Eastern City District Plan is a 20-year plan to manage growth in the context of economic, social and environmental matters to implement the objectives of the Greater Sydney Region Plan. The intent of the District Plan is to inform local strategic planning statements and local environmental plans, guiding the planning and support for growth and change across the district.

The District Plan contains strategic directions, planning priorities and actions that seek to implement the objectives and strategies within the Region Plan at the district-level. The Structure Plan identifies the key centres, economic and employment locations, land release and urban renewal areas and existing and future transport infrastructure to deliver growth aspirations.

Figure 15 Eastern City District Structure Plan



Source: Greater Sydney Commission (Eastern City District Plan)

The site is centrally located between the Harbour CBD and Sydney Airport within the Eastern Economic Corridor as outlined by the yellow shading in the plan extract above. It also benefits from access to the future Sydney Metro line which is shown by the solid blue line. The planning priorities and actions likely to have implications for the proposed development are discussed below:

Planning Priority E5: Providing housing supply, choice and affordability with access to jobs, services and public transport

The proposal will contribute to the provision of services and social infrastructure to meet people's changing needs. The proposed development will contribute to the provision of student housing with high levels of walkability, good transport connections with proximity to tertiary education.

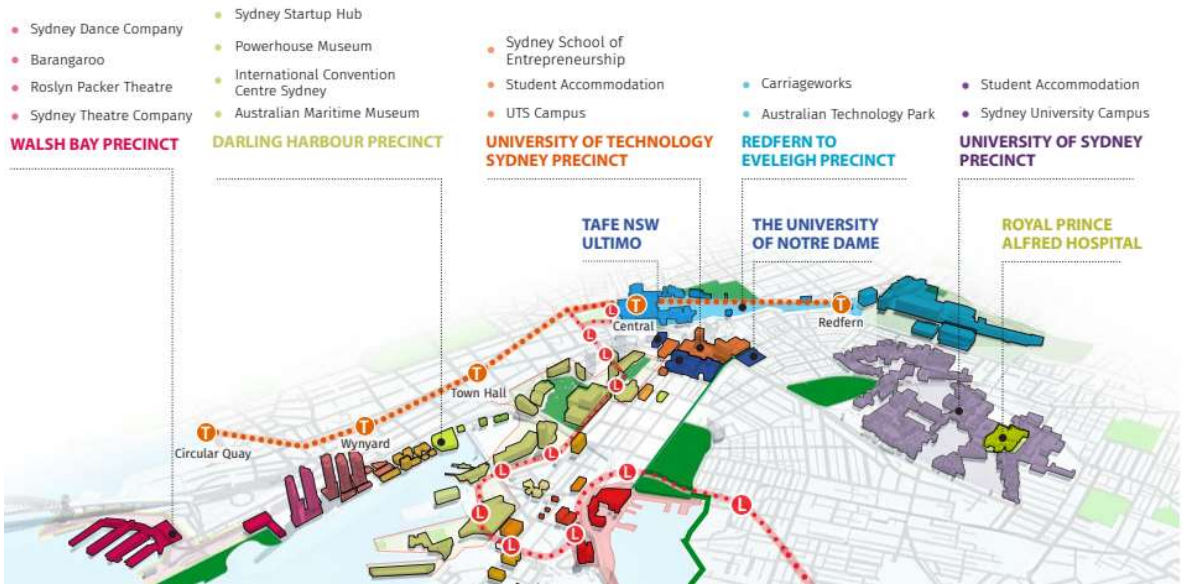
Planning Priority E6: Creating and renewing great places and local centres, and respecting the District's heritage

The proposal will contribute to the ongoing renewal of the Redfern-Waterloo precinct. The proposal includes ground floor retail and active frontages along Regent Street, Marian Street and William Lane, contributing to the activation and revitalisation of this important precinct within the Eastern City Innovation Corridor (as described on the following page).

Planning Priority E8: Growing and investing in health and education precincts and the Innovation Corridor

The subject site is within the Eastern City Innovation Corridor as detailed within the following figure. Competitive innovation precincts depend on high levels of amenity and walkability, with good transport connections spurring the rapid exchange of ideas and the establishment of networks. The proposed development will support the Innovation Corridor by providing student accommodation within walking distance of several tertiary institutions.

Figure 16 Eastern City Innovation Corridor



Source: Eastern City District Plan

Planning Priority E10 Delivering integrated land use and transport planning and a 30-minute city

Overall, the proposed development seeks to facilitate the integration of land use and transport planning and contributes to the creation of a walkable and 30-minute city. The proposal provides a mixed-use development with student accommodation which has been appropriately integrated in an area which is well served by public transport, jobs, goods and services.

3.8. CITY OF SYDNEY DRAFT LOCAL STRATEGIC PLANNING STATEMENT

City Plan 2036: Local Strategic Planning Statement (**LSPS**) provides the framework for the City of Sydney to undertake land use planning and decision making over the next 20 years. This planning statement contains 13 planning priorities organised by the central themes of infrastructure liveability, productivity, sustainability and implementation as outlined in the Greater Sydney Region Plan and District Plans. The planning priorities which are relevant to the site and proposed development are discussed below.

Movement for walkable neighbourhoods and a connected city

The proposed development includes additional retail along Regent Street and 408 student housing beds within close walking distance of existing retail, commercial and community services. The site is well-located close to existing and proposed public transport services, including Redfern railway station, the future Sydney Metro station at Waterloo and existing bus services. 134 bicycle parking spaces will be provided on-site in lieu of on-site car parking, encouraging active transport and reduced reliance on private motor vehicles.

Creating great places

The proposed development is located within an accessible local centre. The proposed building has been carefully sited and designed to deliver design excellence and a high level of amenity within the built environment. The proposal will provide for communal spaces for residents to interact with landscaping that enhances the streetscape and the appearance of the site. The proposal also includes public domain improvements, including street tree planting, paving and seating to contribute to active frontages along Regent Street, Marian Street and William Lane.

New homes for a diverse community

The proposal will deliver 381 rooms, including 338 studio rooms (including six accessible rooms), 27 twin studio rooms and 16 ensuite rooms, comprising a total of 408 beds for tertiary students. The proposed development will contribute to the ongoing delivery of a diversity of housing within the locality, including terrace housing, multi-dwelling housing, low and high-rise apartments and student accommodation. The proposed increase in the local student population will contribute to economic growth and development of the precinct.

3.9. SUSTAINABLE SYDNEY 2030

Sustainable Sydney 2030 outlines the City of Sydney vision for sustainable development within the Sydney LGA to 2021. The vision is based on three overarching goals of green, global and connected, and is guided by ten strategic directions and ten sustainability targets.

The proposal will facilitate the regeneration of the site, delivering new student accommodation and employment opportunities in an inner urban area with good access to existing transport networks. It will contribute to urban renewal in a sustainable manner and support the creation of a new vibrant, creative and diverse community. The proposed development has been designed to contribute to relevant targets and is consistent with the strategic directions as follows:

Direction 1 - A Globally Competitive and Innovative City

The proposal will provide student accommodation within walking distance of several tertiary institutions including University of Sydney, University of Technology Sydney (UTS), TAFE NSW Ultimo Campus and Notre Dame University Sydney. The proposal will support the tertiary education sector and its significant contribution to the NSW and Australian economies.

Direction 3 - Integrated Transport for a Connected City

The site is within a highly accessible location, being less than 200 metres walking distance from Redfern railway station and less than 500 metres of the future Sydney Metro station at Waterloo. The site is also within walking distance of numerous bus routes on Regent Street, Redfern Street and Gibbons Street, providing access to the eastern, southern and inner-western suburbs.

Direction 4 - A City for Walking and Cycling

The site is located close to employment, shops and services, providing opportunity for walking and cycling to be the dominant modes of transport for its future occupants. The proposal provides 134 bicycle storage spaces in lieu of on-site car parking to encourage active transport and reduce reliance on private motor vehicles for transport.

Direction 5 - A Lively, Engaging City Centre

The proposed mixed-use development includes retail uses and common spaces for the student accommodation on the ground level and two building entries on Regent Street and the corner of Marian Street and William Lane to activate the interface of the building with the street frontages. The building design is complemented by the proposed public domain improvements which include new street trees, paving and seating along all three street frontages to contribute to the activation of the public spaces and social interaction between the building occupants and the locality.

Direction 8 - Housing for a Diverse Population

The proposal will increase the housing options available to tertiary students within walking distance of major educational institutions within Central Sydney. The proposal includes 381 rooms which will provide for a total of 408 students in single studios and ensuite rooms and twin studio configurations.

Direction 9 - Sustainable Development, Renewal and Design

The proposal aims to maximise indoor environmental quality outcomes, such as waste reduction and low environmental impact materials, whilst maintaining energy efficiency and providing easy access to transport and bike / end of trip facilities. The development will have a low reliance on private vehicles, being located within a highly accessible location and with no on-site car parking to be provided. The site is well-located close to employment precincts, high-frequency public transport and existing local services, facilitating the delivery of the Green Travel Plan which seeks to provide for a high level of walking and cycling.

3.10. CENTRAL TO EVELEIGH URBAN TRANSFORMATION STRATEGY

The *Central to Eveleigh Corridor Strategy* guides the key strategic urban renewal of approximately 50 hectares of land in and around the rail corridor from Central to Erskineville railway stations. The Strategy was released by UrbanGrowth NSW in November 2016 and was used to guide district planning undertaken by the Greater Sydney Commission and local planning led by Transport for NSW and the Department of Family and Community Services. The proposed development is consistent with the Key moves identified within the Strategy as summarised below:

Key Move 9 – Integrate new high-density mixed use buildings with existing neighbourhoods and places

The proposal seeks to optimise the development potential of the site as outlined within the Strategy. It provides for a high-density development comprising an FSR of 7:1 and a maximum building height of 18 storeys, consistent with the SSD SEPP. Careful consideration has been given to the building design, particularly at the podium level, so the proposed development will integrate with the existing streetscape. Public domain improvements along all three street frontages will enhance the appearance and functionality of the public spaces.

Key Move 10 – Deliver a diversity of housing choice, tenure and price points

The proposed development will contribute to the ongoing delivery of a diversity of housing within the locality, which includes terrace housing, multi-dwelling housing, low and high-rise apartments and student accommodation. The proposed use of the site for student accommodation is considered entirely appropriate as it will optimise its location within easy walking distance of major tertiary institutions, high-frequency public transport and existing local services.

3.11. REDFERN–WATERLOO BUILT ENVIRONMENT PLAN (STAGE ONE) AUGUST 2006

Redfern Waterloo Built Environment Plan Stage 1 (**BEP**) sets out the strategic land use and urban design principles for the sites identified in the State Significant Precincts SEPP. The proposed development aligns with the BEP by:

- Strengthening the connection between Redfern and nearby university campuses.
- Supporting local employment.
- Providing additional housing and housing choice.
- Activating the street fronts.
- Incorporating a podium design that is consistent with the traditional character of area.

The proposal is generally consistent with the land use and design concepts for the Redfern town centre precinct (Redfern Railway Station, Gibbons and Regent Streets). The proposal supports the objectives for character and urban scale in the centre by:

- Maintaining the established character and scale of the Regent Street frontage by incorporating a two-storey podium height and architectural language of the existing retail frontages along Regent Street.
- Providing new retail spaces that further activate the Regent Street ground plane.
- Providing for passive surveillance of all public spaces in the vicinity of the site by addressing windows at upper levels toward the street.
- Delivering public domain improvements including street furniture and street tree planting.

3.12. REDFERN CENTRE URBAN DESIGN PRINCIPLES

The *Redfern Centre Urban Design Principles* (**UDP**) were developed by the Redfern-Waterloo Authority in 2009 to provide additional detail regarding design excellence for future development in accordance with the Redfern-Waterloo State Significant Sites under clause 22 of Part 5 of Schedule 3 of the SSP SEPP.

The principles apply to the area generally bounded by Marian Park, Margaret Street, Regent Street and Lawson Square. The principles were publicly exhibited in 2010 and subsequently endorsed by the (then) Minister for Planning and Infrastructure. The proposal is consistent with the objectives for high-rise development, as demonstrated in **Table 10**.

The proposed variation to the maximum building heights along Regent Street and Marian Street has been fully justified within a Clause 16A Variation Request (refer **Appendix OO**) which is addressed in further detail within **Section 4.2**.

Table 10 Consistency with Redfern Centre Urban Design Principles

Planning Control	Comment	Compliance
3.2.1 Building Height ▪ 18 storeys to centre of site ▪ 3 storeys along Marian Street ▪ 2 storeys along Regent Street	The proposed development has a maximum building height of 18 storeys with a two storey podium along the Regent Street and Marian Street frontages. The proposed variation to the building heights within the prescribed setbacks from the Regent Street and Marian Street property boundaries is fully justified within a Clause 16A Variation Request (refer **Appendix OO**) and in **Section 4.2** of this report	Acceptable on merit
3.2.2 FSR Maximum 7:1	The proposed FSR is 7:1 which complies with the SSP SEPP and the UDP.	Yes
3.2.3 Minimum site area 1,400 sqm	The amalgamated site has a total site area of 1,287m^2. The proposed site area is considered entirely acceptable based on the development potential of the site and the size and dimensions of the immediately adjoining parcel to the south which extends across the rest of the street block to Margaret Street. It has been demonstrated in the Design Report prepared by AJ+C (**Appendix H**) that the siting and design of the proposed building at 90-102 Regent Street will not have an adverse impact on the development potential of the adjoining site to the south.	Acceptable on merit
3.2.4 Building separation Each development to provide minimum of 50% of required separation distance measured from centre line of the road. For tower elements above the street wall, separation distance between non-habitable rooms is to be: ▪ 13m below 8 storeys ▪ 18m in excess of 8 storeys. Design for view sharing by residents and office workers of existing views across southern edge of city and district views to east, west and south	The building separation plans prepared by AJ+C in the Architectural Design package (**Appendix G**) include setback distances to the southern boundary and the centre of William Lane. The proposed development has been sited and designed to maximise the separation distances between the tower building and the approved and likely future buildings to the west and south of the site. This includes increased setbacks to the western boundary, noting the approved affordable rental housing development at 11 Gibbons Street has reduced setbacks to their eastern boundary, which constrains the overall separation distance between the buildings. Where separation distances are less than the recommended distances within the UDP, privacy mitigation measures are included to avoid adverse impacts on visual privacy.	Acceptable on merit

Planning Control	Comment	Compliance
New development to provide a high quality visual appearance when viewed from surrounding areas.	The VIA prepared by Urbis (**Appendix Q**) concludes the proposal is consistent with the transitional development within the locality and will not result in any unacceptable visual or view impacts.	
3.2.5 Podium design Podiums are to be provided to all towers (built form over 6 storeys). ▪ Marian Street - 1.5m for footpath widening to average width of 3m ▪ William Lane - 0.8m to provide for footpath widening	The ground floor of the building is generally built to the street edge along Regent Street. The building is setback along Marian Street to provide for the widening of the footpath in accordance with the UDP. The building is setback from William Lane to provide for pedestrian access through to Margaret Street (subject to redevelopment of the adjoining site to the south).	Yes
3.2.6 Tower design Setbacks above street level are: ▪ 4 metres to Marian Street ▪ 8 metres to Regent Street. New development is to provide articulation and interest to all facades of the buildings.	The tower building above the podium has been generally setback four metres on Regent Street and three metres on Marian Street. The corner encroachment on the Regent Street frontage has a minimum width of 2.5 metres. The proposed setback distances are consistent with or greater than the recently approved development within the locality, including 80-88 Regent Street to the north and 11 Gibbons Street to the west. It is considered that compliance with the recommended setbacks would result in an inconsistent built form which would not be compatible with the existing, approved and likely future built form within the locality. A detailed justification for the proposed building setbacks is provided in the Clause 16A Variation Request attached as **Appendix OO**. The building facades have been designed to provide articulation and interest as outlined in the architectural drawings and ten photomontages submitted with the EIS.	Acceptable on merit
3.2.7 Floor to floor heights Refer to the ADG for the required floor to ceiling heights for residential buildings (4m for ground floor retail, 3.3m for mixed use and 2.7 for residential use)	The floor to ceiling heights are: ▪ 4m for the Ground Floor (Level 1) ▪ 3.3m for Level 2 ▪ 2.7m for Level 2 and above.	Yes

Planning Control	Comment	Compliance
3.2.8 Skyline/ rooftop design Tops of towers to be designed to provide a dramatic silhouette. Roof mounted plant rooms, air conditioning units and other services and equipment shall be screened from view.	The roof top services are screened from view using integrated roof structures and architectural elements. The mechanical plant on the roof-top of the podium is screened from view by the landscaped setbacks and built elements.	Yes

Overall, the proposed development satisfactorily responds to the Urban Design Principles in a manner which is consistent and compatible with the existing, approved and likely future development within the locality.

4. STATUTORY CONTEXT

Various legislative and statutory planning instruments require consideration in the assessment of the proposal. In accordance with the SEARs, this EIS considers the following controls which are applicable to the site and the proposal:

- *State Environmental Planning Policy (State & Regional Development) 2011*
- *State Environmental Planning Policy (State Significant Precincts) 2005*
- *State Environmental Planning Policy (Urban Renewal) 2010*
- *State Environmental Planning Policy (Affordable Rental Housing) 2009*
- *State Environmental Planning Policy (Infrastructure 2007)*
- *State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)*
- *State Environmental Planning Policy No 64—Advertising and Signage*
- *State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development*
- *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*
- *Sydney Local Environmental Plan 2012*
- *Sydney Development Control Plan 2012*
- *Redfern-Waterloo Development Contributions Plan 2006*
- *Redfern-Waterloo Affordable Housing Contributions Plan 2006*

The permissibility of the proposed development and the application of the relevant statutory planning instruments that apply to the site and the proposed development are addressed in detail below.

4.1. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) provides the framework for environmental planning in NSW and includes provisions to ensure that proposal that have the potential to impact the environment are subject to detailed assessment and provide opportunities for public involvement.

This development is proposal under Part 4 of the Act, Division 4.7 State Significant Development, Section 4.38 and is subject to the Minister's consent. **Table 11** below provides an assessment of the proposal against the objects contained within Section 1.3 of the EP&A Act 1979.

Table 11 Consistency with Sydney DCP 2012

Object	Comment/ Response
To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources.	The proposal promotes the social and economic welfare of the community and a better environment through the delivery housing that is available for students in proximity to major tertiary education campuses and integrates land uses with public transport.
To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about the environmental planning and assessment.	The proposal is committed to achieving high standards of ecologically sustainable development and is accompanied by a detailed ESD Report (**Appendix R**).
To promote the orderly and economic use and development of land.	The proposed development has been sited and designed to comply with the core built form controls

Object	Comment/ Response
	and be consistent and compatible with the existing, approved and likely future development within the surrounding land.
To promote the deliver and maintenance of affordable housing.	The proposed development will contribute to the delivery of additional housing in the Sydney metropolitan area. The additional supply of purpose built student accommodation will cater for tertiary students who wish to live close to major tertiary institutions and reduce demand for other housing within the catchment.
To protect the environment, including the conservation of threatened and other species of native animals and plants, ecologically communities and their habitats.	The proposal is located within an established urban context in the inner suburbs of Sydney. The application for the BDAR waiver prepared by Green Tape Solutions demonstrates the proposal will have no impact on threatened species or their habitats (**Appendix S**).
To promote sustainable management of built and cultural heritage (including Aboriginal cultural heritage).	The proposal has been designed to avoid any unacceptable impacts to the surrounding built heritage as outlined in **Section 6.9** and the Statement of Heritage Impact (**Appendix D**). The proposed public art recognises and celebrates the significance of the cultural heritage of Redfern as outlined in **Section 6.10** and the and Aboriginal Cultural Heritage Assessment (**Appendix C**).
To promoted good design and amenity of the built environment.	The proposal exhibits design excellence and mitigates adverse amenity impacts. The design excellence strategy is detailed within the Design Report prepared by AJ+C and attached at **Appendix H**. The design and amenity of the proposal is also discussed in further detail in **Sections 6.1-6.4** of this report.
To promote proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.	The proposed development will be constructed and maintained in accordance with relevant requirements and guidelines. The EIS is accompanied by a BCA Report (**Appendix T**) and an Accessibility Assessment (**Appendix U**) which are addressed in further detail within **Section 6.20** of this report.
To promote the sharing of responsibility for environmental planning and assessment between different levels of government in the State.	Relevant Government authorities and agencies have been consulted through the development of the proposed concept and the preparation of the detailed architectural drawings and supporting plans and reports. The Minister for Planning is the

Object	Comment/ Response
	consent authority as the development is considered SSD.
To provide increased opportunity for community participation in environmental planning and assessment.	An inclusive public consultation strategy has been implemented throughout the project design process (refer to **Section 5** and **Appendix V**). The SSDA will also be publicly notified in accordance with the statutory requirements.

Overall, the proposed development is consistent with the objects and general terms of the EP&A Act.

4.2. NSW BIODIVERSITY CONSERVATION ACT 2016

The *Biodiversity Conservation Act 2016* aims to maintain a healthy, productive and resilient environment for the greatest well-being of the community, consistent with the principles of ESD. Clause 2 of section 7.9 of the *Biodiversity Conservation Act 2016* requires a DA for SSD to be accompanied by a Biodiversity Development Assessment Report (**BDAR**).

A request seeking a waiver for the requirement for a BDAR associated with SSD-10382 was submitted to the NSW DPIE on 8 October 2020. This was accompanied by an assessment of the proposal development by Green Tape Solutions in accordance with the relevant provisions. A preliminary response was received from DPIE requesting additional information regarding the potential habitat for microbats. An updated waiver request was submitted on 21 October 2002 with the requested additional information.

A desk-top assessment confirmed the site contains no threatened species habitat or vegetation and the proposal will not require any clearing of native vegetation. The only *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC**) listed species and Matter of National Environmental Significance (**MNES**) recorded occurring at and near the site is the Grey-headed flying-fox. This species is nomadic an itinerant and likely feeding on local vegetation within the inner-city green zones. There are no habitat features within the development site suitable for this species.

A survey was also undertaken of the site on 20 October 2020 which confirmed there was no evidence of microbats within the buildings. No bat scats, smell or calls were found. However, mitigation measures were proposed to ensure the demolition of the buildings would impacts on native fauna, including microbats, should they be detected. These measures, including a staged demolition process and engagement of a qualified native fauna spotter, have been included within the development description of the proposed works.

A BDAR waiver was issued by the NSW DPIE on 2 November 2010 and a BDAR is not required to be prepared and submitted as part of this SSD application (refer to **Appendix S**).

4.3. STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT)

Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**) identifies sites that are considered State Significant Development sites. The proposed development is located within the Redfern-Waterloo Sites as listed under clause 2(g) and is considered a State Significant Development (**SSD**) under the general provisions of clause 2 which state:

> *Development that has a capital investment value of more than $10 million on land identified as being within any of the following sites on the State Significant Development Sites Map:*

The proposed development has a capital investment value of $51 million and accordingly, the site is considered SSD to which Part 4 of the Act applies.

4.4. STATE ENVIRONMENTAL PLANNING POLICY (STATE SIGNIFICANT PRECINCTS) 2005

State Environmental Planning Policy (State Significant Precincts) 2005 (**SSP SEPP**) aims to facilitate the development of important areas of economic, environmental or social significance to the State. The site is located within the area identified as Redfern-Waterloo Sites under the SSP SEPP. The specific controls apply to the precinct (including the subject site) are set out in Appendix 4 of the SEPP. The proposal has been designed to substantially comply with each of the relevant requirements as outlined below:

Table 12 Consistency with SEPP State Significant Precincts

Control	Comment	Compliance
Part 3 – Provisions relating to development of Redfern–Waterloo Authority Sites		
7. Land Use Zones The site is zoned Business Zone – Commercial Core	The proposed development has been prepared in accordance with the relevant objectives for the zone as outlined below.	Yes
9. Business Zone – Commercial Core 1) The objectives of the Business Zone – Commercial Core are as follows ▪ to facilitate the development of a town centre, ▪ to encourage employment generating activities by providing a wide range of retail, business, office, community and entertainment facilities, ▪ to permit residential development that is compatible with non-residential development, ▪ to maximise public transport patronage and encourage walking and cycling, ▪ to ensure the vitality and safety of the community and public domain, ▪ to ensure buildings achieve design excellence, ▪ to promote landscaped areas with strong visual and aesthetic values to enhance the amenity of the area.	The proposal has been designed to respond to the objectives for the SSP SEPP as outlined below: ▪ The proposal will facilitate the ongoing development of the town centre by providing a high-quality mixed-use building that is compatible and consistent with existing, approved and likely future developments and provides active frontages and public domain improvements that will contribute to the revitalisation and vibrancy of the locality. ▪ The site is ideally located for student housing as it is within walking distance of several tertiary institutions including University of Sydney, University of Technology Sydney (UTS), TAFE NSW Ultimo Campus and Notre Dame University Sydney. The proposal is compatible with the surrounding non-residential development and will add to the vitality and vibrancy of the main street. ▪ The proposed development maximises public transport patronage and encourages walking and cycling. On-site bicycle parking spaces will be provided in lieu of on-site car parking. The site is close to Redfern railway station and the active and vibrant centres of Redfern, Surry Hills and Chippendale. ▪ The public domain improvements will enhance the appearance and functionality of the public domain, including new street planting, paving and seating. The active	Yes

Control	Comment	Compliance
(2) Development for any of the following purposes is prohibited on land within the Business Zone - Commercial Core - bulky goods premises; depots; dual occupancies; dwelling houses; hazardous industries; hazardous storage establishments; heavy industries; home occupations (sex services); industries; light industries; offensive industries; offensive storage establishments; restricted premises; sex services premises; transport depots; truck depots; vehicle body repair workshops; warehouses or distribution centres. (3) Except as otherwise provided by this Policy, development is permitted with consent on land within the Business Zone—Commercial Core unless it is prohibited by subclause (2).	ground floor uses will complement the public domain and improve natural surveillance of the surrounding local road network. ▪ A series of design briefings were held with the SDRP with the feedback incorporated into the final design to achieve design excellence. ▪ The proposed on-site and public domain landscaping will improve the streetscape and the amenity of the public and private spaces. The proposed 'retail premises' (shop) and 'boarding house' (student housing) are not prohibited within the zone and are consistent with the objectives of the zone. Accordingly, the proposal is permitted with consent.	
Clause 20A Demolition requires development consent The demolition of a building or work may be carried out only with development consent.	The SSDA seeks development consent for the demolition of all existing buildings and structures.	Yes
Clause 21(1) Height of buildings Maximum two storeys along Regent Street from the property boundary to a depth of 8 metres. Maximum three storeys along Marian Street from the property boundary to a depth of 4 metres. Maximum 18 storeys across the balance of the site.	The proposed building complies with the overall maximum building height of 18 storeys. However, the proposal seeks to vary from the prescribed building heights within the setbacks to the property boundaries. The proposed building is generally setback 4 metres above the podium along the Regent Street boundary, with a minor point encroachment on the north-eastern corner with a minimum setback of 2.5 metres. The proposed setback is consistent and compatible with the 3 metre setback established by the development to the north including the recent approval for 80-88 Regent Street. The proposed building is setback 3 metres along the revised Marian Street boundary. The proposed setback is consistent and compatible	No – variation justified on merit

Control	Comment	Compliance
	with the approved setback to 11 Gibbons Street which ranges from 400mm to 2.4 metres. Further detailed justification for the proposed building envelope is provided within the variation request which has been prepared in accordance with clause 16A of the SSP SEPP and attached as **Appendix OO**.	
Clause 21(2) Floor space ratio The site has a maximum floor space ratio of 7:1	The proposed floor space ratio is 7:1 which complies with the SEPP.	Yes
Clause 22 – Design Excellence (1) Consent must not be granted unless the consent authority has considered whether the proposed development exhibits design excellence. (2) In considering whether proposed development exhibits design excellence, the consent authority must have regard to the following matters— (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved, (b) whether the form and external appearance of the building will improve the quality and amenity of the public domain, (c) whether the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency, (d) if a competition is held as referred to in subclause (3) in relation to the development, the results of the competition. (3) The consent authority may require a design competition for any	Wee Hur, the project architect AJ+C and members of the consultant team met with the GANSW and SDRP on multiple occasions during the preparation of the architectural drawings. The feedback provided by the GANSW and SDRP have been incorporated into the final building design which has been lodged with the SSDA. A design excellence strategy has been prepared and submitted to the GANSW outlining the way in which design excellence will be achieved. The Design Report prepared by AJ+C outlines the way in which the proposal exhibits design excellence, including: ▪ A high standard of architectural design, materials and detailing which complements the existing, approved and likely future development and the cultural heritage of Redfern ▪ The activation of the streetscape through the siting and design of the ground floor activities and their interaction with the public domain improvements along all three street frontages. ▪ Implementation of sustainable design principles to deliver satisfactory natural daylight and ventilation and the siting and design of the building to optimise the site location and passive surveillance while avoiding unacceptable impacts to the surrounding properties and excessive energy consumption. ▪ The podium setbacks and awnings will improve the quality and amenity of the public	Yes

Control	Comment	Compliance
development over 12 storeys consistent with guidelines issued by the Redfern–Waterloo Authority and approved by the Minister.	domain. The recommended wind mitigation measures will satisfy the target criteria. A design competition was not required to be held in accordance with the SEARs.	
Part 4: Additional provisions for the Redfern- Waterloo Authority Sites not applying to Part 3A Projects		
26 Notification of advertised development	This SSDA will be notified in accordance with the relevant legislation.	Yes
27 Heritage conservation Heritage items must not be demolished, dismantled or moved	The site is not heritage listed or located in a heritage conservation area. There are two local heritage items in the vicinity of the site, including Item I1352 - St Luke's Presbyterian Church to the south and Item I1353 – terrace house to the east. A Statement of Heritage Impact has been prepared (**Appendix D**) which concludes the proposed works would not have any significant impacts to the listed heritage items and the nearby heritage conservation area.	Yes
28 Preservation of trees or vegetation	The three existing street trees on Regent Street and Marian Street will be retained and supplemented with additional street tree planting.	Yes

4.5. STATE ENVIRONMENTAL PLANNING POLICY (URBAN RENEWAL) 2010

State Environmental Planning Policy (Urban Renewal) 2010 (**Urban Renewal SEPP**) establishes the process to assess and identify sites as urban renewal precincts. It seeks to facilitate the orderly and economic development of sites within urban renewal precincts and the delivery of strategic policy objectives.

The site is within the Redfern-Waterloo Potential Precinct as identified on the relevant map which accompanies the Urban Renewal SEPP. The proposal addresses the relevant provisions for development in potential precincts as outlined in clause 10 of the SEPP and as summarised below:

- The proposed development will deliver a higher-density student housing development in accordance with the built form controls outlined within the SSP SEPP.
- The amalgamation of the existing lots is considered appropriate and will not preclude the future development of the adjoining land to the south.
- The site has excellent access to existing and future public transport and existing and likely services within the locality, with public domain improvements that enhance the streetscape and pedestrian and cycle connectivity.

Based on the above, the proposal satisfactorily addresses the relevant requirements of the Urban Renewal SEPP.

4.6. STATE ENVIRONMENTAL PLANNING POLICY (AFFORDABLE RENTAL HOUSING) 2009

State Environmental Planning Policy (Affordable Rental Housing) 2009 (**ARH SEPP**) aims to provide a consistent planning regime for the provision of affordable rental housing and facilitate the effective delivery of new affordable rental housing.

Purpose-built student accommodation is defined as a 'boarding house' under the ARH SEPP. Division 3 outlines the detailed requirements for the delivery of 'boarding houses' in accordance with the ARH SEPP.

Clause 26 of the SEPP states that the Division 3 provisions apply to land within a land use zone that is equivalent to:

(a) R1 General Residential

(b) R2 Low Density Residential

(c) R3 Medium Density Residential

(d) R4 High Density Residential,

(e) B1 Neighbourhood Centre

(f) B2 Local Centre

(g) B4 Mixed Use

The site is within Zone E - Business - Commercial Core under the SSP SEPP. Based on our review, the zone could be considered equivalent to Zone B2 Local Centre or Zone B4 Mixed Use under the *Standard Instrument – Principal Local Environmental Plan* (**SI-PLEP**) based on the land use objectives and permitted uses.

However, DPIE advised in the Scoping Meeting that the Zone E – Business- Commercial Core is not listed within the equivalent land use zones under clause 26 and accordingly, the provisions of the ARH SEPP do not apply to the proposal. The proposed development remains permitted with consent in Zone E - Business - Commercial Core under the provisions of the SSP SEPP.

The relevant provisions listed within Division 3 were considered on a merit basis and demonstrated the appropriateness of the proposal, including the room sizes, communal living rooms, outdoor siting and ancillary facilities. These provisions are not relevant to the assessment of the proposal, however, the following matters are noted on a merit-basis:

- **Density and Scale**: the proposed floor space ratio is 7:1 in accordance with the SSP SEPP
- **Building Height**: the maximum building height is 18 storeys in accordance with the SSP SEPP.
- **Landscaped Area**: the building is generally built to the boundary of the three street frontages in accordance with the existing, approved and likely future streetscape. Landscaping is provided on the podium roof-top to enhance the appearance of the site and the amenity of the development.
- **Solar access**: the proposal incorporates multiple communal living rooms on the Ground Floor (Level 1), Level 2, Level 9 and Level 15. Each of the communal living rooms have been located on the northern side of the building to optimise solar access
- **Private Open Space**: three communal outdoor terraces are provided on the Level 2 podium with a combined area of 403m^2. The outdoor terraces exceed the minimum dimensions, generally ranging from five to eight metres.
- **Parking**: no on-site car parking is proposed based on the proximity of the site to major universities and high-frequency public transport. 134 on-site bicycle parking spaces and public domain improvements are provided to support active transport, including walking and cycling.
- **Accommodation Size**: the proposed student rooms range in size from a minimum of 11.7m^2 for the single studio rooms to a minimum of 16.9m^2 for the twin studio rooms.
- **Communal Living Room**: the primary communal living space is provided on the Ground Level (Level 1) and Level 2, with smaller additional communal areas on Levels 9 and 15.
- **Boarding Room Size**: no boarding room will be larger than 25m^2 (excluding kitchen and bathroom facilities).
- **Number of Lodgers**: no boarding room will be occupied by more than two lodgers.

- **Bathroom and Kitchen Facilities**: each of the student rooms will have private bathroom facilities. The queen studios, adaptable studios and twin studios also include kitchenette facilities. Residents will have access to shared kitchen facilities on Level 2. Staff will have shared facilities on the Ground Floor (Level 1).
- **Boarding Room Manager**: full-time staff will operate from the site between 9:00am and 5:30pm weekdays and 10:00am to 2:00pm on Saturdays. Casual staff will work weekdays between 5:00pm and 8:30pm. Residential Advisors and night managers will be on a rostered shift duty, providing on-site staff to manage any issues after hours.
- **Bicycle and Motorcycle Spaces**: 134 on-site bicycle parking spaces will be provided within the Basement and Ground Floor (Level 1). Motorcycle parking is not proposed to be provided based on the predicted travel mode share outlined within the Traffic Impact Assessment (**Appendix N**).
- **Character of the Local Area**: the physical impacts of the proposed development are considered acceptable based on the detailed assessment of the key issues in **Section 6** The appearance of the proposal is in harmony with the surrounding buildings and the street character. The area is currently undergoing significant redevelopment and gentrification, with a mix of land uses, building typologies and housing stock. The proposed development is consistent with the transition of development within the locality and will not result in any unacceptable visual impacts.

Overall, it is considered the proposed development is considered appropriate for the site and will provide a high-level of amenity for the future student occupants.

4.7. STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

State Environmental Planning Policy (Infrastructure) 2007 (**Infrastructure SEPP**) aims to facilitate the effective delivery of infrastructure across NSW by identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure and prescribing consultation requirements for certain development. The relevant provisions of the Infrastructure SEPP in relation to the proposed development are summarised in the following table.

Table 13 Consistency with Infrastructure SEPP

Clause	Response	Referral Agency
Part 3, Division 5 Electricity transmission or distribution, Subdivision 2 Development likely to affect an electricity transmission or distribution networks	A new 1MVA mini chamber substation is to be installed as part of the development. A formal application will be made to Ausgrid during the detailed design stage.	Ausgrid
Part 3, Division 15 Railways, Subdivision 2 Development in Rail corridors	The proposed development is on land affected by the Sydney Metro corridor and the SSDA will be referred to Transport for NSW and Sydney Metro for comment.	Transport for NSW Sydney Metro
Part 3, Division 17 Roads and traffic, Subdivision 2 Development in or adjacent to road corridors and road reservations	The SSDA will be referred to the RMS as the site is located adjacent to a Classified Road (Regent Street) and is within 150 metres of the future CBD Rail Link (Zone B - Tunnel).	RMS

Each of the relevant clauses of the Infrastructure SEPP have been assessed within the Infrastructure Report (**Appendix W**) and Traffic Impact Assessment (**Appendix N**). Each of these reports is discussed in further detail within the assessment of key issues in **Section 6.7** and **Section 6.21**.

4.8. STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55) provides a state-wide planning approach for the remediation of land and aims to promote the remediation of contaminated land to reduce the risk of harm to human health or the environment. Clause 7(1) requires the consent authority to consider whether land is contaminated prior to the issuance of consent to a DA.

A Detailed Site (Contamination) Investigation (**DSI**) report (**Appendix J)** and Remediation Action Plan (**RAP**) (**Appendix NN**) were prepared by Douglas Partners is discussed in detail in **Section 6.17**. The reports conclude the site can be made suitable for the proposed development, subject to the completion of the remediation works and the preparation of a Validation Report in accordance with the RAP.

4.9. STATE ENVIRONMENTAL PLANNING POLICY NO. 64 – ADVERTISING AND SIGNAGE

State Environmental Planning Policy No.64 – Advertising and Signage (SEPP 64) aims to ensure that signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations, and is of high quality design and finish.

Clause 13 of SEPP 64 requires a consent authority to consider the objectives of the policy and complies with the assessment criteria contained within Schedule 1. The indicative signage zones proposed on the ground floor and upper levels of the building are addressed within the following table.

Table 14 Compliance with Schedule 1 SEPP 64

Criteria	Assessment	Compliance
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?* *Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?*	The proposed signage is consistent with the visual character of the Redfern area, being an area in transition with high density development. Similar signage zones have been approved for the surrounding development sites, including the recently approved Wee Hur student housing development at 13-23 Gibbons Street.	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 is not located within an environmentally sensitive areas or a heritage conversation zone. The proposal will not adversely impact the visual qualities of nearby heritage items.	Yes
3 Views and vistas *Does the proposal obscure or compromise important views?* *Does the proposal dominate the skyline and reduce the quality of vistas?* *Does the proposal respect the viewing rights of other advertisers?*	The proposed signage is contained wholly within the building envelope and the building façade. The proposed signage has been designed to complement the architecture and design features. The size and dimensions of the signage zones are consistent with the scale of the building and will not dominate the skyline.	Yes

Criteria	Assessment	Compliance
4 Streetscape, setting or landscape *Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?* *Does the proposal contribute to the visual interest of the streetscape, setting or landscape?* *Does the proposal reduce clutter by rationalising and simplifying existing advertising?* *Does the proposal screen unsightliness?* *Does the proposal protrude above buildings, structures or tree canopies in the area or locality?* *Does the proposal require ongoing vegetation management?*	The scale of the proposed signage zones is consistent with the scale, proportion and form of the proposed building. The top-of-building signage responds to the architectural features of the building. The ground floor signage is modest and will identify the use of the building and the main entry. The proposed signage will create visual interest along the streetscape and within the emerging skyline. The proposed signage is contained wholly on the building façade and does not protrude above the building or structures.	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?* *Does the proposal respect important features of the site or building, or both?* *Does the proposal show innovation and imagination in its relationship to the site or building, or both?*	The proposed signage zones have been designed in a holistic manner to complement, rather than compete with, the architectural features of the building. The top-of-building signs reinforce the significance of the Regent Street and Marian Street corner and the transformation of the Redfern locality.	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?*	NA	NA
7 Illumination *Would illumination result in unacceptable glare?* *Would illumination affect safety for pedestrians, vehicles or aircraft?*	Illumination of the proposed signage will be in accordance with the relevant Australian Standards and the recommendations of the Light Spill Assessment (**Appendix X**).	Yes

Criteria	Assessment	Compliance
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?* *Would the proposal reduce the safety for pedestrians or bicyclists?* *Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?*	The proposed signage zones are located on the building facade and will not have any impacts on the safety of the surrounding public roads, pedestrians, or cyclists.	Yes

Overall, the indicative signage zones are satisfactorily address each of the relevant provisions of SEPP 64 and are considered appropriate for the site and the locality.

4.10. STATE ENVIRONMENTAL PLANNING POLICY NO. 65 – DESIGN QUALITY OF RESIDENTIAL APARTMENT DEVELOPMENT

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (**SEPP 65**) aims to improve the design quality of residential apartment development in New South Wales.

Clause 4(1) states that SEPP 65 applies to development for a residential flat building, shop top housing or mixed-use development with a residential accommodation component if:

(a) the development consists of any of the following:

(i) the erection of a new building,

(ii) the substantial redevelopment or the substantial refurbishment of an existing building,

(iii) the conversion of an existing building, and

(b) the building concerned is at least 3 or more storeys (not including levels below ground level (existing) or levels that are less than 1.2 metres above ground level (existing) that provide for car parking), and

(c) the building concerned contains at least 4 or more dwellings.

However, Clause 4(4) provides that SEPP 65 does not apply to a boarding house or a serviced apartment unless a LEP states otherwise.

Sydney Local Environmental Plan 2012 does not include any provisions that would require a boarding house to be assessed in accordance with SEPP 65 and accordingly, it does not apply to the proposal.

4.11. STATE ENVIRONMENTAL PLANNING POLICY (VEGETATION IN NON-RURAL AREAS)

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 (**Vegetation SEPP**) aims to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.

An Arboricultural Impact Assessment Report has been prepared by Urban Arbor (**Appendix Y**) which confirms the three existing street trees will be retained in a viable condition. A Landscape Plan has been prepared by Turf Design Studio (**Appendix K**) which details the supplementary street tree planting and on-site landscaping to enhance the appearance and amenity of the site.

The proposed landscape approach is considered appropriate based on the urban context of the site and its compatibility with the surrounding land uses and streetscape character.

Accordingly, the proposed development satisfactorily addresses the relevant provisions of the Vegetation SEPP.

4.12. STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 was gazetted on 25 June 2004. The policy aims to encourage sustainable residential development and provide consistent implementation of the BASIX Scheme across the State.

A BASIX Certificate (Certificate Number: 1130725M) is included at **Appendix Z.** The certificate confirms the proposed development meets the NSW Government's requirements for sustainability and achieves the water and thermal performance requirements.

4.13. SYDNEY LOCAL ENVIRONMENTAL PLAN 2012

The site is located within the Redfern-Waterloo Precinct under the SSP SEPP which includes the land use zoning objectives, permissibility and built form controls.

The site is not classified as land to which the *Sydney Local Environmental Plan 2012* (**LEP**). However, the following matters are noted in relation to the LEP on a merit-basis:

- **Heritage Conservation**: the SSDA is accompanied by a Statement of Heritage Impact (**Appendix D**) and an Aboriginal Cultural Heritage Assessment Report (**Appendix C**) which confirm the proposed development is appropriate and will not have any unacceptable impacts on built or cultural heritage.
- **Flood Planning**: the Flood Assessment Report (**Appendix AA**) confirms the site is suitable for the proposed use and will not result in adverse impacts to the surrounding properties.
- **Airspace Operations**: the proposed development has been designed to comply with the relevant air space requirements, including the maximum height of the building.
- **Active Frontages**: the ground floor of the building has been designed to activate the three street frontages along Regent Street, Marian Street and William Lane.

Overall, the proposed development satisfactorily addresses the LEP provisions that would ordinarily apply to the proposal if it was not located within a state significant precinct under the SSP SEPP.

4.14. SYDNEY DEVELOPMENT CONTROL PLAN 2012

The site is located within the Redfern-Waterloo Precinct under the SSP SEPP which includes the land use zoning objectives, permissibility and built form controls.

The site is not classified as land to which the *Sydney Development Control Plan* applies. Further, the provisions of a DCP do not apply to SSD in accordance with Clause 11 of *State Environmental Planning Policy (State and Regional Development) 2011*. However, the following matters are noted in relation to the LEP on a merit-basis:

- **Public Domain**: the proposed development includes activated street frontages, public domain improvements and public art which will generate pedestrian activity, social interaction and attractive streetscapes. The proposed building entries and awnings have been carefully located to improve pedestrian connectivity and amenity. The proposed materials and lighting have been designed to highlight the architectural features of the building and optimise pedestrian safety while avoiding adverse impacts on sensitive receivers.
- **Design Excellence**: the proposed development has been subject to a rigorous design excellence process with the GANSW and SDRP. The design briefings were also attended by the City of Sydney. The final architectural drawings respond to the matters raised by the Panel during the multiple sessions to ensure the proposal will achieve design excellence in accordance with the SSP SEPP.
- **Ecologically Sustainable Development**: the SSDA is accompanied by an ESD report (**Appendix R**) and BCA report (**Appendix T**) which outline the way in which the ESD principles will be addressed and the sustainability targets achieved in accordance with BASIX, BCA and other requirements.
- **Water and Flood Management**: the Flood Assessment Report (**Appendix AA**) confirms the site is suitable for the proposed use and will not result in adverse impacts to the surrounding properties. The Stormwater Management Report (**Appendix BB**) details the way in which stormwater will be treated in terms of both quality and quantity to avoid impacts on the environment.
- **Heritage**: the SSDA is accompanied by a Statement of Heritage Impact (**Appendix D**) and an Aboriginal Cultural Heritage Assessment Report (**Appendix C**) which confirm the proposed development is appropriate and will not have any unacceptable impacts on built or cultural heritage.
- **Traffic and Parking**: 134 bicycle spaces will be provided on-site in lieu of car parking to ensure that demand for transport generated by the development will be managed in a sustainable manner. The site is within close walking distance of major universities and high-frequency public transport services and a Green Travel Plan has been prepared to optimise active and public transport use.
- **Accessible Design**: the public domain improvements and the internal building design will provide equitable and safe and legible access for all users. The SSDA is accompanied by an Accessibility Report (**Appendix U**) which confirms the proposal will comply with relevant requirements.
- **Waste**: the SSDA is accompanied by a Construction and Demolition Waste Management Plan (**Appendix I**) and an Operational Waste Management Plan (**Appendix M**) to minimise, re-use and manage waste generated by the proposed development.
- **Late-Night Trading Management**: the site is located within a 'Local Centre Area'. The tenant of the proposed retail premises is not yet known, however, it could comprise a food and drink premises. This could be considered a 'Category B – Low Impact Premises' if the proposed use was likely to impact on the amenity and safety of the neighbourhood. The proposed trading hours of 7am to 10pm comply with the base hours for Category B development listed in the DCP for indoor activities. A separate approval would be required for outdoor dining and/or extended trading hours.
- **Signage**: the indicative signage zones provide for a window sign and awning fascia sign at the ground level on Regent Street and top-of-building signs on the north-eastern and north-western corners of the building. The signage zones have been sited and design to be compatible with the architectural design of the building and complement the existing and emerging urban context. The top-of-building signage will identify the registered name and logo of the student accommodation provider, who will occupy the majority of the mixed-use development.

Overall, it is considered that the matters which would ordinarily apply in the Sydney DCP have been satisfactorily addressed within the proposed development.

4.15. REDFERN–WATERLOO DEVELOPMENT CONTRIBUTIONS PLAN 2006

Development contributions will be paid in accordance with the *Redfern Waterloo Contributions Plan 2006*, which requires a cash contribution to the Minister of 2% of the development cost. This equates to a contribution of $1.02 million based on the $51 million capital investment value of the current proposal.

4.16. REDFERN–WATERLOO AFFORDABLE HOUSING CONTRIBUTIONS PLAN 2006

The *Redfern-Waterloo Authority Affordable Housing Contributions Plan 2006* seeks to levy a contribution for the provision of affordable housing within the Redfern-Waterloo area. The EP&A Act defines affordable housing as:

> *housing for very low income households, low income households or moderate income households, being such households as are prescribed by the regulations or as are provided for in an environmental planning instrument.*

Development contributions are based on a rate of $86.88 per sqm of GFA. The affordable housing contribution will be determined based on the net additional GFA, considering the GFA within the final approved development, less the GFA of the existing development.

5. COMMUNITY AND STAKEHOLDER ENGAGEMENT

The SEARs require the applicant to consult with relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. The stakeholders required to be consulted include:

- The City of Sydney Council
- NSW Government Architect's Office
- Sydney Coordination Office within Transport for NSW
- Roads and Maritime Services
- Environment, Energy and Science Group of the Department of Planning, Industry and Environment (former Office of Environment and Heritage)
- Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage)
- Sydney Water
- Sydney Trains
- Sydney Metro
- Sydney Airport
- Adjoining sites and landowners.

Wee Hur and the consultant team were responsible for consulting with the relevant authorities and service providers during the preparation of the supporting reports submitted with the EIS. Details of the relevant consultations, including the issues raised and key responses are provided within **Section 5.1.**

Consultation with adjoining sites and landowners and local community groups was led by Elton Consulting, with separate consultation undertaken with Aboriginal elders in association with the Aboriginal cultural heritage impact assessment and development of the public art strategy by Nicole Monks. The outcomes of the community consultation are detailed within **Section 5.2.**

5.1. GOVERNMENT AGENCIES AND OTHER STAKEHOLDERS

The applicant and their consultants have engaged in one-on-one briefings with the relevant Government agencies throughout the Detailed SSD DA process as outlined in **Table 15** below.

Table 15 Community and Stakeholder Engagement: Issues and Response

Feedback	Proponent Response
City of Sydney Council Meeting at Council's offices on 18 December 2019 with Andrew Rees, Amy Douglas, Cindy Ch'ng and Kate Yates. Key issues identified by Council in email correspondence dated 16 January 2020 included: ▪ Ground floor design: William Lane interface, active uses, setbacks and floor levels ▪ Exceedance of height control: comply with maximum 18 storeys and setbacks	Each of the matters identified by the City of Sydney has been responded to in the refinement of the architectural and landscape drawings, including: ▪ The ground floor was substantially redesigned to activate the ground floor. The bicycle storage facility on William Lane includes large areas of glazing, integrated with public domain improvements that encourage social interaction and activity. Communal lounges and a games room are located along the Regent Street and Marian Street frontages. ▪ The height of the building has been reduced to 18 storeys. The setbacks have been adjusted

Feedback	Proponent Response
▪ Servicing access: truck movements and waste management ▪ Common open space: wind and noise impacts	to respond to the SDRP feedback, while maintaining consistency with the prevailing setbacks established by the existing and approved buildings to the north and west of the site. ▪ The turntable allows for all vehicles to enter and leave the site in a forward direction. ▪ The Wind Impact Assessment confirms the wind impacts of the proposal will be acceptable (**Appendix CC**). A Plan of Management has been prepared (**Appendix L**) to control the use of the outdoor communal areas to avoid unacceptable impacts to adjoining student rooms and surrounding properties.
<u>Government Architect of NSW</u> Briefing meeting at GANSW offices on 14 January 2020 with George Savoulis and Emma Kirkman. Multiple SDRP meetings held on 12 February 2020, 22 April 2020, 3 June 2020 and 26 August 2020 with: ▪ Rory Toomey, Chair - GANSW ▪ Roger Jasprizza, Panellist ▪ Peter Titmuss, Panellist ▪ Richard Johnson, Panellist ▪ Rodger Roppolo, DPIE ▪ Peter John Cantrill, City of Sydney ▪ George Savoulis, Design Advisor – GANSW The Design Report prepared by AJC (**Appendix H**) details the issues raised by the GANSW and SDRP during the briefing meeting and design briefings and the way in which they have been responded to within the final proposal. The key issues from the final design briefing as identified in the correspondence issued by the GANSW dated 9 September 2020 are summarised below: ▪ Landscape: amenity impacts on student bedrooms, mechanical plant, street tree planting	Each of the matters identified by the GANSW and SDRP within the earlier briefings were addressed within the subsequent design briefings. The responses to the matters identified within the minutes from the final meeting on 26 August 2020 are addressed in detail within the Design Report prepared by AJC and as summarised below: ▪ Additional landscaping and operational management measures have been detailed within the Landscape Report (**Appendix K**) and the Operational Management Plan (**Appendix L**) to avoid unacceptable impacts to the adjoining student rooms and surrounding properties. The building services on the roof-top of the podium will be screened by landscaped beds and building structures as outlined in the final drawings. Street tree planting has been carefully sited and selected to comply with Council requirements, avoid conflicts with the proposed awning and enhance the amenity of Regent Street, Marian Street and William Lane. ▪ The western elevation of the building has been refined with the same level of resolution of the other building elevations. The proposed public art strategy has been further resolved as outlined within the Design Report (**Appendix H**), the architectural drawings (**Appendix G**) and photomontages (**Appendix DD**). ▪ The positive feedback from the SDRP recognises the significant changes made to the building design during the design excellence

Feedback	Proponent Response
▪ Façade design and artwork: western podium façade, public art strategy ▪ Architecture: positive changes to previous scheme ▪ Wind impacts/setbacks: comprehensive wind impact assessment required	review process. The proposed setbacks are considered acceptable based on the wind impact assessment as outlined below. ▪ A detailed Wind Impact Assessment Report has been provided with the SDSA (**Appendix CC**) which demonstrates the proposal will comply with the adopted wind acceptability criteria at all pedestrian and public access locations within and around the development, subject to the implementation of recommended mitigation measures, including for the podium roof-top. The report also states the importance of the podium set back and landscaping within and around the development provided in the architectural drawings in wind mitigation.
Sydney Coordination Office within Transport for NSW Roads and Maritime Services The Transport Planning Partnership (**TIPP**) have prepared a Transport Impact Assessment (**Appendix N**) which addresses the existing and proposed TfNSW infrastructure and RMS guidelines. Formal feedback had not been received from TfNSW or RMS at the time of preparing the report. Accordingly, referrals from recent project examples were reviewed to incorporate matters likely to be of interest to TfNSW and the RMS.	The Transport Impact Assessment identified issues likely to be of interest to TfNSW were identified as follows: ▪ *bicycle facilities should be provided in secure, convenient, accessible areas close to the main entries* ▪ *conditions of consent to include the requirement for detailed Construction Pedestrian Traffic Management Plans (CPTMP) to be prepared in consultation with the Sydney Coordination Office within TfNSW.* ▪ *all vehicles to enter and exit the site in a forward direction.* *The matter of zero on-site parking was generally acceptable to transport agencies.* *…the management of construction traffic will be the key traffic related issue for the proposed development. Such that the cumulative implications can be considered and managed it is appropriate that consultation with SCO/TfNSW be undertaken in the preparation of the detailed CPTMP. The preparation of the CPTMP would be following approval prior to Construction Certification* Each of the above matters has been addressed within the SSDA and/or will be addressed via ongoing consultation with the relevant transport authorities in accordance with the relevant conditions.

Feedback	Proponent Response
Environment, Energy and Science Group of the Department of Planning, Industry and Environment (former Office of Environment and Heritage) Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage) Artefact provided copies of the final draft Aboriginal Cultural Heritage Assessment Report (**ACHAR**) and the final draft Statement of Heritage Impact (**SoHI**) to the heritage authorities prior to the lodgement of the SSDA.	The ACHAR and SoHI have been prepared in accordance with the relevant legislation. The client's heritage consultant will continue to liaise with the heritage authorities during the assessment of the SSDA as required. The EES were consulted during the preparation of the BDAR waiver request. Their request for additional information was incorporated into an updated request and the recommended mitigation measures included within the demolition phase of works.
Sydney Water Arcadis undertook a review of DBYD information received from Sydney Water during the preparation of the Infrastructure Report (**Appendix W**) which confirmed the Sydney Water network within the vicinity of the site. Consultation was undertaken in association with the adjoining property at 13-23 Gibbons Street which has confirmed the required water mains upgrade requirements and how these will be incorporated into the current proposal at 90-102 Regent Street.	A section 73 certificate will be submitted to Sydney Water following lodgement of the SSDA. A Notice of Requirements will be obtained to inform the upgrade to the water mains to ensure sufficient pressure and flow to the proposed development. The waste water will be connected to the 225VC service which runs through the rear of the site and connects to William Lane.
Sydney Trains Multiple emailed correspondence during August and September 2020. Sydney Trains advised in their email dated 17 September 2020 that given the proximity of the proposed to the rail tunnel (47 metres) no further consultation was required. Any further consultation will be via the formal referral as part of the SSDA process.	No further action required – DPIE will refer a copy of the SSDA to Sydney Trains for their comment during their assessment of the proposal.
Sydney Metro Meeting held with Geoff Bateman and Peter Bourke on 24 August 2020, with multiple emailed correspondence during July to September 2020 Sydney Metro requested additional documentation including a sketch section to illustrate the depth of excavation and foundation pads or piles and documentation which shows the legal boundary	Wee Hur and the consultant team have worked closely to refine the final building design, including confirmation of column locations, excavation levels, location of foundation pads and the like. Updated drawings have been prepared and submitted to Sydney Metro which respond to their requirements. Additional information to be provided to Sydney Metro as the proposed development is refined during the SSDA assessment and detailed design phases (refer **Section 6.21.2**).

Feedback	Proponent Response
alignment of the Sydney Metro tunnel relative to the subject site.	Once Sydney Metro has provided further comments on the updated drawings, additional detailed documentation will be prepared to finalise the required reporting in accordance with the Sydney Metro *Underground Corridor Protection Technical Guidelines*. Each of the specialist consultants, including Tunnel Risk & Impact, Electrolysis, Geotechnical Monitoring and FE Modelling and Vibration Monitoring, has been engaged and will be progressively mobilised upon receipt of additional advice. Wee Hur and the consultant team will continue to consult with Sydney Metro during the assessment of the SSDA and the detailed design process.
<u>Sydney Airport</u> AJ+C has had ongoing consultation with Peter Bleasdale, Manager Airfield Spatial & Technical Planning at Sydney, including submission and review of documentation which outlines the draft proposal and additional survey information which clarified the proposed building heights.	The proposed building was reduced in height to comply with the Object Limitation Surface as required by Sydney Airport. A Notice to Proponent of Property Development dated 21 October 2020 (**Appendix MM**) was issued which confirms Sydney Airport has no objection to the proposed development, subject to compliance with the relevant heights in the updated plans. A new approval must be sought if the height of any temporary structure (including a construction crane) is required to exceed 45.72 metres AEGH. Approval to operate construction equipment should be obtained prior to any commitment to construct.

5.2. COMMUNITY CONSULTATION

Community consultation was undertaken as outlined in detail within the Community Consultation & Engagement Report prepared by Elton Consulting and attached as **Appendix V**.

Various strategies were implemented to ensure collaborative community involvement in the project. This includes telephone calls, face to face and online meetings (subject to COVID-10 requirements), a door knock, project collateral and a dedicated project email address and telephone hotline. A summary of the key themes raised by the local community and the associated responses are summarised in the following table.

Table 16 Summary of responses to community consultation matters

Feedback	Proponent Response
Parking Lack of available parking both during construction and at end state	A Framework CTMP (**Appendix EE**) outlines the way in which construction vehicle traffic will be managed. It is recommended a 'tool drop' and on-site tool storage facility is provided so workers are not required to transport tools each day and can use public transport. No on-site car parking is provided to avoid increased traffic within the locality and facilitate increased use of public transport and active transport. 134 on-site bicycle spaces will accommodate the desired transport modal shares. The OMP (**Appendix L**) details the way in which this will be managed with future student occupants, including standard lease arrangements and implementation of the GTP (**Appendix FF**).
Overshadowing Concerns about shadowing of properties to the west of the site	The proposed development complies with the maximum building height controls and has been sited to provide for satisfactory separation distances between the western elevation of the building and the SGCH development on the opposite side of William Lane. The Architectural Drawings (**Appendix G**) provide a comprehensive assessment of the potential shadow impacts of the proposed development. The site is located immediately to the east of the SGCH development and accordingly, it will impact on the adjoining site to the west during the morning period. However, this impact will be quite limited, noting the existing impacts associated with the approved development to the north at 80-88 Regent Street. Further, the proposed impacts are limited to the early morning period, as the sun moves across to the west.
Proposed accommodation type Concerns that student accommodation would bring disruptive and noisy activities and misuse of drugs to the area without the benefits of a boost to the local economy, as students do not have high levels of disposable income.	An OMP (**Appendix L**) has been prepared which includes a resident handbook that provides for clear rights and responsibilities of student occupants, including house rules to manage resident behaviour. The outdoor communal terraces areas will have restricted hours of operation and management measures to avoid impacts to the amenity of surrounding properties.
Boost to local economy and businesses Bringing more people into the area can only be a good thing, which is particularly important given there has been less people in the area due to the impacts of COVID-19.	Noted

Aboriginal community consultation has been undertaken in association with the preparation of the ACHAR (**Appendix C**) and in accordance with OEH Consultation Requirements. This included direct correspondence being sent to organisations, advertisements in the *Koori Mail* and *Central Courier* and letters or emails to persons and organisations from agencies contacted during the preparation of the ACHAR.

16 Aboriginal stakeholders registered an interest in the project who were provided with a copy of the report methodology, with a 28 day period for review and comment. Two of the Registered Aboriginal Parties (**RAPs**) provided comments which supported the proposed methodology.

An archaeological survey of the site was undertaken on 22 July 2019 with a representative of Metropolitan LALC. Discussions held during the during the survey indicated that the study area had been heavily impacted through construction of the existing structures on the site. The potential for incorporating heritage interpretation into the development was also discussed with native plantings and the incorporation of appropriate local Aboriginal names into the development suggested by Metropolitan LALC.

A copy of the draft ACHAR was sent to the RAPs with comments due by 15 May 2020. At the end of the consultation period, no comments had been received from RAPS on the draft ACHAR.

6. ENVIRONMENTAL IMPACT ASSESSMENT

This section describes the way in which the key issues identified in the SEARs have been assessed. It provides a comprehensive description of the specialist technical studies undertaken regarding the potential impacts of the proposed development and recommended mitigation, minimisation and management measures to avoid unacceptable impacts.

6.1. DESIGN EXCELLENCE

The preliminary building design was significantly amended and refined during the preparation of the SSDA. The final architectural drawings appended to the EIS (**Appendix G**) have responded to the detailed design feedback provided by the GANSW and SDRP in the five design briefings held between 14 January 2020 and 26 August 2020.

AJ+C has prepared a Design Excellence Strategy which was submitted to the GANSW on 1 October 2020. The Design Excellence Strategy forms part of the Design Report submitted with the EIS (refer page 7 of **Appendix H**) and outlines the way in which the project architects will continue to engage with the SDRP to:

- Integrate and respond to stakeholder and authority comments arising during exhibition of the SSDA.
- Review changes arising though design development to ensure that the design quality represented in the SSDA is maintained and realised.
- Review design responses to Panel comments from the last SDRP on 26 August 2020.

Section 5 of the EIS outlines the way in which the final architectural drawings have responded to each of the matters raised by the SDRP during the most recent Panel meeting. Pages 98-100 of the Design Report prepared by AJ+C include the detailed responses to each of the matters raised by the SDRP during the multiple design briefings, including:

- Significant reduction to the original bulk and scale to provide a more slender tower form and an increased level of compliance with the core built form controls.
- Increased podium setbacks along Regent Street.
- Refinement of the ‘internal street’ and Marian Street/William Lane entry to improve accessibility.
- Provision of additional indoor communal spaces on the upper levels of the tower building.
- Privacy screening between the outdoor communal spaces and adjoining student rooms.
- Awning design to accommodate additional street tree planting and retention of existing trees and mitigate potential wind impacts.
- Refinement of podium and tower elevations including materiality and increased natural daylight and ventilation.
- Development of a public art strategy that responds to the cultural heritage of the locality and the architectural design of the building.

Each of the additional matters outlined within the Design Excellence Strategy will be addressed during the assessment of the SSDA, including further engagement with the SDRP and further refinement of the current drawings, as considered appropriate.

6.2. BUILT FORM AND URBAN DESIGN

6.2.1. Urban Design Analysis

Section 03 of the Design Report prepared by AJ+C (refer **Appendix H**) provides a comprehensive assessment of the urban context, including the way in which the proposed built form, height, bulk and scale, setbacks and interface responds to the existing, approved and likely future development within the surrounding locality and the public domain.

It also outlines the way in which feedback from GMU Urban Design was incorporated into the final architectural drawings, including a precinct-wide urban design analysis. The key urban design matters regarding the podium level are summarised below:

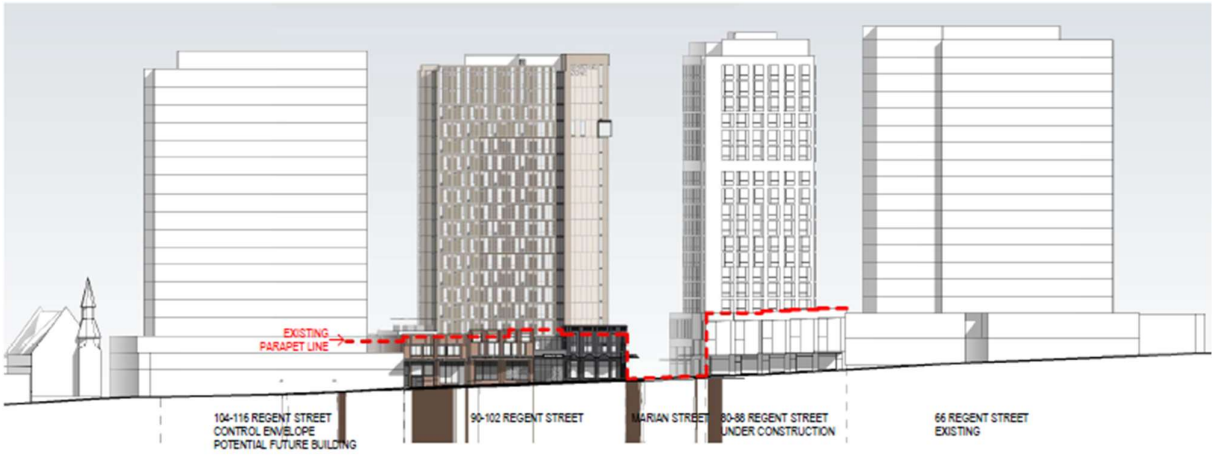
- Podium setback to William Lane which responds to the setbacks for 11 Gibbons Street and provides for the future pedestrian connection from Marian Street to Margaret Street.
- Public domain improvements integrated with the proposed building design to activate the streetscape while accommodating the required building services and fire egress requirements.
- Setback along Marian Street to provide for footpath widening in accordance with the UDP consistency with other recent approvals.
- Zero setback to Regent Street which is consistent with the setbacks to the existing and approved developments to the north.

The urban design analysis which informed the siting and design of the tower building is outlined as follows:

- Provision of satisfactory setbacks to the southern boundary to provide for the potential future development to the south at 104-116 Regent Street, including adequate solar access and outlook
- Southern windows on the southern facade to provide additional natural daylight, with angled blades to maintain visual privacy for the future development to the south.
- Western setbacks ranging from 8.9 metres to 12.32 metres from the centre of William Lane which respond to the siting and design of 11 Gibbons Street to maintain an 18 metre building separation, despite the reduced setbacks of the adjoining development.
- Northern setback of three metres to Marian Street which is consistent with surrounding developments.
- Eastern setback of four metres to Regent Street which is compatible with the prevailing setback along Regent Street, with a minor variation at the corner consistent with the emerging built form pattern in the precinct.

The proposed development has been designed to complement the existing, approved and likely future development within the locality, including the recently approved development at 80-88 Regent Street and 13-23 Gibbons Street. Detailed consideration is given to the approved built forms, including the maximum building heights, podium heights and setbacks.

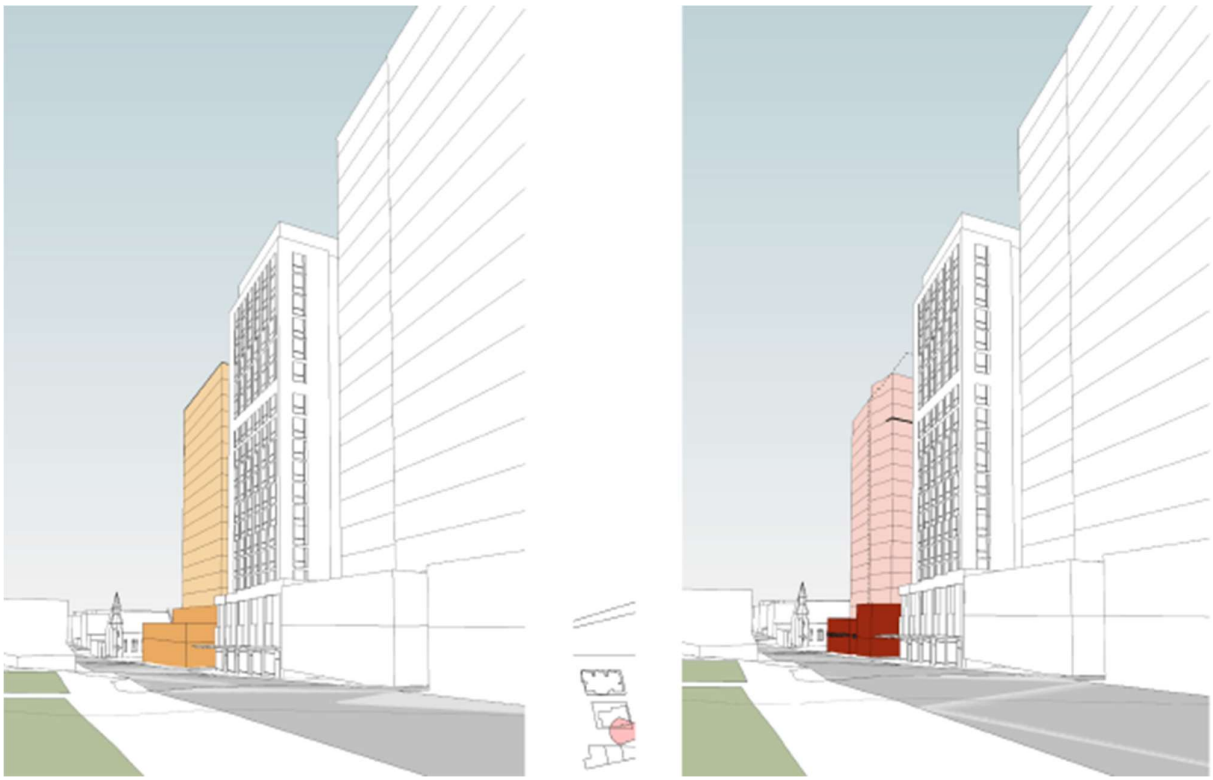
Figure 17 Street Elevation Regent Street



Source: AJ+C Design Report, page 21

The siting and design of the proposed building has also benchmarked against the 'control envelopes' which provide for full compliance with the SSP SEPP and UDP (refer pages 23-29). The comparison envelopes demonstrate the way in which the proposed design will maintain consistency with the existing and emerging built context. The following plan extract outline the way in which the Regent Street streetscape will be maintained in the proposed envelope (shaded red) compared to the control envelope (shaded orange).

Figure 18 Regent Street from north



Source: AJ+C Design Report, page 23

Detailed consideration was also given to the potential future built form of the adjoining property to the south at 104-116 Regent Street and in response to feedback provided by the GANSW and SDRP during the design excellence process. A conservative approach was adopted which assumed the site would be redeveloped for residential apartments. The solar amenity analysis confirmed the potential apartments could achieve the minimum solar access provisions in accordance with the ADG.

Based on the above, it is considered that the proposed development is appropriate having regard to its built form and the way in which it responds to the existing, approved and likely future development within the locality and the public domain.

6.2.2. Design Quality

The design quality of the proposed development has evolved from the detailed design reviews and plan refinement undertaken during the preparation of the architectural drawings and consultation with the GANSW and SDRP.

Detailed consideration was given to the façade treatment of the proposed podium and tower, including both the articulation of the building and the proposed buildings and materials. The ground floor of the building was designed to respond to the public domain, including opportunities to activate the street through the location of the proposed retail premises and the communal spaces within the student housing component.

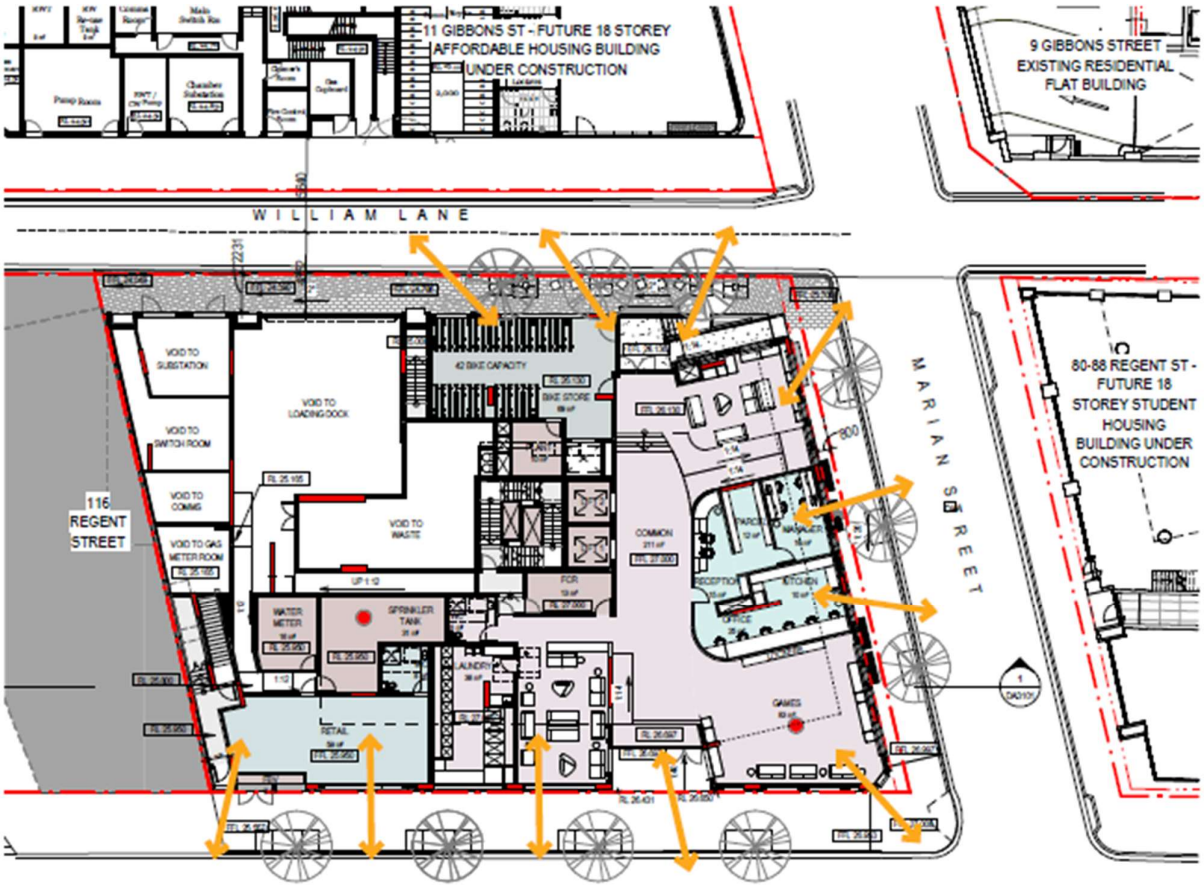
The Design Report prepared by AJ+C provides a comprehensive description of the podium design studies (page 35) which informed the siting and design of the lower levels, including the former pub building on the corner of Regent Street and Marian Street, the through-site connection from Regent Street to Marian Street/William Lane and the historical lot layout. The typical tower levels are influenced by the existing setbacks and the distance separation requirements to the existing, approved and likely future buildings adjacent to the site, as well as the optimisation of solar access, views and visual privacy (page 41)

The materiality of the podium and the tower components are explored in Section 08 of the Design Report, including the way in which the selected façade treatments respond to the locality, environmental factors such as solar access and wind, and the amenity of the future occupants. The proposed materials and finishes for each of the building elevations are described in detail on pages 77-79.

The relationship between the ground floor layout and the surrounding public domain is also comprehensively addressed within the Design Report (page 38) and as shown in the following plan extract.

The building will be activated on all three street frontages, including the retail premises, two entries to the student housing component, the communal spaces and the bicycle storage facility. The only parts of the elevations which will not be activated comprise the loading dock and building services facilities which are located in the least sensitive part of the site, on the south western part of the building facing William Lane.

Figure 19 Street Activation



Source: AJ+C Design Report, page 38

6.2.3. Environmental Amenity

The Design Report prepared by AJ+C (**Appendix H**) provides a comprehensive assessment of the environmental amenity outcomes for the proposed building, including access to natural daylight and ventilation, acoustic separation and access to landscape and outdoor spaces. Additional detailed information regarding these matters is provided within the Acoustic Report prepared by Northrop (**Appendix O**) and the Landscape Report prepared by Turf Design (**Appendix K**).

The siting and design of the proposed building has been heavily influenced by the site orientation and optimising access to natural daylight and ventilation, including student rooms, indoor and outdoor communal spaces and circulation areas. The proposed built form comprises specific features and materials which have been selected to respond to the solar access requirements:

- **Typical Façade**: the tower building component comprises a series of three panels – clear glazing, pattern frit glazing and aluminium panels to provide different levels of transparency and allow balanced light to each of the student rooms.
- **Solar Fins**: key areas of each façade above the mid-tower level include solar fins to provide additional shading to student rooms. The solar fins have been sited and designed to respond to the solar amenity studies.

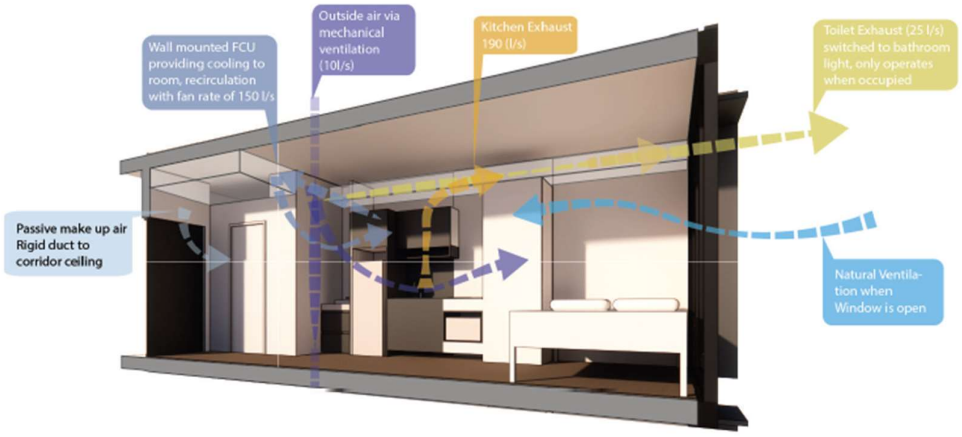
- **Regent Street Podium**: the proposed openings on the podium level of the Regent Street façade are proposed to maximise solar access to the communal spaces and student rooms on Level 2. Glazing has been used to provide an acoustic barrier from the traffic noise below.
- **Marian Street Awning**: a solid awning is proposed on the ground level to control solar access to the communal spaces along the northern elevation, including the glazed areas which are proposed to activate the street frontage.

Figure 20 Typical Façade Module, Marian Street Awning, Solar Fins and Regent Street Podium

Source: AJ+C Design Report, page 66

The natural ventilation of the building needs to be assessed concurrently with the potential noise impacts arising from traffic noise along Regent Street and Gibbons Street. Openable windows have been provided to comply with the requirements of the National Construction Code (**NCC**). However, it is recognised the room occupants may choose to close windows to minimise noise. Fresh air intake is drawn from the roof-top and supplied to each room via risers to maintain natural ventilation, even when windows are closed.

Figure 21 Airflow Diagram



Source: AJ+C Design Report, page 60

Acoustic separation is provided between the student rooms and between student rooms and communal spaces. The Acoustic Report prepared by Northrop includes the acoustic performance requirements for the walls and floors within the building, as well as the management measures to be implemented to avoid unacceptable noise impacts from the outdoor communal spaces on Level 2.

The proposed landscaping of the outdoor communal spaces and the public domain has been specifically designed to meet the likely needs of the future building occupants, as outlined in detail within the Landscape Report. Different spaces are provided for different types of activity, including interactive spaces for socialisation and more secluded spaces for study. The western terrace provides a large communal space which can be used for group activities, including an outdoor cinema and BBQ, while the northern and eastern terraces including seating configurations and recessed seating for smaller groups and individuals.

6.2.4. Public Art

The Design Report prepared by AJ+C (**Appendix H**) includes details of the Art Strategy Proposal by award-winning artist Nicole Monks and Luke Russell in collaboration with Gadigal Elders and the local community (pages 55-57).

Figure 22 Art Strategy Proposal

Source: AJ+C Design Report (Nicole Monks/Luke Russell), page 56

The proposed artwork seeks to celebrate the continuous connection of First Nations people to the land, the water and the skies. The continuing custodians of the unceded land are the Gadigal. As water people, local mob spent much of their time water-fishing, hunting and gathering. The site is located near Alexandria Canal, a midden site and where a dugong skull was found, making this a place of significance. Aboriginal waster storeies hold knowledge that has been passed down since time immemorial.

Three works are proposed across the proposed development which will celebrate the diverse and vibrant Aboriginal community that are connected to Redfern. These include:

- A stylised three-dimensional spear fixed to the north eastern corner of the tower.
- A stylised fish embossed into the cladding of the north eastern corner of the tower.
- Graphical overlays to upper floor common room and ground floor glazing.

The proposed artwork is designed to suit both landmark and human scale, with the upper-level works connecting to the site from a distance and the ground-level elements allowing the site to unfold from different vantage points. It is proposed the artwork will be softly illuminated during the evening to highlight the artwork.

The artwork will be developed in consultation and collaboration with the Gadigal and local community. Nicole Monks has lived and worked within three blocks of the site and maintains many local connections. Luke Russell Luke Russell is a Worimi man (Newcastle) who is currently working to enliven traditional tool making practices, which have similarities along the east coast. A workshop will provide for an exchange of knowledge and practice, with local mob participating in the making of the final artwork.

The proposed artwork will also complement the proposed public art to be delivered in association with the approved development at 13-23 Gibbons Street (which is also owned by Wee Hur) to provide an art laneway along the through-site link from Marian Street to Margaret Street.

6.3. BUILDING USE

The proposed mixed-use building has a total GFA of 9,015m^2 which equates to an FSR of 7:1 based on the total site area of 1,287m^2. The site coverage of the building is 1,116m^2 (or 86.7% of the site) noting the setbacks of the building to Marian Street and William Lane. A detailed break-down of the building on a floor-by-floor basis is provided in the following table.

Table 17 Proposed Land Uses – Floor-by Floor Breakdown

Level	Component	Area (m^2)
Basement	Storage for 90 bicycles, on-site storage detention (OSD) tank, building services and associated facilities	571
Lower Ground	Loading facilities, waste collection, building services and associated facilities	541
Ground Floor	Ground floor retail premises (67m^2) and student housing facilities, including reception, manager's office, common space and 44 bicycle parking spaces	489
Level 2	17 student accommodation rooms (16 single rooms and one twin room), outdoor communal space across three podium areas, including hard and soft landscaping, gymnasium, kitchen and indoor communal areas	489
Level 3	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 4	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 5	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 6	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 7	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 8	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 9	21 student accommodation rooms (19 single rooms and 2 double rooms) and 37 sqm of communal area	492
Level 10	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 11	23 student accommodation rooms (21 single rooms and 2 twin rooms)	489
Level 12	20 student accommodation rooms (19 single rooms and one twin room) and 39 sqm of communal area	489

Level	Component	Area (m^2)
Level 13	23 student accommodation rooms (22 single rooms and one twin room)	490
Level 14	23 student accommodation rooms (22 single rooms and one twin room)	490
Level 15	23 student accommodation rooms (22 single rooms and one twin room)	493
Level 16	23 student accommodation rooms (22 single rooms and one twin room)	490
Level 17	23 student accommodation rooms (22 single rooms and one twin room)	490
Level 18	23 student accommodation rooms (22 single rooms and one twin room)	490
TOTAL		9,015

Development approval is sought for the operation of the retail premises between 7am and 10pm and the student housing component on a 24 hours per day, seven days per week basis, with limitations on certain activities to avoid amenity impacts (refer below). The 380 student housing rooms will cater for a maximum of 408 students. Further details regarding the retail premises will be provided upon confirmation of the future tenant.

The site is located within a 'Local Centre Area' in accordance with the City of Sydney DCP. The tenant of the proposed retail premises is not yet known, however, it is likely that it could comprise a food and drink premises. The proposed use could be considered a 'Category B – Low Impact Premises' if the proposed use was likely to impact on the amenity and safety of the neighbourhood. The proposed trading hours of 7am to 10pm comply with the base hours for a Category B development as listed in the DCP for indoor activities. Any proposal for outdoor dining or extended trading hours would be subject to a separate approvals process. A Plan of Management is not required for a Category B premises which does not trade after 10pm.

The Operations Management Plan prepared by Wee Hur (**Appendix L**) provides comprehensive details regarding the way in which the student housing component will be managed to optimise the site amenity while avoiding impacts on the surrounding properties, including:

- Restricting the use of outdoor communal spaces to residents only, with limited opening hours between 8.00am and 10:00pm Sunday to Thursday and 8:00am to 12 midnight on Fridays, Saturdays and any day immediately before a public holiday.
- Restricting use of the eastern and western terraces areas adjoining student rooms to between 8:00am to 10:00pm seven days per week.
- No external speakers in the outdoor communal areas and only low-level background music being permitted in the indoor communal spaces.
- Full-time staff will be available on-site between 9:00am to 5:30pm on weekdays and 10:00am to 2:00pm on Saturdays. Casual staff will work from 5:00pm to 8:00pm on weekdays, with residential advisors and night managers on rostered shifts after office hours.
- A resident handbook will provide a comprehensive guide regarding the rights and responsibilities of student occupants, including house rules which will provide for acceptable behaviour and avoid adverse amenity impacts.
- Waste management, cleaning and pest management procedures will maintain a clean and safe living environment for students and avoid impacts to surrounding properties.

- Security swipe card access and CCTV will control access to the building and provide for the safety of residents and their guests.

The proposed lighting and illumination of the building is addressed in detail within **Section 6.5.2** of this report.

6.4. AMENITY

6.4.1. Solar Access and Overshadowing

Sections 3, 7, 8 and 10 of the Design Report prepared by AJ+C (refer **Appendix H**) provide a comprehensive assessment of the solar access and overshadowing impacts of the proposed development, including the optimisation of solar access to the building while avoiding unacceptable impacts to adjoining properties and the public domain.

Assessment

The site has restricted solar access from the north and west due to the approved future developments at 80-88 Regent Street and 11 Gibbons Street. The siting and design of the proposed building has been heavily influenced by the approved siting and design of these buildings, while optimising the site orientation and access to natural daylight.

The potential overshadowing of the adjoining properties and public domain is detailed within the existing and proposed shadow diagrams in the architectural drawings and the comparative analysis between the proposed development and the control development envelope in Section 10 of the Design Report (refer to **Figure 23** and **Figure 24** on the following page).

The existing and proposed shadow diagrams show that the locality is affected by the existing and approved developments to the north and west of the site, including the approved developments at 80-88 Regent Street and 11 Gibbons Street.

The site orientation and configuration means the shadow impacts predominantly impact the adjoining site to the south at 104-116 Regent Street. The solar analysis prepared by AJ+C tested the overshadowing impacts of a control envelope and the proposed building mass for the adjoining site. The study demonstrated the potential overshadowing of the future development has been minimised by the narrow building footprint and the proposal would have similar overshadowing impacts compared to an alternative scheme which complied with the setbacks in the UDP.

The properties further south of Margaret Street will also be impacted by additional overshadowing due to the proposed development. However, the impacts are limited to morning period, with most of the potential shadow impacts along the Regent Street properties absorbed by the existing shadow impact of St Luke's Presbyterian Church. Similarly, the potential overshadowing impacts of the proposed development to the properties on the western side of Regent Street are limited to the afternoon period, with no change to the morning periods assessed for mid-winter (9:00am, 10:00am and 11:00am).

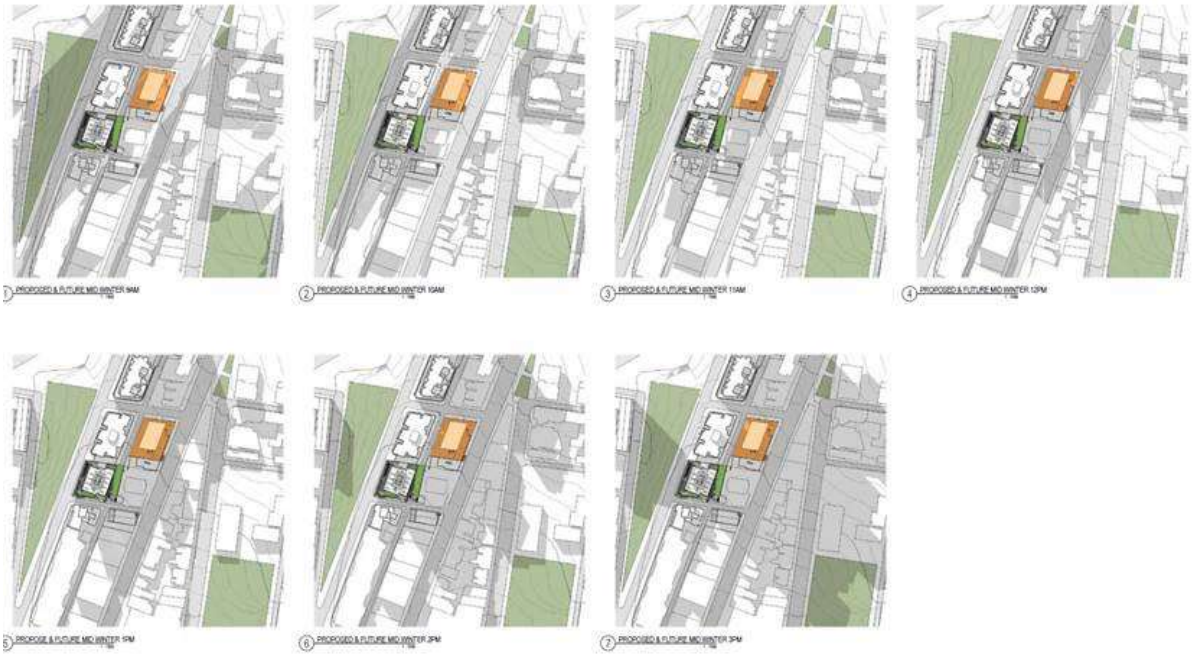
Concern was raised from the adjoining owners of the approved affordable housing development to the west at 11 Gibbons Street. The shadow diagrams show that while the eastern elevation of the adjoining development will be affected by overshadowing at 9:00am during mid-winter, the proposed development will not result in any additional impacts. The building will achieve solar access at 10:00am with shadow impacts then cast by the buildings to the north, rather than the proposed development.

The proposed development will not have any impacts on Rosehill Street Park which is located to the west of Gibbons Street. The proposal will have a minor overshadowing impact on the playing fields on Cope Street. However, the potential impact is limited to after 2:00pm in mid-winter which is considered acceptable.

Figure 23 Solar Analysis of proposed built form during winter solstice

Source: AJ+C Design Report, page 88

Figure 24 Solar Analysis of compliant built form during winter solstice



Source: AJ+C Design Report), page 89

Mitigation Measures

The proposed built form has been designed to avoid unacceptable shadow impacts to surrounding properties and the public domain. The following features and materials have been selected to optimise solar access to the internal spaces and outdoor terraces within the proposed development:

- **Typical Façade:** the tower building component comprises clear glazing, pattern frit glazing and aluminium panels to allow balanced light to each of the student rooms.
- **Solar Fins:** solar fins have been sited and designed to respond to the solar amenity studies and provide additional shading to student rooms.
- **Regent Street Podium:** the openings on the podium level maximise solar access to the communal spaces and student rooms on Level 2.
- **Marian Street Awning:** a solid awning on the ground level controls solar access to the communal spaces along the northern elevation, including the glazed areas which activate the street frontage.

Overall, it is considered the proposed solar access and overshadowing impacts are acceptable based on the compliance of the proposed development with the built form controls and the consistency of the proposal with the emerging urban context.

6.4.2. Wind Impacts

SLR Consulting was engaged to prepare an Environmental Wind Tunnel Test (**Appendix CC**) to assess the ground level wind environment around the proposed development. The report includes wind tunnel testing to determine the potential wind impacts on the surrounding pedestrian level wind environment and assesses pedestrian safety, comfort and amenity in terms of footpaths, building entrances and private terraces.

Assessment

The assessment was conducted using a Discrete Sensor Environmental Wind Tunnel Study where wind tunnel measurements were made to investigate wind conditions throughout and surrounding the proposed development. Key prevailing wind directions of interest are the northeast, southeast and south for summer and mainly west quadrant winds for winter. The present study has adopted the so-called “Melbourne” criteria for assessment, currently referenced by many Australian Local Government Development Control Plans in relation to wind impact. Regent Street is considered to have high levels of pedestrian traffic and accordingly, the standard ‘Walking Comfort’ criterion of 16 m/sec (peak annual gust) was applied.

The baseline scenario testing (ie existing wind conditions) showed some pedestrian areas on Marian Street currently experience wind impacts above the adopted 16 m/s walking comfort criterion but below the 23 m/s safety criterion. The exceedances were due to the channelling of westerly winds upstream of the proposed development site. Similarly, in terms of the existing wind environment, higher winds were observed along Regent Street for northeast wind conditions approaching from upstream of the site. In both cases, the addition of the proposed development does not impact these existing elevated wind conditions.

A range of proximity models were used to test different built environment scenarios, including cumulative impacts of surrounding developments and a comparison of the proposal with a ‘compliant’ design in response to feedback provided by the GANSW and SDRP during the pre-lodgement design reviews. The assessment concluded the proposed development performs similarly in terms of wind impact compared to the ‘compliant’ design, demonstrating the reduced podium setbacks will not result in any additional wind impacts.

Both of the ‘future’ scenarios (‘proposed development’ and ‘compliant design’) resulted in some local ground level locations experiencing modest increases and decreases in wind speed for key prevailing wind directions (northeast, southeast, south and west). These were subjected to additional testing using a range of wind mitigation options: vertical (eg landscaping, screens, etc) and horizontal (eg canopies, awnings, pergolas, etc).

Mitigation Measures

The following mitigation measures are proposed to minimise wind impacts at the pedestrian and podium levels:

- Provision of awnings (as shown in the architectural drawings) and existing and proposed street trees (as shown in the landscape drawings) to protect ground level footpaths. New street trees should be evergreen and of similar foliage to the existing trees.
- Provision of awnings along the northern, eastern and western terraces (as shown on the architectural drawings), with full height vertical screens and tree planting on the Level 2 Podium (as shown on the landscape drawings). The proposed landscaping on the podium roof-top should be evergreen species.

Overall, the Wind Impact Assessment confirms the proposed design complies with adopted wind acceptability criteria at all pedestrian and public access locations within and around the development.

6.5. VISUAL AND ACOUSTIC PRIVACY

The Design Report prepared by AJ+C (refer **Appendix H**) and the Acoustic and Vibration Assessment Report prepared by Northrop (**Appendix X**) provide a comprehensive assessment of the visual and acoustic privacy impacts associated with the proposed development. The assessment of these issues and the recommended mitigation measures are summarised below.

Assessment

The potential visual privacy impacts were assessed based on the distance separation between the proposed building and the existing, approved or likely future development on the surrounding properties.

Detailed consideration was given to the proposed (and later approved) development at 11 Gibbons Street. It was recognised early in the design process that the setbacks of the affordable housing development to William Lane could impact on separation distances and visual privacy between the two developments. The proposed development at 90-102 Regent Street was generally setback by nine metres from the centre of William Lane, with increased setbacks of 13.2 metres at the rear of the tower component, where the adjoining building at 11 Gibbon Street had reduced setbacks, to achieve an appropriate separation distance between the two buildings. Similarly, the front part of the building responded to the increased setback to the eastern elevation of 11 Gibbons Street, maintaining appropriate distance separation between the two buildings and reducing the potential for visual privacy impacts to the west.

A similar exercise was undertaken regarding the adjoining site to the south which comprises a (now) vacant service station. The Design Report prepared by AJ+C outlines the way in which the siting and design of the proposed development at 90-102 Regent Street was influenced by the likely future development on the adjoining site. Detailed consideration was given to the proposed setbacks to the southern boundary and the way in which the proposed development would maintain an appropriate level of amenity for any future development, including the potential for residential apartments to be designed to comply with the ADG.

The acoustic privacy impacts have been assessed in detail within the Acoustic and Vibration Assessment Report and as outlined within **Section 6.12** of this EIS. The proposed development has been assessed regarding the potential internal acoustic privacy impacts for the development, as well as the potential external impacts associated with the use of the outdoor communal spaces.

Mitigation Measures

The following mitigation measures respond to the potential visual and acoustic privacy impacts:

- **Angled blades:** the southern facade includes reduced glazing areas to preserve visual privacy for the adjoining site. Angled blades on the southern windows have been incorporated to preserve visual privacy for a future development on 116 Regent Street.
- **Podium façade:** the depth of the facade will provide protection and privacy to the openings facing Regent Street, with angled privacy louvres and obscured glass on the western façade at Level 2 to reduce potential visual privacy impacts for 11 Gibbons Street.
- **Podium parapets:** the outdoor spaces are screened behind the podium parapet to provide visual privacy from the street.

- **Communal spaces:** raised planter beds with climbing wires provide visual privacy between private rooms and communal terraces. Use of these spaces will be restricted to avoid amenity impacts.
- **Acoustic separation:** compliance with acoustic performance requirements for the walls and floors within the building.

Overall, it is considered that the potential visual privacy impacts are acceptable based on the siting and design of the proposed building, including the separation distances and mitigation measures.

6.5.1. Solar Reflectivity

SLR Consulting was engaged to prepare a Glare and Reflectivity Assessment (**Appendix GG**) which assesses the reflectivity of the proposed facades. A summary of the methodology, assessment and recommended mitigation measures is provided below.

Assessment

The site has three street frontages to Regent Street, Marian Street and William Lane, each of which contain glazing components. The lower level façades will receive significant shielding from the developments to the west and north.

Figure 25 Possible Reflectivity Conditions Lower Levels

Source: SLR Consulting

Figure 26 Possible Reflection Conditions Upper Levels

Source: SLR Consulting

The initial assessment identified areas that may be affected by adverse glare. Initial calculations showed that with uninterrupted glazed façades there will be some glare for motorists traveling along Regent Street, Gibbons Street, Marian Street, Cope Street, Redfern Street and a carpark in close proximity to the proposed site, though all glare conditions recorded for both motorists and pedestrians around the site were found to be below 500 Cd/m^2.

Further analysis was undertaken based on the building forms, actual geometry and proposed mitigation measures within the updated architectural drawings. The final assessment concluded the recommended mitigation measures be retained or incorporated into the final design to minimise adverse glare form the proposed development.

Mitigation Measures

The following mitigation measures are recommended to mitigate the potential for adverse glare conditions:

- Existing landscaping along Regent Street to be retained.
- Additional landscaping is recommended to be retained to Marian Street.
- Wing walls, façade articulations and setbacks should be retained.
- Fins provided to northern façade on Level 15 are required to be provided to all northern facades from Level 3 to 18. Alternatively, screens like those used in earlier designs could be employed.
- Fins provided on level 15 are required to be provided at similar density to all east facades from level 3 to 18. Distribution of fins should be similar to that shown in previous designs.
- Glazing to the northern and eastern facades is to utilise anti-reflective clear glass with reflectivity coefficient of 10% or below.

Each of the above measures has been incorporated into the final architectural drawings and landscape drawings and accordingly, the proposal is considered acceptable from a solar reflectivity perspective.

6.5.2. Light Impacts

SLR Consulting has prepared a Qualitative Light Spill Assessment (refer to **Appendix X**) which assesses the lighting environment around the proposed development.

Assessment

The maximum recommended values of light technical parameters for the control of obtrusive lights was established having regard to the nature of the surrounding uses. The limiting requirement for light spill will vary depending on the use of the surrounding sites, likely to be either 2 or 4 lux.

A light survey was conducted on 26 February 2020 with measurements taken around the edge of the site and several facades facing the site. Measurements were taken at a height of 1.5 metres above the ground spaced approximately 17 metres apart.

The light survey showed a significant amount of night-time lighting in the surrounding area with locations showing illuminance values above the required limits. The light sources included the traffic on Regent Street, commercial tenancies along Regent Street and the adjoining service station and fuel price board.

The assessment acknowledged there will be lighting fixtures for pedestrian movement around the exterior of the site, including the entrances on Regent Street and Marian Street/William Lane. Light could also emanate from the common areas and retail premises on the ground floor. Awnings could be used over the entrances and lighting could be recessed into the awnings to reduce the potential for unacceptable light spill to surrounding sensitive receivers.

The outdoor terrace areas will require lighting at night-time. Lighting should be placed around the outside of the terrace so that it faces away from the surrounding buildings to the east and west, reducing potential for light spill above the required limits.

The report concludes that while the proposed development will increase light within the locality, much of the light will be diffused and reflected. The inner city location minimises the potential impacts, based on the existing lighting within the urban context.

Mitigation Measures

The following recommendations are made to achieve the best performance for the proposed development while having a minimal impact on the surrounding properties:

General Mitigation

- Direct lights downward as much as possible.
- Use luminaires which aim to minimise light spill, eg full cut off luminaires where no light is emitted above the horizontal plane.
- Do not waste energy and increase light pollution by over-lighting.
- Keep glare to a minimum by keeping the main beam angle less than 70°.
- Where possible, use floodlights with asymmetric beams that permit the front glazing to be kept at or near parallel to the surface being lit.
- Direct site lighting away from sensitive locations such as residential properties.
- Where possible, position site lighting as far away from site boundaries as possible.

Site Specific Recommendations

- Lights should be aimed downward as much as possible and shielded to prevent light escaping above the horizontal plane or off the site.
- Lights placed on the outside of the building should be kept as low as possible and correctly aimed to prevent unnecessary light spill.
- Any required lights should be placed around the outside of the terraces.

The adoption of the above recommended mitigation measures will enable the proposed development to achieve the desired outcome with no more than 2 lux falling on the nearby residential facades during curfew hours and no more than 4 lux at the boundaries of nearby commercial facades during curfew hours.

6.5.3. Crime Prevention Through Environmental Design

A Crime Prevention Through Environmental Design (**CPTED**) Assessment has been prepared by Elton Consulting (**Appendix HH**). The CPTED Assessment makes recommendations relating to crime prevention elements and treatments to be incorporated in the development design to minimise risk or opportunities for crimes to occur.

Assessment

The methodology included a policy review, desktop site analysis to determine crime profile and assessment and recommendations. Elton Consulting found:

- There is no street lighting currently present on Marian Street or down William Lane. William Lane provides opportunities for concealment and loitering. The BP service station to the south is in operation 24/7 and therefore may experience some antisocial behaviour.
- There are currently relatively few security measures in place on or in the vicinity of the site. There is minimal street lighting and limited surveillance. There does not appear to be any CCTV cameras in the vicinity of the site.
- The crime profile shows that Redfern has a high crime rate within the City of Sydney LGA. The most prevalent types of crime in Redfern are ‘non-domestic assault’, ‘fraud’ and ‘malicious damage to property’. Many of these crimes are opportunistic and can be minimised through the adoption of appropriate CPTED principles.

Mitigation Measures

- CCTV should be installed and operational at entry / exit points of entrance of residential units and internal mail room. Further CCTV should be positioned throughout, mailbox room, lift / stairs leading to residential units, Internal common areas and corridors. Internal mail room should consist of swipe access only.

- Any materials and fixtures utilised should not create opportunities for vandalism (by colour and long wearing paint etc). Developments which are built using aesthetic materials are less likely to attract criminal activity due to a sense of ownership for the community.
- Adequate lighting should be positioned external to buildings, to create visibility at night and to reduce opportunity for hidden areas. The proposed development should ensure that all lighting meets the Australian Standards and in particular the objectives for crime and fear reduction as outlined in Australian Lighting Standard AS/NZ 1158 for public streets, car parks and pedestrian areas.
- Clear signage throughout building stating the following subjects. 'CCTV surveillance in use at all times' and 'Trespassers will be prosecuted'.
- All landscaping works should ensure that the height, type and density of any vegetation chosen does not restrict any sightlines or create concealment opportunities.
- Developments that are well managed and maintained are less likely to attract criminal activity. The ongoing maintenance of the development and associated landscaping will be important. A Plan of Management should be prepared to ensure maintenance of the development and surrounding area.

Elton Consulting conclude that the site can be made suitable for the proposed development subject to the adoption and implementation of the above mitigation measures.

6.6. VISUAL IMPACTS

Urbis was engaged to prepare a Visual Impact Assessment (**VIA**) to assess the potential visual impacts of the proposed development (refer to **Appendix Q**). The VIA details the view impacts considering the current site situation, the approved situation and the proposed situation.

The VIA methodology is separated into three stages, as summarised below:

- Stage 1: Preliminary Research and Analysis
- Stage 2: Analyse the Visual Effects
- Stage 3: Assess the Visual Impacts

The VIA establishes the visual character of the site and its immediate surrounds to be used as a baseline factor against which to judge the level of change caused by the proposed development. The existing built form is characterised by a row of five distinct retail premises with small shop fronts. The existing development is built to the street frontage with a pedestrian awning and associated business signage. The site to the north is being redeveloped as a high rise student accommodation building, consistent with the increasing scale of built form to the north.

The property to the south comprises a service station accessed from Regent Street. This site is also within the Redfern−Waterloo Authority State Significant Precinct which allows for 18 storey development. Further the south of Margaret Street (at 118 Regent Street), is the St Luke's Presbyterian Church, which was constructed between 1872 and 1876 and is locally listed heritage item.

An 18 storey building would in theory have a moderate to large potential visual catchment. However, the proposed height is consistent with the existing and approved built forms in the same urban block, including 11 Gibbons Street and 13-23 Gibbons Street. The proposed development will have its greatest exposure to the east where the adjoining and surrounding development is low.

The VIA provides an assessment of existing views and the proposed detailed design from key vantage points within Redfern and the public domain. 15 view locations were selected based on field work and analysis of the potential visual catchment. Each of the selected views is described and assessed, considering the potential visual effects of the proposed development including visual character, scenic quality of view, view composition, viewing level, viewing period, viewing distance and view loss and view blocking effects. A rating of the visual effects is based on variable weighting factors for public domain view place sensitivity, visual absorption capacity and compatibility with the urban features. An overall rating of the significant of the visual impact for each view is provided based on the assessment of each of these factors.

13 of the selected views were deemed to have a 'low' significance of visual impact. View 17 which comprises the view south from the steps at the southern side of Jack Floyd Reserve steps was deemed to have a low-medium impact and View 27 which comprises the view north of Margaret Street adjacent to church was considered to have a medium impact.

Each of these views is described in further detail below.

- **View 17** (refer **Figure 27**): the existing view is predominantly characterised by two-storey terrace development on the subject site with open sky. The proposed development will introduce a new built form into the foreground composition. However, the proposed development is not dissimilar in height, form or character to other towers located along Regent Street and is compatible with the existing and desired future character of this part of Redfern. The proposed tower does not block access to scenic features or resources and predominantly blocks areas of open sky.
- **View 27** (refer **Figure 28**): the existing view composition includes a service station and four storey building with high rise buildings visible in the background. The proposed development will be visible from the east end of Margaret Street, however, the building envelope is similar to existing and approved developments in the composition. The proposed tower does not block access to scenic features or resources and predominantly blocks areas of open sky.

The report concludes the level of visual change is consistent with the expectations for development in accordance with the UDP and the SSP SEPP. The proposed built form is comparable with existing and approved developments.

The overall visual impacts of proposed development were found to be acceptable and potential view loss for private domain views is anticipated to be minor.

Figure 27 View 17 Impact

FIGURE 24 EXISTING CONDITIONS

FIGURE 27 PHOTOMONTAGE

Figure 28 View 27 Impact

FIGURE 40 EXISTING CONDITIONS

FIGURE 43 PHOTOMONTAGE

Source: Urbis

6.7. TRANSPORT, TRAFFIC, PARKING AND ACCESS (CONSTRUCTION AND OPERATION)

The Transport Planning Partnership (**TTPP**) has prepared a suite of reports which address the transport, traffic, parking and access matters including:

- Transport Impact Assessment (**TIA**) (**Appendix N**) which assesses the impact of the proposed development on the surrounding transport network.
- Green Travel Plan (**GTP**) (**Appendix FF**) which outlines the way in which travel demand will be managed in the future site operations.
- Framework Construction Traffic Management Plan (**CTMP**) (**Appendix EE**) which outlines the matters to be addressed within the CTMP to be prepared in accordance with the approved development.

Each of these reports is addressed within the following section of the EIS.

Assessment

The site is highly accessible to public transport services. Redfern Railway Station is approximately 200 metres walking distance from the site and provides rail service connections to destinations across Sydney. A new Sydney Metro station is located at the corner of Raglan Street and Cope Street, approximately 400m walking distance from the subject site. Bus stops in the immediate locality provide connectivity to surrounding suburbs in the east, south and city.

An off-road shared path along Gibbons Street and Marian Street provides cycle linkages to Redfern Station, the University of Sydney, University of Technology Sydney, University of Notre Dame, TAFE and Sydney CBD. Pedestrian access is provided along both Marian Street and Regent Street.

Regent Street is a one-way southbound State Road and Gibbons Street is a one-way northbound State Road, parallel to Regent Street. Margaret Street is a two-way local road that connects Regent Street and Gibbons Street. Vehicle access is currently provided from Marian Street and William Lane.

The proposed development has been assessed based on its strategic transport context, agency consultation, an assessment of parking requirements based on the proposed land use and predicted modal share of transport movements. Consideration is given to the potential traffic generation of the proposal, the adequacy of the proposed loading and service vehicle provisions, CPTED principles, alternative forms of transport and preparation of a GTP to encourage sustainable transport modes.

The TIA concludes the site is well-serviced by high frequency public transport services and the future Sydney Metro Waterloo Station will provide additional travel options. On this basis, it is considered acceptable and appropriate that the proposed student accommodation development does not provide any on-site car parking. The lack of on-site car parking will discourage private car ownership, in alignment with the NSW Government and City of Sydney strategic transport objectives. The provision of 134 bicycle spaces is considered appropriate for the proposed student accommodation, considering the forecast travel demands.

The proposal is anticipated to generate little to no net increase in site generated traffic due to the absence of on-site parking and tenancy agreements with future student occupants. As such, the proposal is not expected to generate any adverse traffic impacts on the surrounding road network, nor any operational or safety issues on surrounding key intersections.

All loading and waste collection activities will be undertaken on-site within the proposed loading area, with access via William Lane. A vehicle turntable will enable forward entry and forward exit movements by service vehicles. The design of the loading area has been developed to accommodate an SRV as defined by AS2890.2.

Mitigation Measures

A Framework CTMP has been prepared which establishes the principles and objectives for construction traffic management and provides an indicative construction methodology to ensure the safety of the public and workers. The Framework CTMP will be further developed in consultation with the Sydney Coordination Office within TfNSW and a detailed CTMP finalised prior to the commencement of construction activities.

A GTP has also be prepared which encourages use of transport modes that have low environmental impacts, including walking, cycling, public transport, and better management of car use. The GTP will be implemented during the operational phase of the development, including:

- Public transport maps provided on noticeboards, newsletters, websites, social media to alert students to the alternative transport options.
- Information within the GTP will be provided to students in a Travel Access Guide.
- A formal Travel Plan Co-ordinator (**TPC**) will develop, implement and monitor the GTP.
- The GTP will be monitored to ensure that it is achieving the desired benefits, including travel surveys to establish travel patterns and mode share of trips to and from the site. The GTP may be updated to influence further changes to the travel behaviour.

Overall, the traffic and parking implications are not expected to result in any discernible adverse impact on the surrounding road network, with management measures to ensure minimal traffic and parking implications for both construction and operation of the proposed student accommodation on the site.

6.8. SIGNAGE

Section 2.3.7 of the EIS describes the indicative signage zones that are proposed at the ground level and the upper levels of the building.

The proposed ground-level signs aim to identify the site and the main building entry on Regent Street and include a fascia sign on the awning above the building entry and window signage immediately to the south of the Regent Street entry. The upper level signs will identify the building within the emerging skyline, including the north-eastern corner facing east (Regent Street elevation) and north (Marian Street elevation) and the north western corner facing west (William Lane frontage)

The indicative signage zones have been assessed in accordance with the Schedule 1 provisions listed in SEPP 64 as outlined in detail within **Section 4.9** of the EIS. The assessment found the proposed signage zones are consistent with the existing and approved development within the locality and will not adversely impact on important views or view corridors or dominate the skyline or reduce the quality of vistas.

The indicative signage zones have been sited and designed to complement the architectural features of the proposed building and provide a well-considered response to the existing and emerging urban context. The proposed signs will provide for wayfinding and contribute to the activation of the street frontages.

The proposed signs will be delivered in accordance with the State and local planning legislation, including the complying development provisions and/or Council's LEP and DCP requirements, as relevant to each sign.

6.9. HERITAGE AND ARCHAEOLOGY

Artefact Heritage Services were engaged to prepare a Statement of Heritage Impact (**SoHI**) (**Appendix D**) to assess the impacts of the proposed development on surrounding heritage items and potential archaeological elements. A summary of the assessment and recommended mitigation measures for both the built heritage and non-Aboriginal archaeology is provided below.

Assessment

The SoHI identifies the heritage listed items through a search of Commonwealth and State statutory and non-statutory heritage registers. Statements of heritage significance based on the NSW Heritage Assessment guidelines are reviewed and where relevant, Conservation Management Plans (CMPs) and other documents and guidelines are utilised to provide additional information.

The historical background to the site and its development is reviewed in detail, from the Aboriginal histories of the locality through to European settlement, early subdivision, 19th century industrialisation and more recent developments, including the importance of Redfern for Aboriginal people for employment, activism and community connections.

The SoHI confirms there are no listed heritage items within the study area. However, there are several listed heritage items and a heritage conservation area within the surrounding 150-metre visual buffer zone. This visual buffer zone captures potential visual impacts to heritage items in the vicinity.

This includes:

- State significant: Redfern Railway Station Group (State Heritage Register (SHR)01234).
- Locally significant:
  - St Luke's Presbyterian Church (Local Environmental Plan (LEP)I1352)
  - Terrace house (LEP I1353)
  - Former Redfern Municipal Electric Light Station (LEP I1354)
  - Electricity Substation No. 112 (LEP I2254)
  - Redfern Estate Heritage Conservation Area (LEP C56).

The SoHI confirms the proposed works would not have any direct (physical) impacts to the listed heritage items and the heritage conservation area within the study area. However, while the proposal has been designed to minimise its visual impact to heritage items in the vicinity, the proposed works would have a minor visual impact on the following heritage items:

- Redfern Railway Station Group (SHR 01234)
- St Luke's Presbyterian Church (LEP I1352)
- Redfern Estate Heritage Conservation Area (LEP C56).

The proposed works would also have a negligible visual impact on the following heritage conservation areas:

- Terrace house (LEP I1353)
- Former Redfern Municipal Electric Light Station (LEP I1354)
- Electricity Substation No. 112 (LEP I2254).

The SoHI also addresses the non-Aboriginal archaeological impacts associated with the proposed development, including a review of the previous and current structures on the site and the previous archaeological assessments within the locality. A site inspection confirmed the site currently contains two basements areas associated with the former pub building and the mixed-use development.

An assessment of the historical archaeological potential was based on the desktop analysis and site inspection. The statement of archaeological significance confirms the study area as having:

- Nil-low potential for locally significant historical archaeological remains associated with the early land grants (Phase 1).
- Moderate potential for locally significant 'works' and low potential for locally significant 'relics' associated with mid to late 19thcentury residential development (Phase 2).
- Moderate potential to contain non-significant archaeological 'works' associated with the 20th century development of the site (Phase 3).

The recommended mitigation measures for both the built environment and non-Aboriginal archaeological impacts are outlined below.

Mitigation Measures

The following mitigation measures are proposed to respond to the potential built heritage impacts:

- Vibration monitoring should be undertaken during works at the St Luke's Presbyterian Church (LEP No. I1352). If any inadvertent damage occurs the item, the damage must be reported to the Project Manager and the relevant Heritage Specialists. Damage is to be rectified in accordance with specialist heritage advice.
- Prior to the commencement of works, a Photographic Archival Recording (PAR) report should be prepared of the significant elements of 92-96 Regent Street. The PAR would document the exterior and interior of the buildings and their setting. The recording would be undertaken in accordance with the guidelines for Photographic Recording of Heritage Items Using Film or Digital Capture, as prepared by the NSW Heritage Office.

- Prior to the commencement of works, a salvage strategy should be prepared by qualified heritage professional to identify and recover heritage building fabric for salvage and reuse at the study area. The pressed metal ceilings located within the first floor of all buildings should be considered for reuse. These ceilings could be salvaged and reinstated within the proposed building, or new pressed ceilings of similar designs incorporated into the building. Contributory fabric not retained for future use should be salvaged where possible and donated or sold to heritage restoration specialists.
- There is an opportunity for provision of interpretation measures outlining the history and evolution of the study area. A Heritage Interpretation Strategy should therefore be considered for the project. This should also include and acknowledge Aboriginal associations and values.

The following mitigation measures are proposed to respond to the Non-Aboriginal archaeological impacts:

- As the project is an SSDA, the relics provisions of the Heritage Act 1977 do not apply. It is recommended that archaeological works be undertaken in accordance with archaeological best practise. This would involve investigation and archival recording of any archaeological remains exposed during project works. The methodology adopted would be outlined in an Archaeological Research Design and Methodology prepared for the site prior to works commencing.
- An archaeological testing program, guided by the Archaeological Research Design and Methodology, should be completed prior to the commencement of in-ground project works. Test trenches should target those areas known to contain 19th century outbuildings and structures.
- On finalisation of the testing program a Result Report would be prepared. This report would include recommendations for the future management of the archaeological resource (should one be identified). Recommendations may include the implementation of monitoring and archival recording program during bulk excavation works, or the requirement to archaeologically salvage portions of the site prior to impact.
- Any retrieved historical artefactual material would be the responsibility of the owner of the site. This includes appropriate treatment of the artefacts, and their long-term storage in a safe and accessible place.
- All contractors responsible for ground disturbance within the study area should be provided with a heritage induction conducted by a suitably qualified archaeologist prior to any works commencing. This induction would provide information regarding the nature and appearance of potential heritage items within the study area and the requirements for reporting under the Heritage Act. It would also advise contractors of the role of the archaeologist on site during archaeological investigations.
- 'Relics' are protected under the Heritage Act 1977 and the Heritage Council of NSW should be notified in accordance with section 146 of the Heritage Act 'relics' are identified at any stage of the project. All human skeletal remains are statutorily protected.

Artefact Heritage Services conclude the site can be made suitable for the proposed development subject to adoption and implementation of the above mitigation measures and confirmation the site does not contain state significant archaeological relics or significant archaeological remains not identified in the SoHI.

6.10. ABORIGINAL CULTURAL HERITAGE

An Aboriginal Cultural Heritage Assessment Report (**ACHAR**) was prepared by Artefact Heritage to assess the Aboriginal cultural heritage values across the site (refer to **Appendix C**). A summary of the assessment and recommended mitigation measures is provided below.

Assessment

The cultural assessment includes information collected through desktop assessment, a site survey and consultation with Aboriginal groups. The ACHAR was prepared in accordance with the SEARs and other relevant legislative and policy requirements.

Aboriginal community consultation was conducted in accordance with OEH Consultation Requirements. Correspondence was sent to organisations requesting details of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects. Sixteen Aboriginal stakeholders registered an interest in the project.

An archaeological survey of the site was undertaken on the 22 July 2019 with a representative of Metropolitan LALC. The survey aimed to cover a representative sample of the study area that will potentially be impacted by the proposed works, recording any new Aboriginal objects and identifying areas of potential

archaeological deposit (**PAD**) that may have had no or minimal disturbance. Liaison was undertaken with the Metropolitan LALC regarding the proposed works and the archaeological potential of the study area.

The results of the site survey are summarised below:

- No Aboriginal objects or areas of archaeological potential were identified within the study area and accordingly, no site-specific assessment of archaeological significance is made in the report.
- The study area has been subject to moderate-high levels of disturbance. Aboriginal objects are likely to be present within proximity of water resources such as Waterloo Swamp and Shea's Creek. However, these resources are not located within the immediate vicinity of the study area.
- The proposed works are unlikely to result in harm as identified under the *National Parks and Wildlife Act 1974* (**NPW**) as previously unidentified Aboriginal objects are unlikely to be present in remnant natural soil deposits below the existing development.
- It is acknowledged the continued urbanisation of the Redfern Region has the potential to result in a cumulative impact on the cultural values of the local area.

Sixteen Aboriginal stakeholders registered an interest in the project. Consultation with these groups revealed the importance of acknowledging the changing and continuing relationship to Redfern for Aboriginal people.

The report concludes that no further archaeological investigations are required. The recommended mitigation measures are outlined below.

Mitigation Measures

The report recommendations include the following recommended mitigation measures:

- If suspected human remains are located during any stage of the proposed works, work must stop immediately, and the NSW Police notified. An Archaeologist or Physical Anthropologist should be contacted in the first instance where there is uncertainty whether the remains are human.
- An unexpected finds procedure must be in place throughout the proposed works, with procedures in place for notification of a heritage consultant, the Department of Planning and Environment, Metropolitan LALC and the RAPs where unexpected finds are identified.

Overall, it is considered the site is suitable for the proposed development subject to the adoption and implementation of the above mitigation measures.

6.11. PUBLIC DOMAIN AND PUBLIC ACCESS

The proposed public domain improvements, street activation and key pedestrian linkages are documented within the Architectural Drawings (**Appendix G**), the Design Report (**Appendix H**) and the Landscape Report (**Appendix K**). The scope of the improvements include:

- **Street tree planting**: the three existing street trees near the corner of Regent Street (one tree) and Marian Street (two trees) will be supplemented with additional street tree planting along all three street frontages. The new street trees have been selected from the City of Sydney Street Masterplan, including *Plantanus acerifolia* (Regent Street), *Pistacis chinensis* (Marian Street) and *Waterhousea floribunda* (William Lane). The tree grates will be in accordance with City of Sydney standards. The awnings along the Regent Street and Marian Street frontages has been designed to avoid conflicts between the trees and the awning. The existing street trees may be pruned away from the new awning as necessary.
- **Pedestrian access**: a dedicated pedestrian accessway will be provided along William Lane to provide a future through-block connection from Marian Street to Margaret Street. The existing pedestrian footpath along Marian Street will be widened by setting back the proposed building from the existing boundary line, improving the east-west pedestrian connection from Regent Street to Gibbons Street. The proposed development also includes an 'internal street' which provides entries to the building from both Regent Street and Marian Street/William Lane.
- **Paving treatment**: the paving treatment along Marian Street and Regent Street will be updated in accordance with City of Sydney Street Design Code. This includes concrete unit paving along Regent Street and Marian Street return. In-situ concrete paving will be provided along the balance of the Marian Street frontage, continuing along the new pedestrian connection along William Lane.

- **Street activation**: bench seating will be provided along the Marian Street building façade to provide the opportunity for social interaction and activate the public domain. A break-out space will be provided on William Lane including sandstone seating blocks under the new trees and edge seating adjacent to the staircase to the Marian Street/William Lane entrance to the building.

The proposed public domain improvements, including the improved pedestrian connection along William Lane, has been designed to complement the approved pedestrian improvements associated with the redevelopment of 11 Gibbons Street and 13-23 Gibbons Street and the potential future redevelopment of 104-116 Regent Street.

Wee Hur and their project team consulted with the City of Sydney regarding their requirements for William Lane in association with the approved development for 13-23 Gibbons Street. The feedback from their previous discussions and their working knowledge of the relevant Council requirements informed the design for the current proposal for 90-102 Regent Street.

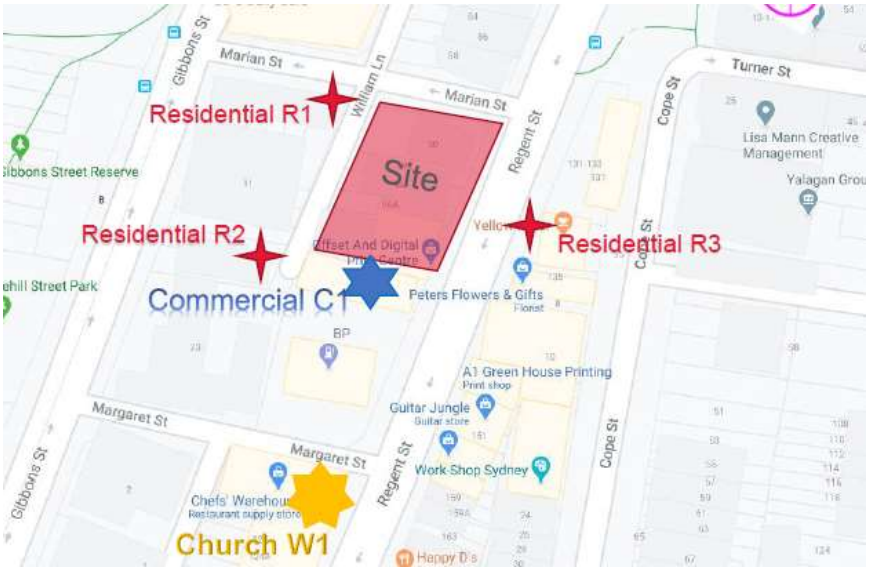
6.12. NOISE AND VIBRATION

An Acoustic and Vibration Assessment Report has been prepared by Northrop and is included at **Appendix O**. The report addresses the proposed operational and construction noise impacts associated with the proposed development.

Assessment

The acoustic environment of the site is dominated by traffic noise from Regent Street and the general 'hum' of the inner-city urban context. The closest sensitive receivers were identified which have potential for noise impacts from the construction or operational phases (refer **Figure 29**).

Figure 29 Noise measurement locations



Source: Northrop

Two noise monitors were installed for 10 days to measure ambient and traffic noise at William Lane and Regent Street. The maximum noise level recorded was 68 dBA. It was recognised the acoustic environment is highly dominated by traffic noise of Regent Street.

The outer envelope of the building will need to be designed to reduce noise impacts on occupants to achieve a maximum noise level of 35 dBA for bedrooms and 40 dBA for living rooms. Calculations were made to obtain the interior noise levels within the living spaces using traffic noise levels from Regent Street and considering the outer wall masonry construction. Recommended measures for the proposed glazing treatment, internal walls, communal areas and mechanical plant are provided within the report (and summarised below).

The proposed demolition, excavation and construction activities have been assessed in accordance with the established noise criteria for the sensitive receivers. Consideration was also given to then construction

vibration levels which have been established based on potential disturbance to surrounding building occupants and damage to surrounding buildings.

The assessment was based on the typical plant involved in each phase of the construction process, noting the proposed works and activities have not yet been finalised. The relevant noise levels were assessed against the established criteria and found that predicted noise emissions from most activities exceed the Noise Affected Level criteria and at times, the Highly Noise Affected Criteria will also be exceeded. Mitigation measures have been provided to meet the required noise levels.

It is estimated that 10-15 trucks will travel to the site per day or 1-2 trucks per hour. Considering the high volume of traffic on Regent Street, the construction vehicle traffic will not result in a perceptible difference in noise level. The resulting noise increase will be well within the 2 dBA limit increase and will comply with the NSW Road Noise Policy requirements.

The assessment of the predicted vibration levels during the construction phase found the service station building to the south should be considered for possible vibration impact. Recommended mitigation measures have been included to minimise vibration impacts.

The Acoustic Report also considered the potential vibration impacts of the Sydney Metro Rail Tunnel and ground-borne noise impacts. Further consideration of these matters will be required prior to commencement of construction, including implementation of the recommended mitigation measures.

Mitigation Measures

The following measures are recommended to mitigate the potential noise impacts associated with the operational phase of the development:

- The recommended glazing schedule will be implemented in the detailed design to mitigate potential traffic and ambient noise.
- All internal walls/partitions which need acoustic rating are to be designed/specified at the CC stage
- All floors which need acoustic and impact treatment are to be designed/ specified at the CC stage.
- An assessment to be conducted to assess and control mechanical and operational noise in accordance with the EPA and other regulatory requirements.
- Acoustically rated walls and floors are to be provided for the communal areas. The proposed hours of use limited to 8:00am to 10:00pm Sunday to Thursday and 8:00am to midnight on Fridays, Saturdays and any day before a public holiday. No external speakers will be permitted and an operation noise management plan will be implemented for management of student activity noise.
- A detailed assessment of the mechanical and operational noise should be conducted once the mechanical plant and equipment has been selected.
- Further advice is to be sought during the detailed design phase for the isolation of the building against future train vibration and ground-borne noise.

The following measures are to be addressed within the future Construction Noise and Vibration Management Plan which will be finalised during the detailed design phase and implemented during the demolition, excavation and construction of the proposed development:

- All ‘feasible and reasonable work practices’ should be implemented to reduce the construction noise
- Suitable hoardings are to be erected around the site
- Noise and vibration generating equipment is to be replaced by quieter and less severe operations.
- A system for community liaison including complaint handling is to be implemented.
- A dilapidation report be prepared for the service station building prior to commencement of construction.
- Attended vibration measurements are to be conducted at the tunnel prior to commencement of construction to measure construction vibration levels and confirm whether vibration monitoring is required.

Overall, it is considered that the potential noise and vibration impacts can be appropriately mitigated and the site is suitable for the proposed development.

6.13. AIR QUALITY, ODOUR AND WASTE

6.13.1. Air Quality and Odour

Wilkinson Murray have prepared an Air Quality Impact Assessment (**AQIA**) which assesses the potential air quality impacts associated with the proposed demolition, excavation, and construction works (**Appendix P**).

Assessment

The main sources of air pollutants in the locality include emissions from local commercial or industrial activities, motor vehicle exhaust and domestic wood heaters. The potential air pollutants associated with the project include dust and particulate matter, including

- Total Suspended Particulates (TSP)
- Particulate Matter (PM_{10})
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO_2)

The air quality assessment criteria are based on the EPA requirements for assessing impacts from dust generating activities. A qualitative assessment of the potential air quality impacts is provided based on a four-step process, including preliminary screening, assessment of impacts, identification of mitigation measures and consideration of residual impacts after the implementation of the mitigation measures. The assessment concludes:

- The total volume of structures to be demolished is less than 20,000m^3 and accordingly, the dust emission magnitude for the proposed demolition works is classified as small.
- The total site area is less than 2,500m^2 and accordingly, the dust emission magnitude for earthworks activities is classified as small.
- The total building volume of new structures to be built would be between 25,000-100,000 m^3 and accordingly, the dust emission magnitude for the construction is classified as medium.
- Heavy vehicle movements are estimated to range from 10-20 during demolition and 10-20 during construction and accordingly, the dust emission magnitude for track out is classified as medium.
- Residents in nearby apartments are considered highly sensitive to both dust soiling and health impacts. The area the surrounding works has a medium sensitivity to dust soiling impacts and a low sensitivity to human health impacts from construction dust.

The assessment of potential dust impacts from the proposed construction works indicates that, in the absence of specific mitigation measures, the works have a medium risk of dust soiling impacts and a negligible risk of health impacts. Accordingly, mitigation measures are recommended which will be implemented through the preparation of a Dust Management Plan as outlined below.

The assessment also includes a qualitative impact assessment of potential air quality and odour impacts from the adjoining service station. The report confirmed the service station includes both stage 1 and 2 vapour recovery systems and the fuel bowsers and tank filling points are located as far away from the subject site as practicable. No VOC odours were detectable during the site inspection. Accordingly, there would be negligible impact of air quality and odour from the adjoining service station.

Consideration was also given to the potential odour impacts from the proposed development. These matters have been addressed in the building design, including the location and enclosure of the garbage storage room and the design of the common area kitchens, the potential for a kitchen in the retail premises and the kitchenettes within the student rooms.

Mitigation Measures

The AQIA recommends a Dust Management Plan be developed prior to commencement of works and including the following measures where practicable:

- **Communications**: develop and implement a stakeholder communications plan that includes community engagement before construction work commences. The name and contact details of the Responsible Person accountable for air quality and dust issues shall be displayed on the site boundary.

- **Site Management**: record all dust and air quality complaints, including identification of cause(s) and appropriate measures taken to reduce emissions in a timely manner. The complaints log shall be made available to relevant authorities.
- **Monitoring**: undertake daily on-site and off-site inspections to monitor dust, record inspection results, and make inspection log available to relevant authorities.
- **Preparing and Maintaining the Site**: avoid site runoff of water or mud, keep site fencing, barriers and scaffolding clean using wet methods and remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If being re-used, keep materials covered.
- **Construction Vehicles and Sustainable Travel**: ensure all vehicles switch off engines when stationary.
- **Operations**: only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays, ensure an adequate water supply is available for effective dust/particulate matter suppression/mitigation and use enclosed chutes and conveyors and covered skips.
- **Demolition**: soft strip inside buildings before demolition, thereby retaining walls and windows in the rest of the building where possible to provide a screen against dust and ensure effective water suppression is used during demolition operations.
- **Construction**: ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.
- **Trackage (Haulage)**: ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport and implement a wheel washing system.

The assessment concludes the residual effects of dust from the project are expected to be not significant and have a low to medium risk of generating unacceptable air quality impacts. The adjoining service station includes vapour recovery systems and accordingly, there would be negligible impact of air quality and odour from the site.

6.13.2. Waste Management

Separate waste management plans (**WMP**) have been prepared by Waste Audit and Consultancy Services for the demolition and construction phase (**Appendix I**) and the operational phase of the proposed development (**Appendix M**). The reports identify the estimated waste and management, minimisation and storage requirements which reflect best-practice and promote strong sustainability initiatives.

Assessment

The WMPs include a waste hierarchy of guiding principles, including:

- **Avoid/Reduce** – minimise the production of waste materials in the construction process and purchase materials during site operations which have minimal packaging.
- **Reuse** – ensure, wherever possible, that materials are reused either on site or offsite during the construction and operational phases of the development.
- **Recycle/Recover** – identify all recyclable waste products to be produced on site with clear signage to ensure separation of recyclable waste and process for on-site or off-site recycling.
- **Disposal** – waste products which cannot be reused or recycled will be removed and disposed of at appropriate licensed facilities in accordance with legislative requirements.

The Demolition and Construction WMP outlines the way in which waste generated during the demolition and construction phases will be managed, including:

- **Record keeping**: records will be maintained regarding all wastes and recycles generated which will be re-used on site or transported for off-site disposal.
- **Materials storage**: all general waste and recycling materials will be stored in appropriately coloured and signed bins to indicate what materials are to be deposited and maximise the recovery of reusable and recyclable materials.

- **Liquid waste**: water is to be used on moderation with grey water to be used for dust suppression. Only clean water will be disposed into the stormwater system with wastewater and run-off disposed of in accordance with Sydney Water requirements.
- **Asbestos**: management procedures will be adopted for materials suspected of containing asbestos, including appointment of a licensed contractor to manage removal of soil and other materials and comply with relevant legislative requirements.

The types, quantities and management systems for the anticipated demolition and construction waste materials generated for the entire site are identified in Tables 1 and 2 of the Demolition and Construction WMP. It is estimated that the total demolition waste will equate to 1,345m^3 of materials, of which over 95% can be diverted from landfill for re-use or recycling. It is estimated an additional 210m^3 of waste will be generated during the construction phase of which over 90% can be diverted from landfill disposal, for re-use on or off-site or recycled off-site at a specialised facility.

The Operational WMP identifies the expected resource streams based on the proposed land use activities, including the retail premises on the ground level and the student accommodation comprising 381 rooms. The total waste generated by the development is calculated in accordance with other student housing developments, including 40 litres of general waste and 40 litres of recycling per occupant, per week. Additional waste will be generated by the communal areas, including the support services, common areas and ancillary facilities, providing a total of 34,486 litres (34.5m^3) of waste and recyclables per week.

A dual chute system will be implemented for general waste and recycling. Chutes will be accessed from each level by residents and will terminate in the storage room on the Lower Ground Level. General waste and mixed recycling (paper, cardboard, glass, metal, and plastics) will be stored in separate 1100-litre Mobile Garbage Bins and collected weekly from the loading dock. 16-17 bins of each material type are expected to be generated each week. A separate caged area will be provided for bulky waste which will be collected by Council on request or through regular scheduled collections.

The total storage area requirement is approximately 45m^2 which will be met in the proposed waste collection area which has a total of 65m^2 including waste and bulk waste storage rooms.

Mitigation Measures

The mitigation measures outlined within the Demolition and Construction WMP and the Operational Management WMP are summarised below:

- A comprehensive Work Plan shall be developed and submitted prior to commencement of demolition activities. The principles to be included in the Work Plan include:
  - Proposed demolition methods
  - Estimated time for work to be completed
  - Hours of operation
  - Sediment control measures
  - Site access
- The Head Contractor will be responsible for ensuring each sub-contractor complies with the WMP, with the Site Manager responsible for its implementation on site.
- All site employees and sub-contractors will be required to attend an induction that will outline the WMP and explain the site-specific matters to be implemented to reduce and recycle waste during the construction phase.
- Waste and recycling contractors will be required to comply with the Operational WMP requirements to achieve and maintain best practice.
- Education will be provided for all site users as part of the general building and orientation and on a regular basis.

Overall, it is concluded the demolition, construction and operational phases of the development can be effectively managed to reduce, re-use, recycle and dispose of waste to avoid unacceptable environmental impacts.

6.14. DRAINAGE AND FLOODING

6.14.1. Stormwater Management

JHA Consulting Engineers have prepared a Stormwater Management Report (**Appendix BB**) which sets out the stormwater management works. A summary of the assessment and recommended mitigation measures is provided below.

Assessment

The Stormwater Management Report assesses the proposed Water Sensitive Urban Design (**WSUD**) features in accordance with the MUSIC software. Both the stormwater quantity and stormwater quality treatment measures are identified within the report and as summarised below.

- **Stormwater Quantity**: the report reviews the adequacy of the proposed 20m^3 on-site stormwater detention (**OSD**) tank in accordance with Sydney Water requirements. The 150mm diameter orifice in the OSD tank will allow stormwater to flow out in a controlled manner without exceeding the Permissible Site Discharge (**PSD**) of 47 litres/sec. The proposed floor surface of the OSD tank is at FFL 25.95. In the event of an extreme storm greater than the 100 year average recurrence interval (**ARI**), stormwater is expected to overflow and discharge to Regent Street without impacting on the building interior.
- **Stormwater Quality**: a Filterra bio-retention system is proposed to be installed on Level 3 to satisfy the WSUD requirements. The proposed system will remove the larger sediment particles and pollutants through sedimentation and chemical reactions with organic materials in the 75mm layer of mulch on the filter media. The results of MUSIC model analysis demonstrate the proposed development will meet the stormwater pollution target prescribed by the City of Sydney.

The recommended mitigation measures to provide for the effective operation of the proposed stormwater management system are summarised below.

Mitigation Measures

The following matters will need to be implemented prior to construction and during the ongoing operation of the development:

- The surveyor shall verify the outlet pipe's invert level of the existing kerb inlet pit prior to construction.
- Maintenance and replacement of the mulch and filter medium will need to be carried out in accordance with the manufacturer specification.

Subject to implementation of the above matters, it is expected the stormwater quantity and quality impacts of the development will be acceptable.

6.14.2. Flooding

JHA Consulting Engineers were also engaged to prepare a Flood Assessment Report (**Appendix AA**) which considers the flood risk and sets out the stormwater management works associated with the proposed development. A summary of the assessment and recommended mitigation measures is provided below.

Assessment

The site is located within the Alexandra Canal catchment which has been subject to several flood studies by the City of Sydney Council, including:

- Alexandra Canal Catchment Flood Study – Report Final, Project W4785 prepared by Cardno
- Alexandra Canal Floodplain Risk Management Study and Plan, Project W4948 prepared by Cardno
- 11 Gibbons Street, Redfern Site Flood Assessment, prepared by WMA Water Pty Ltd. This property is situated just north of this proposed development.

The site is near the upstream end of the Alexandra Catchment with Council's existing street underground drainage network of pits and pipes along Regent Street, Marian Street and William Lane. The flood study results indicate the site is not inundated during the major storm event 100 years ARI. However, there is a flooding issue at the southern part of William Lane arising from an elevated courtyard on a downstream property which is 700mm higher than the street level of William Lane. The kerb lintel pits divert part of the

trapped floodwater to Regent Street via an underground pipe, with a peak flood depth of 0.5-0.69 metres. However, due to the relatively low velocity of flow, the location is designated as Low Hazard.

During an extreme flood event, the flood study results indicate flooding along William Lane and Regent Street, with a peak flood depth of between 0.1-0.3 metres. William Lane and part of the service station site to the south are inundated. Floodwater could flow from William Lane into the service station site, with a floodwater depth of the existing pit reaching 0.7-0.99 metres. However, due to the relatively low velocity of flow, the entire site is designated as Low Hazard.

The potential impacts of climate change and increased rainfall intensities are addressed within the report, including the sensitivity analysis undertaken within the previous flood studies to account for increased rainfall intensities. The proposed development is situated at the upstream end of the Alexandra Canal catchment and accordingly, the rise of sea level due to climate change will not impact on the property.

A detailed analysis is provided of the pre- and post-development site and flood conditions which confirms floodwater will not enter the buildings during the 1% AEP and PMF storm events and the proposed development will not experience undue flood risk or adversely affect downstream neighbourhood properties.

Mitigation Measures

The following matter will need to be implemented during the detailed design phase and prior to construction:

- The proposed minimum flood planning levels will be adopted to comply with City of Sydney requirements for 500mm freeboard of the habitable areas and 300mm freeboard for garage and above floodwater for non-habitable areas.

Overall, the report concludes the site is in a flood safe area and is suitable for the proposed development subject to the adoption and implementation of the above mitigation measure.

6.15. SOIL AND WATER

6.15.1. Soil and Erosion Management

A soil and erosion management plan has been provided within the Stormwater Management Report and accompanying drawings at **Appendix II**. The potential impacts of the development and the proposed soil and sediment control measures are described below.

Assessment

The Stormwater Report recognises that the demolition and construction activities have the potential to impact on the stormwater system and the environment. Appropriate stormwater quality outcomes are required to meet relevant authority requirements and avoid adverse impacts to the operation of the drainage system and the health of the receiving waterways.

The soil and erosion management plan has been designed in accordance with the 'Soils and Construction' Blue Book by Landcom (2004) to avoid sediment from construction activities draining into the existing stormwater pits in Regent Street and William Lane. The proposed mitigation measures are outlined in the stormwater drawings lodged with the SSDA and as summarised below.

Mitigation Measures

The detailed notes detailed on the Soil and Erosion Control Detail plan (Drawings No C102) are to be implemented during the demolition and construction phases. The detailed mitigation measures include:

- Existing kerb inlet pits at William Lane and Regent Street will be protected with sandbags.
- A sediment fence comprising a geotextile filter fabric will be erected around the site where possible.
- Vehicles that enter and exit the site during the construction shall be washed down to prevent the soil and dirt on the road system.
- The contractor shall be responsible for the implementation of all soil erosion and sediment control measures prior to the commencement of work.

Subject to the implementation of mitigation measures, the proposed development will have minimal pollution impacts to the stormwater system.

6.15.2. Geotechnical Issues

Douglas Partners were engaged to prepare a Geotechnical Investigation (**Appendix MM**) to assess the geotechnical conditions at the site. A summary of the assessment and recommended mitigation measures is provided below.

Assessment

Douglas Partners used field work and laboratory work to determine the geotechnical conditions at the site. The field work for the investigation included drilling boreholes at varying depths, including installation of groundwater monitoring wells within three boreholes, and laboratory testing of selected samples.

The site is located within Quaternary-aged transgressive dunes typically comprising medium to fine-grained sand. The boundary with Triassic-aged Ashfield Shale occurs about 140 m to the west of the site. The site does not lie within an area known for acid sulfate soils. The site also does not occur within an area mapped for known soil salinity issues.

Douglas Partner's assessment concluded:

- The exposure classification for buried concrete and steel structures was assessed as being 'non-aggressive' in accordance with Australian Standard AS 2159 – 2009 *Piling – Design and installation*.
- The rock profile includes very low and low strength, fractured laminite about 1-3 metres thick underlain by medium and high strength, fresh and slightly fractured laminite or siltstone.
- No free groundwater was measured during auger drilling of the boreholes. Groundwater is expected between RL 16.0-16.5 metres within the more fractured and weathered rock.
- The Sydney Metro rail twin tunnels are below the site, with the tunnel crown at least 32 metres below the ground surface. The *Sydney Metro Underground Corridor Protection Technical Guidelines* indicate demolition of existing subsurface structures, excavations for basements or footings greater than two metres, ground anchors and shallow or pile footings are allowed subject to an assessment.
- Structural loads should be transferred into the underlying bedrock using piles socketed into at least medium strength (or better) rock.
- Given that excavations will be shallow and within soil, it is expected that vibrations from the construction works will be relatively minor.

Mitigation Measures

The report includes the following mitigation measures

- All excavated materials will need to be disposed of in accordance with the provisions of the current legislation and guidelines including the Waste Classification Guidelines (EPA, 2014).
- Dilapidation surveys should be carried out on surrounding buildings, pavements and sensitive structures that may be affected by the construction works. The dilapidation surveys should be undertaken before the commencement of any construction work.
- Subgrade preparation for lightly loaded pavements, slabs-on-ground and/or raising site levels should incorporate the detailed matters listed within the Geotechnical Report (page 8).
- Vertical excavations within fill and natural soil will require both temporary and permanent support during and after construction, including compliance with temporary and permanent batter slopes for unsupported excavations above the water table and new shoring/retaining walls and propping systems for the existing retaining wall

The report also recommends the following additional investigations:

- Additional rock-cored boreholes be undertaken following demolition of existing buildings to further assess the rock depth and strength across the site, particularly given the heavily loaded foundation piles expected.
- TfNSW and Sydney Metro will require numerical modelling of the impact of the new building loads on the rail infrastructure. In some cases, boreholes to below the invert level of the rail tunnel will be necessary, as an input to the modelling and analyses.

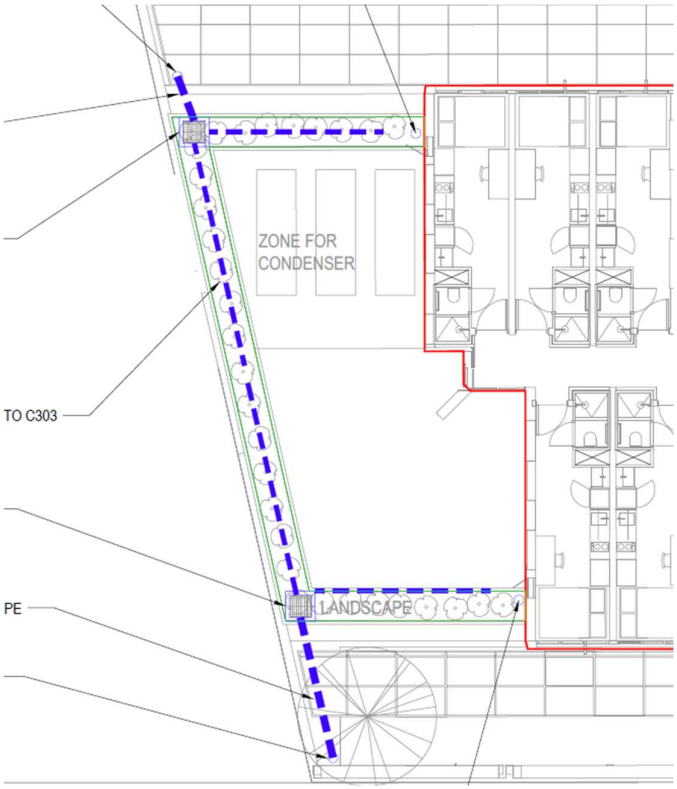
The report concludes the additional geotechnical investigation and analysis will further de-risk and manage the geotechnical issues associated with this development and facilitate compliance with the SEARs.

6.15.3. Integrated Water Cycle Management Practices

The Stormwater Management Report (**Appendix X**) outlines the proposed stormwater quality management measures which include a bioretention system on Level 3 to capture stormwater run-off in soil media. Once the pollutants are in the soil, the bacteria break down and metabolise material, with the plants then up-taking and metabolising the pollutants. The organic matter decomposes to release metals to the feeder roots of the plant and the cells of the bacteria in the soil where they remain and are recycled.

The plants will complement the landscape treatment on Level 2 and provide for the screening between the future development to the south and the required plant and equipment area for the proposed development. The proposed stormwater quality treatment provides multiple benefits and was selected for its aesthetic, functional and biodiversity-enhancing purposes.

Figure 30 Filterra Landscape Planter Box on Level 3



6.16. BIODIVERSITY

A request seeking a waiver for the requirement for a Biodiversity Development Assessment Report (**BDAR**) was prepared by Greentape Solutions and submitted to DPIE on 21 October 2020 (refer to **Appendix S**).

A desk-top assessment confirmed the site contains no threatened species habitat or vegetation and the proposal will not require any clearing of native vegetation. The only *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC**) listed species and Matter of National Environmental Significance (**MNES**) recorded occurring at and near the site is the Grey-headed flying-fox. This species is nomadic an itinerant and likely feeding on local vegetation within the inner-city green zones. There are no habitat features within the development site suitable for this species.

A survey was also undertaken of the site on 20 October 2020 which confirmed there was no evidence of microbats within the buildings. No bat scats, smell or calls were found. However, mitigation measures were proposed to ensure the demolition of the buildings would impacts on native fauna, including microbats, should they be detected. These measures, including a staged demolition process and engagement of a qualified native fauna spotter, have been included within the development description of the proposed works.

A BDAR waiver was issued by the NSW DPIE on 2 November 2020 and a BDAR is not required to be prepared and submitted as part of this SSD application (refer to **Appendix S**).

6.17. ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD)

An Ecological Sustainable Design (**ESD**) Report has been prepared by Vipac Engineers and Scientists (**Appendix R**). The report provides detail on how the overall planning and design of the building has incorporated ESD principles in accordance with the Regulation.

Assessment

The principles of ecologically sustainable development were an integral consideration in design of the proposed development. The sustainability targets for the development will be achieved in an integrated and staged approach through minimising the need for energy consumption (via passive measures) and then consumption optimisation (energy efficiency) and use of renewable resources, where required.

The development will meet and outperform the following regulatory sustainability requirements:

- BASIX – NSW Department of Planning & Environment
- NCC 2019 Section J (Energy Efficiency)

Although not seeking formal rating certification, the design team will consider the sustainable design principles in the 'Green Star Design & As Built Tool – Green Building Council of Australia'.

The key ESD initiatives incorporated into the design are summarised below:

- Load Reduction (minimising the need for resource consumption, eg energy, water and material)
  - Passive Design: the building has been designed to optimise factors including orientation, shading, structure, insultation and glazing. This will minimise the amount of air-conditioning required and significantly reduce the building's energy consumption and greenhouse performance.
  - Building Fabric Improvements: the glazing performance and shading configuration for each orientation will be optimised to ensure that thermal comfort is achieved and solar gains are adequate.
- Energy consumption will be reduced through the efficient design of lighting, air-conditioning, hot water and ventilation systems.
  - High efficiency heating, ventilation and air conditioning
  - High efficiency lighting
  - High efficiency hot water systems
  - High efficiency appliances
- Use of renewable resources:
  - Application of solar energy or solar thermal systems where practical.

Mitigation Measures

The following mitigation measures are recommended to achieve the ESDS principles and sustainability targets:

- Involvement of a Green Star Accredited Professional (**GSAP**) as part of the design to prepare the necessary ESD guidelines.
- High efficiency lighting and effective control initiatives such as daylight and movement sensors to reduce artificial lighting energy consumption and allow maximum advantage to be taken of natural lighting.
- Energy efficiency of Heating Ventilation Air Conditioning system to meet minimum requirements of NCC, Green Star provisions where feasible and relevant Australian Standards including but not limited to AS1668.1, AS1668.2, AS 1682 and AS3666.
- Insulation to meet NCC and AS/NZ 4859.1. Where available, thermal insulation products should be selected which have a low Ozone Depletion Potential in their manufacture and composition.

- High efficiency central gas hot water systems to provide Domestic Hot Water demands for the facility
- Monitoring to be contractually required for all building services, including (battery management systems, mechanical, electrical and hydraulic).
- After handover, the building owner is to implement tuning of all building systems and undertake full recommissioning 12 months after practical completion.
- Contractor is to adhere to a comprehensive Environmental Management Plan (**EMP**) for the works.
- The EMP shall include a WMP, specifying recycling targets for demolition and construction, including contracts which stipulate a minimum 90% target for diversion of waste from landfill.
- Passive design initiatives to be considered before design of the mechanical systems to reduce operational energy costs, with potential reductions in the air conditioning size and ongoing maintenance.
- Where possible (depending on the acoustic limitations), occupants to utilise operable windows and doors to the facade which will provide natural ventilation.
- Application of Solar Energy or Solar thermal systems, where possible.

Overall, the proposed development is considered to result in an acceptable level of environmental impact subject to the adoption and implementation of the above mitigation measures.

6.18. CONTAMINATION

Douglas Partners were engaged to prepare a Detailed Site Investigation (**Appendix J**) and Remediation Action Plan (**RAP**) to assess the potential for site contamination and confirm the suitability of the site to accommodate the proposed development. A summary of the assessment and recommended mitigation measures is provided below.

Assessment

The DSI was prepared based on a desktop analysis, site testing and laboratory testing to determine if there was contamination on the site, including:

- Desk-top analysis including review of published maps, publicly accessible reports and records, aerial photographs and NSW EPA public registers.
- Site testing including drilling of seven boreholes, collection of soil samples, groundwater monitoring wells and groundwater sampling.
- Laboratory testing of samples for contaminants of potential concern (**COPC**).

The desk-top analysis found that based on the review of the site history information, the site and surrounds have been used largely for commercial use since the early 1900s. Several ‘high-risk’ businesses were historically located near the site which were identified as potential sources of contamination. The age of the former structures on the site and potential demolition practises also indicated a potential risk of contamination.

The site testing and laboratory results indicated concentrations of total recoverable hydrocarbons and polycyclic aromatic hydrocarbons which exceeded the Site Assessment Criteria (**SAC**) at one location (BH3) with further analysis indicating the source was likely to be petroleum based. Concentrations of lead in sample BH6 also exceeded the SAC. Based on the soil results, further investigation and/or remediation is recommended for locations BH3 and BH6.

The groundwater results indicated detections of total recoverable hydrocarbons (**TRH**) and volatile organic compounds (**VOC**) in two samples (MW1 and MW3). Again, the source appears to be petroleum based, however, further confirmation is required. The groundwater results also had elevated concentrations of chromium, copper and zinc above the SAC. However, these results are considered typical of groundwater results in an urban setting.

A RAP was subsequently prepared which considered the results of the DSI and additional groundwater monitoring to create a model of the contamination on site and identify areas requiring remediation. The preferred remediation approach is a combination of disposal to landfill, comprising the areas affected by the basement extension, and a cap and contain approach with an appropriately designed barrier for the remaining areas of environmental concern (**AEC**).

Mitigation Measures

The following works are to be undertaken:

- Removal of contaminated soil to landfill and cap contaminated soils in accordance with the RAP and relevant regulatory requirements.
- Material requiring off-site disposal is to have a formal waste classification in accordance with the NSW EPA *Waste Classification Guidelines 2004*.
- General site management considerations (including the stockpiling of soil, waste disposal and importation of soil) are to be followed during remediation works.
- The remediation works are to be documented and a validation undertaken to confirm the remediation has been achieved in a Validation Report.
- A long-term environmental management plan (**LTEMP**) is required to be prepared and included on the Section 10.7 Planning Certificate to allow for appropriate future management to be maintained.

Douglas Partners conclude that the site can be made suitable for the proposed development subject to the successful completion and validation in accordance with the procedures and requirements outlined in the RAP.

6.19. DEVELOPER CONTRIBUTIONS

The site is subject to the *Redfern-Waterloo Development Contributions Plan 2006* and the *Redfern-Waterloo Affordable Housing Contributions Plan 2006*.

Development contributions for the *Redfern-Waterloo Development Contributions Plan 2006* will be levied at a rate of 2% of the development cost. This equates to a contribution of $1.02 million based on the capital investment value of $51 million for the proposed development. However, the final contribution will be based on the capital investment value of the approved development, including any changes to the current scheme.

Development contributions for the *Redfern-Waterloo Affordable Housing Contributions Plan 2006* are based on a rate of $86.88 per sqm of GFA. The affordable housing contribution will be determined based on the net additional GFA. This will be calculated based on the GFA within the final approved development, less the GFA of the existing development.

6.20. BUILDING CODE OF AUSTRALIA AND THE DISABILITY DISCRIMINATION ACT

6.20.1. BCA

McKenzie Group have undertaken an assessment of the proposed development against the Deemed-to-Satisfy (**DTS**) provisions of the relevant sections of the BCA and application Building Regulations (**Appendix T**) and as summarised below.

Assessment

The assessment identifies the matters which deviate from the deemed-to-satisfy provisions of the BCA, including:

- Fire Safety Items:
  - Fire Resistance Levels
  - Public Corridors
  - Protection of openings
  - Bounding construction: Class 3 buildings
  - Exit Travel Distances
  - Travel via fire isolated exits
  - Separation of rising and descending stair flights

  - Fire Hydrant
  - Vertical Sections in Ring Mains
  - Combined Sprinkler and Hydrant System
  - Fire Control Room
- Accessibility Items:
  - Review of access report required
- Miscellaneous items:
  - Weatherproofing of External Walls

Further assessment of the design will be undertaken as the design develops to ensure compliance is achieved prior to approval being issued.

Mitigation Measures

The following key fire safety services are required to meet the minimum DTS requirements:

- Sprinklers system throughout the building
- Fire hydrant system throughout the building
- Fire hose reels to the class 6 and 7b portions of the building (not required to the class 3 residential areas)
- Fire precautions during construction
- Air-pressurization throughout the fire isolated stairs
- Automatic smoke detection and alarm system throughout
- Sound System and Intercom System for Emergency Purposes

Overall, the proposal can comply with the relevant requirements through a combination of deemed-to-satisfy provisions and performance-based solutions, subject to implementation of the recommendations and further reviews during the design development. These matters do not preclude issuing of Construction Certificate as they will be resolved prior to construction.

6.20.2. Accessibility

Accessible Building Solutions has prepared a Statement of Compliance: Access for People with a Disability (refer to **Appendix U**) which assesses the accessibility of the proposed development in accordance with the relevant legislation.

Methodology

The report recognises there is generally insufficient detail at the DA stage to confirm compliance with the detailed requirements. The report identifies where the proposal is ‘capable of compliance’ with the relevant standards at the detailed design stage and considering:

- Access Provisions of the BCA 2019
- Access to Premises Standard
- AS1428 Standards
- AS1735.12 for lifts
- City of Sydney DCP requirements relating to access for people with a disability

The report includes a comprehensive assessment of the relevant standards and level of compliance based on the current architectural drawings. It includes site-specific comments relevant to the proposed development and the matters that will need to be addressed at the detailed design stage, including accessibility to/from the building, through the common areas and within the accessible studio rooms.

Mitigation Measures

A comprehensive list of measures is listed in the report which will need to be addressed or verified at the Construction Certificate stage. This will involve the review and refinement of the detailed design plans following the approval of the SSDA.

In the meantime, it is concluded that the proposal can achieve compliance with the access provisions of the BCA and the Access to Premises Standard.

6.21. INFRASTRUCTURE

6.21.1. Rail Infrastructure

Webber Design was engaged to assess the potential impacts of the proposed development on the CBD Rail Link and Sydney Metro. The following sections outline the work undertaken during the preparation of the SSDA and the additional investigations which will be completed as the design is refined through the assessment process and during the detailed design phase to comply with relevant conditions.

Assessment

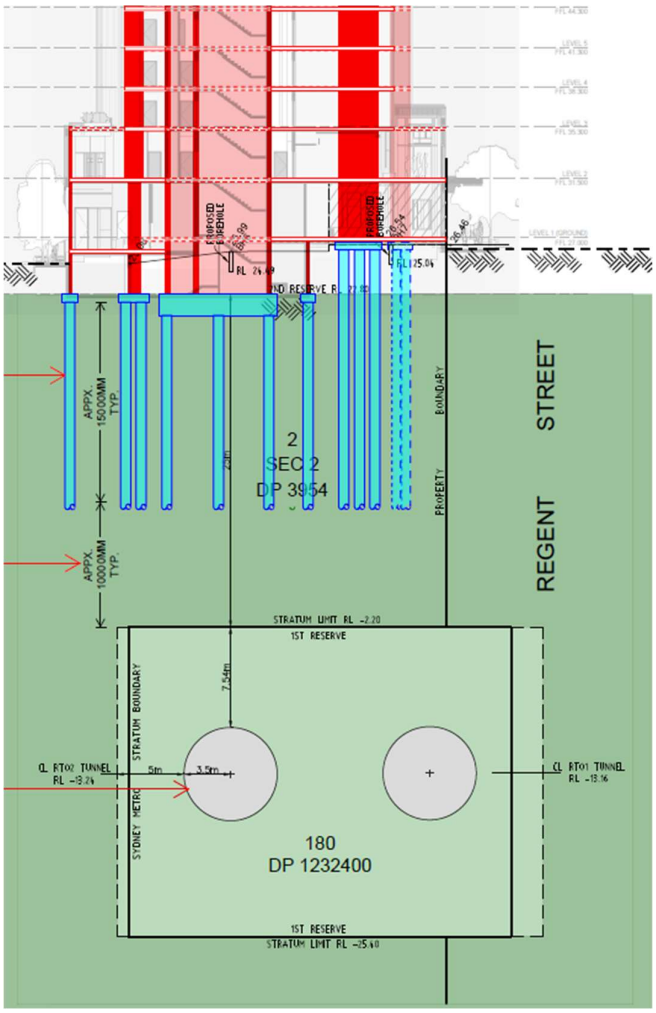
Webber Design has advised that the first phase of work with Sydney Metro involves a preliminary review of the development and identification of potential impacts. To inform this process, the following tasks have been completed:

- **Project Inception**: Wee Hur commenced their engagement with Sydney Metro on 24 July 2020 via emailed correspondence requesting information which was provided by Sydney Metro on 18 August 2020. A meeting was held between Wee Hur, Webber Design and Sydney Metro on 24 August 2020 to provide a briefing regarding the proposal and confirm the additional documentation required by Sydney Metro to understand the scope of works and potential impacts.
- **Preliminary Documentation**: preliminary structural documentation was provided with Sydney Metro on 24 August 2020 which outlined the current proposal. It was noted the proposed building design was subject to further coordination with the project architects. Sydney Metro engineers reviewed the structural documentation on 25 August 2020 and confirmed a concept sketch section was required to illustrate the depth of excavation and foundation pads or piles.
- **Additional Documentation**: the attached drawings prepared by Webber Design (refer **Appendix LL** and plan extract on following page) provide additional details regarding the proposed development and its relationship with the Sydney Metro tunnels which run below the basement level. The drawings show the location of the building and the internal wall layout, as well as the indicative pile layout and approximate loads based on the current column and core layout.
- **Feedback**: Sydney Metro has been requested to provide feedback regarding the Foundation Coordination Package and confirm requirements for foundations in the Second Reserve loading substratum directly above the tunnels and First Reserve.
- **Reporting**: once Sydney Metro has provided further comments, the additional detailed documentation will be prepared to finalise the required reporting in accordance with the Sydney Metro Underground Corridor Protection Technical Guidelines. Each of the specialist consultants, including Tunnel Risk & Impact, Electrolysis, Geotechnical Monitoring and FE Modelling and Vibration Monitoring, has been engaged and will be mobilised upon receipt of additional advice.

Mitigation Measures

Wee Hur and the consultant team will continue to consult with Sydney Metro during the assessment of the SSDA and the detailed design process to confirm the proposed development is acceptable, including any mitigation measures required to avoid, minimise or manage potential impacts.

Figure 31 Sydney Metro Sketch Section



Source: Webber Design

6.21.2. Utility Services

Arcadias prepared an Infrastructure Report (Appendix W) that identifies the existing services and infrastructure within the vicinity of the site, establishes the impact on existing utility assets from the proposed development and the proposed augmentation connection required to service the proposal.

The Infrastructure Report is accompanied by a Building Services Brief (**Appendix KK**) which outlines the mechanical, electrical, hydraulic and fire protection and lift services to be provided in association with the proposed development.

Assessment

The assessment is based on the following:

- Review of “Dial Before You Dig (DBYD)” information
- Preliminary maximum demand calculations based on initial architectural designs
- Review of architectural drawings of the proposed development
- Review of Ausgrid GIS plans and single line diagrams
- Review of Sydney Water Pressure and Flow enquiry

The report identifies the existing infrastructure available to the amalgamated site, including electrical services, communications services, water and sewer services and gas services. Drawings from the relevant service providers are attached to the Infrastructure Report, outlining the location of existing services in relation to the site.

The proposed infrastructure requirements to service the proposed development are summarised below.

- **Electrical:** the calculated maximum demand for the development based on VA/sqm allowance (to AS3000 recommendation) is approximately 1.9MVA. A new 1MVA mini chamber substation is proposed to be installed as part of the development. A formal application requesting “Design Information Package” (DIP) will be made to Ausgrid during the detail design stage.
- **Communications:** the DBYD results indicate there are optic fibre connections in the vicinity of the site. It is proposed to connect into the optic fibre network to provide NBN to the property. New lead in cable would need to be installed to allow connection to the network. An inquiry with Telstra has been made to confirm existing services and facilitate further design.
- **Water and Sewer:** it is proposed to connect into the 150DICL water main running along Regent Street. The initial investigations indicated the existing mains pressure will be insufficient. A Notice of Requirements from Sydney Water will inform the required upgrades to facilitate sufficient pressure and flow to the proposed development. Wastewater will be connected into the 225VC service which runs through the back of the property and connects into William Lane.
- **Gas:** the Ausgrid plans indicate the primary gas main comprises a 75NY 210kPa Jemina gas main which runs along Regent Street. A new lead in gas connection will be provided as part of the proposal.

Mitigation Measures

The proposed infrastructure upgrades outlined above will be implemented in consultation with the respective authorities at the detailed design stage to confirm the supply arrangement and modification. The utility service providers will need to consider the cumulative impact of the approved and proposed developments within the locality on future demand and to ensure there is sufficient system capacity for the current proposal, as well as any future developments in the surrounding area.

Overall, it is concluded the proposed development can be satisfactorily serviced, subject to the augmentation of existing water supply services and the required connections and on-site facilities to connect to existing utility services infrastructure.

6.22. LAND OWNERSHIP AND TENURE

The Trust Company (Australia) Limited ATF Wee Hur Regent Trust is the registered owner of each of the properties within the amalgamated site at 90-102 Regent Street, Redfern.

The proposed student accommodation will be operated by Y Suites which was created under Wee Hur Hospitality Pty Ltd, a wholly owned subsidiary of Wee Hur Holdings Pty Ltd. The development will be held under the Wee Hur PBSA Master Trust and managed by Wee Hur Capital Pte Ltd.

The future tenant for the retail premises on the ground floor was not known at the time of preparing the SSDA.

7. HEALTH IMPACT ASSESSMENT

The assessment of key issues in **Section 6** indicates the proposed development will not result in any regional health impacts.

The nature of the proposed uses, including local retail and student housing, are unlikely to have any implications for regional health. No on-site car parking is provided to reduce reliance on private vehicles and associated traffic generation and air quality impacts. 134 bicycle spaces are provided to encourage cycling as a means of transport. The site is ideally located close to major universities and high-frequency public transport to encourage walking and public transport use.

The potential local health impacts associated with the construction and operation of the proposed development have been identified within the assessment of the key issues and the associated specialist reports appended to the EIS, including:

- Acoustic Report prepared by Northrop (**Section 6.12** and **Appendix O**)
- Air Quality Impact Assessment prepared by Wilkinson Murray (**Section 6.13** and **Appendix P**)
- Framework CTMP prepared by The Transport Planning Partnership (**Section 6.7** and **Appendix EE**).
- Detailed Site Investigation prepared by Douglas Partners (**Section 6.18** and **Appendix J**)

The recommended mitigation measures within the above reports are considered satisfactory to avoid any significant health impacts as outlined below:

- **Noise and vibration**: the Acoustic Report incorporates recommendations which will avoid health impacts to the building occupants and surrounding properties in the demolition, construction and operational phases of the development. These include:
  - Demolition and Construction: a range of measures will be put in place to reduce construction noise, including work practises, suitable hoardings and selection of appropriate equipment. A community liaison system will be implemented to enable any issues to be identified and resolved.
  - Operational: a glazing schedule has been recommended to avoid impacts associated with traffic noise. Operational management measures will be adopted to avoid unacceptable noise impacts from communal outdoor spaces on nearby student rooms and surrounding properties.
- **Air quality and odour**: the Air Quality Impact Assessment establishes air quality criteria to protect the general health and amenity of the comm unity with regard to air quality. It includes a qualitative assessment of potential impacts associated with the demolition, excavation and construction works.

  The report concludes the proposed works are unlikely to result in unacceptable impacts subject to the implementation of the recommended mitigation measures. These include communications, site management, monitoring, site preparation and maintenances, construction vehicles and sustainable travel, operational procedures and measures specific to demolition, construction and track-out (haulage).

  Each of these measures are proposed to be included in a Construction Environmental Management Plan (**CEMP**) for the project
- **Site contamination**: the RAP outlines the remediation works required to be completed so the site can be made suitable for the proposed development. The adoption of these measures will provide for the safety and wellbeing of the future building occupants and surrounding properties, including:
  - Removal of contaminated soil to landfill and cap contaminated soils in accordance with the RAP and relevant regulatory requirements.
  - General site management considerations (including the stockpiling of soil, waste disposal and importation of soil) are to be followed during remediation works.
  - Documentation and validation of the remediation works in a Validation Report.
  - A long-term environmental management plan (**LTEMP**) to allow for appropriate future management to be maintained.

- **Construction management**: a Framework CTMP has been prepared to outline the way in which pedestrian safety will be maintained during the construction of the proposed development. The Framework CTMP will be refined and finalised in consultation with TfNSW and prior to CC issue.

Each of the above matters has been incorporated into the mitigation measures which are summarised within **Section 8** of this report.

8. MITIGATION MEASURES

The measures identified to mitigate the potential environmental impacts of the proposed development are described in detail within **Section 6** of the EIS and summarised in the table below.

Table 18 Proposed Mitigation Measures

Impact	Potential Impact	Approach	Residual Impact
Noise and Vibration	Acoustic environment is highly dominated by traffic noise from Regent Street. Predicted noise emissions from construction activities exceed Noise Affected Level criteria. Potential noise from outdoor communal areas impacting on adjoining student rooms and surrounding neighbours Potential construction vibration impacts on Sydney Metro rail tunnel below the site, 32 metres below the ground surface.	Implement the recommended glazing schedule in the detailed design. All internal walls, partitions and floors which need acoustic rating are to be designed/specified at the CC stage. All mitigation measures are to be addressed within the future Construction Noise and Vibration Management Plan. Restrict use of the outdoor terraces to residents only with limited hours between 8:00am to 10:00pm Sunday to Thursday and 8:00am to 12 midnight on Fridays, Saturdays and evenings prior to a public holiday. No external speakers in outdoor communal areas and only low-level background noise in indoor communal spaces. Student handbook to detail roles and responsibilities and acceptable behaviour with on-site staff to enforce relevant requirements and manage any potential issues with student occupants and surrounding property owners. Detailed structural drawings submitted to Sydney Metro to demonstrate compliance with relevant guidelines. Dilapidation surveys should be carried out on surrounding structures that may be affected by the construction works. Additional rock-cored boreholes be undertaken following demolition. TfNSW and Sydney Metro will require numerical modelling of the impact of the new building loads on the rail infrastructure.	No identified residual impacts

Impact	Potential Impact	Approach	Residual Impact
Biodiversity	No native fauna species have not been recorded at the site, however, it cannot be categorically stated there are no microbats at the site	Demolition to be undertaken in stages with a qualified fauna spotter to be engaged to assess each area prior to demolition and either relocate microbats or all native fauna to self-disperse.	No identified residual impacts
Visual Impacts	Tower component of building dominating visual skyline Podium component impacting on streetscape	Slender tower form selected with architectural modulation and high-quality materials. Podium design complements existing retail tenancies in terms of design and scale and provides visual interest	No identified residual impacts
Visual Privacy Impacts	Potential overlooking of adjoining properties to west (11 Gibbons Street) and south (104-116 Regent Street)	Adequate building separation distances to western and southern facades Minimal glazing areas and angled blades on the southern windows Podium parapets adjacent to outdoor communal spaces with raised planter beds	No identified residual impacts
Wind Impacts	Exacerbation of existing wind tunnel from proposed building, including minor variations to podium setbacks Wind impacts to outdoor terraces, impacting amenity and use	Awnings and existing and proposed street trees to protect ground level footpaths Awnings to be provided along northern, eastern and western terraces with full height screens and planting in accordance with landscape drawings	No identified residual impacts
Solar Reflectivity	Potential glare impacting upon vehicle drivers	Retain existing landscaping along Regent Street with additional landscaping along Marian Street. Provide fins to northern façade on Level 15 to be provided on Levels 3-18. Glazing to northern and eastern facades to utilise anti-reflective clear glass with co-efficient of 10% or below.	No identified residual impacts
Light Impacts	Potential light spill from street lighting, common areas and retail premises on ground	Siting and design of lighting to minimise light spill and keep glare to a minimum and prevent light escaping above the horizontal plane or off the site.	No identified residual impacts

Impact	Potential Impact	Approach	Residual Impact
	floor and outdoor terraces	Lights on outside of building to be as allow as possible and correctly aimed. Lights to be placed around the outside of the terraces.	
Heritage and Archaeology	Potential vibration impacts to listed heritage item. Potential visual impacts on heritage items and a heritage conservation area. Potential to contain locally significant historical archaeological remains.	Vibration monitoring is to be undertaken at the St Luke's Presbyterian Church during works. Any damage is to be rectified in accordance with specialist heritage advice. A Photographic Archival Recording (PAR) report should be prepared of the significant elements of 92-96 Regent Street. A salvage strategy is to be prepared to recover heritage building fabric for salvage and reuse at the study area. A Heritage Interpretation Strategy is to be prepared. An Archaeological Research Design and Methodology is to be prepared prior to the commencement of works. An archaeological testing program is to be completed and a result report prepared if archaeology is found.	No identified residual impacts
Aboriginal Cultural Heritage	Aboriginal objects are unlikely to be present in remnant natural soil deposits below the existing development.	An unexpected finds procedure to be in place throughout the proposed works.	No identified residual impacts
Traffic and Transport	Potential traffic impacts from increased population Construction traffic impacts on car parking and local streets	No on-site car parking and tenancy agreements with future student occupants to reduce private vehicle use. 134 on-site bicycle spaces to encourage cycling as transport mode. Detailed CTMP to be finalised prior to the commencement of construction activities. GTP to be implemented during the operational phase and monitored.	No identified residual impacts
Air Quality, Odour and Waste	Demolition and construction works have medium risk of dust soiling impacts. Potential impacts from waste generated by	A Dust Management Plan is to be developed prior to commencement of works. A Work Plan is to be prepared prior to commencement of demolition activities. Waste and recycling contractors will be	No identified residual impacts

Impact	Potential Impact	Approach	Residual Impact
	demolition, construction and operational phases.	required to comply with the Operational WMP. Waste management, cleaning and pest management to provide a clean and safe living environment for students and adjoining properties	
Drainage and Flooding	Potential localised flooding impacts to proposed development. Potential impacts of proposed development on existing stormwater flow and quality.	The proposed minimum flood planning levels will be adopted to comply with City of Sydney freeboard height requirements. The surveyor shall verify the outlet pipe's invert level of the existing kerb inlet pit prior to construction. Maintenance and replacement of the mulch and filter medium is to be completed.	No identified residual impacts
Soil and Water	Demolition and construction activities have potential to impact on stormwater system.	Existing kerb inlet pits to be protected with sandbags. Installation of a sediment fence around the site. Vehicles to be washed down when entering/ exiting the site. All excavated materials to be disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	No identified residual impacts
Ecologically Sustainable Development	Potential increase in energy consumption associated with demolition, construction and operational phases	ESD measures to be implemented through each stage of the project to achieve sustainability targets	No identified residual impacts
Contamination	The site is identified as containing contaminants from previous land uses and building materials that present an environmental impact during demolition and construction activities.	Removal of contaminated soil to landfill and cap contaminated soils in accordance with the RAP and relevant regulatory requirements. Material requiring off-site disposal is to have a formal waste classification in accordance with the NSW EPA Waste Classification Guidelines 2004. General site management considerations (including the stockpiling of soil, waste disposal and importation of soil) are to be followed during remediation works. The remediation works are to be documented and a validation undertaken to	No identified residual impacts

Impact	Potential Impact	Approach	Residual Impact
		confirm the remediation has been achieved in a Validation Report. A long-term environmental management plan (LTEMP) is required to be prepared and included on the Section 10.7 Planning Certificate to allow for appropriate future management to be maintained.	
Utility Services	Increased demand for potable water, wastewater, power and gas services	New 1MVA mini chamber substation to be provided Sydney Water requirements to inform upgrades to water infrastructure New lead-in connections for NBN and gas	No identified residual impacts
Safety and Security	Potential opportunity for crime based on existing street lighting, security measures and crime statistics	Installation of CCTV within the development and at entrances Materials and fixtures which minimise opportunities for vandalism Adequate lighting external to buildings in accordance with Australian Standards Landscaping to allow for clear sightlines and passive surveillance	No identified residual impacts

9. SECTION 4.15 ASSESSMENT

The proposed development has been assessed in accordance with the relevant matters for consideration listed in Section 4.15 of the EP&A Act.

9.1. ENVIRONMENTAL PLANNING INSTRUMENTS

The proposed development has been assessed in accordance with the relevant State and local environmental planning instruments in **Section 4**. The assessment concludes that the proposal substantially complies with the relevant provisions within the relevant instruments. A Clause 16A Variation Request has been prepared in support of the proposed variation to the building height within the prescribed setbacks to Regent Street and Marian Street.

9.2. DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

No draft environmental planning instruments are relevant to this proposal.

9.3. DEVELOPMENT CONTROL PLAN

The site is not classified as land to which the Sydney DCP 2012 applies as it is contained within The Redfern–Waterloo Authority State Significant Precinct.

The provisions of a DCP do not apply to State Significant Development in accordance with Clause 11 of the SRD SEPP. However, a merit-based assessment in **Section 4.14** found that the proposal general complies with the key provisions in the DCP.

9.4. PLANNING AGREEMENT

No planning agreements are relevant to this proposal.

9.5. REGULATIONS

This application has been prepared in accordance with the relevant provisions of the EP&A Regulation.

9.6. LIKELY IMPACTS OF THE PROPOSAL

The proposed development has been assessed considering the potential environmental, economic and social impacts as outlined below:

- **Natural Environment:** the proposed development has been designed to comply with the relevant State and local planning requirements and Australian standards and guidelines. The impacts to the natural environment can be mitigated, minimised or managed as summarised in **Section 6** and outlined in detail within the specialist reports appended to the EIS.
- **Built Environment:** the proposal substantially complies with the land use and built form controls for the Redfern-Waterloo Precinct. The proposal supports the objectives for character and urban scale in by maintaining the established character and scale of the Regent Street frontage through a new terrace-style podium consistent in scale and architectural language associated with the existing retail tenancies. The tower component is compatible and consistent with the existing and emerging built form within the surrounding area. The variations to the building heights within the setbacks has been fully justified based on the compatibility and consistency with the surrounding development and amenity benefits.
- **Social:** the proposal will increase the housing options available to tertiary students within walking distance of major educational institutions. The building design is complemented by public domain improvements which contribute to the activation of the public spaces and social interaction between the building occupants and the locality.
- **Economic:** the proposal will facilitate the orderly and economic development of site in accordance with the relevant planning controls. It will support the tertiary education sector which makes a significant contribution to the Australian economy and strengthen the connection between Redfern and nearby university campuses. The proposed development will also support local employment during the construction and operation phases. The proposed increase in the local student population will contribute to increased spending and economic growth and development of the precinct.

The potential impacts can be mitigated, minimised or managed through the measures identified in **Section 8** of this EIS.

9.7. SUITABILITY OF THE SITE

The site is considered highly suitable for the proposed development for the following reasons:

- The project is consistent with the NSW Government and City of Sydney Council policies for the site and surrounding area including the Greater Sydney Region Plan, the Eastern City District Plan and Redfern Centre Urban Design Principles.
- The proposal is permissible in the 'Zone E – Business – Commercial Core' and is consistent which the objectives of the zone as it will:
  - Facilitate the ongoing development of the town centre by providing a high-quality mixed-use building that is compatible and consistent with recent and approved developments to the north and west of the site, including student accommodation and affordable housing.
  - Provide employment-generating activities and residential development compatible with the surrounding non-residential uses. The site is ideally located for student accommodation as it is within walking distance of several tertiary institutions including University of Sydney, University of Technology Sydney (UTS), TAFE NSW Ultimo Campus and Notre Dame University Sydney.
  - The proposed development maximises public transport patronage and encourages walking and cycling. On-site bicycle parking spaces will be provided in lieu of on-site car parking spaces. The site is close to Redfern Railway Station and the active and vibrant centres of Redfern, Surry Hills and Chippendale.

The proposal is considered suitable for the site as it delivers a world class student accommodation which aligns with relevant strategic and statutory planning policies and significant NSW Government investment in public infrastructure.

9.8. SUBMISSIONS

It is acknowledged that submissions arising from the public notification of this application will need to be assessed by Council.

9.9. PUBLIC INTEREST

The proposed development is considered in the public interest for the following reasons:

- The environmental impact assessment in **Section 6** found that no adverse environmental, social or economic impacts will result from the proposal. Detailed mitigation measures have been applied, as discussed in **Section 7**.
- The proposal increases the supply of housing that is available for students in proximity to major tertiary education campuses; contributes to the development of a more accessible and walkable city; integrates land uses with public transport; and continues the urban renewal of the subject site and Redfern-Waterloo precinct.
- The project supports the concept of the '30 minute' city envisioned within State and Regional strategic planning policy by locating a student accommodation proximate to public transport, goods and services.
- The proposal is consistent with relevant State and local strategic plans and substantially complies with the relevant State and local planning controls.
- The proposal provides employment opportunities in the short-term through construction and in the long-term through ongoing operation and retail uses.
- The issues identified during the stakeholder engagement have been addressed through the amended architectural design.

10. CONCLUSION AND JUSTIFICATION

This EIS has been prepared to assess the environmental, social and economic impacts of the proposed mixed-use development at 90-102 Regent Street, Redfern. The EIS has addressed the issues identified in the SEARs and has been prepared in accordance with Schedule 2 of the EP&A Regulation. This EIS is submitted to the NSW DPIE pursuant to Part 4 of the EP&A Act.

The SSDA seeks approval for the demolition of existing buildings and structures and the construction of an 18 storey mixed-use building accommodating ground floor retail premises and 408 bed student housing accommodation with indoor and outdoor communal spaces, on-site bicycle parking and ancillary facilities.

This EIS has been prepared to support the SSDA and responds to the relevant matters listed within the Secretary's Environmental Assessment Requirements (**SEARs**) issued on 27 November 2019. Having regard for the biophysical, economic and social considerations, including the principles of ecologically sustainable development, the proposed development is justified for the following reasons:

- The proposal satisfies the applicable state planning policies, and relevant environmental planning instruments that apply to the site:
  - The proposed uses are permitted with consent and meet the objectives of the Business Zone - Commercial Core in accordance with the State Significant Precincts SEPP.
  - The proposal complies with the 18 storey maximum height control. A Clause 16A Variation Request has been submitted which justifies the proposed variations to the maximum building height controls along the Regent Street and Marian Street frontages.
  - The proposal complies with the 7:1 maximum floor space ratio control.
- The proposal is aligned with the strategic policy objectives as it will contribute to a 30-Minute City and facilitate reduced reliance on private vehicles and increased use of public transport and active transport.
- The specialist plans and reports detail the way in which the building has been sited and design to optimise its potential and minimise its potential impacts on the locality. A Design Excellence Strategy has been prepared to demonstrate how the proposal will achieve design excellence.
- The proposal will have an acceptable level of environmental impact for the following reasons:
  - The proposal has no unacceptable traffic impacts and will facilitate increased use of walking, cycling and public transport as a means of travel.
  - The proposal is sympathetic to the heritage items in the vicinity of the site, including St Luke's Presbyterian Church.
  - Overshadowing impacts to the surrounding properties, including 104-116 Regent Street, is minimised by the proposed narrow building footprint to the south.
  - Ground level activation is delivered through the retail tenancy, communal spaces and public domain improvements along the street frontages to increase interaction with the street and passive surveillance of the public domain.
- The proposal will support the tertiary education sector, one of Australia's major international exports, by delivering additional student housing close to major institutions. The proposal will also support local employment during the construction and operation phases and contribute to increased local spending, economic growth and development of the precinct.
- The site is suitable for the proposed use and will contribute to the ongoing revitalisation of the locality, including activation of the streetscape and public domain improvements.
- The development can be adequately serviced by essential infrastructure without unreasonable demands on existing networks.
- The issues identified during the stakeholder consultation have been incorporated into the final concept design and detailed works and can be implemented in the construction and operation of the proposed development.

Based on the above, it is submitted that the proposal is in the public interest and is recommended for approval subject to appropriate consent conditions.

DISCLAIMER

This report is dated 4 November 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Wee Hur Pty Limited **(Instructing Party)** for the purpose of an Environmental Impact Statement **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A CIV REPORT

APPENDIX B SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SSD_10382)

APPENDIX C ABORIGINAL CULTURAL HERITAGE

APPENDIX D HERITAGE IMPACT STATEMENT

APPENDIX E SEARS RESPONSE REFERENCE TABLE

APPENDIX F SITE SURVEY

APPENDIX G ARCHITECTURAL DRAWINGS

APPENDIX H DESIGN REPORT

APPENDIX I CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

APPENDIX J DETAILED SITE INVESTIGATION REPORT

APPENDIX K LANDSCAPE REPORT

APPENDIX L OPERATIONAL MANAGEMENT PLAN

APPENDIX M OPERATIONAL WASTE MANAGEMENT PLAN

APPENDIX N TRAFFIC AND TRANSPORT IMPACT ASSESSMENT

APPENDIX O ACOUSTIC AND VIBRATION REPORT

APPENDIX P AIR QUALITY IMPACT ASSESSMENT

APPENDIX Q VISUAL IMPACT ASSESSMENT

APPENDIX R ECOLOGICALLY SUSTAINABLE DEVELOPMENT

APPENDIX S BDAR WAIVER

APPENDIX T BCA REPORT

APPENDIX U ACCESSIBILITY ASSESSMENT

APPENDIX V COMMUNITY CONSULTATION AND ENGAGEMENT REPORT

APPENDIX W INFRASTRUCTURE REPORT

APPENDIX X LIGHT SPILL IMPACT

APPENDIX Y ARBORICULTURE IMPACT ASSESSMENT

APPENDIX Z BASIX CERTIFICATE

APPENDIX AA FLOOD ASSESSMENT REPORT

APPENDIX BB STORMWATER MANAGEMENT REPORT

APPENDIX CC WIND IMPACT ASSESSMENT

APPENDIX DD PHOTOMONTAGES

APPENDIX EE FRAMEWORK CONSTRUCTION TRAFFIC MANAGEMENT PLAN

APPENDIX FF GREEN TRAVEL PLAN

APPENDIX GG GLARE AND REFLECTIVITY

APPENDIX HH CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

APPENDIX II STORMWATER AND SOIL DRAWINGS

APPENDIX JJ GEOTECHNICAL INVESTIGATION

APPENDIX KK BUILDING SERVICES BRIEF

APPENDIX LL SYDNEY METRO DRAWINGS

APPENDIX MM SYDNEY AIRPORT ADVICE

APPENDIX NN REMEDIATION ACTION PLAN

APPENDIX 00 CLAUSE 16A VARIATION REQUEST

URBIS