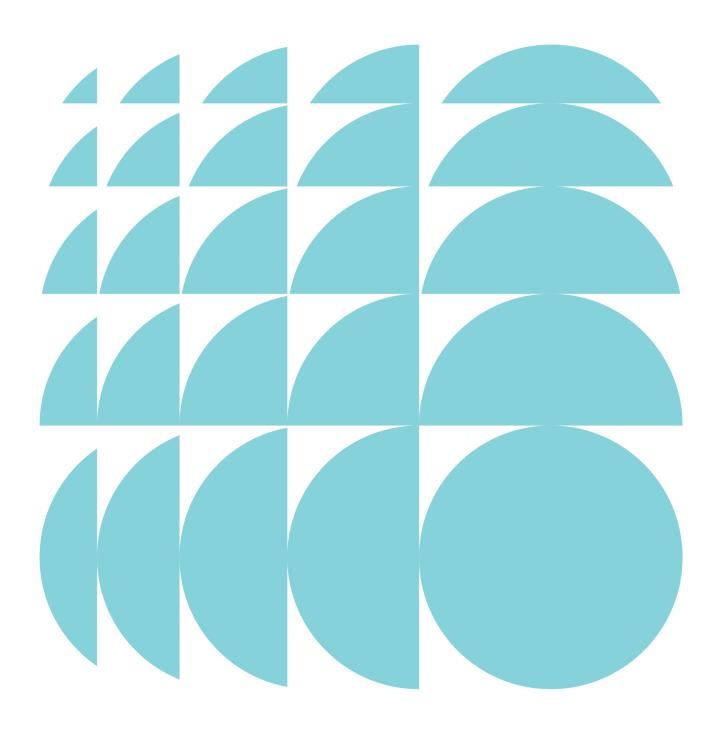
ETHOS URBAN

Environmental Impact Statement

16 Honeysuckle Drive, Newcastle Stage 1A of the Honeysuckle City Campus

Submitted to Department of Planning, Industry and Environment
On behalf of The University of Newcastle

29 July 2019 | 218153



CONTACT

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Statement of Validity

Name

Date

Development Application Details	
Applicant name	University of Newcastle
Applicant address	University Drive, Callaghan, NSW 2308
Land to be developed	16 Honeysuckle Drive, Newcastle
Proposed development	Stage 1A of the University of Newcastle Honeysuckle City Campus as described in Section 3.0 of this Environmental Impact Statement
Prepared by	
Name	Chris Forrester
Qualifications	BPLAN, UNSW
Address	173 Sussex Street, Sydney
In respect of	State Significant Development - Development Application
Certification	
Certification	I certify that I have prepared the content of this EIS and to the best of my knowledge:
Certification	
Certification	knowledge: it is in accordance with Schedule 2 of the Environmental Planning and

Chris Forrester

19/07/2019

Executive Summary

Purpose of this Report

This submission to the Department of Planning, Industry and Environment (the Department) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act). It relates to the detailed design of Stage 1A of the University of Newcastle City Campus at 16 Honeysuckle Drive, Newcastle.

The land is identified as a State Significant Site in Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). Development with a capital investment value of more than \$10 million is State Significant Development (SSD) for the purposes of the EP&A Act. As the proposed development will have a capital investment value of \$23,350,000 it is SSD.

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 30 July 2018. Accordingly, the SEARs were issued on 27 August 2018. This submission is in accordance with the Department's guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

Overview of the Project

The State Significant Development Application (SSDA) seeks approval for Stage 1A of the Honeysuckle City Campus, including a multistorey building to be used for academic and ancillary uses associated with the School of Creative Industries and Innovation Hub. The key objective of the proposed development is to establish a contemporary, sustainable and flexible building for creation and innovation in at the western gateway of the Honeysuckle City Campus.

Stage 1A is the next step in delivering the vision for the Honeysuckle City Campus established under the Concept Plan (SSD 9262), which is currently in its final stages of assessment by the DPIE. The Concept Plan proposes the establishment of building envelopes for seven (7) new buildings across the site, to be used for academic and ancillary uses, and student accommodation.

The Site

The Honeysuckle City Campus Development (HCCD) is located within the Newcastle City Council LGA at 16 Honeysuckle Drive, Newcastle. The HCCD is located on a series of sites situated between Honeysuckle Drive and Civic Lane, acquired from the Hunter and Central Coast Development Corporation (HCCDC).

Specifically, Stage 1A is located at the north western corner of the HCCD, on the portion of land identified as Site 1. The Stage 1A site has an overall area of 1,899m² and is legally described as Lot 1 1163346 and is owned by the University of Newcastle

Planning Context

Section 6.0 of the EIS considers all applicable legislation in detail. The proposal is consistent with the requirements of all relevant SEPPs. The site is zoned B4 Mixed Use and the proposal is permissible with consent and meets the objectives of the subject zone.

Environmental Impacts and Mitigation Measures

This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by the University to manage and minimise potential impacts arising from the development. The key environmental impacts include:

- · Built form and urban design;
- · Impacts on adjoining properties;
- · Environmentally sustainable development;
- · Transport and accessibility;
- · Construction management;
- · Flooding and stormwater; and
- Heritage.

These issues are addressed in **Section 4.1** of this EIS. Mitigation measures, as required, are set out in **Section 6.0** and **Section 7.0** of the EIS.

Conclusion and Justification

The EIS addresses the SEARs and includes adequate information to assess the environmental impacts of the proposed development and ensure any impacts can be appropriately managed.

The development of Building 1A is the next stage in the delivery of the Honeysuckle City Campus Development, in accordance with the long-term vision of the University. The high quality architectural expression exhibits design excellence and will positively contribute to the revitalisation of the Honeysuckle Precinct and the Newcastle City Centre. In addition, the proposed development will attract new skilled jobs, encourage greater innovation and creativity, as well as support stronger partnerships with the private sector and government agencies through research and collaboration.

The potential impacts of the development are reasonable and are able to be managed through the mitigation measures identified in the accompanying documents and Section 7 of this EIS. Given the above merits of the proposal, the proposed development warrants approval by the Minister for Planning and Environment.

1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning, Industry and Environment (DPIE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for State Significant Development (SSD).

The site is identified on the Honeysuckle State Significant Development Sites Map and the development has a capital investment value in excess of \$10 million and therefore it is SSD for the purposes of the EP&A Act (the Act).

The report has been prepared by Ethos Urban on behalf of The University of Newcastle (the University), and is based on the Architectural Plans provided by EJE Architecture (see **Appendix B**) and other supporting technical information appended to the report (see Table of Contents).

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

1.1 Overview of Proposed Development

This SSD application seeks approval for the following development:

- Construction of a four (4) storey building (known as Building 1A), to be used for academic and ancillary uses;
- Maximum gross floor area (GFA) of 2,473m²;
- Maximum building height of RL 27.815 (25.36m) (four storeys);
- Internal fit out works including workspaces and smaller enclosed studios, including staff meeting rooms, student common area, specialised suites and offices; and
- · Landscaping works.

1.2 Background to the Development

The Honeysuckle City Campus Development is located on a series of lots situated between Honeysuckle Drive and Civic Lane, acquired by the University from the HCCDC. The development of the Honeysuckle City Campus in the heart of Newcastle forms part of the University's NeW Futures Strategic Plan (2016-2025), which promotes a long-term vision of delivering new modes of education focused around a compact campus setting in a central location. This is consistent with the University's broader strategy of attracting the best students and academic staff and promoting their national and global presence in education, research and innovation.

In July 2018, a SSD (SSD 9262) application seeking Concept Plan approval for the Honeysuckle City Campus Development was lodged with the DPIE. The Concept Plan established the vision for the redevelopment of the site, which comprised:

- Establishment of building envelopes for seven (7) new buildings across the site, to be used for academic and ancillary uses, and student accommodation;
- Potential maximum Gross Floor Area (GFA) of 65,980m²;
- Maximum building heights ranging between 23m and 34.9m (between 4-9 storeys);
- Design Excellence Strategy outlining the process through which design excellence will be achieved; and
- Design Guidelines to inform the future design of the built form, including:
 - Pedestrian and vehicle access arrangements;
 - Parking and loading;
 - Preliminary landscape design; and
 - Proposed staging of the delivery of the campus.

Stage 1A is the next step in delivering the vision for the Honeysuckle City Campus, and will build on the University's historical presence (University House, Northumberland House, and Conservatorium of Music) and the recent development of NeW Space in the Newcastle CBD.

1.3 Objectives of the Development

The objectives of Stage 1A of the Honeysuckle City Campus are to:

- Establish the site as the western gateway to the Honeysuckle City Campus through quality urban design which demonstrates the site as the theatre of creativity and invention;
- Provide a development that allows for generous external space on all three street frontages, affording interaction between the University and the community;
- Establish a design that encourages creativity and innovation within the building, through well designed working galleries that showcases student activities;
- Deliver flexible learning spaces including large open studios and workspaces to smaller enclosed structured spaces; and
- Develop a sustainable building design that achieves an accredited 5 Star Design and As-Built Green Star Rating (with a pathway to a 6 Star Green Star Rating), which is adaptable, durable and minimises emissions through materiality and innovative interiors.

1.4 Analysis of Alternatives

1.4.1 Strategic need for the Proposal

As previously discussed in **Section 1.2**, the University has a strategic vision, centred around the development of excellent facilities in attractive locations with strong civic and lifestyle amenity, delivering new modes of education from innovative and collaborative facilities, and attracting outstanding staff and students.

Stage 1A is an important part of achieving this vision and will enable the University to establish a new contemporary and highly flexible building for creation and innovation at the western gateway to the Honeysuckle City Campus. The proposed development will build on the amenity offered by a CBD location, the proximity to world class beaches and a rapidly developing waterfront.

Stage 1A will also contribute to the revitalisation of the Newcastle CBD, promoting further investment, attracting new skilled jobs, encouraging greater innovation and creativity, as well as partnerships with the private sector and government agencies through research and collaboration. It will also facilitate the growth of complementary land uses in the surrounding area, such as research institutions and student housing.

1.4.2 Alternative Options

A number of options are available to respond to the need to provide a new innovation and creativity hub in a central CBD location. In consideration of the site constraints, impacts on neighbouring properties and the planning requirements, this report presents five alternative options in responding to the identified need for the development of the Innovation Hub and School of Creative Industries.

Option 1 - Do nothing

Under the 'do nothing' scenario the site would remain as an undeveloped parcel of land which was previously used for the temporary storage of construction materials. This approach would fail to meet the University's identified need for new innovative and creative spaces that accommodate new modes of education and attract high quality staff and students. It would also be inconsistent with the Concept Plan for the Honeysuckle City Campus Development and represent a gross underutilisation of the site and a wasted opportunity to contribute to the revitalisation of Newcastle, particularly given its central location in the CBD.

Option 2 - Develop the site for alternative uses

Option 2 involves the consideration of alternative uses for the site. However, it is considered that the development of the site as an innovation and creativity hub is the most appropriate as it will support the University's strategic vision of development new modes of education and world class facilities in order to expand the University's global

presence in education, research and innovation. The location of the site within the Newcastle Centre also presents a unique opportunity to foster industry partnerships with surrounding businesses and the community.

Furthermore, the location of the site provides an opportunity to leverage off the recently completed Newcastle Light Rail and will support the vision of the Greater Newcastle Metropolitan Plan 2036 which seeks to establish Newcastle as a major university city.

Option 3 - Develop elsewhere

Under Option 3 the University could look to develop the Stage 1A building and the whole of the Honeysuckle City Campus Development on a new site. However, this site is the last remaining development parcel within the Honeysuckle Precinct of a size suitable for the University's needs. It also provides an opportunity to capitalise on the existing amenity of the area and proximity to other existing university facilities such as NeW Space. Option 3 is also inconsistent with recent efforts, namely the preparation and lodgement of the Concept Plan for the Honeysuckle City Campus.

Option 4 - Alternative design

The proposed development has been the subject of an extensive design process aimed at creating a scheme which meets the functional and educational needs of students and staff, while recognising the site's context and the surrounding area.

The detailed design of the proposed building represents a sustainable and innovative scheme, that positively interacts with the public domain and establishes spaces that are flexible and amenable to allow for creative expression and innovative activities to occur. This design also provides visual interest in the skyline and is well established to act as the western gateway to the Honeysuckle City Campus Development. It has been designed as a contemporary building that recognises the Indigenous and European culture of the City of Newcastle, creating a better urban environment within the precinct.

Option 5 - The proposal

Option 5 involves following through with the proposed development detailed in this SSD application (as described in **Section 3.0** and **4.0**). This option aligns with the objectives of the University and contributes to creating a world class campus in the heart of Newcastle. The proposal will address the strategic need identified above and will provide a high-quality development.

1.5 Secretary's Requirements

In accordance with Section 4.39 of the EP&A Act, the Secretary of the Department of Planning, Industry and Environment issued the requirements for the preparation of the EIS on 27 August 2018. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix C**.

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

Table 1 Secretary's Requirements

Requirement	Location in Environmental Assessment
General	
The Environmental Impact Statement (EIS) must address the <i>Environmental Planning</i> and Assessment Act 1979 and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the <i>Environmental Planning and Assessment Regulation</i> 2000.	Environmental Impact Statement
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	
Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: • adequate baseline data;	

Requirement	Locat Environmenta	
consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed);		
 measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment; and 		
justification of impacts.		
The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (CIV) (as defined in Clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;	Included under separate cover	
an estimate of jobs that will be created during the construction and operational phases of the proposed development; and		
certification that the information provided is accurate at the date of preparation.		
Key Issues	Report / EIS	Technical Study
The EIS must address the following matters:	Section 5.1	-
Environmental Planning Instruments, Policies and Guidelines		
Address the statutory provisions applying to the development contained in the relevant EPIs, including:		
State Environmental Planning Policy (State & Regional Development) 2011		
State Environmental Planning Policy (Infrastructure) 2007		
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017		
State Environmental Planning Policy (Coastal Management) 2018		
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017		
State Environmental Planning Policy (Urban Renewal) 2010		
State Environmental Planning Policy No. 55 – Remediation of Land		
State Environmental Planning Policy No 64 – Advertising and Signage		
Draft State Environmental Planning Policy – Remediation of Land		
Draft State Environmental Planning Policy (Environment)		
Newcastle Local Environmental Plan 2012.		
Permissibility Detail the nature and extent of any prohibitions that apply to the development.		
Development Standards Identify compliance with the development standards applying to the site. Justify any development standards not being met.		
2. Consistency with Concept Approval	Section 5.1.1	-
The EIS shall demonstrate the proposal is consistent with the determination of the University of Newcastle - Honeysuckle City Campus concept plan (SSD 9262).		
3. Design Excellence	Section 5.2	Appendix A

Re	Requirement Location in		
		Environmenta	I Assessment
Go	e EIS shall include a design excellence strategy prepared in consultation with the vernment Architect NSW, demonstrating how the proposal will achieve design rellence. This strategy shall:		
•	identify the process to ensure that design excellence is achieved;		
•	demonstrate how comments from the Government Architect NSW have been addressed;		
•	demonstrate the suitability of the site for the proposal;		
•	demonstrate how the proposal will deliver public benefit; and		
•	include Crime Prevention Through Environmental Design principles (CPTED).		
4.	Built Form and Urban Design	Section 5.2.2	Appendices A
The	e EIS shall:		and B
•	outline the design process leading to the proposal with justification of the suitability of the site for the proposal;		
•	include an urban design analysis with consideration of the proposed building form, height, setbacks, bulk, scale, articulation and materials in the context of the immediate locality, the wider area, street activation and the desired future character of the area, including views, vistas, open space, the public domain and connectivity; and		
•	consider and address the relevant sections of the Newcastle Development Control Plan 2012.		
5.	Public Domain and Landscaping	Section 5.3.2	Appendices A and B
The	e EIS shall:		and B
•	include landscaping and public domain details;		
•	identify any open space, public connections and links within the site; and		
•	outline the interface between the site and the public domain.		
6.	Building Use	Section 3.3	Appendix A
•	include a table identifying the proposed land uses including a floor-by-floor breakdown of gross floor area (GFA), total GFA and site coverage; and		
•	include details of the proposed uses and/or operational details for the development, including but not limited to:		
	 hours of operation; and 		
	- capacity.		
7.	Visual and Amenity Impacts	Section 5.4	Appendix A
•	include a visual impact assessment to identify the visual changes and view impacts of the project to/from key vantage points and surrounding land. Photomontages or perspectives should be provided showing the project.		
•	detail impacts of the development on sunlight/overshadowing, wind impacts, reflectivity, visual and acoustic privacy to achieve a high level of environmental amenity		
•	demonstrate compliant levels of overshadowing of the adjoining open space and neighbouring residential properties with shadow information provided showing appropriate context. If there are non-compliances, the portions of the building		

Requirement	Location in Environmental Assessment
creating the non-compliance need to be clearly identified with justification provided	
 outline and address the proposed development's impacts in terms security, including consideration of CPTED principles 	of safety and
 detail any external lighting or illumination and consider the impacts lighting/illumination. 	of this
8. Heritage and Archaeology	Section 5.17 Appendix G and
 include a Heritage Impact Statement (HIS) prepared by a suitably of heritage consultant in accordance with the guidelines in the NSW H Manual. The HIS is to address the impacts of the proposal on any h significance of the site and adjacent areas and is to identify the follows: 	Heritage neritage
 all heritage items (state and local) within the vicinity of the site; 	
- the impacts of the proposal on heritage items including visual i	mpacts; and
 attempts to avoid and/or mitigate the impact on the heritage significant cultural heritage values of the site and the surrounding heritage. 	
 identify any areas with historical archaeological potential within the that could be impacted by the works. If impact on potential archaeo identified, a Historical Archaeological Assessment (HAA) should be a suitably qualified historical archaeologist in accordance with the F Council Guidelines for Archaeological Assessment (1996) and Asse Significance for Historical Archaeological Sites and 'Relics' (2009); 	ology is exprepared by Heritage essing
 include an Aboriginal Cultural Heritage Assessment Report (ACHA identifies and describes Aboriginal cultural heritage values that exis the area affected by the development, prepared in accordance with Practice for Archaeological Investigations of Aboriginal Objects in N guided by Guide to investigating, assessing and reporting on Aborig Heritage in NSW; 	sting across the Code of NSW, and
 consultation with Aboriginal people must be undertaken and docum accordance with the Aboriginal Cultural heritage consultation requires proponents 2010 (DECCW); and 	
 have regard to Newcastle's Archaeological Management Strategy (Newcastle 2015). 	City of
9. Transport, Traffic, Parking and Access (Operation and Constru	
The EIS shall include a transport and accessibility impact assessment paccordance with the relevant guidelines identifying:	prepared in
Operation	
 current and estimated daily and peak hour traffic generation (light a vehicle), coach facilities, public transport, walking and cycling move together with cumulative impacts of existing, proposed and approve developments within the vicinity of the proposed development and traffic upgrade; 	ements, ed
 impacts of additional traffic generated by the development on existiroad, pedestrian and cycle networks within the vicinity of the site ar measures to manage the likely future increase increased demand f transport, pedestrian and cycle infrastructure, including any require 	nd identify for public
 provide a detailed assessment of the existing and future performan intersections providing access to the site, supported by appropriate 	-

Red	quirement	Locati Environmenta	
	and analysis to the satisfaction of RMS and TfNSW, using, but not limited to, SIDRA network modelling for current and future years;		
•	the parking (car and bicycle), loading and servicing demand for the proposed development in accordance with appropriate parking codes, including justification for the amount of parking, loading and servicing facilities provided;		
•	details of travel demand management measures to minimize the impact on general traffic and bus operations and to encourage sustainable travel choices for staff and visitors, and details of programs for implementation, including the preparation of a Green Travel Plan;		
•	include details of service vehicle provisions, access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type, likely arrival and departure times, turning lanes, swept paths, sight distance requirements); and		
•	proposed access arrangements for car and bus pick-up/ drop-off, service vehicles, emergency vehicles and loading areas for the development and measures to mitigate any associated traffic, public transport, pedestrian and bicycle networks impacts (ie pedestrian crossings and refuges and speed control devices and zones).		
Cor	<u>nstruction</u>		
•	an assessment of traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists and public transport services, including the preparation of a draft Construction Pedestrian Traffic Management Plan. This Plan shall include vehicle routes, truck numbers, construction program, works zone location, hours of operation, access arrangements, cumulative impacts of other development. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the transport network;		
•	details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;		
•	details of construction vehicle routes, peak hour and daily truck movements, hours of operation, access arrangements at all stages of construction and traffic control measures for all works;		
•	an assessment of construction impacts on road safety at key intersections and locations for potential pedestrian, vehicle and bicycle conflicts;		
•	details of temporary cycling and pedestrian access during construction;		
•	demonstrate how construction activity associated with the development would not impact proposed light rail construction; and		
•	details of access arrangements for workers, emergency services and the provision for safe and efficient access for loading and deliveries.		
10.	Water, Drainage and Stormwater	Section 5.16	Appendix N
The	EIS shall include:		
•	a stormwater, groundwater and drainage assessment including modelling, contour maps and methodologies, to assess the impact of the development on surface and ground water hydrology and quality		

Requirement	Location in Environmental Assessment	
detail erosion, sediment and stormwater management controls during construction and management and mitigation measures for the prevention of potential water quality impacts during construction		
detail surface and groundwater monitoring activities and methodologies.		
 identify any water licensing requirements or other approvals required under the Water Act 1912 or Water Management Act 2000. 		
11. Flooding	Section 5.16	Appendix N
The EIS shall include an assessment of any potential flood risk on site in accordance with any relevant provisions of the NSW Floodplain Development Manual (2005), Waterfront and Cottage Creek Flood Management Plan 1999, Newcastle City-wide Floodplain Risk Management Study and Plan 2012, and the Honeysuckle Redevelopment Area Flood Study 2018, including:		
 an assessment of existing flood behaviour and impact of sea level rise, climate change, and ecosystem migration; 		
an assessment of potential flood impacts on the proposed development and measures to mitigate any potential flooding;		
any emergency management measures and evacuation procedures;		
consistency with any floodplain risk management plans;		
 an assessment of whether the proposal will significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses; and 		
 detailed consideration of the proposed drainage associated with the proposal, including stormwater and drainage infrastructure. 		
12. Noise and Vibration	Section 5.8	Appendices L and R
The EIS shall include a noise and vibration assessment prepared in accordance with the relevant EPA guidelines. This assessment must detail construction and operational noise impacts on nearby noise sensitive receivers and outline proposed noise mitigation and monitoring procedures.		andix
13. Contamination	Section 5.14	Appendix U
The EIS shall:		
 assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55; and 		
where relevant, undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works.		
14. Air Quality, Odour and Waste	Section 5.12	Appendix L
The EIS shall identify potential air quality, odour and waste impacts during the construction of the development and include any appropriate mitigation measures.		
15. Biodiversity	Section 5.7	Appendix I
The EIS shall include an assessment of the proposal's biodiversity impacts in accordance with the requirements of the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report where required under the Act.		

Requirement	Location in Environmental Assessment	
16. Ecologically Sustainable Development (ESD)	Section 5.9	Appendix F
The EIS shall:		
 detail of how best practice ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design, construction and ongoing operation phases of the development 		
 demonstrate how the proposed development responds to sustainable building principles and best practice, and improves environmental performance through energy efficient design, technology and renewable energy 		
 demonstrate the measures that have been taken to minimise resource consumption, water and energy, including an Integrated Water Management Plan which details any proposed alternative water supplied, proposed end uses of potable and non-potable water and water sensitive urban design. 		
17. Mine Subsidence	Section 5.15	Appendix J
The EIS shall provide a Geotechnical Investigation and Report (prepared by a recognised professional in consultation with the Mine Subsidence Board) which addresses potential subsidence risks, stabilisation works required/ undertaken and confirms suitability of the site for the proposal.		
18. Public Benefits on Contributions	Section 5.21	-
Provide confirmation of the public benefit offer to be derived from the proposal and address Council's Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement.		
19. Building Code of Australia and the Disability Discrimination Act	Section 5.20	Appendix M
The EIS shall include a BCA and access report demonstrating compliance with the Building Code of Australia and the Disability Discrimination Act 1992.		
20. Infrastructure (Light Rail)	Section 5.19	Appendix W
The EIS shall clarify the extent of any excavation and/ or ground penetration and identify any potential impacts on the adjoining light rail infrastructure, including any mitigation measures.		
21. Utilities	Section 5.18	Appendix N and W
In consultation with relevant agencies, ascertain existing capacity and licensing requirements for ongoing water supply and any additional electricity works and or boosted water supply (including need for hydraulic plans) are adequately addressed for the provision of utilities including staging of infrastructure.		*
22. Servicing and Waste	Section 5.13	Appendix T
The EIS shall identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.		
23. Construction Environment Management Plan	Section 5.12	Appendix L

Requirement Location in Environmental Assessment			
	Prepare a draft Construction Environment Management Plan for the proposed works, including the following:		
•	community consultation, notification and complaints handling;		
•	impacts of construction, including noise and vibration, dust and water quality on adjoining development and proposed measures to mitigate those impacts;		
•	construction waste classification, transportation and management methods in accordance with DECCW's Know Your Responsibilities: Managing Waste from Construction Sites Guideline;		
•	identification, handling, transport and disposal of any asbestos waste, lead-based paint and PCBs that may be encountered during demolition, site preparation and construction; and		
•	operational waste management in accordance with the waste management hierarchy.		
Pla	ns and Documents	Report / EIS	Technical Study
doc Ass	e EIS must include all relevant plans, architectural drawings, diagrams and relevant sumentation required under Schedules 1 and 2 of the Environmental Planning and sessment Regulation 2000. Provide these as part of the EIS rather than as parate documents.	Environmental Impact Statement	Refer to Table of Contents
In a	nddition, the EIS must include the following: clause 4.6 variation written request (if required)		
•	site title diagrams and survey plan, showing existing levels, location and heights of existing and adjacent structures/ building		
•	site and context analysis		
•	schedule of proposed GFA per land use		
•	building envelope showing the relationship with proposed and existing buildings in the locality		
•	architectural drawings (to a useable scale at A3)		
•	public domain and landscape drawings (to a usable scale at A3)		
•	architectural and urban design statement		
•	visual and view impact analysis and photomontages		
•	infrastructure impact assessment		
•	design guidelines and design excellence strategy		
•	heritage impact assessment		
•	archaeological impact assessment		
•	transport traffic and parking assessment		
Cor	nsultation		
prochav the	EIS must describe the pre-submission consultation and community engagement cess, including engagement activities undertaken, how participation outcomes be been achieved, how issues raised have been addressed and amendments to design of the development (if applicable). Where amendments have not been de to address an issue, an explanation should be provided.	Section 3.10	Appendix O

Requirement	Location Location Environmental	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. You must consult with:		
City of Newcastle Council;		
Government Architect NSW;		
Transport for NSW;		
Newcastle Transport; and		
Roads and Maritime Services.		
Further consultation after 2 years		
If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.	-	-

2.0 Site Analysis

2.1 Site Location and Context

The Honeysuckle City Campus Development (HCCD) is located within the Newcastle City Council LGA at 16 Honeysuckle Drive, Newcastle. The HCC is located on a series of sites situated between Honeysuckle Drive and Civic Lane, acquired from the HCCDC.

Stage 1A is located at the north western corner of the HCCD, on the portion of land identified as Site 1. The Stage 1A site is bound by Honeysuckle Drive to the north, Worth Place to the west, and Wright Lane to the south.

Located within the wider Honeysuckle Precinct, the site is strategically positioned in the geographic heart of the Newcastle CBD. This area is experiencing a process of revitalisation, with a number of major commercial and residential developments having been completed recently.

The site is also located in close proximity to the Newcastle Light Rail, which is now operational. With stops at Honeysuckle and Civic, the Newcastle Light Rail has improved transport connectivity to the site and the broader area. The Hunter River is located north of the site, while the Civic Precinct of Newcastle and the iconic NeW Space building sit just to the southeast. The locational context of the site is shown at **Figure 1**.



Figure 1 Location plan
Source: Google Maps and Ethos Urban

2.2 Site Description

The Stage 1A site has an overall area of 1,899m² and comprises an undeveloped parcel of land, previously used for the temporary storage of construction materials. The site does not contain any buildings or significant vegetation.

The Stage 1A site is legally described as Lot 1 in DP 1163346 and is owned by the University of Newcastle. A survey plan prepared by Monteath and Powys is located at **Appendix D** and extracted below at **Figure 2**.



Figure 2 The Site
Source: Monteath and Powys

Topography

Topographically, the site is situated in a flat, low-lying area of reclaimed tidal flats associated with the lower Hunter River estuary. The area has been filled using dredged sand with the former Lee Wharf Harbour less than 100m to the north. The site is generally flat with grades of approximately 2%. A survey detailing the contours and slope of the site has been prepared by Monteath and Powys and is included at **Appendix D**.

Vegetation

The site does not contain any significant vegetation. This was recognised by the Department of Planning, Industry and Environment with the granting of a waiver from the preparation of a Biodiversity Development Assessment Report (BDAR) on 14 January 2019 (refer to **Appendix I**).

Heritage

The site does not contain any local or state listed heritage items nor is it located in a heritage conservation area. The Stage 1A site is located in the northwest of Site 1 (wholly within reclaimed land, formerly located within Throsby Creek / Hunter River) and therefore has little potential to contain any intact, in situ Aboriginal archaeological deposit.

However, the adjoining sites known as Site 2 to the immediate south and Site 3 to the south-east are situated within a general heritage conservation area under the *Newcastle Local Environmental Plan (LEP) 2012*. These sites contain remnants of a locomotive turntable dating from between 1856-1895 and are associated with the former Honeysuckle Station. These remnants are not listed in the LEP as a heritage item but are considered to be of archaeological significance.

The site is also proximate to a number of state and locally listed heritage items, including the Civic Railway Workshops Group (Local Heritage Item No. I1479 and SHF No.00956), Civic Railway Station Group and Civic Theatre (Local Heritage Item No.1418 and SHR No.01883).

Flooding

The flood study prepared by Northrop Consulting Engineers (see **Appendix N**) shows that the site is affected by ocean and local catchment flooding. A peak water level of 2.43m AHD is expected at the site during the 1% Annual Exceedance Probability (AEP) event as a result of local catchment flooding.

A peak water level of 3.40m AHD is expected in the Probable Maximum Flood (PMF) as a result of ocean flooding. Flood waters for the ocean flooding are expected to rise slowly relative to the local catchment flood and enter the site from the north west.

However, the most critical classification for the subject area within the development footprint is flood fringe. This is described in the City of Newcastle DCP as "the remaining areas of floodplain not included in flood storage areas and floodways". Worth Place is noted as a major floodway with depths up to 1m possible.

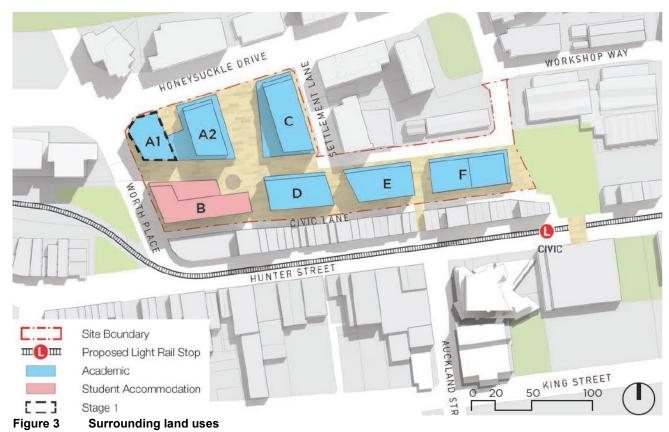
Access and Parking

Vehicle access to the site is currently provided off Wright Lane. As the site is currently vacant, access to the site from Honeysuckle Drive and Worth Place is restricted by an enclosed wire fence.

On-street parking is provided along Honeysuckle Drive and Settlement Lane. Off-street parking is available to the public in the Wright Lane Car Park which forms part of this site. To the east of the site there is a parking station located on Merewether Street whilst to the west of the site there is a carpark off Honeysuckle Drive. The Civic West carpark, at the western end of Gibson Street, south of the site provides capacity for over 470 vehicles.

2.3 Surrounding Development

The Honeysuckle Precinct has undergone steady development over the last two decades, with the Hunter and Central Coast Development Corporation (previously the Honeysuckle Development Corporation) overseeing a number of major projects in close proximity to the site. Land to the north of the site is predominantly residential, with mixed use and commercial to the south. The surrounding land uses of the site and within the remainder of the Concept Plan are depicted at **Figure 3**.



Source: Cox Architecture

To the North

To the north of the site, beyond Honeysuckle Drive, is a series of predominantly high-density shop top housing developments of up to seven storeys, with some commercial and tourism uses between. The Honeysuckle Hotel is located beyond this, on the edge of the Hunter River.

To the East

Under the Concept Plan, the land to the immediate east of the Stage 1A site is intended to be developed for an eight (8) storey educational building, with a seven (7) storey educational building located beyond this.

In the context of the existing site, three mixed-use buildings ranging between eight and nine storeys are located to the immediate east, across Settlement Lane. These buildings front on to both Settlement Lane and Honeysuckle Drive and incorporate retail and commercial tenancies on the ground floor.

Further to the east, along Workshop Way, are a number of heritage listed former railway workshops which have been restored and adapted. They currently accommodate a combination of commercial and tourism uses, most notably the Newcastle Museum.

To the South

Wright Lane forms the southern alignment of the Stage 1A site, running in an east-west direction and intersecting with Worth Place and Settlement Lane. Sites 2 and 3, which are located beyond Wright Lane, currently contain an at-grade car park and a portion of the former heavy rail line.

Under the Concept Plan, the land to the immediate south of the Stage 1A site is intended to be developed for a nine (9) storey building, used for the purposes of student accommodation. Three (3) other buildings, with heights ranging between four (4) and seven (7) storeys are to be located on the remainder of sites 2 & 3.

Further to the south, commercial and residential development of between two and seven storeys is located between Civic Lane and Hunter Street. The recently completed Newcastle Light Rail runs along Hunter Street.

To the West

To the west the site is bordered by Worth Place, which runs in a north-south direction. As part of the construction of the Newcastle Light Rail, Worth Place was connected to Hunter Street, providing a pedestrian and vehicular link to Honeysuckle Drive. Multistorey residential and commercial development of up to nine storeys is located beyond Worth Place, fronting along Honeysuckle Drive.





View of residential and commercial development to the west along Honeysuckle Drive (left image); View of mixed use development to the east (right image).

Figure 4 View of existing developments to the west and east of the site





View of the residential development to the north along Honeysuckle Drive (left image); View of at-grade car park on Sites 2 and 3, and mixed use development bordering Civic Lane and Hunter Street to the south (right image).

Figure 5 View of existing developments to the north and south of the site

2.4 Site Preparation

Enabling Works

DA2018/00933, which sought approval for the carry out of a range of site preparation works, was granted development consent by Newcastle City Council on 1 July 2019. The approved works include filling of the site to achieve minimum flood floor levels, remediation and the augmentation of infrastructure and services to support the future development of the site.

Mine Stabilisation Works

DA2019/00138, which sought approval for ground stabilisation works (grouting) to mitigate the potential risk of mine subsidence, was granted development consent by Newcastle City Council on 18 June 2019. These works are required to be undertaken due to the history of mining activities within the locality.

3.0 Description of the Development

This chapter of the report provides a detailed description of the proposed development. Architectural Drawings are included at **Appendix B**.

This application seeks approval for the following development:

- Construction of a four (4) storey building (known as Building 1A), to be used for academic and ancillary uses;
- Maximum gross floor area (GFA) of 2,473m²;
- Maximum building height of RL 27.815 (four storeys);
- Internal fit out works including workspaces and smaller enclosed studios, including staff meeting rooms, student common area, specialised suites and offices; and
- · Landscaping works.

The proposed works are shown at **Figure 6** and **Figure 7** below and included in the Architectural Drawings at **Appendix B**.



Figure 6 Photomontage of the proposed Building 1A, as viewed from the corner of Worth Place and Honeysuckle Drive

Source: EJE Architecture

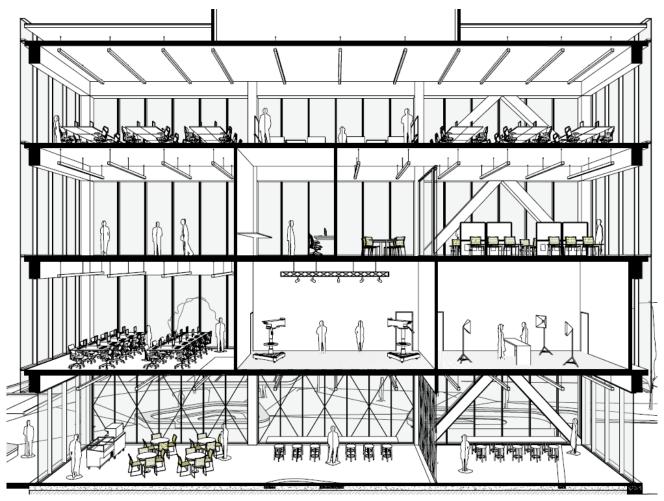


Figure 7 Sectional Perspective

Source: EJE Architecture

3.1 Numerical Overview

The key numeric development information of the proposal is summarised in Table 2.

Table 2 Key development information

Component	Proposal
Site Area	1,899m²
GFA	2,473m²
FSR	1.3:1
Maximum Height	RL 27.815 / 25.36m (4 storeys)
Landscaped Area	567m²

3.2 Development/Urban Design Principles

The planning and design principles adopted for the proposed development of the Stage 1A site are described in two parts:

- The broader design principles relating to the Honeysuckle City Campus Concept Plan (Engaged, Unique, Sustainable); and
- The design principles specific to the Stage 1A development (as outlined below).

Transparency

- · Provide a building that is welcoming, inviting, permeable, open, inspirational and accessible to all.
- Showcase the activities being conducted within the building and thereby attract public interest (ability to 'see into' the building).
- See across/through the levels of the building, to provide visible connectivity between the floors where possible.
- Appear welcoming and accessible to all members of the community and give an impression of inclusivity,
- Foster collaboration, creativity and innovation.
- · Encourage innovative teamwork and share what is achieved and created.
- · Embrace the responsibility to inspire and engage.
- Be open to new ideas and new ways of seeing the world.
- Showcase the innovation culture within, namely that the Hunter Innovation Project provides a foundation for start-ups, research, experimentation and technology prototyping through a city scale testbed and a dedicated space for developing ideas for improving the city.
- · Express innovation in the built form.

Emblematic

- Represent the brand of the University of Newcastle (and its presence within the city of Newcastle)
- For the Innovation Hub, represent the brands of the Hunter Innovation Project and I2N.
- A space for experiences and wonder symbolic of the creativity and making within SOCI.

Public

- Making and Creating a place where everyone feels at home contributing as well as being inspired enabling the makers of today.
- Provide access to information, learning, research, motivation, inspiration, experimenting and connection.
- Make the most of the Civic Precinct and prominent address of the site.
- Integrate the building into the 'living city' with human scale and active street edges.
- · Enhance the public domain.
- Interface with surrounding buildings and urban space features.
- Interface/connect with the University City Campus Development to date.

Sustainability

- Demonstrate a high degree of innovation in sustainability within the built form and where possible, trial the unexpected.
- Showcase the sustainability features of the built form.

Flexibility

- Ability to respond to the future needs/partnerships/research focus.
- Flexibility in the fit-out concept of spaces to support flexibility in the operations of the Innovation Hub over time.
- Efficient use of space.
- Building shell and structure to be open span.

3.3 Built Form

The proposed building, which will form the western gateway to the Honeysuckle City Campus, has been designed to be provide a highly flexibly building, while remaining consistent with the parameters established by the Concept Plan (SSD 9262). The building will have a total of four (4) storeys, comprising a raised ground floor podium with educational and innovation facilities above.

The podium has been designed as an extension of the building, providing ground floor connections to three frontages and supporting a highly permeable ground plane. The podium exposes the structure at the façade line and includes an external awning that weaves around the building. The tower element is characterised by a timber scaffold structure wrapped with a glass façade, capable of supporting digital installations for public viewing.

Land Use & Floor Space by Level

The proposed use and GFA of each level within the new building is provided in **Table 3** below and the Accommodation Schedule included at **Appendix B**.

Table 3 Proposed use and GFA by level

Tubic 0 Troposed use diffe of A by level			
Floor	Use	GFA (m²)	
Ground	Student learning spaces and flexible event space, including lab/tech maker space Cafe	643m²	
	Meeting rooms		
	Building services and amenities, including bathrooms, bike hub and waste and switch room		
First	Blackbox Studio, animation and editing facilities	590m²	
	Meeting rooms		
	Student workspaces, informal learning spaces, social and breakout space.		
	Amenities		
Second	Creative Studio Suite	590m²	
	Academic and technical staff workplace		
	Meeting and seminar rooms, with associated breakout area		
	Amenities		
Third	Innovation Hub Workplace, with a combination of open workstations and various sized offices.	650m²	
	Kitchen		
	Meeting rooms		
	Amenities		
Four	Plant/Services	-	
	Amenities		
	·	2,473m²	
		1	

Building Height

The proposed building, which comprises 4 storeys, has an overall height of 25.36m (RL 27.815) to the top of the building plant.

Building Setbacks

In accordance with design guidelines established under the Concept Plan (SSD 9262), Building 1A incorporates setbacks to Honeysuckle Drive, Worth Place and Wright Lane. **Table 4** outlines the proposed minimum setbacks of Building 1A to these frontages.

Table 4 Proposed setbacks of Building 1A

Frontage	Setback
Honeysuckle Drive	6.29-8.30m
Worth Place	3.34-6.36m
Wright Lane	6.68-17.73m

3.4 Demolition / Site Preparation / Bulk Earthworks / Remediation

As detailed in **Section 2.4**, DA2018/00933, which sought approval for the carry out of a range of site preparation works, was granted development consent by Newcastle City Council on 1 July 2019. The approved works include removal of contaminated fill material, filling of the site to achieve minimum flood floor levels, and the augmentation of infrastructure and services to support the future development of Building 1A.

3.5 Landscaping and Public Domain

Landscaping Plans have been prepared by Terras (**Appendix Y**) that detail landscaping proposed for the public domain. The design for the public domain aims to improve amenity and create an expansive area that will allow for activity to extend beyond the façade. Specifically, the proposed landscaping includes the provision of outdoor seating, awnings and new planting and street trees.



Figure 8 Landscaping plan for Building 1A

Source: Terras

3.6 Pedestrian Access

The primary pedestrian access to Building 1A is located along Worth Place, which will provide convenient access for pedestrians travelling from the Honeysuckle Light Rail Station. However, the design of Building 1A also affords additional opportunities for ground floor pedestrian access along the Honeysuckle Drive and Wright Lane frontages.

3.7 Vehicular Access and Parking

As established in the Concept Plan, no on-site parking spaces will be provided as part of the development of the Honeysuckle City Campus, consistent with NeW Space. The development will, however, allow for specialised parking including drop off zones and accessible parking.

Staff and students that choose to drive will have the option to park in a public parking station in the CBD or utilise the Park and Ride service currently running between the University's Callaghan and Honeysuckle campuses.

Servicing required for users of the building will be minimal and can be accommodated for on-street, outside of peak hours, in a way consistent with surrounding business in the Honeysuckle Precinct. A short term loading zone is proposed on Honeysuckle Drive for small deliveries such as pick up and drop off of student work.

Interim accessible parking is proposed to be provided within the at-grade parking to the south of Stage 1A (also owned by the University) and long term accessible parking will form part of the future public domain plan for the campus.

Bicycle Parking and Facilities

Storage for a total of 28 bicycle spaces is provided in the Bike Hub located to the south east of the building. Separate end-of-trip facilities including showers and bathrooms are also provided for use by occupants on the ground floor of Building 1A. Ultimately, permanent bicycle facilities will be incorporated into a consolidated facility as part of the future development of Stage A2 the Honeysuckle City Campus Development.

3.8 Environmentally Sustainable Development

In accordance with the Concept Plan, the proposed development has been designed to achieve a minimum accredited 5 Star Design and As-Built Green Star Rating. Consistent with the recommendations of the ESD Report prepared by WSP (**Appendix F**), the following measures and initiatives have been adopted, or will be explored at the appropriate stage:

- Innovative cross-laminated timber frame which is more environmentally sustainable than traditional frames;
- Dynamic glazing of the exterior glass to control how much sun enters the building (for improved energy efficiency);
- Outdoor seating made from the University's soft plastics recycling scheme which turns plastic bags into benches;
- Installation of a high capacity, high efficiency rooftop photovoltaic (PV) system;
- Rainwater capture and storage system, with the rainwater captured from the buildings roofs drained and stored
 in tanks and used to address non-potable water demands; and
- · Use of waterless native species in landscaping, which will remove the need for an irrigation system; and
- Mixed mode ventilation, with outside air able to pass through large doors and louvres on the ground floor façade.

A Green Travel Plan (refer to **Appendix Q**) has also been prepared by SECA Solution to encourage future occupants of the development to choose sustainable modes of travel to and from the site.

3.9 Infrastructure and Services

Comprehensive services and infrastructure upgrades for the Honeysuckle City Campus Development were approved under DA2018/00933. Specifically, the approved infrastructure and service upgrades include:

- · Extension of the existing watermain on Worth Place;
- Construction of a gravity sewer main along Wright Lane;
- Installation of a kiosk substation and re-routing of existing Ausgrid High Voltage cables to the kiosk substation;
- Installation of Low Voltage (LV) cables, conduits and pits from:
 - Kiosk substation to Ausgrid Pillar;

- Kiosk substation to future Building 1A and Building B;
- Installation of NBN cable, conduits and pits from existing cable pit on Honeysuckle Drive to future Building 1A and Building B; and
- Installation of University of Newcastle private communication network cable, conduits and pits.

The works approved under DA2018/00933 will provide the infrastructure and services required to enable the development of Stage 1A.

3.10 Signage

This application also seeks approval for the installation of two (2) building identification signs for Building 1A, which will identify the University. The proposed building identification signs are detailed in the Architectural Plans prepared by EJE Architecture (**Appendix B**) and shown in **Figure 9** and **Figure 10** below. **Table 5** below provides a summary of the proposed signage.

Table 5 Proposed Building Identification Signage

Туре	Location	Materiality	Dimensions	Illumination
University Logo Sign (Large)	South Elevation, fixed to the façade between Level 2 and 4.	 Flat mounted building identification wall sign, fixed off building façade 50mm with metal standoffs. Metal cutout, with black powder coat and LED backlight to edge. 	5.2m (H) x 4.1m (W)	Yes
University Logo Sign (Medium)	North Elevation, fixed to wall along ground plane.	 Flat mounted building identification wall sign, fixed off wall 50mm with metal standoffs. Metal cutout, with black powder coat and LED backlight to edge. 	1.4m (H) x 5.1m (W)	Yes

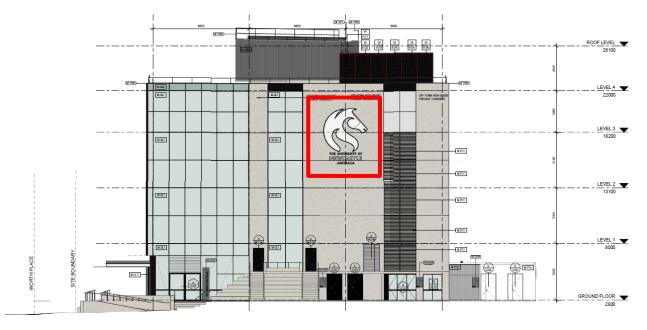


Figure 9 South Elevation

Source: EJE Architecture

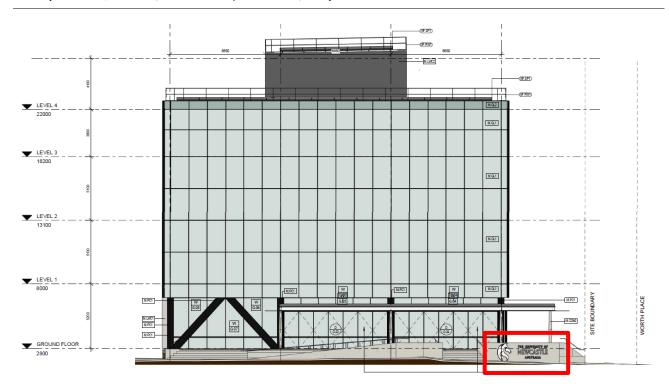


Figure 10 North Elevation

Source: EJE Architecture

4.0 Consultation

In accordance with the SEARs issued for this project, consultation was undertaken with relevant public authorities, the community and Council. A summary of the consultation undertaken to-date with Council, the community and relevant agencies is provided below and included in **Appendix O**. Several consultants have undertaken additional consultation with relevant parties during the preparation of their reports.

4.1 Hunter & Central Coast Development Corporation (HCCDC)

The University has worked closely with the HCCDC since the initiation of the land acquisition process. The proposed development of Stage 1A reflects this ongoing engagement with the HCCDC, as the use, size, scale and form of the proposed development consistent with the HCCDC's vision for the Honeysuckle Precinct.

4.2 Newcastle City Council

The University has regular meeting with Newcastle City Council in relation to their plans for the wider Honeysuckle City Campus Development. In particular, a meeting was held on 5 February 2019 with Council Officers where draft plans for Building 1A were presented. Council provided general support for the design of the development and raised a number of queries around the proposed parking strategy. These matters have been addressed throughout this assessment and relevant technical studies.

4.3 State Design Review Panel (SDRP)

As detailed in **Section 5.2**, the design of Building 1A was presented to the State Design Review Panel (SDRP) on 12 September and 28 November 2018. During consultation, the SDRP recommended the following changes be considered:

- A resolved public domain design that shapes the building footprint, and context plan for adjacent buildings that leads users through Site 1B to the campus heart;
- Resolution of the ground floor interface, in terms of façade, programme and access;
- Further resolution of the sustainability strategy, and in particular the roof plane; and
- Clear connectivity to future Building A2.

Following consultation with the SDRP, each of the recommended changes have been incorporated into the updated design of Building 1A. The updated design of Building 1A was presented to the SDRP for a third time on 8 May 2019. As discussed in the Design Report prepared by EJE (**Appendix A**) the project team has incorporated the recommendations made by the SDRP in May 2019 into the final design of Building 1A.

4.4 Community Consultation

Ethos Urban's consultation approach was based on extensive experience designing and delivering strategic communication and consultation processes for a variety of projects. The consultation program was designed to be practical and effective in capturing valuable feedback, mitigating risks, and highlighting key benefits of the project.

Key activities during the consultation process are documented in **Table 6** and a Community Consultation Outcomes Report is included at **Appendix O**.

Table 6 Activities undertaken during community and stakeholder consultation process

Date	Time and Location	Type of Consultation	Audience	Number of attendees
Friday 22 February	11am-2pm NeW Space	School of Creative Industries Orientation Day	SOCI students and staff	25
Thursday 28 February	3pm – 5pm, NeW Space	Staff and Students Information Session	SOCI students and staff	152
Thursday 28 February	5pm – 6pm, NeW Space	Stakeholder Information Session	Stakeholders, staff, and students	
Thursday 28 February	6pm – 8pm, NeW Space	Community Information Session	Surrounding landowners, business and the general community	
Saturday 2 March	10am – 12pm NeW Space	Community Information Session	Surrounding landowners, business and the general community	31
	1	1	TOTAL	208

5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposed SSDA. It addresses the matters for consideration set out in the SEARs (see **Section 1.5**). The Mitigation Measures at **Section 7.0** complement the findings of this section.

5.1 Relevant EPIs, Policies and Guidelines

The relevant strategies, environmental planning instruments, policies and guidelines as set out in the SEARs are addressed in **Table 7**.

Table 7 Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines

Instrument/Strategy	Comments
Strategic Plans	
NSW State Priorities	The NSW State Priorities are a series of reforms designed to grow the economy, deliver infrastructure, and improve health, education and other services across NSW. The proposed development aligns with the NSW State Priority of encouraging business investment as the Honeysuckle City Campus will attract and create new skilled jobs, encourage innovation and partnership with the private sector, and be a catalyst for other forms of development and economic activity within the city centre.

Instrument/Strategy	Comments
	The proposed development will also facilitate the delivery of education infrastructure, noting that the NSW State Priorities seek to improve educational results.
Hunter Regional Plan 2036	The Hunter Regional Plan 2036 is a 20-year blueprint for the future of the Hunter and the development of the site will play an important role in meeting its strategic planning objectives. Developing a national Centre of Excellence for Health and Education is one of the four priority objectives of the plan and expanding the University's presence in the city centre is a key component of this.
	The development is also expected to play a significant role in revitalising the Newcastle City Centre in accordance with Direction 3 of the Plan as it will be a catalyst for further investment in the centre, attracting new skilled jobs and encouraging innovation and partnerships with the private sector.
	The University's expansion will also create a substantial population base in the Newcastle CBD, including students, staff and visitors, which will support local business and provide activation of the surrounding public domain.
Greater Newcastle Metropolitan Plan 2036 (GNMP 2036)	The GNMP 2036 set out the strategies and actions that will drive sustainable growth and development across Greater Newcastle. The GNMP 2036 underpins the Hunter Regional Plan 2036 and helps to achieve the vision for the Hunter region to become the leading regional economy in Australia.
	Specifically, the proposed development will contribute to the achievement of expanding the education and innovation cluster within Greater Newcastle. It will establish new university facilities within the heart of Newcastle and further enhance the tertiary education sector. The proposed development will increase the educational investment in the area and encourage entrepreneurship to create a vibrant and innovative hub.
Newcastle Urban Renewal Strategy 2014 (NURS)	The NURS considers the suitability of the Newcastle City Centre for urban renewal. It outlines a clear strategy underpinned by a range of initiatives, and an implementation plan to support the revitalisation of Newcastle over the next 25 years. The strategy proposes a framework for the city to successfully grow and identifies initiatives to improve the city's economy, access, connections and the quality and attractiveness of the public domain, all of which are catalysts for encouraging development.
	 Key elements of the NURS relative to Stage 1A of the Honeysuckle City Campus include: Supporting employment growth, through establishing a university presence within the Civic precinct and binging retail businesses back into the city centre;
	 Contributing to the promotion of a university presence and educational hub in the city centre to stimulate drive and demand for commercial and retail floor space and create synergies with established businesses and industry sectors; and
	Recognising Newcastle's heritage as an asset and core component of placemaking and encouraging innovation.
	The Stage 1A development is the first step in realising the vision for the Honeysuckle City Campus and will actively support the objectives and principles of the NURS as it will be a catalyst for the continued renewal of the city centre of Newcastle. The proposed development will enhance the University's presence in the city centre and will support employment and economic growth by attracting and creating highly skilled jobs in education, training and research.
	The Stage 1A development will support the creation of a substantial population base in the city centre and will contribute to economic activation in the surrounding area. This will in turn provide flow on economic benefits to surrounding local businesses. In this way, the Stage 1A development will be the first stage in realising the development of the Honeysuckle City Campus and will support the reshaping of Hunter Street as a main street and key destination.
	The proposed design of the building will also enhance the heritage significance of the locality. Through the carefully considered architectural design and building materiality, the overall aesthetic of the Stage 1A development is to communicate the heritage significance of the past whilst including innovative features to create visual interest for the future.
	As such, the proposed Stage 1A development is not only consistent with the strategic vision of the NURS but will actively promote and encourage the renewal of the Newcastle City Centre.
Newcastle 2030 Community Strategic Plan	The Newcastle 2030 Community Strategic Plan establishes a vision for a smart, liveable and sustainable global city. The Plan emphasises the importance of collaboration and partnership between Council and the University in achieving this vision.

Instrument/Strategy	Comments
	The Plan envisages a vibrant, diverse and resilient economy, centred around educational excellence and research. The development of Stage 1A is consistent with this vision, as it will facilitate flow on economic benefits, creating skilled jobs and complementary land uses in the surrounding area.
	The proposed development will also achieve the goal of creating a smart and innovative city. Specifically, the expansion of the University in the Newcastle CBD will create a new education and research node, fostering innovation and educational excellence.
Future Transport Strategy 2056 (and supporting plans)	The Future Transport Strategy sets out a 40-year framework to guide investment, policy and reform service provision. The Future Transport Strategy focuses on the role of transport in delivering movement and place outcomes that support the desired character of the places and communities. It also emphasises the importance of integrating land use and transport planning in a way that activates public spaces, improves liveability and character, and promotes investment.
	The proposed development has been strategically located in close proximity to public transport infrastructure, ensuring that the campus is connected, accessible and integrated into the surrounding environment. The proposal also encourages sustainable transport options, through active travel and car sharing.
Greater Newcastle Future Transport Plan	The Greater Newcastle Future Transport Plan considers the Greater Newcastle Area, supporting the overarching Future Transport Strategy 2056. It outlines the vision that will guide future transport planning for the Greater Newcastle area.
	Specifically, the Plan recognises the transformative impact of the Newcastle Light Rail in improving access and amenity in the Newcastle city centre.
	The development is consistent with the objectives of the Greater Newcastle Future Transport Plan because it will create a substantial population base in the CBD, encouraging patronage of the Newcastle Light Rail.
Better Placed 2017	The design of the Stage 1A building and broader Honeysuckle City Campus has been developed with reference to the NSW Government Architect's integrated design policy 'Better Placed'. The Policy recognises that large scale urban renewal projects are complex and often involve multiple projects being undertaken across stages.
	As such, the Stage 1A building has been designed with reference to Design Guidelines that were developed and approved as part of the Concept Proposal Design Excellence Guidelines. The consistency of Stage 1A with the Design Guidelines is detailed in the Design Report prepared by EJE Architecture and included at Appendix A .
NSW Planning Guidelines for Walking and Cycling	The proposal supports the objectives of this publication as it provides ample facilities to encourage cycling and has been designed to integrate with the broader Honeysuckle City Campus. New pedestrian and through site linkages will be included in the broader development to promote walking within the precinct. Additionally, the location of Stage 1A ensures that alternative modes of travel are available.
Port of Newcastle Development Plan (PDP) 2015	The PDP establishes a strategic direction for the management of the Port of Newcastle and communicates anticipated development opportunities within the Port of Newcastle.
	The PDP emphasises the need for considering potential conflicts between sensitive land uses and the operation of the Port. It also outlines the need for height restriction for development around the city centre to acknowledge the land-based navigation aids which are important to the safe navigation of vessels in the harbour.
	While the Honeysuckle City Campus Development is proposed to be developed on former Port wharves, opposite the Carrington Precinct of the Port, it is not anticipated to conflict with the operation of the Port. Specifically, the proposed height of the Stage 1A building is consistent with existing and future development and will not undermine the land-based navigation aids used by vessels.
Hunter Street Revitalisation Plan	The Hunter Street Revitalisation Plan sets out the City of Newcastle's strategy for revitalising Hunter Street. The strategic framework established four community identified themes: enterprise, integrated transport, people and places and greenways. Each of these themes contain short term and long-term priorities that make up the theme. The proposed development will assist in achieving the revitalisation of Hunter Street by directly contributing to the themes of enterprise and people and place as it will consolidate education uses within the Civic Precinct.
State Legislation	

Comments Instrument/Strategy EP&A Act The proposed development is consistent with the objects of the EP&A Act for the following It promotes the proper management, development and conservation of natural and artificial resources for the purpose of promoting the social and economic welfare of the community; It promotes and co-ordinates the orderly and economic use and development of land; It promotes the sustainable management of buit and cultural heritage (including Aboriginal hertiage); It promotes good design and amenity of the built environment; Is designed in accordance with the principles of ecologically sustainable development and integrates economic environmental and social considerations; It protects the environment; and The community has been engaged in the planning process. The proposed development is consistent with Division 4.7 of the EP&A Act, particularly for the following reasons: The development has been declared to have state significance; The development is not prohibited by an environmental planning instrument; and The development has been evaluated and assessed against the relevant heads of consideration under Section 4.15(1). **EP&A Regulations** The EIS has addressed the specification criteria within clause 6 and clause 7 of Schedule 2 of the EP&A Regulation. Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle (and other considerations), which assesses the threats of any serious or irreversible environmental damage (see Section 8.3). As required by Clause 7(1)(d)(v) of Schedule 2, the following additional approvals will be required in order to permit the proposed development to occur. Act **Approval Required** Legislation that does not apply to State Significant Development Coastal Protection Act 1979 N/A Fisheries Management Act 1994 N/A Heritage Act 1977 N/A National Parks and Wildlife Act 1974 N/A N/A **Biodiversity Conservation Act** (would otherwise apply) Rural Fires Act 1997 N/A Water Management Act 2000 N/A (would otherwise apply) Legislation that must be applied consistently Fisheries Management Act 1994 No Coal Mine Subsidence Compensation Act 2017 No No Mining Act 1992 Petroleum (Onshore) Act 1991 No Protection of the Environment Operations Act 1997 No Roads Act 1993 Yes Pipelines Act 1967 No SEPP 55 (Remediation of Land) The Contamination Report prepared for the site by Coffey (see **Appendix U**) demonstrates the site can be made suitable for the proposed development. The suitability of the site for the proposed development is discussed further at Section 5.14. SEPP 64 - Advertising and As discussed in Section 3.10, building identification signage has been incorporated into Signage the façade of the building. An assessment against the provisions of SEPP 64 is provided in Section 5.21.

Instrument/Strategy	Comments			
SEPP (Infrastructure) 2007	The proposed development does not have access to a classified road or to a road that connects to a classified road (within 90m of the connection). Accordingly, as the proposed development has a GFA of below 10,000m² and does not include car parking spaces, it will not require referral to the RMS as 'traffic generating development' under Schedule 3 of the SEPP. An assessment of parking and traffic generation can be found in Section 5.11 .			
SEPP (Coastal Management) 2018	The site is located within a 'Coastal Environmental Area' and 'Coastal Use Area' under the SEPP. As such, an assessment of the relevant provisions for land within these areas is provided at Section 5.7.1 below.			
SEPP (State and Regional Development) 2011	The aim of the policy is to identify development that is SSD. Pursuant to the SRD SEPP a project will be SSD if it falls into one of the classes of development listed in Schedule 1 of the SEPP.			
	The site is identified on the Honeysuckle Stat development has a capital investment value i for the purposes of the EP&A Act.	te Significant Development Sites Map and the in excess of \$10 million. Therefore, it is SSD		
	A Quantity Surveyor's certificate prepared co under separate cover.	infirming the total CIV has been submitted		
SEPP (Urban Renewal) 2010	The site is located within a 'Potential Urban F and the proposal is consistent with the provis prevent: Development of the precinct for higher der development;	sions of Clause 10 as it will not restrict or		
	Future amalgamation of sites for the purpo	oses of such development; and		
	 Access to or development of infrastructure public transport. 	e in areas associated with existing and future		
	The proposal is consistent with the objective purposes of urban renewal.	of developing the potential precinct for the		
SEPP (Vegetation in Non-Rural Areas) 2017	The site has previously been cleared and doe requires clearing.	es not contain any significant vegetation that		
Draft SEPP (Environment)	The Draft SEPP Environment was released for the present and replace a number of SEPPs and the Draft SEPP, the site is not identified as be 'Waterway'. Further, no tree removal is proposed to the present the pre	eing with an area of 'Urban Bushland' or		
Local Planning Instruments and	Controls			
Newcastle Local Environmental Plan 2012	Clause 2.1 – Land Use Zone	The proposed uses, including; educational establishments are permissible with development consent in the B4 Mixed Use zone.		
	The proposal is also consistent with the objectives of the zone as it: integrates a variety of uses in an accessible location that maximises public transport patronage and encourages walking and cycling;			
		provides a mixture of compatible land uses; and		
	will greatly enhance activity and supp adjoining commercial uses within the Newcastle CBD without adversely impact on the viability of other centres			
	Clause 4.3 – Height of Buildings The proposed development has height of 25.36m (RL 27.815). To complies with the maximum build of 30m.			
therefore complies with the ma of 2.5:1. It is noted that the Con (which is currently in the final s assessment) distributes floor s the site and specifies a maxima		The proposal has a FSR of 1.3:1 and therefore complies with the maximum FSR of 2.5:1. It is noted that the Concept Plan (which is currently in the final stages of assessment) distributes floor space across the site and specifies a maximum quantum of GFA for future development. Under the		

Instrument/Strategy	Comments				
		Concept Plan, Building 1A has a maximum GFA of 4,000m². The proposed development has a maximum GFA of 2,473m², in accordance with the parameters of the Concept Plan.			
	Clause 5.10 – Heritage Conservation	As detailed in Section 2.2 , the adjoining sites known as Site 2 to the immediate south and Site 3 to the south-east are situated within a general heritage conservation area under the Newcastle Local Environmental Plan (LEP) 2012. Further, the site is proximate to a number of state and locally listed heritage items.			
		Accordingly, a Heritage Impact Statement (Appendix G) and an Aboriginal Cultural Heritage Assessment Report (Appendix H) has been prepared by Curio Projects. These reports demonstrate that there will be no adverse heritage impacts, subject to the implementation of the suggested recommendations. This is further addressed at Section 5.17 below.			
	Clause 6.1 – Acid Sulfate Soils	The site is identified as containing Class 1 Acid Sulfate Soil on Council's Acid Sulfate Soils Map. Removal of Acid Sulfate Soils has been addressed as part of the Early Works DA (DA2018/00933).			
	Clause 6.2 – Earthworks	There are no bulk earthworks proposed as part of this application. The earthworks required to enable development of the site were addressed as part of the Early Works DA (DA2018/00933).			
	Clause 7.5 – Design Excellence	Clause 7.5(3) of the LEP requires that all new development in the Newcastle City Centre exhibits 'design excellence'. This is addressed at Section 5.2 below.			
Newcastle Development Control Plan 2012	Whilst DCPs do not apply to SSD under Clause 11 of the SEPP (State and Regional Development), the proposal is consistent with the aims of the DCP's 'Honeysuckle' precinct in that:				
	 the proposed building addresses three frontages, including Worth Place, Honeysuckle Drive and Wright Lane; 				
	 the public domain surrounding the proposed building has been designed as an extension of the structure, providing an identifiable building address and zone for activity that will improve safety through passive surveillance and encourage activity, pedestrian and cycleway movement; and 				
	does not detrimentally impact on existing	g heritage items.			

5.1.1 Consistency with the Honeysuckle City Campus Concept Plan (SSD 9262)

The proposed development is consistent with the development standards and building envelope proposed under Concept Plan for Stage 1A of the Honeysuckle City Campus. Further, the overall outcome achieved by the proposed development is consistent with the Concept Plan with regards to environmental impacts, particularly density, visual impact, overshadowing and traffic generation.

An overview of the proposed development's consistency with the Concept Plan is detailed in **Table 8** below.

Table 8 Consistency with the Concept Plan

Component	Discussion
Land Uses	The proposed educational and ancillary uses are consistent with what was considered under the Concept Plan. The suitability of these uses was addressed in the Concept Plan, and has been further demonstrated in the following sections of the EIS.

Component	Discussion
Gross Floor Area	Building 1A will provide 2,473m² of GFA, which complies with the 4,000m² of indicative GFA proposed under the Concept Plan.
Built Form	As demonstrated at Appendix B , Building 1A has been designed to fit entirely within the building envelope proposed under the Concept Plan. In accordance with design guidelines established under the Concept Plan, Building 1A incorporates setbacks to Honeysuckle Drive, Worth Place and Wright Lane.
Building Height	The proposed development has a maximum height of 25.36m (RL 27.815), which is below the maximum building height of 30m.
Vehicle Access	In accordance with the Concept Plan, service vehicles will access the site from along Wright Lane.
Environmental Performance	The proposed development has been designed to achieve the sustainability targets nominated in the Concept Plan, as demonstrated in the ESD Report at Appendix F and discussed in Section 5.9 .

This assessment ensures that the consent authority can be readily satisfied that the proposed development is not inconsistent with the Concept Plan, in accordance with Section 4.24 of the EP&A Act.

5.2 Design Excellence

5.2.1 Design Excellence Strategy

Building 1A has been designed to not only meet specific educational and service requirements, but also to be capable of achieving design excellence. In this regard, the design of Building 1A is consistent with the Design Excellence Strategy and Design Guidelines submitted with the Concept Plan for the Honeysuckle City Campus.

The design of Building 1A was presented to the State Design Review Panel (SDRP) on 12 September and 28 November 2018. The SDRP was generally supportive of the schematic design, indicating that the scheme could be supported if the following changes were undertaken:

- A resolved public domain design that shapes the building footprint, and context plan for adjacent buildings that leads users through Site 1B to the campus heart;
- Resolution of the ground floor interface, in terms of façade, programme and access;
- Further resolution of the sustainability strategy, and in particular the roof plane; and
- Clear connectivity to future Building A2.

As detailed in the SSD Design Report prepared by EJE (refer to **Appendix A**), each of the changes recommended by the SDRP have been incorporated into the updated design of Building 1A. The updated design of Building 1A was presented to the SDRP for a third time on 8 May 2019. As discussed in the Design Report prepared by EJE (**Appendix A**) the project team has incorporated the recommendations made by the SDRP in May 2019 into the final design of Building 1A.

5.2.2 Newcastle LEP 2012 Design Excellence Requirements

Clause 7.5(3) of the LEP requires that all new development in the Newcastle City Centre exhibits 'design excellence' and criteria are prescribed in the clause that must be met for design excellence to be achieved. The site is within the defined Newcastle City Centre area and as Stage 1A must satisfy the design excellence criteria under this clause. **Table 9** below demonstrates how the proposed development satisfies the criteria.

Table 9 Assessment against design excellence provisions of the Newcastle LEP 2012

Criteria	Assessment
(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	detailing appropriate for its location at the western
(b) whether the form and external appearance of the development will improve the quality and amenity of the public domain	gateway of the Honeysuckle City Campus. Specifically, the design of the building will create a 'stage within a city'. The timber scaffold wrapped with a glass

Criteria	Assessment		
	façade will showcase the activities within and is capable of supporting digital installations for public viewing.		
	In this way the form and appearance of the proposed development will improve the quality and amenity of the public domain. This has been discussed in further detail in the Design Report prepared by EJE Architecture (Appendix A).		
(c) whether the development detrimentally impacts on view corridors identified in the Newcastle City Development Control Plan 2012	The proposal will not impact on any view corridors identified in the DCP, including those along Worth Place, Settlement Lane and from Newcastle Museum (refer to Section 5.5).		
(d) how the development addresses the following matters:			
(i) heritage issues and streetscape constraints	Consistent with the Concept Plan Design Guidelines, the proposed development includes initiatives to celebrate the natural, European and Aboriginal heritage significance of the site. These initiatives are discussed in Section 5.3.2 .		
	As detailed in Section 5.17 , measures to mitigate heritage impacts have been developed and an Unexpected Finds Policy will be implemented at the appropriate stage.		
(ii) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form	The proposal does not include any tower forms, with a maximum height of 25.02m (four storeys). However, the proposed built form remains consistent with the surrounding development context.		
(iii) bulk, massing and modulation of buildings	As detailed in Section 5.2.2 , the proposed development		
(iv) street frontage heights, overshadowing, wind and reflectivity			
(v) environmental impacts such as sustainable design	The proposed development has been designed with		
(vi) the achievement of the principles of ecologically sustainable development	consideration for sustainability and the principles of ecologically sustainable development. Specifically, the proposed development is capable of achieving an accredited 5 Star Design & As-built Green Star Rating (with a pathway to a 6 Star Green Star Rating). This is discussed in further detail in Section 5.9 and in the ESD Report prepared by WSP (Appendix F).		
(vii) pedestrian, cycle, vehicular and service access, circulation and requirements	The proposed development prioritises pedestrian and cycle access, providing multiple opportunities for ground floor pedestrian access, as well as End of Trip (EOT) facilities and parking for bicycles.		
	Vehicular access to the proposed development is limited to along Honeysuckle Drive and Worth Place. Access for service vehicles is provided along Wright Lane.		
	As detailed in Section 5.11 , this approach is consistent with the vision established by the Concept Plan and the Parking and Traffic Assessment prepared by Seca Solution (Appendix P).		
(viii) the impact on, and any proposed improvements to, the public domain	As detailed in Section 5.3.2 , the design of the public domain aims to improve amenity and create an expansive area that will allow for activity to extend beyond the façade. Specifically, the proposed landscaping includes the provision of outdoor seating, awnings and new planting and street trees.		

5.3 Built Form and Urban Design

5.3.1 Building Configuration and Built Form

The Concept Plan established the vision and guidelines to assess the detailed design of future development of the Honeysuckle City Campus Development. Stage 1A is entirely consistent with the vision and guidelines of the Concept Plan, while also providing a refined design that minimises negative impacts and maximises amenity for future staff, students and visitors.

Building 1A is located at the key intersection between Worth Place and Honeysuckle Drive, and performs the role of a gateway building for the Honeysuckle City Campus Development. The proposed development has been designed with regard to the significance of the location, consultation and advice received to date, and the need for the University to establish a contemporary and flexible building for education and innovation.

Overall, the proposed development provides a built form that is appropriate in the context of the site and the evolving character of the Honeysuckle Precinct and Newcastle CBD. It presents a distinct, innovative and efficient building with flexibility to adapt to the future requirements of the University. The core is located to maximise free space in the floor plate and together with generous ceiling heights will provide excellent amenity.

Further, the proposed development, which has a height below the maximum provision of the Newcastle LEP, has been designed to provide a human-scale response. Building 1A also provides increase setbacks, comparative to the Concept Plan, along Honeysuckle Drive, Wright Lane and Worth Place (refer to **Figure 11**). Together, this will ensure an appropriate interface and sympathetic response to surrounding development, the waterfront and the future Honeysuckle City Campus.

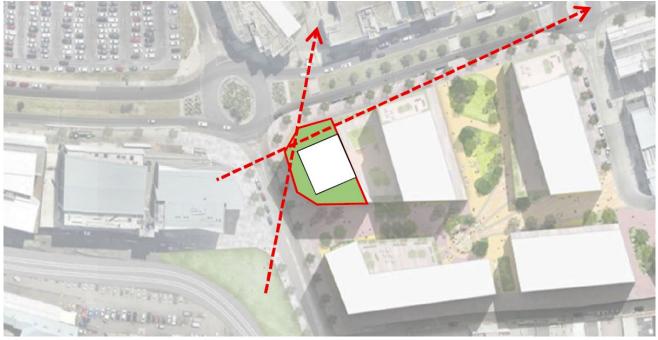


Figure 11 Proposed envelope of Building 1A, comparative to Building 1A envelope under Concept Plan Source: EJE Architecture

5.3.2 Landscaping and Public Domain

Landscape Plans have been prepared by Terras and are included at **Appendix Y** and extracted below in **Figure 12**. Compared to the Concept Plan, the refined building and siting proposed for Building 1A provides for a generous public domain. Specifically, the increased building setbacks to Wright Lane, Worth Place and Honeysuckle Drive will create an expansive area that will allow for activity to extend beyond the façade and provide an opportunity for interaction between staff, students and visitors. The proposed landscape design will contribute to the activation of the public domain and improve amenity for pedestrians by providing outdoor seating, awnings and new street trees and planting.

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The proposed landscape design for the ground plane also incorporates elements of natural, Aboriginal and European heritage. The natural heritage of the site has been represented through the organic shaping of the tiers, troughs and stairs in the landscape, representative of the nearby Hunter River. The European heritage of the site, specifically its historic use as railway engineering workshops, has been represented through the aesthetic of the podium, which incorporates elements of brick and steel. Lastly, the traditional Awabakal Aboriginal heritage has been represented through the incorporation of shells and deposits collected from local archaeological excavations in the polished concrete floors, reflective of a traditional midden.

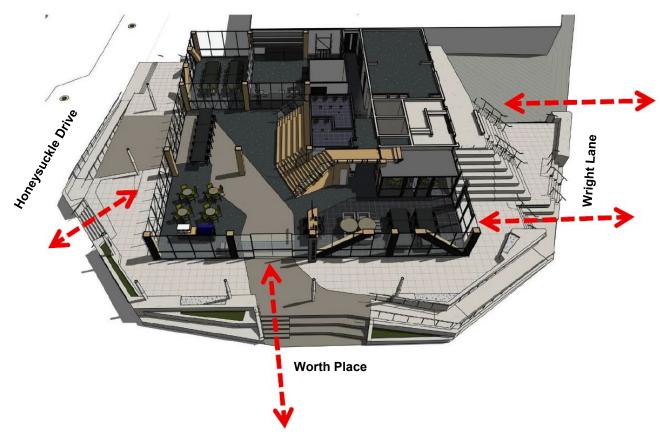


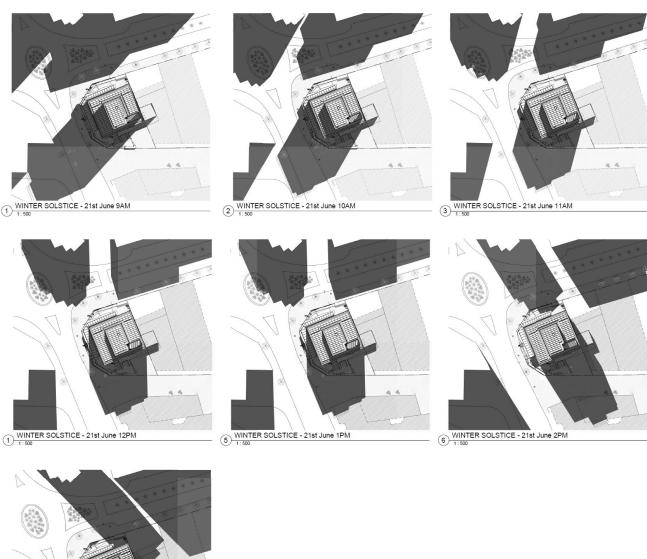
Figure 12 Ground Floor interface between public domain and Building 1A Source: EJE Architecture

5.4 Impacts on Adjoining Properties

5.4.1 Overshadowing

EJE Architecture (refer to **Appendix B**) have prepared shadow diagrams detailing the shadows cast by the proposed development at hourly intervals between 9am and 3pm on 21 June. Extracts of the shadow diagrams are included in **Figure 13** below. These diagrams have assessed the impacts of overshadowing on the winter solstice, being the worst-case scenario when solar access is most limited.

As demonstrated by these diagrams, the proposed development, which is consistent with the scale of surrounding development, will not overshadow significant areas of the public domain or neighbouring residential properties. Instead, shadows cast by the proposed development will predominately fall on the pedestrian thoroughfare along Wright Lane and vehicular traffic along Worth Place. The reduced scale of the proposed development, when compared to the Concept Plan, will reduce overshadowing to surrounding development and public open space.



2 WINTER SOLSTICE - 21st June 3PM

Figure 13 Extract of shadow diagram, showing extent of overshadowing on winter solstice Source: EJE Architecture

5.4.2 Privacy

The proposed development has been carefully designed to minimise adverse privacy impacts on existing residential uses across Worth Place. Specifically, the proposed development includes an increased setback, compared to the Concept Plan, along the Worth Street frontage. This results in a building separation of approximately 28m between the proposed development and multistorey residential development across Worth Place. As such, the proposed development is considered acceptable on the basis that it will not result in any significant overlooking or privacy impacts on adjacent dwellings.

5.4.3 Reflectivity

In order to ensure that there are no adverse reflectivity impacts resulting from the proposed development, the façade glazing system will adopt a maximum normal specular reflectivity of 20%. This will ensure that the proposed development will not create unwanted glare for pedestrians, motorists, or occupants of surrounding buildings.

5.5 Visual Impacts

The proposed building has been designed to fit within the building envelope proposed in the Concept Plan and will contribute to the developing skyline of the Honeysuckle Precinct. EJE Architecture has prepared perspectives (refer to the Design Report at **Appendix A**) that demonstrate how the proposed building will fit within the streetscape, when compared to both existing development and the envelopes proposed in the Concept Plan. These perspectives are shown in **Figure 15** below and demonstrate that the proposed development will have an acceptable impact on view sharing and visual impacts as:

- The proposed development has been designed to respond to the built form context of surrounding development
 and view corridors through the public domain, and is generally consistent with the scale of development
 envisioned for the site under the Newcastle LEP.
- The proposed development will be constructed from high-quality material and finishes, and the proposed landscaping, digital façade and public domain elements will contribute to a unique and attractive streetscape; and
- The proposed development, when compared to the Concept Plan, provides an increased setback to
 Honeysuckle Drive, Worth Place and Wright Lane. The generous setback to these three frontages will further
 reduce view impacts for nearby residential development, particularly those on western side of Worth Place.



Figure 14 North Western Perspective, showing sightlines maintained along Honeysuckle Drive

Source: EJE Architecture

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Figure 15 South Western Perspective, showing sightlines maintained between neighbouring mid-rise structures

Source: EJE Architecture

5.6 Wind Impacts

A Pedestrian Wind Environment Study has been prepared by Windtech and is provided at **Appendix V**. The study undertook an assessment of the impact of the proposed development on the local wind climate and the potential wind impacts on important outdoor areas, within and around the proposed development.

The results of the study indicate that the development benefits from shielding provided by neighbouring buildings and the proposed structure itself. Further, downwash wind effects are not expected to be an issue due to the low overall height of the building and the orientation of the building towards the prevailing winds.

However, due to the alignment of Honeysuckle Drive and Worth Place, the pedestrian footpaths along these streets are potentially exposed to both prevailing west-north-westerly and southerly winds. It should be noted that this is an existing wind conditions and the implementation of the following mitigation measures into the design of the proposed development will enhance the local wind conditions along the pedestrian footpaths. The recommended wind treatment measures include:

- Inclusion of densely foliating street trees along Worth Place;
- Inclusion of densely foliating vegetation such as trees, shrubs or hedge planting within the proposed non-trafficable areas around the subject development on the ground level; and
- Inclusion of the proposed impermeable awning above the ground level.

Subject to the inclusion of the above mitigation measures into the design of the proposed development, Windtech conclude that wind conditions along the various pedestrian footpaths surrounding the development are expected to be suitable for their intended uses.

5.7 Biodiversity and the Natural Environment

The site does not contain any significant vegetation, having been previously cleared and used for the storage of construction material. Accordingly, the proposal will not cause any significant impacts on biodiversity or the natural environment as recognised by the Department of Planning, Industry and Environment and the Office of Environment and Heritage in their granting of a waiver for the preparation of a Biodiversity Development Assessment Report (BDAR) on 14 January 2019 (refer to **Appendix I**).

5.7.1 Coastal Management SEPP

The site is located within a 'Coastal Environmental Area' and 'Coastal Use Area' under SEPP (Coastal Management) 2018. As such, an assessment of the relevant provisions for land within these areas is provided at **Table 10**.

Table 10 Coastal Management SEPP Assessment

Control Assessment Division 3 Coastal Environment Area

- 1) The consent authority must consider whether the proposed development is likely to cause an adverse impact on:
 - a. the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment.
 - b. coastal environmental values and natural coastal processes
 - the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,
 - d. marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms.
 - existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability.
 - f. Aboriginal cultural heritage, practices and places,
 - g. the use of the surf zone.

The proposed development is located within a dense CBD environment and not located immediately adjacent the waterfront. Accordingly, the proposal will not adversely impact:

- the biophysical, hydrological and ecological environment;
- · coastal environmental values or processes;
- · the water quality of a marine estate;
- marine vegetation or fauna;
- public open space or access to the foreshore
- Aboriginal cultural heritage (refer to Section 5.17.3 below); or
- the use of the surf zone.

Division 4 Coastal Use Area

- Development consent must not be granted to development on land that is within the coastal use area unless the consent authority:
 - has considered whether the proposed development is likely to cause an adverse impact on the following:
 - existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,
 - overshadowing, wind funnelling and the loss of views from public places to foreshores,
 - the visual amenity and scenic qualities of the coast, including coastal headlands,

Given the location of the proposed development within a dense CBD environment and not immediately adjacent the waterfront, it will not:

- adversely impact on access to the foreshore;
- create unacceptable overshadowing and wind funnelling, or result in the loss of views from public places to foreshores; or
- adversely on the amenity and scenic qualities of the coast.

In addition, subject to the recommendations detailed in **Section 5.17**, the proposed development will not adversely impact on:

· Aboriginal cultural heritage, practices and places; or

Control		Assessment
	 iv. Aboriginal cultural heritage, practices and places, 	cultural and built environment heritage.
	v. cultural and built environment heritage, and	
b)	is satisfied that:	
	 i. the development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a), or 	
	 ii. if that impact cannot be reasonably avoided— the development is designed, sited and will be managed to minimise that impact, or 	
	iii. if that impact cannot be minimised—the development will be managed to mitigate that impact, and	
c)	has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.	

5.8 Noise and Vibration

An Acoustic Report has been prepared by AECOM (provided at **Appendix R**) to assess potential noise and vibration impacts associated with the proposed construction and operation of the development. The noise impact assessment identifies environmental noise sources which may impact on the proposed development, or on surrounding areas, and recommends attenuating acoustic treatments.

Noise Intrusion

The assessment identified harbour traffic, the light rail line along Hunter Street and road traffic along Hunter Street, Honeysuckle Drive and King Street as the main sources of noise affecting the proposed development. The impact of noise intrusion was assessed in accordance with Australian Standard AS2107:2016.

The assessment found that environmental noise intrusion, associated with traffic and events in the surrounding area exceeded the acceptable criteria, with ambient noise measured at approximately 66dB(A) throughout the daytime.

Accordingly, to comply with the established internal noise criteria the façade glazing system would require a minimum of 6mm float glass, 12mm airgap and 6.38mm laminated glazing. The assessment also provides various recommendations for internal acoustic treatments to ensure that noise generated within the building does not exceed the acceptable criteria.

Operational Noise

The operational noise generated by the proposed development will predominately be from mechanical plant located on the rooftops of Building 1A. The potential noise generated by mechanical plant has been assessed against the NSW EPA 'Industrial Noise Policy', with consideration of nearby properties surrounding the development.

As specific mechanical plant and equipment has not yet been selected, detailed assessment of operational noise cannot yet be undertaken. However, AECOM confirm that it is possible to achieve compliance with noise objectives via standard acoustic treatment practices, including selecting the quietest plant practicable, treating mechanical plant with enclosures, barriers, duct lining and silencers.

Construction Noise and Vibration

The AECOM report (**Appendix R**) includes an assessment of temporary acoustic and vibration impacts on surrounding sensitive receivers associated with the construction of the development. The report concludes that the construction activities are expected to exceed the noise management levels at various times throughout the construction programme, however the impacts of this can be mitigated through the implementation of respite periods and the careful selection of well-maintained and quite plant.

The Preliminary Construction Management Plan (draft CMP) prepared by APP (**Appendix L**) provides a framework for the management of construction noise and vibration, with reference to the limits established in the *Interim Construction Noise Guidelines* 2009. The draft CMP nominates management measures to control noise and vibration impacts on surrounding development and ensure that works comply with the applicable standards and controls or are appropriately mitigated.

5.9 Environmentally Sustainable Development

The Environmentally Sustainable Development (ESD) Report included at **Appendix F** has been prepared by WSP to explore a range of sustainability strategies, and outline examples of best practice sustainable building principles that will be incorporated into the design, construction and ongoing operation phases of the development.

As part of the ESD Report, WSP have assessed the development and have provided an indicative scorecard. This scorecard certifies that the initiatives identified in this application are capable of achieving the benchmark requirements nominated in the Concept Plan for the Honeysuckle City Campus.

Specifically, the report confirms that the proposed development complies with Section J 'Energy Efficiency' of the National Construction Code (2016) and is capable of achieving an accredited 5 Star Design and As-built Green Star Rating (with a pathway to a 6 Star Green Star Rating). This is consistent with the objectives of the University's Sustainability Plan 2018-2025.

5.10 Crime and Safety

Crime prevention through environmental design (CPTED) is a situational crime prevention strategy that focuses on the design, planning and structure of the environment. It aims to reduce opportunities from crime by employing design and place management principles that minimise the likelihood of essential crime ingredients. The aims of the CPTED strategy are to influence the design of the buildings and places by:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture;
- Increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended;
- · Reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- Removing conditions that create confusion about required norms of behaviour.

A Crime Prevention Through Environmental Design (CPTED) Report has been prepared by Ethos Urban and is provided at **Appendix K**. The report includes an assessment of crime statistics obtained from the NSW Bureau of Crime Statistics and Research (BOSCAR), which represents criminal incidents recorded by NSW Police.

The report identifies a number of recommendations to be incorporated into the detailed design of the proposed building which may serve to reduce the risk of criminal activity and encourage the safety of all users of the development.

The Crime Risk Assessment of the proposed development found the proposal to be rated in the 'moderate' category. Notwithstanding this, recommendations to further improve the safety and security of the development have been summarised as follows:

- Maintain sightlines to and from the proposed development and the surrounds by ensuring signage and equipment do not create a significant visual obstruction.
- Ensure the main foyer and circulation spaces are unobstructed by structures to remove opportunities for concealment and ensure sightlines are provided to and from the development.
- The glazed facades of the building at street level should be free of clutter and signage to allow sightlines between the development and the public domain.
- A CCTV network should be provided for the back of house areas and overall development. The CCTV network
 is to be designed in consultation with a suitably qualified security consultant with a Class 2A license under the
 Security Industry Act 1997 who can provide specific advice on the placement, installation, monitoring and
 maintenance of the CCTV network.

- Provide appropriate lighting in and around the development and consult with a qualified lighting engineer to ensure that correct lighting is provided to meet the minimum Australian and New Zealand Lighting Standards.
- Provide wayfinding signage and building identification signage where appropriate to reinforce perceptions of safety and legibility in the development. Ensure that wayfinding signage is appropriate to deter access to private areas and direct pedestrian movements to desired locations.
- Ensure mechanisms are in place to facilitate the on-going maintenance of the building, including the implementation of a rapid removal policy for vandalism repair and the removal of graffiti.
- Ensure that landscaping is well maintained and cared for to prevent vegetation from becoming overgrown and creating opportunities for concealment. To maintain sightlines to and from the development, it is recommended that plant species not exceed a mature height of 1m above ground level, or in the case of trees, should achieve a minimum canopy height of 1.8m when mature.
- Provide secure electronic access (card / key controlled entries / lifts etc.) to all entrances of the building to facilitate in demarcating the site's public and non-publicly accessible areas.
- Care should be given to the design of the awning proposed along the street frontages to ensure that natural ladders are avoided. Natural ladders can provide unwanted access to the upper levels of the development.
- Security personal are advised to parole the publicly accessible areas of the site to minimise opportunities for anti-social behaviour.

These mitigation measures can be implemented through the detailed design and operation of the development. The proposed development is confirmed as being generally consistent with the principles of CPTED.

5.11 Transport and Accessibility

Seca Solution have prepared a Parking and Transport Assessment (**Appendix P**) addressing the traffic and parking impacts associated with the proposed development, including impacts on the local and regional road network. The Parking and Traffic Assessment is informed by the Transport Access Strategy that accompanied the Concept Plan. The Transport Access Strategy is a long-term plan that aligns with the future of the city of Newcastle and supports the University's commitment to promote sustainable transport options.

5.11.1 Traffic Generation

Background

The Honeysuckle Precinct, within which the proposed development is located, has previously undergone traffic modelling to determine the impact of future development on the road network. In this modelling, indicative traffic generation for the site was calculated on the basis that future development on the site would be commercial.

The Transport Access Strategy has been developed by applying earlier analysis undertaken by the University for NeW Space to current data and transport trends. The Strategy has also taken into consideration the latest government strategies, including the Greater Newcastle Future Transport Plan and the Greater Newcastle Metropolitan Plan 2036.

Traffic Generation

As identified by Seca Solution in the Traffic Access Strategy prepared for the Concept Plan, it is expected that 66% of students and 59% of staff shall live within the Newcastle CBD and within a distance suitable for walking, cycling or with convenient access to public transport. As such, the vehicle demands associated with the proposed development primarily relate to service vehicle movements, with some demand for drop-off/pick-up and accessible parking for staff and students. Accordingly, estimated traffic generation of the future development has been determined as minimal and significantly below that previously allowed for in the historical modelling for the Honeysuckle Precinct.

Traffic Impacts

Given that traffic generation from the proposed development will be minimal, Seca Solution conclude that the impact of the proposed development will have an acceptable impact on the local road network. Further, as the proposed development does not provide additional parking spaces and will have a minimal impact on traffic generation,

Roads and Maritime Services (RMS) have confirmed that additional assessment of traffic impacts is not required at this stage.

5.11.2 Parking

In accordance with the restricted parking strategy of the Concept Plan and the objectives of the Transport Access Strategy, with the exception of accessible parking, no car parking spaces are included at the proposed Stage 1A site. This is consistent with the parking analysis undertaken by Seca Solution, which found that parking demand associated with the proposed development is expected to be minimal. The analysis also found that there is spare parking capacity within the Newcastle CBD (paid on-street or in parking stations), which can provide for those who choose to drive.

Instead, the proposed development will leverage off its prominent location in the Newcastle CBD and excellent access to public and active transport options, including the Newcastle Light Rail. It is expected that demand for parking spaces will be further reduced by:

- The University's existing campus shuttle which provides a direct connection between the City and Callaghan campus for students and staff (this shuttle also acts as a Park and Ride service);
- The promotion of cycling and walking through the provision of state-of-the-art end of trip facilities and bike storage;
- Bike share programs and electric bike charging stations to align with Council's Smart Cities program;
- Provision of information for students and visitors on transport options (including on the University's website);
 and
- The promotion of the University's existing RideShare policy and spaces at the Conservatorium.

A Green Travel Plan (refer to **Appendix Q**) has also been prepared by Seca Solution to encourage future occupants of the development to choose sustainable modes of travel, which will further reduce demand for parking spaces.

Stage 1A will include interim End of Trip (EOT) facilities and bicycle parking to accommodate for the initial demands of the Honeysuckle City Campus. Permanent bicycle parking facilities will be installed as part of the future public domain plan for the campus (subject to a separate application).

Interim accessible car parking is proposed to be provided within the at-grade parking to the south of Stage 1A (also owned by the University) and long term accessible parking will also form part of the future public domain plan for the campus.

5.11.3 Servicing

As detailed in **Section 3.7**, a short term loading bay is proposed on Honeysuckle Drive for deliveries such as student works or receipting and returning equipment. Given the initial size of Building 1A, servicing requirements are expected to be minimal and primarily related to waste removal. For this reason, Seca Solution conclude that the proposed servicing arrangements are adequate.

5.12 Construction Management

To minimise impacts on pedestrians, adjacent buildings, areas of the public domain and traffic during construction works, a Preliminary Construction Management Plan has been prepared by APP and included at **Appendix L**. The Preliminary Construction Management Plan address matters such as safety, erosion and sediment control, dewatering, noise and vibration, and dust suppression. Construction of the proposed development will be carried out in accordance with this plan to ensure construction impacts (if any) are minimised and/or controlled.

5.12.1 Construction Traffic Management

A Preliminary Construction Traffic Management Plan (preliminary CTMP) has been prepared by Seca Solution (**Appendix S**) to address the management of local traffic and construction vehicles during the project. This document provides a framework within which a detailed CTMP will be prepared, prior to the commencement of works.

5.13 Waste Management

5.13.1 Operational Waste Management

A Preliminary Waste Management Plan (draft WMP) has been prepared by EJE Architecture (**Appendix T**) to ensure that waste generated by the proposed development is managed in accordance with the relevant components of the City of Newcastle's *Waste Management Technical Manual 2012* and the University's *Environmental Sustainability Plan 2018-2025*.

The draft WMP provides a detailed description of the likely waste streams associated with the proposed development and how this waste is to be stored, processed, recycled or reused.

Based on modelling of functional floor area and expected usage profiles, EJE Architecture estimate that the proposed development will generate approximately 477 litres of waste and recyclables every day. They conclude that the proposed waste storage area, which is located on the ground floor of building, is capable of accommodating the volume of waste generated by the development.

A detailed Operational Waste Management Plan will be prepared prior to occupation of the proposed development.

5.13.2 Construction Waste Management

The draft WMP included at **Appendix T** also includes a preliminary assessment of the likely waste streams during construction. It is noted that the proposed building has been designed to minimise on-site construction waste, with the cross-laminated timber (CLT) structure, glazed façade, concrete panel elements, and the sheet metal roof all having been prefabricated. In order to minimise construction waste, the appointed construction contractor will be required to prepare a detailed Construction Waste Management Plan prior to the commencement of works.

5.14 Contamination and Groundwater

A Detailed Site Investigation was undertaken by Coffey in February 2019 (see **Appendix U**) which found that the main contaminant of potential concern, from a site suitability perspective for Site 1A, is Benzo(a)Pyrene (BaP). Specifically, two BaP hotspots have been identified at sample locations BH8 and BH10 (refer to **Figure 16**). The investigation concluded that the site is suitable in its current state for commercial/industrial uses, however, would require remediation for more sensitive uses such as open space.

The proposed Stage 1A building is classified under the commercial/industrial category (HIL D) in accordance with the NEPM guidelines and is therefore suitable for the proposal in its current form. Notwithstanding, an early works DA is currently in its final stages of assessment by the City of Newcastle Council (DA2018/00933) that seeks to remediate all identified hotspots across the broader Site 1 area to a HIL C value which is suitable for the more sensitive use of open space. Accordingly, a Remediation Action Plan (RAP) has been prepared as part of the early works DA which outlines a strategy for the remediation and validation of the land to achieve a 95% UCL across the site that is below the HIL C assessment criteria for BaP. A copy of the RAP submitted with the early works DA is provided at **Appendix X**.

Accordingly, following remediation and validation of the hotspots as part of the site early works, Site 1A will be suitable for the School of Creative Industries and Innovation Hub building as well as any associated open space which may fall outside of the building footprint.



Figure 16 Location of soil sample locations

Source: Coffey

5.15 Mine Subsidence

As detailed in **Section 2.4**, ground stabilisation works (grouting) to mitigate the potential risk of mine subsidence have been approved by Council under DA2019/00138. The adequacy of these works has been separately assessed by Subsidence Advisory NSW and approval has been granted under *Section 33 of the Coal Mine Subsidence Compensation Act 2017* (refer to **Appendix J**).

5.16 Flooding and Stormwater

A Stormwater and Servicing Assessment has been prepared by Northrop (**Appendix N**) and details the proposed flood mitigation and water cycle management strategies to be implemented for the proposed development. These matters are discussed below.

5.16.1 Flooding

Existing Flood Behaviour and Impact of Climate Change

Existing flood behaviour has been obtained from Flood Information Certificate No. FL2018/00123. The subject site is affected by ocean and local catchment flooding. In summary:

- A peak water level of 2.43m AHD is expected at the site during the 1% Annual Exceedance Probability (AEP) event, as a result of local catchment flooding.
- A peak water level of 3.40m AHD is expected in the Probable Maximum Flood (PMF) as a result of ocean
 flooding. Flood waters for the ocean flooding are expected to rise slowly relative to the local catchment flood
 and enter the site from the north-west. A sea level rise of 90cm has been incorporated into this estimate, and as
 such, it is assumed that this information adequately estimates the impact due to climate change.
- The Flood Information Certificate indicates that the Highest Life Hazard Category for the overall site is L5 for local catchment flooding, however this is applicable to the nearby floodway, and not to the development area. This was confirmed with Council. The highest Hydraulic Behaviour Threshold for the development area is H3, which is equivalent to a Life Hazard Category of L4. An L4 hazard classification is commensurate with flash flooding, and requires evacuation to a suitable flood free refuge within the enclosed flood waters.

 For ocean flooding, the Highest Life Hazard Category is L1. An L1 hazard classification is commensurate with slow rising flood waters, and requires evacuation to flood free land outside of the entire flood.

The site has various flood classifications, however the most critical classification for the subject area within the development footprint is flood fringe. Flood fringe areas are described in DCP 2012 as 'the remaining areas of floodplain not included in flood storage areas and floodways'.

Potential Flood Impacts of the Proposed Development

As noted above, the most critical flood classification for the subject area within the development footprint is flood fringe. As such, it is expected that the development will have no significant adverse impact on the flood behaviour both onsite and on the adjacent properties.

The Waterfront and Cottage Creek Flood Management Plan (1999) shows a floodway directly to the west of the proposed site, referred to as the Worth Place floodway. The Honeysuckle Redevelopment Area Flood Study (2018), which supersedes the earlier plan, retains the 20m Worth Place floodway, and also includes a 10m wide floodway between building envelopes B and D to allow an overland flow path to be maintained between Civic Lane and Wright Lane.

Design consideration will need to be given to this floodway, however the proposed development footprint does not impede on the floodway and is therefore considered to be consistent with the Flood Management Plan.

Compatibility with Floodplain Risk Management Plans

The proposed development is generally compatible with the DCP and Newcastle Citywide Floodplain Risk Management Study and Plan (2012) with respect to habitable floor levels and on-site refuge. The Flood Planning Level was obtained from Council in Flood Certificate FL2018/0002 and is derived from The Honeysuckle Redevelopment Area Flood Study (2018). All habitable floor levels are set at the Flood Planning Level, being 2.80m AHD, which equates to the 1% AEP plus 370mm freeboard.

The L4 hazard category, which is applicable to the site, requires on-site refuge above the PMF. Refuge may be sought in all levels above the ground floor for each building, in line with Council's DCP. Further details will be provided in a Flood Emergency Management Plan, which will be prepared and implemented prior to occupation of the building.

Emergency Management and Evacuation

The emergency response will depend on the type of flooding experienced at the site. For ocean dominated flooding, sufficient warning should be available to evacuate building occupants to higher ground. Conversely, for extreme local catchment flooding, refuge should be sought onsite. It is expected that prior to occupation, emergency response plans for a range of scenarios will be developed and displayed at prominent locations around the building in the form of a Flood Emergency Management Plan.

5.16.2 Stormwater Management

The Stormwater and Servicing Report included at **Appendix N** also investigates the potential impact of the development on surface and ground water hydrology and quality, monitor methodologies, and details erosion, sediment and stormwater management controls.

The report concludes that the proposed development and stormwater management strategy meets the requirements of Council's DCP and the Newcastle City Council Stormwater and Water Efficiency for Development Technical Manual (2017).

5.17 Heritage

Curio Projects has prepared a Heritage Impact Statement (**Appendix G**) for the proposed development of Building 1A to identify its potential impact on heritage items, heritage conservation areas, potential archaeological resources and Aboriginal cultural heritage values. The study concludes that any potential impacts can be addressed through careful detailed design of the proposed development, consideration of surrounding heritage items, and application of archaeological investigation and mitigation techniques. The key findings are summarised below.

5.17.1 Built Heritage

As detailed in **Section 2.2**, there are no items of built heritage located within the site and the site is not located within the curtilage of any Heritage Conservation Area. Accordingly, the HIS found that the proposed development will present no physical impact to any individual heritage item or heritage fabric. The HIS also concludes that the proposed development will have no visual impact to the setting or character of the Civic Railway Workshops Group, nor any other nearby heritage item of conservation area.

Further, while Building 1A represents an innovative design, the built form will be generally consistent with the existing context of the Honeysuckle Precinct. The lightweight and open presentation of the glazed building façade, and use of natural materials and neutral tones will serve to complement the heritage context of the area, without conflicting or detracting from its heritage character. Accordingly, Curio conclude that the proposed development will have a neutral visual impact on the wider heritage value of the area.

5.17.2 Historical Archaeology

The proposed Building 1A is located on an area of reclaimed land, not associated with the former location of any major historical structures. As such, Curio conclude that there is little to low potential for any historical archaeological resource to be located in situ within the development footprint of Building 1A.

However, Curio recommend that an Unexpected Finds Policy should be implemented during development works. The Unexpected Finds Policy will provide a procedure to follow should any unexpected archaeological resource be encountered during works.

On this basis, Curio conclude that the proposed development can proceed (subject to SSDA approval), without the need for additional heritage approvals or archaeological investigations.

5.17.3 Aboriginal Archaeology

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Curio (refer to **Appendix H**) in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* and the Office of Environment & Heritage's *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*.

The ACHAR concludes the proposed development will have no potential to impact any natural soil profiles capable of retaining an Aboriginal archaeological deposit, due to location of the Stage 1A footprint wholly within fill/reclaimed land. Accordingly, management and mitigation measures focus on social and cultural outcomes and initiatives, rather than archaeological investigation or intervention. Specifically, the identified management and mitigation measures include:

- An Aboriginal Cultural Heritage Management Plan (ACHMP), should be prepared for the wider HCCD project, in
 order to provide a working framework and strategic advice for the appropriate and sensitive management of
 Aboriginal cultural heritage and archaeology going forward for the life of the project;
- An Aboriginal cultural induction should also be developed and undertaken by all future employees and constructions workers on site, prior to the commencement of construction works; and
- Opportunities to interpret Aboriginal cultural heritage values should also be identified for implementation within Building 1A, alongside a holistic approach to the interpretation of Aboriginal cultural heritage values across the Honeysuckle City Campus.

5.18 Servicing and Utilities

Northrop have prepared Stormwater and Servicing Report (**Appendix N**), which assesses the existing provision of services and utilities. The report concludes that:

- There is sufficient capacity within the nearby Newcastle 12 Wastewater Pump Station and 300mm gravity main running along Worth Place to service the development;
- Existing water infrastructure is available; and
- There is sufficient capacity within the existing 30kPa distribution mains along the northern side of Honeysuckle Drive to service Building 1A.

As detailed in **Section 2.4**, the works necessary to service Stage 1A were approved by Council under DA2018/00933.

5.19 Infrastructure (Light Rail)

GHD confirm (refer to **Appendix W**) that there are no ground penetrations or potential impacts on the light rail infrastructure. Newcastle City Council were consulted during the design phase and it was agreed that where any light rail crossings were required, the Smart City conduits could be utilised to mitigate any impact on the new light rail infrastructure. Northrop also conclude that the development is located far enough away from the light rail network so as not to have any direct impact on the light rail infrastructure (refer to **Appendix N**).

5.20 Building Code Compliance

A BCA and Access Report has been prepared by Lindsay Perry Access and is included at **Appendix M**. The report confirms the proposed development is capable of achieving the requirements of the Building Code of Australia (BCA) and the *Disability Discrimination Act 1992*.

5.21 Signage

State Environmental Planning Policy No 64 – Advertising and Signage (SEPP 64) applies to all signage that, under an environmental planning instrument, can be displayed with or without development consent and is visible from any public place or public reserve. The proposed signage meets the objectives of SEPP 64 in that it:

- the new signage is scaled appropriately for the building and the broader area in which it is located;
- · is commensurate with the amenity and visual character of the area;
- does not block any significant views and will not have an adverse impact on the amenity or future character of the surrounding area;
- · will effectively communicate the address and presence of the University; and
- is of highly quality of design and finish.

Schedule 1 of SEPP 64 contains assessment criteria that are to be considered by the consent authority. An assessment of the proposal against the criteria is provided in **Table 11** below.

Table 11 Assessment Criteria under Schedule 1 of SEPP 64

Assessment Criteria	Comments	Compliant
1. Character of the Area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signage is compatible with the existing and desired character of the area as it comprises signage associated with the future Honeysuckle City Campus and reinforces the broader mixed use character of the Honeysuckle Precinct and the Newcastle CBD.	Yes
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	Currently, there is no particular theme for signage in the surrounding area. Notwithstanding, the proposal will establish a consistent aesthetic for signage on the proposed building.	Yes
2. Special Areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed signage has been designed to provide a sensitive response to the character of the building and design of the public domain. The proposed signage will not 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.	Yes
3. Views and Vistas		
Does the proposal obscure or compromise important views?	The proposed signage is located on the façade of the building and on the wall along the ground plane. For this reason, the proposed signage will not obscure or compromise any important views.	Yes

Assessment Criteria	Comments	Compliant
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signage has been designed and located to avoid dominating the skyline or reducing the quality of vistas. The signage has been sensitively integrated with the design of the building and public domain, and uses high quality materials that ensure it is complementary to the building.	
Does the proposal respect the viewing rights of other advertisers?	The proposed signage is of a scale that will respect the viewing right of other signage.	Yes
4. Streetscape, Setting or Landsca	pe	
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The proposed signage has been designed with consideration for both the streetscape and the need to assist in place identification. The scale, proportion and form of the proposal is considered appropriate as, it responds to the overall size of the building.	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage is fully integrated with the high quality design of the new building and features a contemporary design that will positively contribute to the streetscape.	Yes
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The signage relates to a new building. However, the number of signs proposed will ensure minimal visual impact on the streetscape and helps establish a sense of place with a strong relationship to the public domain. Consistency in the design of the signage and its proportionate size will ensure that the proposal will not result in visual clutter.	Yes
Does the proposal screen unsightliness?	The proposed signage does not screen unsightliness, but rather has been designed to integrate with and complement the proposed development.	Yes
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage on the façade of the building will protrude above the proposed street trees. However, the design of the signage will achieve a high-quality design with consideration of the architectural features of the building and the context of the site. The signage will be designed so as to not detract from the desired amenity and visual character of the surrounding area.	
Does the proposal require ongoing vegetation management?	The proposal does not require any ongoing vegetation management.	N/A
5. Site and Building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposal has been carefully designed to be compatible with the scale, proportions, and presentation of the building. The scale of the proposal is considered to be appropriate for the context of the site and will support the mixed use character of the area.	Yes
Does the proposal respect important features of the site or building, or both?	The proposal is respectful in its design and will not dominate the surrounding locality or detract from any of the important features of the building.	Yes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage has been innovatively integrated with the building architecture and landscape design.	Yes
6. Associated Devices and Logos	with Advertisements and Advertising Structures	I.
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?	Lighting devices have been integrated into the overall design of the signage zones/signs. The signs are to be backlit with all necessary cabling being concealed within the sign or signage structure. The University's logo will be designed to read as an integral part of the signage and the building façade.	Yes
7. Illumination		1
Would illumination result in unacceptable glare?	Illumination will be developed with respect to the relevant Australian Standards and best-practice measures for building identification and wayfinding signage.	Yes
Would illumination affect safety for pedestrians, vehicles or aircraft?	It will be confirmed at the relevant stage that the proposed signage does not result in unacceptable glare or light spill, or impact the safety of pedestrians,	Yes
Would illumination detract from the amenity of any residence or other form of accommodation?	vehicles or aircraft.	
Can the intensity of the illumination be adjusted, if necessary?	The intensity of the illumination can be adjusted as required, however a curfew is not proposed.	Yes

Assessment Criteria	Comments	Compliant
Is the illumination subject to a curfew?		
8. Safety		
Would the proposal reduce the safety for any public road?	As discussed above, the illumination of the proposed signage will be developed with regard to the relevant Australian Standards and best-practice measures to ensure it does not reduce the safety for any public road. The location of the proposed signage zones on the façade of the building and the within the public domain would not be expected to reduce the safety of any public road.	Yes
Would the proposal reduce the safety for pedestrians or bicyclists?	The location and scale of the proposed signs do not pose any adverse impacts on pedestrian or cyclist safety.	Yes
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposed signage will not obstruct sightlines from public areas.	Yes

5.22 Contributions

Consistent with the Concept Plan, this application seeks an exemption from the payment of s7.11 contributions. The relevant contributions plan for the site is the *City of Newcastle 94A Development Contributions Plan 2009* (as revised in August 2015).

Exemptions from a levy under the existing contributions plan may be considered by the relevant consent authority for the following development, or components of development (amongst others):

- An application on or behalf of Council for community infrastructure, such as but not limited to libraries, community facilities, recreation areas, recreation facilities and car parks.
- An application by a NSW government department to enable development defined as an 'Infrastructure Facility'
 under State Environmental Planning Policy (Infrastructure) 2007.
- Any other development for which Council considers an exemption warranted, where a decision is made by formal ratification of the Council at a public Council meeting.

Where an applicant would like to apply for an exemption to the payment of a Section 94A Levy, they are required to submit to Council at development assessment stage, an application for an exemption giving reasons and providing any necessary evidence for the exemption.

It is noted that the payment of any contribution on this development is discretionary, and that the approval authority, in this case the Minister for Planning, while empowered to impose a condition requiring the payment of a monetary contribution is not required to under either the EP&A Act or Council's Contributions Plan.

University as the Crown and Public Educational Institution

The University is recognised as the Crown by virtue of Clause 226 of the EP&A Regulation. Section 4.6 of the EP&A Act provides that in relation to Crown applications, a consent authority is unable to impose a condition of consent without the approval of the University or the Minister. However, the University is conscious of its central position in the Newcastle LGA and its ongoing relationship with Council and the local community. The University also understands the need to continue to work cooperatively with Council to reach agreement on an appropriate balance of development conditions that meet Council's planning responsibilities, whilst also meeting the University's need to provide critical infrastructure.

The Public Nature of the Proposed Development

The University and its functions are inherently of a public nature, providing educational and employment opportunities to the Newcastle community. The proposed expansion of their city campus for new research and teaching facilities is part of the University's core academic functions.

The inherent public character of the campus development, including Stage 1A, is in contrast to a strictly commercial development where a full levy might be considered reasonable (such as applicable in a Section 94A Plan).

The underlying purpose of Council's Contributions Plan is to raise funds from private, commercially driven developments to be put towards the cost of public facilities and infrastructure which are burdened by those developments. Imposing a levy on the University's own public infrastructure (and in doing so financially compromising the University's ability to perform its teaching and research functions) conflicts with the public tenet of the Contributions Plan. Indeed, to do so would be simply diverting education-based funding away from the University for other unrelated purposes, potentially with no nexus to the University.

Whilst Council's Contributions Plan does not automatically exclude Crown Developments from the payment of developer contributions, applicants are able to seek as exemption under Section 7 of the Plan.

An exemption is considered appropriate as the University is a not-for-profit public institution which often relies on government grants, donations, and community funding to provide new facilities for both the University community, and the public at large. The levying of a development contribution would divert a portion of these public funds, which have been specifically provided for an educational purpose, to local services without any direct nexus to the impact on those services.

As outlined in further detail below, the nature of the development as a university building means that many of the categories of infrastructure that Council (such as libraries, recreational areas and community space) is seeking to levy for are already provided by the University, for use by staff, students and the general public. On this basis, it is considered unnecessary that the development be levied for community facilities, public domain or new open space contributions.

Additionally, the project represents a significant benefit to the immediate community, the City of Newcastle, and the wider region. Not only is the campus expansion acting as a key catalyst for the revitalisation of Newcastle's CBD, fulfilling a key NSW Government initiative, the project is a key piece of education infrastructure. The proposal has direct public benefits and is purpose built to assist and improve the prosperity of present and future generations of people within Newcastle and the state of NSW.

Crown Applications – Department of Planning Circular D6

It is noted that Council does not automatically grant exemptions to Crown Developments, however the Department's Circular D6 sets out the reasons why Crown developers should be able to seek exemptions from developer contributions payments.

While Circular D6 "Crown Development Applications and Conditions of Consent" was formulated in 1995, it still remains the guiding document in relation to Crown applications and development contributions. The effect of this circular is, that where the applicant is a Crown authority and the development is for Educational Services, no contributions should be collected for open space, community facilities, parking, and general local and main road upgrades. As the proposed development is for the purpose of a new university building, it is clearly development for the purposes of Educational Services. Contributions may be levied for stormwater works.

The exemption from payment of contributions relating to community facilities, public domain and new open space is considered appropriate, as the wider campus development will provide significant areas of accessible open space for public recreation, as well as a range of community facilities available for the general public. These include:

- Grounds and open space (providing activity after hours, enhancing the safety of the area)
- Library (NeW Space);
- Gallery (Watt Space);
- Concert hall (Conservatorium of Music);
- Gymnasiums, pool and other recreation facilities (The Forum Harbourside);
- Teaching space for schools and schools' programs (such as moot trials and debating);
- Child care facilities;
- Medical facilities; and

Auditoriums.

The availability of these amenities and services, which are maintained by the University, reduces the demand on public amenities outside the campus.

6.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for the proposed development has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- · The adequacy of baseline data;
- The potential cumulative impacts arising from other developments in the vicinity of the Site; and
- Measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

Figure 17 indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- · The receiving environment;
- · The level of understanding of the type and extent of impacts; and
- · The likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- The complexity of mitigation measures;
- · The known level of performance of the safeguards proposed; and
- The opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Significance of	Manageability of impact				
Significance of impact	5	4	3	2	1
	Complex	Substantial	Elementary	Standard	Simple
1 – Low	6	5	4	3	2
	(Medium)	(Low/Medium)	(Low/Medium)	(Low)	(Low)
2 – Minor	7	6	5	4	3
	(High/Medium)	(Medium)	(Low/Medium)	(Low/Medium)	(Low)
3 – Moderate	8	7	6	5	4
	(High/Medium)	(High/Medium)	(Medium)	(Low/Medium)	(Low/Medium)
4 – High	9	8	7	6	5
	(High)	(High/Medium)	(High/Medium)	(Medium)	(Low/Medium)
5 – Extreme	10	9	8	7	6
	(High)	(High)	(High/Medium)	(High/Medium)	(Medium)

Figure 17 Risk Assessment Matrix

				Risk Assessment		
Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Significance of Impact	Manageability of Impact	Residual Impact
Traffic and Parking	C/O	Increased traffic on local roads Increased parking on local roads Construction related traffic congestion	 The mitigation measures to manage traffic on surrounding roads have been discussed in the Transport and Parking Assessment (Appendix P) prepared by SECA Solution. Implementation of a Green Travel Plan and Transport Access Strategy (Appendix Q) to reduce demand for parking on the surrounding street network, Implementation of construction traffic management measures identified within the Construction Traffic Management Plan (CTMP) (Appendix S) during the development. 	3	2	5 Low / Medium
Heritage	C/O	 Impact on surrounding heritage items and conservation areas Impact on archaeological heritage (Aboriginal and general) 	 The development has the potential to impact on heritage values, relating to nearby heritage listings, as well as Aboriginal and historical archaeology. However, the potential impacts can be addressed through the application of archaeological investigation and mitigation techniques. Curio has assessed the potential heritage impacts of the proposed development and recommended a number of mitigation measures to be implemented (Appendix G and Appendix H) 	3	2	5 Low / Medium
Contamination	С	Exposure of contamination or hazardous materials during construction	Implementation of an Unexpected Finds Procedure and Asbestos Management Plan in accordance with the recommendations of the Contamination Report prepared by Coffey (Appendix U).	2	2	4 Low / Medium
Visual Impact and Built Form	0	 Visual impact of the development when viewed from the public domain. Visual impact of the development when viewed from surrounding properties. 	The proposed development has a height below the maximum permissible under the Newcastle LEP, providing a human scale response that will reduce shadowing and bulk The proposed development provides increased setbacks to Wright Lane, Worth Place and Honeysuckle Drive, which will maximise the size of the public domain.	3	2	5 Low / Medium
Biodiversity	С	Loss of biodiversity	Given the developed nature of the site and current and historical uses, there are not likely to be any impacts on any threatened species, populations or ecological communities or their habitats. This is confirmed by the Biodiversity Assessment Waiver included at Appendix I .	1	1	2 Low

				Risk Assessment		
Noise and Vibration	C/O	Increase in noise levels during construction activities Increase in noise levels associated with the operation of Building 1A	 Adoption of a Construction Management plan to minimise and manage noise and vibration emissions from the site during construction and ensure compliance with the <i>Interim Construction Noise Guidelines 2009</i>. Implementation of noise management measures identified in the Preliminary Construction Management Plan (Appendix L) to reduce total noise emissions from the site, including applying acoustic treatments to plant and equipment. 	3	1	4 Low / Medium
Flooding	0	Flooding of the site during significant weather events	 Ensuring adequate building freeboards, with all habitable floor levels set at the Flood Planning Level. Implementation of Flood Emergency Management Plan, which will be displayed at prominent locations. 	2	1	3 Low
Wind	0	Creation of adverse wind conditions on the surrounding public domain	Inclusion of wind treatment measures identified in the Pedestrian Wind Environment Study (Appendix V), including an impermeable awning above the ground level and densely foliating street streets, shrubs and planting across the public domain.	2	2	4 Low / Medium
Crime	0	Opportunities for crime in proximity to the proposed development.	Implementation of the recommendations detailed in the CPTED Assessment (Appendix K) will serve to reduce the risk of criminal activity and encourage the safety of all users of the development.	2	2	4 Low / Medium

7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 12** below. These measures have been derived from the previous assessment in **Section 4.1** and those detailed in appended consultants' reports.

Table 12 Mitigation Measures

Mitigation Measures

Construction Impacts

A detailed Construction Management Plan (CMP) will be prepared by the appointed contractor prior to the commencement of works. The CMP will establish site management principles generally in accordance with the preliminary Construction Management Plan prepared by APP dated 18 April 2019.

Heritage / Archaeology

Implement the recommendations of the Curio Heritage Impact Statement (dated 22 February 2019) in relation to built form heritage, historical archaeology and Aboriginal archaeology.

Waste

Measures to manage waste generated during the construction and operation of the proposed development will be implemented in accordance with the Preliminary Waste Management Plan (draft WMP) prepared by EJE Architecture (dated 17 April 2019). The draft WMP will be finalised prior to occupation of the building and an appointed contractor will prepare a detailed Construction Waste Management Plan prior to the commencement of works.

Crime

Implementation of the recommendations of the CPTED Assessment prepared by Ethos Urban dated 9 May 2019 will serve to reduce the risk of criminal activity and encourage the safety of all users of the development.

Environmentally Sustainable Development

The proposed development will target a 5 Star Green Star Rating, with a pathway for a 6 Star Green Star Rating, in accordance with the University's Sustainability Plan 2018-202 and the ESD Report prepared by WSP dated 18 April 2019.

Noise and Vibration

Measures to mitigate operation and construction noise and vibration will be implemented in accordance with the recommendations of Preliminary Construction Management Plan prepared by APP (dated 18 April 2019) and the Acoustic Report prepared by AECOM dated 20 February 2019.

Contamination

As part of the site early works, Site 1A should ve remediated in accordance with RAP prepared by Coffey dated 8 April 2019.

8.0 Justification of the Proposal

In general, investment in major projects can only be justified if the benefits of doing so exceed the costs. Such an assessment must consider all costs and benefits, and not simply those that can be easily quantified. As a result, the EP&A Act specifies that such a justification must be made having regard to biophysical, economic and social considerations and the principles of ecologically sustainable development.

This means that the decision on whether a project can proceed or not needs to be made in the full knowledge of its effects, both positive and negative, whether those impacts can be quantified or not.

The proposed development involves the development of inner-city brownfield site as part of the broader development of the University's Honeysuckle City Campus. The assessment must therefore focus on the identification and appraisal of the effects of the proposed change over the site's existing condition.

Various components of the biophysical, social and economic environments have been examined in this EIS and are summarised below.

8.1 Social and Economic

The proposed development will generate significant social and economic benefits for the Newcastle CBD, the Newcastle LGA and wider Hunter Region during construction and operation. The construction and operation of the building will create new employment opportunities for the local and regional economy. The Capital Investment Value (CIV) (refer to **Appendix E**) for the proposed development has been estimated by Concept 2 Reality Consulting at approximately \$23,350,000 (excl. GST).

On this basis, the project is expected to create approximately 170 jobs during the construction and operation phase of the project. This number includes construction workers, academic staff and support staff. The creation of these types of jobs will directly support the growth and development of the knowledge economy in Newcastle. The employment generated by the operation of the proposed development will also increase retail expenditure in the local area. This local retail expenditure is expected to be directed toward food-related purchases such as takeaway, cafés, restaurant dining and take-home groceries. The remainder of workforce expenditure is dedicated to spending on retail goods, such as clothing and accessories, entertainment, leisure activities and personal services. As a result, the trading conditions of retailers near the proposed development will likely improve.

In addition, the proposed development will form a key part of the Newcastle CBD's Civil Precinct and assist Council achieve its objectives to enhance the night time economy, revitalise Hunter Street, promote the use of public and active transport and have vibrant and safe streets. As a major economic activity generator which operates during and outside standard business hours, the proposed development will consolidate and significantly enhance the Civic Precinct and help make the Newcastle CBD a world class education, innovation and business hub.

8.2 Biophysical

Section 5.7 above provides an assessment of the biophysical impacts of the proposal and the environmental risk assessment contained at **Section 6.0** demonstrates that the proposed development will not result in any significant adverse environmental impacts that cannot be appropriately addressed through standard conditions of consent or the mitigation measures included at **Section 7.0**.

8.3 Ecologically Sustainable Development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any serious threat of irreversible damage to the environment and therefore the precautionary principle is not strictly relevant to the proposal. It is noted, however, that a conservative approach has been applied to all specialist studies supporting the application.

Intergenerational Equity

Inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both the existing and future generations by:

- Implementing safeguards and management measures to protect environmental values.
- Facilitating job creation and the expansion of a university in close proximity to public transport; and
- Improving the public domain and amenity in the Newcastle CBD.

The proposal has integrated short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

Conservation of Biological Diversity and Ecological Integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.

The proposal would not have any significant effect on the biological diversity and ecological integrity of the study area.

Improved Valuation, Pricing and Incentive Mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance.

Additional measures will be implemented to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases.

9.0 Conclusion

The Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the proposed development of Stage 1A of the Honeysuckle City Campus Development. The EIS has addressed the issues outlined in the SEARs (**Appendix C**) and accords with Schedule 2 of the EP&A Regulation with regards to consideration of relevant environmental planning instruments, built form, social and environmental impacts.

This report provides an assessment and justification for the development, consistent with the relevant environmental plans and policies. The environmental assessment provided in Section 4.1 demonstrates the proposed development will have minimal environmental impacts upon the surrounding neighbourhood and any impacts can be managed through the proposed mitigation measures listed at Section 7.0 or conditions of consent.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- The proposed development remains generally consistent with the Concept Plan. It will deliver the key outcomes and objectives of the Concept Plan, including major public benefits;
- It will contribute to the development a world class educational precinct within the Newcastle CBD;
- The environmental impacts associated with the proposed development are minimal and manageable;
- It will be integrated with the surrounding context and provides a high level of pedestrian amenity and permeability at ground level with high quality public domain and landscaping treatments;
- The development is representative of high quality architectural and landscape design. The development will
 positively contribute to the renewal of the Honeysuckle Precinct and Newcastle CBD while providing and
 improved and enlarged public domain;
- It will meet sustainability objectives, including an accredited 5 Star Design and As-built Greenstar Rating, with a pathway to a 6 Star Green Star Rating;
- The site is extremely well serviced by public transport infrastructure. The development will therefore support the strategic imperative of delivering high quality development in conjunction with public transport capacity and bicycle parking;
- It will contribute to the revitalisation and activation of the Newcastle CBD, promoting investment in the CBD and the growth of complementary land uses; and
- It will help achieve the objectives of the Hunter Regional Plan 2036, Draft Greater Newcastle Metropolitan Plan 2036 and the Newcastle Urban Renewal Strategy 2014.

Given the merits described above it is requested that the application be approved.