

STATE SIGNIFICANT DEVELOPMENT ASSESSMENT REPORT: Macquarie University Arts Precinct (SSD 8388)



Environmental Assessment Report Section 4.40 of the *Environmental Planning and* Assessment Act 1979

May 2018

ABBREVIATIONS

Applicant AS CIV Consent Council DA DCP Department EIS EP&A Act EP&A Regulation EPA EPI ESD FSR GA NSW GFA GSC ICNG INP NPI LEP LGA Minister MQU MUAPP NCC OEH PFM REF Regulation RMS RDCP 2014 RLEP 2014 RLEP 2014 RLEP 2014 RLEP SEPP SRD SEPP SRD SEPP	Macquarie University, or anyone else entitled to act on their behalf Australian Standard Capital Investment Value Development Consent City of Ryde Council Development Application Development Control Plan Department of Planning and Environment Environmental Impact Statement <i>Environmental Planning and Assessment Act 1979</i> <i>Environmental Planning and Assessment Regulation 2000</i> Environment Protection Authority Environmental Planning Instrument Ecologically Sustainable Development Floor Space Ratio Government Architect of NSW Gross Floor Area Greater Sydney Commission Interim Construction Noise Guideline Industrial Noise Policy Noise Policy for Industry Local Environment Area Minister for Planning Macquarie University Macquarie University Structure Project National Construction Code Office of Environment and Heritage Planning Focus Meeting Review of Environmental Factors <i>Environmental Planning and Assessment Regulation 2000</i> Roads and Maritime Services Ryde Development Control Plan 2014 <i>Ryde Local Environmental Plan 2014</i> Response to Submissions Secretary of the Department of Planning and Environment Secretary of the Department of Planning and Environment State Environmental Planning Policy State Environmental Planning Policy State Environmental Planning Policy (State and Regional Development) 2011
SRD SEPP SSD TfNSW	State Environmental Planning Policy (State and Regional Development) 2011 State Significant Development Transport for New South Wales

Cover Photograph: Artists' impression of the proposed development (Source: Applicant's EIS)

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EXECUTIVE SUMMARY

This report is an assessment of a State significant development (SSD) application lodged by Macquarie University (the Applicant) seeking consent for the development of a new Arts Precinct at the North Ryde campus of Macquarie University. The Macquarie University Arts Precinct Project (MUAPP) seeks to provide best practice standards for research and teaching in the Arts and general learning in the Arts faculty. The MUAPP would be utilised by existing students and staff.

The proposed development has a capital investment value (CIV) of \$111 million and includes refurbishment of two buildings, construction of a new purpose-built faculty 'Showcase Building' and construction of a new covered atrium. The proposed development would generate approximately 181 construction jobs over the 20 month construction program. There will be no change to student or staff numbers as the existing arts faculty students would be serviced by the new facilities.

The proposed development is SSD under clause 15 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) as the proposed development is for the purposes of an education establishment and has a CIV of more than \$30 million. The Minister for Planning is the consent authority.

The site is located in the City of Ryde local government area and is zoned B4 Mixed Use under the Ryde Local Environmental Plan 2014 (RLEP 2014). The proposed development is defined as an educational establishment and is permissible with consent.

The Environmental Impact Statement (EIS) was exhibited from 16 November 2017 to 15 December 2017. The Department received seven submissions during the exhibition period from public authorities commenting on the proposed development, including City of Ryde Council (Council). The key matters raised in the submissions included cumulative construction impacts, landscaping and accessibility as well as noise and vibration.

The Applicant submitted a Response to Submissions (RtS) that provided additional information and provided responses to the key issues raised in the submissions. Additional documentation provided included further consultation and accompanying information regarding issues raised by Sydney Trains, additional information regarding traffic, an updated noise and vibration assessment and revised plans addressing accessibility and landscaping.

The Department re-consulted with agencies on the additional information presented and further responses were received from Council, Environment Protection Authority (EPA) and Transport for New South Wales (TfNSW).

The Department has undertaken a detailed assessment of the proposed development and is satisfied that the impacts of the development have been addressed through the EIS and RtS or can be adequately managed and mitigated through the recommended conditions for the proposed development.

Whilst the built form is considered compatible with the existing surrounds, the Department has recommended a condition requiring additional activation of the atrium area and re-consideration of internal equitable access around the buildings. Additionally, the Department has recommended conditions of consent requiring the Applicant to consult with TfNSW in the preparation of a Construction Pedestrian and Traffic Management Plan to ensure impacts of concurrent construction of the proposed development with the Sydney Metro Northwest upgrades to the Epping to Chatswood Rail Line are appropriately managed. With the implementation of the recommended conditions, the Department considers that impacts can be managed satisfactorily.

The application is consistent with the objects of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) (including ecologically sustainable development), State priorities and A Metropolis of Three Cities – the Greater Sydney Region Plan. The Department is satisfied that the subject site is suitable for the proposed development and therefore considers the proposed development would be in the public interest and recommends that the SSD application be approved, subject to conditions.

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1. BACKGROUND

1.1. Introduction

This report provides an assessment of a State Significant Development (SSD) application for the development of an interconnected Arts Precinct at the Macquarie University North Ryde campus.

Macquarie University (MQU) (the Applicant) proposes to redevelop the existing Arts faculty buildings to provide improved facilities utilising best practice standards for research and teaching in the Arts and general learning in the Arts faculty. The proposed Macquarie University Arts Precinct project (MUAPP) would be utilised by existing students and staff.

1.2. The site and surroundings

1.2.1. Site context

The subject site is located approximately 15 km north-west of the Sydney central business district in the Ryde local government area (LGA) (see **Figure 1**).



Figure 1: Site location in context with the Sydney CBD and Ryde LGA (Source: Google Maps)

The MQU North Ryde campus located at 192 Balaclava Road, Macquarie Park, is surrounded by a variety of land uses: Lane Cove National Park to the north; predominantly low to medium density with some high density residential areas to the south and west; and a major shopping precinct (Macquarie Centre) to the east (see **Figure 2**).



Figure 2: Site Context (Source: Google Maps)

The MQU North Ryde campus is located on 126 hectares and comprises teaching and research spaces, shops, cafes, recreational facilities, banks, a bar, pharmacy, bulk-billed medical clinic, private hospital, and other ancillary facilities (see **Figure 3**). The MQU campus is irregular in shape and is located on both sides of the M2 Motorway.

1.2.2. Site Description

The proposed development site has a total area of 7,500 sqm and currently accommodates a complex of three three-storey buildings (W6B) and an eight-storey building (W6A), both constructed in 1968 (See **Figure 4**). Between these buildings is an open courtyard and the area immediately to the south has recently been cleared as part of a separate approval from City of Ryde Council (Council) (LDA2017/0223).



Figure 3: Macquarie University Site – North Ryde Campus (Source: Macquarie University website)

1.2.3. Previous Approvals and other relevant applications

On 13 August 2009, the then Minister for Planning approved a concept plan (MP 06_0016) for the redevelopment of the Macquarie University Campus site. The concept plan approval comprises the provision of 400,000 sqm of floorspace for commercial uses, 61,200 sqm of floorspace for academic uses 3,450 student housing beds, associated infrastructure, car parking and landscaping. The concept plan approval also identified a number of road upgrade works to facilitate the campus redevelopment and required the agreements for these upgrade works to be made with the first application for new commercial floorspace. The approved concept plan applies to the overall MQU campus and does not specify building envelopes that form part of the academic core. Consideration of the consistency of the proposed development in accordance with the concept plan is provided at **Appendix C.**

A modification to the concept plan approval is currently being considered by the Department. The proposed modifications include: modifications to height controls and floorspace to ratify local controls; an increase in academic floorspace (from 61,200 sqm to 157,000 sqm); removal of floorspace capping in certain precincts and redistribution of floorspace; increase in student projections; and a revised and consolidated Design Excellence Strategy and Urban Design Guidelines.

The proposed development is consistent with the eight storeys identified for the academic core identified in the Design Excellence Strategy and Urban Design Guidelines as required by the concept plan.



Figure 4: Proposed development site (Source: NearMap)

2. DESCRIPTION OF PROPOSED DEVELOPMENT

2.1. Description of proposal

The key components and features of the proposed development (as refined in the Response to Submissions (RtS)) are provided in **Table 1** and shown in **Figure 5** to **Figure 9**. It should be noted that the Applicant has undertaken demolition and earthworks approved by Council for part of the site (LDA2017/0223).

Aspect	Description	
Development Summary	Internal refurbishment of buildings W6A and W6B, a new entrance to the W6B from Wally's Walk, a new purpose built 'Showcase Building' south of W6A and a new covered atrium space between W6A and the new building.	
Uses	Educational establishment and facilities associated with the Arts Faculty of Macquarie University	
Site area	7,500 sqm	
Gross floor area (GFA)	 Additional floor space: 1,298 sqm academic floor space to W6A and W6B 4,456 sqm academic floor space in the new building 	
Demolition	 Existing buildings W6A and W6B are proposed to be totally internally refurbished and stripped back to the existing structural shell 	
Built form	 Overall building height of eight storeys, consistent with the existing W6A New five-storey 'Showcase Building' New entrance to W6B from Wally's Walk Covered atrium between W6A and new 'Showcase Building' Façade of W6A to be fitted with new transparent, twin wall glazed 	

 Table 1: Key components of the SSD application

Aspect	Description	
	façade.	
Building Works	 Building W6A Internal refurbishment to renew and revitalise the existing eight-storey building and facilities Aged core replaced with new core that will serve to facilitate more interactions across academic areas Northern façade replaced with new dual skin glazed facade Atrium space to be erected between W6A and new 'Showcase Building' 	
	 Building W6B Internal refurbishment to renew and revitalise the existing facilities New entrance from Wally's Walk 	
	 Showcase Building Construction of purpose built faculty building (south of W6A) to accommodate MQU's ancient cultures and modern history collections, wet and dry teaching and field work spaces, function/exhibition space and areas for academic use Atrium space connecting the new building to W6A. 	
Access	 Vehicle access would be maintained via Epping Road, entering the university grounds via Balaclava Road 	
Hours of operation	 Publicly accessible areas: 8 am to 5:30 pm Teaching hours: 8 am to 10 pm 	
Construction Hours	 Monday to Friday: 8 am to 5:30 pm Saturday: 8 am to 4 pm No works on Sunday or public holidays 	
Construction Timing	 20 month construction period June 2018 – February 2020 	
Construction Traffic	 Up to 80 truck movements per day Peak construction: 10 truck movements per hour Truck movements will be outside of daily peak hours, where possible 	
Construction Car parking	An at-grade student/staff carpark (w4 carpark) is located immediately south of the landscaped berm that accommodates 280 parking spaces. A portion of this carpark will be utilised for the purposes of construction.	
Jobs	Approximately 181 construction jobs.	
CIV	\$111 million	

The proposed development seeks to improve the connection of the Arts Precinct to Wally's Walk, a central thoroughfare of the MQU campus. To achieve this connection, the Applicant has proposed a podium linkage from existing building W6A to the pedestrian avenue, whilst retaining the structural fabric of the existing arts buildings W6A and W6B. Additionally, the proposed development connects the isolated academic areas within W6A by removing the central core of the building and replacing this with a Collaborative Hub that visually connects all eight floors and contains meeting and research spaces. Student facilities, including a new café, the 'Student Connect' unit and a 'Concierge' function will be jointly located on the ground floor area of W6A to encourage wider interaction across the faculty.

The new 'Showcase Building' will accommodate: a combined Ancient Cultures and Modern History Museum; a new Function and Temporary Exhibition space; the Immersive Languages Teaching spaces and community research units including Big History; the Ancient History Research Centre; and the Centre for Agency Values and Ethics. The 'Showcase Building' will open directly into a new covered atrium space with direct connection to the ground floor of refurbished building W6A.

The proposed development will only accommodate existing students who will be temporarily relocated during construction and others will decant from other buildings at the campus.



Figure 5: Proposed Ground Floor plan (main entrance level) (Source: RtS)



Figure 6: Proposed Eastern Elevation (Source: RtS)







Figure 8: Proposed Southern Elevation (Source: RtS)

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Figure 9: Proposed Northern Elevation (Source: RtS)

2.2. Project Need and Justification

The proposed development would provide for a further 30-35 years of serviceable life to the existing Arts faculty buildings. Further, the redevelopment would provide best practice standards for research and teaching spaces in addition to bringing the facilities up to contemporary regulatory building standards.

The Applicant states that the reuse and refurbishment of the existing buildings would also provide significant Ecologically Sustainable Development (ESD) benefits with regards to embodied energy, and would result in a shorter construction timeframe consequently minimising amenity and traffic impacts.

2.3. Strategic Context

The Department considers that the proposal is justified given it is consistent with:

- State and Premiers Priorities to improve education results through the provision of new and improved teaching and education facilities
- A Metropolis of Three Cities the Greater Sydney Region Plan, as it seeks to support education land uses around Macquarie University and meet the changing needs of MQU's Faculty of Arts
- Greater Sydney Commission's revised draft North District Plan, as it would enhance an existing education facility that would consequently improve connections to foster a networked community
- The State Infrastructure Strategy 2018-2038, as it would ensure:
 - ageing assets keep up with standards for classroom conditions and support modern and technologically enabled teaching and learning
 - that NSW has a dynamic and innovative vocational training sector that is responsive to industry and client needs
- Future Transport Strategy 2056 as it would provide improved facilities in a highly accessible location.

The proposed development would provide direct investment in the region of approximately \$111 million, which would support approximately 181 construction jobs.

3. STATUTORY CONTEXT

3.1. State Significant Development

The proposal is SSD under section 4.36 (development declared SSD) of the Environmental Planning and Assessment Act 1979 (EP&A Act) as the development is for an educational facility, with a CIV in excess of \$30 million, as defined under clause 15 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

3.2. Consent Authority

The Minister is the consent authority under section 4.5 of the Act. In accordance with the Minister's delegation dated 11 October 2017, the Executive Director, Priority Projects Assessments may determine the application as

- the relevant Council has not made an objection
- there are less than 25 public submissions in the nature of objection
- a political disclosure statement has not been made.

3.3. Permissibility

The subject site is zoned B4 – Mixed Use under the Ryde Local Environmental Plan 2014 (RLEP). The objectives of the zone include integrating a mixture of compatible land uses in accessible locations to maximise public transport patronage and encourage walking and cycling. The proposed development is permissible with consent and is consistent with the objectives of

the zone. Therefore, the Minister for Planning or a delegate may determine the carrying out of the development.

3.4. Environmental Planning Instruments

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any environmental planning instrument that is of relevance to the development the subject of the development application. Therefore the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the proposed development that have been taken into consideration in the assessment. The following EPIs apply to the site:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy (Educational Establishments & Child Care Facilities) 2017 (Education SEPP)
- State Environmental Planning Policy No.55 Remediation of Land (SEPP 55)
- Ryde Local Environmental Plan 2014 (RLEP).

The Department's consideration of relevant EPIs is provided in **Appendix B**. In summary, the Department is satisfied that the application is consistent with, or satisfactorily responds to, the requirements of the EPIs.

3.5. Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent/ approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore in making an assessment the objects should be considered to the extent they are relevant. A response to the Objects of the EP&A Act is provided at **Table 2**.

Objects of the EP&A Act	Consideration
 (a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources 	The proposed development seeks to develop land within an existing university campus and will maximise efficiency by consolidating the existing university facilities site into a central location. The consolidation will provide an identified Arts Precinct for the university and provide significant social benefits.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	Section 3.6 of this report considers the proposed development against the principles of ecologically sustainable development.
(c) to promote the orderly and economic use and development of land,	The proposed development would meet the objectives of the Ryde LEP zone and provide improved education and cultural infrastructure. The development would also generate construction jobs and infrastructure investment.
(d) to promote the delivery and maintenance of affordable housing,	The proposed development does not involve the provision / maintenance of affordable housing.
 (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats, 	The proposed development would not result in the loss of any threatened or vulnerable species, populations, communities or significant habitats.

Objects of the EP&A Act	Consideration
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The proposed development is not anticipated to result in any impacts upon built and cultural heritage, including Aboriginal cultural heritage. Notwithstanding, the Department has recommended a condition of consent requiring works to cease in the event of finding an unexpected Aboriginal heritage relic (See Appendix E).
(g) to promote good design and amenity of the built environment,	The Department has consulted with the GA NSW throughout the assessment of the proposed development and considers the application, with the implementation of the Department's recommendations (See Section 5.2.1) would provide for good design and amenity of the built environment.
 (h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants, 	The Department has considered the proposed development and has recommended a number of conditions of consent to ensure the construction and maintenance is undertaken in accordance with legislation, guidelines, policies and procedures (see Appendix E)
 (i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, 	The proposed development is SSD in accordance with the SRD SEPP. The Department has consulted with Council and other relevant Government agencies on the proposed development, including consultation on recommended conditions of consent.
 (j) to provide increased opportunity for community participation in environmental planning and assessment. 	Section 4.1 sets out details of the Department's public exhibition of the proposed development.

3.6. Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991* (see glossary at **Appendix D**). Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) the precautionary principle,
- (b) inter-generational equity,
- (c) conservation of biological diversity and ecological integrity,
- (d) improved valuation, pricing and incentive mechanisms.

The Department has considered the proposed development in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision making process via a thorough and rigorous assessment of the environmental impacts of the proposed development. The proposed development, particularly the reuse of the structures of W6A and W6B is consistent with ESD principles. Appendix X of the Applicant's EIS provides additional detail of the opportunities and initiatives that may be included as part of the proposed development.

The Applicant is targeting a 5-Star Green Star (Australian Best Practice) rating and has identified initiatives that would minimise the consumption of resources, water and energy. The proposed ESD initiatives include: highly efficient façade system; low impact materials; use of highly efficient water fixtures and fittings; energy efficient lighting and on-site photovoltaic cells; water sensitive urban design measures to improve water quality from the site; waste reduction; and improved indoor environmental quality including consistent and managed thermal comfort levels. The Applicant has not confirmed the suite of initiatives to be implemented as part of the proposed development and as such, the Department has recommended a condition that the details of the final ESD initiatives implemented, demonstrating 5-Star Green Star rating, be submitted to the satisfaction of the Certifying Authority prior to commencement of works.

Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives will encourage ESD, in accordance with the objects of the EP&A Act.

3.7. Secretary's Environmental Assessment Requirements

The EIS is compliant with the Secretary's Environmental Assessment Requirements (SEARs) and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

4. CONSULTATION AND SUBMISSIONS

4.1. Exhibition

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from 16 November 2017 until 15 December 2017 (30 days). The application was exhibited on the Department's website, the Department's Sydney Office, at Service NSW Centres and at Council's Customer Service Centre.

The Department placed a public exhibition in the Sydney Morning Herald, The Daily Telegraph and the Northern District Times on 15 November 2017 and notified adjoining landholders, and relevant State and local government agencies in writing.

The Department received a total of seven submissions from government agencies (including Council) and no submissions from the public. A summary of the issues raised in the submissions is provided in **Table 3** and copies of the submissions may be viewed at **Appendix A**.

The Department has considered the comments raised in the submissions received in its assessment of the application (Section 5) and/or by way of recommended conditions in the instrument of consent at Appendix E.

4.1.1. Public Authority submissions

Table 3: Summary of Government agency submissions to the EIS exhibition

City of Ryde Council (Council)

Council did not object to the proposal, however raised a number of matters in relation to transport and accessibility and requested:

- bicycle and pedestrian peak hour movements be provided
- clarification on changes to staff and student numbers as a result of the proposed development
- a copy of the most up-to-date University Travel Plan
- a loading bay management plan be implemented to provide guidance on restrictions and access
- drawings indicating the widths of the proposed footpaths
- inclusion of management measures during construction (street sweepers, maintenance of roads, parking in designated areas and installation of appropriate signage).

Roads and Maritime Services (RMS)

RMS provided the following comments:

- construction of the proposed development is likely to coincide with the Sydney Metro North West Project and the potential for the increase in construction vehicles in the broader area
- recommended the Applicant consult with the Sydney Coordination Office to coordinate traffic and transport impacts within the wider area and recommended development of a detailed Construction Traffic Management Plan detailing the vehicle routes, number of trucks, construction hours, access and traffic controls to be approved by Council prior to construction certification.

Transport for New South Wales (TfNSW)

TfNSW noted the following for consideration:

- the proposed development would likely coincide with the temporary shutdown of the Epping-Chatswood Rail Link and the operation of the Temporary Transport Plan for this line (including the Macquarie University Railway Station)
- recommended construction vehicle movements be managed in coordination with TfNSW and

recommended the development of a Construction Pedestrian and Traffic Management Plan, to be endorsed by the Sydney Coordination Office prior to the commencement of works.

- Additionally, TfNSW raised the following comments on the Preliminary Traffic Management Plan:
- proposed truck routes were not supported as they have the potential to adversely affect the Temporary Transport Plan (bus routes, bus interchange operations, cumulative construction traffic on Herring Road)
- requested demonstration as to why alternate routes proposed by TfNSW were not suitable
- an alternate truck route that avoids Herring Road should be provided
- clarification on truck route from the east should be provided, considering current restrictions from the M2 Motorway
- provide a commitment that construction vehicles will not travel the during AM and PM peak periods in the Macquarie Park area.

Sydney Trains

Sydney Trains requested additional information be provided prior to the commencement of construction in accordance with *Development Near Rail Tunnels* (TfNSW, 2016) including:

- final geotechnical and structural reports/drawings
- final construction methodology pertaining to structural supports during excavation
- cross-sectional drawings showing the rail corridor, sub soil profile, proposed basement excavations and structure design of sub-ground supports
- detailed survey plan indicating the relationship with the Sydney Trains easement and rail corridor land
- an analysis of the loading-unloading of the site and its effect on the rock mass surrounding the rail corridor

Additionally, Sydney Trains recommended a number of conditions be imposed to ensure the integrity of the rail corridor.

Environment Protection Authority (EPA)

The EPA raised concerns in relation to the following:

Construction

- the need for a detailed assessment of potential site contamination, including groundwater
- noise and vibration impacts, including the need for standard construction hours and intra-day respite periods for highly noise intrusive generating work
- the need for dust, erosion and sediment control and management measures

Operation

- noise impacts on sensitive receivers during operational activities such as public address systems, community use of the facilities, waste collection, ground maintenance and mechanical services (such as air conditioning plant)
- consideration of feasible and reasonable noise mitigation and management measures
- implementation of water sensitive urban design principles including stormwater re-use, and opportunities to minimise energy consumption generated from non-renewable sources.

The EPA also provided a number of recommendations including: requiring an unexpected finds protocol for hazardous materials, compliance with the *Protection of the Environment Operations (Waste) Regulation 2014* in relation to asbestos waste, consultation with Safework NSW, construction vehicle arrival and departure times, consideration of the use of non-tonal reversing alarms, consideration of waste handling guidelines and waste collection.

Sydney Water

Sydney Water recommended the imposition of a number of conditions of consent due to the proximity of the proposed development to Sydney Water infrastructure. Sydney Water:

- requested approved plans be provided to determine if Sydney Water's sewer, water and stormwater drains/easements would be affected
- noted a Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained.
 Ausgrid

Ausgrid identified the likely requirements of the proposed development and raised the following:

- consideration be given to the compatibility of the proposed development with existing Ausgrid infrastructure
- recommended a number of conditions associated with the integration of the proposed development with Ausgrid infrastructure (method of electricity connection, supply of electricity and requirements and conduit installation).

4.2. Applicant's Response to Submissions

Following the exhibition of the application, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in those submissions.

On 16 February 2018, the Applicant provided a Response to Submissions (RtS) on the issues raised during the exhibition of the proposed development. The Applicant's RtS provided geotechnical and engineering information in relation to the rail corridor, additional traffic assessment, clarifications around the noise assessment and revised and updated plans in relation to architectural and landscape elements of the proposed development.

The RtS was referred to agencies for information and placed on the Department's website. Further comments were received from Council, TfNSW and the EPA. No additional submissions were received from the general public. A summary of the issues raised is provided at **Table 4** and copies of the submissions may be viewed at **Appendix A**.

Table 4: Summary of Government agency submission on the RtS

Council		
Council was generally satisfied with the response to the issues raised in its submission on the EIS and raised the following additional matters for consideration:		
 Council noted that the maximum number of truck movements was generally low and considered the restriction of truck movements to operational hours to be excessive, however considered traffic controllers should be employed along the construction truck access route at key pedestrian/cyclist locations 		
 noted the limited use of the loading facility on the ground floor of the 'Showcase Building' (one per day by courier type vehicles, rather than large trucks) and recommended that in the event that large trucks require access to the loading bay, these be restricted to outside of peak commuter periods 		
 requested finish details of pedestrian access areas be provided to Council's Public Domain Team prior to construction certification 		
 requested that construction parking be more clearly delineated and included within the Construction Pedestrian and Traffic Management Plan, to be approved prior to construction certification. 		
TfNSW		
TfNSW reviewed the additional information provided within the RtS and provided the following comments for consideration:		
 the revised truck access route is acceptable recommended any construction traffic management plan consider the cumulative impact of any proposed works within Macquarie University 		
 recommended construction vehicles be restricted to travelling outside of AM/PM peak to minimise impact on the road network during operation of the TfNSW Temporary Transport Project 		
maintained the previous recommendation that a Construction Pedestrian and Traffic Management Plan be endorsed by the Sydney Coordination Office prior to the commencement of works.		
EPA		
EPA noted the additional information provided and noted some matters raised within the submission on the EIS had not been fully addressed. These included:		
 requested additional justification for the extended construction hours or implementation of standard hours of construction 		
 locations of attended and unattended monitoring were not clearly identified in the Updated Noise and Vibration Impact Assessment 		
 confirmed intra campus noise impacts are irrelevant to the assessment of compliance with relevant noise criteria in the NSW Industrial Noise Policy. 		

Additional matters raised by these agencies, in addition to the Department's consideration of key issues is presented within **Section 5**.

5. ASSESSMENT

5.1. Section 4.15(1) matters for consideration

Table 5 identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with Section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in relevant appendices or other sections of this report as referenced in the table.

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Consideration of relevant EPIs has been undertaken in Appendix B . The proposed development satisfactorily complies.
(a)(ii) any proposed instrument	Not applicable
(a)(iii) any development control plan	Refer to Appendix B
(a)(iiia) any planning agreement	A Voluntary Planning Agreement between Council and MQU was executed in February 2013 and applies to the proposed development. (see Section 5.2.3 for detail regarding contributions).
(a)(iv) the regulations	The SSD application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to development applications (Part 6 of the EP&A Regulation), public participation procedures for SSD's and schedule 2 of the EP&A Regulation relating to environmental impact statements.
(a)(v) any coastal zone management plan	Not applicable
(b) the likely impacts of that development	The Department's assessment has given appropriate consideration to the likely impacts of the proposed development and is satisfied it can be appropriately mitigated or conditioned (refer to Section 5).
(c) the suitability of the site for the development	The site currently contains an existing educational establishment and is considered suitable for the proposed development given its accessible location.
(d) any submissions	Consideration has been given to the submissions received for the proposed development during the exhibition in Section 4 of this report. Key issues raised in submissions have been considered further in Section 5 of this report.
(e) the public interest	The proposed development is considered to be in the public interest as it would provide a new education facility in a highly accessible location (refer to Section 4.2.5).
Biodiversity values exempt if: (a) On biodiversity certified land (b) Biobanking Statement exists	Not applicable

5.2. Key and Other Issues

The Department has considered the Applicant's EIS, the issues raised in submissions and the Applicant's RtS in its assessment of the proposed development. The Department considers the key issues associated with the proposed development to be:

- built form, urban design and public domain
- traffic, transport and access.

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the application and are discussed at **Section 5.2.3** of this report.

5.2.1. Built form, urban design and public domain

The proposed development includes the construction of a new 'Showcase Building' and the complete refurbishment of W6A and W6B, including stripping to the structural core of these buildings to facilitate an improved connection across the Arts faculty and to the primary thoroughfare of MQU, Wally's Walk.

The proposed development of the MUAPP proposes an overall building height of eight storeys (RL 87.9), with the top of the roof top plant area at a maximum height of RL 94.1. The overall maximum height of the Arts Precinct will remain at the existing height of W6A at eight storeys. The footprint of the 'Showcase Building' will remain within the east-west alignment provided by the existing buildings. Additionally, the proposed development will provide approximately 5,754 sqm of additional floor space to MQU.

The external façade of the Arts Precinct will comprise the existing brick aesthetic, existing exposed concrete beams and columns, quartz and sandstone cladding and extensive areas of glazed twin wall façade. The proposed development will result in the buildings of the Arts Precinct (existing buildings and the new 'Showcase Building') having similar unified external façade design to provide continuity across the MUAPP.

The proposed development will improve connections between existing buildings W6A to W6B by re-developing the courtyard as a series of stepped platforms that provides a gradual transition to bridge the level difference from W6B to W6A. The Arts Precinct would also provide for a connection between W6A and the new 'Showcase Building' via a transparent (Ethylene tetrafluoroethylene (ETFE)) covered atrium area. The atrium area will physically amalgamate W6A and the new 'Showcase Building', creating a shared open space at ground level whilst providing a clear entry to the Arts Precinct from Wally's Walk to the south of the faculty. W6B will continue to address Wally's Walk to the north. The 'Showcase Building' also provides direct connection to the atrium and into the Collaborative Hub within the redeveloped W6A.

The Government Architect NSW (GA NSW) reviewed the proposed development and considered that whilst the proposed design was generally appropriate within the context of the site, equitable access and the urban design/landscape elements of the building/carpark interface and the benefits provided by the atrium spaces should be maximised to create improved public domain elements with improved sustainability outcomes.

The Applicant provided further detail and amended plans as part of the RtS, demonstrating the accessibility of the proposed development to/from the southern carpark and provided further information relating to materials, finishes, landscaping elements and sustainability outcomes of the proposed development.

The Applicant revised the design of the interface between the public domain and the proposed development in the RtS. A scaled, paved forecourt is proposed immediately in front of the entry to the 'Showcase Building' to highlight the public entry. Passage will be available between the accessible carparking spaces provided immediately to the east via this paved area directly into the Arts Precinct. The view of the 'Showcase Building' from the southern carpark is presented within **Figure 10**.

Additionally, the Applicant highlighted the proposed buffer of 2.8 m along the southern frontage of the 'Showcase Building' that will include tree plantings and soft landscape elements, providing a landscaped interface between the new building element and pedestrian/vehicular traffic.

The atrium space between the new 'Showcase Building' and W6A which facilitates connectivity within the Arts Faculty is shown in **Figure 11**. The form, massing and articulation of the facades of the 'Showcase Building' and W6A as well as the visual interaction of these elements with the higher level connecting link bridge located at the approximate mid-point of the atrium is also shown in **Figure 11**.



Figure 10: Photomontage of the view from the Southern Carpark (Source: EIS)



Figure 11: Photomontage of atrium looking east (Source: RtS)

In response to the request from the GA NSW regarding the sustainability benefits, initiatives and opportunities associated with the atrium space, the Applicant highlighted the primary function of the atrium, being a linking and unifying element that defines the Arts Precinct. Notwithstanding, the key sustainability benefits were highlighted as follows:

- the northern façade of the 'Showcase Building' would be shaded by the atrium roof allowing the deletion of extensive external sun shading louvres and the use of clear glazing in a sustainable and environmentally efficient manner
- the usable outdoor space provided by the atrium provides for external breakout and conversation spaces plus a small scale amphitheatre creating usable space gained in a cost effective and environmentally sound manner
- the ETFE roof itself is a lightweight solution less than one kg per square metre roof weight which enables the implementation of a lighter weight steel framing solution of minimal material content

• the ETFE roof is a recyclable material that can be melted and reconstituted to create new ETFE material at any stage of its life cycle.

The Department considers that the proposed development is well aligned with the existing built form on the campus and the height and massing is appropriate within the context of the site.

The site is not subject to a height control under the RLEP 2014. As stated in **Section 1.2.3**, the proposed development is consistent with the eight storeys identified for the academic core identified in the Design Excellence Strategy and Urban Design Guidelines as required by the concept plan. The additional floorspace is within the additional 61,200 sqm and the proposed 157,000 sqm of academic floorspace (MP 06_0016 MOD 1) permitted across the MQU campus under the concept plan.

The Department considered the input received from the GA NSW in addition to the supplementary information provided by the Applicant. The GA NSW and the Department acknowledge the amendments and clarifications provided in the RtS, however, considered that equitable access and public access and safety associated with the atrium could still be improved. The architectural strategy for the MUAPP aims to improve the connection between the Arts Precinct and the campus overall via Wally's Walk. GA NSW considered the improved connections should be available to all members of the community, however the width of the entry stairs from Wally's Walk does not provide sufficient space to provide both stair access and a platform lift.

A similar issue was raised for equitable access on level one of the 'Showcase Building'. Accordingly, the use of ramps was encouraged by GA NSW rather than stairs and lifts. With regard to the atrium, the limited entry points and poor passive surveillance opportunities were considered by the GA NSW to compromise public safety. The GA NSW considered greater permeability and activation through additional openings and landscaping would improve the design.

Whilst accessibility around the proposed development meets legislative requirements, the GA NSW did not consider the use of chair or platform lifts to be an equitable solution. In response to the GA concerns, the Department has recommended a condition requiring that equitable and inclusive access must be provided for all primary circulation routes throughout the development, noting that stairs with platform lifts are not acceptable as the primary access route.

The modern design of the atrium is complimentary to the surroundings and does not appear obtrusive within or outside of the university grounds. The Department in consultation with the GA NSW has considered the justification provided by the Applicant, and on balance, the proposed design is acceptable. Whilst the GA NSW suggested that additional openings and landscaping could be included in a modified atrium design (to avoid areas of 'dead space' and enhance the opportunities for the use of this space), the Applicant has detailed that one of the key requirements in the design of the atrium space is to incorporate an existing Indigenous song line which runs through the site of the atrium. Engagement with the local elders and community commenced prior to lodgement of the SSD application, which has informed the design in the proposal as submitted. In this regard, the existing Indigenous song line has impacted the general design of the atrium landscaping, including hard and soft landscape balance, access points and travels paths. Additional openings cannot be considered in areas where there is a level difference between the internal floor level and the atrium ground level, as additional ramps or steps will infringe on the song line path and generally affect the landscaping and access arrangements.

Additional openings to the atrium may also potentially impact on the functional requirements of the areas surrounding the atrium, such as the museum to the south, which requires an extremely controlled environment that cannot be compromised with additional openings, whilst additional opening to the north will require redesign of the circulation spaces and ramps immediately adjacent the areas of student services in the building.

The design of the Arts Precinct is aligned with the existing buildings and the contemporary aesthetic provides a juxtaposition to the significance of Wally's Walk enabling it to be more visually prominent. Accordingly, the Department is satisfied that the proposed design of the integrated Arts Precinct is appropriate in its context and acceptable for the site.

5.2.2. Traffic and transport

A Traffic and Parking Assessment of the proposed development was undertaken by TDG NSW. The assessment documented the existing roads and accessibility of the site and the impact of the proposed development, in cumulation with nearby projects.

Existing Access

Balaclava Road provides two-way vehicle movement extending from Epping Road to MQU, however only provides for west movements east of Eucalyptus Street. Eastbound vehicles utilise First Walk. Beyond First Walk, the development site is accessed via Macquarie Walk and then directly via Western Road. The development site is adjoined by Western Road to the east, which provides access to the W4 carpark (including accessible car parking) and the loading facilities for the MQU Café, located further east of the site (see **Figure 12**). Most roads within the university grounds have footpaths with pedestrian crossings at most intersections to facilitate student movements.



Figure 12: Existing Road Network (Source: Google Maps, 2017)

MQU currently provides approximately 5,000 car parking spaces for university use. The approved concept plan for the site includes provision for car parking capacity of 10,800 for both commercial and university uses. A one-day survey of the existing parking availability in close proximity to the development site within MQU indicated there was a total of approximately 2,353 parking spaces, including 1,679 unrestricted spaces. During the one-day survey, there were a minimum of 458 parking spaces available at any one time, which included unrestricted spaces.

The MQU North Ryde campus is well connected to public transport services, principally via the Macquarie University Railway Station on the Chatswood to Epping Rail Line, located approximately 500 m to the south-east of the centre of the campus. Train services are typically every fifteen minutes during the day and every thirty minutes during the evening. The Sydney Metro North West Project is currently underway and aims to upgrade the existing Chatswood to Epping Line to deliver a high frequency driverless metro style service initially connecting Chatswood to Rouse Hill and ultimately via a second harbour crossing to Bankstown.

Additionally, there are a number of bus routes operating in close proximity to the MQU North Ryde campus. Bus routes that operate along University Avenue, within the grounds of the MQU North Ryde campus are as follows: 140, 288, 290, 291, 292, 294, 459, 506, 507, 518, 544, 545, 550 and M54.

Construction

The Applicant indicated that construction traffic, similar to existing traffic, will enter the university via Balaclava Road, and then vehicles will proceed via Macquarie Walk to Western Road. Construction trucks will enter the designated site compound area within the W4 carpark, adjacent to the site to be unloaded (see **Figure 13**). To minimise the disturbance to university operations, the Applicant proposes to establish temporary parking within the presently underutilised carpark Y2 of MQU to accommodate any temporarily displaced vehicles (see **Figure 12**).



Figure 13: Truck unloading area and swept paths – W4 carpark (Source: Applicant's EIS)

The Applicant anticipates up to 40 trucks entering and exiting the site per day (80 movements) to facilitate the proposed development during construction hours. The typical number of trucks

entering and exiting the site is anticipated to be less than 20 per day. The maximum number of movements per hour is anticipated to be 10 truck movements (five inbound and five outbound).

To manage the potential impacts of construction vehicles at the site, the Applicant provides a number of commitments in relation to the management of construction traffic, including requiring construction vehicles to only utilise designated routes and scheduling arrival and departures to minimise 'waiting' of vehicles at the site.

To manage the potential conflicts between construction vehicles and pedestrians, particularly large truck-and-dog trucks delivering materials to the site, the Applicant commits to restricting speeds on university roads to 30 km/h and 10 km/h in shared zones and posting appropriate directional signage to ensure safe access around the construction areas to both vehicles and pedestrians.

Council's comments on the EIS were focussed upon transport and accessibility of the proposed development. Council noted that bicycle and pedestrian daily and peak hour movements were not provided and recommended a number of measures be implemented during construction to minimise impacts, including the utilisation of street sweepers to clean up spoil, maintenance of roads during construction, restricting construction staff to specified areas and traffic control signage be installed in accordance with *Traffic Control at Work Sites V4* (RMS, 2010) and Australian Standard 1742.3 *Manual of Uniform Traffic Control Devices.*

Additionally, both RMS and TfNSW raised concerns regarding the construction of the proposed development coinciding with the Sydney Metro North West Project. RMS raised the increase in construction vehicles and the potential impacts on general traffic and bus operations as well as the safety of pedestrians and cyclists during commuter peak periods.

Both RMS and TfNSW recommended that the Applicant consult with the Sydney Coordination Office to coordinate traffic and transport impacts within the wider area and recommended development of a detailed Construction Pedestrian and Traffic Management Plan detailing the vehicle routes, number of trucks, construction hours, access and traffic controls to be approved by Council prior to construction certification. Additionally, TfNSW did not support the construction truck access route and provided an alternative for consideration.

The Applicant's RtS provided additional information in relation to bicycle and pedestrian movements and considered the alternative truck access route provided by TfNSW. The route proposed by TfNSW was considered to not satisfy the requirements for the proposed development in terms of reducing vehicle and pedestrian interactions. As such, the Applicant provided an alternative to the route proposed as part of the EIS and to that proposed by TfNSW. The alternative route proposes that vehicles travelling to/from the east access Epping Road via the Pittwater Road/M2 Motorway Interchange and vehicles travelling to/from the west access Epping Road via Land Cove Road and the associated M2 Motorway Interchange.

In further submissions received from TfNSW and Council on the RtS, they were generally satisfied with the additional information provided, however TfNSW maintained its recommendation that a Construction Pedestrian and Traffic Management Plan be prepared and endorsed by the Sydney Coordination Office.

The Department has considered the commitments of the Applicant in addition to the comments received form Council, RMS and TfNSW. The Department acknowledges that there is potential for cumulative construction impacts between the proposed development and the construction works and closedown of the Epping to Chatswood rail line, associated with the Sydney Metro North West Project. The Department is satisfied that the alternate access route provided within the RtS would assist in minimising the conflict with concurrent construction projects. Notwithstanding, the Department recommends that the Construction Pedestrian and Traffic Management Plan be developed in consultation with Council, Sydney Coordination Office of

TfNSW and RMS, detailing management of pedestrians and traffic throughout all construction phases.

The Department supports the commitments and recommendations of the Applicant to minimise these impacts and has recommended a condition of consent requiring the Applicant engage suitably qualified traffic controller/s for the duration of construction works. Furthermore, the Department has recommended that the speed limits within the university by restricted to 10 km/h in shared areas.

The Department considers that the ease of access to a wide range of high frequency public transport options is an advantage for the site as it would enable the continued use of public transport during construction, when there is likely to be some disturbance on the road network in the area. Given there are multiple modes of transport available and multiple services for some modes, any potential impacts would likely be dispersed and are considered negligible. Notwithstanding, the Department has recommended construction traffic be managed in accordance with the requirements of the Sydney Coordination Office to ensure traffic impacts are minimised.

The Department concludes that with the implementation of the Applicant's commitments and recommended conditions of consent, construction traffic impacts can be managed and pedestrian safety maintained throughout the construction of the proposed development.

Active transport

The MQU North Ryde campus contains an extensive footpath network, providing clear routes of travel for pedestrians throughout the university, including crossings along all roads and through carparks.

The existing bicycle hub and parking area located outside of building W6A provides parking for 34 bicycles, lockers, showers and an adjacent bicycle repair station. This bicycle hub is currently being relocated approximately 150 m to the east of the proposed development. As there are no proposed changes to staff or student numbers, both the existing provision of bicycle parking and end of trip facilities, as well as the location of these facilities are considered by the Applicant to satisfactorily service the proposed development.

Council requested additional information regarding the number of pedestrian and cyclist movements on the surrounding road network adjacent to the proposed development. To address this, the Applicant undertook pedestrian and cyclist counts of active transport users accessing the site from Epping Road north and southbound and Balaclava Road, east and westbound during both AM peak and PM peak periods. Changes to these access avenues to the MQU site are not required to facilitate the proposed development.

Council subsequently indicated its satisfaction with the clarifications provided regarding pedestrian and cyclist movements and was satisfied that the proposed development would not generate any additional movements. Notwithstanding, Council requested that marshals be positioned within the MQU North Ryde campus private road network at key locations of pedestrian/cyclist and truck route interactions during construction to ensure ongoing safety of active transport users.

The Department notes that the proposed development will not result in changes to staff and student numbers at the MQU North Ryde campus. As such, it is satisfied that the current cycleway and pedestrian pathways and facilities around the development site provide adequate and safe infrastructure to accommodate active transport users. However, as the university will continue to operate throughout the construction period, the Department supports the recommendation of Council and recommends a condition of consent that marshalls shall be positioned within the Macquarie Campus Private Road Network at key pedestrian/cyclist locations on the truck route throughout construction of the proposed development.

The Department is satisfied that appropriate infrastructure exists to ensure the ongoing utilisation of active transport to, from and around the site. With the implementation of the condition of consent, the Department concludes that safety of pedestrians and cyclists can be maintained during the construction of the proposed development.

Operational Traffic

The Applicant has indicated that the operation of the proposed development is unlikely to result in any change to staff or student numbers and as such, operational traffic is anticipated to return to existing levels following construction. Further, the Applicant has not proposed any additional operational car parking.

Council's comments on the traffic and accessibility assessment indicated that the Applicant's conclusions regarding operational car parking were acceptable. Council raised the movement of large operational vehicles, particularly associated with loading and unloading at the new 'Showcase Building' and recommended a management plan be developed and implemented to provide guidance and restrictions on use of the loading bay.

The Applicant provided clarification within the RtS that vehicles accessing the loading bay would be predominantly courier-type vehicles rather than large trucks. Council was subsequently satisfied that the typical vehicles accessing the loading bay would not be significant, however, in the event that large trucks were required to access the loading bay, restrictions be imposed on times of access.

As the proposed development is not anticipated to generate any additional visitation or traffic movements, the Department is satisfied that operational traffic will return to existing levels and does not consider the provision of additional parking to be necessary. Notwithstanding, the Department agrees with Council in relation to trucks accessing the loading dock and has subsequently recommended a condition of consent that requires trucks accessing the loading bay be restricted to outside of AM and PM peak times

University Travel Plan

A copy of the existing University Travel Plan 2012-2017, prepared by GTA Consultants, was submitted as part of the EIS, noting that a revised updated plan, University Travel Plan 2018-2023, is currently being finalised. The Plan recommends achieving a mode share of 70 per cent public transport and active transport by 2032 by achieving the following objectives:

- reduce barriers to non-car travel modes
- provide incentives for non-car travel
- establish cultures of active and public travel use
- enhance intra-campus mobility and accessibility
- place making and reducing the need to travel
- ensure car parking is utilised efficiently.

The proposed development aims to continue MQU's progress to date in delivering the 70 per cent mode share target by 2032 by delivering of aspects of the *Action Plan 2012-2022*, including supporting and improving the quality and experience of walking across campus by providing wide pedestrian walkways to facilitate access to public transport and active transport facilities.

Council noted that the University Travel Plan is currently undergoing updates indicating that it did not assist the assessment of sustainable travel initiatives and strategies.

Whilst the University Travel Plan 2012-2017 is now 'out-of-date', the action plan contained within the document (*Action plan 2012-2022*) presents measures to be delivered to achieve the university's mode share target of 70 per cent by 2032. Whilst the target may change in the updated plan, the Department considers the actions presented will continue to be relevant and remain 'in-date'.

The Department considers that the University Travel Plan 2012-2017 to still be relevant to the proposed development. Notwithstanding, it is considered that any revised travel plan will continue to outline sustainable travel initiatives to employees, students and visitors to campus. The Department is satisfied the *Action Plan 2012-2022* within the University Travel Plan 2012-2017 would be successful in working towards achieving travel mode targets with the proposed development delivering on applicable initiatives.

5.2.3. Other issues

The Department's consideration of other issues is provided at Table 6.

Issue	Consideration	Recommendation
Noise	 The EIS included a construction and operational noise assessment prepared by Wood and Grieve Engineers. The development site is located approximately 350 m from the nearest public road, Epping Road. The site is immediately surrounded by educational faculty buildings, with the Lotus Theatre to the immediate north of the development site. Both attended and unattended noise monitoring was undertaken to quantify the existing acoustic environment at the site and at the nearest sensitive receiver location. The noise environment was determined to be dominated by pedestrian, natural sounds and traffic noise. Attended background monitoring was undertaken at two locations within the university grounds and three long-term unattended loggers were installed within the development site, adjacent to the Lotus Theatre and to the immediate north-east of the development site at from 10 April 2017 to 19 April 2017. Construction The Interim Construction Noise Guideline (DECCW, 2009) (ICNG) outlines the process of establishing noise management levels (NMLs) to minimise construction noise impacts on sensitive receivers. The NML (Noise Affected) during standard construction hours at the nearest receivers (within the university), based on background noise levels, ranges from 49 dB LAeq(15min) to 54 dB LAeq(15min)). The Applicant has requested construction hours as follows: 7 am to 5:30 pm Monday to Friday 8 am to 4 pm Saturday No construction works on Sunday or NSW Public Holidays. Saturday hours are extended from those recommended by the ICNG (8 am to 1 pm) however, given the location of the site and the works within the site, in addition to the hours provided by Council as part of the earthworks approval, the Department supports the extension of construction hours on Saturdays. Construction noise is	 The Department has recommended a condition of consent requiring the Applicant: only undertake construction between 7 am to 5:30 pm Monday to Friday and 8 am to 4 pm Saturday undertake noisy works between specific times in accordance with the ICNG restrict arrival times of construction vehicles to construction hours implement 'respite periods' for works that generate noise with particularly annoying or intrusive characteristics operate plant and equipment in accordance with the established project specific noise limits outlined within the Macquarie University Arts Precinct - Noise and Vibration Impact Assessment for State Significant Development Application (2 Feb 2018).

Issue	Consideration	Recommendation
	 impact off the Macquarie University site as a result of the surrounding traffic noise. It should be noted however, that the university, including the Lotus Theatre and nearby childcare centre would remain operational during the 20-month construction period. The Applicant has indicated that there is potential for noise generated by construction activities to impact upon the surrounding facilities of the university. As such, the Applicant has proposed to locate stores, site offices and temporary buildings between the works and the most sensitive locations to provide some noise screening. Additionally, the Applicant has indicated that silencers be installed on noisy equipment and alternative reversing alarms be considered. Given the distance to surrounding buildings, construction vibration is not expected to be significant for the proposed works. In its submission, the EPA made the following recommendations to ensure minimal noise impacts upon off-site noise sensitive receivers: o construction-related works likely to be audible be undertaken during standard construction hours within the ICNG o intra-day respite periods be implemented for works identified in the ICNG as particularly annoying and intrusive o construction vehicles should not arrive outside of the approved construction hours agreed with the Applicant that intrusive movement alarms on construction vehicles be investigated and replaced where possible. In noting the recommendations of the EPA in conjunction with the approval granted by Council for the earthworks at the site (LDA2017/0223), the Department supported the mitigation measures of the Applicant as well as the recommendations for respite periods and movement alarms provided by the EPA. The Department acknowledges that a development within an established environment, i.e. an operational university, will likely result in some noise impacts and as such, has recommended conditions to ensure noise is mi	
	 Operation Typical office hours of operation of the proposed development would be from 8 am to 5:30 pm and teaching hours being 8 am to 10 pm. Mechanical 	

Issue	Consideration	Recommendation
Issue	 'Showcase Building', is proposed to operate 24 hours a day. In its assessment of operational noise, the Applicant considered the relevant provisions of the NSW Industrial Noise Policy (EPA, 2000) (INP). Australian Acoustical Consultants (AAAC) Guideline for Child Care Centre Acoustic Assessment. The Applicant's EIS provided project specific noise levels for the nearest affected on-campus locations. The EPA considered that the noise assessment considered only the noise impacts of the operation of the proposed development on-campus and did not include an assessment of potential operational noise impacts of the operation of the proposed development on-campus and did not include an assessment of potential operational noise impacts upon sensitive receivers off-campus. The EPA noted that as the mechanical ventilation system/air-conditioning system within the faculty showcase' building is anticipated to operate 24 hours per day and background noise monitoring was not undertaken at the most sensitive off-campus locations or that a night period background noise level at this receiver of 30 dBA be adopted. In response to concerns raised by the EPA, the Applicant established the anticipated noise levels at the closest off-campus sensitive receiver (BaptistCare Willandra Retirement Village) and indicated that night time and evening limits at this location, in accordance with the INP, would be 44 dB LAeq(15min) and 37 dB LAeq(15min) respectively. The Department noted the Applicant's commitments of the Applicant within the RIS. In considering the information presented and commitments of the Applicant within the RIS. In considering the information presented and commitments of the Applicant within the EIS and RtS as well as the comments from the EPA, the Department considers that the operational noise limits. As such, the Department has recommended specific off-site operational noise limits for the BaptistCare Willandra Retirement Village	

Issue	Consideration	Recommendation
	The Department concludes that noise impacts of the proposed development can be appropriately managed through the implementation of the commitments made by the Applicant and the recommended conditions of consent.	
Geotechnical Impacts	 The impacts of the proposed development upon the rail corridor were assessed within the geotechnical investigation prepared by JK Geotechnics and structural engineer Taylor Lauder Bersten. The Applicant indicated that additional support forms part of the refurbishment of both W6A and W6B and will be provided in limited locations as advised by the project's structural engineer, Taylor Lauder Bersten. These works will partly sit within the railway tunnel corridor's area of influence, and Sydney Trains has been consulted about the potential impacts. The Applicant indicated that a concurrence for the early works under clause 86 of the Infrastructure SEPP was ongoing. In its submission on the EIS, Sydney Trains requested final versions of plans in accordance with <i>Development near Rail Tunnels</i> in addition to recommending a number of conditions of consent. In the RtS, additional advice from both the geotechnical and structural engineers indicated that the proposed development would likely result in negligible and localised/minimal impacts upon the rail corridor and rail infrastructure with no negative impact upon the integrity of the rail corridor envisaged. The Department has considered the information provided by the Applicant in addition to the comments received from Sydney Trains. As some aspects of detailed design are yet to be finalised, the Department supports the recommendations of Sydney Trains and has recommended a number of conditions, the Department considers the impacts upon the rail corridor can be managed and minimised. 	 The Department recommended conditions of consent requiring: the Applicant submit copies of finalised plans to Sydney Trains for approval/certification joint dilapidation inspections of rail infrastructure and adjoining properties be undertaken at the instruction of Sydney Trains details of machinery used for excavation be provided to Sydney Trains the Applicant to engage an electrolysis expert to assess the potential for impacts of stray current upon the proposal consult with Sydney Trains regarding public liability insurance cover and/or a Bond/bank guarantee all excavations, shoring and piling works to be supervised by an appropriately experience geotechnical engineer no rock anchors/bolts be installed submit certified as-built drawings to Sydney Trains and Council prior to occupation.
Contamination	 A Preliminary Stage 1 Environmental Assessment was prepared by Environmental Investigation Services as part of the EIS. The following subsurface works were considered as the aspects that have the potential to encounter areas of soil contamination: new pile footings installed at building W6A new pile footings installed at building W6B excavations to approximately five metres for the proposed 'Showcase Building' The results of the Preliminary Stage 1 Environmental Assessment classified existing soils as general waste (non-putrescible) and concluded further contamination testing would not be required. 	 The Department has recommended conditions of consent requiring the Applicant: undertake works in accordance with Protection of the Environment Operations (Waste) Regulation 2014 consult with SafeWork NSW if any asbestos waste is to be handled and/or disposed of.

Issue	Consideration	Recommendation
	 In its submission on the EIS, the EPA raised the age of the structures identified for demolition and as a result, lead-based paints and asbestos containing materials may be encountered. EPA recommended the Applicant develop an unexpected finds protocol to detail procedures for managing unidentified asbestos and lead-based paint as well as any other potential contamination sources and that the Applicant satisfy the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 regarding asbestos waste, where required and SafeWork NSW be consulted if any asbestos waste is to be handled. The Department acknowledges that the potential risk of contamination at the site is low. Notwithstanding, the Department supports the recommended a condition of consent requiring the Applicant to undertake works in accordance with the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> and consult with SafeWork NSW if any asbestos waste is to be handled/disposed of. 	
Tree Removal	 An Arboricultural Impact Assessment was undertaken by Australian Tree Consultants. The assessment was provided with the EIS, however the consideration and assessment of tree removal formed part of the Council approval (LDA2017/0223. The assessment considered 120 trees within the boundary of the proposed works. Of these trees, 80 were identified for removal and 40 for retention. Additionally, the assessment provided a number of recommendations to protect the trees to be retained, including installation of site boundary fencing and specific tree protection controls. In considering the Applicant's assessment, the Department notes that the Applicant intends to retain trees where possible and will ensure appropriate protection is installed around these trees to avoid impacts of construction upon them. These measures are supported by the Department and it is noted that these measures form part of the Council approved DA (LDA2017/0223). Notwithstanding, the Department supports the recommendations within the Arboricultural Impact Assessment Report and has recommended a condition of consent requiring the implementation of tree protection controls for all trees that have not been approved for removal. 	The Department has recommended a condition of consent requiring the Applicant implement tree protection controls for all trees that have not been approved for removal.
Aboriginal Cultural Heritage	 Mary Dallas Consulting Archaeologists (MDCA) prepared a due diligence Aboriginal heritage assessment for the whole of the Macquarie University North Ryde campus in 2012. The assessment concluded that the site had no 	The Department has recommended a condition of consent requiring the Applicant cease works if any unexpected archaeological

Issue	Consideration	Recommendation
	 visible evidence of Aboriginal use, however areas of potential archaeological sensitivity were identified. The areas identified as part of this study are not within the proposed development footprint and as such, the Applicant considers that the potential for Aboriginal cultural heritage impacts as a result of the proposed development are negligible. The Department notes that the site has been substantially disturbed, with the university operating at the site since 1964. Given the findings of the previous study of the overall campus, the Department accepts the Applicant's conclusion regarding potential Aboriginal cultural heritage impacts of the proposed development. However, given that excavations will be required for the construction of the 'Showcase Building', in addition to potential new structural piles for the existing buildings, the Department considers that an unexpected finds protocol should be prepared. The Department also considers that works should cease on the site and relevant stakeholders consulted if any objects are found. 	relics are uncovered during the work and contact the OEH Heritage Division immediately.
Historic Heritage	 A Heritage Impact Statement was prepared by Tropman and Tropman Architects to assess the potential heritage impacts of the proposed development upon historic heritage. The nearest item of significance, listed on the RLEP 2014 is located approximately 250 metres north-east of the development site – the Macquarie University Ruins. The proposed development would be confined to the site presented within Figure 4 and impacts upon the listed heritage item are anticipated to be negligible. The Department supports the conclusions of the Applicant and considers that impacts upon the macquarie University Ruins as a result of the proposed development would be negligible. 	The Department considers no conditions or amendments are necessary.
Section 94 Contributions	 Development within MQU's North Ryde campus is subject to a Voluntary Planning Agreement (VPA) between MQU and Council (executed February 2013). In accordance with the terms of the VPA, the proposed development is exempt from monetary contributions as the proposed development is for the purposes of academic use, including research for non-commercial purposes. Council raised no comments regarding contributions. The Department is of the view that contributions for development within MQU are to be in accordance with the VPA executed in February 2013 and no further action is required. 	The Department considers no conditions or amendments are necessary.
5.2.4. Public Interest

The proposal is considered to be in the public interest as it would provide the following public benefits:

- additional investment in educational infrastructure within a highly accessible location
- growing the Macquarie Park health and education precinct
- provision of a world class cultural, education and research facility
- ensuring the State remains competitive in attracting students, staff and researchers in the tertiary education sector
- delivery of approximately 181 new construction jobs.

6. CONCLUSION

The Department has assessed the merits of the proposal taking into consideration the issues raised in all submissions as well as the Applicant's response, and is satisfied the impacts have been satisfactorily addressed by the proposal and through the Department's recommended conditions.

The proposed development is consistent with the objects of the EP&A Act (including ecologically sustainable development) and is consistent with the State's strategic planning objectives for the site as set out in the NSW Premier and State Priorities A Metropolis of Three Cities – the Greater Sydney Region Plan and the Northern District Plan as it will support education land uses associated with the Macquarie University and contribute to the Macquarie Park health and education precinct.

The Department also considers that the proposal would provide significant public benefits through the provision of a cultural, educational and research facility in an accessible location and economic benefits through the generation of approximately 181 construction jobs.

The Department's assessment concludes that the built form of the proposed development is acceptable and would not result in any significant adverse environmental or amenity impacts and is generally consistent with the scale and form of the existing development. Further, the proposed development would preserve the link to the establishment of the existing buildings by maintaining the facades and integrating the enhanced facilities with those existing structures.

The Department is satisfied that the Applicant has satisfactorily responded to the issues raised and recommends the approval of the SSD application of the MUAPP, subject to recommended conditions. The Department's recommended conditions of consent would ensure the construction and operation of the proposed development would not result in adverse environmental impacts upon the surrounding environment. The Department considers the development is in the public interest and should be approved.

7. RECOMMENDATION

For the purpose of section 4.38 of the *Environmental Planning and Assessment Act 1979*, It is recommended that the Executive Director, Priority Projects Assessments, as delegate for the Minister for Planning:

- a) consider the findings and recommendations of this report
- b) grant consent the SSD application (SSD 8388), subject to conditions
- c) sign the attached development consent at Appendix E.

Rebecca Sommer Senior Planner, Social and Other Infrastructure Assessments

Recommended by:

David Gibson Team Leader Social and Other Infrastructure Assessments

Decision

Approved by:

el 4/5/18

David Gainsford 4/5/(8 Executive Director Priority Projects Assessments as delegate of the Minister for Planning.

APPENDIX A RELEVANT SUPPORTING INFORMATION

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning's website as follows.

1. Environmental Impact Statement

http://majorprojects.planning.nsw.gov.au/?action=view_job&job_id=7894

2. Government and Agency Submissions

http://majorprojects.planning.nsw.gov.au/?action=view_job&job_id=7894

3. Applicant's Response to Submissions

http://majorprojects.planning.nsw.gov.au/?action=view_job&job_id=7894

4. Government and Agency Submissions

http://majorprojects.planning.nsw.gov.au/?action=view_job&job_id=7894

APPENDIX B CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENT(S) AND DCP(S)

Environmental Planning Instruments (EPIs)

To satisfy the requirements of section 4.15 of the EP&A Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the proposed development and have been taken into consideration in the environmental assessment of the proposed development.

Controls considered as part of the assessment of the proposed development are:

- State Environmental Planning Policy (State & Regional Development) 2011
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No. 55 Remediation of Land
- State Environmental Planning Policy No. 64 Advertising and Signage
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017; and
- Ryde Local Environmental Plan 2014.

State Environmental Planning Policy (State and Regional Development) 2011

The aims of this SEPP are to identify SSD and State significant infrastructure and confer the necessary functions to joint regional planning panels to determine development applications.

The proposal is considered to be SSD in accordance with section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it is development for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million, under clause 15 (educational establishments) of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011, as in force at the time of lodgement.

State Environmental Planning Policy (Infrastructure) 2007

The SEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

The development constitutes traffic generating development in accordance with clause 104 of the ISEPP and therefore must be referred to RMS for comment. The application was referred to RMS and TfNSW their comments are summarised in **Section 4.1.1** of this report.

The proposal is considered to be consistent with the ISEPP given the consultation and consideration of the comments raised has been undertaken in the Department's assessment in **Section 5** of this report.

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

SEPP 55 aims to provide a state-wide approach to the remediation of contaminated land. In particular, SEPP 55 aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment by specifying under what circumstances consent is required, specifying certain considerations for consent to carry out remediation work and requiring that remediation works undertaken meet certain standards.

The proposed development does not include demolition and earthworks which have been undertaken as part of an approval from Council (LDA2017/0223).

The Department considers that, in accordance with clause 7 of SEPP 55, the development site would be suitable for its intended purposes. Notwithstanding, the Department has included a

condition recommending procedures and protocols be developed to deal with any unexpected finds.

Ryde Local Environmental Plan (RLEP) 2014

Consideration of the relevant controls contained within RLEP 2014 is provided below in Table 1.

City of RLEP 2014	Department Comment/Assessment
Clause 2.1 Land Use Zones	The site is zoned B4 Mixed Use. The proposed development, for the purpose of an educational establishment, is permitted with consent in this zone.
Clause 4.3 Building height	The height development standards restrict any proposed development, however do not apply to the land of the proposed development either under the Ryde LEP 2014 or the approved Part 3A Concept Plan. The Department considers this clause has been met.
Clause 4.4 Floor Space Ratio	The FSR development standards restrict any proposed development, however do not apply to the land of the proposed development either under the Ryde LEP 2014 or the approved Part 3A Concept Plan. The Department considers this clause has been met.
Clause 5.10 Heritage Conservation	The submitted Heritage Impact Statement satisfactorily considers and assesses the impact of the proposed development. The proposal has been designed to maintain the significance of the existing heritage items the Macquarie University relics. The Department considers this clause has been met.
Clause 6.2 Earthworks	The earthworks associated with the proposed development include the potential to improve footings of buildings to facilitate the refurbishments. A CEMP would be prepared to ensure management and minimisation of impacts prior of construction prior to the commencement of works. The Department considers this clause has been met.
Clause 6.4 Stormwater Management	Stormwater and flooding associated with the proposed development was addressed within the Applicant's EIS. Additionally, the Applicant has provided a commitment to undertake stormwater harvesting. The proposal of the Applicant goes to addressing the impacts associated with the removal of permeable surfaces to facilitate the construction of the Showcase Building. The Department considers this clause has been satisfied.
Clause 7.9 (3) Information and education facilities (Car parking)	The proposal includes no additional car parking spaces as the staff and student numbers are not anticipated to change as a result of the proposed development. The Department considers the requirements of this clause to not be applicable.
Clause 7.20 Development requiring or authorising preparation of a development control plan	A Development Control Plan (DCP) is not required to be prepared if the consent authority is satisfied that such a plan would be unreasonable or unnecessary in the circumstances. The proposed development includes the retention of the structures of two existing buildings on an established university site. These buildings provide the extent to which the site can be developed. The Department is satisfied that environmental impacts have been addressed, and that a DCP is considered unreasonable and unnecessary in this case and the site is the subject of a concept plan, which addresses the matters that a DCP would address.

Table 1: Consideration of RLEP 2014

APPENDIX C CONSISTENCY WITH CONCEPT PLAN APPROVAL

Cor	ncept Plan Approval R	equirement		Department Comment/ Assessment
 A1 Development Description (1) Except as modified by this approval, Concept Plan approval is granted only to the carrying out of development solely within the Concept Plan area as described in the document titled "Macquarie University State Environmental Planning Policy (SEPP) amendment and Concept Plan" dated April 2008, as amended by the "Macquarie University Concept Plan and SEPP (Major Projects) Amendment Preferred Project Report" dated March 2009, prepared by JBA Planning Consultants and Cox Richardson Architects including: a) The provision of an additional 400,000m² of commercial GFA and associated parking outside of the Academic Core. b) The Provision of an additional 61,200m² of academic GFA within the Academic Core. 			Assessment The proposed development would result in an additional 1,298 sqm to the existing floor areas of W6A and W6B as well as 4,456 sqm floor area for the 'Showcase Building'. The additional floorspace is within the additional 61,200 sqm currently approved for the academic core. It is also well within the proposed 157,000 sqm of academic floorspace as requested as part of the modification to the	
	Housing Precincts for L Infrastructure upgradin as required, and	University purposes of	nly.	concept plan. As noted, this modification request is currently being considered by the
e)	Rationalisation of Unive	ersity car parking loca	itions.	Department.
 (1) follo ther a) (2) this Par prev (3) ther of th 	In accordance with Sec re is an approved Conce ne Act by Council, must	generally be in accord entation (including an or State Environmen and Concept Plan" of quarie University Con ndment Preferred Pa by JBA Planning C rovided by the Depar in Schedule 2, Part B tents set out in Sched nsistencies between the plans and docume difications of this con- tion 75P(2)(a) of the B ept Plan, any approva	dance with the y appendices tal Planning Policy lated April 2008, as cept Plan and SEPP roject Report" dated Consultants and Cox tment's modifications and the Proponent's ule 3. the modifications of entation described in cept approval EP and A Act, where I given under Part 4	The Department considers the proposed development has been designed in accordance with the applicable requirements of the documentation.
The follo	A3 Gross Floor Area The maximum gross floor area for each precinct is detailed in the following table: Precinct Maximum Gross Floor Area (m ²)		is detailed in the	The proposed development would result in an additional 1,298 sqm to the existing floor areas of W6A and W6B as well as 4,456 sqm floor
Pr	ecinct D	136,000		area for the 'Showcase
Pr	ecinct E (Station orth)	90,000		Building'.
	ecinct E (Station buth)	85,000		A balance of 55,446 m ² remains within the Academic

Concept Plan Approval R	tequirement		Department Comment/ Assessment
Precinct E (Triangle South of University Avenue)	155,000		Core.
Precinct F	70,000		
Academic Core	61,200		
A4 Consolidated Concept Plan A consolidated version of the Concept Plan, combining the approved components of the Environmental Assessment, Preferred Project Report, Statement of Commitments, and modifications required by this approval, is to be submitted to the Department within 3 months of the Concept Plan approval.			N/A
A5 Approval authority In the event that the Counc applications on the site, an Commitments to be submit shall be instead be require	cil is the consent authors by reports specified in tted to the Director Ge	the Statement of eneral for approval,	N/A
A6 Approvals by the Dire If any of the terms of the ap made between the propone all parties to the agreemen reached within 3 months of issue can be referred to the details of the discussions a for the Director General to	ector General pproval specify that ar ent and a government at are to act reasonabl f the commencement e Director General for and the dispute are to	n agreement is to be agency or council, y. If no agreement is of negotiations, the a decision. Full	N/A
A7 Lapsing of Approval Approval of the Concept Plan shall lapse 5 years after the determination date in Part A of Schedule 1, unless an application is submitted to carry out a development for which concept approval has been given.			The Concept Plan continues to be valid as the lodgement of the Australian Hearing Hub application was submitted within five years of the approval.
B1 Car Parking (1) Car parking for commercial uses shall not exceed a maximum rate of 1 space per 80m ² of gross floor area across Precincts E and F. Note: variations to the car parking rates could be considered only where it can be demonstrated with certainty that upon completion of the full development of Precincts E and F in accordance with the approved Concept Plan, compliance is achieved with the maximum prescribed car parking rate.			No change to operational parking proposed. Temporary loss of parking resulting from the construction laydown area within the carpark immediately south of the development site. Centralised parking does not
(2) The maximum car park and is distributed for each	precinct as follows:	s is 10,800 spaces	form part of this application.
a) Precincts A, G and H (total) – 4,095 spaces		
b) Precinct B – 1,000 spa	ICES		
c) Precinct D – 705 spaces			
c) Precinct D - 705 space	es		
 c) Precinct D – 705 space d) Precinct E and F (total) 			
,) – 5,000 spaces mmercial buildings wit in basements (part of the site) and generall above. The design of rchitectural treatment	which may be above y contained within any above ground	

Co	ncept Plan Approval Requirement	Department Comment/ Assessment
of t gro	site shall be consolidated into four carparks around the perimeter the Academic Core (Precincts A and B). The design of any above bund carparks shall include architectural treatment of the vations to reduce their visual impact and dominance.	
(1) aca (2) und ead Ge of t	Transport and Pedestrian Management A 40% non-car mode share target shall be adopted for the ademic and commercial uses on the site. A travel survey of the academic and commercial uses shall be dertaken every five years and identify the mode share achieved for ch transport type. A report shall be submitted to the Director neral of the Department of Planning and shall include a summary the survey methodology and results and recommendations to nieve the target of 40% non-car mode share target.	The Applicant has identified that the 40% mode share split to non-car mode was achieved once the Macquarie University railway station became operational. This was confirmed within the Macquarie University <i>Sustainability Report</i> (2014) and <i>Travel Demand Survey</i> 2014.
(1) inte Uni	Road works The Concept Plan approval includes the following road ersection upgrades identified within Section 4.4 of the "Macquarie iversity Concept Plan TMAP" dated March 2009 and prepared by rdno Eppell Olsen:	The Applicant has been engaged in ongoing discussions with the relevant road authorities to resolve the outstanding road work
a)	Epping Road / Balaclava Road intersection – additional through lane on Balaclava Road (south) and additional right turn lane on Balaclava Road (north)	upgrades. As a result of these discussions, the Applicant has made offers to enter into Planning
b)	Epping Road / Herring Road intersection – additional through lane on Herring Road (south), additional right turn lane on Epping Road (east), two through lanes and two right turn lanes on Herring Road (north) and adjusted signal phasing.	Agreements with the Department and Council for the outstanding road works that have been identified as
c)	Waterloo Road / Herring Road intersection – left/through lane on Waterloo Road (east) and adjusted signal phasing.	required from the additional transport assessments undertaken subsequent to
d)	Waterloo Road / Culloden Road intersection – realign Gymnasium Road to make fourth leg at roundabout and provide two lane circulating roundabout.	the concept plan approval
e)	Talavera Road / Christie Road intersection – additional left turn slip lane, though lane/right turn lane on Talavera Road (east), departure lane becomes full traffic lane on Talavera Road (west) and adjusted signal phasing.	
f)	Talavera Road / Herring Road intersection – adjusted signal phasing.	
agr the As abo inte Aut	Within 3 months of the date of this approval, or as otherwise reed to by the Department, indicative timing and staging plans of above intersection works shall be submitted to the Department. part of any application that generates the need to undertake the ove intersection works, detailed design plans for the relevant ersection upgrade(s) and a commitment to enter into a Works thorisation Deed (or similar type of agreement) with the RTA, shall submitted to the Department.	
(1) be Cor (2)	Design Excellence and Urban Design Guidelines The Design Excellence Strategy and Urban Design Guidelines to prepared (as referred to on page 5 of the Statement of mmitments) are to have regard to Macquarie Park Corridor DCP. The Design Excellence Strategy and Urban Design Guidelines to be prepared in consultation with Council and include provision	The Applicant has submitted the final consolidated Design Excellence Strategy and Urban Design Guidelines as part of the modification application (MP 06_0016 MOD 1). These guidelines

Concept Plan Approval Requirement	Department Comment/ Assessment
 for the accommodation of car parking in the basement of new buildings, including details in relation to the achievement of activated frontages, and details related to the provision of bicycle paths and associated facilities. (3) The Design Excellence Strategy and Urban Design Guidelines for Precinct E are to specifically address pedestrian crossing from the Macquarie Park railway station to the Academic Core, creating active frontages around the station particularly after hours, and integration of station services buildings into design of new buildings around the station plaza. (4) The Design Excellence Strategy and Urban Design Guidelines are to indicate the extent of setbacks required by the RTA. Such guidelines to be prepared in liaison with the /RTA, having regard to the micro simulation modelling and the extent of setback required to achieve additional capacity improvements and bus priority. (5) The Design Excellence Strategy and Urban Design Guidelines are to be submitted for approval by the Department of Planning prior to the or with the first application for new building works within each precinct. 	ratify the changes to layout, floorspace and heights for Precincts D and E adopted in the in Ryde LEP as a result of the planning for the Herring Road Priority Precinct. The site has minimal controls as it is an existing precinct. The new building and alterations and additions are generally consistent with the guideline and the objectives identified for the site and surrounding area.
 B5 Setbacks (1) An amendment to the Concept Plan is to be prepared in consultation with Council and the RTA, and approved by the Department of Planning, which makes provision for adequate setbacks along Balaclava Road (from Epping Road to University Avenue) and Waterloo Road (from Herring Road to Research Park Drive), to facilitate additional capacity improvements and bus priority, prior to or with the lodgement of the first application for new building works within Precinct E. (2) The setbacks referred to in (1) above to form part of the agreements referred to in C15 of this approval. 	The Applicant has undertaken a micro- simulation model that indicates that setbacks would not be required. Notwithstanding, MQU has committed to regular traffic counts to monitor traffic performance of the University Avenue intersection at Balaclava Road, however notes that this is still being negotiated with RMS and has not yet approved by the Department. The proposed development does not form building works within Precinct E and as such, this condition is not required to be satisfied at this
 C1 Staging of Development (1) The Proponent shall demonstrate with each application for building works that the proposed development represents the orderly and coordinated development such that: a) It may be serviced by existing infrastructure, by infrastructure approved by this Concept Plan, or is capable of being serviced; and b) Access for vehicles and pedestrians is available and can be made available. 	time. Access to the proposed development was considered within Section 5.2.1 . The Department considers that the proposed development can be serviced by existing infrastructure and will provide equitable access to the buildings with the implementation of the recommended conditions.

Concept Plan Approval Requirement	Department Comment/ Assessment
C2 Urban Design Details (1) Future applications for increased height of buildings to the north of Macquarie University Station shall demonstrate by way of sections and elevations, the relationship of the proposed increase in building height with that approved by this Concept Plan.	N/A
(2) Development within Station North (Precinct E) is to be set back 43 metres from the centre line of Waterloo Road. The Urban Design guidelines for Precinct E shall demonstrate by way of Sections and elevations how this setback is to be achieved, the proposal's relationship with the setbacks approved by this approval, as well as provision for activated frontages, and assessment of any adverse impacts including but not necessarily restricted to, visual impact and overshadowing.	
C3 Landscaping (1) The Landscape Management Plan referred to on Page 4 of the Statement of Commitments is to be integrated with the Design Excellence Strategy and Urban Design Guidelines referred to in B4 of this approval and is to demonstrate:	The Design Excellence Strategy and Urban Design Guidelines includes a Landscape Management Plan. The proposal is generally consistent with the
a) Maintenance of the bush land setting of the site.b) Achievement of the landscape principles articulated in the Statement of Commitments, and as shown in Figure 26 to the Environmental Assessment Report.	principles of the Landscape Management Plan.
(2) The Landscape Management Plan is to be prepared for each precinct, and submitted for approval prior to or with the first application for new building works within each precinct.	
C4 Riparian Zone, Flooding and Stormwater (1) The Stormwater Management Plan and other various plans referred to on page 6 the Statement of Commitments are to be:	N/A
a) Integrated with the Vegetation Management Plan and Threatened Species Plan referred to on page 4 of the revised Statement of Commitments.	
 b) Revised in accordance with any modifications undertaken as part of this approval. (2) The Stormwater Management Plan is to be submitted for approval with each application for new building works, as relevant. 	
C5 Bushfire Protection (1) A Bushfire Management Plan is to be prepared in accordance with the requirements of ' <i>Planning</i> for <i>Bushfire Protection 2006</i> ' (NSW Rural Fire Service), particularly in relation to Precinct B. The Bush Management Plan has to be prepared to the satisfaction of the NSW Rural Fire Service and submitted with each application for building works, as relevant.	N/A
(2) Uses constituting 'Special Fire Protection Purposes' as defined in ' <i>Planning for Bushfire Protection 2006</i> ' are to be undertaken in consultation with the NSW Rural Fire Service.	
C6 Flora and Fauna (1) The Vegetation Management Plans, the Threatened Species Plan, and the Weed Management Plan referred to on page 4 of the Statement of Commitments shall detail responsibility for each action, and shall include on going measures.	N/A The site is not within an area subject to threatened species of communities and the proposed development does not include the removal of
(2) A copy of the Plans shall be submitted with each application for	

Concept Plan Approval Requirement	Department Comment/ Assessment
building works.	vegetation.
(3) All future development is to be undertaken in accordance with the 'Guidelines for Development Adjoining Department Of Environment and Conservation Land' by DECC dated August 2006.	
C7 Environmentally Sustainable Development (1) The requirements in respect of environmentally sustainable development as set out at page 1 of the Statement of Commitments is to be submitted for approval with each new application for building works on the site, as relevant.	Th Applicant provided an ESD report for the proposed development. The Department's consideration of ESD commitments is presented within Section 3.6 and within the Department's recommended conditions of consent.
C8 Environmental Management and Contamination (1) The hazardous material audit, and a targeted Phase 2 intrusive contamination assessment referred to on page 2 of the Statement of Commitments is to be prepared be submitted for approval with each application for building works based on an assessment on a precinct by precinct basis.	The Department's consideration of the Applicant's contamination assessment is provided within Section 5.2.3 . The department acknowledges the risk of contamination is low, however has recommended conditions of consent to ensure that potentially contaminated waste is appropriately managed and disposed.
C9 Heritage / Archaeology (1) The Aboriginal Archaeology Strategy referred to on page 5 of the Statement of Commitments is to be prepared in liaison with the Metropolitan Local Aboriginal Land Council, and is to be submitted for approval prior to or with the first application for new building works within each precinct.	The Strategy was approved by the Department on 14 December 2012 and was provided by the Applicant as part of the application.
 C10 Access, Traffic, Transport and Parking (1) The University Travel Plan (UTP) referred to at page 1 of the Statement of Commitments is to be prepared in liaison with Council and the RTA, and approved by the Department of Planning, prior to or with the first submission of the first application for building works for academic/educational uses within the Academic Core. (2) The detailed micro-simulation model referred to at page 2 of the Statement of Commitments is to be prepared in liaison with Council, the RTA and the Ministry of Transport and submitted to the Department of Planning for approval prior to or with the submission of the first application for new commercial floor space on the site. (3) The micro simulation modelling is to be prepared on the basis that there will be no additional access to the M2 Hills Motorway. 	The Applicant has undertaken a micro- simulation model that indicates that setbacks would not be required. Notwithstanding, MQU has committed to regular traffic counts to monitor traffic performance of the University Avenue intersection at Balaclava Road, however notes that this is still being negotiated with RMS and has not yet approved by the Department.
 (4) The micro simulation modelling is to form the basis for discussion in respect of the agreement between the RTA and the Proponent referred to at C15 below. (5) A Workplace Travel Plan referred to at page 2 of the Statement of Commitments be prepared for each commercial development and submitted for approval prior to the occupation of that commercial 	The proposed development does not form building works within Precinct E and as such, this condition is not required to be satisfied at this time.

Concept Plan Approval Requirement	Department Comment/ Assessment
development.	
C11 Child Care Strategy (1) The Child Care Strategy referred to on page 7 of the revised Statement of Commitments is to be prepared in consultation with Council, and submitted for approval prior to or with the first application for new floor space.	The Strategy was conditionally approved by the Department on 14 December 2012 and was subsequently finalised on 7 November 2013.
C12 Transitional Matters (Triangle South of University Avenue) (1) As part of any future applications associated with the Cochlear development, the at-grade parking is to be relocated elsewhere and replaced with open space.	N/A
C13 Construction Staging	The Applicant provided a
 (1) A Staging Plan including details of proposed bulk earth works must be submitted for approval with the first application for new building works within each precinct. (2) The Staging plan is also to address those matters identified in 	Preliminary Construction Management Plan and Erosion and Sedimentation Plan as part of its application.
 (1) A Construction Management Plan, an Erosion and Sedimentation Plan, and a report detailing the existing geological 	The Department reviewed this documentation and provided requirements within the recommended conditions
conditions of each development site(within the relevant precinct), and any potential geological impacts of development consistent with the Concept Plan must be submitted with any application for the development of the particular precinct or site and is to be integrated with any Vegetation Management Plan and Threatened Species Management Plan referred to on page 3 and 4 of the revised Statement of Commitments; and integrated with the Staging Plan referred to in C1 of this approval.	of consent that a final Construction Environmental Management Plan and that includes all finalised erosion and sediment controls, be prepared for the proposed development.
C14 Utilities (1) The following plans are to be prepared and approved by the relevant agencies prior to the submission of the first application for building works:	N/A
a) A detailed water supply infrastructure needs analysis is to be undertaken as indicated at page 5 of the Statement of Commitments.	
b) A detailed service master plan is to be prepared.	
c) The water supply needs analysis and detailed service master plan to be prepared to the satisfaction of the relevant agency.	
(2) All electricity and other relevant services shall be accommodated underground, where ecological or landscape outcomes are not compromised.	
C15 Agency and Council Agreements (1) An agreement is to be made with the RTA for relevant road and intersection works prior to or with the first application for new commercial floor space on the site.	The Applicant has indicated that the status of the VPAs is as follows: • MQU are currently
(2) The agreement referred to in (1) above is to provide details on the staging for the road based infrastructure provision outlined in Condition B3(1) as well as the construction of missing cycleway connections on Epping Road and details of appropriate bus priority measures to be implemented throughout the University.	 responding to the draft VPA from the Department MQU are awaiting a response form Council. As stated within Section 5.2.3 a VPA was executed
(3) Proposed road works/significant intersections modifications along	between Council and MQU

Concept Plan Approval Requirement	Department Comment/ Assessment
the classified road network and local street network, as identified within the agreement referred to in (1) above, are to be designed to meet the RTA standards and endorsed by a suitably qualified and chartered engineer, and approved by the Department of Planning.	regarding contributions.
(4) The agreement referred to in (1) above is to include provision for a Works Authorisation Deed for any works referred to in the agreement as may be required by the RTA. The Proponent to be responsible for all public utility adjustment/relocation works and all works/regulatory signposts associated with the proposed development shall be at no cost to the RTA.	
(5) An Agreement is to be made with Council for the provision of development contributions and/or agreed works in kind required for the development of the site, prior to, or with the first application for new floor space on the site".	

APPENDIX D GLOSSARY

Ecologically Sustainable Development can be achieved through the implementation of:

- (a) the precautionary principle namely, 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. In the application of the precautionary principle, public and private decisions should be guided by:
 - (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
 - (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
 - *(i)* polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
 - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.(CI.7(4) Schedule 2 of the Regulation)

Objects of the Act

- (a) to encourage:
 - (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
 - (ii) the promotion and co-ordination of the orderly and economic use and development of land,
 - (iii) the protection, provision and co-ordination of communication and utility services,
 - (iv) the provision of land for public purposes,
 - (v) the provision and co-ordination of community services and facilities, and
 - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
 - (vii) ecologically sustainable development, and
 - (viii) the provision and maintenance of affordable housing, and
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

Section 79C Evaluation

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

- (a) the provisions of:
 - (i) any environmental planning instrument, and

- (ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
- (iii) any development control plan, and
- (iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and
- (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and
- (v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),

that apply to the land to which the development application relates,

- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.
- **Note.** See section 75P(2)(a) for circumstances in which determination of development application to be generally consistent with approved concept plan for a project under Part 3A.
- **Note.** The consent authority is not required to take into consideration the likely impact of the development on biodiversity values if:
 - (a) the development is to be carried out on biodiversity certified land (within the meaning of Part 7AA of the <u>Threatened Species Conservation Act 1995</u>), or
 - (b) a biobanking statement has been issued in respect of the development under Part 7A of the <u>Threatened</u> <u>Species Conservation Act 1995</u>.

APPENDIX E RECOMMENDED CONDITIONS OF CONSENT