

Bioresources Facility Building, Newcastle University

State Significant
Development Assessmen
(SSD 8937)



February 2019

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Cover photo

Proposed building as viewed from the north east (Source SRtS Landscaping Report)

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Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AHD	Australian Height Datum
BCA	Building Code of Australia
CIV	Capital Investment Value
CIP	Community Involvement Plan
Consent	Development Consent
Council	The City of Newcastle
Department	Department of Planning and Environment
DPI	Department of Primary industries
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
GANSW	Government Architect NSW
GFA	Gross Floor Area
ICNG	Interim Construction Noise Guideline
LEP	Local Environmental Plan
Minister	Minister for Planning
NDCP 2012	Newcastle Development Control Plan 2012
NLEP 2012	Newcastle Local Environmental Plan 2012
OEH	Office of Environment and Heritage
RFS	Rural Fire Service
RMS	Roads and Maritime Services
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy

SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SRtS	Supplementary Response to Submissions
SSD	State Significant Development
SSI	State Significant Infrastructure
TfNSW	Transport for NSW
TIA	Transport Impact Assessment



This report provides an assessment of a State significant development (SSD) application for a new Bioresources Facility Building within the Callaghan Campus of the University of Newcastle (SSD 8937). The Applicant is The University of Newcastle and the proposal is located within the City of Newcastle local government area (LGA).

The proposal seeks approval for the construction and operation of a new three storey building for research and education purposes. The proposal also includes associated site excavation and preparation works, landscaping and infrastructure works.

The proposal has a Capital Investment Value (CIV) of \$31.7 million and would generate 63 construction jobs. The proposal is SSD under clause 15 of Schedule 1 of the *State and Environmental Planning Policy (State and Regional Development) 2011*, as it is development for the purpose of a tertiary institution with a CIV of more than \$30 million. Therefore, the Minister for Planning is the consent authority.

The application was publicly exhibited between 21 June 2018 and 18 July 2018. The Department of Planning and Environment (the Department) received a total of seven submissions, all from public authorities. No public submissions were received. An additional three submissions from public authorities were received in response to the Applicant's Response to Submissions (RtS), which was received on 24 September 2018. The key issues raised in the submissions include developer contributions and acoustic impacts.

The Department has considered the above issues in its assessment, along with urban design and landscaping impacts. The Department has considered the merits of the proposal in accordance with relevant matters under Section 4.15(1), the objects of the *Environmental Planning and Assessment Act 1979*, the principles of Ecologically Sustainable Development, and issues raised in all submissions as well as the Applicant's response to these.

The Department's assessment concludes that the proposed scale and design of the building is appropriate and would make a positive contribution to the urban design of the campus. Subject to the provision of three additional canopy trees and measures to ensure retention of trees where possible, the Department is also satisfied that landscaping would be acceptable and would provide an appropriate setting for the building.

The Department considers that noise and vibration impacts can be satisfactorily mitigated during construction and operation, subject to the use of standard construction hours, the preparation and implementation of a Construction Noise and Vibration Management Plan that has been prepared in consultation with neighbours, and development of a work program to ensure construction works would minimise disruptions to sensitive receivers.

The Applicant has sought an exemption to the payment of development contributions. The Department considers that as there is no increase in students or staff proposed as part of the development and the fact that the University is a not for profit organisation that provides a significant social benefit to the wider community, contributions should not be applied in this case. The proposal would not place increased demand on Council's infrastructure.

The development would deliver educational infrastructure facilities to address the needs of Newcastle and the Hunter Region. The facilities provide further investment in social infrastructure and supports a total of 63 construction jobs. The Department is satisfied that the subject site is suitable for the proposal. The Department concludes the proposal is in the public interest and recommends that the application be approved subject to conditions.



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This report provides an assessment of a State significant development (SSD) application for a new Bioresouces Facility Building at the University of Newcastle, Callaghan Campus (Figure 1) (SSD 8937).

The proposal seeks approval for a new three storey building (including plant level) and use of the building for education and research purposes.

The application has been lodged by the University of Newcastle (the Applicant). The site is located within the City of Newcastle local government area (LGA).

1.1 Site description

Newcastle University's main campus at Callaghan is twelve kilometres north-west of the Newcastle central business district. The University campus covers an area of approximately 140 hectares and has been developed progressively since its inception in 1965, with the campus now containing numerous buildings of varying architectural styles and sizes as well as expansive open space and bushland areas. The campus has a current student population of approximately 27,000.

The development site the subject of this application, is known as 8 University Drive, Callaghan (or lot 1 DP 1188100), and is located on the western edge of the campus with frontage to the University Ring Road within the campus, and beyond that, the Newcastle Inner City Bypass (see **Figure 1**).

The site slopes from the south-east to the north-west. Currently on the site are four glasshouses, a shade house, and general-purpose building. These will be demolished or relocated elsewhere on the campus under a separate Part 5 REF approval. An existing carpark and a number of small storage buildings in the southern part of the site will be retained. A number of trees are located on the southern and eastern edges of the site. The location of the site and site photos are provided in **Figures 2** to **7**.

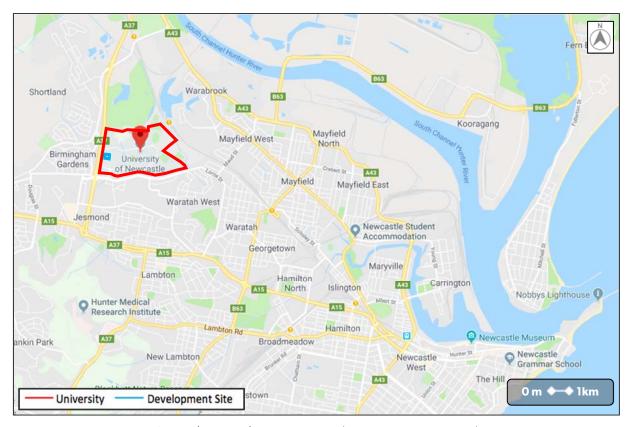


Figure 1 | Regional/Local context map (Base source: Google Maps)



Figure 2 | Site Location (Base source: Google Maps)



Figure 3 | Aerial view of site (Base source: SixMaps)



Figure 4 | Aerial view of site from the west (Base source: Google Maps)



Figure 5 | Site viewed from the south west (Source: Google Maps/streetview)



Figure 6 | Site viewed from the north west (Source: Google Maps/streetview)



Figure 7 | site viewed from the south east (Source: EIS)

1.2 Surrounding development

Within the University Campus, the site is adjoined by Ring Road to the west, and other university buildings to the north, east and south. These include the Medical Sciences Building to the north (**Figure 8**), Biological Sciences and Basden Theatre to the east (**Figure 9**), Science Building and Chemistry Building to the south (**Figure 10**).

Outside of the Campus to the west, is the Newcastle Inner City Bypass, beyond which is the residential suburb of Birmingham Gardens, characterised predominantly by free standing dwelling houses, interspersed by some multi-unit housing developments.



Figure 8 | Medical Sciences Buildings (Source: Google Maps/streetview)



Figure 9 | Basden Theatre (Source: EIS)



Figure 10 | Chemistry and Science Buildings (Source: Google Maps/streetview)



The key components and features of the proposal (as refined in the Response to Submissions) are provided in **Table 1** and are shown in **Figures 11** to **15**.

Table 1 | Main components of the project

Aspect	Description
Project Summary	Construction of a university building known as the Bioresources Facility and use for education and research purposes
Demolition and Earthworks	 No demolition proposed as part of this application. Existing structures will be removed or relocated under separate Part 5 REF approval Excavation (up to 4m) and fill (up to 1m) to create a level building platform
Built form	 A three storey building including enclosed roof plant level Building height (incl. parapet) 15m (RL 38.065) plus 3.1m high ventilation stacks Building is contemporary in design, with simple ground and plant levels setback from the building line of the first floor feature level. The first floor incorporates a reflective glazed façade that warps and bulges A small single storey free standing mechanical plant enclosure is also proposed
Gross floor area (GFA)	to the south of the main building Total GFA of 3,500sqm
Uses	Educational facility for animal research, including:
	 Entry, Administration, circulation and office spaces Animal holding and procedure spaces Research and breeding animal facilities Research sample freezer farm Loading dock, plant room, and building services areas Storage and waste management areas
Access	 Vehicular access to loading dock from existing ring road and service road to the north of the site No changes to existing internal roadways or access arrangements in the vicinity of the site
Car parking	No changes to existing car parking on the site

Bicycle parking	No bicycle parking provided in the building Bicycle parking is provided in existing campus 'Bike Hubs' which include secure storage racks, lockers and showers for use by students and staff	
Landscaping	 New entry pathways, sculptural timber benches and new plantings of grass trees, shrubs and groundcovers Removal of 19 trees and retention of 14 existing trees 	
Hours of operation	Core teaching hours are 8am to 9pm Monday to Friday Dilling till 24th of the first of the	
	Building will be accessible 24 hours for care of animals (rats/mice)	
Signage	No signage details provided as part of this application	
Population	No change to student or staff numbers	
Jobs	No change to operational jobs	
	• 63 construction jobs	
CIV	• \$31,700,000	
Construction	Construction over a two year period with no staging	
	Construction hours generally would be:	
	o Monday to Friday 7am to 6pm	
	o Saturdays 8am to 1pm	
	o No work on Sundays or public holidays	
	Some construction during non-standard hours may be required	

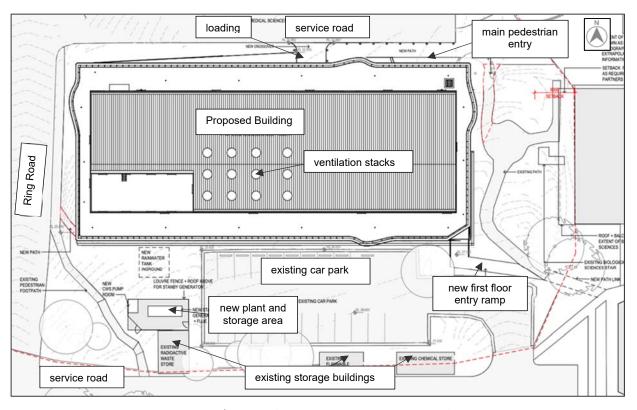


Figure 11 | Site Plan (base source: RtS Architectural Plans)



Figure 12 | Proposed south-western corner of the building as viewed from the Ring Road (Base source: SRtS Landscaping Report)



Figure 13 | Proposed north-western corner building as viewed from the Ring Road (Base source: SRtS Landscaping Report)

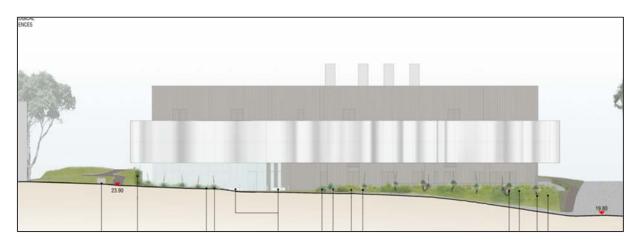


Figure 14 | Southern Elevation (Base source: SRtS Landscaping Report)

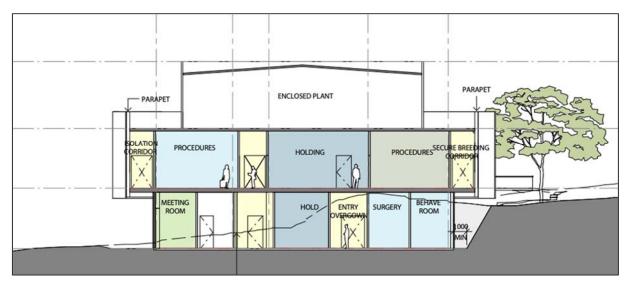


Figure 15 | North-south cross section (Base source: Architectural Plans)

3. Strategic Context

The Applicant states the new facility will be a foundational piece of research infrastructure for the University and will integrate into the existing Science Technology Engineering Mathematics and Medicine Precinct in line with the Universities Strategic Plan ('New Futures'). The Strategic Plan aims to ensure the University of Newcastle delivers outstanding education, research and innovation outcomes, and the Bioresources Facility is required to allow the University to continue to deliver world leading biomedical and biological research in facilities that support bioresource-based research. The proposed development is needed to provide technical and functional capability beyond that of existing facilities in response to emerging trends in biomedical research, which will assist tertiary students to reach their full potential in their biomedical field.

The proposal would strengthen the University's role in contributing to the growth of Newcastle and the Hunter Region, and more broadly the NSW economy.

The Department considers that the proposal is appropriate for the site given:

- the Hunter Regional Plan 2036, which recognises that enhancing specialist centres such as the University of Newcastle will expand the regional economy, and support more jobs close to where people live and would contribute to the goal of ensuring the Hunter remains Australia's leading regional economy.
- the Greater Newcastle Metropolitan Plan 2036, which recognises that the growth of the University is integral to achieving key goals of creating a workforce skilled and ready for the new economy, and to attaching new business and institutions to Greater Newcastle. The Metropolitan Plan seeks to facilitate the development of further research institutions within the Callaghan campus of the University.
- the Future Transport 2056 Strategy, as it does not provide additional on-site parking and the University is well serviced by public transport and provides facilities to support active transport options, and encourages the use of accessible public transport options.
- it would provide direct investment in the region of approximately \$31.7 million, which would support 63 construction jobs.



4.1 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 has a CIV in excess of \$30 million (\$31.7 million)) and is for the purpose of a tertiary institution under clause 15 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

The Minister is the consent authority under section 4.5 of the EP&A Act.

In accordance with the then Minister for Planning's delegation to determine SSD applications, signed on 11 October 2017, the Executive Director, Priority Projects may determine this 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.

4.2 Permissibility

The site is identified as being located within the SP2 Infrastructure (Educational Establishment) under Newcastle Local Environmental Plan (NLEP) 2012. The proposed building is defined as an educational establishment and is permissible with consent within the zone. Therefore, the Minister for Planning or a delegate may determine the carrying out of the development.

4.3 Mandatory matters for consideration

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 (EPI) 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 project and that have been taken into account in the assessment of the project.

The Department has undertaken a detailed assessment of these EPIs in **Appendix B** and is satisfied the application is consistent with the requirements of the EPIs.

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**.

Table 2 | Response to the objects of section 1.3 of the EP&A Act

Object	ts of the EP&A Act	Consideration
(a)	to promote the social and economic welfare of the community and a better environment	The development would ensure the proper management and development of suitably zoned
	by the proper management, development	management and development of suitably zoned

	and conservation of the State's natural and other resources	land for the social welfare of the community and State.
(b)	to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes measures to deliver ecologically sustainable development as described below.
(c)	to promote the orderly and economic use and development of land,	The development would meet the objectives of the zone and deliver improved tertiary infrastructure for the State. The development would economically serve the community through construction jobs and infrastructure investment.
(d)	to promote the delivery and maintenance of affordable housing,	Not applicable.
(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.
(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.
(g)	to promote good design and amenity of the built environment,	The proposal has been reviewed by the Government Architect NSW (GANSW) throughout the assessment of the proposed development. The Department considers the application, with the implementation of the GANSW's recommendations (refer to Section 6.1) 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 (refer to Appendix C)
(i)	to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposal (Section 5.1), which included consultation with Council and other public authorities and consideration of their responses (Sections 5.2 , 5.4 and 6).

 (j) to provide increased opportunity for community participation in environmental planning and assessment. The Department publicly exhibited the proposal as outlined in **Section 5.1**, which included notifying adjoining landowners, placing a notice in newspapers and displaying the proposal on the Department's website and at Council during the exhibition period.

Ecologically sustainable development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. 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:

- the precautionary principle.
- inter-generational equity.
- conservation of biological diversity and ecological integrity.
- improved valuation, pricing and incentive mechanisms.

The Applicant is targeting an equivalent 5-Star Green Star (Australian Best Practice) rating using the University's own ESD rating tool. Proposed ESD initiatives and sustainability measures, include:

- Building Management System to control and optimise operation of plant and allow remote monitoring of all systems, remote readings of energy, water and gas meters, data logging of energy consumption and zoning of ventilation and air conditioning systems.
- LED lighting and lighting control systems for motion and daylight detection where functionally appropriate.
- rainwater harvesting for reuse in toilets and landscaping.
- roof mounted solar hot water system and / or solar power system.
- installation of energy and water efficient fixtures and fittings.

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 is consistent with ESD principles as described in Section 6.16 of the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). To ensure a minimum 4 Star Green Star Rating is achieved, it is recommended a condition requiring the development be designed and certified to this standard be imposed using either the rating system of the Green Building Council of Australia or an alternate method as endorsed by the Planning Secretary.

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.

Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

Planning Secretary's Environmental Assessment Requirements

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

Section 4.15(1) matters for consideration

Table 3 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 **Section 6** (Assessment) and relevant appendices or other sections of this report and EIS, referenced in the table.

Table 3 | Section 4.15(1) matters for consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided in Appendix B of this report.
(a)(ii) any proposed instrument	Satisfactorily complies. The Department's consideration of relevant draft EPIs is provided in Appendix B of this report.
(a)(iii) any development control plan (DCP)	Under clause 11 of the SRD SEPP, DCPs do not apply to SSD. Notwithstanding, consideration has been given to relevant DCPs at Appendix B.
(a)(iiia) any planning agreement	Not applicable.
(a)(iv) the regulations Refer Division 8 of the EP&A Regulation	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(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	Appropriately mitigated or conditioned - refer to Section 6 of this report.
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Sections 3 and 6 of this report.
(d) any submissions	Consideration has been given to the submissions received during the exhibition period. See Sections 5 and 6 of this report.
(e) the public interest	Refer to Section 6 of this report.

Biodiversity Conservation Act 2016

The proposed works are not likely to have a significant impact on biodiversity values. The Office of Environment and Heritage and the Department have determined that the application for the Bioresources Facility is not required to be accompanied by a BDAR and granted a waiver accordingly.



5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from 21 June until 18 July 2018 (28 days) The application was exhibited at the Department and on its website, Service NSW Centres and at the City of Newcastle Council's office.

The Department placed a public exhibition notice in the Newcastle Star on 20 June 2018 and notified adjoining landholders and relevant State and local government authorities in writing. Department representatives visited the site to provide an informed assessment of the development.

The Department has considered the comments raised in the public authority and public submissions during the assessment of the application (**Section 6**) and/or by way of recommended conditions in the instrument of consent at **Appendix C**.

5.2 Summary of submissions

The Department received a total of seven submissions, all from public authorities. No submissions were received from the general public.

5.3 Public authority submissions

A summary of the issues raised in the public authority submissions is provided at **Table 4** below and copies of the submissions may be viewed at **Appendix A**.

Table 4 | Summary of public authority submissions to the EIS exhibition

City of Newcastle Council (Council)

Council does not object to the proposal, but provided the following comments:

- the full section 7.12 developer contribution applicable under Council's Section 94A Contributions Plan should be applied to the development.
- traffic and parking impacts are acceptable subject to provision of on-site parking for construction staff.
- stormwater is acceptable subject to provision of a new kerb inlet and pollution control.
- more information is required in relation to:
 - acoustic impacts to off-site receivers, particularly residential properties to the west of the site.
 - sediment and erosion control.
 - incorporation of the recommendations of the odour assessment in the design.
 - bushfire land mapping.

Transport for NSW (TfNSW)

TfNSW does not object to the proposal and provided the following comments:

• bus services, pedestrian and bicycle rider movements are to be maintained at all times during the construction, particularly during university peak times.

• a Construction Pedestrian and Traffic Management Plan (CPTMP) be prepared in consultation with Council and RMS to address construction traffic impacts, including cumulative impacts.

Roads and Maritime (RMS)

RMS does not object to the proposal and provided the following comments:

- RMS reserves the right to review the CPTMP at any time and make changes to maintain road safety and efficiency.
- all works associated with the project shall be at no cost to RMS or Council, to RMS requirements.

Office of Environment and Heritage (OEH)

OEH does not object to the proposal and provided the following comments:

- a waiver from the requirement to submit a Biodiversity Development Assessment Report (BDAR) was granted on 18 May 2018 and therefore no further biodiversity assessment is required.
- the Applicant should prepare an Aboriginal cultural heritage assessment report that documents the investigation of potential impacts to Aboriginal cultural heritage.
- OEH is satisfied with the flooding assessment and no further flooding assessment is required.

NSW Rural Fire Service (RFS)

RFS does not object to the proposal and recommended conditions in relation to asset protection zones, water and utilities, evacuation and emergency management and landscaping.

NSW Environment Protection Authority (EPA)

The EPA has no comment in relation to the project.

Ausgrid

Ausgrid advises it supports the proposal, which will have no impact on Ausgrid's assets as the University maintains and operates its own private low voltage network.

5.4 Response to Submissions and supplementary information

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 the submissions.

On 24 September 2018, the Applicant provided a Response to Submissions (RtS) (**Appendix A**) on the issues raised during the exhibition of the proposal. The RtS included an Aboriginal Cultural Heritage Assessment Report (ACHAR), arborist report, revised clarification of construction hours and construction vehicle parking and minor amendments to the design including:

- an increase building height from 14m to 14.5m.
- an increase in the number of ventilation stacks (from 3 to 12) and confirmation of stack heights.
- minor changes to landscaping / location of external pump building.

The RtS was made publicly available on the Department website and was referred to the relevant public authorities. An additional three submissions were received from public authorities, including Council, OEH and RFS. A summary of the issues raised in the submissions is provided at **Table 5** and copies of the submissions may be viewed at **Appendix A**.

Table 5 | Summary of public authority submissions to the RtS

Council

Council confirmed the RtS has addressed some aspects of its original submission. However, Council reiterated its comments regarding the payment of developer contributions, noting: educational establishments are not exempt under Council's contributions plan; contributions assist with funding a potential future cycleway and other local traffic management; and the proposal has the potential to result in additional students and staff, resulting in increased infrastructure demand. Council also provided the following additional comments:

- careful consideration needs to be given to construction noise impacts on residential receivers, particularly
 for any proposed construction works outside of standard hours.
- a soil and water management plan should be prepared to manage sediment and erosion control.
- further information is required in relation to odour assessment.

Council also provided recommended conditions should the application be recommended for approval.

Office of Environment and Heritage (OEH)

OEH reviewed the ACHAR and is satisfied with the assessment. No other issues were raised.

RFS

RFS reviewed the RtS and has no objection, subject to imposition of previously recommended conditions.

In response to submissions to the RtS and the Department's request for additional information, the Applicant provided an RtS Addendum, which provided further information and clarification on aspects of the proposal, particularly around noise, odour and landscaping and design. The parapet height of the proposed building was also increased from 14.5m to 15m to screen photovoltaic panels on the roof.

Council advised that the supplementary information satisfactorily addresses the matters raised in its previous submissions with the exception of payment of developer contributions. No other agencies raised any further concerns.



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

- built form, urban design and landscaping.
- noise and vibration impacts.
- development contributions.

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 6.4**.

6.1 Built Form, Urban Design and Landscaping

Building Design / External Appearance

The proposed building would generally present as three storeys in scale, although due to the site topography, the ground floor would not be perceptible as a floor at the south-east corner of the site, where the building would present as two storeys.

The building will be contemporary in appearance, and due to security and functional needs to control internal light, it would not present as a typical educational building with numerous windows and openings, but instead will incorporate predominantly blank facades, with limited variation in materiality at each level. Nevertheless, visual interest will be provided by the unique design of the first floor level, which is wrapped in a reflective glazing with graduated white frit pattern within the glass that warps and bulges and reflects the surrounding landscape (**Figures 16** and **17**). The Applicant advises the stark difference in material between this first floor and the recessive nature of the ground floor and plant level facades (both proposed with dark metal cladding and set back from the façade line of the first floor) has been designed to create the illusion of a minimalist object 'floating' above the landscape. The fritted and curved glass is designed to convey continuity and flow, softening the appearance of the building and integrating the form within the bush setting of the campus. The contemporary design also seeks to reflect the cutting-edge scientific enquiry taking place within the building whilst respecting and responding to surrounding context.

Activation and transparency have been incorporated where possible, particularly at the north-east and south-east corners of the building, being the key interface with campus pedestrians. In particular, the ground level entry allows for visual activation of the entry and administration spaces (**Figure 16**).

Twelve exhaust stacks would protrude 3.1 metres above the roof parapet level, but due to their setback of at least 1.8 metres from the façade line, the stacks would not be dominant visual elements of the built form (**Figure 17**).



Figure 16 | Proposed building viewed from the north-east (Source: SRtS Landscaping Report)



Figure 17 | Proposed building viewed from the south-east (Source: SRtS Landscaping Report)

The application was referred to Government Architect NSW (GANSW) who did not raise any specific concerns with the external appearance of the building but requested further information to understand the external materials and finishes. Additional information was provided by the Applicant as requested and GANSW did not raise any further issues.

The Department has considered the design and form of the building. Noting that there are no height or floor space LEP controls applying to the site, and adjoining university buildings are typically one to four storeys in height, the scale of the building is considered to be appropriate. Surrounding built forms also vary widely in terms of design, materials and appearance, and the proposed contemporary design would sit comfortably within the range of

building designs on the campus. The contemporary design is also considered an appropriate response to the unique security and functional requirements of the building and would make a positive contribution to the urban design of the campus. In particular, the reflective glazed first floor juxtaposed with the recessive ground and upper levels provides visual interest and breaks up the massing of the building. The Department acknowledges activation and transparency have been incorporated in the facade design where appropriate, subject to functional limitations. Further, where activation and transparency cannot be provided at the ground floor level, blank walls are either predominantly located below external ground levels so that they will not be dominant visual elements, or landscaping (discussed below) will be provided to assist with softening and screening the walls.

Overall, the Department is satisfied the scale and design of the building is appropriate and would complement the existing built environment of the campus.

Internal Design, Access and Amenity

The Applicant advises the internal layout has been designed to be flexible and to allow for room uses to interchange to accommodate different activities as needed over the life of the building.

GANSW reviewed the internal layout and raised concerns in relation to circulation and access as well as provision of natural light. In particular, GANSW recommended that circulation and lift locations should be reviewed to ensure compliant access within the building.

The Department notes that two lifts would be provided at the western end of the building, but these lifts would not be readily accessible from the main entry points at the eastern end of the building at the ground and first floors, and may involve long or circuitous paths of travel for disabled persons (see **Figures 18** and **19**).



Figure 18 | Ground floor plan showing lift locations in red and access path from entry to the lifts in pink (Base source: Architectural Plans)

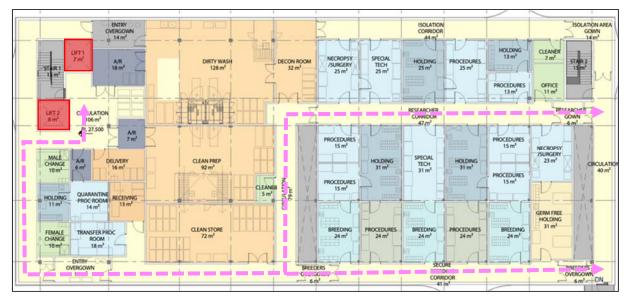


Figure 19 | First floor plan showing lift locations in red and access path from lifts to office, research areas, and entry corridor in pink (Base source: Architectural Plans)

In response, the Applicant advises that the lifts have been located at the western end of the building to serve the operational needs of the University. In particular, the location of the lifts mitigates the risk of cross contamination when transporting animals and equipment throughout the facility, with one lift used for incoming clean supplies and clean cages servicing the ground floor holding area and one lift used for biological waste and dirty cages. The Applicant advised it investigated locating the second lift in the buildings east, close to the administration zone for primary use for staff and researcher access throughout the facility. However, this option did not allow the lift to be used for the intended logistical operations and could only be used for passenger transportation. The function of the building allows for researchers to move freely through the building with appropriately placed automatic opening doors, no steps and accessible movement between functional parts of the building.

The Applicant also submitted a report from an access consultant. The report advises that while staff and visitors to the building may benefit from the provision of a path of travel from the Level 1 entry to the Ground level meeting and future function areas which is direct and does not pass through secure areas, this is considered to be an operational matter rather than an access requirement of the BCA and referenced Australian Standards. Further, the location of passenger lifts and travel distances between lifts and building entrances is not mandated in the BCA or Australian Standards.

The Department notes that in order to travel internally within the building from the Ground floor main entrance to the office or research areas located at the eastern end of the first floor, most people could use the stairwell immediately adjacent to the entry. While people in wheelchairs would have a relatively long path of travel via the existing access arrangements, the Department considers that the absence of a lift in the eastern end of the building would not significantly disadvantage staff and researchers with disabilities.

GANSW also recommended that without compromising the architectural strategy or functionality of the building, consideration should be given to providing natural light (windows) to the first floor corridors to improve internal amenity. The Applicant advised that uncontrolled light leaks from corridors into animal rooms can confound and compromise experimental outcomes and the building has therefore been designed to enable the lighting within the corridors to be controlled to match the light/dark cycle within the animal rooms. Nevertheless, glazing has been provided where it would not impede research, including administration spaces, meeting and lunch room, cleaning and storage areas and circulation space outside the research zones.

The Department accepts the Applicant's advice that daylight leaks from the corridor into the research rooms, particularly as doors are opened and closed, may compromise the primary operational needs of the facility, and is satisfied glazing has been incorporated for internal amenity where possible.

Landscaping and Tree Removal

Landscape plans were submitted with the application and revised landscape plans and arborist report were submitted with the RtS and SRtS to address concerns raised by GANSW. Landscape works include tree removal, new access pathways, new sculptural timber benches and new plantings of grass trees, shrubs and groundcovers adjacent to the building, as depicted in **Figures 20** and **21**.

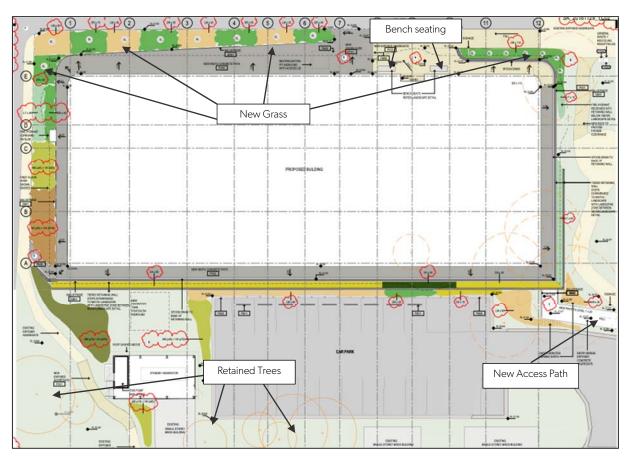


Figure 20 | Landscape Plan (Base source: SRtS Revised Landscape Plan)

Following review of the amended information, GANSW recommended that a greater proportion of planting should include taller trees to supplement the remaining tree canopy, and external access paths should be designed to allow for tree retention.

Of the 33 existing trees on or adjoining the site, 19 are proposed for removal and 14 would be retained. The arborist report notes that retention of two of these trees will be dependent on the final design of the pedestrian path to the Level 1 entry at the south-east corner of the building. Of the 19 trees proposed for removal, eight are assessed as having moderate to high retention value, being native canopy trees with heights of eight to 50 metres.

The landscape plans include planting of 16 new grass trees, which would have a mature height of three metres (**Figure 21**) as well as small shrubs and ground covers. In addition, and in order to comply with NDCP 2012, and the associated requirements of the Newcastle Urban Forest Technical Manual and Landscape Management Implementation Plan Callaghan Campus (initiated by the University in September 2012 as part of its 2011-2013 Environmental Sustainability Plan), it is proposed to contribute \$9,000 (\$20 per sqm of lost native canopy) to the

University's bush regeneration budget, which will enable tree planting and bushland regeneration on other parts of the campus.

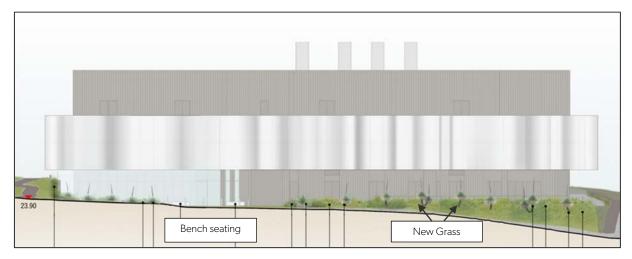


Figure 21 | Landscape Plan North Elevation (Base source: SRtS Revised Landscape Plan)

The Department has assessed the landscaping plans and considers the extent of tree removal to be an issue. Despite compensatory measures for bushland regeneration on other parts of the campus, the loss of 19 trees, including seven significant trees which exceed 25 metres in height, without any replacement planting of canopy trees near the building, would result in adverse impacts for the landscape character for this part of the campus and reduced amenity though lost canopy shading. Further, the appearance of the site would be improved by the provision of canopy trees, particularly where the plantings could soften and screen the elevated and unarticulated blank ground floor walls at the north-western corner of the site. The Department acknowledges the site is constrained by requirements for bushfire protection, and there is limited space for planting following construction of the building, but considers that three small to medium canopy trees could be provided in the northern and western setbacks without compromising compliance with asset protection zone requirements, while making a substantial contribution to improving the amenity and landscape setting of the site. A condition has been recommended requiring landscape plans be amended to incorporate three advanced plantings of canopy trees with a mature height of at least twelve metres.

As the arborist report notes that retention of two of the 14 trees will be dependent on the final design of an adjacent pedestrian path, the Department has also recommended a condition requiring compensatory planting for these tress should their retention not be possible.

Subject to the retention of 14 trees and the provision of three new canopy trees as recommended, the Department considers the landscaping adjacent to the building to be acceptable in the context of the constraints of the site, and would provide an appropriate landscape setting for the building. Plantings are proposed to be all local indigenous species and pathways and seating will provide good connectivity and amenity for students and staff and integrate the site with surrounding areas. Standard conditions are also recommended to ensure protection of retained trees during construction works.

6.2 Noise Impacts

A revised Noise and Vibration Assessment (NVA) was submitted with the RtS that assessed the potential construction and operational noise and vibration impacts on nearby sensitive land receivers, including surrounding University buildings and nearby residential premises. The closest residential premises are located on the opposite side of the Newcastle Inner City Bypass (see **Figure 22**). The revised NVA was submitted to address matters raised by Council, including assessment of impacts to residential receivers and amendment of construction hours to day time only.



Figure 22 : Subject site and nearby sensitive receivers, including other university buildings surrounding the site and dwellings on the opposite side of the bypass (Source: NVA)

Construction Impacts

The EPA's Interim Construction Noise Guideline (ICNG) outlines the process of establishing construction noise management levels for surrounding sensitive receivers. Based on the established background noise levels and ICNG recommended day time noise management levels (NMLs), construction noise and vibration management levels for the residential colleges, dwelling houses, educational land uses and recreation areas have been established for construction activities, which are outlined in **Table 6**.

Table 6 | Construction noise management levels

Sensitive Receiver	NMLs (dB(A) L _{eq}) Day (7am – 6pm Mon – Fri; 8am – 1pm Saturday)	
Residential Receivers	45 (RBL + 10 dB) (external noise level)	
Educational Receivers	45 (internal noise level) / 55 (external noise level)	

The NVA identified construction vibration was expected to comply with criteria for the surrounding residential receivers but vibrating rollers (such as compactors required for earthworks) would exceed vibration criteria for the surrounding classrooms. Further, noise generated from most construction works except internal works is expected to result in exceedance of the NMLs at both the residential and educational sensitive receivers if no mitigation measures are implemented. Predicted maximum construction noise levels are 74 dB(A) for adjoining classrooms and 54 dB(A) for residences, during the earthworks phase.

To manage noise and vibration impacts, the NVA recommends a number of mitigation measures, including:

- careful selection of vibratory plant, taking into account vibration criteria for adjacent buildings and large vibratory rollers be substituted with smaller units or replaced with alternative compaction techniques.
- review of minimum offset distances once final vibratory plant has been selected and where minimum working distances are exceeded, vibration monitoring should be undertaken at the nearest affected receiver.
- noise screening.
- scheduling the noisiest works during university holidays.
- appropriate plant and equipment selection and maintenance.
- induction and training of employees on guieter work practices.
- managing truck movements and queuing.
- minimise noise from reversing or movement alarms.
- noise monitoring throughout the project.

The Applicant advised in the RtS that construction activities would occur during standard construction hours as set out in the ICNG (7am to 6pm Monday to Friday and 8am to 1pm Saturdays). However, the Applicant also advised that construction works during non-standard hours may be required to minimise impacts on surrounding educational receivers. No assessment of the impacts of non-standard hours construction works on nearby residential receivers were provided as part of the NVA.

Council noted any proposed construction activities outside of normal construction hours would exacerbate the extent of impacts on residential receivers, due to lower background noise levels.

In the absence of an assessment of out of hours construction impacts, the Department considers there is no justification for out of hours works given the likely adverse noise and amenity impacts for nearby residential receivers. Further, on-site impacts to other classrooms could be managed by the Applicant by the above mitigation measures, including scheduling noisy works during semester break, as well as potentially relocating adjacent classes or facilities on a temporary basis.

The Department therefore recommends a condition restricting construction activities to the standard hours, consistent with the ICNG, with variations only permitted for emergencies, police requirements, inaudible works, or where the Planning Secretary is satisfied in advance that there is appropriate justification.

To further ensure compliance with the ICNG is achieved and maintained throughout the construction, and given the proximity of sensitive receivers, the Department also recommends conditions requiring the Applicant to implement the mitigation measures outlined in the NVA, through preparation and implementation of a Construction Noise and Vibration Management Plan (CNVMP), which is to:

- be prepared in consultation with the affected sensitive receivers.
- identify appropriate measures to mitigate the noise impacts.
- monitor noise and vibration impacts.
- establish a complaints management system.

The Department is satisfied that, subject to standard construction hours and the preparation and implementation of a CNVMP in consultation with the closest sensitive receivers, construction noise and vibration impacts can be satisfactorily managed and mitigated to ensure the amenity and operations of surrounding sensitive receivers are not adversely impacted upon. The CNVMP would ensure that potential impacts on human comfort and buildings and structures are minimised.

Operational Impacts

Operational noise generated from the proposal would be associated with the operation of mechanical plant. The NVA demonstrates operational noise from plant would not be audible at the residential receivers, and subject to rooftop plant being located within an enclosure incorporating acoustic screens and louvres, the plant would comply with noise criteria for adjacent educational spaces,

Conditions are recommended requiring the Applicant to identify the required mitigation measures to attenuate the mechanical plant noise prior to commencement of works, to ensure compliance with the project specific noise levels. The Department has also recommended conditions requiring the Applicant undertake a noise monitoring program of the mechanical plant within three months of occupation of the building, to verify that the measured noise levels of the mechanical plant do not exceed the established noise criteria.

The Department is satisfied that, subject to recommended conditions, noise generated from operation of the proposal can be managed to comply with the relevant criteria.

6.3 Development Contributions

Under the City of Newcastle Section 94A Development Contributions Plan 2009 (Contributions Plan), the applicable contribution would be 1 per cent of the estimated cost of the development. This type of plan is now referred to as a section 7.12 plan. The Applicant has requested a full exemption from payment of contributions. The Contributions Plan outlines types of development that would be excluded from development contributions. This does not specifically include universities, but does include: "the fit out or refurbishment of an existing development where there is no enlargement or intensification of the current land use".

The Applicant has sought an exemption to the payment of development contributions as:

- the proposal is similar to 'the fit out or refurbishment of an existing development where there is no enlargement or intensification of the current land use' as it does not create additional demand for community facilities or services, as it is not expected to generate additional student or staff numbers.
- the application is Crown development and the University already provides extensive services and facilities
 for its students and the wider community in the form of open space, recreation, sporting fields, pools,
 libraries, public venues, art gallery, bush regeneration and wetland management including on adjoining
 sites, affordable student housing, student engagement and the public good of ongoing education of the
 community.

Council has requested payment of contributions in accordance with its Contributions Plan, noting:

- the Contributions Plan was previously amended to specifically remove the exemption for educational establishments as these types of development generally create significant infrastructure requirements for Council, such as upgrades to roads, new footpaths and cycleways.
- developer contributions assist with funding the cycleway route between the City and the University, which is heavily used by students and staff and funding is also required for local traffic management in Callaghan and surrounding areas.
- the proposal may result in additional students and staff, noting the current building being used by the Bioresources Facility staff and students could be adopted for a new use once the new facility is constructed.

The Department has reviewed the Applicant's and the Council's position and notes the Minister can exercise discretion in applying developer contributions. Circular D6 'Crown Development Applications and Conditions of Consent' is the government's guiding document in relation to Crown applications and development contributions. Although the circular is not specifically applicable to section 7.12 plans, the Department considers it is a relevant consideration in this matter. Circular D6 states that Crown activities providing a public service or

facility lead to significant benefits for the public in terms of essential community services, and these activities are not likely to require the provision of public services and amenities in the same way as developments undertaken with a commercial objective. The Circular provides that for Educational Services, contributions should only be levied towards funding for drainage (where the proposal is likely to increase site runoff or add to drainage infrastructure needs) or local traffic management at the site entrance, if required.

The Department notes section 7.12 plans do not require any connection between the development on which the levy is imposed and the facilities to be funded. Notwithstanding, any contribution to be levied must be reasonable.

The Department considers that as the proposal is Crown development, and the University is a not for profit organisation that provides a significant social benefit to the wider community, the principles of Circular D6 apply as they would for any Crown development proposing social infrastructure. As the proposal would not result in increased runoff or the need for roadworks to the site entrance, the Department is of the opinion that the contribution requirement should not apply in this circumstance. This is consistent with the Department's position in its determination of the SSD application for the new Newcastle University building known as 'New Space' in the Newcastle CBD in 2015.

Further, the Department is satisfied the proposal would not lead to additional students or staff as the University has advised that the purpose of the facility is only to consolidate existing research facilities into a single purpose built building and there is no intention to re-purpose existing facilities for uses that would increase staff or student numbers (as confirmed by the University). As such, the proposal would not place increased demand on Council's infrastructure and the payment of a contribution not considered appropriate in this instance.

6.4 Other Issues

The Department's consideration of other issues is provided at **Table 7**.

Table 7 | Department's assessment of other issues

Issue	Findings	Recommended Condition
Traffic and Parking Impacts	 A Traffic Impact Assessment (TIA) was submitted with the EIS which considered the traffic and parking impacts of the proposal during both the construction and operational phases. Updated information on construction traffic and construction worker parking was provided with the RtS. The TIA concludes there would be no operational impacts in terms of traffic generation or parking demand, noting: the proposal will not result in increased staff or student numbers. there will be no change to existing on-site parking arrangements, no change to the existing campus road network and no change to existing local roads. service deliveries to the site would be via the existing internal road network and a maximum of one or two deliveries per day are expected. 	The Department has recommended standard conditions of consent requiring the Applicant to prepare and implement a CPTMP, in consultation with RMS and Council. Conditions to ensure provision of parking for construction workers on the site and to enable RMS to revise the CPTMP if necessary are also recommended. Standard conditions requiring protection of public infrastructure and repairs to any damage

 On this basis, the Department is satisfied the proposal would result in no adverse operational traffic or parking impacts.

- During the peak construction phase, traffic movements are anticipated to be up to 90 inbound (am) and 90 outbound (pm) construction staff movements and up to 10 delivery vehicles spread across the day. The impact on the operation of the road network is anticipated to be minor as construction worker movements do not coincide with peak periods associated with the University campus.
- Council advised traffic and parking is acceptable, subject to provision of on-site parking for staff.
- TfNSW raised no concerns, subject to a
 Construction Pedestrian and Traffic Management
 Plan (CPTMP) prepared in consultation with Council
 and RMS, and to ensure bus services, pedestrian
 and bicycle rider movements are to be maintained at
 all times during the construction.
- RMS also raised no concerns subject to it being able to review and revise the CPTMP if necessary for road safety and efficiency and provided the works associated with the project are at no cost to Council or RMS.
- The Department notes the Applicant has confirmed that construction workers will be able to park within the site. Further, as the site is within the campus and does not directly front a public road, the works are unlikely to adversely affect public road infrastructure.
- Nevertheless, the Department has recommended standard conditions of consent requiring protection of public infrastructure and requiring the Applicant to prepare and implement a CPTMP, in consultation with RMS and Council.
- Subject to approval and implementation of the CPTMP, the Department is satisfied that construction traffic impacts will be appropriately managed.

caused by the proposal are also recommended.

Aboriginal Heritage

- An Aboriginal Cultural Heritage Assessment Report (ACHAR) was submitted with the RtS to address concerns raised by OEH.
- The assessment did not identify any Aboriginal objects or areas of cultural value within the works area, noted the facility would be constructed in an area subject to

The Department has recommended conditions requiring a protocol for identifying and dealing with unexpected Aboriginal Cultural Heritage finds.

prior development and modification, and had low archaeological potential given its location mid slope on a hill and away from water sources. The ACHAR also included consultation with Registered Aboriginal Parties which did not result in identification of any specific works or cultural values that need to be considered. The ACHAR recommended appropriate actions to be taken in the case of unexpected finds on the site as well as an Aboriginal Cultural Heritage Awareness Induction document for workers.

- OEH reviewed the ACHAR and advised it was satisfied with the assessment and had no further comments.
- The Department considers that subject to appropriate procedures for unexpected finds on the site, the proposal would not result in unacceptable archaeological Aboriginal Cultural Heritage impacts.

Contamination

- A Preliminary Site Investigation was submitted with the EIS and notes that the site has been used as an educational facility since 1964, and prior to that it was Crown land, undeveloped and generally unused.
- Eight sampling locations were used to assess areas and contaminants of potential concern. Testing did not reveal any contaminants above threshold levels, although the report notes there are data gaps, particularly below existing buildings, or potentially contaminated slag below existing pavement materials, and noting no groundwater samples were taken.
- The report concludes the site has low to moderate risk of potential contamination, but as there is a potential risk for contamination within inaccessible areas and the extent of slag is unknown, the report recommends an unexpected finds protocol should be developed.
- The report also recommends any soil removed from the site be classified prior to disposal, as well as validation soil sampling once excavation is complete, to ensure residual soils are suitable for the ongoing land use.
- The Department notes that no objections were raised to the findings and recommendations of the contamination assessment.
- The Department is satisfied that the Applicant has adequately addressed the requirements of SEPP 55 and subject to recommended conditions, the site can

Conditions are recommended requiring:

- an unexpected finds protocol.
- classification of soil removed for disposal.
- further testing of soil remaining on the site.

be made suitable for its intended use (noting that the proposal does not represent a change in land use).

Bushfire

- As the site is bushfire prone land, a Bushfire Threat
 Assessment was submitted with the EIS. The
 assessment was updated with the RtS to take into
 account revised bushfire mapping.
- The assessment concludes the proposed development complies with *Planning for Bushfire Protection*, subject to proposed protection measures, including detailed emergency evacuation planning, access and egress.
- RFS reviewed the bushfire assessment and advised it
 has no objection to the proposal, subject to
 imposition of conditions requiring asset protection
 zones, appropriate connection and location of
 utilities, an updated evacuation and emergency
 management plan and appropriate landscaping.
- The Department is satisfied that subject to conditions, the proposal will not result in unacceptable bushfire risk.

To ensure compliance with Planning for Bushfire Protection, the Department has recommended conditions in relation to asset protection zones, utilities, evacuation and emergency management and landscaping.

Stormwater Management

- Stormwater Plans have been submitted with the application and include connection to the existing stormwater system as well as collection of all roof runoff to a rainwater tank for reuse in toilets and landscaping, with overflow into the existing drainage system.
- Overall stormwater runoff quantities would be reduced as a result of the collection of roof water to the rainwater tank. Even in cases where the tank overflows into the stormwater system, runoff is expected to have lower pollutant load than the existing site, as the roof area would generate cleaner stormwater than existing mixed ground surfaces and sealed handstand areas across the site.
- Council have advised the stormwater plans are generally acceptable and have recommended conditions requiring updated plans to ensure compliance with Council standards.
- The Department is satisfied that, subject to the imposition of conditions as recommended by Council, the proposal will not result in any adverse impacts to the stormwater system, quantity of stormwater runoff or water quality.

The Department has recommended conditions requiring updated stormwater plans in accordance with Council requirements.

Odour and Operational Waste

- Odour sources from the proposed facility are expected to be:
 - o Major sources: odour emissions discharged to the external environment by way of exhaust stacks. These odours are expected to originate from the processes within the proposed facility (e.g. autoclaving a sterilization method that uses high-pressure steam).
 - o Minor sources: odours from waste materials immediately outside the building (e.g. at the loading dock); and odour emissions originating from within the building (e.g. from chemical consumables such as disinfectants) that are not captured by a fume collection system and escape to the external environment by way of an opening (e.g. a door or a window).
- An odour impact assessment from the operation of the facility was submitted with the EIS and updated modelling was submitted with the RtS to take into account revisions to the number and height of dispersal stacks as recommended in the original assessment.
- The odour assessment demonstrates that in a worst case scenario, the proposal will not have adverse odour impacts on nearby residences. Within the campus, odour impacts are predicted to be, at worst, just noticeable and not offensive or objectionable.
- An Operational Management Plan, including waste management, will be developed prior to occupation of the building. The facility will hold approximately 4,400 cages and consist of a ratio of approximately 95% mice and 5% rats. There will be numerous waste storage and consumables throughout the facility such as the bulk and consumables stores as well as the loading dock.
- Bio waste will be stored in the bio waste store on the northern side of the building. Waste will be collected from the facility by a bio waste contractor. Deceased animals will be frozen in a cadaver freezer within the bio waste store where collections are based on both demand and routine collections. Bedding and contaminated/soiled materials will be autoclaved to remove infectious material and disposed as general waste. Any risk group 2 microorganisms and/or genetically modified

The Department has recommended a condition requiring the proposal to operate in accordance with the recommendations of the odour impact assessment.

- microorganisms will be autoclaved or chemically inactivated before disposal. Cytotoxics will be disposed through cytotoxic waste stream.
- To further minimise the potential for odour impacts, the assessment recommends that the autoclaving cycle not be conducted during early mornings in winter, and that all wastes be covered, and waste management practices followed.

Signage

- The EIS advises new signage will be erected including building identification and directional signage within the site, however, no details of proposed signs have been provided with the application.
- As no details have been provided to enable an assessment, the Department recommends inclusion of a condition clarifying that the proposal does not include approval of signage.
- The Department notes most signage, including building identification and directional signage, can be erected as exempt or complying development and therefore development consent is not required.

The Department recommends a condition clarifying that the proposal does not include approval of signage.



The Department has reviewed the EIS, RtS and assessed the merits of the proposal, taking into consideration advice from the public authorities, including Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

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 Hunter Regional Plan 2036 and the Greater Newcastle Metropolitan Strategy 2036. The project will provide improved tertiary education and research facilities associated with the University of Newcastle thereby positively contributing to the social infrastructure of the region, education of the population and skills of the future workforce. The proposal would also provide economic benefits, with investment in the region of approximately \$31.7 million, generating 63 construction jobs.

The Department has assessed the merits of the proposal and has found the key issues associated with the project include built form and urban design, noise impacts and developer contributions. The Department's assessment concludes that the proposal delivers a high quality architecturally designed building that will contribute to the urban design of the campus. It also concludes that it is not appropriate to require developer contributions in this case, as the proposal would not result in additional demand on Council resources or infrastructure. Conditions have been recommended to satisfactorily address any outstanding, residual construction or operational issues, including noise impacts.

The Department concludes the impacts of the development are acceptable and can be appropriately mitigated through the implementation of the recommended conditions of consent. Consequently, the Department considers the development is in the public interest and should be approved subject to conditions.



It is recommended that the Executive Director, Priority Projects, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report.
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application.
- agrees with the key reasons for approval listed in the notice of decision.
- grants consent for the application in respect of SSD 8937.
- signs the attached development consent and recommended conditions of consent (Appendix C).

Recommended by:

David Gibson

Team Leader Social Infrastructure Assessments Recommended by:

Karen Harragon Director

Social and Other Infrastructure Assessments



The recommendation is: Adopted by:

David Gainsford

Executive Director Priority Projects

20/2/19



Appendix A - List of Documents

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

- 1. Environmental Impact Statement http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8937
- 2. Submissions http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8937
- 3. Applicant's Response to Submissions http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8937
- 4. Applicant's Response to Submissions and Supplementary information http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8937

Appendix B - Statutory Considerations

ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

To satisfy the requirements of section 4.15(a)(i) of the EP&A Act, this report includes references to the provisions of the EPIs that govern the carrying out of the project and have been taken into consideration in the Department's environmental assessment.

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP)
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)
- State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP)
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP)
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP)
- Newcastle Local Environmental Plan (NLEP) 2012.

COMPLIANCE WITH CONTROLS

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

Table 1 | SRD SEPP compliance table

Relevant Sections		Consideration and Comments	Complies
3 Aims of Policy The aims of this Policy are as follows: (a) to identify development that is State significant development		The proposed development is identified as SSD.	Yes
8 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if: (a) the development on the land concerned is, by the operation of an environmental planning instrument,		The proposed development is permissible with development consent and the proposal is for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million, under	Yes
(b)	not permissible without development consent under Part 4 of the Act, and the development is specified in Schedule 1 or 2.	clause 15 (3) of Schedule 1.	

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure 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.

Clause 102 of the SEPP requires that development for an educational establishment adjacent to a road corridor for a freeway or any other road with a daily traffic volume of more than 20,000 vehicles must consider 'Development Near Rail Corridors and Busy Roads – Interim Guideline".

The development is adjacent to the Newcastle Inner City Bypass and the applicant estimates daily traffic volumes would exceed 20,000 vehicles. As such, the acoustic assessment has considered the impacts of road traffic noise on the development. Predicted road traffic noise impacts were found to be less than the recommended noise criteria set out in the guidelines and as such, the proposal will not be unacceptably impacted by road noise.

The application was referred to RMS, who raised no concerns with the proposal.

The proposal is therefore consistent with the Infrastructure SEPP given the consultation and consideration of the comments from the relevant public authorities.

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

The Education SEPP commenced on 1 September 2017 and aims to simplify and standardise the approval process for child care centres, schools, TAFEs and universities while minimising impacts on surrounding areas and improving the quality of the facilities. The Education SEPP includes planning rules for where these developments can be built, which development standards can apply and constructions requirements. The application has been assessed against the relevant provisions of the Education SEPP.

Clause 45(1) of the Education SEPP provides that development for the purpose of a university may be carried out by any person with development consent on land in a prescribed zone. The site is within land zoned SP2, Infrastructure under SLEP 2012, which is identified as a prescribed zone in clause 43 of the Education SEPP. The proposal is therefore permissible with consent under the SEPP.

Clause 57 of the Education SEPP requires traffic generating development that involves addition of 50 or more students to be referred to the RMS. The Applicant advises the proposal will not result in any additional students at the university. Nevertheless, the application was referred to RMS for comment (refer to **Section 5**).

State Environmental Planning Policy No. 33 - Hazardous and Offensive Development (SEPP 33)

SEPP 33 aims to identify proposed developments with the potential for significant off-site impacts, in terms of risk and or offence (odour, noise). A development is defined as potentially hazardous and / or potentially offensive, if, without mitigating measures in place, the development would have a significant risk and/ or offence impact on offsite receptors.

The Applicant provided a preliminary risk screening using the Departments *Applying SEPP 33* guideline, and provided additional information on the refrigeration system to address concerns raised by the Department.

The preliminary risk screening identified that the storage quantities of dangerous goods would be below the threshold quantities in SEPP 33 and therefore the development is not classified as potentially hazardous. The Department has assessed the PHA and concludes it has satisfied relevant Department Guidelines.

Notwithstanding, the Department has recommended conditions consistent with HIPAP No 12 – Hazards-Related Conditions of Consent to further ensure the continual safe operation of the development.

State Environmental Planning Policy No. 44 - Koala Habitat Protection (SEPP 44)

SEPP44 applies to land within the Newcastle Local Government Area. The SEPP aims to encourage the proper conservation and management of areas of natural vegetation for koalas and requires development to be consistent with an approved koala plan of management if land is identified as core koala habitat.

An Ecological Assessment Report was submitted with the EIS which concludes that the site is not deemed to constitute a potential koala habitat, given the limited canopy of koala food trees, lack of evidence of species habitation on the site and absence of historical records indicating koala populations.

The Department concurs with the findings of the report, and as such, no further assessment is required under SEPP 44

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. The EIS includes a contamination assessment for the site and its ongoing use for education purposes, which concludes risk of contamination is low, with no indication of gross contamination or contaminant concentration above threshold levels. However, the report noted that there are data gaps and therefore an unexpected finds protocol should be developed. The report also recommends any soil removed from the site be classified prior to disposal as well as validation soil sampling once excavation is complete to ensure residual soils are suitable for the ongoing land use.

The Department recommends conditions relating to developing an unexpected find protocol to ensure measures are in place should any unanticipated contamination be found during works. Condition in relation to classification of soils and validation are also recommended. The Department is satisfied that the Applicant has adequately addressed the requirements of SEPP 55 and subject to recommended conditions, the site can be made suitable for its intended use.

Draft State Environmental Planning Policy (Remediation of Land)

The Draft Remediation SEPP will retain the overarching objective of SEPP 55 promoting the remediation of contaminated land to reduce the risk of potential harm to human health or the environment.

Additionally, the provisions of the Draft Remediation SEPP will require all remediation work that is to carried out without development consent, to be reviewed and certified by a certified contaminated land consultant, categorise remediation work based on the scale, risk and complexity of the work and require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to council.

The Department is satisfied that the proposal will be consistent with the objectives of the Draft Remediation SEPP.

Newcastle Local Environmental Plan (NLEP) 2012

The NLEP 2012 aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Newcastle LGA. The NLEP 2012 also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the NLEP 2012 and those matters raised by Council in its assessment of the development (refer to **Section 5**). The Department concludes the development is consistent with the relevant provisions of the NLEP 2012. Consideration of the relevant clauses of the NLEP2012 is provided in **Table 2**.

Table 2 | Consideration of the NLEP 2012

NLEP2012	Department Comment/Assessment		
Clause 5.10 Heritage conservation	The site is not a heritage item, nor is it within a heritage conservation area under the LEP. The impact to Aboriginal Heritage has been assessed and appropriate conditions are recommended to ensure protection of Aboriginal Heritage - refer to Section 6.4 .		
Clause 5.12 Infrastructure development and use of existing buildings of the Crown	The clause provides that the LEP cannot restrict or prohibit the carrying out of development by a public authority that is permitted to be carried out with development consent. As the development is permissible and is being carried by a public authority, the LEP controls cannot be used to restrict the development.		
Clause 6.1 Acid Sulfate Soils	The development site is classified as Class 5 acid sulfate soils under the LEP. The proposal is not within 500m of land classed 1 to 4, nor is it below five metre AHD and it will not lower the water table below one metre AHD on adjacent classes of land. As such, no further assessment is required with respect to acid sulfate soils.		
Clause 6.2 Earthworks	The proposal involves some cut and fill to provide a level building platform but does not include extensive excavation as no basement levels are proposed. A Report on Geotechnical Investigation, Preliminary Site Investigation (Contamination) and Aboriginal Cultural Heritage Assessment summarise the existing situation and potential impact of the redevelopment. This report has also considered the impact of the earthworks in terms of vibration and noise impact (Section 6.2) and potential for disturbance of Aboriginal relics (Section 6.4). Standard conditions are also recommended to: ensure the earthworks will not result in adverse soil erosion or water quality impacts; ensure the quality of imported fill and classification of excavated material taken off site; and ensure an unexpected finds protocol is in place for encountered relics. As such, the proposal is considered to be consistent with the objective of the clause, ensuring that any earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items.		

Newcastle Development Control Plan 2012 (NDCP 2012)

In accordance with Clause 11 of the SRD SEPP, Development Control Plans do not apply to State significant development. Notwithstanding, the objectives and relevant provisions of NDCP 2012 are appropriate for consideration in this assessment in accordance with the SEARs.

The EIS provides a comprehensive consideration of relevant aims and provisions of NDCP 2012 (refer to **Section 4.15** of the EIS). The Department has reviewed the assessment and considers the proposal is generally consistent with the objectives and intended planning outcomes of the DCP as demonstrated in **Table 3**.

Table 3 | Consideration of NDCP 2012

SDCP 2012	Department Comment/Assessment
3.11 Community Services – Building Design	The design of the development has been considered in Section 6.1 and is considered to appropriately integrate with the surrounding environment and built form.
4.02 Bush Fire Protection	Assessed at Section 6.4 of this report.
4.04 Safety and Security	A CPTED assessment is provided at Section 6.9 of the EIS. Natural surveillance from the building will be provided as far as possible, within the constraints of the operational and security requirements of the building. To supplement natural surveillance, the University uses CCTV, 24/7 security patrols and lighting of outdoor spaces.
4.05 Social Impact	The proposed development provides an improved education and research facility for the University of Newcastle, thereby contributing to education which would have an overall positive social impact.
5.01 Soil Management	The proposal generally complies with cut and fill recommendations of the DCP. Conditions are recommended to ensure appropriate sediment and erosion control, including a requirement to prepare a Soil and Water Management Plan.
5.02 Land Contamination	Addressed at Section 6.4 of this report.
5.03 Vegetation Management	Tree removal is addressed at Section 6.1 of this report. In addition, and in order to address the requirements of the DCP and the associated requirements of the Newcastle Urban Forest Technical Manual and Landscape Management Implementation Plan Callaghan Campus, contributions are proposed towards bushland regeneration on other parts of the campus, nest boxes are proposed to be installed on the site to offset the loss of 5 tree hollows being removed and appropriate actions taken to manage fauna impacts during tree removal. A condition is recommended requiring these offset and mitigation measures to ensure compliance with the DCP.
5.04 Aboriginal Heritage	Addressed at Section 6.4 of this report.
5.05 Heritage Items	No heritage items are impact by the proposed development. ;
5.06 Archaeological Management	A condition is recommended to ensure appropriate measures are taken if unexpected archaeological relics are uncovered during excavation.
7.02 Landscape, Open Space and Visual Amenity	Addressed at Section 6.1 of this report.
7.03 Traffic, Parking and Access	Addressed at Section 6.4 of this report.

7.05 Energy Efficiency	Addressed at Section 4.3 of this report.	
7.06 Stormwater	Addressed at Section 6.4 of this report.	
7.07 Water Efficiency	The proposal incorporates a rainwater tank and water efficient fixtures as recommended.	
7.08 Waste Management	Conditions are recommended to ensure waste is managed in accordance with waste minimization objectives during both the construction and operational phases of the development.	
8.00 Public Participation	Addressed at Section 5 of this report.	

Api	pendix C -	 Recommended Instrument of Consent 	/Apr	roval
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