



Planning &
Environment

**STATE SIGNIFICANT DEVELOPMENT
ASSESSMENT REPORT:
*Refurbishment of Electrical Engineering
Building*
The University of New South Wales
*(SSD 7370)***



Secretary's Assessment Report
Section 89H of the
Environmental Planning and Assessment Act 1979

June 2016

ABBREVIATIONS

Applicant	The University of New South Wales
CIV	Capital Investment Value
Council	Randwick City Council
CPTED	Crime Prevention Through Environmental Design
DCP	Development Control Plan
Department	Department of Planning and Environment
EEB	Electrical Engineering Building
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
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
GFA	Gross Floor Area
ISEPP	State Environmental Planning Policy (Infrastructure) 2007
LEP	Local Environmental Plan
Minister	Minister for Planning
OEH	Office of Environment and Heritage
Regulation	Environmental Planning and Assessment Regulation 2000
RMS	Roads and Maritime Services
RtS	Response to Submissions
s94A	Section 94A Development Contributions Plan
Secretary	Secretary of the Department of Planning and Environment, or her delegate/nominee
SEPP	State Environmental Planning Policy
SEARs	Secretary's Environmental Assessment Requirements
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
TfNSW	Transport for New South Wales
UNSW	The University of New South Wales

Cover Photograph: View of the refurbished Electrical Engineering Building from the Rex Vowels Theatre (Source: Applicant's EIS)

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EXECUTIVE SUMMARY

This report is an assessment of a State significant development (SSD) application lodged by the University of New South Wales (UNSW) (the applicant) seeking approval for the refurbishment and reuse of the existing Electrical Engineering Building (EEB).

The proposal consists of the redevelopment and reuse of the EEB and the adjoining Rex Vowels Theatre to provide for a further 30-35 year serviceable life of the buildings and to ensure compliance with relevant building standards. Landscape and pavement works would also enhance the connection between the EEB and the University campus. The project has a capital investment value (CIV) of \$80,082,298.

The proposal is SSD under clause 14 of Schedule 1 to the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), as it is development for the purpose of an educational establishment with a CIV of more than \$30 million. The Minister for Planning is the consent authority.

The subject site is zoned SP2 – Infrastructure (Educational Establishment) under Randwick Local Environmental Plan 2011 (LEP 2012). The proposal is consistent with a definition of a 'educational establishment' under LEP 2012 and is permissible with consent in the SP2 – Infrastructure (Educational Establishment) zone.

The proposal was exhibited from 18 February 2016 to 18 March 2016. The Department received submissions from Randwick City Council (Council), Transport for NSW (TfNSW), Environment Protection Authority (EPA), Sydney Water, the Office of Environment and Heritage (OEH) and Roads and Maritime Services (RMS). No submissions were received from the public. The matters identified in the agency submissions primarily relate to the design and bulk of proposed additional rooftop plant, development contributions, and amenity impacts.

The applicant provided a Response to Submissions (RtS) on 19 April 2016, which included additional information in relation to the key issues raised in the submissions.

The Department has assessed the merits of the proposal and considers the key issues associated with the project include: built form and urban design; and development contributions.

The Department has carefully considered the height, bulk and scale of the development and the associated impacts on surrounding properties. Due to the topography of the University campus, the EEB sits on the lower side of a retaining wall separating the Upper and Lower campuses. As a result of the contour of the land, the relative height of the EEB North Block is significantly reduced when viewed from the Upper Campus. The Department considers that this would minimise the perceived height of the proposed rooftop plant from sensitive receivers.

A proposed landscaping strategy for the site includes measures to improve accessibility to the building for staff and students, prioritising pedestrians over vehicles. The Department is satisfied that the refurbished EEB building design exhibits a high standard of quality resulting in significant improvements to the public domain.

The Department has considered a request from Council for a payment of \$261,000 under the relevant Section 94A contributions plan. In this instance, it has recommended that no contribution be applied given there would be no increase in student and staff numbers as a result of the proposed development.

The visual impact of the refurbished EEB on residential properties adjacent to the University campus would be negligible when considering the topography of the site, the relative central location of the building within the campus, screening provided by existing trees, and the design and strategic placement of additional plant infrastructure.

The Department is satisfied that the proposal is in the public interest as it would deliver sustainable development and optimise the lifecycle of existing buildings. The proposal would also deliver a significantly improved work and study environment in order to retain staff and students and strengthen links between the University and industry.

The Department is satisfied that the residual impacts of the proposed development have been addressed in the Environmental Impact Statement (EIS) and RtS, and can be adequately managed through the recommended conditions of consent.

The Department considers that the application is consistent with the objects of the EP&A Act (including ecologically sustainable development), State priorities and *A Plan for Growing Sydney*. The Department is also satisfied that the proposal would provide significant public benefits to the local and regional community through the provision of increased and improved educational services. The proposal would also provide 143 new construction jobs.

The Department therefore considers that the development would be in the public interest and recommends that the SSD application be approved, subject to conditions.

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1. BACKGROUND AND PROPOSED DEVELOPMENT

1.1 Background

The applicant proposes the redevelopment and reuse of the University of New South Wales (UNSW) Electrical Engineering Building (EEB) and the adjoining Rex Vowels Theatre to provide for a further 30-35 year serviceable life. The upgrade of the building would also ensure regulatory compliance with contemporary building standards. The EEB was originally constructed in 1963 and the proposal seeks to demolish and rebuild the internal fit-out, replace all engineering services throughout the building and modify the building's façade.

1.2 Site Description

The subject site is located at the UNSW Kensington campus, approximately 5 km southeast of the Sydney Central Business District, within the Randwick Local Government Area. The site is owned by UNSW and is legally described as Lot 3 in DP 1104617. The campus has been used for educational purposes since 1949. The location of the campus is shown in **Figure 1**.

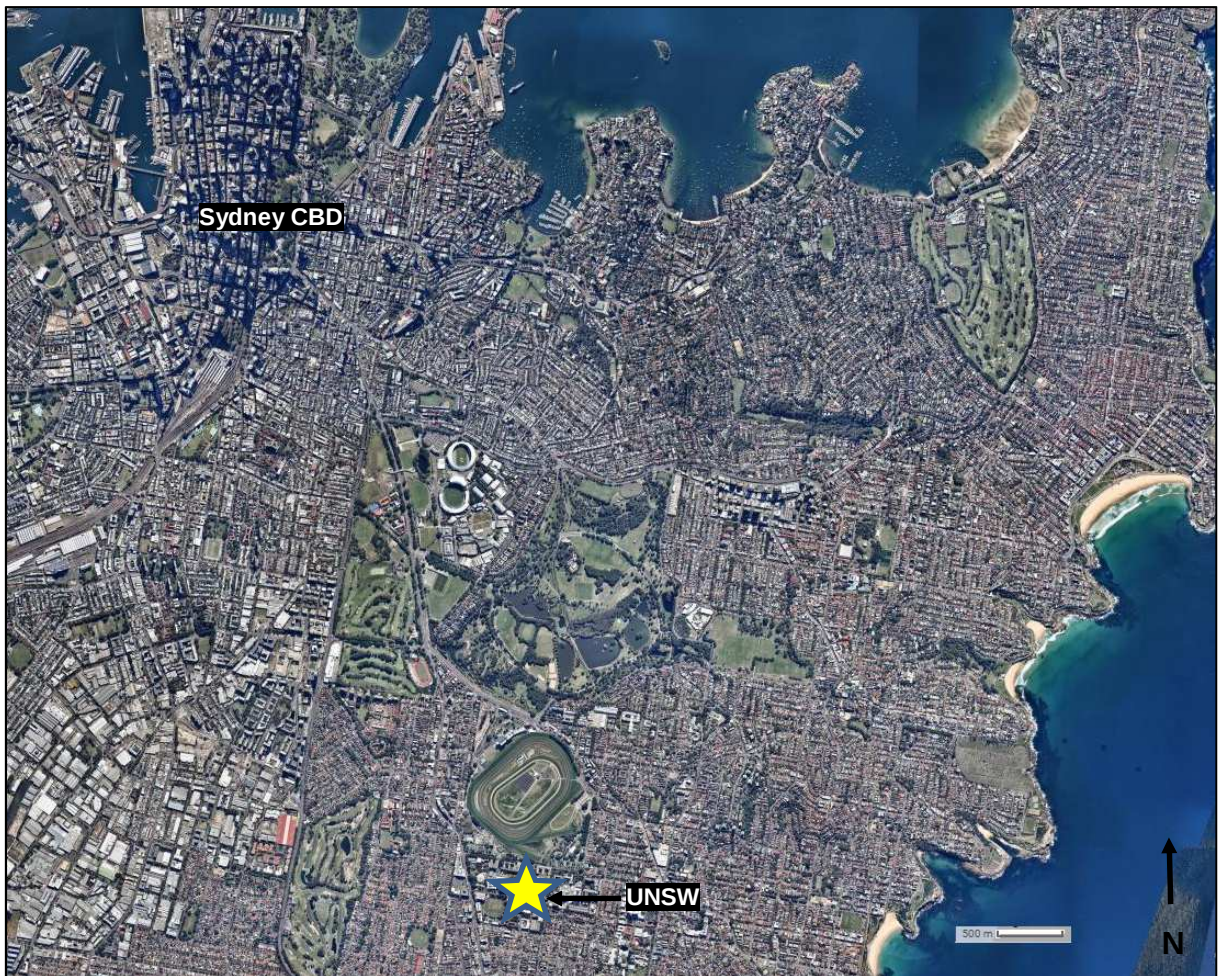


Figure 1 – Project Location

(source: NearMap)

The Kensington Campus is generally bound by Anzac Parade to the west, Botany Street to the east, High Street to the north and Barker Street to the south. The development site sits centrally within the campus, immediately to the west of a grade change between the Lower and Upper campuses. The Ainsworth Building (J17), previously known as the Mechanical Engineering Building, sits to the south of the site. The buildings are of a similar age, form and architectural style, and form a key grouping framing the University Mall and International Square. The Ainsworth Building was the subject of SSD 5572, approved in April 2013, which included the construction of new additions, internal refurbishment and fitout, minor exterior

alterations, and public domain and landscaping upgrades. These works have since been completed. The CBD and South East Light Rail, which will operate between Circular Quay and Randwick/Kingsford and include UNSW stops at Anzac Parade and High Street, is currently under construction and will be operational by 2019.

The John Niland Scientia Building sits directly adjacent to the EEB on Upper Campus, and the Quadrangle Building sits to the north-east. The Kensington Campus is shown in **Figure 2** and the location of the EEB is shown in **Figure 3**.



Figure 2 – UNSW Kensington Campus

(source: NearMap)

The EEB (G17) comprises a six-level 18x86 m South Block fronting the University Mall and a perpendicular five-level 18x66 m North Block. The Rex Vowels Theatre (F17) attaches to the lower ground floor of the EEB and forms part of the project scope. The Nura Gili Centre for Indigenous Programs is located on the Ground Level of the EEB. The centre is not included in the scope of the proposal. The existing site is shown in **Figure 4** and **Figure 5**.

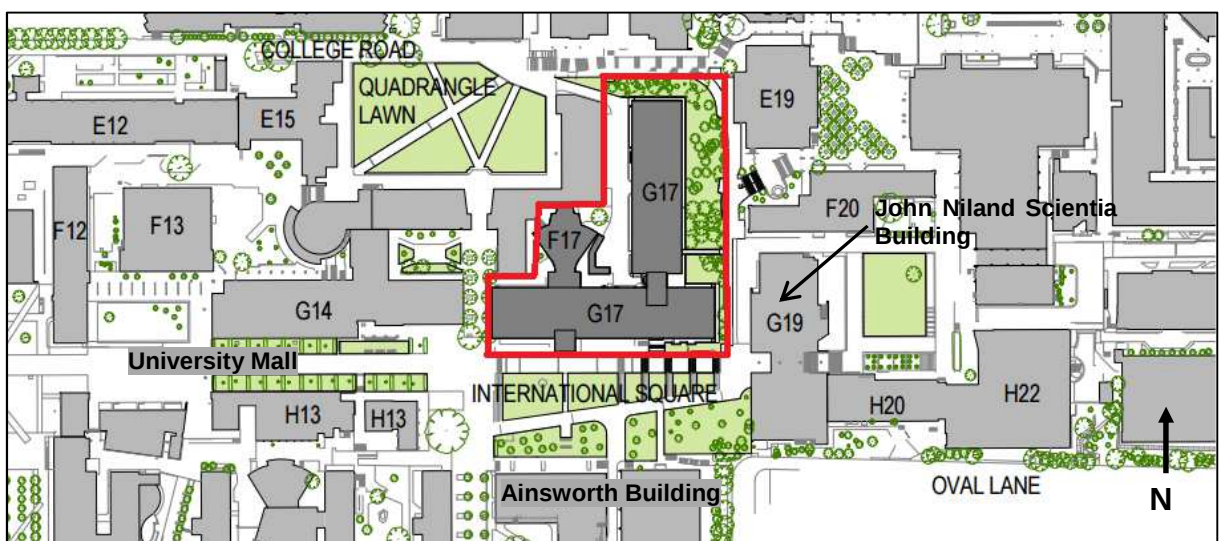


Figure 3 – Subject site within Lower Campus

(source: Applicant's EIS)



Figure 4 – Existing EEB building (on left) looking east towards the John Niland Scientia Building
(source: Applicant's EIS)



Figure 5 – Current EEB internal courtyard facing south
(source: Applicant's EIS)

The subject site is accessible to vehicles via Gate 2 off High Street. No staff or student parking is provided within the site; however, there are a small number of short-term parking spaces available in the internal courtyard of the building associated with the loading dock and servicing of the EEB. The site is landscaped at its northern and eastern edges with a range of planted deep soil tree species forming a green buffer. The eastern side of the EEB is adjacent to a retaining wall that arises from the change of topography between the Upper and Lower Campus. The subject site is generally separated from residential and other sensitive external land uses. The closest residential dwellings, located on Willis Street, Oval Lane and Norton Street in Randwick, sit approximately 65 m from the closest edge of the EEB. The Randwick hospital precinct, including the Prince of Wales Hospital, Royal Hospital for Women and the Sydney Children's Hospital, also sit approximately 550 m to the east of the site (see **Figure 2**).

1.3 Project Description

Table 1 provides a summary of the development proposal's key components and features. **Figures 6, 7, 8 and 9** provide a view of the existing building and an indicative perspective of the proposed development.

Table 1: Key Development Components

Development Summary	The proposal consists of: • new internal fit-out for both the EEB and Rex Vowels Theatre; • replacement of all internal and external building services, including a new roof top plant level (North Block) and plant enclosure (South Block); • upgrading and modification of the building façades; • modifications of levels/access for vehicles in the courtyard area; • landscaping works; and • demolition of the existing Dangerous Goods store.
Façade	• South Block: - o all existing glazed windows on the southern and northern façades are to be replaced with double glazed aluminium windows; - o existing spandrels on Level 2 in the centre of South Block would be removed to enable full-length bay windows; - o extensions to entry canopies; and - o two bay windows on the northern façade to be removed to facilitate a services riser to the east and an extended lift foyer to the west; • North Block: - o recladding and removal of boxed windows at the northern end of Level 4; - o new sun shading devices to be installed on the eastern and western elevations; - o a series of bays to be opened to facilitate wide panel lift doors with vision panels along the western façade of Ground level; - o extension of the floor plate (half a building grid module) at the junction between the North and South Blocks to improve safe handling and loading of goods; and - o new automatic sliding doors at Ground level. • Rex Vowels Theatre: - o glazing walls to replace existing windows; - o replacement of existing roof with a metal deck system; - o demolition of the walls enclosing the existing gas storage area; and - o removal of glazed façades and doors on the east and west between the Theatre and South Block.
Rooftop Plant	• Construction of a new rooftop plant on the North Block, comprising 90% of the total rooftop area; • construction of a smaller roof plant area on the South Block, comprising 10% of the total rooftop area near the existing lift overrun tower; • installation of a series of new and relocated exhaust flues, cooling towers, lightning rods across both roofs and a series of existing research antennae; and • installation of external rooftop desk study areas.
Landscaping/ Tree Removal	• Upgrading of existing degraded pavement; • existing entry steps at University Mall to be removed and replaced with new accessible ramp with integrated drains; • existing garden beds fronting University Mall to be removed and replaced by a new paved zone with internal spill-out area; • new stairs at University Mall to be accompanied with increased circulation around lift core and drainage upgrades; • pavement upgrade to College Road; • construction of a flush shared zone to College Road (within the Kensington Campus and to the north of the EEB) within the courtyard area; • installation of in-site concrete bleachers with integrated planting zones and timber seating edges to form an outdoor classroom; • removal of three trees; • new wider pedestrian bridge to eastern EEB entry at Level 2 to improve

	accessibility and entry; and existing wall height to be reduced to improve sightlines to the EEB eastern entry.
Gross Floor Area (excluding Nura Gili)	The current GFA of 14,172 sqm would be maintained.
Building Height	Existing rooftops reach RL57 (RL63.6 to lift core), while the new rooftop plant will add approximately 4.5 m height to the building within a limited area and footprint, reaching a rooftop maximum of RL62-RL63.
Capital Investment Value	\$80,082,298
Number of Jobs	Approximately 143 full-time equivalent construction jobs.



Figure 6 – Current view of South Block looking north

(source: Applicant's EIS)

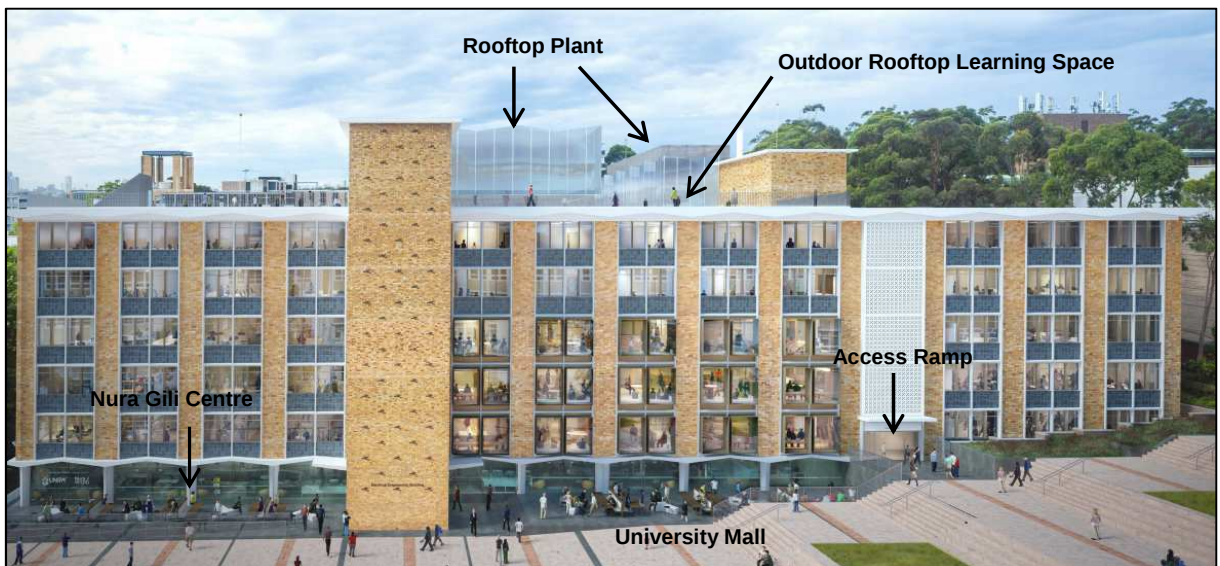


Figure 7 – Proposed design of South Block looking north

(source: Applicant's EIS)



Figure 8 – Current North Block western façade from Rex Vowels Theatre

(source: Applicant's EIS)



Figure 9 – Proposed North Block western façade from Rex Vowels Theatre

(source: Applicant's EIS)

1.4 Project Need and Justification

The redevelopment of the EEB would reinforce a key grouping of engineering buildings, which frame the University Mall at the transition of Upper and Lower Campus. These buildings are a valuable reference to UNSW's early years. The proposal is needed because:

- it would upgrade the facility to current regulatory building standards and provide it with a further 30-35 year serviceable life;
- the new internal fit-out would provide best practice standards for research and teaching in electrical engineering, telecommunications and general learning;
- the reuse and refurbishment of the existing building (rather than demolition and construction of a new building/s) would provide significant ecologically sustainable development benefits; and
- the proposal would produce embodied energy savings by presenting a more sustainable façade.

2. STATUTORY AND STRATEGIC CONTEXT

2.1. SEPP (State and Regional Development) 2011

The proposal is classified as State significant development because it is development for the purpose of an educational establishment with a capital investment value (CIV) in excess of \$30 million in accordance with Schedule 1 of the SRD SEPP. Therefore the Minister for Planning is the consent authority.

2.2. Delegated Authority

In accordance with the Minister's delegation dated 16 February 2015, the Executive Director, Priority Projects Assessments can determine the subject application as Council has not objected to the proposal, no political disclosure statement has been made and less than 25 public submissions have been received objecting to the proposal.

2.3. Permissibility and Zoning

The subject site is zoned SP2 – Infrastructure (Educational Establishment) under the Randwick Local Environmental Plan 2012 (LEP 2012) (refer to **Figure 10**). The proposal is consistent with a definition of an 'educational establishment' under LEP 2012 and is permissible with consent in the SP2 – Infrastructure (Educational Establishment) zone.

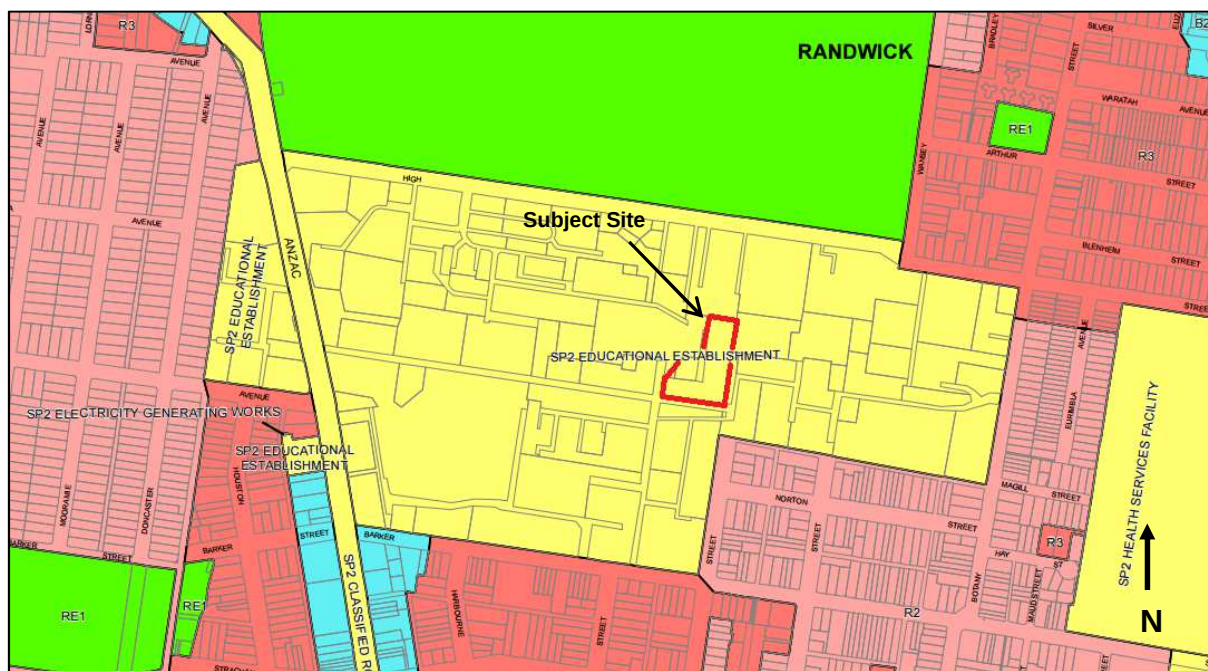


Figure 10 – Zoning Plan extract LEP 2012

(source: Randwick LEP 2012)

2.4. Environmental Planning Instruments

The Department's consideration of relevant Environmental Planning Instruments (EPIs) (including SEPPs) is provided in **Appendix B**. The proposal is consistent with the relevant requirements of the EPIs.

2.5. Objects of the Environmental Planning and Assessment Act 1979

Decisions made under the EP&A Act must have regard to the objects of the EP&A Act, as set out in section 5 of the Act (see glossary at **Appendix C**). The proposal complies with the objects of the EP&A Act as it would deliver upgraded educational facilities to promote the social welfare of the State. The proposal also supports the orderly development of land, being development for public purposes in order to facilitate the delivery of community services.

2.6. Ecologically Sustainable Development

The EP&A Act adopts the definition of Ecologically Sustainable Development (ESD) found in the *Protection of the Environment Administration Act 1991* (see glossary at **Appendix C**). Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes.

The Department has considered the project in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision making process via a thorough assessment of the environmental impacts of the project. The proposal is considered to be consistent with ESD principles as described in Section 3.1 of the applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Regulation.

The proposal would not impact on any vulnerable species, populations, communities or significant habitats. The site is not subject to any known effects of flooding. The site would not be impacted by changes in sea level resulting from climate change.

The development incorporates the following sustainability initiatives:

- reuse of an existing building, providing embodied energy savings;
- facade shading to minimise solar heat gain, and reduce energy requirements for air conditioning;
- provision of rooftop space for potential for photovoltaic cells; and
- connectivity to and use of existing Campus-wide initiatives such as water reuse from the UNSW aquifer and cycling facilities.

The Department is satisfied that the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

2.7. Environmental Planning and Assessment Regulation 2000

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

2.8. Strategic Context

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

- is consistent with NSW State Priorities to build infrastructure to support 31 per cent more households, and to ensure NSW residents have the best educational infrastructure;
- is consistent with *A Plan for Growing Sydney*, as it would support Randwick's role as a strategic centre for education and health. The proposal also aligns with the key objectives of the draft East Subregional Strategy, being to consolidate and strengthen Randwick specialised education and health centre;
- is consistent with *NSW Long Term Transport Master Plan 2012*, as it proposes to strengthen usage of existing public transport services and encourage a modal shift away from private vehicle use by encouraging active transport;
- is consistent with *Sydney Cycling Future 2013*, as it excludes the provision of additional car parking and would maintain and enhance existing bicycle infrastructure to encourage a modal shift away from private vehicle use; and
- would provide direct investment in the region of approximately \$80 million, which would support 143 construction jobs.

2.9 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.

3. EXHIBITION CONSULTATION AND SUBMISSIONS

3.1. Exhibition

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the application and accompanying information was made publicly available for at least 30 days following the date of first publication, in accordance with the Regulation. The Department publicly exhibited it from 18 February 2016 until 18 March 2016:

- on the Department's website;
- at the Department's Bridge Street Sydney Information Centre; and
- at Randwick City Council Information Centre.

The Department advertised the public exhibition in the Sydney Morning Herald and The Daily Telegraph on 17 February 2016, and the Southern Courier on 16 February 2016. The Department notified adjoining landholders, and relevant State and local government authorities in writing.

The Department received a total of six submissions from public authorities during the exhibition of the application, including Randwick City Council. No submissions were received from the general public.

A summary of the issues raised in submissions is provided in the following sections.

3.2. Public Authority Submissions

No public authority objected to the proposal, however each provided comments for consideration in the Department's assessment of the application. A summary of the issues raised is provided below.

Council provided the following comments on the EIS:

- the EIS does not provide enough discussion regarding how the provisions of the Randwick Development Control Plan 2013 have been met;
- the proposal is non-committal in regard to achieving any kind of benchmark in a recognised sustainability ratings system, and only notes compliance with Section J of the Building Code of Australia, with limited ESD measures beyond the embodied energy benefits of re-using the existing building;
- details regarding the demolition, removal, storage, handling and disposal of asbestos based building products and materials should be addressed in the construction management plan;
- future operational noise levels produced by rooftop plant equipment are unclear, and no approval should be given without certainty that its operation will not give rise to 'offensive noise' as defined in the *Protection of the Environment Operations Act 1997*;
- the application should be subject to a Section 94A developer contribution payment of \$800,000 (based on 1 per cent of the proposal's CIV) for the following reasons:
 - o UNSW does not fall into a category exempt from payment of developer contributions;
 - o the University places heavy demands on and also benefits from the public services and facilities provided by Council;
 - o the University has not suggested alternative methods of payment, such as works-in-kind in lieu of a contribution; and
 - o the subject land owned by the University is not subject to the payment of rates, and any developer contribution would be considered reasonable and feasible by Council.

Transport for NSW (TfNSW) provided the following comments on the EIS:

- as construction of the Sydney Light Rail Project has commenced, the applicant is required to seek further advice from TfNSW in relation to construction access route arrangement to the proposed development prior to the commencement of construction;

- the applicant should be required to prepare a Construction Pedestrian and Traffic Management Plan in consultation with TfNSW;
- bicycle facilities proposed should be located in secure, convenient, accessible areas close to main entries; and
- wayfinding and travel access guides to assist with further increasing the mode share of walking and cycling should be developed.

Environment Protection Authority (EPA) provided the following comments on the EIS:

- the proposed site is located within proximity of surrounding residences, which may be adversely affected by noise impacts during demolition, site preparation, construction and operational activities;
- intra-day respite periods for high noise construction activities should be imposed, in negotiation with NSW Health and hospital managements;
- the applicant should ensure that vehicles involved in construction-related activities do not arrive at the site or in surrounding residential precincts outside of approved construction hours;
- the applicant should implement all feasible and reasonable measures as may be necessary to prevent water pollution;
- all waste generated during the project should be assessed, classified and managed in accordance with the *Waste Classification Guidelines Part 1: Classifying Waste*;
- the applicant should be required to develop and implement a protocol for the handling, storage, transport and disposal of any asbestos encountered;
- no concrete waste and rinse water is to be disposed of on the site;
- the applicant is to undertake compliance noise monitoring at the time of commissioning of roof top plant and equipment to confirm that noise emitted does not exceed the nominated project-specific noise levels; and
- the EIS does not adequately detail proposed measures to implement water sensitive urban design principles. The applicant is required to implement water sensitive urban design principles, including stormwater collection, treatment and re-use for non-potable purposes.

Sydney Water provided the following comments on the EIS:

- any approved plans must be submitted to Sydney Water to determine whether the development will affect sewer or main, stormwater drains and/or easements; and
- a Section 73 Certificate must be obtained as early as possible prior to the commencement of construction.

OEH advised that it had reviewed the EIS and provided no further comment.

RMS advised that it had reviewed the EIS and provided no further comment.

3.3. Applicant's Response to Submissions

The applicant provided a response to the issues raised in submissions on 19 April 2016. While there were no changes made to the overall design or the layout of the proposal in the Response to Submissions report (RtS), the applicant provided further clarification and information regarding:

- consideration of Council's DCP;
- rooftop plant noise emissions and management; and
- proposed exemption from payment under Council's s94A plan.

The Department made the RtS publicly available on its website and referred it to Council for review. No public submissions were received regarding the RtS.

Randwick Council provided the following comments in relation to the applicant's RtS:

- due to the proximity of sensitive residential receivers, it is critical for the acoustic consultant engaged to be involved in preparation/assessment of construction certificate plans and to provide a validation acoustic compliance prior to the issuing of an occupation certificate; and
- a revised monetary contribution of \$261,000 is requested for the upgrading of footpaths on Botany Street under Council's Section 94A Contribution Plan.

4. ASSESSMENT

4.1. Section 79C Evaluation

Table 3 identifies the matters for consideration under section 79C that apply to State significant development, in accordance with section 89H of the EP&A Act (see glossary at **Appendix C**). The table represents a summary for which additional information and consideration is provided for in **Section 4** (Key and Other Issues) and relevant appendices or other sections of this report and the EIS, referenced in the table.

The EIS has been prepared by the applicant to consider these matters and those required to be considered in the SEARs and in accordance with the requirements of section 78(8A) of the EP&A Act and Schedule 2 of the EP&A Regulation.

Table 3: Section 79C(1) Matters for Consideration

Section 79C(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	Not applicable.
(a)(iv) the Regulation	The development application satisfactorily meets the relevant requirements of the Regulation, including the procedures relating to development applications (Part 6 of the Regulations), public participation procedures for SSD's and schedule 2 of the Regulation relating to EIS's. Refer to discussion at Section 2.7 .
(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 that they can be appropriately mitigated or conditioned (refer to Section 4.2).
(c) the suitability of the site for the development	The site is suitable for the development because it would provide an educational establishment in a central location, and is accessible to public transport and key road networks (refer to Section 2.8).
(d) any submissions	Consideration has been given to the submissions received during the exhibition in Section 3 of this report. Key issues raised in submissions have been considered further in Section 4.2 of this report.
(e) the public interest	The proposal is in the public interest as it would provide improved educational facilities and delivers sustainable development by optimising the life cycle of existing structures (refer to Section 4.2.3).
Biodiversity values exempt if: (a) On biodiversity certified land (b) Biobanking Statement exists	Not applicable

* Under clause 11 of the SRD SEPP, development control plans do not apply to State significant development. Notwithstanding, consideration has been given to relevant Development Control Plans at **Appendix B**.

4.2. Key and Other Issues

The Department considers the key environmental assessment issues for the application to be:

- built form, urban design and public domain;
- development contributions; and
- other matters.

4.2.1. Built Form, Urban Design and Public Domain

The Department has considered the height, bulk and scale of the redevelopment and the associated impacts on surrounding properties. The proposal would result in a built form essentially identical to the current building form, except for the rooftop additions for new and upgraded plant equipment. The new plant would generate additional rooftop volume in strategically selected locations, resulting in an increased height of up to 4.5 m in these locations. The proposed additional rooftop bulk would be located primarily on the North Block, where 90 per cent of additional rooftop plant area would be located. The remaining 10 per cent of additional plant would be located atop of the South Block. On both roofs there would be a series of new and relocated projections along the ridgeline, including exhaust flues, cooling towers, lightning rods and existing research antennae.

The development site is located approximately 65 m from the nearest residential receivers on Willis Street to the south-east. As a result of the contour of the land, the relative height of the North Block is significantly reduced when viewed from the east and south-east. The Department considers that this would minimise the perceived height of the refurbished North Block from nearby receivers. In contrast, the EEB South Block sits level with the adjacent University Mall and surrounding buildings on Lower Campus. The Department notes that, should the bulk of additional rooftop material have been located on South Block, the relative height and visual impact from the proposal on Lower Campus would have been much greater than the impact upon Upper Campus as currently proposed. North Block is also located further away and primarily out of the line-of-site of residential properties, and is therefore better suited to accommodate the majority of new plant. The contour of the site is demonstrated in **Figure 11**.

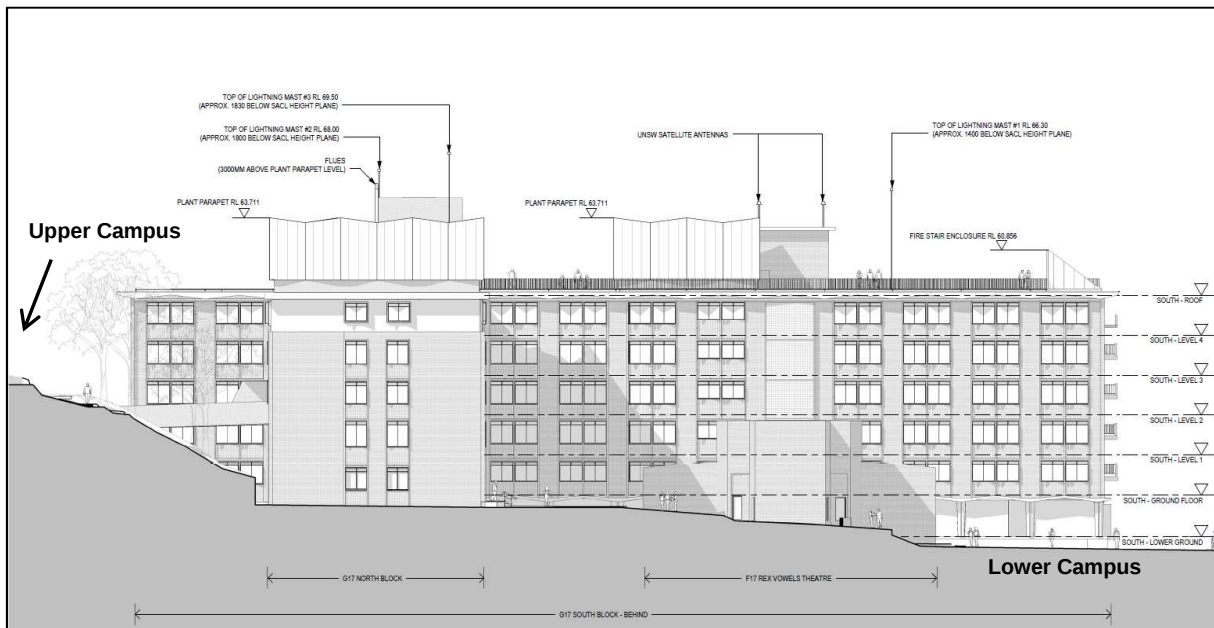


Figure 11 – Northern elevation, showing contour of site

(source: Applicant's EIS)

The Department also considers that the proposed design of the rooftop plant would reduce visual bulk through the introduction of an angled façade (rather than being flush with the existing EEB façade) and the use of translucent, multi-walled polycarbonate panels (as shown in **Figure 12**).

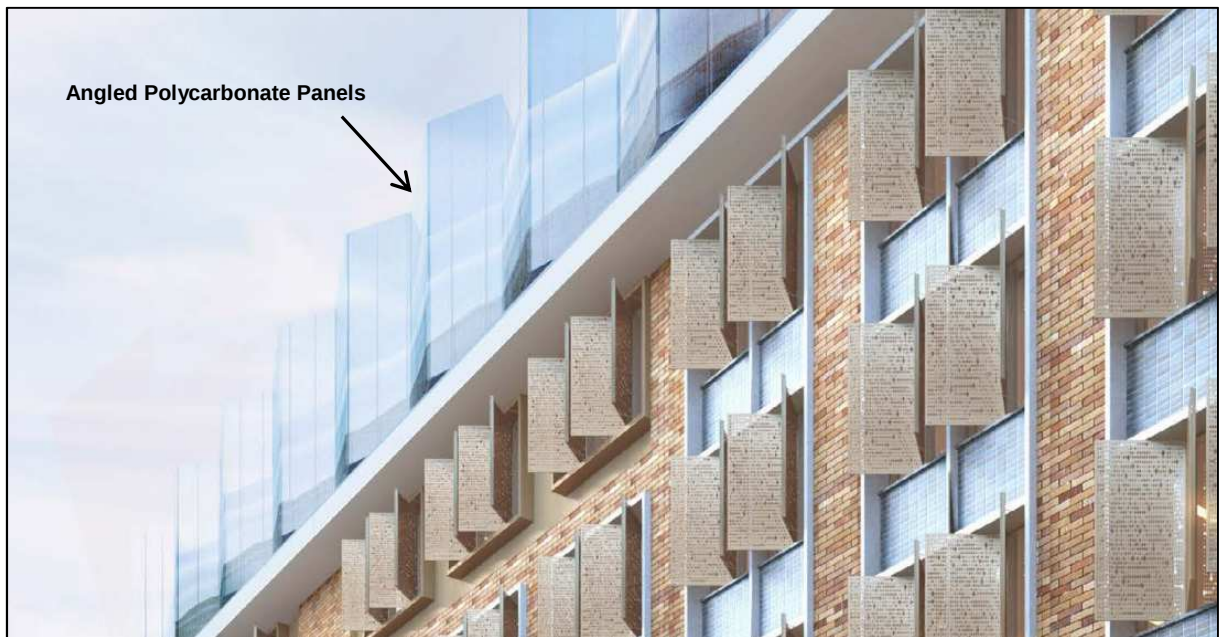


Figure 12 – North Block rooftop plant façade

(source: Applicant's EIS)

The proposal would result in a general reduction in useable floorspace within the building, falling by 311 sqm (or by three per cent) due to increases in circulation and services spaces to meet Fire Safety and other requirements, including the requirements of the Building Code of Australia and the *Disability Discrimination Act*. The student and staff population of the building would remain static. Whilst the internal usable floorspace would be reduced, the Department considers this would only be a minor decrease and notes that the proposal would result in improved internal building efficiency within the same building envelope, with increased services, circulation and amenities.

The proposed landscaping strategy for the subject site includes the removal of existing entry steps and garden beds and replacing them with an accessible ramp and paved internal spill-out areas, with an increase in circulation around the existing lift core addressing University Mall. The College Road pavement would be upgraded, and the existing kerb within the EEB courtyard would be removed to create a new flush shared zone. Within the courtyard concrete bleachers, timber seating and planting zones would be constructed to form an outdoor classroom space.

These works would necessitate the removal of three existing eucalypts of up to 20 m in height, two of which are located within the internal courtyard and one located adjacent to the eastern façade of the North Block. All trees are considered to be in relatively good health, however with some defects. The Department considers the removal of these trees to be a minor impact of the proposal, offset by the planting of up to nine new deciduous trees adjacent to the Rex Vowels Theatre. The proposed landscape plan is shown in **Figure 13**.

The landscape plan also proposes to remove the existing glass doors between the Rex Vowels Theatre and the EEB South Block, as well as construct a wider pedestrian bridge between Upper Campus and Level 2 of the North Block (accessible entrance). The Department is satisfied that these measures would improve accessibility to the building for staff and students.



Figure 13 – Landscape Plan

(source: Applicant's EIS)

Overall, the Department considers that the landscaping strategy would provide for the upgrade of degraded pavements, improve building accessibility and prioritise pedestrians over vehicles within the EEB courtyard. Further, additional landscaping would benefit staff and students through the provision of shaded areas with public seating for outdoor learning spaces.

The Department considers that the removal of glass doors between the Rex Vowels Theatre and the EEB, as well as the introduction of an outdoor teaching space to the courtyard, would increase openness, visibility (casual surveillance) and connection with adjacent spaces.

The design also takes into account the principles of Crime Prevention Through Environmental Design (CPTED). The EEB curtilage is generally a highly trafficked place, particularly adjacent to the University Mall. The Department is satisfied that security control measures would be implemented, with a number of student and staff-only accessible areas to be included within the building. These would be access controlled after hours with alarms, security hardware, locks, pass-swipes and lift locks. Security also patrols the University campus 24 hours per day, seven days a week.

4.2.2. Development Contributions

The applicant has requested an exemption from Council's Section 94A (s94A) Development Contributions Plan 2012 (s94A plan), which applies a one per cent levy for development with a capital investment value greater than \$200,000 unless an exemption applies. Therefore, the development contribution normally required for this development would be approximately \$800,000.

Notwithstanding, the applicant has sought an exemption for the following reasons:

- the University provides significant community benefits given the public character of the University and the material public benefits provided by the University;
- the development is replacing existing University floor space and would not result in additional demand on local infrastructure given there will be no new staff or students;
- the University is a not for profit organisation, and subsequently any surplus income is better redirected into research and education;
- the applicant is a Crown authority and the development is for Education services, and therefore the proposal is exempt from development contributions in accordance with Circular D6 'Crown Development Applications and Conditions of Consent'; and
- the University provides a range of social, cultural and recreational facilities that contribute to the local area and the residents and worker population in the area.

Council considers that the development contributions should be required as the developer does not fall within the exempt categories and Council's ongoing provision of local infrastructure supports the operations of the University, which is dependent on the ongoing provision of infrastructure by Council. Furthermore, Council is of the opinion that employment growth within the Randwick area will be linked with the growth of the University and therefore continued pressure will be placed on Council infrastructure. Therefore Council contends that the payment of contributions is appropriate and reasonable.

Section 94A plans do not require any connection between the development upon which the levy is imposed and the facilities on which the levy is to be used. Section 94A plans are used where it is difficult to establish the nexus between development and the increased demand for public facilities and services.

Notwithstanding, a section 94A condition should be reasonable, and as the University is a 'not for profit' organisation, and there will be no increase in the number of students and staff as a result of the development, it is not proposed to impose a requirement for a s94A

contribution. The Department's consideration of requiring development contributions for educational establishments has varied as each case has been considered on its merits with consideration to the various s94 and s94A plans that have applied. The Department's approach in this instance is consistent with other applications approved at UNSW, namely the Mechanical and Manufacturing Engineering Precinct Development (SSD 5572), which was approved without a development contributions payment requirement as it proposed refurbishment of an existing faculty building without any proposed increase in staff or student numbers using the building.

In accordance with section 94(2)(b) of the EP&A Act, the Minister may impose a condition under section 94A, and if imposed, may have regard to any contributions plan that applies. In this instance, it has recommended that no contribution be applied, given there would be no increase in student and staff numbers as a result of the proposed development.

4.2.3. Other Matters

Local Amenity

Consideration has been given to the impacts of the proposal on the university campus and adjoining properties in terms of overshadowing, visual privacy and acoustic amenity, as detailed below.

Overshadowing

Additional shadowing from the EEB rooftop would potentially fall over the University Mall, the Quadrangle Building, and the curtilage of the John Niland Scientia Building at the winter solstice. Most of these areas of the campus currently sit within the zone of overshadowing created by the existing EEB and surrounding university buildings. The Department is satisfied that the additional overshadowing would not significantly impact upon the amenity of the University campus. No overshadowing will occur on residential properties adjacent to the campus boundary. Existing and future overshadowing in mid-winter is shown in **Figure 14**.

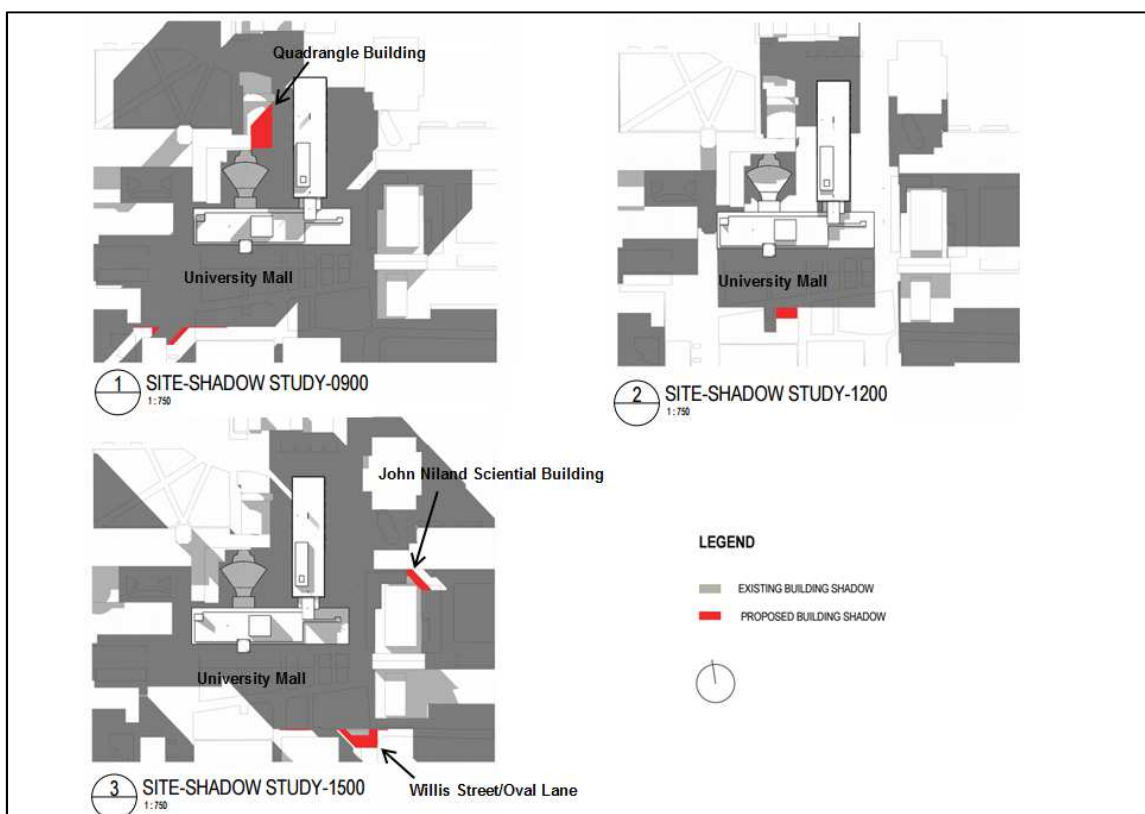


Figure 14 – Existing and future overshadowing during mid-winter

(source: Applicant's EIS; 1:750)

Visual Impact and View Loss

The closest residential receivers are located approximately 65 m from the subject site on Willis Street. The visual impact of the proposal on these residences is shown in **Figures 15** and **16**.

The Department considers that the rooftop additions would be imperceptible from a distance outside of the campus, and would not significantly alter the silhouette from such a distance. Views from outside of the campus into and through the campus from the public domain would largely be unaffected, as rooftop additions would be largely obscured by existing vegetation flanking Willis Street and Oval Lane. Additionally, the western orientation of dwellings on Willis Street minimises outlook towards the EEB in the north-west, and almost eliminates views over the North Block of the building. Therefore, the Department is satisfied that the use of North Block, rather than South Block, for the bulk of additional rooftop plant would reduce the visual impact of the proposal on the Willis Street residential receivers.



Figure 15 – View of EEB from Willis Street and Oval Lane looking north, envelope of proposed additional rooftop plant shown in yellow.
(source: Applicant's EIS)



Figure 16 – View of EEB from corner of Willis Street and Oval Lane looking north-west, envelope of proposed additional rooftop plant shown in yellow.
(source: Applicant's EIS)

The Department notes that from within the UNSW campus, the greatest opportunity to see the rooftop additions would be from the elevated positions in the Upper Campus located to the east of the EEB site. However, it considers that the additions would not result in a significant impact from this vantage point, and would not interrupt any of the key iconic campus views from elevated positions directly down University Mall to Anzac Parade, such as from the John Niland Scientia Building. The placement of the bulk of rooftop additions on the North Block would also reduce the visual impact of the proposal on the University Mall and buildings to the immediate south and west of the EEB, as views of the North Block are obstructed by the South Block from these locations.

The Department is satisfied that the proposal has been designed to minimise view impacts on surrounding residences and to the University campus through the placement of 90 per cent of the rooftop additions onto the North Block.

Noise and Vibration

The EIS is accompanied by an Acoustic Report, which addresses potential noise and vibration impacts of the construction works and the operation of the proposal.

Construction Noise and Vibration

The assessment identified the most critical sensitive receivers that may be affected by noise and vibration as the student residences on High Street, private residences on Willis Street, and staff and students within the University campus. Potential noise and vibration sources during construction would include the installation of structural steel work, and the grinding, cutting and drilling of existing building structures. Vibration and ground-borne noise impacts are likely to be highest during internal demolition and excavation, during which equipment such as concrete saws and jackhammers would be used.

Standard hours noise levels have been set at 53 dB(A) at the external boundaries of the nearest residences on Willis Street, and 65 dB(A) for at the external boundaries of surrounding campus buildings, including the High Street student residences. External demolition and construction works are likely to exceed this noise level on occasion, particularly when works occur at higher levels of the EEB.

The assessment identified a number of noise and vibration management measures to be implemented during construction. These include:

- scheduling noise activities to occur outside of the most sensitive times of the day for each nominated receiver (e.g. early in the morning);
- implementation of equipment-specific screening;
- limiting the number of trucks on site at the start of each day;
- adopting best practice noise management when loading trucks;
- minimising truck idling; and
- ensuring that any equipment not identified in the assessment incorporates silencing/shielding equipment in order to meet the noise criteria.

The EPA raised no objection to the findings or recommendations of the acoustic assessment. However, it recommended the applicant be required to schedule intra-day 'respite periods' for noisy construction activities, noting the close proximity of the site to sensitive noise receivers including the residences on Willis Street, the Sydney Children's Hospital and the Royal Hospital for Women.

To ensure the amenity of the surrounding residential receivers is protected, the Department has recommended a condition requiring the applicant to prepare a Construction Noise and Vibration Management Plan, which would need to address all relevant requirements contained in the EPA Interim Construction Noise Guideline, including noise sources, residential receivers, mitigation measures and monitoring and reporting procedures. The

Department is satisfied that, subject to the recommended conditions, any noise and vibration impacts associated with the construction works can be adequately mitigated and managed.

Operational Noise

Operational noise for the proposal is likely to be generated by laboratory operations and noise from the rooftop plant. A preliminary review for the operation of the main plant room located on the roof has established a noise criteria of 65-70 dB(A) at one metre of the building rooftop boundary. The applicant has committed to incorporating noise controls into the detailed design of the rooftop plant to ensure that cumulative noise output from the plant at the nearest receivers is within the allowable limits. A number of design controls would also be implemented to limit the operational noise output of the rooftop plant, including the use of barriers, acoustic louvres, and sound absorption panels. The assessment concludes that the proposal would not result in any change to, or increase in, current operational noise impacts for the most affected residential receivers on Willis Street or the High Street student residences.

Council raised concerns regarding the uncertainty around the final selection of plant material and therefore unclear operational noise outputs, noting that the final visual impact of the noise attenuation controls is also unknown. However, the applicant has committed to implementing noise control measures to manage offensive noise emissions (such as tonality, low frequency dominance and impulsive character). The EPA has recommended that the applicant be required to undertake noise monitoring at the time of commissioning of roof top plant and equipment to confirm that noise emitted does not exceed the nominated noise levels, and does not exhibit tonal or intermittent characteristics. The Department is satisfied that all noise dampening devices would be contained within the plant zones and within plant rooms and enclosures, resulting in a negligible visual impact on both the University campus and surrounding residential dwellings.

To ensure that the on-going amenity of the surrounding residential receivers is protected throughout the operation of the development, the Department has recommended a condition requiring compliance with the EPA noise emission guidelines and the recommendations in the acoustic assessment submitted with the application. It has also recommended a condition requiring the applicant undertake noise monitoring at the time of commissioning of rooftop plant and equipment.

The Department is satisfied that, subject to the recommended conditions, any noise impacts associated with the operation of the proposed development can be adequately mitigated and managed.

Construction Traffic

Construction vehicle access to the development site is proposed to be via Gate 2 off High Street, utilising the existing signalised intersection. This will ensure that impacts on residential streets will be minimised. Trucks will be accompanied by traffic marshals to ensure pedestrian safety within the university campus. Any queuing of vehicles will occur within the campus and not on surrounding streets.

In its comments on the EIS, TfNSW highlighted that as construction of the Sydney Light Rail Project has commenced, the applicant is required to seek further advice from TfNSW in relation to the construction access route arrangement to the proposed development prior to the commencement of construction, and that a Construction Pedestrian and Traffic Management Plan should be required to be prepared in consultation with TfNSW. In response, the applicant has detailed in their RtS that UNSW will continue to liaise with TfNSW in relation to construction access route arrangements for the proposed development prior to the commencement of construction and how this may impact on, or work with arrangements for, the Sydney Light Rail Project.

The Department is satisfied that all construction vehicle movements could be accommodated within the existing road network. The applicant is required via a recommended condition of development consent to prepare a Construction Traffic Management Plan that specifies the potential impacts to traffic, pedestrians, cyclists and bus services within the vicinity of the subject site.

Overall, the Department is satisfied the traffic report analysis demonstrates that the impact of the development on the existing arterial and local road network would not be significant.

Public Interest

The proposal is considered to be in the public interest as it would have significant benefits including:

- delivering sustainable development on the campus by optimising the life cycle of existing structures;
- improved urban design and pedestrian outcomes for the site;
- delivering improved research facilities to facilitate collaboration with industry to support innovation;
- supporting the recruitment and retention of researchers and teaching staff through the delivery of more modern and fit-for-purpose teaching, learning and research space; and
- consolidation and providing further investment in education and research infrastructure in the Randwick Education and Health Specialised Centre.

The Department therefore concludes that the proposal is in the public interest.

5. CONCLUSION

The Department has reviewed the EIS and considered advice from the public authorities including Council. Issues raised in the submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The Department's assessment concludes that the built form is appropriate given the functional requirements of the EEB. The proposal would not result in any adverse visual impacts on the surrounding area and is acceptable in scale within the local context. The placement of the majority of additional rooftop plant on the North Block would reduce visual bulk, and the design of rooftop mass would be improved by the introduction of an angled façade and the use of translucent, multi-walled polycarbonate panels.

The proposal would provide for the upgrade of degraded pavements, improve building accessibility and prioritise pedestrians over vehicles within the EEB courtyard. The design has also taken into consideration the CPTED principles and the Department is satisfied that all feasible measures to improve and maintain staff and student safety have been considered.

The Department considers that the application is consistent with the objects of the EP&A Act (including ecologically sustainable development), State priorities and *A Plan for Growing Sydney*. The Department is also satisfied that the proposal would provide significant public benefits to the local and regional community through the provision of increased and improved educational facilities. The proposal would also provide 143 new construction jobs.

The proposal is considered to be in the public interest as it would deliver sustainable development and optimise the life cycle of existing structures, and deliver a significantly improved work and study environment in order to retain staff and students and strengthen links between the University and industry.

The Department is satisfied that the proposed development satisfactorily responds to the issues raised and recommends that the SSD application for the refurbishment and reuse of the UNSW Electrical Engineering Building be approved, subject to conditions. The Department's recommended conditions of consent would ensure that the construction and future operation of the proposed facilities would maintain the environmental and residential amenity of the surrounding environment.

6. RECOMMENDATION

In accordance with section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Priority Projects Assessments, as delegate of the Minister for Planning, grants development consent for the construction and operation of the Refurbishment of the UNSW Electrical Engineering Building (SSD 7370).

Prepared by: Nathan Stringer, Planning Officer

Endorsed by:



2/6/2016

Karen Harragon

Director

Social and Other Infrastructure Assessments

Approved by:



David Gainsford 3/6/16

Executive Director

Priority Projects Assessments

APPENDIX A RELEVANT SUPPORTING INFORMATION

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 Assessment
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6980
2. Submissions
http://majorprojects.planning.nsw.gov.au/index.pl?action=list_submissions&job_id=6980
3. Applicant's Response to Submissions
http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6980

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

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

The aims of the SRD SEPP are to identify State significant development (SSD) and State significant infrastructure (SSI) and provide the necessary functions to joint regional planning panels to determine development applications.

The proposed development is SSD in accordance with s. 89C 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 in accordance with Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011. Therefore the Minister for Planning is the consent authority.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) aims to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce to impact of the development are taken into account.

SEPP 33 requires that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact. The Department is satisfied that, in accordance with the SEPP, sufficient information has been provided within the EIS to assess the impact of hazardous development and impose conditions to reduce or minimise impacts.

State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) is the primary environmental planning instrument guiding the remediation of contaminated land in NSW. SEPP 55 aims to:

- provide a state-wide planning approach to the remediation of contaminated land;
- identify when consent is required or not required for a remediation work;
- specify certain considerations that are relevant to applications for consent to carry out remediation work; and
- require that remediation work meet certain standards and notification requirements.

Clause 7 of SEPP 55 identifies that a consent authority must not consent to the carrying out of any development on land unless:

- it has considered whether the land is contaminated;
- if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out; and
- if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

SEPP 55 requires a consent authority to consider whether the land is contaminated, and if so, whether the land will be remediated before the land is used for the intended purpose. The applicant submitted a targeted environmental site assessment and RAP with the application. The assessment concludes the site is suitable for the intended use. The Department is satisfied that, in accordance with clause 7 of the SEPP, the investigations undertaken of the

subject site demonstrate that the site can be made suitable for the continued use as an educational establishment.

Randwick Local Environmental Plan 2012

The proposal is consistent with the aims of the LEP 2012, in that it:

- supports a diverse local economy and present business and employment opportunities for the community;
- supports the efficient use of land and integration of land use and transport;
- achieves a high standard of design in the public domain that enhances quality of life;
- promotes sustainable transport, public transport use, walking and cycling;
- promotes the importance of ecological sustainability;
- protects, enhances and promotes the environmental qualities of Randwick; and
- promotes an equitable and inclusive social environment.

Consideration of the relevant clauses of the LEP is provided in **Table 4**.

Table 4: Consideration of LEP 2012

Criteria	Complies	Department Comment / Assessment
Clause 4.3 Height of buildings	Complies	The part of the University campus where the EEB and Rex Vowels Theatre is located is not subject to any height controls.
Clause 4.4 Floor space ratio	Complies	The part of the University campus where the EEB and Rex Vowels Theatre is located is not subject to any floor space ratio controls.
Clause 5.10 Heritage conservation	Complies	The University campus contains a localised Heritage Conservation Area (Item C2) around the Old Tote Courtyard, located north-west of the EEB site and separated by numerous buildings. The Department is satisfied that there will be no significant material impact on the heritage conservation area.
Clause 5.12 Infrastructure development and Use of existing buildings by the Crown	Complies	BCHC is an educational establishment administered by a Crown Authority.
Clause 6.1 Acid sulfate soils	Complies	The University campus is not mapped as being subject to any acid sulfate soils. The Department is satisfied that it is unlikely any acid sulfate soils would be exposed by the proposed works.
Clause 6.8 Airspace operations	Complies	A detailed review has revealed the Obstacle Limitation Surface (OLS) for the site to be between approximately 68 m AHD – 74 m AHD. The design of the EEB indicates that the tallest elements of the building are all below OLS height, and therefore will not pose an issue for the operation of Sydney Airport. Should any permanent or temporary projection into the Obstacle Limitation Surface occur, the applicant would submit an application to Sydney Airport Corporation in relation to either elements of the built form or temporary construction cranes.
Clause 6.11 Design excellence	Complies	The renewal and refurbishment of the building will retain the characteristics of the current building, which exhibits a high standard of design, materiality, detailing and is appropriate for the type and location of building. The Department is satisfied that the proposal would significantly enhance the ESD credentials of the building, improve solar access into the building, address acoustic transmissions, and improve the visual appearance and safety of the current design.

Randwick Development Control Plan 2013

It is noted that clause 11 of the State Environmental Planning Policy (State and Regional Development) 2011 provides that development control plans do not apply to SSD. Notwithstanding, the key relevant controls applying to the EEB site are addressed in **Table 4**.

Table 5: Consideration of the relevant DCP 2013 controls.

Randwick DCP 2013	Department's Assessment
B1 Design	An architectural and landscape design report has been prepared as part of the EIS. The report establishes the site's context, undertakes a comprehensive site analysis, discusses the design approach and offers an area analysis. The Department is satisfied that the proposal has been designed to improve the maximise efficiency and improve the public domain.
B3 Ecologically Sustainable Development	The building has been designed to retain most of the existing external fabric with thermal upgrades such as double glazing, passive sun shading and wall insulation. The Department is satisfied that the design responds to the University campus and to the local microclimate.
B4 Landscaping and Biodiversity	A landscape plan has been prepared as part of the EIS, detailing existing trees and natural features within or adjacent to the site. Whilst three trees would be removed, much of the existing vegetation on site would be maintained. The Department is satisfied that the retention of most planting, as well as the addition of infill planting adjacent to the Rex Vowels Theatre, would maintain the natural environment of the University campus.
B6 Recycling and Waste Management	A waste management plan has been prepared as part of the EIS, detailing management practices to be adopted in conjunction with the UNSW Environmental Policy. General waste collection would be located in the open paved area behind the South wing, and dangerous goods waste would be stored locally adjacent to laboratories in an approved Australian Standards cabinet. The Department is satisfied that the applicant has a thorough waste management plan in place to effectively manage waste during construction and operation of the proposal, including the management of asbestos waste during construction.
B7 Traffic, Transport and Access	A traffic and transport report has been prepared as part of the EIS, detailing access to car parking, public transport, and measures to encourage active transport. The proposal would prioritise access for pedestrians over vehicles within the internal EEB courtyard. The Department is satisfied that the proposal would not result in an increase in road usage, and that the high rates of public and active transport to and from the University campus would continue.
B8 Water Management	An integrated water management report has been prepared, detailing rainwater re-use provisions and measures to implement water reduction and energy savings. The Department is satisfied that the stormwater plan provided would effectively manage any potential impacts on the surrounding University campus.
E2 – 4.2.1 Sustainability	The building has been designed to retain most of the existing external fabric with thermal upgrades such as double glazing, passive sun shading and wall insulation. The Department is satisfied that the design responds to the University campus and to the local microclimate.
E2 – 4.2.2 Sense of Place	The existing EEB is characterised as a legacy building on the University campus. The Department is satisfied that the refurbishment would actively contribute to the creation of a high quality campus aimed at generated memorable experiences for staff, students and visitors.
E2 – 4.2.3 Legibility	The pattern of public domain identified in the DCP is supported in the proposed landscape approach for the building. The Department is satisfied that the introduction of new paving and outdoor teaching spaces, and the removal of glass barriers would enhance legibility around the EEB.

E2 – 4.2.4 Knowledge Clusters and Hubs	The Department is satisfied that the proposed landscaping, including outdoor teaching spaces and increased accessibility, would encourage informal interchange of ideas. The proposal has been designed to provide flexible working and teaching spaces for staff and students. The refurbishment would improve the functionality of the building and enhance its contribution to the University.
E2 – 4.2.5 Landscape	The landscape plan prepared as part of the EIS identifies significant existing planting and provides opportunities for enhancing existing open spaces. The plan proposes to enhance visibility and sight lines, eliminating areas of darkness and possible entrapment. The Department is satisfied the proposal would provide for the upgrade of degraded pavements and provide new outdoor learning spaces.
E2 – 4.2.6 Buildings	The Department notes that the refurbishment of the EEB would extend the usable life of the building and provide flexible working and teaching spaces for staff and students. Alterations to the façade would increase light and openness. The Department is satisfied that the proposal has been designed to minimise view loss impacts on surrounding residences and to the University campus through the placement of 90 per cent of additions to the North Block rooftop.
E2 – 4.2.9 Recreation and Cultural Facilities and Events	The refurbishment of the Rex Vowels Theatre would include improvements to accessibility connections to and around the theatre and the provision of updated bleachers. The Department is satisfied that the theatre would act as a gathering place, enhancing the campus social experience.
E2 – 4.2.10 Transport and Parking	The Department is satisfied that the proposal would not result in an increase in road usage, and that the high rates of public and active transport to and from the University campus would continue.

APPENDIX C 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.(Cl.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 Threatened Species Conservation Act 1995), or
 - (b) a biobanking statement has been issued in respect of the development under Part 7A of the Threatened Species Conservation Act 1995.
-

APPENDIX D RECOMMENDED CONDITIONS OF CONSENT
