Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act* Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 8636
Proposal Name	Engineering and Technology Precinct Development
Location	The University of Sydney, Darlington Campus
Applicant	The University of Sydney
Date of Issue	8 August 2017
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000.</i> Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental
	 impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: adequate baseline data; consideration of potential cumulative impacts due to other development in the vicinity; and measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any
	significant risks to the environment. The EIS must be accompanied by a report from a qualified quantity surveyor providing: a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and certification that the information provided is accurate at the date of preparation.
Key issues	 The EIS must address the following specific matters: 1. Statutory and Strategic Context – including: Address the statutory provisions contained in all relevant environmental planning instruments, including: State Environmental Planning Policy (State & Regional Development) 2011; State Environmental Planning Policy (Infrastructure) 2007; State Environmental Planning Policy No. 33 – Hazardous and Offensive Development; State Environmental Planning Policy No. 55 – Remediation of Land; and Sydney Local Environmental Plan 2012. Permissibility Detail the nature and extent of any prohibitions that apply to the development. Development Standards Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.

Campus Improvement Program 2014 - 2020

In accordance with section 83D(3) of the *Environmental Planning and Assessment Act 1979*, demonstrate that the proposal is not inconsistent with the development consent granted for The University of Sydney Campus Improvement Program concept proposal (SSD 6123).

2. Policies

Address the relevant planning provisions, goals and strategic planning objectives in the following:

- NSW State Priorities;
- A Plan for Growing Sydney;
- NSW Long Term Transport Master Plan 2012;
- Sustainable Sydney 2030;
- Sydney's Bus Future 2013;
- Sydney's Cycling Future 2013;
- Sydney's Walking Future 2013;
- Sustainable Sydney 2030 (the City of Sydney);
- Healthy Urban Development Checklist, NSW Health; and
- Greater Sydney Commission's Draft Central District Plan.

3. Built Form and Urban Design

- Address the height, density, bulk and scale, and setbacks of the proposal in relation to the locality and the surrounding development (including SSD 6123 Campus Improvement Program building envelopes), topography and streetscape.
- Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours, landscaping and Crime Prevention Through Environmental Design Principles.
- Demonstrate in consultation with, and to the satisfaction of, the Government Architect NSW that design excellence will be achieved in accordance with the provisions of Sydney Local Environmental Plan 2012.
- Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.

4. Environmental Amenity

Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing, lighting impacts and wind impacts. A high level of environmental amenity for the surrounding locality must be demonstrated.

5. Transport and Accessibility

Include a transport and accessibility impact assessment, which details, but not limited to the following:

- accurate details of the current daily and peak hour vehicle, public transport, pedestrian and cycle movement and existing traffic and transport facilities provided on the road network located adjacent to the proposed development;
- an assessment of the operation of existing and future transport networks including the bus network and their ability to accommodate the forecast number of trips to and from the development;
- details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips;
- the adequacy of public transport, pedestrian and bicycle networks and infrastructure to meet the likely future demand of the proposed development;
- the impact of the proposed development on existing and future public transport infrastructure within the vicinity of the site in consultation with

- Roads and Maritime Services and Transport for NSW and identify measures to integrate the development with the transport network;
- details of any upgrading or road improvement works required to accommodate the proposed development;
- details of travel demand management measures to minimise the impact on general traffic and bus operations and to encourage sustainable travel choices and details programs for implementation;
- the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for upgrading or road improvement works, if required (note: traffic modelling is to be undertaken with scope to be agreed by TfNSW and RMS in advance);
- the proposed active transport access arrangements and connections to public transport services;
- the proposed access arrangements, including car and bus pick-up/dropoff facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones;
- measures to maintain road and personal safety in line with CPTED principles;
- the proposed car and bicycle parking provision, including end-of-trip facilities, which must be taken into consideration of the availability of public transport and the requirements of Council's relevant parking codes and Australian Standards;
- proposed bicycle parking facilities in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance:
- details of the proposed number of car parking spaces and compliance with appropriate parking codes and justify the level of car parking provided on-site;
- details of emergency vehicle access arrangements;
- an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures;
- service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times);
- in relation to construction traffic:
 - assessment of cumulative impacts associated with other construction activities (if any);
 - an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;
 - details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;
 - details of anticipated peak hour and daily construction vehicle movements to and from the site:
 - details of access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle:
 - details of temporary cycling and pedestrian access during construction;
 - details of proposed construction vehicle access arrangements at all stages of construction; and
 - traffic and transport impacts during construction, including cumulative impacts associated with other construction activities, and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact (which must

include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/construction activities).

- → Relevant Policies and Guidelines:
- Guide to Traffic Generating Developments (Roads and Maritime Services)
- EIS Guidelines Road and Related Facilities (DoPI)
- NSW Planning Guidelines for Walking and Cycling
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
- Cycling Aspects of Austroads Guidelines

6. Ecologically Sustainable Development (ESD)

- Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development.
- Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice.
- Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.

7. Noise and Vibration

Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding sensitive receivers.

- → Relevant Policies and Guidelines:
- NSW Industrial Noise Policy (EPA)
- Interim Construction Noise Guideline (DECC)
- Assessing Vibration: A Technical Guideline 2006

8. Heritage

- Include a Heritage Impact Assessment prepared in accordance with the guidelines in the NSW Heritage Manual that addresses the policies in The University of Sydney Grounds Conservation Management Plan (2016), and the degree to which the design of the proposal will contribute to the character and heritage of The University of Sydney.
- Provide a view assessment identifying significant views and potential impacts of the proposal on the heritage significance of The University of Sydney.
- A historical archaeological assessment should be prepared by a historical archaeologist in accordance with the Heritage Division, Office of Environment and Heritage Guidelines Assessing Significance for Historical Archaeological Sites and 'Relics' 2009. This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. In the event that harm cannot be avoided in whole or Part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations.

9. Contamination

Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.

- → Relevant Policies and Guidelines:
- Managing Land Contamination: Planning Guidelines SEPP 55 Remediation of Land (DUAP)

10. Sediment, Erosion and Dust Controls

Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.

- → Relevant Policies and Guidelines:
- Managing Urban Stormwater Soils & Construction Volume 1 2004 (Landcom)
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
- Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)

11. Utilities

- Preparation of an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation requirements of the development for the provision of utilities including staging of infrastructure.
- Preparation of an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.

12. Contributions

Address Council's Section 94 Contribution Plan and/or details of any Voluntary Planning Agreement.

13. Drainage

Detail drainage associated with the proposal, including stormwater and drainage infrastructure.

14. Waste

Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.

15. Construction Hours

Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.

In addition, the EIS must include the following:

- Architectural drawings (dimensioned and including RLs);
- A digital 3D CAD model (for submission to the City of Sydney, at a 1:500 scale);
- Site survey plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries;
- Site analysis plan;
- Stormwater concept plan;
- Sediment and erosion control plan;
- Shadow diagrams;
- View analysis / photomontages;
- Landscape plan (identifying any trees to be removed and trees to be retained or transplanted);
- Draft Public Domain Plan:
- Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan;
- Geotechnical and structural report;

	 Conservation Management Plans for each heritage listed building; Accessibility report; Arborist report; Acid sulphate soils management plan (if required); and Schedule of materials and finishes.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with:
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified.