

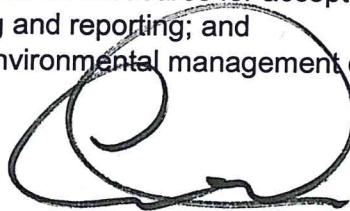
Development consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning and Infrastructure, under delegation dated 27 February 2013, I grant consent to the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts including economic and social impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.



Executive Director
Major Projects Assessment
Development Assessment Systems and Approvals

Sydney *15 October* 2013

SCHEDULE 1

Application No.:	SSD 5087-2011
Applicant:	University of Sydney
Consent Authority:	Minister for Planning and Infrastructure
Land:	The University of Sydney, Camperdown Campus (Part Lot 101 in DP 1171804 and Part Lot 1966 in DP 1117595)
Development:	<p>Australian Institute of Nanoscience, Science Research and Education Facility, including:</p> <ul style="list-style-type: none">• construction of a new four storey educational establishment and new pedestrian bridge links to existing Physics Building;• demolition of minor structures, including interface points with Physics Building to enable construction of pedestrian links;• construction of external plant and storage room;• site public domain and landscaping works; and• associated building services, loading dock and two car parking spaces.

DEFINITIONS

Advisory Notes	Advisory information relating to the consent but do not form a part of this consent
Applicant	The University of Sydney
Application	The development application and the accompanying drawings plans and documentation described in Condition A2.
BCA	Building Code of Australia
Construction	Any works, including earth and building works
Council	City of Sydney
Certification of Crown Building works	Certification under s109R of the EP&A Act
Certifying Authority	Means a person who is authorised by or under section 109D of the EP&A Act to issue a construction certificate under Part 4A of the EP&A Act; or in the case of Crown development, a person qualified to conduct a Certification of Crown Building works
Day time	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure or its successors
Director-General	Director-General of the Department of Planning and Infrastructure, or nominee/delegate
Director General's approval, agreement or satisfaction	A written approval from the Director- General (or nominee/delegate) Where the Director-General's approval, agreement or satisfaction is required under a condition of this approval, the Director-General will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Director-General may ask for additional information if the approval, agreement or satisfaction request is considered incomplete. When further information is requested, the time taken for the applicant to respond in writing will be added to the one month period.
EEC	Endangered ecological community
Evening	The period from 6pm to 10pm
Environmental Impact Statement (EIS)	Environmental Impact Statement titled <i>Science Research and Education Facility – Australian Institute of Nanoscience, The University of Sydney</i> , prepared by Integrated Site Design, dated January 2013.
EPA	Environment Protection Authority, or its successor
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation or Regulation	Environmental Planning and Assessment Regulation 2000
Minister	Minister for Planning and Infrastructure, or nominee
Night time	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water, or its successor
OEH	Office of the Environment and Heritage, or its successor
PCA	Principal Certifying Authority, or in the case of Crown development, a person qualified to conduct a Certification of Crown Building works
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build
Response to Submissions (RtS)	Response to Submissions report titled, <i>Science Research and Education Facility – Australian Institute of Nanoscience, The University of Sydney</i> , prepared by Integrated Site Design, dated August 2013.
RMS	Roads and Maritime Services Division, Department of Transport or its successor
Sensitive receiver	Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church) and children's day care facility.
Subject Site	The University of Sydney, Camperdown Campus (Part Lot 101 in DP 1171804 and Part Lot 1966 in DP 1117595).

SCHEDULE 2

A ADMINISTRATIVE CONDITIONS

Development Description

A1. Except as amended by the conditions of this consent, development consent is granted only to carrying out the development as described in Schedule 1.

Development in Accordance with Plans and Documents

A2. The applicant shall carry out the project generally in accordance with the:

- a) Environmental Impact Statement titled *Science Research and Education Facility – Australian Institute of Nanoscience, The University of Sydney*, prepared by Integrated Site Design, dated January 2013.
- b) Response to Submissions report titled, *Science Research and Education Facility – Australian Institute of Nanoscience, The University of Sydney*, prepared by Integrated Site Design, dated August 2013.
- c) following drawings, except for:
 - i) any modifications which are Exempt or Complying Development;
 - ii) otherwise provided by the conditions of this consent.

Architectural (or Design) Drawings prepared by Architectus			
Drawing No.	Issue	Name of Plan	Date
DA-0010	2	Site Plan – Key Plan	25.06.2013
DA-0011	3	Site Plan – Demolition	22.07.2013
DA-0012	2	Site Plan – Proposed Context	22.07.2013
DA-1000	3	Floor Plan – AIN Level 1	22.07.2013
DA-1001	1	Floor Plan – AIN Level 2	19.06.2013
DA-1002	1	Floor Plan – AIN Level 3	19.06.2013
DA-1003	2	Floor Plan – AIN Level 4	25.06.2013
DA-1004	2	Floor Plan – AIN Roof Plan	25.06.2013
DA-2000	2	Sections – Sheet 1	22.07.2013
DA-2001	3	Sections – Sheet 2	22.07.2013
DA-2002	2	Sections – Sheet 3	22.07.2013
DA-3000	3	Elevations – Sheet 1	22.07.2013
DA-3001	2	Elevations – Sheet 2	22.07.2013
DA-4000	2	Existing / Demolition – East Link Plans	22.07.2013
DA-4001	1	Existing / Demolition – West Link Plans	19.06.2013
DA-4002	3	Existing / Demolition – East Link – Elevations – Sheet 1	22.07.2013
DA-4003	2	Existing / Demolition – East Link – Elevations – Sheet 2	22.07.2013
DA-4004	1	Existing / Demolition – West Link – Elevations	19.06.2013
DA-4005	1	Proposed – West Link and East Link Plans	19.06.2013
DA-4006	2	Proposed – East Link Elevations	22.07.2013
DA-4007	1	Proposed West Link Elevations	19.06.2013

Inconsistency between documents

- A3. If there is any inconsistency between the plans and documentation referred to above the most recent document shall prevail to the extent of the inconsistency. However, conditions of this approval prevail to the extent of any inconsistency. Where there is an inconsistency between approved elevations and plans, the elevations prevail.

Building Code of Australia Compliance

- A4. All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the ongoing benefit of the community. Compliance with the performance requirements can only be achieved by :
- a) complying with the deemed to satisfy provisions, or
 - b) formulating an alternative solution which :
 - i) complies with the performance requirements, or
 - ii) is shown to be at least equivalent to the deemed to satisfy provision, or
 - iii) a combination of a) and b).

Development Expenses

- A5. It is the responsibility of the applicant to meet all expenses incurred in undertaking the project, including expenses incurred in complying with conditions imposed under this approval.

Lapsing of approval

- A6. This consent will lapse five years from the date of consent unless the works associated with the project have physically commenced.

Prescribed Conditions

- A7. The applicant shall comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the Regulation.

Director General as Moderator

- A8. Where this consent requires further approval from public authorities, the parties shall not act unreasonably in preventing an agreement from being reached. In the event that an agreement is unable to be reached within 2 months or a timeframe otherwise agreed to by the Director-General, the matter is to be referred to the Director-General for resolution. All areas of disagreement and the position of each party are to be clearly stated to facilitate a resolution. The Director-General's resolution of the matter will be binding on the parties.

Long Service Levy

- A9. For work costing \$25,000 or more, a Long Service Levy shall be paid. For further information please contact the Long Service Payments Corporation on their Helpline 13 1441.

Legal notices

- A10. Any advice or notice to the consent authority shall be served on the Director-General.

B PRIOR TO COMMENCEMENT WORKS

Certified Plans

- B1. Plans certified in accordance with section 109R of the EP&A Act are to be submitted to the Certifying Authority and the department prior to commencement of each stage of the works and shall include details as required by any of the following conditions.

Additional details to be submitted – Landscape Plan

- B2. To ensure that the development is suitably embellished, a detailed landscape plan shall be prepared and drawn to scale by a qualified landscape architect or landscape designer, based on the document titled *Australian Institute of Nanoscience, University of Sydney – Landscape Report*, prepared by Aspect Studios, dated 18/07/2013. The landscape plan shall also include design recommendations contained within the Statement of Heritage Impact, prepared by Graham Brooks and Associates, dated November 2012.

Prior to the commencement of work, the landscape plan shall be submitted to the Department of Planning and Infrastructure for approval.

Road Deposit/Bond

- B3. The following current fee and bond (which is subject to periodic review and may vary at time of payment) shall be lodged with council:

- a) Road inspection fee
- b) Road maintenance bond.

The bond is required to cover the cost of any damage to council's public assets (eg: road, guttering, footpaths, drainage systems) arising from development works. The bond (less an administration fee) will be refunded upon the completion of the development should there be no damage to council's assets as a result of the development works.

The road inspection fee covers council's costs to inspect public assets adjacent to the development site before and after development work.

Reflectivity

- B4. The building materials used on the facades of the buildings shall have a maximum normal spectral reflectivity of visible light of 20 percent and shall be designed so as not to result in glare that causes any discomfort or threatens the safety of pedestrians or drivers. A report/statement demonstrating compliance with these requirements is to be submitted to the satisfaction of the Certifying Authority prior to commencement of above ground works.

Safety/Heath/Amenity

- B5. Toilet facilities shall be provided on the land at the rate of 1 toilet for every 20 persons or part thereof employed at the site and maintained throughout development. Each toilet provided shall be:

- a) a standard flushing toilet, and
- b) connected:
 - i) to a public sewer, or
 - ii) if connection to a public sewer is not practicable, to an accredited sewage management facility provided by the council, or

-
- iii) if connection to a public sewer or an accredited sewage management facility is not practicable to some other sewage management facility approved by council.
- B6. A sign is to be erected and maintained in a prominent position on the site in accordance with Clause 98 A (2) of the Environmental Planning and Assessment Regulations 2000 indicating:
- a) the name, address and telephone number of the principal certifying authority for the work, and
 - b) the name of the principal contractor (if any) for the building work and a telephone number on which that person may be contacted outside working hours, and
 - c) stating that unauthorised entry to the work site is prohibited.

This condition does not apply to:

- a) building work carried out inside an existing building, or
 - b) building work carried out on premises that are to be occupied continuously (both during and outside working hours) while the work is being carried out.
- B7. Should the development work:
- a) be likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or
 - b) involve the enclosure of a public place,

a hoarding or protective barrier shall be erected between the work site and the public place. Such hoarding or barrier shall be designed and erected in accordance with Council's current Local Approvals Policy under the Local Government Act 1993.

Where necessary, an awning shall be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.

The hoarding, awning or protective barrier shall be effectively illuminated between sunset and sunrise where it may be hazardous to any person in the public place.

Outdoor Lighting

- B8. All outdoor lighting within the site shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting. Details demonstrating compliance with these requirements are to be submitted to the satisfaction of the Certifying Authority prior to commencement of above ground works.

Access for People with Disabilities

- B9. The building must be designed and constructed to provide access and facilities for people with a disability in accordance with the Building Code of Australia. The Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any construction drawings.

Erosion and Sedimentation Control

- B10. A soil erosion and sediment control plan must be developed and implemented in accordance with the document *Managing Urban Stormwater-Soils & Construction Volume 1* (2004) by Landcom. Details are to be submitted to the satisfaction of the Certifying Authority prior to commencement of above ground works involving vegetation removal or soil disturbance.

Pre-Construction Dilapidation Reports

B11. The applicant is to engage a qualified structural engineer to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all retained existing and adjoining buildings, structures and infrastructure within the 'zone of influence'. This zone is to be defined as the horizontal distance from the edge of the excavation to twice the maximum excavation depth. Any entry into private land is subject to the consent of the owner(s) and any inspection on privately affected land shall include details of the whole building where only part of the building may fall within the 'zone of influence'.

The report shall be submitted to the satisfaction of the Certifying Authority prior to the issue of the commencement of works. A copy of the report is also to be forwarded to the council.

Bicycle Parking Spaces

B12. A minimum of 20 bicycle parking spaces are to be provided for the development. Details confirming the parking number shall be submitted to the satisfaction of the Certifying Authority prior to the commencement of above ground works.

Parking and Service Vehicle Layout

B13. Plans demonstrating compliance with the following traffic and parking requirements shall be submitted to the satisfaction of the Certifying Authority prior to commencement of above ground works:

- a) all vehicles should enter and leave the subject site in a forward direction. In the event that site constraints do not permit heavy rigid vehicles to enter and leave the subject site in a forward direction, then all reversing movements should be undertaken under the control of certified traffic controllers to ensure public safety when vehicles are reversing
- b) car parking associated with the proposal (including queuing areas, grades, turn paths, sight distance requirements, aisle widths, and parking bays) should be in accordance with AS 2890.1-2004, AS2890.6 for accessible spaces and AS 2890.2-2002 for heavy vehicle usage
- c) the layout, design and security of bicycle facilities off-street must comply with the minimum requirements of Australian Standard AS 2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities except that:
 - i) all bicycle parking for staff / employees of any land uses must be Class 2 bicycle facilities; and
 - ii) all bicycle parking for visitors of any land uses must be Class 3 bicycle rails.
- d) appropriate pedestrian and cyclist advisory signs are to be provided at the egress from the car park
- e) all works/regulatory signposting associated with the proposed developments shall be at no cost to the relevant roads authority
 - i) the swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the subject site, shall be in accordance with AUSTROADS.

Structural Details

B14. Prior to the commencement of works, the applicant shall submit to the satisfaction of the PCA structural drawings prepared and signed by a suitably qualified practising Structural Engineer that comply with:

- a) the relevant clauses of the BCA

-
- b) the development consent.

Mechanical Ventilation

B15. All mechanical ventilation systems shall be installed in accordance with Part F4.5 of the Building Code of Australia and shall comply with Australian Standards AS1668.2 and AS3666 *Microbial Control of Air Handling and Water Systems of Building*, to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection. Details shall be submitted to the satisfaction of the Certifying Authority prior to commencement of above ground works.

Storage and Handling of Waste

B16. The building plans and specifications submitted to the principal certifying authority prior to the commencement of any works shall demonstrate that an appropriate area will be provided within the premises for the storage of garbage bins and recycling containers and all waste and recyclable material generated by this premises, including:

- a) All internal walls of the storage area are rendered to a smooth surface, coved at the floor/wall intersection, graded and appropriately drained with a tap in close proximity to facilitate cleaning
- b) Include provision for the separation and storage, in appropriate categories, of material suitable for recycling
- c) include provision for separate storage and collection of organic/food waste.

Stormwater and Drainage Works Design

B17. Final design plans of the stormwater drainage systems, prepared by a qualified practicing professional and in accordance and with the requirements of and in consultation with council, shall be submitted to the certifier prior to the certification of Crown Building works. The hydrology and hydraulic calculations shall be based on models described in the current edition of Australian Rainfall and Runoff.

Sydney Water Notice of Requirements

B18.

- a) An application shall be made to Sydney Water for a Certificate under Part 6, Division 9, section 73 of the Sydney Water Act 1994 (Compliance Certificate) prior to the issue of any Construction Certificate.
- b) The Application must be made through an authorised Water Servicing Coordinator. Please refer to the "Your Business" section of the web site www.sydneywater.com.au then follow the "e-Developer" icon or telephone 13 20 92 for assistance.
- c) Following application a "Notice of Requirements" will advise of water and sewer extensions to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

Demolition

B19. The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 *The Demolition of Structures*. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance shall be submitted to the satisfaction of the PCA prior to the commencement of works.

Notice of Commencement of Works

B20. The PCA and council shall be given written notice, at least 48 hours prior to the commencement of building works on the subject site.

Construction Environmental Management Plan

B21.

- a) Prior to the commencement of any works on the subject site, a Construction Environmental Management Plan (CEMP) shall be submitted to the PCA. The Plan shall address, but not be limited to, the following matters where relevant:
 - i) hours of work
 - ii) 24 hour contact details of site manager
 - iii) traffic management, in consultation with council
 - iv) construction noise and vibration management, prepared by a suitably qualified person
 - v) management of dust to protect the amenity of the neighbourhood
 - vi) erosion and sediment control
 - vii) measures to ensure that no unforeseen damage occurs to nearby heritage buildings
 - viii) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the subject site
 - ix) external lighting in compliance with AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting
 - x) flora and fauna management.
- b) The CEMP must not include works that have not been explicitly approved in the development consent. In the event of any inconsistency between the consent and the CEMP, the consent shall prevail.
- c) The applicant shall submit a copy of the CEMP to the department and to the council, prior to commencement of work.

Waste Management Plan during construction

B22.

- a) Prior to the commencement of any works on the subject site, a Construction Waste Management Plan prepared by a suitably qualified person in consultation with the council, shall be submitted to the PCA. The Plan shall address, but not be limited to, the following matters:
 - i) recycling of demolition materials including concrete
 - ii) removal of hazardous materials and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.
- b) Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of emission of fibres to the air, are to be submitted to the satisfaction of the PCA prior to the removal of any hazardous materials.
- c) The applicant shall submit a copy of the Plan to the department and to the council, prior to commencement of work.
- d) The applicant must notify the Roads and Maritime Authority's Traffic Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste

material from the Subject Site, prior to the commencement of the removal of any waste material from the subject site.

Construction Noise and Vibration Management Plan

B23. Prior to the commencement of any works, a Construction Noise and Vibration Management Plan shall be prepared, that includes but is not limited to the following:

- a) Identification of each work area, site compound and access route (both private and public);
- b) Identification of specific activities that will be carried out and associated noise sources at the premises and access routes;
- c) Identification of all potentially affected sensitive receivers;
- d) The construction noise and vibration objectives identified in accordance with the NSW Interim Construction Noise Guideline and Assessing Vibration: A technical Guideline;
- e) Assessment of potential noise and vibration from construction methods (including noise from construction traffic) against the objectives identified in (d);
- f) Where the objectives are predicted to exceed an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce noise impacts;
- g) Description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction, including early erection of operation noise control barriers;
- h) Procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity; and
- i) Measures to monitor noise performance and respond to complaints.

The applicant shall submit a copy of the plan to the department and to the council, prior to commencement of work.

Construction Traffic Management Plan

B24. Prior to the commencement of any works, a Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control shall be prepared in consultation with and submitted to council. The applicant shall submit a copy of the plan to the department prior to commencement of work.

B25. All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping.

Archival Recording

B26. Prior to the commencement of works to the Physics Building, an archival record of the external and internal areas of the Physics Building is to be prepared in accordance with NSW Heritage Branch guidelines titled 'Photographic Recording of Heritage Items using Film or Digital Capture' for approval. A copy shall be submitted to the City of Sydney Council and the Heritage Branch prior to works commencing.

Air Quality Management Plan

B27. Prior to the commencement of any works on the subject site, an Air Quality Management Plan is to be prepared which describes project specific mitigation measures and safeguards to control dust and exhaust emissions. This plan must be implemented at all stages of the project to minimise impacts on nearby sensitive receivers.

Utility Services

- B28. Prior to the commencement of works the applicant is to negotiate with the utility authorities (e.g. Ausgrid and Telecommunications Carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the underground structure.
- B29. Prior to the commencement of works written advice shall be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provision of adequate services.

C DURING CONSTRUCTION

Hours of Work

- C1. The hours of construction, including the delivery of materials to and from the subject site, shall be restricted as follows:
- a) between 7:00 am and 6:00 pm, Mondays to Fridays inclusive
 - b) between 7:30 am and 3:30 pm, Saturdays;
 - c) no work on Sundays and public holidays
 - d) Works may be undertaken outside these hours where
 - i) the delivery of materials is required outside these hours by the Police or other authorities;
 - ii) it is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm;
 - iii) Variation is approved in advance in writing by the Director General or his nominee.

Erosion and Sediment Control

- C2. All erosion and sediment control measures, are to be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

Disposal of Seepage and Stormwater

- C3. Any seepage or rainwater collected on-site during construction or ground water shall not be pumped to the street stormwater system unless separate prior approval is given in writing by council.

Approved Plans to be On-site

- C4. A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification shall be kept on the subject site at all times and shall be readily available for perusal by any officer of the department, council or the PCA.

Site Notice

- C5.
- a) A site notice(s) shall be prominently displayed at the boundaries of the subject site for the purposes of informing the public of project details including, but not limited to the details of the Builder, PCA and Structural Engineer.
 - b) The notice(s) is to satisfy all but not be limited to, the following requirements:
 - i) Minimum dimensions of the notice are to measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size
 - ii) The notice is to be durable and weatherproof and is to be displayed throughout the works period
 - iii) The approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
 - iv) The notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the subject site is not permitted.

Protection of Trees

- C6. All trees on the subject site that are not approved for removal are to be suitably protected in accordance with Australian Standard AS 4970-2009 Protection of Trees on Development Sites and other measures necessary to protect root system, trunk and branches, during construction.

Construction Noise Management

- C7. The development shall be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan.
- C8. If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the NSW Industrial Noise Policy), 5dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise management levels.
- C9. The applicant shall schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved in the Construction Noise and Vibration Management Plan.
- a) 8.00 am to 12.00 pm, Monday to Friday
 - b) 2.00 pm to 5.00 pm Monday to Friday
 - c) 9.00 am to 1.00 pm, Saturday
- C10. Wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where outlined in a Construction Noise and Vibration Management Plan.
- C11. Any noise generated during the construction of the development must not be offensive noise within the meaning of the *Protection of the Environment Operations Act, 1997* or exceed approved noise limits for the subject site.

Vibration Criteria

- C12. Vibration caused by construction at any residence or structure outside the subject site must be limited to:
- a) for structural damage vibration, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and
 - b) for human exposure to vibration, the evaluation criteria presented in British Standard BS 6472- Guide to Evaluate Human Exposure to Vibration in Buildings (1Hz to 80 Hz) for low probability of adverse comment.
 - c) Vibratory compactors must not be used closer than 30 metres distance from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified above.
 - d) These limits apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved by the Director-General.

Work Cover Requirements

- C13. To protect the safety of work personnel and the public, the work site shall be adequately secured to prevent access by unauthorised personnel, and work shall be conducted at all times in accordance with relevant Work Cover requirements.

Hoarding Requirements

C14. The following hoarding requirements shall be complied with:

- a) no third party advertising is permitted to be displayed on the subject hoarding/fencing
- b) the construction site manager shall be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application.

Heritage Consultant

C15. The nominated heritage consultant shall provide advice on the detail design resolution of new elements and inspect the demolition and removal of material to ensure that no unapproved loss of significant fabric or elements occurs (to minimise impacts on significant fabric and to manage the implementation of the conditions of approval).

C16. All work shall be carried out by suitably qualified tradesmen with practical experience in conservation and restoration of similar heritage items. The nominated heritage consultant shall be consulted prior to the selection of appropriate tradesmen.

Site Protection and Works

C17. Built elements of heritage significance are to be adequately protected during the works from potential damage. Protection systems must ensure historic fabric is not damaged or removed.

C18. New services shall be concealed appropriately to minimise visual impacts. The installation of new services and fit-outs shall be carried out in such a manner as to minimise damage to or removal of historic fabric and shall not obscure historic features. Any penetrations through heritage fabric for supply and waste pipes and mechanical ducts should be prevented.

C19. All new internal and external finishes and works of making good to the Physics Building shall match the existing original work adjacent in respect of materials used, detailed execution and finished appearance.

Construction Vehicles

C20. All construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping.

Loading and Unloading During Construction

C21. All loading and unloading activities associated with construction activities must be accommodated on site.

C22. If, during excavation, it is not feasible for loading and unloading to take place on site, a Works Zone on the street may be considered by council.

C23. A Works Zone may be required if loading and unloading is not possible on site. If a Works Zone is warranted an application must be made to council at least 8 weeks prior to commencement of work on the site. An approval for a Works Zone may be given for a specific period and certain hours of the days to meet the particular need for the site for such facilities at various stages of construction. The approval will be reviewed periodically for any adjustment necessitated by the progress of the construction activities.

C24. In addition to any approved construction zone, providing must be made for loading and unloading to be accommodated on site once the development has reached ground level. Where the structural design of the building permits, provision must also be made for the basement and/or the ground floor to be used as a loading and unloading area for the construction of the remainder of the development.

No Obstruction of Public Way

C25. The public way (outside of any construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances. Non-compliance with this requirement will result in the issue of a notice by the relevant Authority to stop all work on site.

Impact of Above Ground Works – Physics Building

C26. All new internal and external finishes and works of making good to the Physics Building shall match the existing original work adjacent in respect of materials used, detailed execution and finished appearance.

D PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

Structural Inspection Certificate

- D1. A Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the PCA prior to occupation of the building. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) shall be submitted to the approval authority and the council after:
- a) The site has been periodically inspected and the Certifier is satisfied that the structural works is deemed to comply with the final design drawings.
 - b) The drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

Mechanical Ventilation

- D2. Following completion, installation and testing of all the mechanical ventilation systems, the applicant shall provide evidence to the satisfaction of the PCA, prior to the issue of any occupation or commencement of use, that the installation and performance of the mechanical systems complies with:
- a) The Building Code of Australia;
 - b) Australian Standard AS1668 and other relevant codes;
 - c) The development consent and any relevant modifications; and,
 - d) Any dispensation granted by the New South Wales Fire Brigade.

Post-construction Dilapidation Report

- D3. Prior to the commencement of use or occupation of the building:
- a) The applicant shall engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of the construction works. This report is to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads.
 - b) The report is to be submitted to the PCA. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the PCA must:
 - i) compare the post-construction dilapidation report with the pre-construction dilapidation report required by these conditions; and
 - ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
 - c) A copy of this report is to be forwarded to the council.

Fire Safety Certification

- D4. Prior to commencement of use or occupation of the building, a Fire Safety Certificate shall be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority and council. And prominently displayed in the building

Road Damage

- D5. The cost of repairing any damage caused to council or other Public Authority's assets in the vicinity of the subject site as a result of construction works associated with the approved development, is to be met in full by the applicant/developer prior to the commencement of use or occupation of the building.

Note: Should the cost of damage repair work not exceed the road maintenance bond, council will automatically call up the bond to recover the costs. Should the repair costs exceed the bond amount, a separate invoice will be issued.

Sydney Water Compliance

- D6. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation.

Application must be made through an authorised Water Servicing Coordinator. Please refer to the "Your Business" section of the web site www.sydneywater.com.au then follow the "e-Developer" icon or telephone 13 20 92 for assistance.

The Section 73 Certificate must be submitted to the PCA prior to the commencement of use or occupation of the building in the case of buildings or works, or issue of a subdivision certificate, in the case of subdivision.

Completion of Landscape and Public Domain Works

- D7. Prior to the prior to the commencement of use or occupation of the building, the PCA is to be satisfied that all landscape and public domain works, including the removal of all noxious and/or environmental weed species, has been undertaken in accordance with the approved plan(s) and conditions of consent.

E POST OCCUPATION

Loading and Unloading

- E1. All loading and unloading of service vehicles in connection with the use of the premises shall be carried out wholly within the subject site at all times.

Unobstructed Driveways and Parking Areas

- E2. All driveways and parking areas shall be unobstructed at all times. Driveways and car spaces shall not be used for the manufacture, storage or display of goods, materials or any other equipment and shall be used solely for vehicular access and for the parking of vehicles associated with the use of the premises.

Noise Control – Plant and Machinery

- E3. Noise associated with the operation of any plant, machinery or other equipment on the subject site, shall not exceed 5dB(A) above the background noise level when measured at the boundary of the subject site.
- E4. Details demonstrating compliance with the project specific noise levels are to be verified within 60 days and then one year after the occupation of the building and commencement of operations. These details are to be submitted to the satisfaction of the Director-General verifying that the operational noise levels do not exceed the operation noise level goals identified in the *Construction and Operation – Environmental Noise and Vibration Impact Assessment*, prepared by AECOM, dated 17 July 2013. The noise monitoring program shall also verify compliance with the acceptable noise criteria in the NSW Industrial Noise Policy, January 2000.

Should the noise monitoring program identify any exceedence of the noise criteria referred to above, the applicant is required to implement appropriate noise attenuation measures so that operational noise levels comply with the criteria.

Storage of Hazardous or Toxic Material

- E5. Any hazardous or toxic materials must be stored in accordance with Workcover Authority requirements and all tanks, drums and containers of toxic and hazardous materials shall be stored in a bunded area. The bund walls and floors shall be constructed of impervious materials and shall be of sufficient size to contain 110% of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area.
- E6. The storage of all hazardous materials within the development shall not exceed the thresholds stipulated within State Environmental Planning Policy No. 33 Hazardous and Offensive Development at any time.

Lighting Management

- E7. To ensure light spill impacts on adjoining residences are appropriately managed and minimised, internal and external lighting shall be designed and managed in accordance with AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting and sustainable design initiatives outlined within the report titled *Sustainable Design Report: Australian Institute of Nanoscience, University of Sydney*, dated 26 July 2013 and prepared by Surface Design.

Public Way to be Unobstructed

- E8. The public way must not be obstructed by any materials, vehicles, refuse, skips or the like under any circumstances.

Works-as-Executed Plans

- E9. Works-as-executed drainage plans are to be provided to council on completion of works.

ADVISORY NOTES

Appeals

AN1. The applicant has the right to appeal to the Land and Environment Court in the manner set out in the Environmental Planning and Assessment Act, 1979 and the Environmental Planning and Assessment Regulation, 2000 (as amended).

Other Approvals and Permits

AN2. The applicant shall apply to the relevant authority for all necessary permits including crane permits, road opening permits, hoarding or scaffolding permits, footpath occupation permits and/or any other approvals under Section 68 (Approvals) of the *Local Government Act, 1993* or *Section 138 of the Roads Act, 1993*.

Use of Mobile Cranes

AN3. The applicant shall obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to the commencement of works. In particular, the following matters shall be complied with:

- a) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on-site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from council:
 - i) At least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions, and
 - ii) At least 4 weeks prior to the works for full road closures and partial road closures which, in the opinion of council, will create significant traffic disruptions.
- b) The use of mobile cranes must comply with the approved hours of construction and shall not be delivered to the site prior to 7.30 am without the prior approval of council.

Responsibility for other consents / agreements

AN4. The applicant is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

Movement of Trucks Transporting Waste Material

AN5. The applicant must notify the Roads and Maritime Authority's Traffic Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the subject site, prior to the commencement of the removal of any waste material from the subject site.

Building Identification

AN6. The building name and number, if any, should be clearly displayed at either end of the ground level frontages prior to the occupation of the building or commencement of the use.

Temporary Structures

- AN7.
- a) An approval under State Environmental Planning Policy (Temporary Structures) 2007 must be obtained from the council for the erection of the temporary structures. The application must be supported by a report detailing compliance with the provisions of the Building Code of Australia.
 - b) Structural certification from an appropriately qualified practicing structural engineer must be submitted to the council with the application under State Environmental

Planning Policy (Temporary Structures) 2007 to certify the structural adequacy of the design of the temporary structures.

Disability Discrimination Act

AN8. This application has been assessed in accordance with the Environmental Planning and Assessment Act 1979. No guarantee is given that the proposal complies with the Disability Discrimination Act 1992. The applicant/owner is responsible to ensure compliance with this and other anti-discrimination legislation. The Disability Discrimination Act 1992 covers disabilities not catered for in the minimum standards called up in the Building Code of Australia which references AS 1428.1 - Design for Access and Mobility. AS1428 Parts 2, 3 & 4 provides the most comprehensive technical guidance under the Disability Discrimination Act 1992 currently available in Australia.

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

AN9.

- a) The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance (NES) matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister.
- b) This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the applicant's responsibility to consult the Department of Sustainability, Environment, Water, Population and Communities to determine the need or otherwise for Commonwealth approval and you should not construe this grant of approval as notification to you that the Commonwealth Act does not have application. The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.

Asbestos Removal

AN10. All excavation and demolition works involving the removal and disposal of asbestos must only be undertaken by contractors who hold a current WorkCover Asbestos or "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence and removal must be carried out in accordance with Work Health and Safety Regulation 2011, the NSW Government and WorkCover document titled *How to Safely Remove Asbestos: Code of practice* and NOHSC: "Code of Practice for the Safe Removal of Asbestos"

AN11. Five days prior to the commencement of licensed asbestos removal, WorkCover must be formally notified of the works. All adjoining properties and those opposite the development must be notified in writing of the dates and times when asbestos removal is to be conducted. The notification is to identify the licensed asbestos removal contractor and include a contact person for the site together with telephone number and email address.

Site contamination issues during construction

AN12. Should any new information come to light during demolition or construction works which has the potential to alter previous conclusions about site contamination then the applicant must be immediately notified and works must cease. Works must not recommence on site until the consultation is made with the department.