

Project Approval

Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning under delegation executed on 25 January 2010, I approve the project application referred to in schedule 1, subject to the conditions in schedules 2 to 3.

These conditions are required to:

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

Shaddad

Director-General
Department of Planning

Sydney *20th December* 2010

SCHEDULE 1

Application No.:	MP 10_0032
Proponent:	Macquarie University
Approval Authority:	Minister for Planning
Land:	University Avenue, Macquarie University (Part Lot 191 in DP11157041)
Project:	Australian Hearing Hub comprising construction and fit-out of a 6 storey educational building including: • 23,182m² of Gross Floor Area; • 2 basement levels; • 333 car spaces; • laboratory, academic/research and office space; and • ancillary commercial and retail uses.

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DEFINITIONS

Advisory Notes	Advisory information relating to the approved project but do not form a part of this approval.
BCA	Building Code of Australia
Construction	Any works, including earth and building works
Council	City of Ryde Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DECCW	Department of Environment, Climate Change and Water or its successors
Department	Department of Planning or its successors
Director-General	Director General of the Department of Planning, or nominee
EA	Environmental Assessment titled <i>Australian Hearing Hub, University Avenue, Macquarie University</i> prepared by JBA Planning dated July 2010
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
Evening	The period from 6pm to 10pm
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
Minister	Minister for Planning, or nominee
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
PPR	Preferred Project Report titled <i>Australian Hearing Hub, University Avenue, Macquarie University</i> prepared by JBA Planning dated October 2010
Project	The project described in Condition A1, Part A, Schedule 2 and the accompanying plans and documentation described in Schedule 2, Part A, Condition A2.
Proponent	Macquarie University, or anyone else entitled to act on this Approval
POEO Act	Protection of the Environment Operations Act 1997
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.
RTA	Roads and Traffic Authority
Statement of Commitments	The Proponent's Statement of Commitment in Schedule 3
Subject Site	Part Lot 191 in DP 1157041

SCHEDULE 2

PART A - ADMINISTRATIVE CONDITIONS

Terms of Approval

Development Description

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

Development in Accordance with Plans and Documents

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

- (a) EA;
- (b) PPR;
- (c) The following plans:

Architectural (or Design) Drawings prepared by <i>Perumal Pedavoli Architects</i>			
Drawing No.	Revision	Name of Plan	Date
ARC-PA 00_011	A	SITE AND BUILDING SETOUT PLAN	29.09.10
ARC-PA 01_001	A	BASEMENT 2	29.09.10
ARC-PA 01_002	A	BASEMENT 1	29.09.10
ARC-PA 01_003	A	GROUND FLOOR PLAN	29.09.10
ARC-PA 01_004	-	LEVEL 1 FLOOR PLAN	29.09.10
ARC-PA 01_005	-	LEVEL 2 FLOOR PLAN	29.09.10
ARC-PA 01_006	-	LEVEL 2 FLOOR PLAN	29.09.10
ARC-PA 01_007	-	LEVEL 4 FLOOR PLAN	29.09.10
ARC-PA 01_008	-	LEVEL 5 FLOOR PLAN	29.09.10
ARC-PA 01_009	A	PLANT / ROOF PLAN	29.09.10
ARC-PA 01_010	A	ROOF PLAN	29.09.10
ARC-PA 01_101	A	ELEVATIONS SHEET 1	29.09.10
ARC-PA 01_102	A	ELEVATIONS SHEET 2	29.09.10
ARC-PA 01_103	A	ELEVATIONS SHEET 3	29.09.10
ARC-PA 01_104	A	ELEVATIONS SHEET 4	29.09.10
ARC-PA 01_111	-	ELEVATIONS DETAILS	29.09.10
ARC-PA 01_112	-	COLOURED ELEVATIONS 01	29.09.10
ARC-PA 01_113	-	COLOURED ELEVATIONS 02	29.09.10
ARC-PA 01_114	-	COLOURED ELEVATIONS 03	29.09.10
ARC-PA 01_201	A	SECTIONS SHEET 1	29.09.10
ARC-PA 01_202	A	SECTIONS SHEET 2	29.09.10
ARC-PA 01_203	A	SECTION SHEET 3	29.09.10
ARC-PA 01_204	-	SECTIONS SHEET 4	29.09.10
Architectural (or Design) Drawings prepared by <i>Lorna Harrison Pty Ltd</i>			
Drawing No.	Revision	Name of Plan	Date
LND PA 00 001	A	LANDSCAPE PLAN	27.09.10

- (d) conditions of this approval; and
- (e) Proponent's Statement of Commitments (Schedule 3).

except for any modifications which are 'Exempt and Complying Development' or as may be necessary for the purpose of compliance with the BCA and any Australian Standards incorporated in the BCA.

Inconsistency between plans and documentation

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.

Responsibility for other consents/agreements

A4. The proponent is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

Prescribed Conditions

A5. The Proponent shall comply with the prescribed conditions under Part 6, Division 8A of the Regulation.

Development Description

A6. Except as amended by the conditions of this approval, approval is granted only to carrying out the development as described in Schedule 1, and development must be carried out consistently with the Statement of Commitments (attached as Appendix 1).

These conditions of approval do not relieve the Proponent of its obligations under the EP&A Act or any other Act.

Demolition Works

A7. No demolition works form part of this project application approval.

Compliance with the Building Code of Australia

A8. Work must be carried out in accordance with the requirements of the Building Code of Australia.

Development Expenses

A9. It is the responsibility of the developer to meet all expenses incurred in undertaking the development, including expenses incurred in complying with conditions imposed under this approval.

PART B – PRIOR TO CERTIFICATION OF CROWN BUILDING WORKS

Crown Building Work

B1. Crown building work cannot be commenced unless the Crown building work is certified by or on behalf of the Crown to comply with the technical provisions of the State's building laws. The proponent shall supply the Department of Planning with evidence of the certification of the works.

Certification of the works under s 109R of the EP&A Act 1979 before commencement can be either for the whole project or a component of the works, reflecting the staging of construction.

Long Service Levy

B2. Prior to certification of any Crown building works, payment of the long service levy under section 34 of the *Building and Construction Industry Long Service Payment Act 1986* must be paid (or, where such a levy is payable by instalments, the first instalment of the levy).

Mechanical Ventilation

B3. All mechanical ventilation systems shall be designed 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, prior to certification of any Crown building works to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection.

Disabled Access

B4. Access and facilities for people with disabilities shall be provided in accordance with Part D3 of the BCA's Access Policy. Prior to certification of any Crown building works for the new building a certification of compliance with this condition from an appropriately qualified person shall be obtained.

Traffic and Parking Details

B5. Prior to certification of relevant Crown building works for the new building, plans are to identify the following traffic and parking details:

- a) all vehicles should enter and leave the site in a forward direction. In the event that site constraints do not permit heavy rigid vehicles to enter and leave the 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 and AS 2890.2-2002 for heavy vehicle usage;
- c) appropriate pedestrian advisory signs are to be provided at the egress from the car park and loading dock and
- d) all works/regulatory signposting associated with the proposed developments shall be at no cost to the RTA.

Reflectivity

B6. The light reflectivity from any building materials used on the facades of the building shall not exceed 20% and shall be designed so as not to result in glare that causes any nuisance or interference to any person or place.

Sydney Water – Notice of Requirements

B7. 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 certification of any Crown building works.

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.

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.

Outdoor Lighting

- B8. All outdoor lighting shall be designed to comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

PART C— PRIOR TO CONSTRUCTION

Construction Management Plan

- C1. A Construction Management Plan shall be prepared in consultation with Council and submitted to the Department for approval prior to the commencement of works. The Plan shall include, but not be limited to, the following matters which are to be addressed by suitably qualified person(s):

- a) **Hours of work**, which must be in accordance with the conditions of this approval;
- b) **Contact details** of the site manager and all principle contractors;
- c) **Traffic management**, which is to be developed in consultation with the RTA if required and is to include:
 - identification of a work zone;
 - ingress and egress of vehicles to the site;
 - management of loading and unloading of materials;
 - number and frequency of vehicles accessing the site and construction vehicle routes;
 - the times vehicles are likely to be accessing the site;
 - access arrangements and traffic control;
 - details on the temporary relocation of the bus stop;
 - changes to on-street parking restrictions on roads;
 - management of construction traffic and car parking demand including preparation and distribution of a Travel Access Guide; and
 - management of existing vehicular and pedestrian movements / routes around the site throughout the various stages of construction;
- d) **Erosion and sediment control**, identifying appropriate measures to be installed during construction which shall be designed in accordance with in accordance with the document *Managing Urban Stormwater – Soils & Construction Volume 1 (2004)* by Landcom;
- e) **Construction noise and vibration management**, identifying specific activities that will be carried out and associated noise sources, identify all potentially affected sensitive receivers, noise and vibration monitoring reporting and response procedures, description of specific mitigation treatments management measures and procedures to be implemented, and address any other relevant provisions of Australian Standard 2436-1981 *Guide to Noise Control on Construction, Maintenance and Demolition Sites*;
- f) **Construction waste management**, identifying options for minimising waste in construction; reuse and recycling of materials; the storage, control and removal of construction waste; and
- g) **Dust control** measures to be implemented to prevent the movement of airborne particles from the site throughout the construction process, and the tracking of material from the site by trucks and other vehicles. This is to include the appropriate use of physically barriers and the dampening of exposed excavated surfaces. The storage and stockpiling areas for material is also to be detailed.

Notice to be Given Prior to Commencement / Excavation

- C2. Council shall be given written notice, at least 48 hours prior to the commencement of excavation, shoring or underpinning works on the site for each stage of the project.

Construction Works Zone

- C3. If a construction works zone is required where loading and unloading is not possible on site and approval is required from the relevant Roads Authority, the Proponent shall obtain approval prior to commencement of works. An approval for the works zones may be given for a specific period and certain hours of the day to meet the particular need for the site for such facilities at various stages of construction.

Road Occupancy Licence

- C4. A road occupancy licence is to be obtained from the relevant Roads Authority, if required, prior to the commencement of works for any works that may impact on traffic flows on the surrounding street network.

Barricade Permit

- C5. Where construction/building works require the use of a public place including a road or footpath, approval for a Permit is to be obtained from Council prior to the commencement of work. Details of the barricade construction, area of enclosure and period of work are required to be submitted to the satisfaction of Council.

Road/Asset Opening Permit

- C6. A Road / Asset Opening Permit must be obtained from the relevant Roads Authority, if required, prior to carrying out any works within or upon a road, footpath, nature strip or in any public place, in accordance with section 138 of the Roads Act 1993, and all of the conditions and requirements contained in the Road / Asset Opening Permit must be complied with.

Vehicle Cleansing

- C7. Prior to the commencement of work, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site. It is an offence to allow, permit or cause materials to pollute or be placed in a position from which they may pollute waters.

Utility Services

- C8. Prior to the commencement of work the proponent is to negotiate with the utility authorities (e.g. Energy Australia, Sydney Water Corporation Limited and Telecommunications Carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the underground structure. Any costs in the relocation, adjustment or support of services are to be the responsibility of the proponent.
- C9. Any necessary alterations to public utility installations being at the proponent's/Demolisher's expense and to the requirements of both Council and the appropriate authorities.

Contact Telephone Number

- C10. The proponent shall ensure that a 24 hour contact telephone number is continually attended by a person with authority over the works for the duration of the development. The contact number shall be forwarded to Council and the Department prior to commencement of works.

Haulage Routes

- C11. The routes for import of any fill materials or export of any spoil being submitted to and agreed to by the relevant road authorities prior to the commencement of haulage, if required. Unacceptable deterioration or failures within public roads attributable to these operations is to be restored to the requirements of, and at no cost to the road authorities.

PART D – DURING CONSTRUCTION**Ecologically Sustainable Development**

- D1. The project shall achieve as a minimum a 4 star Green Star design rating and shall implement all construction and design measures outlined in The Australian Hearing Hub Macquarie University ESD Return Brief, prepared by Cundall, dated 15 September 2010.

Hours of work

- D2. The hours of excavation and work on the development must be as follows:
- (a) All excavation and construction work and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (e.g. loading and unloading of goods, transferring of tools) in connection with the approved development must only be carried out between the hours of:
 - 7.00am and 6.00pm on Mondays to Fridays
 - 8.00am and 1.00pm on Saturdays
 - No work must be carried out on Sundays or public holidays.
 - (b) Works may be undertaken outside these hours where:
 - the delivery of materials is required outside these hours by the Police or other authorities
 - It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm
 - the work is approved by the Director General or his nominee.

Site Notice

- D3. A site notice(s) shall be prominently displayed at the boundaries of the site for the duration of works for the purposes of informing the public of project details including, but not limited to:
- (a) details of the Builder and Structural Engineer for all stages of the project;
 - (b) the approved hours of work;
 - (c) 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; and
 - (d) to state that unauthorised entry to the site is prohibited.

Excavation

- D4. If it is necessary to excavate below the level of the base of the footings of the adjoining roadways, the owners of the roadway are to be given at least 7 days notice. This notice is to include complete details of the work.

Noise Control

- D5. All work, including excavation and construction work must comply with the Australian Standard 2436-1981 'Guide to Noise Control on Construction, Maintenance and Demolition Sites'.
- D6. Noise and vibration emissions from equipment and associated site works must not result in damage to nearby premises or result in an unreasonable loss of amenity to nearby residents or businesses and the relevant provisions of the Protection of the Environment Operations Act 1997 must be satisfied at all times.

Standards and Codes

- D7. All building works shall be constructed in accordance with safe work practices and complying with the relevant Australian Standards, Codes of Practice and the Building Code of Australia.

Work Cover Requirements

- D8. 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

- D9. The following hoarding requirements shall be complied with:
- (a) To ensure an appropriate presentation of the site during the construction period, temporary artwork shall be provided along any hoarding/fencing proposed to be erected around the subject site.
 - (b) The temporary artworks shall inform the general public about the proposed works being undertaken by the proponent and the site's history.
 - (c) No third party advertising is permitted to be displayed on the subject hoarding/fencing.
 - (d) 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.

Swept Path of Vehicles

- D10. The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS.

No obstruction of public way

- D11. 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.

Disposal of seepage and stormwater

- D12. Any seepage or rainwater collected on-site during excavation shall not be pumped to the street stormwater system unless separate prior approval is given in writing by the relevant Authority.

Erosion and sediment control

- D13. Sediment controls are to be in place for the duration of the works to ensure that no sediment, fines, and like material can enter the waterway or drainage system. The proponent is to carry out works generally in accordance with the Construction Management Plan and controls are to be maintained at design level throughout the duration of the works and are to be inspected for this purpose at frequent intervals. Any deficiencies are to be immediately made good.

Dust Control Measures

- D14. Dust control measures are to be in place or are to be undertaken for the duration of the works to prevent dust from affecting the amenity of the immediate area during construction. The proponent is to carry out works generally in accordance with the Construction Management Plan, and controls are to be maintained at design level throughout the duration of the works and are to be inspected for this purpose at frequent intervals. Any deficiencies are to be immediately made good.

Pedestrian Access During Construction

- D15. Pedestrian access along University Avenue and Macquarie Drive is to be maintained as far as feasible throughout construction. Alternative routes, including those for persons with disabilities, shall be clearly identified and signposted for the duration of the works, and until such time as the permanent accessible paths are provided.

Setting Out of Structures

- D16. The new buildings shall be set out by a registered surveyor to verify the correct position of each structure in relation to property boundaries and the approved alignment levels.

Directional Signage

- D17. Directional signage shall be modified as required to accommodate any altered pedestrian and vehicular movements within the area.
- D18. Particular attention is to be paid to:
- (a) wheelchair accessible paths of travel;
 - (b) safe road crossing areas including signalised and other designated crossings;
 - (c) key landmarks;
 - (d) access to transport nodes including public transport; and
 - (e) the vehicular entrance and exit driveways and the direction of traffic movement within the site being clearly indicated by means of reflectorised signs and pavement markings.

Traffic Movement

D19. The following traffic movement requirements shall be complied with:

- (a) All loading and unloading associated with works must occur on site.
- (b) All vehicles must enter and leave the site in a forward direction.
- (c) The cost of all traffic management works shall be borne by the Proponent.
- (d) No trucks associated with the approved works are permitted to park or stand on public roadways.
- (e) Gates shall be closed between vehicle movements.
- (f) Movement of trucks to and from the site shall be staggered so as to limit access and egress during peak traffic periods.
- (g) The Contractor shall make provision for safe, continuous movement of traffic and pedestrians in public roads and private roads accessible to the public and erecting traffic warning signs conforming to the Roads and Traffic Authority's General Specifications (RTA Spec. Part G10 "Control of Traffic" and RTA Spec. 3355). Traffic control is to be carried out only by flagmen with certification that they have been trained in accordance with Australian Standard 1742.3 – 2002.

Approved plans to be on-site

D20. A copy of the approved and certified plans, specifications and documents incorporating conditions of approval shall be kept on the site at all times and shall be readily available for perusal by any officer of the Department or Council.

Work on site to cease

D21. If any unidentified historical archaeological remains or deposits are exposed during the works excavation is to cease immediately in the affected areas and the archaeologist is to undertake an evaluation of the potential extent and significance of such relics. The Heritage Council is to be notified in accordance with section 146 of the NSW Heritage Act, 1977.

D22. Should any Aboriginal relics or artefacts be discovered during the course of any works on-site, then work is to cease immediately. Work may only be resumed following written consent being obtained from the Department of Environment, Climate Change and Water.

Excavated Material

D23. Any excavated material to be removed from the site being assessed, classified, transported and disposed of in accordance with the EPA's Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes.

Imported Fill

D24. Any imported fill onto the site being validated to ensure its suitability for the proposed land use from a contamination perspective. Imported fill is to be certified that it is not contaminated, based upon analysis or the known past history of the site from which it is obtained.

PART E – PRIOR TO OCCUPATION AND COMMENCEMENT OF USE

Access and Traffic

E1. Prior to occupation of the building:

- (a) the detailed micro-simulation model, as required by Modification C10(2) in the Concept Plan MP 06_0016 Approval, is to be completed in consultation with Council, the RTA and Transport NSW and submitted to the Department of Planning for approval.
- (b) an agreement is also to be made with the RTA, as required by Modification C15(1) in the Concept Plan MP 06_0016 Approval, for relevant road and intersection works prior to occupation of the building.
- (c) the amendment to the Concept Plan, as required by Modification B5 in the Concept Plan Approval MP 06_0016, shall make provision for any adequate setbacks along Balaclava Road (from Epping Road to University Avenue) and Waterloo Road (from Herring Road to Research Park Drive) to facilitate additional capacity improvements and bus priority.

Heritage

E2. Prior to occupation of the building, the Aboriginal Archaeology Strategy as required by Modification C6 of the Concept Plan Approval MP06_0016, is to be prepared in liaison with the Metropolitan Local Aboriginal Land Council and submitted to the Department of Planning for approval.

Workplace Travel Plan

E3. Prior to occupation of the building, a Workplace Travel Plan is to be submitted to the Department of Planning for approval for commercial uses on the site. This plan shall demonstrate consistency with the Concept Plan including the goal of achieving 40% public transport mode share by occupants of the building.

Childcare Strategy

E4. Prior to occupation of the building the Child Care Strategy as required by Modification C11 of the Concept Plan Approval MP06_0016 is to be prepared in consultation with Council and submitted to the Department of Planning for approval.

Developer Contributions

- E5. Prior to occupation of the building the Proponent shall provide written evidence to the Department that demonstrates:
- (a) that an agreement has been made with Council for the provision of development contributions and/or agreed works in kind as required by Modification C15(5) of the Concept Plan Approval MP 06_0016; and
 - (b) development contributions have been paid to Council and/or agreed works in kind have been commenced in accordance with the agreement with Council in (a) in relation to this project.

Noise Control – Plant and Machinery

- E6. Prior to occupation of the building a report is to be prepared by a qualified acoustic engineer confirming 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 project approval and any relevant modifications; and
 - (d) any dispensation granted by the New South Wales Fire Brigade.

Fire Safety Certificate

- E7. A Fire Safety Certificate shall be obtained for all the Essential Fire or Other Safety Measures forming part of this approval prior to occupation of the building. A copy of the Fire Safety certificate must be submitted to the relevant authority and Council.

Structural Inspection Certificate

- E8. A Structural Inspection Certificate for any structural work is to be obtained prior to occupation of the building.

Sydney Water

- E9. A Compliance Certificate issued under Part 6, Division 9, Section 73 of the Sydney Water Act 1994 shall be obtained prior to occupation of the building.

Road Damage

- E10. 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 proponent prior to the occupation of the building.

Waste Management

- E11. Prior to occupation of the building the Proponent must ensure that waste handling works have been completed in accordance with the Waste Management Plan; other relevant approval conditions; and any relevant Council policy.

PART F – POST OCCUPATION & ON GOING OPERATIONAL CONDITIONS

Ecologically Sustainable Development

- F1. The project shall achieve as a minimum a 4 star Green Star design rating and shall implement all operational and design measures outlined in The Australian Hearing Hub Macquarie University ESD Return Brief, prepared by Cundall, dated 15 September 2010.

Car Parking

- F2. The car park shall only be used by occupants of the building, visitors of the building and any car share schemes.
- F3. The Proponent shall provide the Department with a car parking management plan to demonstrate how the use of the stacked car parking space will be managed.

Annual Fire Safety Certificate

- F4. An annual Fire Safety Statement must be given to Council and the NSW Fire Brigade commencing within 12 months after the date on which the initial Interim/Final Fire Safety Certificate is issued. This must ensure that the essential services installed in the building for the purpose of fire safety have been inspected and at the time of inspection are capable of operating to the required minimum standard.

Noise Control – Operational

- F5. The use of the premises shall not cause a nuisance, or an offensive noise as defined in the *Protection of the Environment Operations Act 1997*, to adjoining properties or the public.

Noise Control – Plant and Machinery

- F6. Noise associated with the operation of any plant, machinery or other equipment on the site, shall not give rise to any one or more of the following:
- Transmission of "offensive noise" as defined in the *Protection of the Environment Operations Act 1997* to any place of different occupancy;
 - A sound pressure level at any affected residential property that exceeds the background (LA90, 15 minute) noise level by more than 5dB(A). The background noise level must be measured in the absence of noise emitted from the premises. The source noise level must be assessed as a LAeq, 15 minute; and

- Notwithstanding compliance with (1) and (2) above, the noise from mechanical plant associated with the premises must not be audible in any habitable room in any residential property between the hours of 12.00 midnight and 7.00am.

Loading and Unloading

F7. All loading and unloading, including deliveries to and from the site in connection with the use must be carried out in a manner so as not to cause inconvenience to the public or detrimentally impact the amenity of the locality.

Unobstructed Driveways and Parking Areas

F8. 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.

ADVISORY NOTES

Use of Mobile Cranes

AN1. The Proponent 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 Proponent shall ensure the following matters are 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:
 - at least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions; and
 - 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 7.30am without the prior approval of Council.

Movement of Trucks Transporting Waste Material

AN2. The proponent shall notify the Roads and Traffic Authority's Traffic Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the site, prior to the commencement of the removal of any waste material from the site.

Disability Discrimination Act

AN3. This application is to comply with the Disability Discrimination Act 1992. The proponent/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.

Temporary Structures

AN4. A Barricade/Hoarding Permit must be obtained prior to the commencement of construction works from the relevant Authority. The permit application must be supported by a report detailing compliance with the provisions of the Building Code of Australia.

Structural certification from an appropriately qualified practicing structural engineer must also be submitted to the relevant Authority to certify the structural adequacy of the design of the temporary Barricades/Hoarding.

Structural Capability for Existing Structures

AN5. The structural capabilities of any existing structure will need to meet the requirements of the BCA and may require engaging a structural engineer.

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

AN6. 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.

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 proponent's responsibility to consult Environment Australia 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.

SCHEDULE 3 PROPONENT'S STATEMENT OF COMMITMENTS

Subject	Commitments	Timing
Public Art Strategy	A Public Art Strategy will be prepared for the hearing Hub development following approval which will provide details regarding the potential location and design of public art on the site.	Detailed Design Stage
Lighting Strategy	A Lighting Strategy will be prepared which will address the following principles: ▪ Lighting should integrate fixture style with the building's architectural character. ▪ Investigate opportunities to utilise solar (photovoltaic) technology, high efficiency fixtures or alternative energy sources as energy saving measures. ▪ Buildings must have a strong night-time building presence and entries be visible from their primary vehicular and pedestrian access points. ▪ Visible point sources of building illumination must be minimised. ▪ Wall lighting may be installed to illuminate entrance features, however no other lighting of walls visible from outside the plot is permitted, including mounting of light fixtures to the top of boundary walls.	Detailed Design Stage
Signage Strategy	A Signage Strategy will be prepared which will address the following principles: ▪ Building identification signage must relate only to tenants within the building. ▪ Building identification signage is to be a maximum size of 25sqm and must not be on any frontage facing the Academic Core. ▪ Signage lighting is to be arranged and maintained so that the light source is not directly visible from a public right-of-way or adjacent property. ▪ As part of the detailed proposal submission, a plan is to be submitted for approval by Macquarie University showing the location of the proposed signage and detailing dimensions, proposed colour, material, copy, and method of illumination.	Detailed Design Stage
Noise	▪ The glass suppliers shall provide evidence that the systems proposed have been tested in a registered laboratory and comply with the minimum listed TL requirements. Also, the glazing installer should certify that the glass has been constructed and installed in a manner equivalent to the tested samples. ▪ All noise emission from the mechanical plant shall comply with DECC NSW Industry Noise Policy requirements. ▪ External noise levels at the property boundaries shall not exceed the levels given in AS 1055. AS 1055	Detailed Design Stage, Construction and Operation

Subject	Commitments	Timing																						
	nominates typical background noise levels that would occur, considering the general activities in the vicinity. Given the levels of road traffic and the existence of commercial activities in the area, the appropriate ambient noise category given in AS 1055 applying to the development would be R4. The corresponding night-time background noise levels for the R4 category are 45 dB(A) at night and 55 dB(A) during the day. ▪ Use of the premises shall not create an offensive noise as defined in the <i>Protection of the Environment Operations Act 1997</i>. ▪ Vibration from plant shall not be perceptible within an adjacent property. ▪ Noise emissions compliance certification testing will be conducted during the occupation certificate stage of the project to certify compliance with the noise goals presented in Section 5.5 of the Noise and Vibration Intrusion and Environmental Noise Assessment prepared by Acoustic Logic and dated 3 May 2010. These are summarised in Tables B and C below: Table A - Noise Objectives <table><tr><th>Location</th><th>Day Time Noise Objective dB(A) LAeq</th><th>Evening Time Noise Objective dB(A) LAeq</th><th>Night Time Noise Objective dB(A) LAeq</th><th>Sleep Arousal Objective (internal) dB(A) LAmx</th></tr><tr><td>Residential receivers</td><td>55¹</td><td>45</td><td>40</td><td>55</td></tr></table> Table B - Criteria for Traffic Noise <table><tr><th>Location</th><th colspan="2">Recommended traffic noise levels</th></tr><tr><th></th><th>Day (7am to 10pm)</th><th>Night (10pm to 7am)</th></tr><tr><td>Macquarie Drive (Local Road)</td><td>55dB(A)LAeq(1hr)</td><td>50dB(A)LAeq(1hr)</td></tr><tr><td>University Avenue (Local Road)</td><td>55dB(A)LAeq(1hr)</td><td>50dB(A)LAeq(1hr)</td></tr></table>	Location	Day Time Noise Objective dB(A) LAeq	Evening Time Noise Objective dB(A) LAeq	Night Time Noise Objective dB(A) LAeq	Sleep Arousal Objective (internal) dB(A) LAmx	Residential receivers	55 ¹	45	40	55	Location	Recommended traffic noise levels			Day (7am to 10pm)	Night (10pm to 7am)	Macquarie Drive (Local Road)	55dB(A)LAeq(1hr)	50dB(A)LAeq(1hr)	University Avenue (Local Road)	55dB(A)LAeq(1hr)	50dB(A)LAeq(1hr)	
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Access	The following measures will be implemented to ensure that appropriate disabled access is provided on the site: ▪ Ensure there is an accessible path of travel from the site boundary to the entry doors of the Hearing Hub for a person in a wheelchair, compliant with AS1428.1. ▪ Consideration is needed for all fire stair doors to have 850mm clear widths (920mm door leaf). ▪ Consider at least 1 passenger lift is operable in event of emergency ▪ Emergency alarm systems shall include audible and	Detailed Design Stage, Construction and Operation																						

¹ The amenity criterion is applied when noise events are steady throughout the four hour period. For intermittent events, the intrusiveness criterion is still subject to application.

Subject	Commitments	Timing
	visual warnings indicators in assisting people with sensory disabilities. ▪ Ensure all internal common use doors to have 850mm clear widths (920mm door leaf), which will allow for larger wheelchairs & 510mm latch side clearances, compliant with AS1428.2. ▪ Provide tactile ground surface indicators (TGSIs) at the start/finish of the stairs, compliant with AS1428.4. ▪ Ensure that components in the lift car (control panels, audio/visual indicators, handrails and light levels) comply with AS1735.12. ▪ In line with the Draft DDA Access Code Clause D3.7, a hearing augmentation system is required in the Lecture Theatre/Auditorium ▪ In line with Council DCP, clause 17, accessible toilet pans shall be positioned to allow for a right or left hand transfer on each subsequent floor ▪ Provide ambulant cubicles in each male and female bank of toilets ▪ Ensure the two sets of dual hinged entry doors to the café to have 850mm clear widths (920mm door leaf), which will allow for larger wheelchairs & 470mm latch side clearances, compliant with AS1428.2 & the Ryde DCP 2006 9.2, Clause 10. ▪ Ensure the entry threshold is level at all relevant levels of the building to assist wheelchair users compliant with AS1428.1. ▪ In general the maintenance illumination levels should be 150 lux for paths of travel, corridors and stairs. Ensure all lighting levels comply with AS1680 and AS1428.2 ▪ Signage to comply with draft DDA Premises Standards.	
ESD	The building will seek to achieve a 5 Star Green Star Office v3 rating (Design and As-Built) for the base building and a minimum 4.5 Star NABERS Energy rating for the base building. To achieve this the building design, fit out and features will have the following energy efficient attributes or initiatives: ▪ facade treatments and materials; ▪ paints and coatings; ▪ adhesives and sealants; ▪ carpets and floor coverings; ▪ engineered wood products, fixtures, materials, and tapware; ▪ recycling opportunities; ▪ electrical fixtures;	Detailed Design Stage, Construction and Operation

Subject	Commitments	Timing
	▪ mechanical services; ▪ hydraulic services (including rainwater, water reuse, potable water consumption); ▪ structural and civil engineering methods and process; and ▪ construction and operational management. In applying the above initiatives the final mix of these will need to be determined as part of the final detailed design resolution of the construction-level plans for the development.	
Aboriginal Heritage	DECCW will be notified immediately should an aboriginal relic be uncovered during excavation or construction, and work within the immediate vicinity of the relic will cease until advice from DECCW has been received.	Excavation and Construction
Geotechnical	Disposal of Excavated Material ▪ All excavated materials will be disposed of in accordance with the current Waste Classification Guidelines (DECCW, April 2008). Groundwater Seepage ▪ During construction, it is anticipated that groundwater seepage will be controlled by perimeter drains connected to a 'sump-and-pump' dewatering system. Permanent subfloor drainage below the basement floor slab connected to a sump and pump dewatering system will be provided for the basement. Dilapidation Surveys ▪ Dilapidation surveys will be undertaken on surrounding buildings and pavements before the commencement of any excavation work in order to document any existing defects so that any claims for damage due to construction related activities can be accurately assessed. Vibrations ▪ Where impact breakers are required in the vicinity of adjacent structures monitoring will be undertaken to limit vibrations on these structures. Generally, a maximum peak particle velocity of 8 mm/sec (in any component direction) at the foundation level of adjacent structures will be imposed for both structural and human comfort considerations. Excavation Support ▪ Vertical excavations within the soils and extremely low to low strength rock and also highly fractured medium to high strength rock will be undertaken with both temporary and permanent lateral support during and after excavation. Due to the deeply weathered rock profile and the close proximity of the excavation to the site boundaries, shoring/support over the full depth of the excavation will be provided. Some unsupported vertical excavation in medium to high strength rock may be possible towards the base of the excavation on the western part of the site.	Excavation and Construction

Subject	Commitments	Timing
	Batter Slopes and Vertical Rock Faces - Batter slopes and vertical rock face treatments will be subject to the recommendations and proposed solutions described in the project's geotechnical report(s). Where an alternate or similar solution is proposed, this will be subject to a separate geotechnical assessment or a peer review. Soil Nail Support System - The Soil Nail Support System will be subject to the recommendations and proposed solutions described in the project's geotechnical report(s). Where an alternate or similar solution is proposed, this will be subject to a separate geotechnical assessment or a peer review. Pavement and Floor Slabs - Pavement and floor slabs will be subject to the recommendations and proposed solutions described in the project's geotechnical report(s). Where an alternate or similar solution is proposed, this will be subject to a separate geotechnical assessment or a peer review.	
Contamination	- If encountered, management and disposal of asbestos material by an ASA licensed contractor is to be undertaken. - A full waste classification assessment be undertaken at the time of stockpiling the excavated material from the subject site	Excavation and Construction
Erosion and Sediment Control during Construction	The following measures will be implemented during construction to assist with erosion and sediments control during construction: - construction exits for all vehicles leaving the site - silt traps at stormwater pits when constructed - revegetation of the site as soon as practicable. Erosion control measures will be inspected and maintained after each rain event and at intervals not exceeding 2 weeks.	Excavation and Construction
Construction	Construction Traffic Management Plan - The contractor will prepare a construction traffic management plan and ensure the appropriate allocation of resources to manage vehicle and pedestrian traffic around the site, ensuring the safety and security all persons moving in proximity of the Hearing Hub site. - The Construction Traffic Management Plan will address (but not be limited to): - Construction traffic routes; - relationship of construction traffic with peak traffic times in and around the University; - Construction traffic parking including construction workers' parking; and - loading / unloading of vehicles. Hoarding - A hoarding is to be provided around the perimeter of the site, in accordance with the requirements of the Occupational Health and Safety Act, and NSW Workcover.	Construction

Subject	Commitments	Timing
	Construction signage ▪ The Contractor shall provide sign-boards as required to comply with Workcover and OH&S requirements Environmental Management Plan ▪ Stormwater and waste water management will be included in the Environmental Management Plan (EMP) and the control measures documented in the plan will be implemented during the construction of the project. The EMP will be developed in detail but will include: - Silt Control on the Roads; - Water from Dewatering systems; - Rainwater within the site, during excavation and before final pavements are installed; - Diversion of clean water; - Waste Water, from general cleanup of tools and equipment; and - Spills control. Implemented procedures will be in compliance with the Dept of Environment and Protection, Local Council and Sydney Water requirements. ▪ The EMP controls will include items such as: - All construction plant, equipment and vehicles are to be properly maintained and operated so as to alleviate excessive exhaust emissions; - Good "House Keeping" on site with regular removal of loose material; - Waste loads leaving the site are to be covered at all times; - All dust generating construction activities are to cease during high wind conditions unless operations can be controlled by localized watering or other control means; - The burning of waste materials and the lighting of fires will be strictly prohibited on the site at all times; - Continual visual monitoring of the site will be undertaken by site management to ensure that works do not generate unacceptably high levels of dust; - Wherever practical, materials and processes that are non-toxic will be employed to minimize possible harmful affects to air quality; - Scaffolding to include mesh and shade cloth to reduce wind velocity and also to trap any wind born objects; and - Activities which produce airborne particles are to be done in enclosed spaces e.g. spray painting. Construction Waste Management Plan ▪ The contractor will implement a Construction Waste Management Plan.	

Subject	Commitments	Timing
	Notification of Construction Activities ▪ The Contractor shall provide a methodology for the notification of disruptive activities for the approval of the Superintendent, prior commencement of the works. ▪ If works are planned that will exceed the construction noise objective, all sensitive receivers will be notified in writing at least 48hrs prior to the commencement of those works. ▪ The operators of the Childcare centres and aged care facility will be notified of commencement of construction works one week prior to commencement. Construction Hours ▪ The hours of construction shall be as follows, unless approved by the Director, Strategic Assessments, Department of Planning: - Between 7:00am and 7:00pm, Monday to Fridays inclusive; - Between 8:00am and 4:00pm, Saturdays; and - No work on Sundays and public holidays. Pedestrian and Cyclists ▪ Provisions will be made for pedestrians and cyclists to pass the worksite safely. ▪ A minimum footpath width of 2m will be maintained at all times. ▪ Suitable pedestrian road crossing points will be maintained. ▪ At times it may be necessary to direct pedestrians and cyclists onto the road carriageway and adequate warning signs and barricades will be provided. ▪ Traffic controllers or other traffic devices to direct traffic would be provided in accordance with AS 1742.3: 1996. ▪ The construction schedule for the development will also aim to minimise: ○ disruption to traffic movements particularly at peak periods; and ○ interference with public transport services ▪ Adequate fencing will be installed around the perimeter of the construction site to restrict unauthorised public access. ▪ All demolition and construction related vehicles would comply with the University's traffic and parking rules. ▪ Vehicular access points to the construction site will be selected to avoid conflict with high volume pedestrian desire lines that exist on Macquarie Drive and University Avenue.	
Noise Criteria for Construction	▪ The following noise criteria shall apply to potentially affected residential receivers - the LA10 noise level to not exceed 20dB(a) above the existing LA90 background noise level; and ▪ The following noise criteria shall apply to potentially affected retail and commercial receivers - the LA10	Construction

Subject	Commitments	Timing
	noise level to not exceed 25dB(A) above existing LA90 background noise level.	
Construction Vibration	▪ A detailed study of construction vibration impacts will be undertaken of each of the proposed activities which will occur as part of the excavation and construction works on the site. Appropriate vibration mitigation methods for construction will be selected on this basis. ▪ Excavation - the site measurements will establish noise/vibration levels at sensitive receivers. If noise levels exceed the criteria then the possibility of reducing noise emission shall be investigated and all practical methods shall be employed to reduce noise to the target levels in order to preserve the amenity of the nearby residences. ▪ Construction - the main noise producing activities are attributed to the forming and pouring of the concrete floor slabs, and crane operation. These activities will be managed by placing the plant as far as practicable from the sensitive receivers.	Construction
Complaints Handling mechanisms for Construction Noise	▪ Regular scheduled meetings will be held with affected stakeholders for a finite period, until all issues have been addressed and the evidence of successful implementation is embraced by all parties. ▪ A newsletter informing nearby residents of upcoming activities that are likely to generate higher noise/vibration levels will be produced. ▪ Should ongoing complaints of excessive noise or vibration criteria occur immediate measures shall be undertaken to investigate the complaint, the cause of the exceedences and identify the required changes to work practices. In the case of exceedences of the vibration limits all work potentially producing vibration shall cease until the exceedence is investigated. The effectiveness of any changes shall be verified before continuing. Documentation and training of site staff shall occur to ensure the practices that produced the exceedences are not repeated. ▪ If a noise complaint is received the complaint shall be recorded on a Noise Complaint Form. The complaint form shall list: - The name and address of the complainant (if provided); - The time and date the complaint was received; - The nature of the complaint and the time and date the noise was heard; - The name of the employee who received the complaint; - Actions taken to investigate the complaint, and a summary of the results of the investigation; - Required remedial action, if required; - Validation of the remedial action; and - Summary of feedback to the complainant. ▪ A permanent register of complaints shall be held. All complaints received shall be fully investigated and	Construction

Subject	Commitments	Timing
	reported to management. The complainant shall also be notified of the results and actions arising from the investigation. ▪ The investigation of a complaint shall involve where applicable: - noise measurements at the affected receiver; - an investigation of the activities occurring at the time of the incident; - inspection of the activity to determine whether any undue noise is being emitted by equipment; and - Whether work practices were being carried out either within established guidelines or outside these guidelines. ▪ Where an item of plant is found to be emitting excessive noise, the cause will be rectified as soon as possible. Where work practices within established guidelines are found to result in excessive noise being generated then the guidelines shall be modified so as to reduce noise emissions to acceptable levels. Where guidelines are not being followed, the additional training and counselling of employees shall be carried out. Measurement or other methods shall validate the results of any corrective actions arising from a complaint where applicable.	
Contributions	Contributions will be paid consistent with the Macquarie University Campus-wide VPA presently being negotiated between Macquarie University and the City of Ryde Council.	Prior to the final Occupation Certificate being issued.
Travel Demand Management	The following travel demand measures will be implemented for the Hearing Hub development: ▪ A Workplace Travel Plan ▪ Provision of car pooling and car share spaces in priority locations ▪ A Travel Access Guide for visitors to the site. Macquarie University will also investigate the following travel demand measures as part of their overall management of traffic on the Campus: ▪ an extension of the existing formal car pooling system to include Hearing Hub workers; ▪ implementation of a car share scheme which includes dedicated car share parking spaces; ▪ implementation of a shuttle bus service which would also operate during the evening / night with links to key transport nodes; ▪ promoting flexible working practices; and ▪ investigation of travel pass scheme.	Prior to the Occupation Certificate being issued and during Operation.
Construction Traffic	A Demolition / Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control will be submitted to Council.	Prior to the issue of a Construction Certificate.
Car Park Layout	The layout of the proposed car park will be designed in accordance with AS 2890.1-2004 and AS2890.2 –	Prior to the issue of a Construction

Subject	Commitments	Timing
	2002.	Certificate.
Operational Waste Management	An Operational Waste Management will be prepared for the Hearing Hub development following approval which will detail how waste and recycling will be managed on the site during operation.	Operation
Energy Efficient Equipment	The operations and maintenance manual for the building will include requirements to source energy efficient equipment as replacements become necessary.	Operation
Car Park Management	Once the allocation of tenant car parking spaces has been finalised, information regarding the car parking management will be provided to the Department. Management measures will be devised that will tie to the Work Place Travel Plan.	Prior to issue of an Occupation Certificate.