

NSW Department of Planning and Environment
320 Pitt St
Sydney NSW 2000

Attention: Ms. Michelle Niles

31 July 2017

Dear Sir/Madam,

**RE: Proposed redevelopment of UNSW Cliffbrook Campus
SSD 16_8126 (the 'Proposal')**

We act for Mr Emile Sherman, Mr Craig Blair, Ms Sarah Hopkins, Mr Matt Moran and Ms Melanie Caffrey, who own and occupy the properties comprising 12, 14 and 18 Battery Street, Clovelly.

Our clients' properties immediately adjoin the land the subject of the Proposal.

Having reviewed the Environmental Impact Statement (**EIS**) for the Proposal and having obtained advice from noise and visual amenity experts, our clients submit that:

- (a) the impacts of the Proposal have not been properly assessed in the EIS;
- (b) the Secretary's Environmental Assessment Requirements dated 21 December 2016 (**SEARs**) have not been complied with;
- (c) without a proper assessment, the Proposal is incapable of approval by the consent authority; and
- (d) based on the limited assessment which has been undertaken, it is evident that the Proposal will cause significant adverse impacts on residential amenity.

For these reasons, the Proposal ought not be approved.

Representatives of our clients have had the opportunity to discuss the Proposal with representatives of UNSW. As a result of those discussions, should approval ultimately be granted (notwithstanding the matters noted above), our clients submit that **strict, enforceable conditions must be imposed** to ameliorate the most significant adverse effects of the Proposal on them, their amenity and the local community.

The proponent has recently informed our clients that it intends to amend the Proposal in an attempt to address some of the adverse impacts identified below. Our clients hereby request that they be provided with a proper opportunity to review and comment on any revised proposal before it is assessed by the Department of Planning and Environment.

1. Failure to comply with the SEARs

As detailed in the attached **expert acoustic report**, the EIS fails to comply with clause 12 of the SEARs in that it does not provide a qualitative assessment of the main noise and vibration generating sources during either construction or operation:

“12. Noise and Vibration

Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land, including surrounding residential properties.”

Further, clause 5 of the SEARs requires the proponent to:

“detail amenity impacts including solar access, acoustic impacts, visual privacy, view sharing/loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.”

The proponent has failed to provide adequate detail regarding acoustic, privacy and visual impacts.

In addition, the proponent has failed to demonstrate any substantial steps it intends to take in ensuring that a high level of environmental amenity for surrounding residential

land will be maintained. Adequate, specific measures to mitigate and manage the acoustic, privacy and visual impacts are not provided in the Proposal. The proponent has simply failed to comply with the SEARs.

Furthermore, this non-compliance gives rise to a potential breach of the zone objectives of SP2, (see page 35 of the EIS). The relevant objective is to facilitate development that will not adversely affect the amenity of nearby and adjoining development. The neighbouring low density residential-zoned areas are susceptible to unacceptable adverse impacts.

In light of the critical deficiencies and omissions in the proponent's noise assessment, we request that our clients' noise expert, Mr Brian Clarke, be given an opportunity to review and comment on any further acoustic studies prepared for the proponent before the Proposal is determined by the consent authority.

2. Significant and unacceptable adverse impacts on residents

2.1 Noise Impacts

Even allowing for the significant deficiencies in the proponent's noise assessment, it is clear that the Proposal will have significant and unacceptable noise impacts on neighbouring residential properties both during construction and, more importantly, throughout its operation.

The local area is a quiet residential precinct. The large numbers of people (students, staff and visitors), vehicles, dining events and entertainment events to be facilitated by the Proposal will radically change the character of the neighbourhood, imposing unacceptable noise impacts on the local community (including our clients).

We **enclose** a report on the acoustic impacts of the Proposal prepared by **Mr. Brian Clarke** of **Wilkinson Murray**. Mr. Clarke has undertaken an independent review of the Proposal and the Acoustic Report for the Proposal prepared by JHA Engineers.

As noted in Mr. Clarke's report, the proponent's acoustic assessment is fundamentally flawed and fails to appropriately predict the likely levels of noise created by the Proposal. The measures planned for the mitigation of acoustic impacts are equally flawed, lacking specificity and efficacy.

Considering Mr. Clarke's conclusions, the proposed path from the south of the development to Tower Street (**Path**), the meeting points along the Path (**Pods**) and the paved 'breakout' area are particularly objectionable.

Further, the size and positioning of the proposed dining room windows are inappropriate. Large, openable windows from a significant place of congregation are likely to emit substantial noise projected towards neighbouring properties along Battery Street, especially at night.

2.2 Visual

We **enclose** a report on the visual and privacy impacts of the Proposal prepared by **Dr. Richard Lamb of Richard Lamb and Associates**.

Dr. Lamb confined his investigation to potential direct view and privacy impacts on our clients, and has highlighted the proposed Path and Pods as areas of special concern. The raised Pods will significantly impact upon our clients' iconic coastal views from their dwellings and outdoor areas at the rear of their properties.

Further, the proposed planting in the vicinity of the Path will use vegetation that, in the long-term, will grow to a significant height. While this may take several years to manifest, the growth will result in a substantial obstruction of the most desirable and valuable views from our clients' properties.

2.3 Privacy

The proposed Path, Pods and fencing will significantly interfere with, and impact upon, our clients' privacy.

The Path runs along the rear boundaries of our clients' properties, allowing its users very proximate access to those properties. In the absence of greater screening (which would be equally undesirable due to obstruction of our clients' views), our clients are placed in an unreasonably vulnerable position relative to large numbers of passersby. This is compounded by a lack of control as to when the Path will be used.

This impact is further aggravated by the inclusion of the Pods in the Proposal, which will facilitate a concentrated and consistent presence of onlookers at a very short distance from our clients' properties. Having purchased properties that backed on to an unoccupied reserve, it would be entirely inappropriate to replace this amenity with artificially lit, wifi-connected "meeting places".

As no hours of operation of the Path are provided in the Proposal, the Path and Pods present a potentially 24-hour a day intrusion upon our clients' privacy. The combination of unhindered access and artificial lighting are utterly incompatible with our clients' privacy and amenity.

The proposed fence at the south of the property at 12 Battery Street also compromises the privacy of that property's residents. The proposed sweep and height of the fence do not prevent overlooking into that property from the Proposal site. The ability of the Proposal's users to approach this fence and easily see into 12 Battery Street represents an entirely unacceptable privacy intrusion.

Dr. Lamb's report, noted above, provides further comments on the privacy impacts of the Proposal.

2.4 Hours of Operation

In an otherwise quiet residential area, the proposed hours of operation are entirely unsuitable.

The facilitation of electronically amplified events until 10pm will produce a high level of noise in the evening. The noise subsequently produced by departing attendees after such events will continue even later.

The absence of any proposed hours of operation in the Proposal regarding the Path and Pods is completely objectionable. The generation of noise from passersby and congregators in this part of the Proposal could arise at any time of day or night in the absence of restrictions on access to this area.

As a combination of classes and seminars are planned for the Proposal from 8am to 10pm, Monday to Sunday, coupled with other uncertain hours of operation and the timing of people arriving and departing the site, neighbouring properties will be expected to endure noise impacts with little to no respite. Any Proposal that generates such impacts could not be approved by any reasonable decision-maker.

2.5 Traffic and parking

The Proposal plans to provide 37 on-site parking spaces. Regardless of factoring in public transport use, it is unrealistic to suggest that this number of spaces can accommodate the occupants of 52 bedrooms as well as the site staff. Considering that on street parking is not part of the Proposal, the parking measures proposed are entirely inadequate for the likely needs of the Proposal.

While the EIS for the Proposal asserts that the planned traffic and parking arrangements will adequately accommodate the demands of residents, students and staff, it fails to account for the increase in demand during seminars. As these events are not restricted to people otherwise using the site, additional traffic and parking impacts need to be considered.

As the Proposal currently neglects seminar-related traffic, the impacts both on-site and in nearby streets are simply unknown and unassessed. The parking capacity on

site is likely to be reached regularly and on-street parking nearby will be placed under additional strain.

Further investigation into the impacts of seminar-related traffic is required, and so too measures to mitigate the impacts of such traffic on the surrounding neighbourhood. In the absence of these matters being investigated and properly assessed, the Proposal should not be approved.

3. The Proposal is not appropriate for the area

The Proposal site is surrounded by low density residential housing. The impacts described above and in the **attached reports** will significantly and permanently alter the character and amenity of the surrounding neighbourhood.

The Proposal is more than an educational institution, providing accommodation, dining, a gymnasium and entertainment facilities. A development such as this wholly conflicts with the character of the quiet residential neighbourhood in which it is proposed to be set.

With no other development of such high-density accommodation, dining or recreation in the vicinity of the Proposal, such a development is entirely unsuitable for any area of this nature.

4. Conditions

For the reasons provided above, our clients wholly object to the Proposal. It is inappropriate and inconsistent with the amenity of the area and incapable of approval.

If, however, the consent authority is minded to grant approval to the Proposal, our clients request that, **as a bare minimum**, the Path (or any other access to, or use of, the vegetated area to the southeast of campus) must not be permitted as a part of the consent and the following conditions must be imposed:

- a) The proponent must consult with, and seek the approval of, the owners of the properties on the southern side of Battery Street (**Battery St Properties**) regarding the planting of any vegetation to the rear of their properties. The height of any vegetation planted to the rear of the Battery St Properties must not exceed 2.5 metres.
- b) All windows in the dining room must be installed so as to remain permanently shut.
- c) No doors are to be installed on the ground level of the eastern side of the Proposal facing 10 Battery Street.
- d) Paving must not be used in the area described in the Proposal as the 'breakout' area. Materials employed must absorb all sound otherwise capable of being detected by residents of Battery Street.
- e) The fence to the south of 12 Battery Street must consist of brick or sandstone and be built to a height of 2.4 metres. The colour and finish of the fence is to be determined in consultation with the owners of the Battery St Properties. Privacy planting must also be placed in front of the wall, consisting of plants consistent with condition (a) above.

If the consent authority were to approve the Proposal with the Path, which would be a manifestly unreasonable outcome for the aforementioned reasons, the construction and use of the Path must be subject to stringent conditions to be determined in consultation with our clients. At a bare minimum, our clients would require that:

- a) The path from the south of the development to Tower Street shall not include or lead to any seating or widened sections for the purposes of congregation (including 'pods') at any point between its ends.
- b) Hours of access to, and use of, the path are to be restricted to between 8am and 6pm.
 - (i) The proponent is to ensure that all residents on the southern side of Battery Street to the east of the Proposal site are given access to the path during these hours.

- (ii) Artificial lighting along the Path must only operate within these hours.

Our clients (with their retained experts) wish to be given the opportunity to review any draft conditions prior to any consent being granted.

Our clients reserve the right to:

- (a) make additional submissions at any time prior to the Proposal (or any amendments to it) being determined; and
- (b) bring the matters set out in this letter and its attachments to the attention of the Court if any challenge is made to the grant of an approval of the Proposal.

Yours faithfully



Andrew Beatty
Director
Beatty Legal Pty Limited
ABN 44 273 924 764

Encl:

- 1. Acoustic review report by Mr Brian Clarke of Wilkinson Murray, dated 19 July 2017.
- 2. Visual impact and privacy review report by Dr Richard Lamb, Richard Lamb & Associates, dated 31 July 2017.

19 July 2017

WM Project Number: 17207
Our Ref: MS 19072017 BC
Email: marlon@beattylegal.com

Marlon Shou
Beatty Legal Pty Ltd
Level 4, Beanbah Chambers
235 MACQUARIE STREET
SYDNEY NSW 2000

Dear Marlon

**Re: UNSW - Cliffbrook Campus DA
Acoustic Review
Privileged and Confidential**

INTRODUCTION

Wilkinson Murray has been engaged by the owners of properties at 12,14 and 18 Battery Street Coogee to conduct a review of potential noise impacts associated with the construction and operation of the proposed Redevelopment of UNSW Cliffbrook Campus at 45-51 Beach Street, Coogee State Significant Development Submission (SSD 8126).

This review was based on the following

- A site inspection conducted between 3 and 4 pm on Wednesday 5th July 2017;
- A review of the following supporting documents:
 - Secretary's Environmental Assessment Requirements for SSD 8126;
 - Environmental Impact Statement prepared by Urbis dated May 2017;
 - Acoustic Report for the Redevelopment of UNSW Cliffbrook Campus 45-51 Beach Street, Coogee prepared by JHA Engineers Revision B dated 08/05/17; and
 - Operational Management Plan prepared by UNSW Revision C dated 05/05/17.

Proposed Operations

A review of the EIS indicates that the project involves the demolition of existing structures, modification, and extension of existing office building. It includes the construction of a 3-4 storey building which will include accommodation teaching and function areas.

Whilst the current facility operates during normal business hours the proposed teaching facility will accommodate up to 50 students that will operate on a 7-day basis.

The Cliffbrook Campus will provide space for the following uses:

- Residential accommodation for course participants.
- Teaching (lectures, discussions, tutorials).
- Venues for UNSW conferences and seminars.
- Catering services to support residence and UNSW conference programs.
- Common spaces for participant use.
- Gymnasium for participant use.
- Passive recreational activities for participant use.

As such the proposed changes represent a significant change in use from an acoustic perspective.

Site Inspection

A site inspection was conducted at 14 Battery Street Coogee and on the subject site between 3 pm and 4 pm on Wednesday 5th July 2017. It was noted that the residences at 12,14 and 18 Battery Street Coogee bound the subject site including the proposed main building, eastern outdoor area, and pathway.

The area is noted as being a quiet residential location. A 15-minute noise measurement was conducted at the southern boundary of the site and a background noise levels of 38 dBA was recorded. The ambient noise was made up of local traffic and birds.

The location of the development and the residences is shown in Figure 1 which has been reproduced from the EIS.

Figure 1 Site Aerial



Secretary's Environmental Assessment Requirements for SSD 8126

The Secretary's Environmental Assessment Requirements for noise and vibration are contained in item 12 as follows;

12. Noise and Vibration

Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land, including surrounding residential properties. Consideration is to be given to restricting the hours of use of any outdoor recreation areas and the establishment of a system to effectively management resident complaints.

→ *Relevant Policies and Guidelines:*

- *NSW Industrial Noise Policy (EPA)*
- *Interim Construction Noise Guideline (DECC)*
- *Assessing Vibration: A Technical Guideline 2006*

REVIEW OF JHA ACOUSTIC REPORT

It is to be expected that the acoustic report should address the requirements of item 12 of the SEARs. However, based on a review of the report there are many issues that have not be addressed as detailed in the following sections.

Noise Measurements and Noise Criteria

Attended and unattended noise monitoring was conducted on and around the site by JHA. However only the noise logging was used to establish site specific operational noise criteria in accordance with the NSW Industrial Noise Policy.

Unfortunately, the results of noise logging appear to be contaminated in that noise levels measured by the logger are much higher than those measured by JHA in the surrounding streets or by myself when on site.

For example, street attended background noise measurements in the day were reported to be 42 dBA whilst noise data from the loggers for the day is reported to be 53 dBA, this is a significant difference. In addition, my measurements in the afternoon were in the order of 38 dBA compared to the reported logger noise levels.

Furthermore, the fact that night L_{Aeq} and L_{A90} noise levels are reported at the same level further indicates that the noise logger data is unreliable and not suitable for the establishment of site specific noise criteria.

Therefore, it can be concluded that correct site-specific noise criteria, both for construction and operation, has not been established therefore no correct assessment can be conducted on the development. As such the potential impacts or appropriate mitigation measures cannot be established.

Construction Noise

The SEAR's require a "quantitative" assessment of construction noise consistent with the Interim Construction Guideline. However, **no** assessment has been conducted which requires establishment of Construction Noise Management Levels along with predictions of resultant cumulative noise levels at surrounding residences. Rather a table of individual equipment noise levels at 2 distances has been provided with no reference to potentially affected residences. How this relates to the cumulative noise levels of equipment operating for construction activities at specific receivers is unclear.

Due to the limited assessment, no specific construction management measures have been determined for the project. Only generic construction noise management procedures have been presented.

It can be concluded that the construction noise assessment is inadequate as it has not determined the potential impact of construction noise and therefore does not meet the SEARs requirements.

Construction Vibration

In the case of construction vibration relevant vibration criteria have been presented. However, no predictions of resultant vibration levels at receivers has been conducted. As there is no description of construction scenarios it is not possible to determine potential impacts.

I note that there are recommendations which, for example, recommend at safe working distance of 5 metres for "jackhammers". Whilst it is unclear if a "jackhammer" is a rockbreaker it is noted that a vibration level of 2 mm/s (as noted by JHA would) be unacceptably high at residences.

It can be concluded that the vibration assessment is inadequate and does not meet the SEARs requirements.

OPERATIONAL NOISE

It is noted that in the JHA's introduction of the report states that:

This report also includes an assessment for the noise impact of the various activities within the proposed development on neighbouring properties including:

- *Noise emissions from occupants and guests engaged in outdoor recreational activities*
- *Noise from mechanical plant, carpark and general property maintenance*
- *Noise from traffic entering and leaving the carpark*
- *Use of the premises outside of normal hours of operation.*

A review of the JHA noise assessment indicates that the only noise assessment that has been addressed in any way is noise from mechanical services. Unfortunately, the criteria on which it is assessed is incorrect as detailed in early sections.

In the case of noise from occupants in outdoor areas, breakout cocktail areas, carpark, property maintenance and the use of the premises outside normal hours there is no predicted noise at surrounding receivers. Given that indoor events and external events are proposed a quantitative assessment should be conducted to determine potential impacts at residences.

For example, assuming 50 persons occupied the Breakout / Cocktail areas in the evening an assessment based on half of these people speaking in a raised voice (each with a sound pressure levels of 68 dBA at 1 m) would result in a noise level of 54 dBA at the residence at 12 Battery Street. Clearly this magnitude of noise would be unacceptable and warrant the implementation of noise control measures such as physical enclosure, restriction of hours or elimination this activity. No such assessment has been conducted rather generalist noise control measures such as response to complaints, noise monitoring and restriction of hour to 9 or 10 pm are proposed in the report. Such a cursory approach to management of potential noise emissions is considered unacceptable nor is it consistent with the SEARs in my opinion.

Other potential issues, such as noise from students congregating on the outdoor lawn area on the south-east corner of the campus (the start of the trail), students using the trail and students occupying the "pods" along the trail have not been addressed at all. These activities have the potential to impact on the subject residences particularly in the evenings and weekends when ambient noise levels are lower.

In the EIS there is a statement in relation to noise stating:

To provide suitable amenity for the future course participants, noise mitigation management strategies including glazing, noise barriers and noise management strategies have been provided for the proposed development.

However there has been no assessment of noise impacts to determine any specifics of these measures. It is not suitable to state that "*Detailed design of the building glazing, envelope and acoustic barriers will be provided in the design development phase*", as it is the purpose of the development application assessment to identify the potential impacts and suitable mitigation that demonstrates that the acoustic amenity of surrounding receivers can be adequately protected.

Furthermore, it is noted in the report that amplified music is proposed to be controlled by closing of doors (section 7.1) however no assessment of this noise source has been considered. These sources are acoustically significant and in my opinion, require detailed assessment rather than a response to complaints / noise measurement approach to noise management.

Assessment of proposed activities with respect to site specific noise criteria must be conducted so that effective physical and operational measures can be determined. These measures can then be included in the design of the development along with the operational plan of management.

Plan of Management

The plan of management in relation to noise control reflects the recommendations of the acoustic report. As such the acoustic assessment only provides general recommendations that are not based on any detailed assessment of potential noise impact.

In relation to noise plan of management it commits to:

- Relevant noise policy;
- On-going noise monitoring;
- Signage; and
- Noise complaints register.

There are no specific noise mitigation methods on how or where these will be detailed and documented. Nor are there any site-specific noise criteria by which complaints and monitoring will be assessed.

Having reviewed the operational noise assessment and the plan of management I have no confidence that noise emissions from the proposal can be adequately controlled and managed by the University.

Summary and Conclusion

Based on my independent review of the UNSW - Cliffbrook Campus State Significant Development Application, with respect to potential noise and vibration impacts on surrounding residences, I conclude the following:

- Site specific noise criteria has been determined on unrepresentative noise measurements and as such noise criteria are considered unreliable.
- No adequate assessment of construction noise and vibration has been conducted, therefore potential impacts and mitigation measures have not been determined.
- Assessment of operational noise has not been conducted with respect to any of the proposed activities associated with the development. As such determination of site specific noise mitigation measures has not been conducted.
- An initial review of patron noise indicates that potential for significant impact at the subject surrounding residences. It should be noted that the proposed "noise management procedures will be ineffective.
- Based on my review of the noise and vibration assessment it is my opinion that there is no meaningful assessment of operation noise consistent with the SEARs at the subject residences, nor for that matter at any surrounding residences.
- Due to the inadequacies of the noise assessment I have no confidence that the operations of the proposed facility can be managed to protect the acoustic amenity of the surrounding residences.
- It is my opinion that the noise and vibration assessment UNSW Cliffbrook Campus at 45-51 Beach Street, Coogee State Significant Development Submission (SSD 8126) needs to be reassessed and that the noise and vibration assessment should be conducted by a company that has membership to the Association of Australasian Acoustical Consultants (AAAC) or the consultant conducting the assessment is a member of the Australian Acoustical Society (AAS) or Institution of Engineers Australia with competency in environmental acoustics.
- In the absence of any qualitative assessment of potential noise impacts it would be prudent, unless demonstrated otherwise, to restrict hours of operation to normal business hours on weekdays.

I trust this information is sufficient. Please contact us if you have any further queries.

Yours faithfully

WILKINSON MURRAY



Brian Clarke
Senior Associate



BRIAN CLARKE



SENIOR ASSOCIATE

AREAS OF EXPERTISE

- Architectural Acoustics
- Environmental Acoustics
- Aircraft Noise
- Accredited Assessor in the ABGR & NABERS Schemes
- Land & Environment Court Expert Witness Training
- Air Quality

QUALIFICATIONS

- Bachelor of Engineering (Mechanical)
- Certificate in Marketing, UTS

OH&S / SAFETY

- WorkCover NSW OH&S Construction White Card

AFFILIATIONS

- Member, Institution of Engineers Australia (MIEA)

EMPLOYMENT HISTORY

- Engineer, State Rail Authority of NSW
- Consultant, Wilkinson Murray
- Sales Engineer, Acoustica
- Consultant, RFA Acoustic Design
- Manager, Building Group, Heggies Australia Pty Limited
- Business Manager Acoustic Energy & ESD, Heggies Australia Pty Limited
- Senior Associate, Wilkinson Murray Pty Limited

PROFILE

Brian graduated from the University of Technology Sydney with an Honours Degree in Mechanical Engineering in 1983. Whilst studying, he was employed as a Cadet Engineer by the State Rail Authority where he was involved in a wide range of mechanical and civil projects.

On completion of his degree, Brian worked in the heavy plant equipment field and became the Engineer responsible for air conditioning and building services for the State Rail Authority for a number of years. As a result of this experience, Brian has exceptional skills in building services and well-developed knowledge in the practical application of acoustic design.

Since 1989, Brian has specialised in the fields of acoustics and vibration, gaining specific experience in the management of construction and operation noise, and designing noise control measures. Brian works on numerous room and building projects in addition to design and investigative reports.

In recent years Brian has conducted numerous assessments of aircraft noise working with Dr Rob Bullen a world leader in aircraft noise.

ARCHITECTURAL

The Bond Commercial Development
Art Gallery of NSW
Alcatel Lucent Office Fitout
National Gallery of Australia
Sydney Jewish Museum
Durby Interactive Tourist Facility
ARN Radio Studios, North Ryde
Katoomba Cultural Centre
Jacksons Landing Residential Development
Corrs Westgarth Fitouts
Stockland Head Office New Headquarters
RAAF Richmond Squadron Headquarters
Bonnyrigg Shopping Centre
Rhodes Corporate Park
The Wave Apartment Building Broadbeach
The Eclipse Apartments
National Gallery of Australia
Canberra Grammar Music Facility and Hall
DFAT Offices Canberra
Bangkok Embassy

ENVIRONMENTAL

Newcastle Ports Mayfield Site
Kembla Grange Asphalt Plant
Victoria Road Widening
Boydton Sand Extraction
The Bond Building – Lend Lease Headquarters
Nokia Commercial Building – Jacksons Landing
Residential Development at Jackson Landing
Bondi Rail Link EIS
Minto Glass Recycling Facility
The Point Luxury Apartments
The Sovereign Commercial Building Auckland
National Gallery of Australia Extensions
Albion Park Asphalt Plant Noise and Air Assessment
Coopers Peak Residential Development
Stockland Greenhills
South Barangaroo
Mangoola Mine EIS

AIRCRAFT NOISE

Western Sydney Airport EIS
Sydney Airport 2032 ANEF and N70 Noise Contours.
Aircraft Noise Impacts Assessments at Tralee Canberra.
Sunshine Coast Airport Expansion EIS.
RAAF Military JSF Peer Review of Noise Modelling.
Broome Airport Masterplan.
Tamworth Airport and Flying School Noise Modelling.
Orange Aerodrome Extension - EIS
Review of New Aircraft Noise Metrics for Urban Taskforce.
Boydton Helipad Noise Assessment
Assessment of Sydney Residential and Commercial buildings for aircraft noise
Brisbane Airport New Parallel Runway EIS
Preparation of TNIP Compact Noise Information Package for Sydney Airport
Melbourne Airport Noise Modelling
Auckland Airport review of Aircraft Noise.



RLA Ref: 118317

Privileged and Confidential Communication – Subject to Legal Professional Privilege

31 July, 2017

Attention Marlon Shou

Beatty Legal Pty Ltd
Level 4 235 Maquarie Street
Sydney NSW 2000

By email: marlon@beattylegal.com

Cc: timothy@beattylegal.com

Dear Mr Shou

Advice on Visual and Amenity Impacts

SSD 16-8126 UNSW Cliffbrook Campus

Proposed Development

The proposed development is a State Significant Development (SSD 16-8126) on land known as the UNSW Cliffbrook Campus. The proposed development includes the demolition and construction of new buildings, retention of Cliffbrook House and extensive landscape works including on land that is located in front (south) of residential houses located at 12, 14 and 18 Battery Street (the subject dwellings).

Visual Context

The subject site and the most significant built forms proposed are predominantly located west of the subject dwellings. The site extends to the east and to the rear of the houses and is characterised by open turf areas and wide swathes of natural vegetation and revegetation that has been planted or regenerated on the sloping ground. The subject dwellings are located north of Gordons Bay, Clovelly on the edge of land that slopes towards the Bay. The subject dwellings have primary living spaces to the rear so that primary views are available



from rooms and external terraces along the south elevation. Views to the south and south-east include parts of Gordon Bay, Coogee Beach Headland and beyond to the Tasman Sea. The foreground composition in eastern views includes 'Heath-leaved Banksia scrub She-oak heath on sandstone headlands' (as shown on Existing vegetation communities figure prepared by Narla Environmental 2017) much of which is presently at a height of approximately 2.5m and allows views to scenic features to be maintained.

Key Issues

RLA have reviewed the visual assessment prepared by GMU and agree that its methodology and findings provide an adequate representation of potential visual impacts that would be caused by proposed built forms. However we have further comments in regard to the effects of the features proposed to be included in the eastern extension of the subject site as shown on 'Landscape Groundplane East' sheet 8002.

Having reviewed relevant documents eg the SEARS, SEE and various appendices available on the DPE website via the Major projects link, RLA raise the following points that require clarification;

1. 'Landscape Groundplane East' sheet 8002 (the landscape plan) indicates the location of a new coastal walkway, sitting areas in 'pods' and areas of proposed planting. The location and nature of these features create privacy and amenity issues and potentially view loss for the subject properties.
2. The landscape plan shows that the majority of existing open space in land south of the subject dwellings is proposed to be planted with 'bush regeneration to be coordinated with existing bush care groups'. In this regard existing open space in front of No.12, 14 and 18 Battery Street will be revegetated with species that are part of the Eastern Suburbs Banksia Scrub species (ESBS) community. This is inconsistent with information provided in relation to existing species on the site.
3. Notwithstanding existing native vegetation is growing in places and may in time reach a height that may block or filter southerly views to some extent, a review of the proposed ESBS plant list shows that many species will grow quickly to a height in excess of 5m to 6m eg; *Acacia longifolia*, *Acacia terminalis*, *Allocasuarina distyla*, *Banksia integrifolia* and *Banksia ericifolia*. Further, if the objective for this land is 'bush regeneration' using species from the ESBS community, the retention of existing views cannot be guaranteed. Bush regeneration typically does not include maintenance of the vegetation to achieve a particular height.
4. It is stated at page 5 of the Landscape Design Statement that the existing bush regeneration south of the subject properties is more closely related to the Coastal Headland Banksia Heath community (CHBH) and does not meet the criteria for classification as ESBS. Therefore, it is not clear why species from the ESBS community would be used for revegetation.
5. Details eg. plant species, potential height and form in the CHBH community, are not provided. It is unclear whether species from this community will be used in the proposed development and if so, from what source they would be derived.
6. At page 28 of the Landscape Design Statement it states that species selected from the ESBS will be restricted to 2.5m in height in 'view sensitive' areas. It is not stated

how species will be specifically selected, placed or maintained effectively so as to protect existing views, neither are the view sensitive areas identified. In our opinion, the subject dwellings are view sensitive areas from which views should be protected and therefore they ought to have been identified as view sensitive locations, for which specific details of plant species, potential heights and the means to be taken to manage the vegetation to retain views ought to have been provided.

7. A landscape planting plan and vegetation management plan are therefore required, but have not been provided. These should indicate the placement of plant species to be used in view sensitive areas and should detail maintenance and management practices designed to protect views and amenity for the subject dwellings.
8. The landscape plan shows that a '2m wide zone of maintained turf' will be installed adjacent to the south boundary of the subject dwellings. The maintained turf zone will allow members of the public including the University community to access and congregate immediately outside and within a few metres of living spaces and external terraces of the subject properties. The maintained turf zone appears to be inappropriate and ineffective for maintenance and does not adequately compensate for the loss of informal access for residents to the open space which would result from implementation of the landscape plans. It will only create amenity and security issues for the subject properties. The amenity and security of the subject dwellings should be protected by the removal of the maintained turf zone and resolution of the conflicting statements in relation to security in the documentation.
9. A double row of 'shrubs' that are not included in the landscape plan's legend are shown immediately south of the maintained turf zone. These are labelled as 'buffer planting understorey (max mature height 2.5m)'. Understorey plants are not included in the indicative planting palette, therefore it is unknown whether the species are appropriate to either the maintenance of view or bush regeneration, or how they can or will be maintained regularly and appropriately so as to protect existing views.
10. Vegetation within the buffer planting should be maintained to 2.5m in height or less, to protect existing amenity and views for the subject dwellings. A vegetation management plan for the buffer planting including species, potential height and form and management practices designed to maintain the views and amenity of the subject dwellings, is required, as noted above, but not provided.
11. Although details of the proposed landscape for land south of No. 12 Battery Street was not available for download via the Department of Planning & Environment website, the proposed planting is included on Landscape Roof Plan 8003. This plan shows that large swathes of revegetation is planned for the area south of No. 12 Battery Street, including an extension of the maintained turfed zone and buffer planting understorey mix. The maintained turf zone should be removed due to potential security and amenity issues for the subject dwellings (refer to points 8 and 9 above).
12. The presence of the buffer planting immediately adjacent to the 2m turf zone also conflicts with prevailing DCP controls regarding passive surveillance of the public domain and the SEARs requirements in section 3 Built Form and Urban Design, that relate to crime prevention through environmental design principles. Passive surveillance requires views to be maintained across the landscaped area south of

the subject dwellings, which is in conflict with the height and location of the buffer planting understorey proposed, which would have the effect of limiting or eliminating potential passive surveillance by blocking views into and across the landscaped area. This is one of several example of apparent conflict between the implementation of the landscape plans and the stated intentions with regard to security.

13. The proposed coastal walkway includes pods of development set amongst areas of revegetation south of the subject properties. In particular, two elliptical shaped features will be located south of Nos.16 and 18 Battery Street. Pages 19 to 21 of the Landscape Design Statement show that the pods include sandstone retaining walls and timber decks that may be raised above ground level (depending on adjacent topography). In addition, they will include electrical connections for low level lighting bollards and wifi. The availability of free wifi in a public space that is lit overnight will create amenity and security issues for the subject properties.
14. It is stated that low level bollard lighting will be used along the coastal walkway. This conflicts with page 63 of the EIS which states that "The rear pedestrian accessway will be lit at night with low downlit light, on sensors, to minimise spill to neighbours". The nature, potential effects and impacts of night lighting and light spill require assessment and clarification, as do the means by which security will be monitored.
15. Down lights, (if used) may cause nuisance such as glare and light spill to the subject dwellings, depending on the heights at which luminaires are placed and the luminance and colour of the light emitted. The mention of down lights is also in conflict with the bollard lighting mentioned in the landscape plans. There are no details provided of this kind of lighting either.
16. Low level bollard lighting (if used) may not provide adequate night time security for users of the coastal path, or subject dwellings and may also create night time light spill and amenity for the subject dwellings. The visual effects and impacts of night time lighting for adjacent residents has not been assessed and must be mitigated. Night lighting should not be permitted along the coastal pathway if it conflicts with views from residences. Any significant light spill in the foreground of views to the south and south east will conflict with the quiet enjoyment of night-time views across the landscaped area and reserve toward the ocean beyond.
17. It is also not stated how light spill and visual effects will be mitigated if understorey vegetation close to the subject properties is maintained as stated to a height of 2.5m. A detailed vegetation management plan for the buffer planting understorey zone is required (refer to points 8, 9 and 10), as in an explanation of how light spill will be managed and also how light either supports or inhibits adequate management of night-time and casual surveillance.
18. The landscape plans show that the existing steel fence that separates the Campus site from the open space south of the subject properties will be retained. Another, additional curved fence, will be installed east of this location, that includes an entry gate to the campus. The two fences intersect to the north and it appears that there is no access provided to the turf area or the buffer planting understorey zone for the purposes of maintenance. The location of fences and gates needs to be resolved as it relates to potential security issues for the subject dwellings.



19. Potential security impacts for the subject dwellings requires clarification (refer to point 18). The combination of buffer planting, regeneration of coastal vegetation, unpredictable growth of native vegetation generally, lighting and free wifi, is likely to create an environment that is unable to be managed securely and which is a potential risk to the security and privacy of the subject dwellings.
20. Security measures in relation to access to the coastal park and to access for maintenance of the buffer planting and revegetation zones should be clarified. The proposed narrow pathways and pods, surrounded by potentially tall and dense vegetation, are likely to pose a security hazard to the University and concern for adjacent residences.
21. Night time security and amenity for subject properties should be maintained in our opinion by the use of a curfew. Gates should be locked at night to prevent public access to the open space and coastal pathway and to resolve the conflict of lighting and noise with the quiet enjoyment on our clients' residences.

Yours sincerely

A handwritten signature in black ink that reads 'Richard Lamb'. The signature is fluid and cursive, with a large, stylized 'R' and a long, sweeping tail that loops back under the name.

Dr Richard Lamb

Richard Lamb and Associates