



10 September 2024

REFERRAL RESPONSE – ENVIRONMENTAL HEALTH

FILE NO: Development Applications: 240/2024/1

ADDRESS: 80 Drumalbyn Road BELLEVUE HILL 2023

PROPOSAL: Demolition of the existing three (3) residential flat buildings and associated structures on the sites and the construction of a new residential flat building comprising 26 units, two swimming pools & landscaping with the sites consolidated

FROM: Louie Salvatore

TO: Ms F Stano

1. ISSUES

- *Acoustics – Construction and occupation phase of the development.*

2. DOCUMENTATION

I refer to the following documents received for this report:

- Statement of Environment Effects: prepared by GSA Planning – Job No. 23266 – June 2024.
- Architectural Plans: prepared by MHNDUNION Architects – Project No. 23-048 – Revision 01 – 01 July 2024.
- Preliminary Geotechnical Investigation: prepared by AssetGeoEnviro – Report ID. 7520-R1 – 05 June 2024.
- Acoustic Report: prepared by Pulse White Noise Acoustics Pty Ltd - Report No. 240536-80-84 Drumalbyn Rd Bellevue Hill-Noise Impact Assessment-R0 – 27 August 2024.
- Referral Response – Environmental Health 20 August 2024.

3. RESEARCH

The following research was undertaken in the preparation of this assessment:

- A site inspection was carried out on the following date: *#Insert/delete as appropriate*

4. SUMMARY OF PROPOSAL

The proposed works comprise of:

- Demolition of the existing three (3) residential flat buildings and associated structures on the site; and
- Construction of a new residential flat building comprising 26 units, two swimming pools, landscaping and associated works.

The resulting land use will be a part three part eight storey residential flat building containing twenty-six (26) residential units with associated private open space areas and services. The



development will have a two to three-storey street appearance. Each unit has access to private open space at their respective level, and communal open space at the lower ground floor level.

The proposed residential flat building includes underground car parking accessed via a double car lift set back from Drumalbyn Road. The proposed Levels 1, 2 & 3 will accommodate vehicle parking for 40 cars (including 3 accessible spaces, 4 visitor spaces and 4 EV spaces) across the underground levels, and mechanical services to support the ongoing function of the development. The ground floor level will accommodate one residential unit as well as bicycle parking and additional plant area. Levels 1 to 3 of the development will comprise four residential units at each level. Level 4 will comprise six residential units. Level 5 is at street level where pedestrian access to the building is possible and will comprise five residential units. Level 6 will comprise two residential units.

Lower Ground Floor Level

- Unit G.1 private terrace with outdoor shower and change room, private pool;
- External spiral stair to habitable space;
- External stair to lawn space;
- Communal pool and terracing; and
- Plant equipment and mechanical services.

Ground Floor Level

- Unit G.1, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, Bedroom 4, bathroom, laundry, pantry and open plan kitchen/living/dining area with adjacent private balcony allowing access to private swimming pool below;
- Bicycle parking for 29 spaces (including 3 visitor spaces);
- Communal area with adjacent terrace allowing access to communal swimming pool below;
- Lobby, stair and 2 lifts; and
- Plant equipment and mechanical services.

Level 1

- 16 car spaces, accessed via the double car lift;
- Unit 1.1, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 1.2, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, study, open plan kitchen/living/dining area with adjacent balcony;
- Unit 1.3, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 1.4, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry/pantry, open plan kitchen/living/dining area with adjacent balcony;
- Lobby, 2 lifts, 2 stair sets and mechanical services; and
- Various non-trafficable planter boxes.

Level 2

- 13 car spaces (including 3 disabled spaces), accessed via the double car lift;
- Unit 2.1, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bath, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 2.2, comprising Master Bedroom with ensuite, Bedroom 2, bath, laundry, study, open plan kitchen/living/dining area with adjacent balcony;



- Unit 2.3, comprising Master Bedroom with ensuite, Bedroom 2, bath, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 2.4, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bath, laundry/pantry, open plan kitchen/living/dining area with adjacent balcony; and
- Lobby, 2 lifts, 2 stair sets and mechanical services.

Level 3

- 11 car spaces (including 4 visitor spaces and 4 EV spaces), accessed via the double car lift;
- Unit 3.1, comprising Master Bedroom with ensuite and walk in robe, Bedroom 2, Bedroom 3, Bedroom 4, 2 bathrooms, laundry, open plan kitchen/living/dining area with adjacent balcony, and family room with adjacent terrace;
- Unit 3.2, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, study, open plan kitchen/living/dining area with adjacent balcony;
- Unit 3.3, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 3.4, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry/pantry, open plan kitchen/living/dining area with adjacent balcony;
- Lobby, 2 lifts, 2 stair sets and mechanical services; and
- Various non-trafficable planter boxes.

Level 4

- Unit 4.1, comprising Master Bedroom with ensuite, Bedroom 1, Bedroom 2 with adjacent balcony, bathroom, laundry, pantry, study, open plan kitchen/living/dining area with adjacent terrace;
- Unit 4.2, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry/pantry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 4.3, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, study, open plan kitchen/living/dining area with adjacent balcony;
- Unit 4.4, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 4.5, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry/pantry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 4.6, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry, study, open plan kitchen/living/dining area with adjacent terrace;
- Double car lift, which is enclosed and cannot be at this level accessed; and
- Lobby, 2 lifts, 2 stair sets and mechanical services.

Level 5 (Street Level)

- Unit 5.1, comprising Master Bedroom with ensuite, Bedroom 1, Bedroom 2 with adjacent balcony, bathroom, laundry, pantry, study, open plan kitchen/living/dining area with adjacent terrace;
- Unit 5.2, comprising Master Bedroom with ensuite, Bedroom 1, Bedroom 2, Bedroom 4, bathroom, powder, pantry, open plan kitchen/living/dining area with adjacent balcony and planter box;
- Unit 5.3, comprising Master Bedroom with ensuite, Bedroom 2, bathroom, laundry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 5.4, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry/pantry, open plan kitchen/living/dining area with adjacent balcony;
- Unit 5.5, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry, study, open plan kitchen/living/dining area with adjacent balcony; and
- Lobby, 2 lifts, 2 stair sets and mechanical services.



Level 6

- Unit 6.1, comprising Master Bedroom with ensuite, Bedroom 2, Bedroom 3, bathroom, laundry, pantry, study, open plan kitchen/living/dining area with adjacent terrace with non-trafficable roof garden;
- Unit 6.2, comprising Master Bedroom with ensuite and walk in wardrobe, Bedroom 2 with adjacent non-trafficable roof garden, Bedroom 3 with ensuite, Bedroom 4, 2 bathrooms, laundry, study, open plan kitchen/living/dining area with adjacent balcony to Drumalbyn Road and adjacent terrace with non-trafficable roof garden to the rear; and
- Lobby, 2 lifts, stairs and mechanical services.

5. ASSESSMENT

Comments have been prepared on the following. **Where Approval is recommended, Conditions of Consent follow at the end of the comments.**

a) ACOUSTICS

Environmental Health Referral Response of 20 August 2024 recommended:

“Provide a noise and vibration assessment report, prepared by a qualified acoustic consultant (AAAC), in accordance with the relevant noise guidelines, State Environmental Planning Policies and Woollahra Municipal Council Development Control Plan.

The noise and vibration assessment must detail construction and operational noise and vibration impacts on nearby sensitive receivers and structures and outline the proposed management and mitigation measures that would be implemented. As a minimum, the scope of works should include:

- *Undertake noise measurements to determine ambient and background noise levels.*
- *Establish project noise goals for the construction and operation of the proposed project.*
- *Identify the likely principal noise sources during construction, operation and their associated noise levels.*
- *The assessment of potential noise, vibration and sleep disturbance impacts associated with construction and operation aspects of the project.*
- *Provide recommendations pertaining to external building performance requirements for the proposed development to achieve appropriate internal amenity standards.*
- *Provide recommendations for feasible and reasonable noise and vibration mitigation and management measures, where noise or vibration objectives may be exceeded”.*

Environmental Health - Review

In response, the Applicant has provided an **Acoustic Report: prepared by Pulse White Noise Acoustics Pty Ltd - Report No. 240536-80-84 Drumalbyn Rd Bellevue Hill-Noise Impact Assessment-R0 – 27 August 2024.**

The Report has assessed the potential environmental noise intrusion impacts on the development and noise emissions to nearby receivers from mechanical plant associated with the development. As well as potential noise impacts from existing noise sources within the vicinity of the site which predominantly includes traffic noise from surrounding roadways.

Unattended Noise Monitoring



An unattended noise survey was conducted between the 20th April and 27th August 2024. The Report states that unattended noise monitor was positioned in a location suitable for the assessment of **traffic noise impacts from New South Head Road** and background noise levels. Environmental Health notes that the proposed development site is a considerable distance away from New South Head – Environmental Health considers this a typographical error. The correct location of the noise logger is shown in Figure 1 of the Report, which is representative of the Existing ambient noise level.



The unattended (yellow) and attended (green) show the positioning of the noise logger. The measured Rating Background Noise Level (RBL) are presented in Table 1 of the Report.

Measurement Location	Daytime ¹		Evening ¹		Night-time ¹	
	LA90 ² (dBA)	LAeq ³ (dBA)	LA90 ² (dBA)	LAeq ³ (dBA)	LA90 ² (dBA)	LAeq ³ (dBA)
80-84 Drumalbyn Road, Bellevue Hill	40	49	38	49	30	44
<i>Note 1: For Monday to Saturday, Daytime 7:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 8:00 am.</i>						
<i>Note 2: The LA90 noise level is representative of the "average minimum background sound level" (in the absence of the source under consideration), or simply the background level.</i>						
<i>Note 3: The LAeq is the energy average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.</i>						

Attended Noise Measurements

Attended noise level measurements were undertaken at the site on 20th August 2024 during 5 PM through to 5.45 PM. The results of the attended noise level measurements are to supplement the unattended noise logging for the assessment of background noise levels.

1. Noise Assessment – Internal Noise Intrusion

External noise intrusion into the building will generally be via the building envelope (external wall, glazing or external roof). In the absence of any applicable requirements in Council's DCP 2015, objectives recommended ambient noise levels and reverberation times for internal spaces are given in Table 1 of Australian / New Zealand Standard 2107:2016 "Acoustics - Recommended design sound levels and reverberation times for building interiors". It recommends a range with lower and upper levels (rather than "satisfactory" and "maximum" internal noise levels) for building interiors based on room designation and location of the development relative to external noise sources. Refer to Table 3 of the Report.



Section 4 of the Report has recommended acoustic treatments to ensure the recommended internal noise levels are achieved. The recommended acoustic constructions to the buildings external façade glass elements, building elements, external roof & ceiling constructions and all opening and penetration requirements are detailed in this section.

2. Noise Assessment – External Noise Emissions

Environmental Health notes that the Report has correctly referred to the relevant noise level criteria for noise emissions generated on the site once completed. In particular, *Section B3.10 7 & 9 Site Facilities from the Woollahra DCP 2015* lists suitable criteria for the assessment of noise emissions from mechanical plant services. (*Note: Noise emissions from mechanical plant equipment must not exceed the background noise levels when measured at the boundary of the development site*).

Environmental Health also notes that the Report has referenced *Noise Policy for Industry (NSW NfPI)* which provides a framework and process for determining external noise criteria for the assessment of noise emission from industrial developments. The NSW NfPI criteria for industrial noise sources have two components:

- Controlling the intrusive noise impacts for residents and other sensitive receivers in the short term; and
- Maintaining noise level amenity of particular land uses for residents and sensitive receivers in other land uses.

For Intrusive noise, the NSW NfPI states, “*that the noise from any single source should not intrude greatly above the prevailing background noise level. Industrial noises are generally considered acceptable if the equivalent continuous (energy- average) A-weighted level of noise from the source (LAeq), measured over a 15-minute period, does not exceed the background noise level measured in the absence of the source by more than 5 dB(A)*”. This noise emission criteria is less stringent than *Woollahra Council’s DCP 2015 – “Noise emissions from mechanical plant equipment must not exceed the background noise levels when measured at the boundary of the development site”*.

Table 6 of the Report below shows the measured external noise emission levels for the WDCP 2015 (Rating Background Levels), and NSW NfPI (Intrusive & Amenity).

Table 6 External noise level criteria in accordance with the NSW NPI

Location	Time of Day ¹	Project Amenity Noise Level, LAeq, period (dBA)	Measured LA90, 15 min (RBL) ² (dBA)	Measured LAeq, period Noise Level (dBA)	Intrusive LAeq, 15 min Criterion for New Sources (dBA)	Amenity LAeq, 15 min Criterion for New Sources (dBA) ⁴
Residential Receivers	Day	50	40	49	45	53
	Evening	40	38	49	43	43
	Night	35	30	44	35	38
<i>Note 1: For Monday to Saturday, Daytime 7:00 am – 10:00 pm; Night-time 10:00 pm – 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am – 10:00 pm; Night-time 10:00 pm – 8:00 am.</i> <i>Note 2: LA90 Background Noise or Rating Background Level.</i> <i>Note 3: Project Noise Trigger Levels are shown in bold and underlined.</i> <i>Note 4: As per Section 2.4.1 of the NPI</i>						



The Report has correctly adopted the **more stringent Project Trigger Noise Levels**, being the measured Rating Background Levels for the Day-time, Evening & Night-time periods, as presented in Table 7 of the Report.

Table 7 Project Specific Noise Criteria for Mechanical Plant

Location	Time of Day ¹	Noise Level (LAeq, 15 min) (i.e., RBL + 0)
Residences	Day	40
	Evening	38
	Night	30
<i>Note 1: For Monday to Saturday, Daytime 7:00 am – 10:00 pm; Night-time 10:00 pm – 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am – 10:00 pm; Night-time 10:00 pm – 8:00 am.</i>		

Mechanical Plant Services

For mechanical services equipment, detailed selections of the proposed mechanical plant and equipment to be used on the site, and the exact location of key plant items, are not available. Environmental Health recommends that all future plant and equipment to be acoustically treated to ensure the noise levels at all surrounding receivers comply with noise emission criteria detailed in Table 7 of the Report.

Car Lift & Access Door

An assessment of noise generated from the proposed car lift and access door on the site has been undertaken.

1. Car lift – The proposed car lift is located within the building structure of the proposed building. Based on the location of the car lift the following operational noise levels are expected:

- Car lift motor – Noise level of up to 95 dB(A) SWL. Motor located within the building structure including the building structure and associated with each car stacker.
- Operation of the car lift – up to 85 dB(A) SPL including movement of the lift and the movement of cars on and off the lift.

Based on the proposed operation of the car and access door lift, acoustic treatments are detailed in section 6.2 of the Report to ensure noise level emissions as well as future internal noise levels within dwellings of the development comply with the relevant noise criteria.

Environmental Health – Conclusion and Recommendations

Environmental Health is satisfied that internal noise intrusions and external noise emissions arising from the development can be controlled through design and construction noise control measures, as detailed in the *Acoustic Report: prepared by Pulse White Noise Acoustics Pty Ltd - Report No. 240536-80-84 Drumalbyn Rd Bellevue Hill-Noise Impact Assessment-R0 – 27 August 2024*.

Additional Information

The Application has not considered Construction Noise and Vibration impacts. The “*Interim Construction Noise Guidelines*” (published by the NSW Office of Environment and Heritage, 2009) deals with the assessment of noise from construction activities and advises on best practice approaches to minimise noise impacts. The ICNG provides noise management levels for construction noise at residential and other potentially sensitive receivers. These management



levels are to be calculated based on the adopted rating background level (RBL) at nearby locations, as shown in Table 3-2.

An appropriate assessment in compliance with DECCW's Interim Construction Noise Guidelines June 2009 and DEC's Assessing Vibration: A technical Guideline dated February 2006. Construction Noise Reports are usually appropriate at CC stage.

At the Construction Certificate stage, a *Construction Noise Management Plan (CNMP)* is to be prepared by a suitably qualified acoustic consultant. The construction noise will be assessed with consideration to *DECCW Interim Construction Noise Guidelines (ICNG) (2009)* to provide noise management levels for construction noise at residential and other potentially sensitive receivers. The management levels are to be calculated based on the adopted rating background level (RBL) at nearby locations.

The CNMP shall be a site specific plan developed to ensure that appropriate work practices are implemented during the demolition, excavation and construction to minimise noise and vibration impact. The CNMP shall include:

- Attended and unattended noise monitoring at locations indicative of noise sensitive receivers.
- Site description.
- Staging of construction.
- Establishment of project specific airborne noise construction goals based on monitored existing noise levels.
- Prediction of construction noise levels from proposed construction works.
- Recommendation of environmental noise control options/management practices.
- Complaints handling and community liaison procedures.

b) ACID SULFATE SOILS

Refer to Environmental Health Referral Response of 20 August 2024.

It was concluded that there was negligible probability that actual ASS will be disturbed during excavation works, and considered that a Preliminary Investigation was not required for the proposed works.

c) LAND CONTAMINATION – SEPP (Resilience & Hazards) 2021

Refer to Environmental Health Referral Response of 20 August 2024.

It was concluded that the development sites were unlikely to be contaminated and further investigation was not considered necessary.

6. RECOMMENDATION

Council's Environmental Health Officer has determined that the Acoustic Report (Pulse White Noise Acoustics 27 August 2024) is satisfactory, subject to the following conditions:

A. GENERAL CONDITIONS

A. 1.	Approved Plans and Supporting Documents
	Those with the benefit of this consent must carry out all work and maintain the use and works in accordance with both the architectural plans to which is



affixed a Council stamp “Approved” and supporting documents listed below unless modified by any following condition.

Where the plans relate to alterations or additions only those works shown in colour or highlighted are approved.

Reference	Description	Author	Date
Report No.240536- 80-84 Drumalbyn Rd Bellevue Hill-Noise Impact Assessment- R0-27 August 2024	Acoustic Report	Pulse White Noise Acoustics Pty Ltd	27 August 2024

Notes:

- Warning to Principal Certifier – You must always insist on sighting the original Council stamped approved plans. You must not rely solely upon the plan reference numbers in this condition. Should the Applicant not be able to provide you with the original copy Council will provide you with access to its files so you may review our original copy of the approved plans.
- These plans and supporting documentation may be subject to conditions imposed under section 4.17(1)(g) of the Act modifying or amending the development.

Condition Reason: To ensure all parties are aware of the approved plans and supporting documentation that applies to the development.

B. BEFORE DEMOLITION WORK COMMENCES

C. ON COMPLETION OF REMEDIATION WORK

D. BEFORE ISSUE OF A CONSTRUCTION CERTIFICATE

D	1.	Acoustics – Design and Construction
		The recommendations provided in the approved acoustic report titled <i>Pulse White Noise Acoustics – Report No. 240536-80-84 Drumalbyn Rd Bellevue Hill-Noise Impact Assessment-R0 – 27 August 2024</i> , shall be incorporated into the design and construction of the development and be shown on plans accompanying the Construction Certificate application.



The construction methodology and plans accompanying the Construction Certificate application shall be assessed and certified in writing by a suitably qualified acoustic consultant, to verify conformance with the requirements of the aforementioned acoustic report. The written certification from the suitably qualified acoustic consultant shall be submitted to and approved by the Principal Certifying Authority (PCA) prior to issue of the Construction Certificate.

Note: 'Suitably qualified acoustic consultant' means a consultant who possesses Australian Acoustical Society membership or are employed by an Association of Australasian Acoustical Consultants (AAAC) member firm.

Condition Reason: To ensure internal acoustic amenity is maintained for occupants of the building.

D 2. Acoustics – Mechanical Plant Services

Before the issue of any construction certificate, an Acoustic Report, prepared by a suitably qualified acoustic consultant, shall assess the environmental cumulative noise impacts associated with the operation of all **mechanical plant services**.

The Acoustic Report shall have regard to the *Woollahra Municipal Council – Woollahra DCP 2015* and *Table 7 Project Specific Noise Criteria* in the approved acoustic report titled, *Pulse White Noise Acoustics – Report No. 240536-80-84 Drumalbyn Rd Bellevue Hill-Noise Impact Assessment-R0 – 27 August 2024*.

Where necessary, noise amelioration treatments will be incorporated in the mechanical plant services design to ensure that cumulative noise levels comply with the noise emission criteria. Compliance noise testing is to be undertaken following the installation of the mechanical plant equipment.

Note 1: Compliance with the Night-time (RBL) noise emission criteria will ensure compliance at all other times.

Note 2: Note: 'Suitably qualified acoustic consultant' means a consultant who possesses Australian Acoustical Society membership or are employed by an Association of Australasian Acoustical Consultants (AAAC) member firm.

Condition Reason: To protect the acoustic amenity of the surrounding environment.

D 3. Acoustics – Demolition and Construction



	At the Construction Certificate stage, a <i>Construction Noise Management Plan (CNMP)</i> is to be prepared by a suitably qualified acoustic consultant. The construction noise will be assessed with consideration to <i>DECCW Interim Construction Noise Guidelines (ICNG) (2009)</i> to provide noise management levels for construction noise at residential and other potentially sensitive receivers. The management levels are to be calculated based on the adopted rating background level (RBL) at nearby locations. The CNMP shall be a site specific plan developed to ensure that appropriate work practices are implemented during the demolition, excavation and construction to minimise noise and vibration impact. The CNMP shall include: ▪ Attended and unattended noise monitoring at locations indicative of noise sensitive receivers. ▪ Site description. ▪ Staging of construction. ▪ Establishment of project specific airborne noise construction goals based on monitored existing noise levels. ▪ Prediction of construction noise levels from proposed construction works. ▪ Recommendation of environmental noise control options/management practices. ▪ Complaints handling and community liaison procedures. Condition Reason: To protect the acoustic amenity of the surrounding environment.
D 4.	Swimming and Spa Pools – Backwash Before the issue of any construction certificate, the construction certificate plans and specifications required under clause 7 of the Development Certification and Fire Safety Regulation, must detail the connection of backwash to Sydney Waters sewer in compliance with clause 10.9 (Figure 10.2) of AS/NZS 3500.2.2. Notes: • The plans must show the location of Sydney Water’s sewer, the yard gully or any new connection to the sewer system including a detailed cross section of the connection complying with clause 10.9 (Figure 10.2) of AS/NZS 3500.2.2. • The discharge of backwash water to any stormwater system is water pollution and an offence under the Protection of the Environment Operations Act 1997. The connection of any backwash pipe to any stormwater system is an offence under the Protection of the Environment Operations Act 1997. Condition Reason: To ensure swimming and spa pool backwash is connected to Sydney Waters sewer.
D 5.	Light and Ventilation



Before the issue of any construction certificate, the construction certificate plans and specifications required under clause 7 of the Development Certification and Fire Safety Regulation, must detail all lighting, mechanical ventilation or air-conditioning systems complying with Part F.4 of the BCA or clause 3.8.4 and 3.8.5 of the BCA Housing Provisions, inclusive of AS 1668.1, AS 1668.2 and AS/NZS 3666.1.

If an alternate solution is proposed then the construction certificate application must include a statement as to how the performance requirements of the BCA are to be complied with and support the performance based solution by expert evidence of suitability.

This condition does not set aside the mandatory requirements for 'Legionella Control' under the Public Health Act 2010 and Public Health Regulation 2022 in relation to regulated systems. This condition does not set aside the effect of the Protection of the Environment Operations Act 1997 in relation to offensive noise or odour.

Notes:

- Clause 69 of the Regulation requires compliance with the BCA. Clause 19 of the Development Certification and Fire Safety Regulation prevents the issue of a construction certificate unless the Principal Certifier is satisfied that compliance has been achieved.
- Part 3, Division 1 of the Development Certification and Fire Safety Regulation details what information must be submitted with any construction certificate. It is the Applicant's responsibility to demonstrate compliance through the construction certificate application process.
- Applicants must also consider possible noise and odour nuisances that may arise. The provisions of the Protection of the Environment Operations Act 1997 have overriding effect if offensive noise or odour arises from the use.
- Applicants must pay attention to the location of air intakes and air exhausts relative to sources of potentially contaminated air and neighbouring windows and air intakes respectively, see section 2 and 3 of AS 1668.2.

Condition Reason: To ensure the development is provided with adequate light and ventilation.

D 6.	Acoustic Certification of Mechanical Plant and Equipment
	Before the issue of any construction certificate, the construction certificate plans and specifications required under clause 7 of the Development Certification and Fire Safety Regulation, must be accompanied by a certificate from a professional acoustic engineer certifying that the <i>cumulative</i> noise level measured at any boundary of the site at any time while the proposed mechanical plant and equipment is operating will not exceed the background noise level. Where noise sensitive receivers are located within the site, the noise level is measured from the nearest strata, stratum or community title land and must not exceed background noise level, at any time. The background noise level is the underlying level present in the ambient noise, excluding the subject noise source, when extraneous noise is removed.



	For assessment purposes the background noise level is the LA90, 15 minute level measured by a sound level meter. Where sound attenuation is required this must be detailed. Notes: • Further information including lists of Acoustic Engineers can be obtained from: - Australian Acoustical Society - professional society of noise-related professional www.acoustics.asn.au - Association of Australian Acoustical Consultant - professional society of noise related professionals www.aaac.org.au Condition Reason: To ensure the development does not result in any unreasonable acoustic impacts.
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D 7.	Ventilation - Enclosures used by Vehicles (Car parks, automotive service, enclosed driveways, loading docks and the like) Before the issue of any construction certificate, the basement carpark in which vehicles powered by internal combustion engines are parked, serviced or operated are required to comply with Section 4 of Australian Standard 1668.2-2012. In general air distribution must achieve uniform dilution of contaminants in the garage and maintain contaminant concentrations below recommended exposure standards. The basement carpark must be naturally ventilated or provided with a combination of both supply and exhaust mechanical ventilation. The applicant is to determine the method of ventilation of the basement carpark and provide details to the Certifying Authority accordingly. Except as varied, the basement carpark shall be mechanically ventilated by a combination of general exhaust and supply flow rates in accordance with Australian Standard 1668.2-2012. Condition Reason: To ensure the development is adequately ventilated.
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D 8.	Ventilation - Internal Sanitary Rooms Before the issue of any construction certificate, all internal sanitary rooms and laundry facilities not provided with natural ventilation must be provided with a system of mechanical exhaust ventilation in accordance with <i>Minimum Exhaust Ventilation Flow Rates of AS 1668.2-2012</i>. Details of any proposed mechanical ventilation system(s) must be submitted with the Construction Certificate plans and specifications to the Certifying Authority demonstrating compliance with AS 1668 Parts 1 & 2.
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Condition Reason: To ensure the development is adequately ventilated.
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E. BEFORE BUILDING WORK COMMENCES

F. DURING BUILDING WORK

F 1.	Hours of Work –Amenity of the Neighbourhood
	While site work is being carried out: a) No work must take place on any Sunday or public holiday. b) No work must take place before 7am or after 5pm any weekday. c) No work must take place before 7am or after 1pm any Saturday. d) The following work must not take place before 9am or after 4pm any weekday, or before 9am or after 1pm any Saturday or at any time on a Sunday or public holiday: • piling, • piling, • rock or concrete cutting, boring or drilling, • rock breaking, • rock sawing, • jack hammering, or • machine excavation. e) No loading or unloading of material or equipment associated with the activities listed in part d) above must take place before 9am or after 4pm any weekday, or before 9am or after 1pm any Saturday or at any time on a Sunday or public holiday. f) No operation of any equipment associated with the activities listed in part d) above must take place before 9am or after 4pm any weekday, or before 9am or after 1pm any Saturday or at any time on a Sunday or public holiday. g) No rock excavation being cutting, boring, drilling, breaking, sawing , jack hammering or bulk excavation of rock, must occur without a 15 minute interval break within every hour. Notes: • The use of noise and vibration generating plant and equipment and vehicular traffic, including trucks in particular, significantly degrade the amenity of neighbourhoods and more onerous restrictions apply to these activities. This more invasive work generally occurs during the foundation and bulk excavation stages of development. If you are in doubt as to whether or not a particular activity is considered to be subject to the more onerous requirement (9am to 4pm weekdays and 9am to 1pm Saturdays) please consult with Council. • Each and every breach of this condition by any person may be subject to a separate penalty infringement notice or prosecution. • The delivery and removal of plant, equipment and machinery associated with wide loads subject to Transport for NSW and NSW Police restrictions on their movement outside the approved hours of work will be considered on a case by case basis.



- Compliance with these hours of work does not affect the rights of any person to seek a remedy to offensive noise as defined by the Protection of the Environment Operations Act 1997, the Protection of the Environment Operations (Noise Control) Regulation 2017.
- NSW EPA Noise Guide is available at www.epa.nsw.gov.au/noise/nglg.htm

Condition Reason: To mitigate the impact of work upon the amenity of the neighbourhood.

F 2.	Dust Mitigation
	While site work is being carried out, dust mitigation must be implemented in accordance with “Dust Control - Do it right on site” and the accompanying facts sheets published by the Southern Sydney Regional Organisation of Councils. This generally requires: h) Dust screens to all hoardings and site fences. i) All stockpiles or loose materials to be covered when not being used. j) All equipment, where capable, being fitted with dust catchers. k) All loose materials being placed bags before placing into waste or skip bins. l) All waste and skip bins being kept covered when not being filled or emptied. m) The surface of excavation work being kept wet to minimise dust. n) Landscaping incorporating trees, dense shrubs and grass being implemented as soon as practically possible to minimise dust. Notes: • “Dust Control - Do it right on site” and the accompanying factsheets can be downloaded from Council’s website www.woollahra.nsw.gov.au • Special precautions must be taken when removing asbestos or lead materials from development sites. Additional information can be obtained from www.safework.nsw.gov.au and www.epa.nsw.gov.au. Other specific conditions and advice may apply. • Demolition and construction activities may affect local air quality and contribute to urban air pollution. The causes are dust, smoke and fumes coming from equipment or activities, and airborne chemicals when spraying for pest management. Precautions must be taken to prevent air pollution. Condition Reason: To mitigate the impact of dust upon the amenity of the neighbourhood and prevent water pollution.
F 3.	Swimming and Spa Pools – Temporary Child Resistant Barriers and other Matters
	While site work is being carried out, temporary child-resistant barriers must be installed in compliance with the Swimming Pools Act 1992 and Building Code of Australia where any swimming pool or spa pool, as defined by the Swimming Pools Act 1992, contains more than 300mm in depth of water at any time. Permanent child-resistant barriers must be installed in compliance with the Swimming Pools Act 1992 and the Building Code of Australia as soon as practical.



	Backwash and any temporary dewatering from any swimming pool or spa pool as defined by the Swimming Pools Act 1992 must be discharged to the sewer in compliance with clause 10.9 (Figure 10.2) of AS/NZS 3500. Notes: This condition does not prevent Council from issuing an order under section 23 of the Swimming Pool Act 1992 or taking such further action as necessary for a breach of this condition or the Swimming Pools Act 1992. Condition Reason: To ensure access to swimming pools is effectively restricted to maintain child safety.

G. BEFORE ISSUE OF AN OCCUPATION CERTIFICATE

G 1.	Swimming and Spa Pools – Permanent Child Resistant Barriers and other Matters Before the issue of any occupation certificate, and prior to filling any swimming pool, as defined by the Swimming Pools Act 1992: - Permanent child-resistant barriers must be installed in compliance with the Swimming Pools Act 1992 and the Building Code of Australia. - The swimming pool must be registered in accordance with section 30B of the Swimming Pools Act 1992 on the NSW Government Swimming Pool Register. - The Principal Contractor or Owner must either obtain a certificate of compliance issued under section 22D of the Swimming Pools Act 1992 or an appropriate occupation certificate authorising use of the swimming pool. - Public pools must comply with the NSW Health Public Swimming Pool and Spa Pool Guidelines in force at that time and private pools are encouraged to comply with the same standards as applicable. - Water recirculation and filtration systems must be installed in compliance with AS 1926.3: Swimming pool safety - Water recirculation systems. Backwash must be discharged to the sewer in compliance with AS/NZS 3500. Water recirculation and filtration systems must be connected to the electricity supply by a timer that limits the systems operation such that it does not operate before 8 am or after 8 pm on any Sunday or public holiday, or before 7 am or after 8 pm on any other day. Notes: - NSW Health guidelines and fact sheets are available at www.health.nsw.gov.au Condition Reason: To ensure that the swimming pool maintains public safety and to manage the amenity impacts of swimming pools.
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G 2.	Swimming Pool Fencing
	Before the issue of any occupation certificate, swimming pool fencing is to be constructed in accordance with AS1926: Australian Standard Swimming Pool Safety Part 1 – Safety Barriers for Swimming Pools. Notes: • Pools commenced or completed after May 2013 must meet the BCA and AS1926.
	Condition Reason: To ensure swimming pool safety.

H. OCCUPATION AND ONGOING USE

H 1.	Swimming and Spa Pools – Maintenance
	During the occupation and ongoing use, swimming and spa pools must be maintained: a) in compliance with the Swimming Pools Act 1992 and the Building Code of Australia with regard to the provision of child-resistant barriers and resuscitation signs, b) in compliance with the NSW Health “Public Swimming Pools and Spa Pools Advisory Document” in force at that time. Private pools are encouraged to comply with the same standards as applicable, c) in compliance with AS 1926 Swimming pool safety - Water recirculation and filtration systems, d) with backwash being discharged to the sewer in compliance with AS/NZS 3500, and e) with a timer that limits the recirculation and filtration systems operation such that it does not emit noise that can be heard within a habitable room in any other residential premises (regardless of whether any door or window to that room is open): • before 8 am or after 8 pm on any Sunday or public holiday, or • before 7 am or after 8 pm on any other day. Notes: • Child-resistant barriers, resuscitation signs, recirculation and filtration systems and controls systems require regular maintenance to ensure that life safety, health and amenity standards are maintained. • The NSW Health public swimming pools and spa pools guidelines are available at www.health.nsw.gov.au
	Condition Reason: To ensure public health and safety.

H 2.	Noise Control
	During the occupation and ongoing use, the use of the premises must not give rise to the transmission of offensive noise to any place of different occupancy. Offensive noise is defined in the Protection of the Environment Operations Act 1997. Notes:



	• Council will generally enforce this condition in accordance with the Noise Guide for Local Government (www.epa.nsw.gov.au/your-environment/noise/regulating-noise/noise-guide-local-government) and the NSW Industrial Noise Policy (www.epa.nsw.gov.au/your-environment/noise/industrial-noise) published by the NSW Environment Protection Authority. Other State Government authorities also regulate the Protection of the Environment Operations Act 1997. • Useful links: - Community Justice Centres—free mediation service provided by the NSW Government www.cjc.nsw.gov.au. - NSW Environment Protection Authority— see “noise” section www.environment.nsw.gov.au/noise. - NSW Government legislation- access to all NSW legislation, including the Protection of the Environment Operations Act 1997 and the Protection of the Environment Noise Control Regulation 2017 is available at www.legislation.nsw.gov.au. - Australian Acoustical Society—professional society of noise related professionals www.acoustics.asn.au. - Association of Australian Acoustical Consultants—professional society of noise related professionals www.aaac.org.au. - Liquor and Gaming NSW—www.liquorandgaming.nsw.gov.au.
	Condition Reason: To protect the amenity of the neighbourhood.

H 3.	Noise from Mechanical Plant and Equipment, including Pool Equipment During the occupation and ongoing use, the <i>cumulative</i> noise level measured at any boundary of the site at any time while the mechanical plant and equipment is operating must not exceed the background noise level. Where noise sensitive receivers are located within the site, the noise level is measured from the nearest strata, stratum or community title land and must not exceed background noise level at any time. The background noise level is the underlying level present in the ambient noise, excluding the subject noise source, when extraneous noise is removed. For assessment purposes the background noise level is the LA90, 15 minute level measured by a sound level meter. Notes: • Words in this condition have the same meaning as in the Noise Policy for Industry (2017) www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017) and Noise Guide for Local Government (2013) www.epa.nsw.gov.au/your-environment/noise/regulating-noise/noise-guide-local-government
	Condition Reason: To protect the amenity of the neighbourhood.

H 4.	Noise Control - Swimming pool/spa pool pumps and associated equipment During the occupation and ongoing use, the swimming pool/spa pool pump(s) and associated equipment are not to operate during the hours stipulated in the
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	Protection of the Environment Operations (Noise Control) Regulation 2008 as follows: a) Before 8am or after 8pm during Saturdays, Sundays and public holidays; b) Before 7am or after 8pm on any other day.
	Condition Reason: To protect the amenity of the neighbourhood.

Louie Salvatore
Senior Environmental Health Officer

10 September 2024
Completion Date