

Attachment B

Acoustic report plus addendum

PIER 8/9, 23 HICKSON ROAD, MILLERS POINT

DA Acoustic Assessment for Function Centre

22 June 2026

Markham Real Estate Partners Pty Limited ATF M7 Property Trust

TM784-03F02 Pier 8-9, 23 Hickson Rd, Millers Point - DA Acoustic Assessment For Function Centre (r8)

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1 Introduction

This Noise Assessment Report is submitted to the City of Sydney Council (Council) on behalf of Markham Real Estate Partners Pty Limited ATF M7 Property Trust (Markham) (the Applicant), to support a Development Application (DA) for the use of Tenancy B, located at the northern end of Piers 8/9, 23 Hickson Road, Millers Point (the site), across Levels 2 to 4 for the purposes of a business events and function centre premises.

Specifically, the proposed development comprises:

- Use of Tenancy B for a business events and function centre premises;
- Base building works including:
 - o Demolition of existing external fire egress stairs and internal commercial office fit-out across Levels 2 to 4;
 - o Construction of new fire egress stairs and gantries on either side of the pier to support safe access and egress;
 - o Installation of new lifts on the western side of the pier to improve vertical access to the tenancy;
 - o Construction of a new balcony to the northern façade of the pier;
- Internal alterations and fit-out works across Levels 2 to 4 to accommodate the proposed events and function centre use, including the following:
 - o Two (2) function spaces, that are connected via a soft wall to allow for one (1) large space if required;
 - o Kitchen and bar area, with back-of-house facilities accessible from both function spaces;
 - o Private function room on Level 4;
 - o Office and administration rooms, office amenities and storage space;
 - o Bathroom amenities;
- Associated building works and services upgrades required to support the proposed use.

The business events and function centre premises will have a maximum capacity of 750 people.

For a detailed description of the proposed development, refer to the Statement of Environmental Effects (SEE) prepared by Beam Planning, and the Architectural Drawings prepared by Sissons.

1.1 The Site

The site is located at Piers 8/9, 23 Hickson Road, Millers Point within the City of Sydney Local Government Area (LGA). It is legally identified as Lot 8 in DP1018716.

Pier 8/9 consists of a three-storey building set on a post and beam structure, with an interior that has been creatively repurposed for various activities, such as commercial office space and a restaurant / function space. The pier has an external, concrete apron and a timber support structure with a triple, pitched corrugated metal roof.

The site is identified as part of the *Walsh Bay Wharves Precinct* (SHR item no. 00559), listed on the State Heritage Register as in item of significance under the *Heritage Act 1977*.

In addition, the suburbs of Millers Point and Dawes Point are located within the Millers Point Heritage Conservation Area, encompassing various local and state heritage-listed assets as identified by the *Sydney Local Environmental Plan 2012*. An aerial image of the site is shown below.

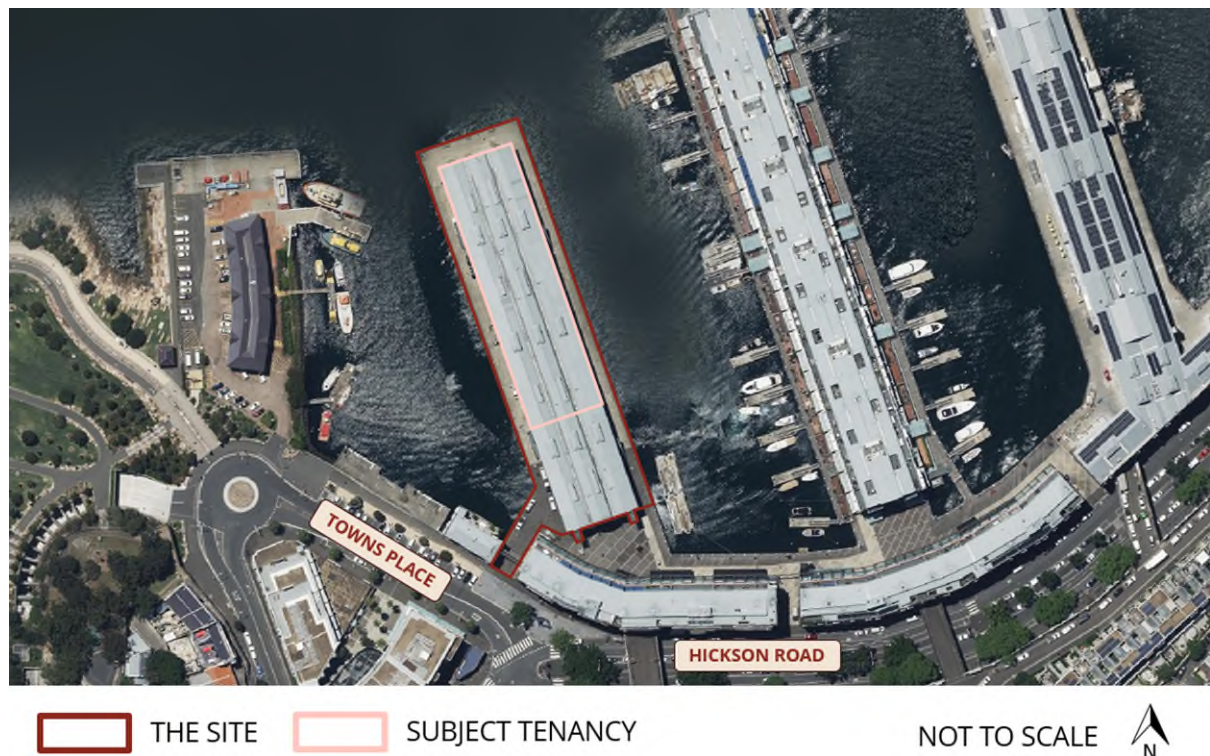


Figure 1-1: Aerial image of the site

1.2 Acoustic Assessment

The assessment has been prepared to evaluate potential noise breakout against the City of Sydney Council's entertainment noise criteria, as set out in the amended City of Sydney Development Control Plan (DCP) 2012, Section 3.18. These requirements are more stringent than the standard acoustic criteria typically applied by Liquor & Gaming NSW. Meeting the DCP criteria will also ensure compliance with Liquor & Gaming NSW acoustic requirements.

The goal of this study is to determine the allowable operating noise levels within the internal spaces of the development while complying with DCP requirements.

This assessment utilises the following acoustic data:

- Background noise survey data conducted at the site location by Renzo Tonin & Associates (RTA) between 22/10/2025 to 04/11/2025 as part of acoustic reporting for the propose redevelopment of the site.
- Noise breakout test of the existing building on site 30th March 2026 for the purpose of determining the building shell performance to determine the sound transmission performance of the existing building shell, which is proposed to remain unchanged during the use of the site.

This report is based on the preliminary architectural drawing set prepared by Sissons dated 20/04/2026.

Appendix A contains a glossary of acoustic terms used in this report.

2 Site Description and Surrounding Sensitive Land Uses

The subject site involves the proposed change of use of an existing commercial tenancy located in the northern section of Level 2 at Pier 8/9, Walsh Bay Wharf, Millers Point, to a function centre operating under a liquor licence. The location of the subject site is illustrated in Figure 2-1.

The northern section of Level 2 at Pier 8/9 is currently configured as office space and will be repurposed into a function centre to support events and hospitality uses. The project includes the construction of four gantries, with two located on each side of the pier, to improve connectivity and circulation. New lifts and stairways will be installed to provide safe and efficient access to the function centre via the gantries.

2.1 Proposed Operating Hours

The proposed operating hours for the function centre are as follows:

Internal Areas:

- Monday to Wednesday – 7:00am to 11:00pm
- Thursday to Saturday – 7:00am to 12:00am
- Sunday – 7:00am to 11:00pm

Outdoor Areas:

- Gantries - Monday to Sunday – 7:00am to 10:00pm
- Northern Balcony - Monday to Sunday – 7:00am to 10:00pm

2.2 Surrounding Sensitive Receivers

Pier 8/9 is occupied by commercial tenancies. Other receivers surrounding the project site include a mix of restaurants, retail outlets and residential properties.

The potentially nearest affected residential receivers are the waterfront apartments located approx. 70m to the east, in the "The Pier" residential building at 19 Hickson Road, Dawes Point (pier 6/7), and the upper-level apartments (level 1 and above) located in the mixed-use development at 21-21A Hickson Road, Dawes Point, approx. 100m to the south. The surrounding sensitive receivers considered in this assessment are summarised below.

Table 2-1: Surrounding sensitive receivers

ID	Address	Description
R1	19 Hickson Road, Dawes Point (Walsh Bay Pier 6/7)	"The Pier" six-storey residential apartment building
R2	6 Towns Pl, Millers Point	Double-storey residential apartment building
R3	21-21A Hickson Road, Dawes Point (Walsh Bay Shore 8/9)	6-storey mixed-use building with ground level commercial/retail tenancies and upper-level apartments (assumed from level 1)
R4	17-17A Hickson Road, Dawes Point (Walsh Bay Shore 6/7)	6-storey mixed-use building with ground level commercial/retail tenancies and upper-level apartments (assumed from level 1)

Figure 2-1 illustrates the subject site, surrounds and noise monitoring locations.

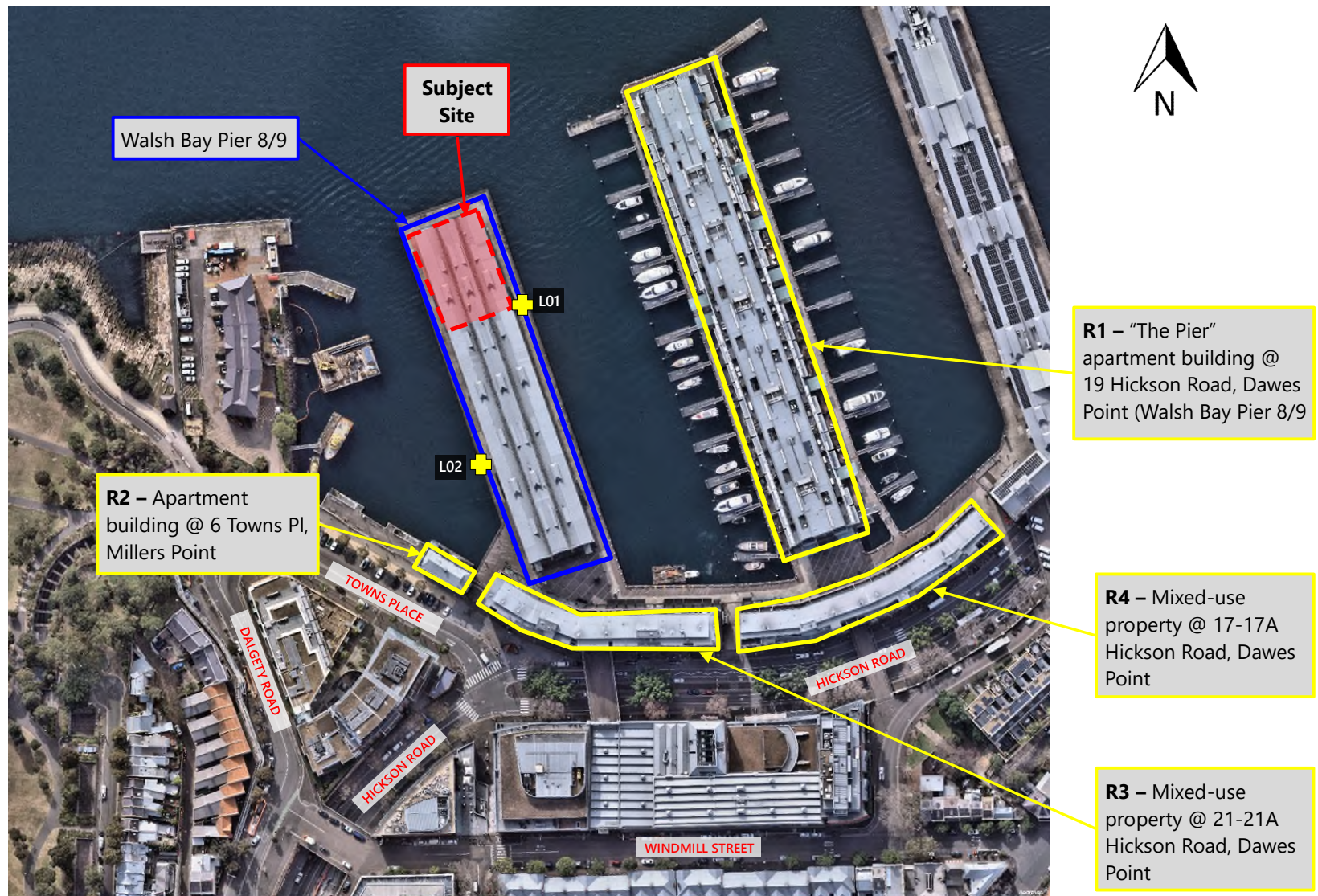


Figure 2-1: Locations of subject site, surrounding noise sensitive properties and noise surveys (source: Nearmap Limited)

3 Existing Noise Environment

The noise environment of an area varies over time. The NSW Environmental Protection Authority’s (EPA) Noise Policy for Industry (NPfI) outlines standard time periods over which the background and ambient noise levels are to be determined, which are as follows:

- Day: 07:00-18:00 Monday to Saturday and 08:00-18:00 Sundays & Public Holidays
- Evening: 18:00-22:00 Monday to Sunday & Public Holidays
- Night: 22:00-07:00 Monday to Saturday and 22:00-08:00 Sundays & Public Holidays

The noise monitors record noise levels on a continuous basis and stores data every fifteen minutes. The noise logger was calibrated before and after measurements and no significant deviation in calibration was noted. The noise monitoring equipment used here complies with Australian Standard 1259.2-1990 “Acoustics - Sound Level Meters” and is designated as Type 1 instruments suitable for field use.

The graphical recorded output from the long-term noise monitoring is included in Appendices B and C.

3.1 Background/Ambient noise levels

Background noise survey was conducted at the site location by Renzo Tonin & Associates (RTA) between 22/10/2025 to 04/11/2025 The results of the background noise survey are presented below.

Table 3-1: Representative Rating Background and Ambient Noise Levels

Location/Date of Noise Survey	Logging Data Representative of:	Noise Survey Results			
		Day (7am-6pm)	Evening (6pm-10pm)	Late Evening (10pm-12am)	Night (10pm-7am)
Location L01 – Facing East, Pier 8-9, Walsh Bay Wharf, Millers Point 22/10 to 04/11/2025	R1 and R4	49dB(A)L ₉₀ and 58dB(A)L _{eq} (Period)	50dB(A)L ₉₀ and 55dB(A)L _{eq} (Period)	44dB(A)L ₉₀ and 50dB(A)L _{eq} (Period)	41dB(A)L ₉₀ and 52dB(A)L _{eq} (Period)
Location L02 – Facing West, Pier 8-9, Walsh Bay Wharf, Millers Point 22/10 to 04/11/2025	R2 and R3	50dB(A)L ₉₀ and 57dB(A)L _{eq} (Period)	47dB(A)L ₉₀ and 56dB(A)L _{eq} (Period)	43dB(A)L ₉₀ and 55dB(A)L _{eq} (Period)	39dB(A)L ₉₀ and 52dB(A)L _{eq} (Period)

The measured background noise spectra are presented below:

Table 3-2: Measured Background Noise Spectra dB(Z) L₉₀, 15min

Description / Representative of:	Time of Day	Overall dB(A)	Octave band centre frequency – Hz, dB(Z)								
			31.5	63	125	250	500	1k	2k	4k	8k
Location L01 – Facing East, Pier 8-9, Walsh Bay Wharf, Millers Point	7am-6pm	49	57	55	53	49	46	44	39	31	20
	6pm-10pm	50	55	53	51	49	47	47	40	30	20
	10pm-12am	44	49	48	46	44	41	40	34	25	17
	12am-7am	41	48	45	44	41	39	37	31	23	17
Location L02 – Facing West, Pier 8-9, Walsh Bay Wharf, Millers Point	7am-6pm	50	57	55	53	49	47	45	41	32	22
	6pm-10pm	47	53	53	51	47	45	43	38	29	19
	10pm-12am	43	50	50	49	44	41	39	33	24	18
	12am-7am	39	48	47	46	41	36	34	30	21	17

4 Noise Emission Criteria

4.1 Noise Emission Criteria

The proposed function centre must comply with the City of Sydney's Entertainment Sound Management controls (Sydney DCP 2012 Section 3.18, updated June 2025). These controls set strict octave-band noise limits to protect nearby residences (sensitive receivers).

All criteria in the DCP are expressed as unweighted 15-minute equivalent continuous sound levels ($L_{Zeq,15min}$) in each octave band from 31.5 Hz to 8 kHz, reflecting the prominence of low-frequency content in entertainment noise.

The relevant DCP requirements are:

- **External Noise Emission** (noise to building façade/property boundary of nearby development):
 - o From 7:00 am to midnight, the entertainment noise level at the nearest residential property boundary at 1.5m above the ground must not exceed 5dB above the background (RBL) in any octave band.
 - o From midnight to 7:00 am, entertainment noise at the nearest residential property boundary at 1.5m above must not exceed the background (RBL) in each octave band.
- **Internal Noise Intrusion** (noise to internal areas of nearby development):
 - o Inside habitable rooms of the nearest residences, entertainment noise must not exceed the pre-existing background noise level in any octave band between 7:00 am and midnight, and
 - o Must be at least 12dB below the background (or at/below the threshold of audibility) from midnight to 7:00 am.

4.2 External Noise Emissions Goals

Note:

- The DCP does not specify whether the internal noise level criteria are to be achieved with windows open or closed. For the purposes of this assessment, it has been assumed that the criteria apply to residence with windows open, representing the more stringent condition.
- The critical noise receiving locations are the top floor windows of nearby development. Noise at 1.5m above ground level (the external noise criteria location) is significantly shielded. Noise emissions to the top floor windows of nearby development is critical.

If the intention is to achieve the internal noise criteria, windows open) it is necessary to meet the BG+0 (before midnight goal)/BG-12 (post-midnight goal) externally at the window of the nearest residence.

If compliance is achieved at this location, compliant noise levels will also be achieved inside, regardless of whether the windows are open or closed.

Adopting the above, noise emission goals become as detailed below. As the proposed operating hours for the function centre does not go beyond 12:00 am, the criteria for midnight operations do not apply to the site.

Table 4-1: Entertainment Noise Emission Goals

Description	Time Period	Overall dB(A)	Octave band Centre Frequency – Hz, dB(Z) L ₁₀ (15 min)								
			31.5	63	125	250	500	1k	2k	4k	8k
L01 – Facing East, Pier 8-9, Walsh Bay Wharf, Millers Point											
Representative of Receiver R1 and R4											
Noise Emission Goals	7am-6pm (49BG+0dB)	49	57	55	53	49	46	44	39	31	20
	6pm-10pm (50BG+0dB)	50	55	53	51	49	47	47	40	30	20
	10pm to 12am (44BG+0dB)	44	49	48	46	44	41	40	34	25	17
L02 – Facing West, Pier 8-9, Walsh Bay Wharf, Millers Point											
Representative of Receiver R2 and R3											
Noise Emission Goals	7am-6pm (50BG+0dB)	50	57	55	53	49	47	45	41	32	22
	6pm-10pm (47BG+0dB)	47	53	53	51	47	45	43	38	29	19
	10pm to 12am (43BG+0dB)	43	50	50	49	44	41	39	33	24	18

4.3 Commercial Receivers

Both the City of Sydney's Entertainment Sound Management controls and the Sydney DCP 2012 Section 3.18, updated June 2025 do not address noise from entertainment venues to commercial receivers. However, City of Sydney have regularly addressed internal noise to commercial receivers in standard consent conditions for entertainment venues.

This condition states:

Despite clause (a), between 7:00am and 12:00 midnight, the LAeq, 15-minute noise level from the use must not exceed the greater of the following inside any habitable room of residential or tourist accommodation, or at any time within an affected commercial premises:

(i) The existing internal LA90, 15-minute level (from external sources, excluding the entertainment use) in any octave band (31.5 Hz to 8 kHz); or

(ii) If the LZ90, 15-minute level in any octave band is below the hearing threshold curve (Tf) from Table 1 of ISO 226:2003, the lowest audible level (Lp) from the Tf curve in that band becomes the criterion for that octave's LZeq, 15-minute noise level.

The criteria listed above has been set as a noise goal for the separation of the proposed tenancy from the Office Tenancy below, however, the Heritage restrictions on the building may limit the installation of acoustic treatments. A noise assessment is presented in Section 5, below.

5 Noise Emission Assessment

5.1 External Noise Emission to Residential Receivers

Noise emissions from the proposed use have been assessed to ensure the amenity of nearby residents is not adversely affected, particularly during the most noise-sensitive late evening period. Key assumptions, and predicted noise levels at the nearest residential receiver are detailed below.

5.1.1 Noise prediction methodology

Modelling and assessment of airborne noise impacts from the subject site were undertaken using 3D noise modelling software, CadnaA (Version 2025 MR1), in accordance with ISO 9613-1996. The model incorporated noise sources, receiver locations, topographical features, and proposed noise mitigation measures.

Noise modelling algorithms were used to calculate the contribution of each noise source at identified sensitive receiver locations and to predict overall noise levels from the site under typical worst-case operational scenarios.

5.1.2 Assumed Noise Source

- Noise (patron vocal and music) breakout from internal areas through the proposed new Gentries and Northern Balcony access doors.
- Noise (patron vocal and music) breakout through the existing fixed windows facing residential receivers.
- Noise (patron vocal and music) breakout through the existing site roof.
- As the proposed venue also plans to feature patrons in the proposed 4 Gentries and the existing Northern Balcony, noise emission predictions have been assessed based on number of patrons occupied the space.
- Patrons will enter and exit the venue to the surrounding transportation network and parking via Pier 9.

5.1.3 Assumed Building Envelope

The following has been adopted with respect to the acoustic performance of the building envelope:

Table 5-1: Building envelope acoustic performance

Proposed new construction elements	Acoustic rating R_w assumed	Indicative construction
New Gantry and Northern Balcony access doors	R_w 32	6.38mm thick laminated glass with acoustic seals with automatic door closers.

Proposed new construction elements	Acoustic rating R_w assumed	Indicative construction
Gantry and balcony screening (1.8m high to the east and west)	R_w 32	6.38mm thick laminated glass with no gaps between panels.
Existing Windows	R_w 27	4mm thick monolithic glass.
Existing Metal Pitched Roof	R_w 40	largely exposed profiled metal sheet roofing (Colourbond or similar).

5.1.4 Noise Emission Scenarios and Predictions

The following scenarios have been assessed below:

5.1.4.1 Scenario 1 – operations up to 10:00pm:

- Proposed gantries and northern balcony access doors may remain open for operations up to 10:00pm. Operations on gantries and northern balcony to cease after 10:00pm.
- Background music is to be played over the speaker system at a level of 65dB(A) L_{eq} at a distance of 2m. The resulting total internal noise level (patron vocal noise plus background music) is assumed as outlined below.

Table 5-2: Assumed Source Noise Levels – Internal Noise Level up to 10:00pm

Obtained from	Applicable noise source	Overall dB(A)	Octave band centre frequency - Hz (dBZ)								
			31.5	63	125	250	500	1k	2k	4k	8k
Data Library	Internal Noise Level for proposed function centre (patron and background music) up to 10pm (Reverberant L _p L _{eq} , 15min)^	82	84	84	89	80	77	78	73	67	64

Note: [^]Spatial L_p considered occurring at each facade element for the purpose of external noise predictions.

- For the worst-case scenario in outdoor areas, it has been assumed that there will be 20 patrons (raised voice, one in two speaking) per gantry, and 40 patrons (raised voice, one in two speaking) within the northern balcony.
- The assumed noise levels for outdoor patrons are set out below:

Table 5-3: Assumed Source Noise Levels

Obtained from	Applicable noise source	Overall dB(A)	Octave band centre frequency - Hz (dBZ)								
			31.5	63	125	250	500	1k	2k	4k	8k
Data Library	Sound Power level Per Patron in Outdoor Area (raised voice, 1 in 2 speaking) (L_w $L_{eq, 15min}$)	77	62	66	76	71	75	73	68	61	52

- The predicted noise levels at the residential receivers are as follows:

Table 5-4: Noise Predictions for Scenario 1 - operation up to 10:00pm

Receiver	Description	Noise Level Emissions to Hampstead Road – dBL ₁₀									
		31.5	63	125	250	500	1k	2k	4k	8k	A-wt
R1	Predicted noise levels	52	46	49	42	43	42	36	28	17	45
	Noise goals (7am - 6pm)	57	55	53	49	46	44	39	31	20	49
	Noise goals (6pm - 10pm)	55	53	51	49	47	47	40	30	20	50
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2	Predicted noise levels	48	43	45	36	37	36	30	21	10	40
	Noise goals (7am - 6pm)	57	55	53	49	47	45	41	32	22	50
	Noise goals (6pm - 10pm)	53	53	51	47	45	43	38	29	19	47
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R3	Predicted noise levels	46	41	44	34	36	34	28	20	7	38
	Noise goals (7am - 6pm)	57	55	53	49	47	45	41	32	22	50
	Noise goals (6pm - 10pm)	53	53	51	47	45	43	38	29	19	47
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R4	Predicted noise levels	45	39	42	32	32	31	25	16	1	35
	Noise goals (7am - 6pm)	57	55	53	49	46	44	39	31	20	49
	Noise goals (6pm - 10pm)	55	53	51	49	47	47	40	30	20	50
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Noise emissions for operations between 7am and 10pm is compliant provided that the recommendations in Section 6 are adopted.

5.1.4.2 Scenario 2 – operations between 10:00pm and 12:00am:

- Operations on gantries and northern balcony to cease after 10:00pm and all the access doors to be closed.
- As the proposed venue will include live or DJ music. The resulting total internal noise level (patron vocal noise plus DJ music) is assumed as outlined below.

Table 5-5: Assumed Source Noise Levels – Internal Noise Level between 10:00pm and 12:00am

Obtained from	Applicable noise source	Overall dB(A)	Octave band centre frequency - Hz (dBZ)								
			31.5	63	125	250	500	1k	2k	4k	8k
Data Library	Internal Noise Level for proposed function centre (patron and DJ music) between 10pm and 12am (Reverberant L_p $L_{eq, 15min}$)^	90*	67	91	92	88	86	87	81	74	65

Note: ^Spatial L_p considered occurring at each facade element for the purpose of external noise predictions.

* The assumed internal noise level for DJ music has been limited to 90 dB(A) for the purposes of compliance assessment.

- The predicted noise levels at the residential receivers are as follows:

Table 5-6: Noise Predictions for Scenario 2 - operation between 10:00pm and 12:00am

Receiver	Description	Noise Level Emissions to Hampstead Road – dBL ₁₀									
		31.5	63	125	250	500	1k	2k	4k	8k	A-wt
R1	Predicted noise levels	35	48	44	33	26	25	21	4	0	33
	Noise goals (6pm - 10pm)	49	48	46	44	41	40	34	25	17	44
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2	Predicted noise levels	30	46	43	30	23	19	14	0	0	30
	Noise goals (6pm - 10pm)	50	50	49	44	41	39	33	24	18	43
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R3	Predicted noise levels	30	45	41	29	20	19	13	0	0	28
	Noise goals (6pm - 10pm)	50	50	49	44	41	39	33	24	18	43
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R4	Predicted noise levels	28	42	39	27	19	17	13	0	0	26
	Noise goals (6pm - 10pm)	49	48	46	44	41	40	34	25	17	44
	Complies?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Noise emissions for operations between 10pm and 12am midnight is compliant provided that the recommendations in Section 6 are adopted.

Internal noise levels may be increased from 90dB(A) to 95dB(A) with the inclusion of additional façade treatments recommended in Section 6.

5.2 Internal Noise Emission to Commercial Receiver

A noise assessment has been undertaken to determine the existing acoustic performance of the floor partition separating the proposed function centre and the office partition below and predict internal noise levels from the operation of the function space.

It is noted that higher noise events within the function space are likely to occur after typical and reasonable office hours

5.2.1 Measured Performance of the existing floor partition

Acoustic testing has been undertaken to determine both the airborne and impact acoustic performance of the existing floor system.

The summary of test results are presented below with the test reports included in APPENDIX D:

Table 5-7: Existing performance of floor system

Partition	Measured Airborne Rating (DnT,w)	Measured Impact Rating (L'nT,w)
Floor separating proposed function centre (Lot 2) from office tenancy (Lot 3) below	51	56

Sound Insulation Rating DnT,w is a measure of the noise reduction property of the partition, a higher rating implying a higher sound reduction performance

LnT,w refers to Weighted Standardised Impact Sound Pressure Level. A lower rating implies a higher impact sound reduction performance

5.2.2 Internal Noise Goals

In addition, the measured background noise level in the Lot 3 office tenancy during the testing period are summarised below along with the internal noise goals within the tenancy.

Table 5-8: Internal Ambient Noise Levels and Internal Noise Goals

Description	Time Period	Overall dB(A)	Octave band Centre Frequency – Hz, dB(Z)								
			31.5	63	125	250	500	1k	2k	4k	8k
Lot 3 office tenancy Background Noise Levels L ₉₀ , dB	9pm	44	18	27	38	41	44	40	34	29	24
Lot 3 office tenancy Noise Goals L ₁₀ , dB		47	21	30	41	44	47	43	37	32	27

5.2.3 Predicted Internal Levels (no treatment)

Based on the predicted noise levels presented above for scenario 1 and 2, and the current acoustic performance of the floor, the following internal noise level in the Lot 3 office tenancy are predicted:

Scenario	Description	Internal Noise Predictions to Lot 3 Office tenancy – dBL ₁₀									A-wt
		31.5	63	125	250	500	1k	2k	4k	8k	
Scenario 1 – Internal noise level 82dB(A) –	Predicted noise levels	33	53	53	40	29	23	14	3	0	39
	Noise goals	21	30	41	44	47	43	37	32	27	47
	Complies?	No*	No*	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scenario 2 – Internal noise level 90dB(A)	Predicted noise levels	36	60	56	48	38	32	22	10	1	44
	Noise goals (6pm - 10pm)	21	30	41	44	47	43	37	32	27	47
	Complies?	No*	No*	No	No	Yes	Yes	Yes	Yes	Yes	Yes

* Transmission loss of the floor system have been predicted below 100Hz

The set noise goals are generally exceeded in the lower frequencies, which is a reflection on lower acoustic performances of timber joist structures, typical in heritage buildings. It is noted that the overall predicted noise levels are lower than the overall background noise level + 3dB.

It is highly unlikely that Scenario 2 (expected between 10pm and 12am) will impact the office space, and as such, the design recommendations have been based on Scenario 1 (prior to 10pm). In principle recommendations for the separating floor system are recommended in Section 6, below.

6 Recommendations/Noise management

The following acoustic treatments/management controls are to be implemented to ensure compliant noise emissions:

6.1 Operational management

- The access doors to the gantries and northern balcony to be kept closed after 10:00pm.
- Operations on gantries and northern balcony to cease after 10:00pm.
- Music noise level to be limited to 65dB(A)_{L_{eq}, 15min} at a distance of 2m from any speaker, within the function centre between 7:00am and 10:00pm.
- DJ Music noise level to be limited to 90dB(A)_{L_{eq}, 15min} within the function centre between 10:00pm and 12:00am. This limit is based on the façade assumptions presented in Section 5.1.3 and 6.2.1. This level may be increased to 95dB(A) with additional façade treatments installed as specified in Section 6.2.2.
- Music levels may be increased to 90dB(A) prior to 10pm provided the eastern gantry and northern balcony doors are closed. The western gantry may remain opened until 10pm.
- Management to prevent noisy (shouting)/anti-social behaviour outside the premises after leaving the site. Patrons are to enter and exit the premises via Pier 9.
- Minimum of one staff/security member to ensure that entry door remain closed.
- Proposed Function Centre to cease use at 12am.
- No disposal of glass in external areas after midnight.
- No queueing outside and no garbage removal in external areas after midnight.

6.2 Building envelope

6.2.1 Building envelope (with music limited to 90dB(A) internally)

- New access doors to the gantries and northern balcony should comprise 6.38 mm thick laminated glass within timber frames, fitted with acoustic seals or equivalent.
- Existing fixed windows should be upgraded with acoustic seals.
- Management should install signage reminding patrons to be considerate when leaving the site, given the proximity to nearby residential receivers.

6.2.2 Building envelope (with music limited to 95dB(A) internally)

- New access doors to the gantries and northern balcony should comprise of double glazed systems consisting of 10.38mm laminated glass, a 12mm air gap, and 6.38 mm thick laminated glass within commercial frames, fitted with acoustic seals or equivalent.
- Existing fixed windows should be upgraded with a secondary window (similar to Aneeta sashless windows behind existing heritage windows) and acoustic seals.
- Acoustic façade options, including sound blocking acoustic curtains may be incorporated into the internal side of the façade in lieu of upgraded external walls.
- Speakers are to be vibration isolated.
- Management should install signage reminding patrons to be considerate when leaving the site, given the proximity to nearby residential receivers.

6.3 Separating floor system and internal treatments

Acoustic treatments to the existing floor system may be limited by the heritage requirements for the building, particularly from the underside, where there are exposed joists. As a result, recommendations are made to increase acoustic performance from above the substrate only:

- Addition of mass to the current floor system via FC sheeting or Plywood on timber battens and rubber underlay over the existing floor system (carpet removed);
- Installation of an isolated dance floor;
- Consideration for carpeted flooring to the border of the function room;
- The use of absorptive treatments to absorb sound within the function rooms;
- The inclusion of absorptive treatments to available wall and ceiling surfaces within the function rooms.
- Speakers are to be vibration isolated and are not to be floor mounted
- The use of sound limiters to limit bass frequencies below 125 Hz.

7 Conclusion

Renzo Tonin & Associates has completed an acoustic assessment to support the Development Application for the commercial tenancy at Pier 8-9, Walsh Bay Wharf, Millers Point to operate as a Business Events and Function Centre with a liquor licence.

Provided that the recommendations in Section 6 of this report are adopted, the site is capable of complying with relevant acoustic criteria.

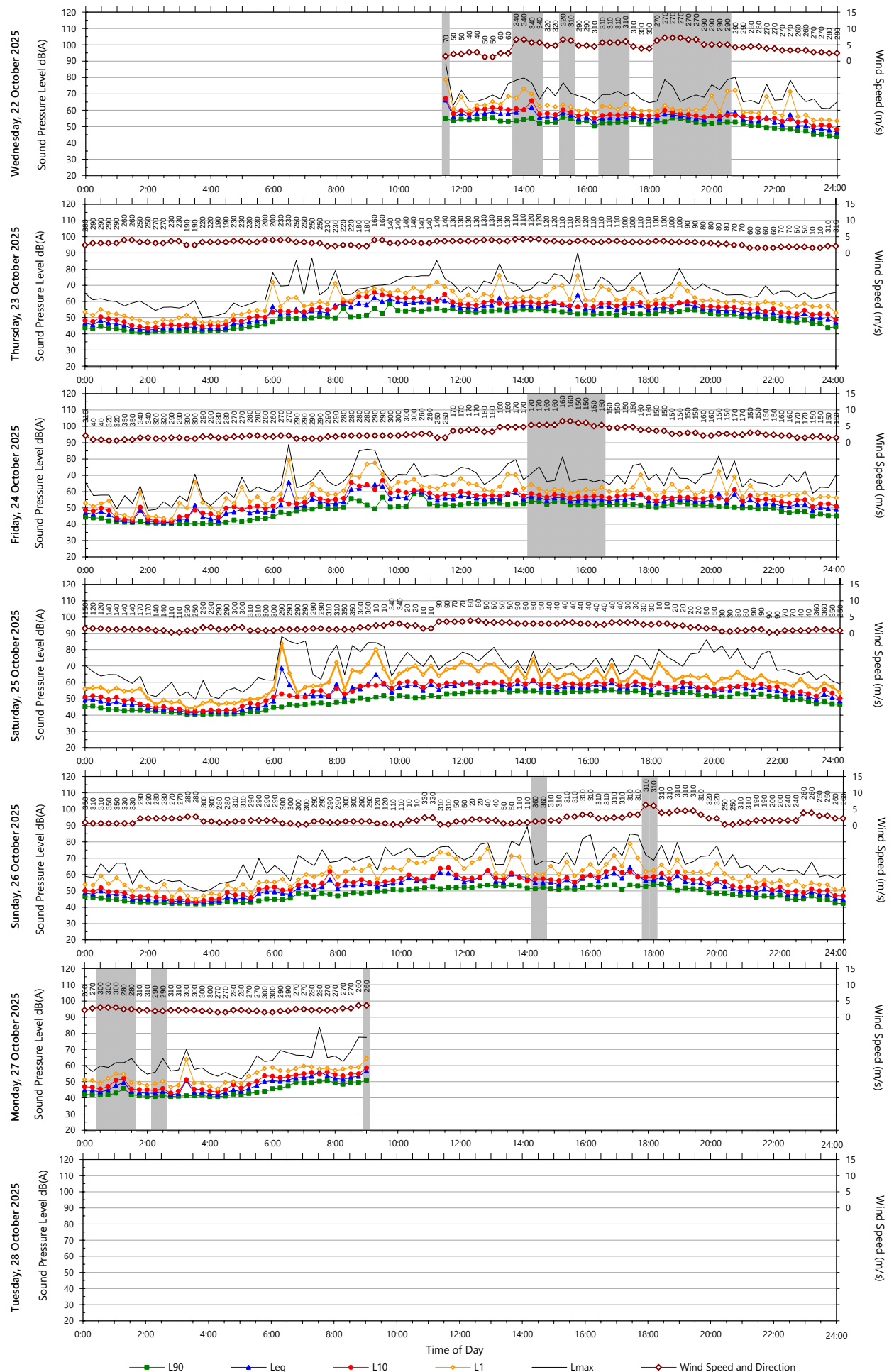
APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).																																								
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.																																								
Assessment period	The period in a day over which assessments are made.																																								
Assessment Point	A point at which noise measurements are taken or estimated.																																								
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).																																								
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of common sounds in our daytime environment: <table><tr><td rowspan="2">threshold of hearing</td><td>0 dB</td><td>The faintest sound we can hear</td></tr><tr><td>10 dB</td><td>Human breathing</td></tr><tr><td rowspan="2">almost silent</td><td>20 dB</td><td></td></tr><tr><td>30 dB</td><td>Quiet bedroom or in a quiet national park location</td></tr><tr><td rowspan="2">generally quiet</td><td>40 dB</td><td>Library</td></tr><tr><td>50 dB</td><td>Typical office space or ambience in the city at night</td></tr><tr><td rowspan="2">moderately loud</td><td>60 dB</td><td>CBD mall at lunch time</td></tr><tr><td>70 dB</td><td>The sound of a car passing on the street</td></tr><tr><td rowspan="2">loud</td><td>80 dB</td><td>Loud music played at home</td></tr><tr><td>90 dB</td><td>The sound of a truck passing on the street</td></tr><tr><td rowspan="2">very loud</td><td>100 dB</td><td>Indoor rock band concert</td></tr><tr><td>110 dB</td><td>Operating a chainsaw or jackhammer</td></tr><tr><td rowspan="2">extremely loud</td><td>120 dB</td><td>Jet plane take-off at 100m away</td></tr><tr><td>130 dB</td><td></td></tr><tr><td>threshold of pain</td><td>140 dB</td><td>Military jet take-off at 25m away</td></tr></table>			threshold of hearing	0 dB	The faintest sound we can hear	10 dB	Human breathing	almost silent	20 dB		30 dB	Quiet bedroom or in a quiet national park location	generally quiet	40 dB	Library	50 dB	Typical office space or ambience in the city at night	moderately loud	60 dB	CBD mall at lunch time	70 dB	The sound of a car passing on the street	loud	80 dB	Loud music played at home	90 dB	The sound of a truck passing on the street	very loud	100 dB	Indoor rock band concert	110 dB	Operating a chainsaw or jackhammer	extremely loud	120 dB	Jet plane take-off at 100m away	130 dB		threshold of pain	140 dB	Military jet take-off at 25m away
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	130 dB																																								
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dB(A)	A-weighted decibels. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the “A” filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.																																								
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.																																								

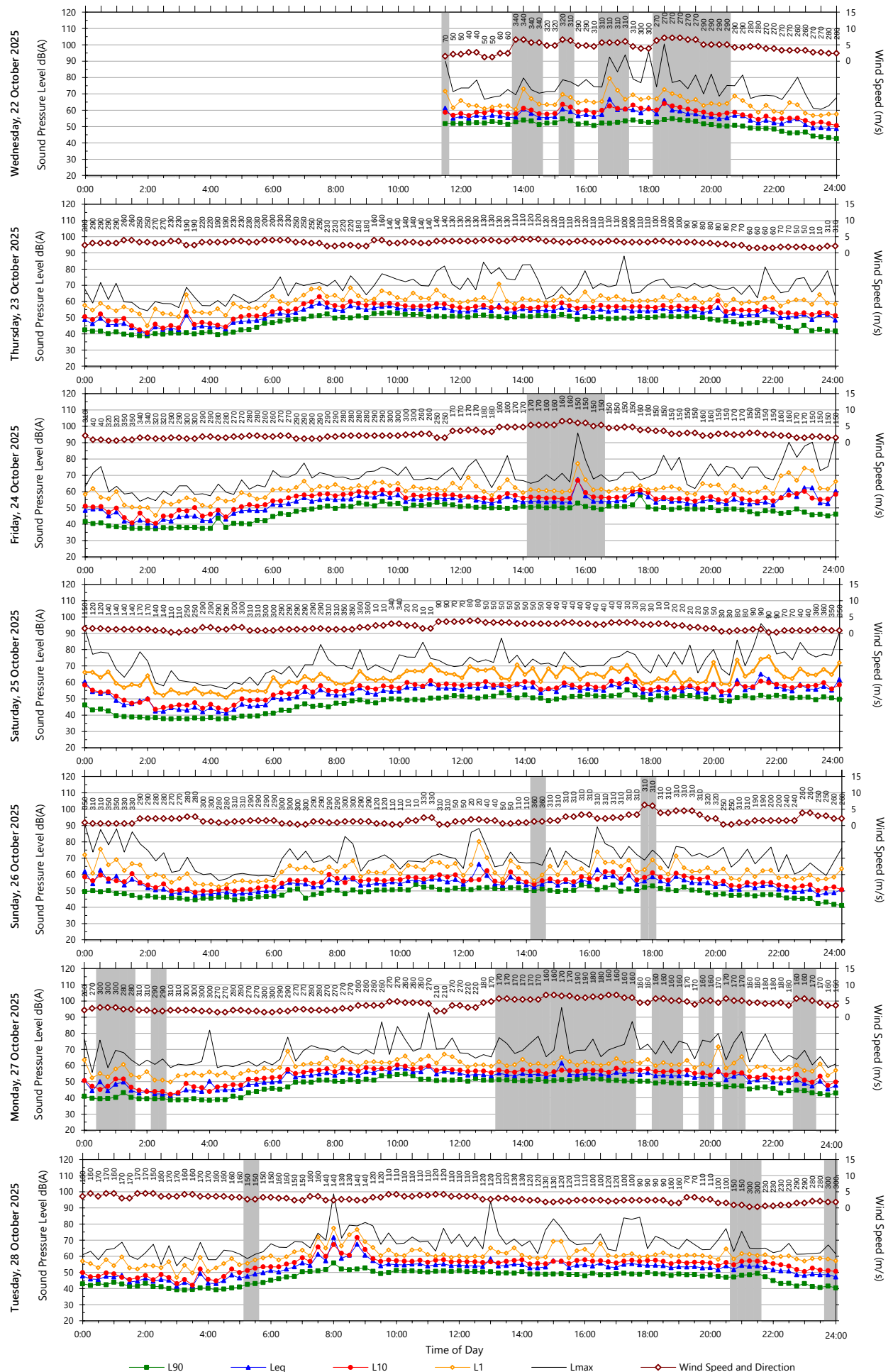
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
L _{Max}	The maximum sound pressure level measured over a given period.
L _{Min}	The minimum sound pressure level measured over a given period.
L ₁	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L ₁₀	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L ₉₀	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
L _{eq}	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain L _{eq} sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.

APPENDIX B Long term noise monitoring results



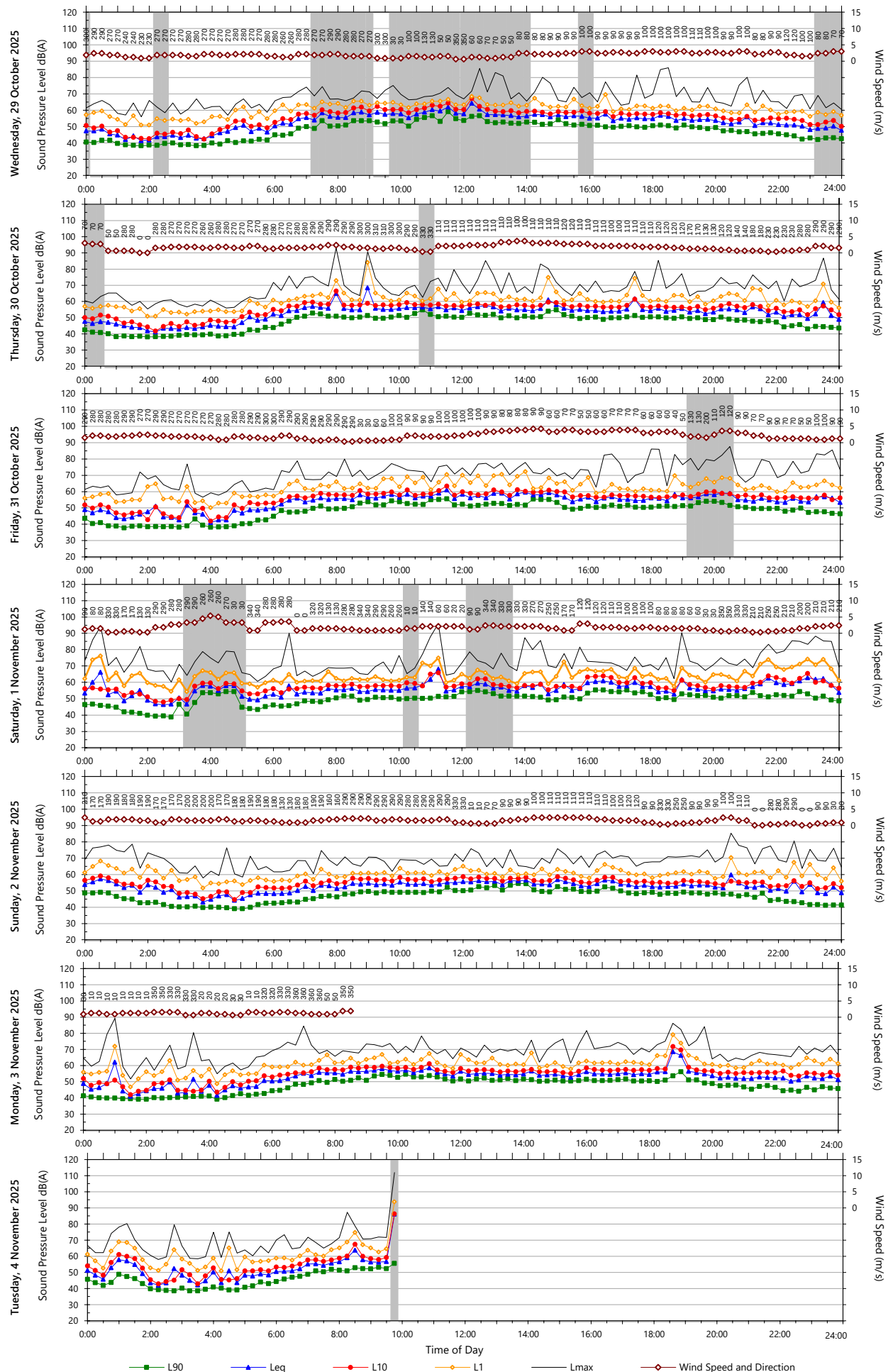
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Template: QTE-26 Logger Graphs Program (r45)



Data File: 2025-10-22_SLM_000_123_Rpt_Report.txt

Template: QTE-26 Logger Graphs Program (r45)

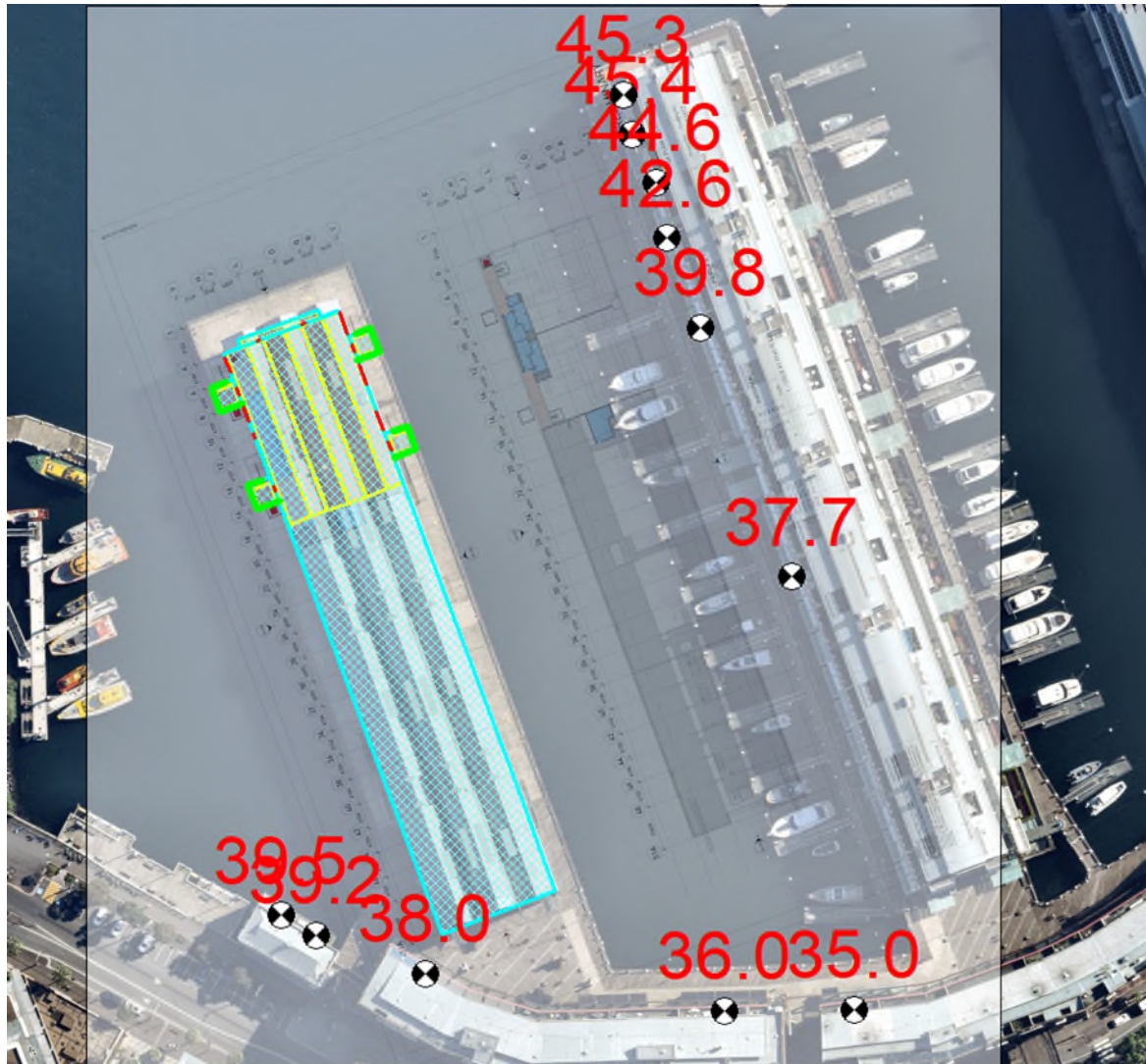


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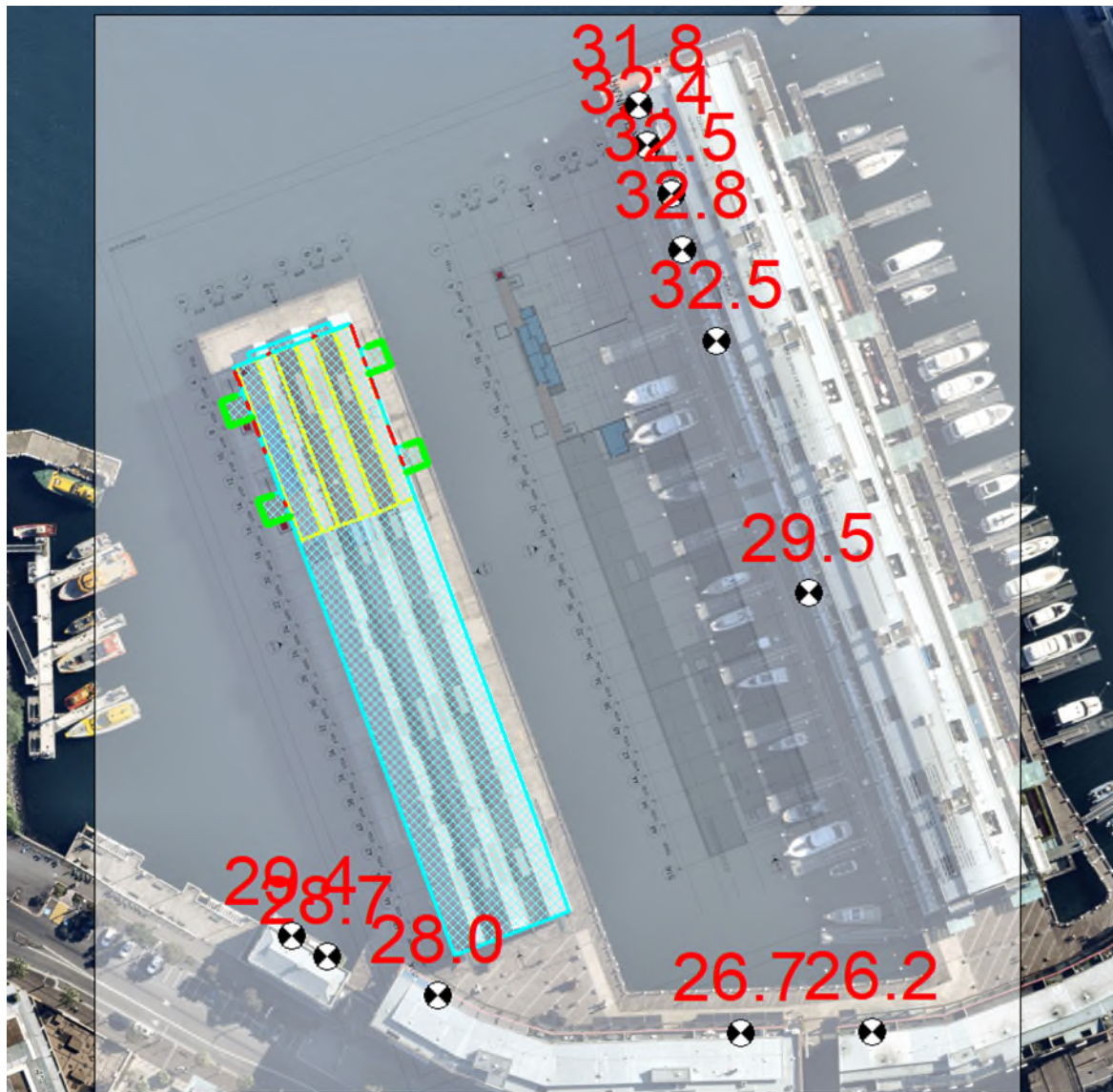
Template: QTE-26 Logger Graphs Program (r45)

APPENDIX C CadnaA modeling results

Scenario 1 – operations up to 10:00pm:



Scenario 2 – operations between 10:00pm and 12:00am:



APPENDIX D Acoustic performance of existing floor system

Standardized impact sound pressure levels in accordance with ISO 16283-2
Field measurements of impact sound insulation of floors using the tapping machine

Client: Markham

Date of test: 15/06/2026

Location: Piers 8 & 9, 23a Hickson Road, Millers Point

Northern Tenancy Impact Test Report

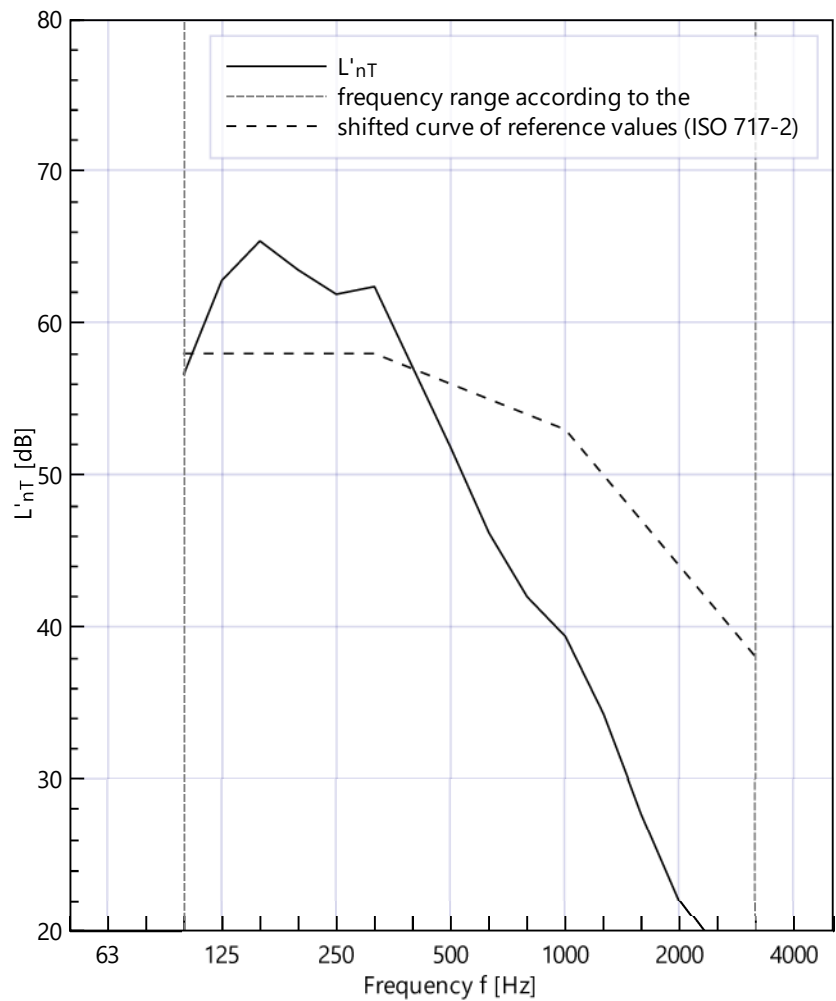
Sound Level Meter: A3A-00528-D1 (M2230: 11255)

Transmission direction: Vertical

Source room volume: L02

Receiving room volume: 2556.00 m³ (L01)

Frequency f Hz	L' _{nT} 1/3 octave dB
50	---
63	---
80	---
100	56.6
125	62.8
160	65.4
200	63.5
250	61.9
315	62.4
400	57.1
500	51.8
630	46.2
800	42.0
1000	39.4
1250	34.3
1600	27.7
2000	22.0
2500	19.0
3150	14.9
4000	12.4
5000	≤ 10.0



≤: 1.3 dB correction applied,
value at the limit of measurement

Rating in accordance with ISO 717-2:

L'_{nT,w}(C_i) = 56 (0) dB

C_{i,50-2500} = --- dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: TM784-03

Name: Griffin Rogers

Date: 16/06/2026

Signature:

Standardized level difference in accordance with ISO 16283-1
Field measurements of airborne sound insulation between rooms

Client: Markham

Date of test:

15/06/2026

Location: Piers 8 & 9, 23a Hickson Road, Millers Point

Northern Tenancy Airborne Floor Test Report

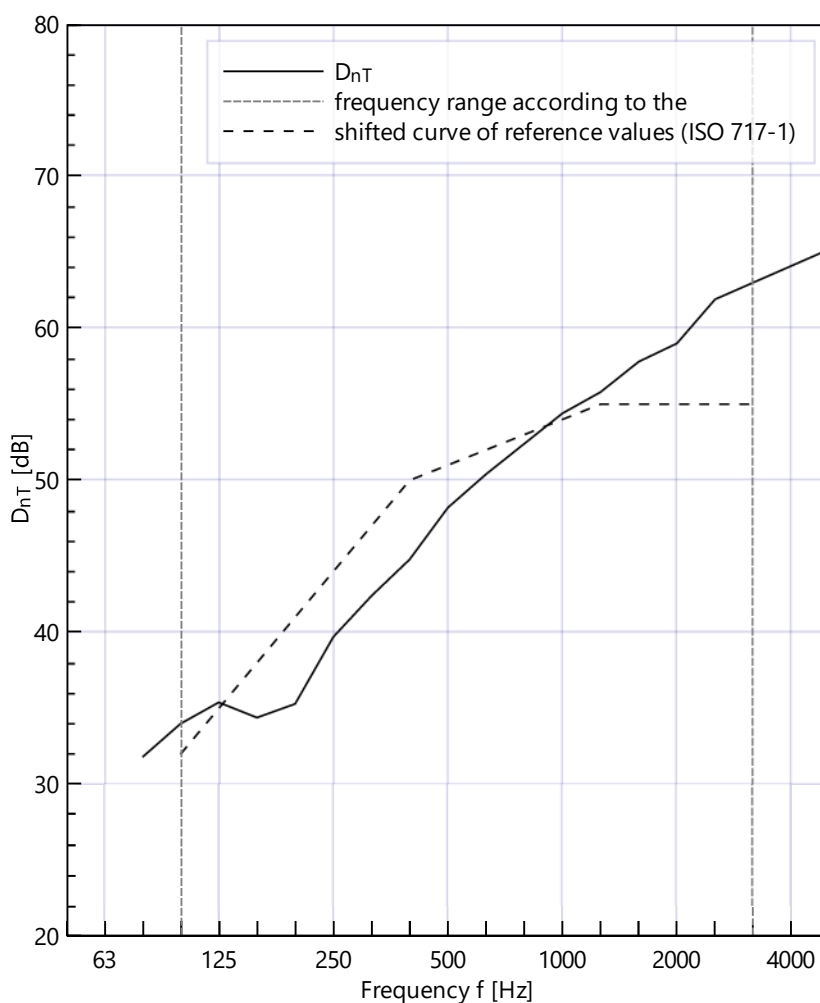
Sound Level Meter: A3A-00528-D1 (M2230: 11255)

Area of common partition: 836.00 m² (Vertical)

Source room volume: 2556.00 m³ (L01)

Receiving room volume: 2556.00 m³ (L02)

Frequency f Hz	D _{nT} 1/3 octave dB
50	---
63	---
80	31.8
100	34.0
125	35.4
160	34.4
200	35.3
250	39.7
315	42.4
400	44.8
500	48.2
630	50.4
800	52.4
1000	54.4
1250	55.8
1600	57.8
2000	≥ 59.0
2500	61.9
3150	≥ 63.0
4000	≥ 64.1
5000	≥ 65.2



≥: 1.3 dB correction applied,
value at the limit of measurement

Rating in accordance with ISO 717-1:

$D_{nT,w}(C;C_{tr}) = 51$ (-2; -6) dB

$C_{50-3150} = ---$ dB;

$C_{50-5000} = ---$ dB;

$C_{100-5000} = -1$ dB

$C_{tr,50-3150} = ---$ dB;

$C_{tr,50-5000} = ---$ dB;

$C_{tr,100-5000} = -6$ dB

Evaluation based on field measurement using results obtained by an engineering method.

Report No.: TM784-01

Name: Griffin Rogers

Date: 16/06/2026

Signature:

11 August 2026

TM784-05F01 addendum letter to acoustic report (r3)

Markham Real Estate Partners Pty Ltd ATF M7 Property Trust

Harry Kimpton

H.Kimpton@Markham.com.au

From: Rebecca Corbett [Rebecca.Corbett@renzotonin.com.au]

Pier 8/9 Hickson Road, Millers Point - Addendum Letter to DA report

1 Introduction

This addendum provides additional information to the acoustic report prepared for Development Application of the proposed Function Centre for Pier 8 & 9 at 23 Hickson Road, Millers Point (Development Application D/2026/626). [Report reference: TM784-03F02 Pier 8-9, 23 Hickson Rd, Millers Point - DA Acoustic Assessment For Function Centre (r8), dated 22/5/2026]

City of Sydney Council have requested the following additional information relating to acoustics and noise.

- **Acoustic Report:** The acoustic report should be updated to assess patron dispersal, patron congregation, rideshare and taxi activity, vehicle door slams, servicing activity and waste collection operations where these activities have the potential to affect nearby residential receivers.

Additional modelling based on the information provided by the proposed plan of management and data provided by the operator has been undertaken.

2 Patron dispersal and congregation

Expected typical and maximum patron dispersal numbers have been provided by the proposed operator of the venue. A plan of management has been prepared to address patron dispersal and congregation. The dispersment data is based on data collected over years operating similar function venues and is therefore considered the most reliable data for use for assessment.

This information has identified:

- For large events (up to 750 persons), 3 security guards will be located along the wharf (at ground lifts, mid pier, and at the boom gate at Towns Place). In addition, 2 RSA Marshalls will be located at the venue exit.
- For typical events (up to 400 persons), 2 security guards will be located at the ground lifts and boom gate at Towns Place. In addition, 2 RSA Marshalls will be located at the venue exit.

The security guards positioned along the wharf to ensure patrons disperse quickly and quietly, along with 2 RSA Marshalls. In addition, signage will be located along the wharf imploring patrons to consider neighbours as they are departing.

Given the presence of security personnel and RSA Marshalls, along with the plan of management, the following source noise levels are assumed.

Table 1: Assumed Source Noise Levels

Obtained from	Applicable noise source	Overall dB(A)	Octave band centre frequency - Hz (dBZ)								
			31.5	63	125	250	500	1k	2k	4k	8k
Data Library	Sound Power level Per Person (casual voice, 1 in 2 speaking) (L_w L_{eq} 15min)	64	59	60	59	61	62	64	62	50	48

Given patrons are to depart the premises via Pier 9 only, the worst affected receivers as a result of patron departures are:

- 6 Towns Place, Millers Point; and
- 21-21A Hickson Road, Dawes Point

Both are located at the end of the pier, either side of the Towns Place boom gate.

Given the adjoining paths and roads are not privately owned and are accessible to the public, it is not reasonable to apply the same criteria as noise emission from an enclosed function venue to that of persons walking and talking on public streets. As such a criteria of 'background + 5dB' would be considered more appropriate to apply to dispersing patrons.

A 'background + 5dB' criteria is used to assess noise intrusiveness, with EPA's Noise Policy for Industry and Noise Guide for Local Councils both adopting the criteria to assess noise intrusion.

An assessment of patron noise as they disperse for a function of 750 guests, starting at 6.30pm and ending at 12am has been undertaken with the results presented below:

Table 2: breakdown of expected dispersal and predicted noise levels

Patron Departure times	Number of Guests Departing in period	Guests per passing through in a 15 minute Interval	Predicted noise levels at 6 Towns Place, LAeq, 15 min	Predicted noise levels at 21-21A Hickson Road, LAeq, 15 min	Proposed criteria at facade (Background + 5dB), LAeq, 15 min	Complies?
By 10.30pm	75	38	38	38	48	Yes
10:30pm – 11pm	225	113	43	43	48	Yes
11pm – 11.30pm	263	132	43	43	48	Yes
11.30pm – 12am	188	94	42	42	48	Yes

Broadband analysis

Guest departing data provided by venue operator based on operation of venues of similar size, use and capacity

It is noted that the plan of management nominates that events will end 15 minutes before the allocated time, allowing the venue to be empty by the finishing time. Eg, the event will conclude at 11.45pm for the venue to be empty by midnight. Guests are expected to be continually moving during their dispersal. The modelling accounts for this movement and does not assume that patrons will be stationary and in one location for an entire 15 minute assessment period.

Based on the predictions above and the implementation of the plan of management, noise levels from patrons departing the venue can be adequately controlled.

Whilst the purpose of the plan of management and placement of security guards at placements along the pier is intended to prevent guests congregating outside the venue and move guests along, modelling has been undertaken in two locations where congregation of groups has the potential to occur. These are at the bottom of the western lift/ gantry, and along Towns Place as guests wait for their taxis or ride shares to arrive.

An assessment of guests congregating in these locations has been undertaken with result presented below. It has been assumed that up to 50% of guests leaving within these periods shown could congregate at the bottom of the western lift/ gantry and up to 35% of guests leaving within these periods could congregate on Towns Place at the pier entry (which is equivalent to the identified percentage of people leaving the venue likely to catch taxis or ride shares). It is assumed that the group remains congregated for the entire 15minute period, which is considered a conservative approach.

Table 3: breakdown of expected congregation and predicted noise levels

Patron Departure times	Number of Guests Departing in period	Guests congregating in a 15 minute Interval	Predicted noise levels at 6 Towns Place, LAeq, 15 min	Predicted noise levels at 21-21A Hickson Road, LAeq, 15 min	Proposed criteria at facade (Background + 5dB), LAeq, 15 min	Complies?
At Lift Base (Pier 9)						
By 10.30pm	75	38	32	28	48	Yes
10:30pm – 11pm	225	113	37	33	48	Yes
11pm – 11.30pm	263	132	37	33	48	Yes
11.30pm – 12am	188	94	36	32	48	Yes
Town Place (at Pier entry)						
By 10.30pm	75	26	40	40	48	Yes
10:30pm – 11pm	225	80	48	48	48	Yes
11pm – 11.30pm	263	92	48	48	48	Yes
11.30pm – 12am	188	66	47	47	48	Yes

Broadband analysis

Guest departing data provided by venue operator based on operation of venues of similar size, use and capacity

3 Rideshare and taxi activity

Section 3 of the Transport Assessment for the site identifies the forecast travel demand for different modes of transport during major functions. Based on the predicted modes of transport for a typical major function (750 persons) that ends by midnight, the following number of Taxi/ Ride share movements are predicted.

Table 4: Ride Share/ Taxi movements

Patron Departure times	Number of vehicle movements via Taxi or Ride Share per 15 minute interval
By 10.30pm	7
10:30pm – 11pm	20
11pm – 11.30pm	23
11.30pm – 12am	16

Other than the vehicle movement along the road, the main source of noise from Taxi and Ride share use is the doors closing on the vehicle. The following maximum noise levels have been used for this

assessment. Data is based on traditional petrol vehicles with standard opening doors. It is noted that a larger portion of taxis and ride shares are now electric or hybrid vehicles, generating significantly less road noise and may also incorporate soft closing doors.

A taxi zone is located on the opposite side of Hickson Road, however, for the purpose of assessment, it has been assumed that taxi and ride share pick ups are at the closest point to the pier entrance.

Car door slams in the quiet of night can produce noticeable transient noise. The sound power levels generated by taxi and ride share activities are presented in the following table.

Table 5: Carpark noise emission sound power levels

Activity	Metric	Sound power level, dB(A) re. 1pW per 15-minute
Vehicle moving (10km/h)	Passby L_w	45
Door Slam (1 per vehicle)	$L_w + 10\log(t)$	60

Noise generated by ride share and taxi pick ups includes vehicle doors closing and vehicles moving. To assess this noise, the $L_{Aeq\ 15\text{-minute}}$ noise level at the nearest affected residential premises was determined for each relevant time period based on the number of vehicle movements expected to occur during that period. For the purpose of this assessment.

Criteria for taxi and ride share pick ups and movements have been assessed to a 'background + 5dB' criteria.

Predicted noise levels from the activities presented above:

Table 6: Predicted noise levels from taxi/ ride share activities

Patron Departure times	Taxi/ ride share movements per 15 min period	Predicted noise levels at 6 Towns Place	Predicted noise levels at 21-21A Hickson Road	Proposed criteria at facade (Background + 5dB)	Complies?
By 10.30pm	7	37	37	48	Yes
10:30pm – 11pm	20	41	41	48	Yes
11pm – 11.30pm	23	42	42	48	Yes
11.30pm – 12am	16	40	40	48	Yes

Broadband analysis

Based on the predictions above noise levels from patrons departing the venue in taxis and ride shares will comply with the nominated acoustic criteria.

4 Servicing activities

The operator has informed us that on a typical event day, the venue could expect approximately 5 deliveries over the course of the day, all occurring during the daytime period. This would typically result in no more than 1 delivery in any 15 minute period. It is expected that deliveries would typically occur in vans and small rigid trucks entering the site via the Towns Place boom gate and driving along the concrete section of the pier. Deliveries are to occur during the day time period only.

Suitable criteria has been established as 'background + 5dB.

Table 7: Delivery vehicle emission sound power levels

Activity	Metric	Sound power level, dB(A) re. 1pW per 15-minute
Reverse Beeper (tonal)	L _W , 100 seconds	100
Unloading/ loading 9m truck with hand pallet jack	L _{Aeq}	78
Truck start	L _{Aeq}	74

Predicted noise levels from on pier deliveries for a 15 minute period are as follows:

Receiver	Predicted noise level, L _{Aeq} , 15 min, dB(A)	Day time background noise level, L _{A90} , dB(A)	Assessment criteria 'background + 5dB'	Complies?
6 Towns Place, Millers Point	51	50	55	Yes

Based on the predictions above noise levels from deliveries to the venue will comply with the nominated acoustic criteria.

5 Waste Collection

Waste is currently collected for the site 6 days a week, this is undertaken between the hours of 7am - 4pm. Waste for the venue is to be collected as part of the current collections. This may extend the length of time that waste collection takes but does not increase the number of collections experienced by residences. Collections currently occur during the hours of 7am and 4pm.

The proposed waste collection is not predicted to change noise emission to neighbouring residents.

6 Conclusion

Noise associated with patron dispersal and congregation, ride share and taxi activities, serving activities and waste collection associated with the proposed development at Lot 3, Pier 8/9, 23 Hickson Road are

predicted to comply with nominated acoustic criteria dependent on the implementation of the Plan of Management for the site.

The additional assessment demonstrates that the maximum-capacity 750-person operation can be accommodated without unacceptable acoustic impacts at the nearest residential receivers, including during the late-night patron departure period, subject to implementation of the acoustic and operational controls identified in the Acoustic Report and Plan of Management.”

Document control

Date	Revision history	Non-issued revision	Issued revision	Prepared	Instructed	Reviewed / Authorised
10.8.2026	1 st issue	0	1	R Corbett		H Pearce
10.8.2026	Minor amendment to rideshare numbers		2	R Corbett		
File Path: R:\AssocSydProjects\TM751-TM800\TM784 tt Walsh Bay & 23a Hickson Rd Millers Point\Task 5 - addendum\TM784-05F01 addendum letter to acoustic report (r3).docx						

Important Disclaimers:

The work presented in this document was carried out in accordance with the Renzo Tonin & Associates Quality Assurance System, which is based on Australian/New Zealand Standard AS/NZS ISO 9001.

This document is issued subject to review and authorisation by the suitably qualified and experienced person named in the last column above. If no name appears, this document shall be considered as preliminary or draft only and no reliance shall be placed upon it other than for information to be verified later.

This document is prepared for the particular requirements of our Client referred to above in the 'Document details' which are based on a specific brief with limitations as agreed to with the Client. It is not intended for and should not be relied upon by a third party and no responsibility is undertaken to any third party without prior consent provided by Renzo Tonin & Associates. The information herein should not be reproduced, presented, or reviewed except in full. Prior to passing on to a third party, the Client is to fully inform the third party of the specific brief and limitations associated with the commission.

In preparing this report, we have relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Client and/or from other sources. Except as otherwise stated in the report, we have not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate, or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

We have derived data in this report from information sourced from the Client (if any) and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination and re-evaluation of the data, findings, observations and conclusions expressed in this report.

We have prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

The information contained herein is for the purpose of acoustics only. No claims are made and no liability is accepted in respect of design and construction issues falling outside of the specialist field of acoustics engineering including and not limited to structural integrity, fire rating, architectural buildability and fit-for-purpose, waterproofing and the like. Supplementary professional advice should be sought in respect of these issues.

External and internal cladding / lining disclaimer: No claims are made and no liability is accepted in respect of any external and/or internal wall and/or roof and/or ceiling systems (eg facade / cladding materials, insulation, acoustic absorption etc) that are: (a) not compliant with or do not conform to any relevant non-acoustic legislation, regulation, standard, instructions or Building Codes; or (b) installed, applied, specified or utilised in such a manner that is not compliant with or does not conform to any relevant non-acoustic legislation, regulation, standard, instructions or Building Codes.

APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
Assessment point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 120dB Deafening
dB(A)	A-weighted decibels. The A-weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
L _{Max}	The maximum sound pressure level measured over a given period.
L _{Min}	The minimum sound pressure level measured over a given period.

L ₁	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L ₁₀	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L ₉₀	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
L _{eq}	The “equivalent noise level” is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain L _{eq} sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.

17 August 2026

TM784-05F02 Acoustic letter regarding morning hours of operation (r0)

James Markham

Markham

Level 2, Pier 8/9, 23 Hickson Road,
Millers Point NSW 2001

Dear Sir/Madam

Pier 8 & 9, 23 Hickson Road, Millers Point - Letter to address Council comments

Council have requested an amendment to the Plan of Management for the proposed function venue at Pier 8 & 9, Hickson Road, Millers Point, proposing:

3.0 Hours of Operation

Outdoor hours should be from 9am to make clear the eastern gantries and northern balcony are not to be used between 7am and 9am except in emergencies and western gantries for entry and exit only between those times.

It is noted that morning events will not be high noise producing events, with the likely use of the outdoor spaces involving partons enjoying a coffee or tea in the morning sun.

In terms of acoustics, it is noted that the period between 7am and 9am is considered the day time period. The day time period is identified in the NSW EPA's Noise Policy for Industry as 7am - 6pm, with the night time period identified as 10pm to 7am. Liquor and Gaming NSW also identify the critical noise periods as midnight to 7am, with a less stringent criteria applied from 7am to midnight.

Further to this, upon assessing the measured background noise levels surrounding the site, the difference in typical LA90 background noise level is approximately 2dB, which would not be noticeable under normal listening conditions, so does not support more stringent operating conditions between the daytime hours of 7am - 9am.

Regards,

A handwritten signature in black ink, appearing to read 'Rebecca Corbett', with a stylized, cursive script.

Rebecca Corbett

Principal Engineer, M.A.A.S

Rebecca.Corbett@renzotonin.com.au