



Mechanical Noise Emission Assessment

Proposed Licensed Premises

2 / 11 Ada Avenue Brookvale



Client:
Marlies Eatery

11 October 2024



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CONTENTS

Glossary	3
1 Introduction.....	4
1.1 Executive Summary.....	4
1.2 Project Description	4
1.3 Scope of Works	4
2 Assessment Criteria and Standards.....	5
2.1 Local Government and Council Criteria	5
2.2 State Government Policies and Legislation.....	6
2.3 NSW Environment Protection Authority	6
3 Noise Measurement Equipment and Standards.....	8
4 Mechanical Noise Emission Assessment.....	9
4.1 Project Noise Emission Criteria and Objectives	9
4.2 Schedule of Mechanical Equipment.....	10
4.3 Nearest Receivers	10
4.4 Acoustic Modelling Assumptions	11
4.5 External Noise Emission Levels.....	12
4.6 Sleep Disturbance	13
5 Discussion	14
6 Recommendations and Design Advice	14
7 Conclusion.....	15
Appendix A – Location Map, Aerial Image and Drawings.....	3 pages
Appendix B – Unattended Noise Monitoring Data.....	4 pages

GLOSSARY

NOISE

Noise is produced through rapid variations in air pressure at audible frequencies (20 Hz – 20 kHz). Most noise sources vary with time. The measurement of a variable noise source requires the ability to describe the sound over a particular duration of time. A series of industry standard statistical descriptors have been developed to describe variable noise, as outlined below.

NOISE DESCRIPTORS

L_{eq} – The sound pressure level averaged over the measurement period. It can be considered as the equivalent continuous steady-state sound pressure level, which would have the same total acoustic energy as the real fluctuating noise over the same time period.

L_{Aeq(15min)} – The A-weighted average equivalent sound level over a 15-minute period.

L_{A10} – The A-weighted noise level that has been exceeded for 10% of the measurement duration.

L_{A90} – The A-weighted noise level that has been exceeded for 90% of the measurement duration. This descriptor is used to describe the background noise level.

RBL – Rating Background Level. The overall, single-figure background level representing each assessment period (day/evening/night) over the whole monitoring period (as opposed to over each 24-hour period used for assessment background level). This is the level used for assessment purposes.

dB – Decibels. The fundamental unit of sound, a Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell. Probably the most common usage of the Decibel in reference to sound loudness is dB sound pressure level (SPL), referenced to the nominal threshold of human hearing. For sound in air and other gases, dB (SPL) is relative to 20 micropascals (μPa) = 2×10^{-5} Pa, the quietest sound a human can hear.

R_w – Weighted Sound Reduction Index. A measure of sound insulation performance of a building element. The higher the number, the better the insulation performance.

A-WEIGHTING

"A-weighting" refers to a prescribed amplitude versus frequency curve used to "weight" noise measurements to represent the frequency response of the human ear. Simply, the human ear is less sensitive to noise at some frequencies and more sensitive to noise at other frequencies. A-weighting is a method to present a measurement or calculation result with a number representing how humans subjectively hear different frequencies at different levels.

NOISE CHARACTER, NOISE LEVEL AND ANNOYANCE

The perception of a given sound to be deemed annoying or acceptable is greatly influenced by the character of the sound and how it contrasts with the character of the background noise. A noise source may be measured to have only a marginal difference to the background noise level but may be perceived as annoying due to the character of the noise. Acoustic Dynamics' analysis of noise considers both the noise level and sound character in the assessment of annoyance and impact on amenity.

1 INTRODUCTION

1.1 EXECUTIVE SUMMARY

Acoustic Dynamics is engaged by **Marlies Eatery** to conduct a mechanical noise emission assessment for the proposed mechanical plant to be installed at the new restaurant premises at 2/11 Ada Avenue Brookvale.

This document provides a technical assessment of noise emission resulting from various mechanical noise sources proposed to service the restaurant at the potentially most affected sensitive receiver locations, to achieve compliance with the relevant noise criteria and objectives.

- (a) Northern Beaches Council;
- (b) NSW Environment Protection Authority;
- (c) Association of Australasian Acoustical Consultants; and
- (d) Australian Standards.

1.2 PROJECT DESCRIPTION

The project site is located at 2/11 Ada Avenue Brookvale, situated within a General Industrial (C2) land zone within the Northern Beaches Council area of NSW. The site is bounded by commercial receivers at 11 Ada Avenue, 13 Ada Avenue, 12 Ethel Avenue, 9 Ada Avenue and 14 Ada Avenue. The nearest residential receiver is located at 21 Wattle Road.

The project proposal is to include the fitout of the existing business to serve as a restaurant and the extension of hours from the 7:00am to 4:00pm currently in place to between 7:00am to 12:00am in the future.

This assessment has been conducted based on the information provided by the proponent including the architectural drawings and the mechanical specifications.

The project site, adjacent receivers and surrounding area are shown in the Location Map and Aerial Image presented within **Appendix A**.

1.3 SCOPE OF WORKS

Acoustic Dynamics has been engaged to provide an acoustic assessment suitable for submission to the relevant authorities.

The scope of the assessment is to include the following:

- Review local planning and development control instruments, state guidelines, federal legislation, standards and guidelines applicable to the proposal;

- Conduct unattended noise monitoring and operator-attended measurements at the development site to determine the existing noise environment and establish relevant noise criteria;
- Perform relevant calculations and noise modelling associated with the proposal to determine noise emission at nearby receiver locations; and
- Provide recommendations for design measures to be incorporated to achieve compliance with the relevant criteria and minimise potential noise impacts at nearby receiver locations.

2 ASSESSMENT CRITERIA AND STANDARDS

Acoustic Dynamics has reviewed local planning and development control instruments, government policies and legislation, standards and guidelines that are applicable to the proposal. The relevant sections of this review and the most stringent criteria applicable to this assessment are presented below.

2.1 LOCAL GOVERNMENT AND COUNCIL CRITERIA

2.1.1 LOCAL PLANNING AND DEVELOPMENT CONTROL INSTRUMENTS

Acoustic Dynamics has reviewed the relevant local planning and development control instruments, including the following documents:

- *Warringah Local Environmental Plan 2011 (LEP)*; and
- *Warringah Development Control Plan 2011 (DCP)*.

Acoustic Dynamics' review of the Warringah LEP did not yield specific acoustic criteria or information relevant to this assessment.

Acoustic Dynamics' review of the Warringah DCP indicated the following information relevant to this assessment:

“Applies to Land

This control applies to land to which Warringah Local Environmental Plan 2011 applies.

Objectives

- *To encourage innovative design solutions to improve the urban environment.*
- *To ensure that Noise emission does not unreasonably diminish the amenity of the area or result in Noise intrusion which would be unreasonable for occupants, users or visitors.*

Requirements

1. Noise from combined operation of all mechanical plant and equipment must not generate Noise levels that exceed the ambient background Noise by more than 5dB(A) when measured in accordance with the NSW Industrial Noise Policy at the receiving boundary of residential and other Noise sensitive land uses.”

2.2 STATE GOVERNMENT POLICIES AND LEGISLATION

Acoustic Dynamics has conducted a review of the relevant state environmental planning policies, legislative acts and statutory instruments, including the following documents:

- *Protection of the Environment Operations Act 1997.*

References to various acoustic requirements applicable to this assessment are summarised below.

2.2.1 PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997

The POEO Act provides generic regulatory instruments that can be applied to manage noise emission from a development site. Acoustic Dynamics advises that the operation of mechanical services and other sources associated with the development not generate “*offensive noise*”, as defined within the Act:

“offensive noise means noise—

(a) *that, by reason of its level, nature, character or quality, or the time at which it is made, or any other circumstances:*

- (i) *is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or*
- (ii) *interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or*

(b) *that is of a level, nature, character or quality prescribed by the regulations or that is made at a time, or in other circumstances, prescribed by the regulations.”*

2.3 NSW ENVIRONMENT PROTECTION AUTHORITY

Acoustic Dynamics has reviewed various assessment guidelines and criteria published by the NSW Environment Protection Authority (EPA), including the following documents:

- *Noise Policy for Industry 2017 (NPfI); and*
- *Noise Guide for Local Government 2013 (NGLG).*

References to applicable acoustic guidelines and requirements are summarised below.

2.3.1 NOISE POLICY FOR INDUSTRY 2017

The NPfl outlines and establishes noise criteria for industrial and other noise sources in various zoning areas. The following criteria have been applied for the assessment of noise emission associated with the use and operation of the development.

PROJECT INTRUSIVENESS NOISE LEVEL

The intrusiveness noise level is determined as follows:

$L_{Aeq, 15min} = \text{rating background noise level} + 5 \text{ dB}$	
where:	
$L_{Aeq, 15min}$	represents the equivalent continuous (energy average) A-weighted sound pressure level of the source over 15 minutes.
and	
Rating background noise level	represents the background level to be used for assessment purposes, as determined by the method outlined in Fact Sheets A and B.

PROJECT AMENITY NOISE LEVEL

The recommended amenity noise levels represent the objective for **total** industrial noise at a receiver location, whereas the **project amenity noise level** represents the objective for a noise from a **single** industrial development at a receiver location.

To ensure industrial noise levels (existing plus new) remain within the recommended amenity noise levels for an area, a project amenity noise level applies for each new source of industrial noise as follows:

Project amenity noise level for industrial developments = recommended amenity noise level (Table 2.2) minus 5 dB(A)
--

2.3.2 SLEEP DISTURBANCE CRITERION

Acoustic Dynamics advises that sleep disturbance is a complex issue, and the potential for sleep disturbance to occur depends on both the level of noise at a residential receiver, and the number of events that occur.

The NSW EPA has investigated overseas and Australian research on sleep disturbance. The assessment of noise for sleep disturbance relies on the application of a screening that indicates the potential for this to occur. The EPA's NGLG provides the following guidance for such a screening test:

“Currently, there is no definitive guideline to indicate a noise level that causes sleep disturbance and more research is needed to better define this relationship. Where likely disturbance to sleep is being

assessed, a screening test can be applied that indicates the potential for this to occur. For example, this could be where the subject noise exceeds the background noise level by more than 15 dB(A). The most appropriate descriptors for a source relating to sleep disturbance would be $L_{A1(1\text{ minute})}$ (the level exceeded for 1% of the specified time period of 1 minute) or L_{Amax} (the maximum level during the specified time period) with measurement outside the bedroom window.”

Additionally, the guidelines of the NPfl provide the following additional information:

“Where the subject development/premises night-time noise levels at a residential location exceed:

- $L_{Aeq,15min}$ 40 dB(A) or the prevailing RBL plus 5 dB, whichever is the greater; and/or
- L_{AFmax} 52 dB(A) or the prevailing RBL plus 15 dB, whichever is greater”.

Further to the above information, the following summarizes the sleep disturbance criterion:

$L_{Aeq,15min} \leq 40 \text{ dB}$ or $L_{Aeq,15min} \leq (\text{RBL} + 5 \text{ dB})$, whichever is greater AND L_{Amax} or $L_{A1(1\text{ minute})} \leq L_{A90} + 15 \text{ dB}$ or 52 dB(A), whichever is greater

The EPA’s *Road Noise Policy 2011* document references other publications for consideration:

“The World Health Organisation guidelines (WHO 1999) recommended that:

‘where noise is continuous, the equivalent sound pressure level should not exceed 30 dB(A) indoors, if negative effects on sleep are to be avoided’.”

In addition to the above, the EPA has previously published the following additional information relating to findings of significant research carried out for sleep disturbance:

“Maximum internal noise levels below 50-55 dBA are unlikely to cause awakening reactions... One or more noise events per night, with maximum internal noise levels of 65-70 dBA, are not likely to affect health and wellbeing significantly.”

3 NOISE MEASUREMENT EQUIPMENT AND STANDARDS

All measurements were conducted in general accordance with AS 1055.1:2018 *Acoustics – Description and Measurement of Environmental Noise Part 1: General Procedures*. Sound measurements were carried out using precision sound level meters conforming to the requirements of IEC 61672.1:2002 *Electroacoustics: Sound Level Meters – Part 1: Specifications*. The instrumentation used during the survey is set out in **Table 3.1**.

Table 3.1 Noise Survey Instrumentation

Type	Serial Number	Instrument Description
NGARA	878028	ARL Real Time Sound Acquisition System
4230	1234135	Brüel & Kjaer Acoustic Calibrator

The reference sound pressure level was checked prior to and after the measurements using the acoustic calibrator and remained within acceptable limits.

4 MECHANICAL NOISE EMISSION ASSESSMENT

The following section provides an assessment of environmental noise impacts and mechanical noise emission associated with the use of the facility at the closest receiver properties, against the various noise criteria and objectives.

4.1 PROJECT NOISE EMISSION CRITERIA AND OBJECTIVES

To establish the acoustic environment at the subject site in accordance with the guidelines of the NPfl, unattended noise monitoring was conducted between 30 September 2024 and 9 October 2024. The noise logger was shielded from direct noise associated with vehicular traffic or mechanical plant associated with the development.

Acoustic Dynamics advises the measurement location, shown in **Appendix A**, is representative of the existing noise environment of the nearest sensitive receivers. Results from the long-term noise monitoring are presented in **Appendix B**.

Following the general procedures of the NPfl outlined in **Section 2.3**, a summary of the established noise environment is presented below.

Table 4.1 Measured External Noise Levels and Project Noise Objectives for Nearest Receivers

Location	Assessment Period	L _{A90} Rating Background Noise Level (RBL) [dB]	Measured L _{Aeq} Noise Level [dB]	Project Intrusiveness Noise Level L _{Aeq,15min} [dB]	Project Amenity Noise Level L _{Aeq,15min} [dB] ²	Project Noise Trigger Level L _{Aeq,15min} [dB]
Residential Receivers	Day (7am ¹ to 6pm)	43	56	48	53	48
	Evening (6pm to 10pm)	37	51	42	43	42
	Night (10pm to 7am ¹)	32	47	37	38	37
Commercial Receivers	At any time	—	—	—	63	63
Industrial Receivers	At any time	—	—	—	68	68

Note: 1) 8:00am on Sundays and public holidays.
 2) Amenity adjustment based on “Suburban” residential receiver type, “Commercial” and “Industrial” receiver types (NPfl Table 2.2). The noise emission objective has been modified in accordance with the recommendations detailed within the NPfl Section 2.2, for time standardisation of the intrusiveness and amenity noise levels (L_{Aeq,15min} will be taken to be equal to the L_{Aeq, period} + 3 dB).

In accordance with the NGLG and NPfI guidelines detailed above, the following sleep disturbance screening criterion for external noise emission has been applied for this project:

External Sleep Disturbance Criteria:

$$L_{Aeq,15min} \leq 42 \text{ dB}$$

AND

$$L_{Amax} \text{ or } L_{A1(1 \text{ minute})} \leq 52 \text{ dB}$$

Acoustic Dynamics advises that achieving compliance with the relevant noise emission objectives applicable at the boundaries of the nearest sensitive receivers will adequately protect the acoustic amenity of all nearby receivers.

4.2 SCHEDULE OF MECHANICAL EQUIPMENT

Acoustic Dynamics has established and assessed the following items of mechanical equipment proposed to service the development.

The noise data presented below has been established based on information provided by the proponent and manufacturer specifications.

Table 4.3 Schedule of Mechanical Equipment

Qty	Ref.	Model	Description	Sound Power Level [dB(A)]
Air Handling Units				
1	AC-01	38QHFO92	Existing Single Fan Air-Conditioning Unit	69
Compressors				
1	CO-01	Unknown ²	Existing Compressor (Internal)	80²
Fans				
1	KEF-01	GUE454V	Rooftop Exhaust Fan	89
2	TEF-01	Unknown ²	Existing Small Bathroom Exhaust Fans (Internal)	60²

Note: 1) Acoustic Dynamics has assumed units will operate at **maximum capacity**.
 2) Sound power level data unavailable, however Acoustic Dynamics has conservatively assumed these levels based on data available for similar products. Acoustic Dynamics has recommended the selected fans do not exceed these specifications.

4.3 NEAREST RECEIVERS

The cumulative noise impact has been assessed to the potentially most affected point at the adjacent sensitive receiver properties and presented below.

Table 4.4 Nearest Sensitive Receiver Locations

Source	Location	Direction
Residential Receivers		
R ₁	21 Wattle Road	South
Commercial Receivers		
B ₁	3/11 Ada Avenue	Above
B ₂	1/11 Ada Avenue	West
B ₃	4/11 Ada Avenue	East
B ₄	3/12 Ethel Avenue	East
B ₅	13 Ada Avenue	North
B ₆	14 Ada Avenue	West
Industrial Receivers		
I ₁	9 Ada Avenue	South

Acoustic Dynamics advises that by achieving compliance with the nearest sensitive receiver locations, compliance will also be achieved at all other sensitive receiver locations further away.

4.4 ACOUSTIC MODELLING ASSUMPTIONS

Acoustic modelling was undertaken using noise modelling software (*CadnaA Version 2023*). CadnaA calculates environmental noise propagation according to the applicable international and ISO standards, including the ISO 9613 algorithm.

Within our calculations and acoustic modelling, noise emission contributions from the development have been considered taking the following factors into account:

- Airborne noise losses due to distance and ground topography;
- Losses due to direction and diffraction;
- Increases due to reflections; and
- Acoustic shielding.

The following assumptions were made regarding the noise model configuration:

1. Kitchen exhaust fan will be located on the rooftop;
2. Toilet exhaust fans are ducted to the existing outlets at the rear of the site;
3. Air conditioning will be operated using the existing condenser unit on the eastern wall of the first floor parking area;
4. Acoustic Dynamics understands a compressor will be installed internally within the proposed cool room; and
5. Acoustic Dynamics has conservatively assumed all units will operate at **maximum capacity** at all times.

4.5 EXTERNAL NOISE EMISSION LEVELS

The calculated maximum external noise emission levels at the nearest receiver locations are presented against the relevant noise emission criteria below.

The assessment location for **external noise emission** is defined as the most affected point on or within any sensitive receiver property boundary. Examples of this location may be:

- 1.5m above ground level;
- On a balcony at 1.5m above floor level; and
- Outside a window on the ground or higher floors, at a height of 300mm below the head of the window.

Table 4.5 Calculated Maximum External Noise Emission Levels & Objectives

Receiver	Relevant Assessment Period	Source	Calculated Maximum L_{Aeq} Noise Level ¹ [dB]	L_{Aeq} Noise Emission Objective [dB]	Complies?
R ₁	Night (10pm to 7am ²)	Existing Plant	17	42	Yes
		Proposed Plant	19		
		Cumulative Total	19		
B ₁	When in use	Existing Plant	48	63	Yes
		Proposed Plant	56		
		Cumulative Total	57		
B ₂	When in use	Existing Plant	10	63	Yes
		Proposed Plant	37		
		Cumulative Total	37		
B ₃	When in use	Existing Plant	10	63	Yes
		Proposed Plant	40		
		Cumulative Total	40		
B ₄	When in use	Existing Plant	18	63	Yes
		Proposed Plant	39		
		Cumulative Total	39		
B ₅	When in use	Existing Plant	18	63	Yes
		Proposed Plant	27		
		Cumulative Total	28		

Receiver	Relevant Assessment Period	Source	Calculated Maximum L_{Aeq} Noise Level ¹ [dB]	L_{Aeq} Noise Emission Objective [dB]	Complies?
B ₆	When in use	Existing Plant	3	63	Yes
		Proposed Plant	35		
		Cumulative Total	35		
I ₁	When in use	Existing Plant	63	68	Yes
		Proposed Plant	27		
		Cumulative Total	63		

Note: 1) Includes the benefits of recommendations outlined in **Section 6** of this report.
 2) 8:00am on Saturdays, Sundays and public holidays.

Acoustic Dynamics advises the calculated **external** noise emission levels are conservatively based on **maximum capacity** operations at the development. Acoustic Dynamics advises that such a scenario is unlikely to occur and noise levels are likely to be below those calculated for the majority of the time.

4.6 SLEEP DISTURBANCE

Acoustic Dynamics has determined the potential maximum L_{Aeq} **external** noise emission level from the facility resulting from the continuous operation of mechanical equipment, when measured at the nearest residential receivers during the night-time assessment period.

Table 4.6 Calculated Maximum Continuous External Noise Levels & Relevant Noise Criteria

Sensitive Receiver	Source	Predicted Maximum L_{Amax} Sound Pressure Level [dB] ¹	L_{Aeq} Sleep Disturbance Criterion [dB] ²	Complies?
Residential Receivers along Wattle Road	Mechanical Plant	19	42	Yes

Note: 1) Predicted L_{Amax} noise level is the maximum instantaneous measured noise level.
 2) Maximum instantaneous noise level measured during the night-time assessment period (10:00pm until 7:00am on weekdays, or 8:00am on weekends and public holidays).

Acoustic Dynamics advises that **instantaneous** L_{Amax} noise events that exceed the external sleep disturbance criterion at the nearest residential receivers are unlikely to occur, due to the continuous nature of operating mechanical equipment, following incorporation of the recommendations provided in **Section 6**.

5 DISCUSSION

The calculations indicate the following:

1. Noise emission resulting from the proposal is **predicted to comply** with the relevant acoustic criteria of Northern Beaches Council, the NSW EPA and federal legislation during the proposed hours of operation when assessed at the nearest sensitive receivers;
2. Maximum instantaneous external noise events are **predicted to comply** with the NSW EPA's guidelines on sleep disturbance when assessed at the nearest sensitive receivers;
3. There is **low risk** of acoustic disturbance to the nearest sensitive residential, commercial and industrial receivers during the proposed hours of operation;
4. To ensure the assessment is conducted in a conservative manner, noise emission has been assessed as a **worst-case** scenario (i.e. all noise generating activities and noise sources occurring simultaneously and at maximum capacity). Generally, noise emission associated with the proposal is **predicted to be lower** than the calculations presented; and
5. The noise calculations and operational assumptions should not be considered prescriptive. They are modelling assumptions that have been used to demonstrate typical noise sources and operations associated with the facility **can be designed to achieve compliance** with the relevant criteria.

6 RECOMMENDATIONS AND DESIGN ADVICE

The following recommendations are provided to ensure the proposed mechanical upgrades are designed and constructed to achieve compliance with the relevant acoustic requirements:

1. Where feasible, consider reducing operations in the late evening and early night period by:
 - Reducing the operational capacity of mechanical equipment;
 - Scheduling the use of noisy equipment to the least-sensitive time of day; or
 - Schedule noisy pieces of equipment such that they are used separately rather than concurrently;
2. Mechanical equipment should be regularly maintained and serviced to maintain low mechanical noise emission levels;
3. Implementation of an appropriate community liaison procedure, including a noise and vibration complaint procedure and means of ongoing communication with nearby potentially affected receivers once development operations begin;
4. Condenser units shall be isolated from the wall and supporting structure with rubber pads to prevent the transmission of vibration from the condenser units to the structure;

5. All connections between the condenser unit, ductwork, pipes and pipe connectors shall be properly aligned using a suitable flexible material, and all penetrations shall be acoustically sealed; and
6. All fans shall be supported and isolated from the building structure by incorporating impact isolation mounts (spring mounts, seismic mounts or rubber mounts);
7. All connections between fans, ductwork, pipes and pipe connectors shall be properly aligned using a suitable flexible material, and all penetrations shall be acoustically sealed; and
8. Acoustic Dynamics advises that the various items of mechanical plant and equipment throughout the development shall be isolated from the building structure by incorporating impact isolation mounts such as spring mounts, seismic mounts, or rubber mounts. Suppliers of appropriate impact isolation systems are:
 - ❑ Embelton and Co Pty Ltd; and
 - ❑ Mason Mercer Pty Ltd.

7 CONCLUSION

Acoustic Dynamics has conducted a mechanical noise emission assessment associated with the proposed mechanical upgrades to the proposed restaurant located at 2/11 Ada Avenue Brookvale.

A review of the applicable local planning and development control instruments, government policies and legislation, and various standards and guidelines was conducted in accordance with the requirements of:

- (a) Northern Beaches Council;
- (b) NSW Environment Protection Authority;
- (c) Association of Australasian Acoustical Consultants; and
- (d) Australian Standards.

Acoustic Opinion

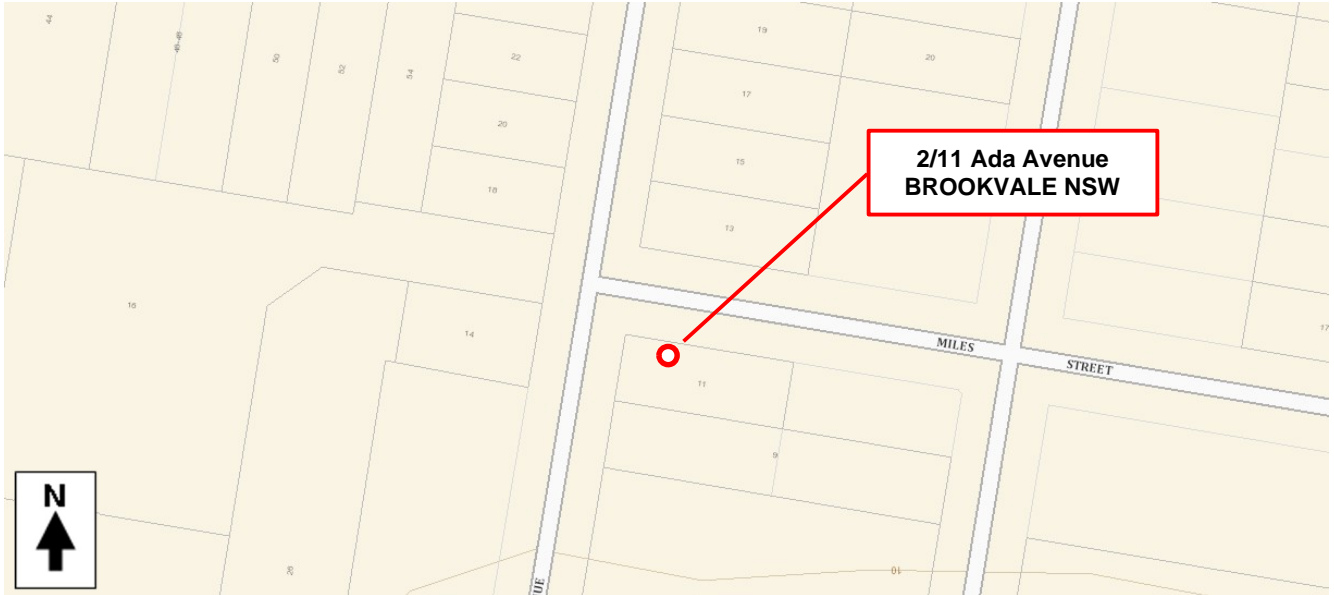
Further to our site survey, noise monitoring and measurements, our review of the relevant acoustic criteria and requirements, and our calculations, Acoustic Dynamics advises that the proposal can be designed to comply with the relevant acoustic criteria of Northern Beaches Council, the NSW POEO Act 1997 and the NSW EPA, with the incorporation of our recommendations detailed within this report.

It is our opinion that the acoustic risks associated with the proposal can be adequately controlled and the amenity of neighbouring properties and residents can be satisfactorily protected.

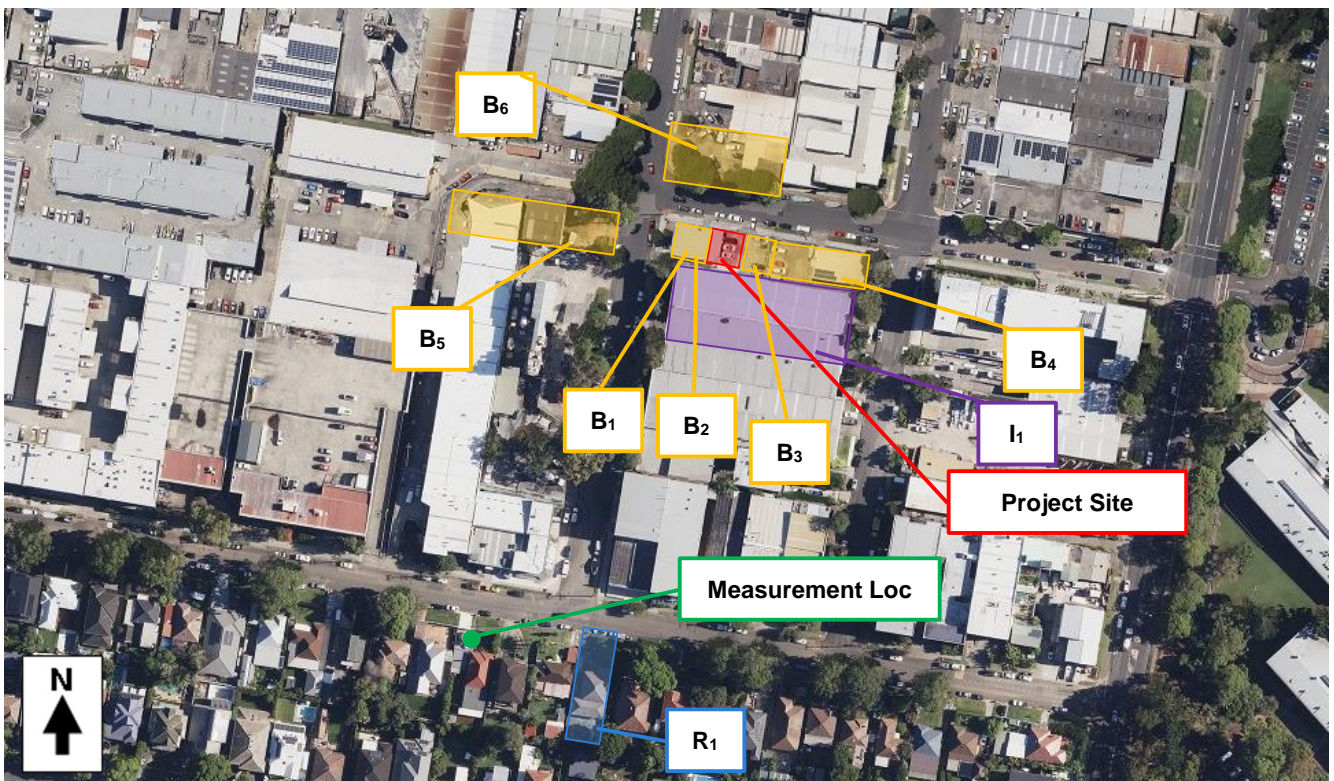
We trust that the above information meets with your present requirements and expectations. Please do not hesitate to contact us on 02 9908 1270 should you require more information.

APPENDIX A — LOCATION MAP, AERIAL IMAGE AND DRAWINGS

A.1 LOCATION MAP (COURTESY OF SIX MAPS)

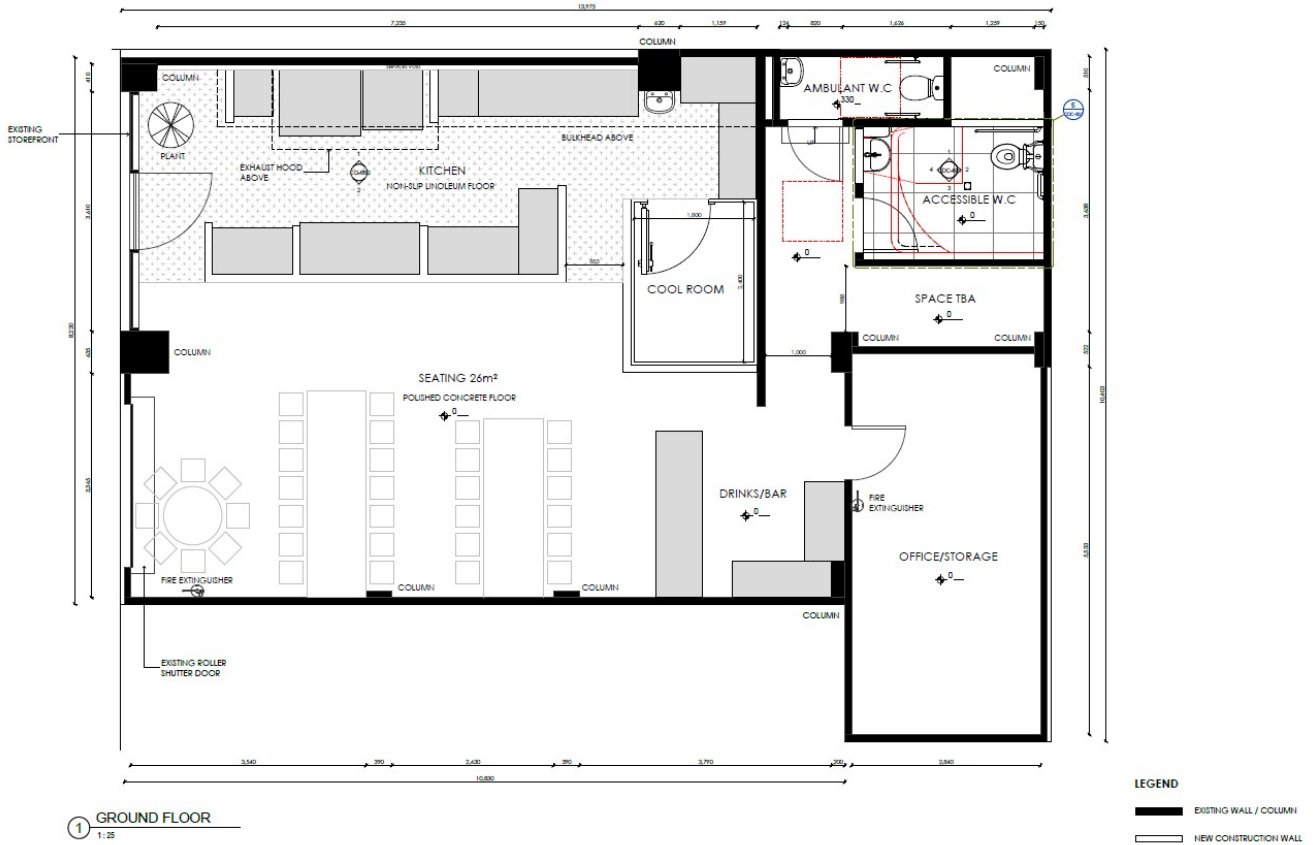


A.2 AERIAL IMAGE (COURTESY OF SIX MAPS)



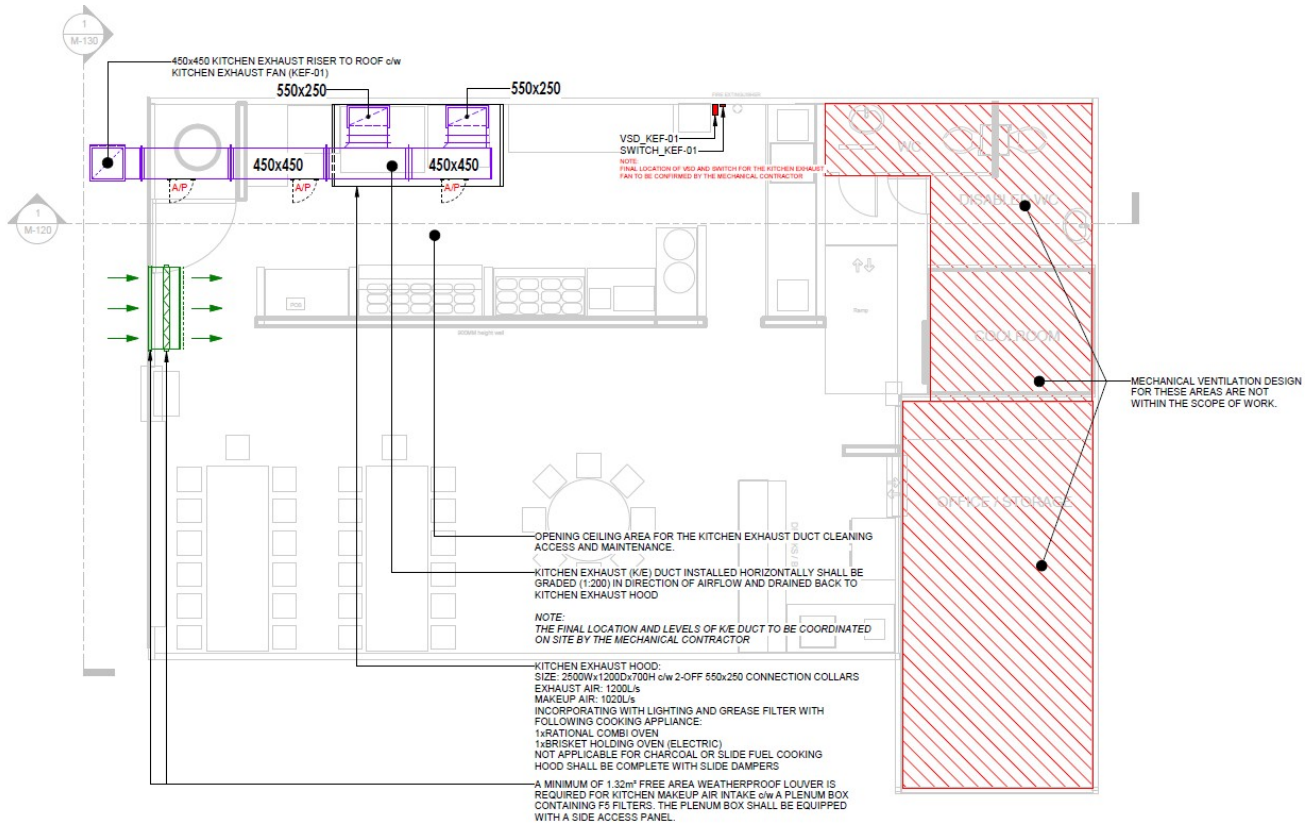
A.3 ARCHITECTURAL PLANS (COURTESY OF PACE ARCHITECTS)

A.3.1 GROUND FLOOR PLAN

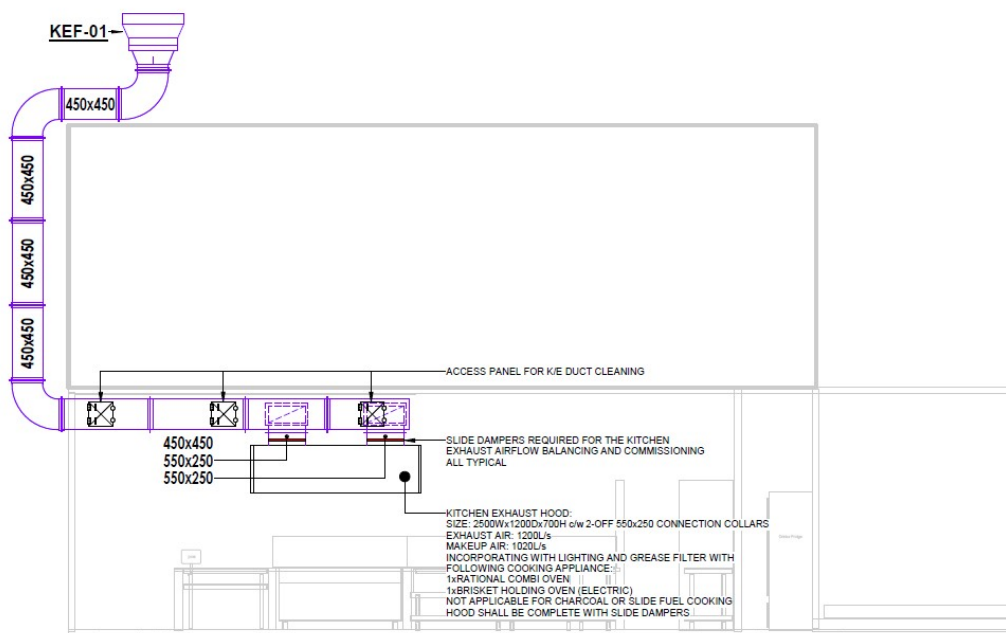


A.4 MECHANICAL PLANS (COURTESY OF SQM INTERNATIONAL)

A.4.1 GROUND FLOOR DRAWING

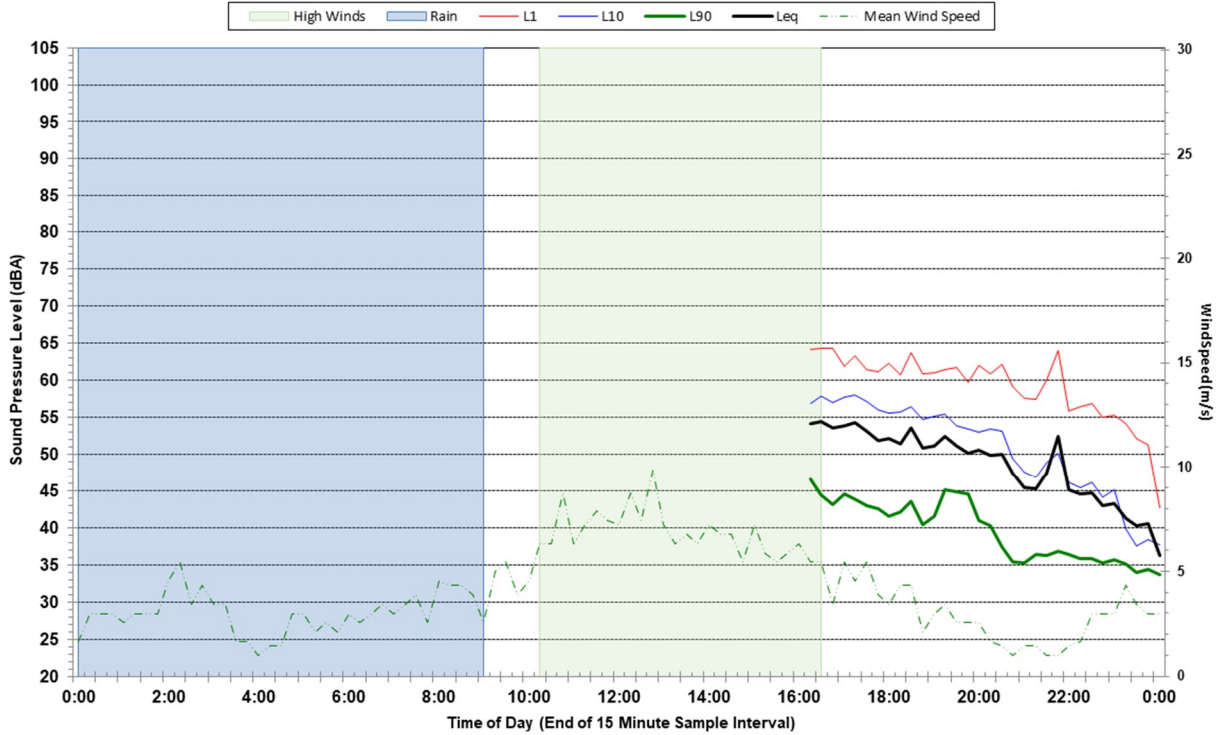


A.4.2 KITCHEN SECTION DRAWING

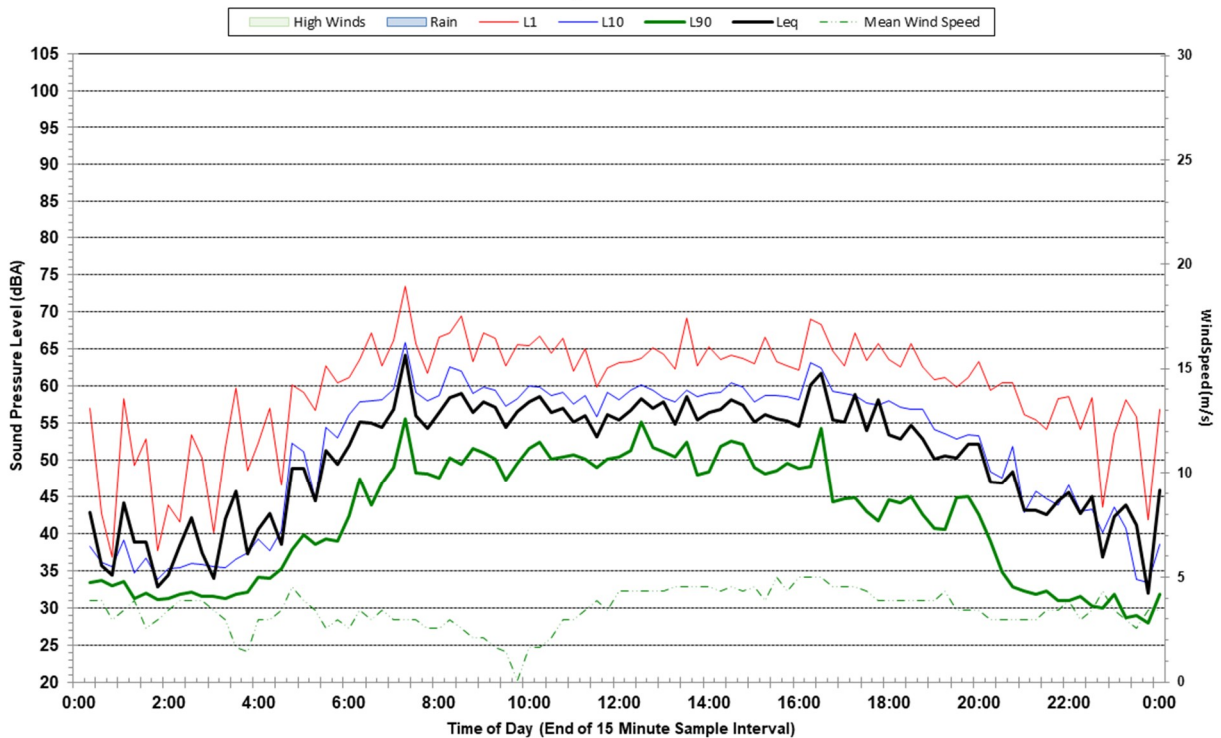


APPENDIX B — UNATTENDED NOISE MONITORING STATISTICAL GRAPHS

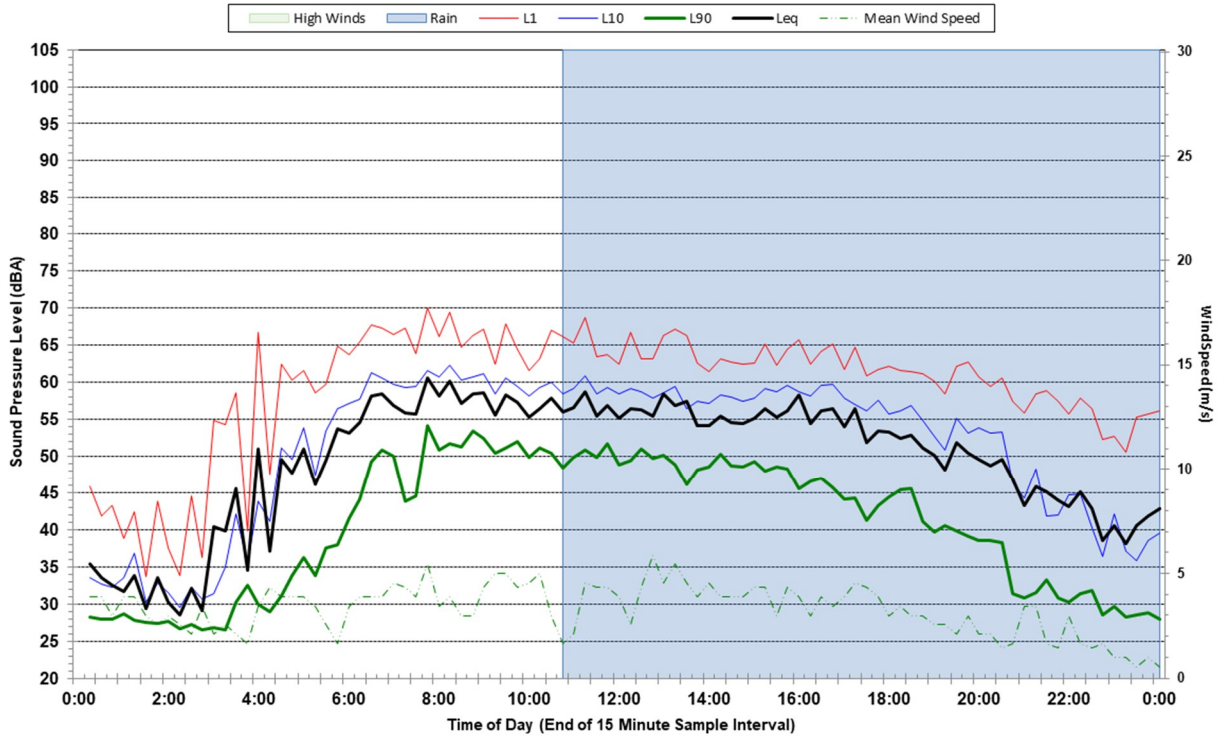
**Statistical Ambient Noise Levels
- Monday 30 September 2024**



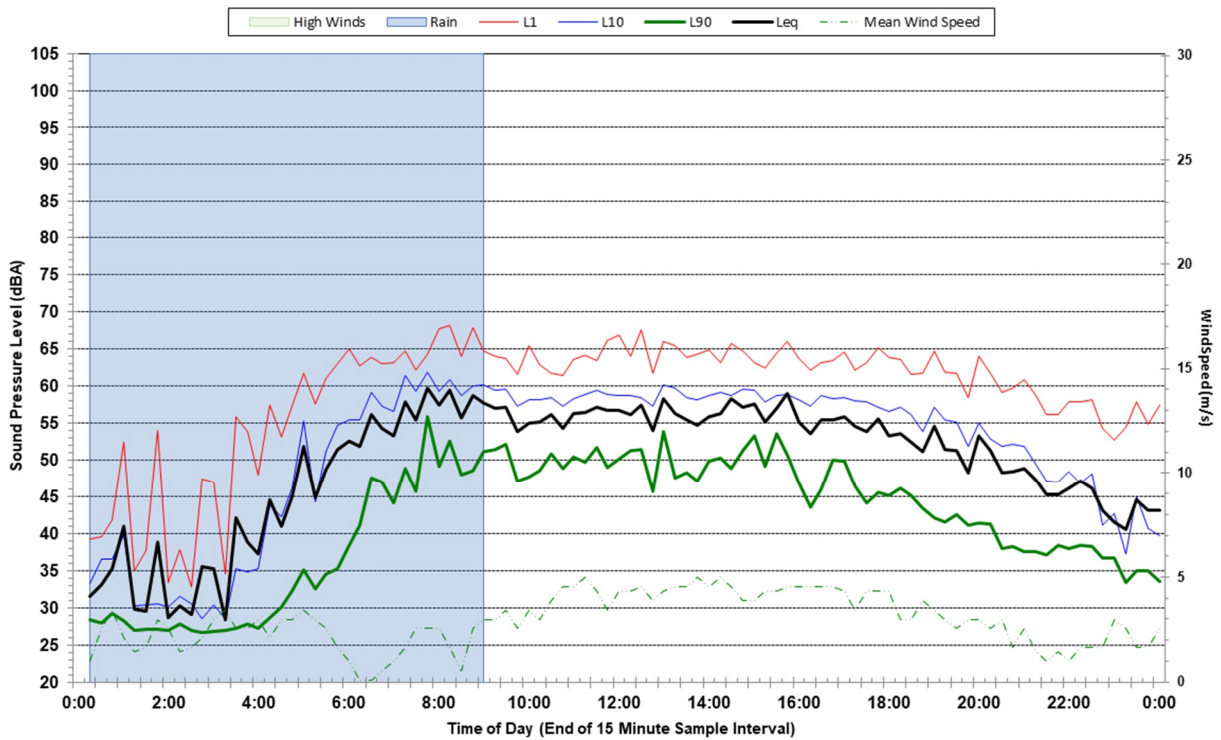
**Statistical Ambient Noise Levels
- Tuesday 1 October 2024**



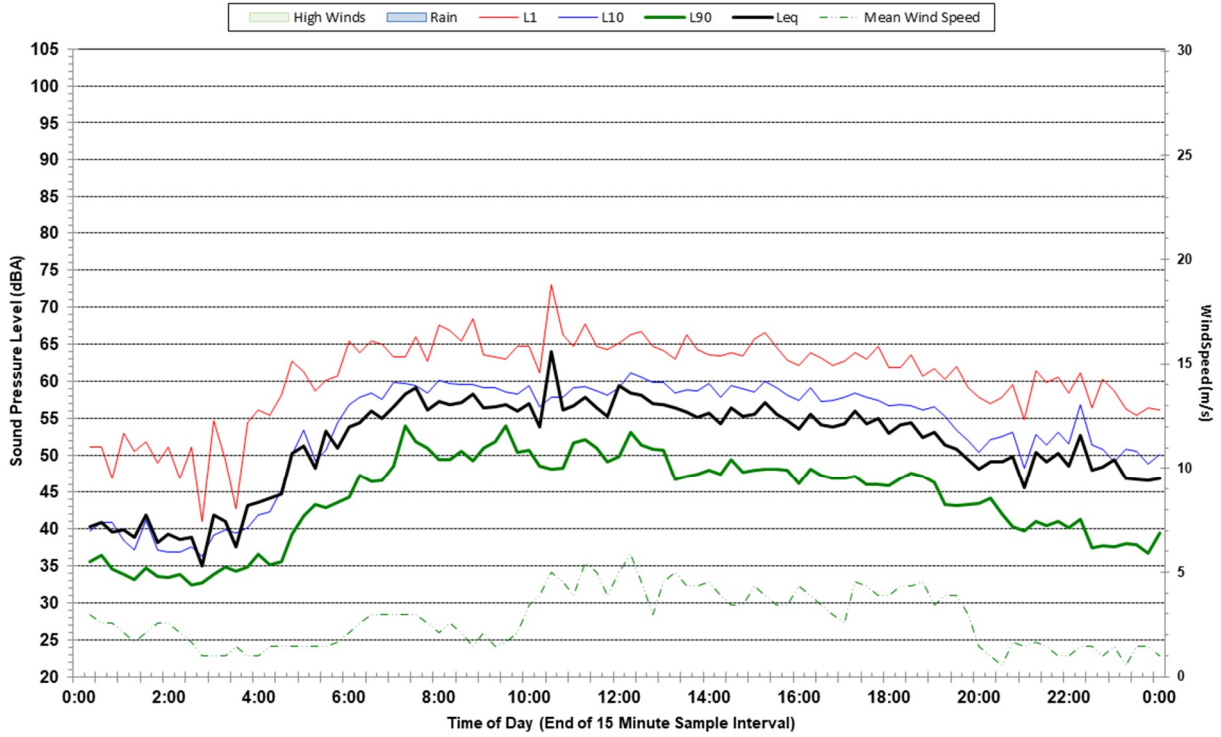
Statistical Ambient Noise Levels - Wednesday 2 October 2024



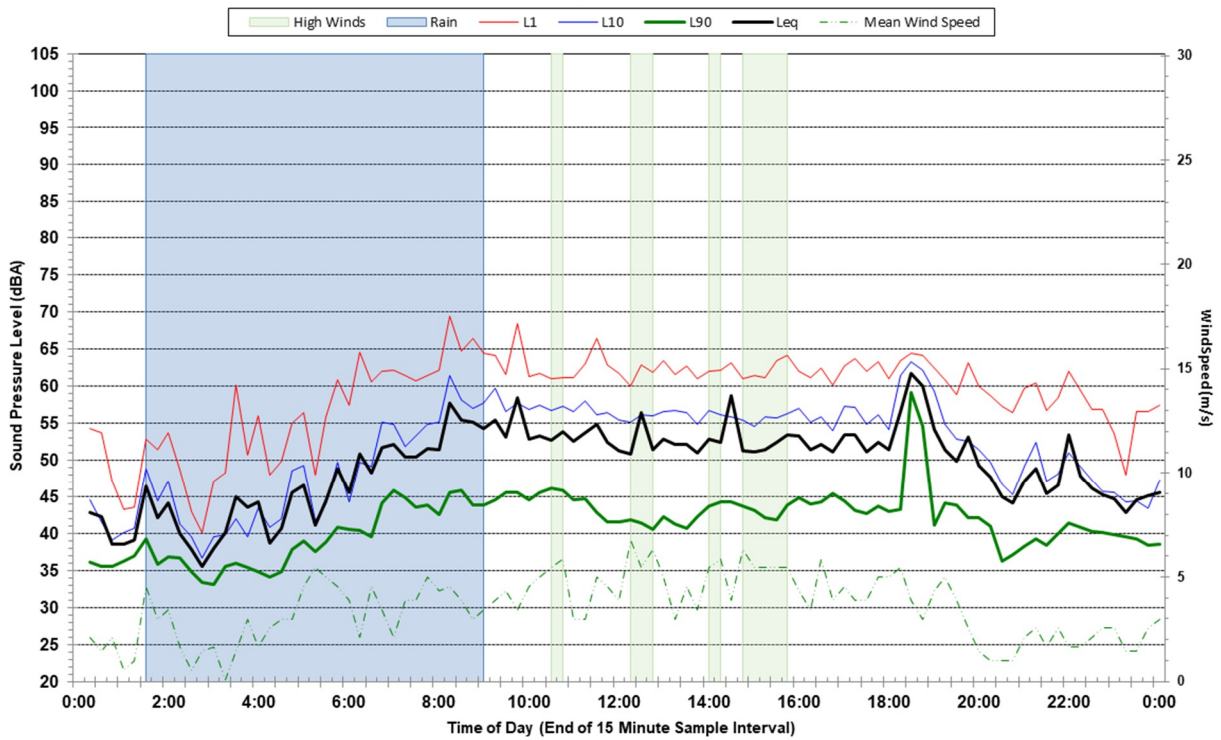
Statistical Ambient Noise Levels - Thursday 3 October 2024



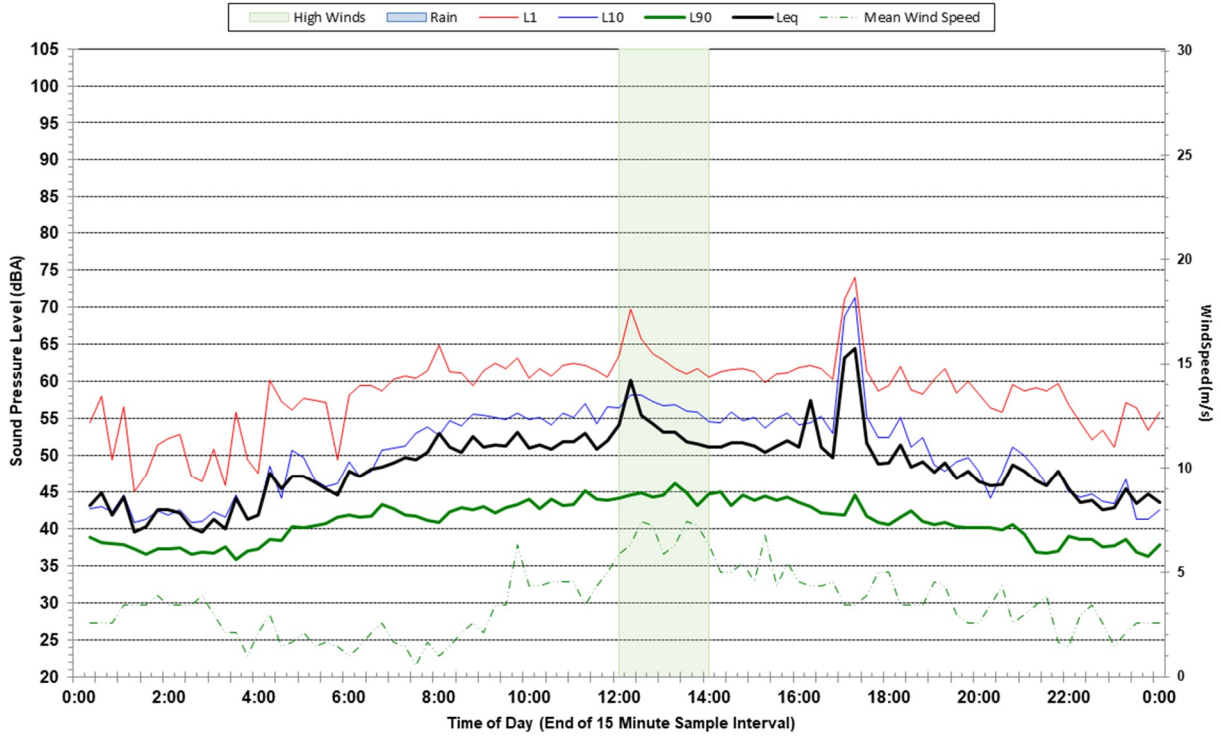
Statistical Ambient Noise Levels - Friday 4 October 2024



Statistical Ambient Noise Levels - Saturday 5 October 2024



Statistical Ambient Noise Levels - Sunday 6 October 2024



Statistical Ambient Noise Levels - Monday 7 October 2024

