Noise Assessment

Proposed Hungry Jacks Operation
254-256 Goonoo Goonoo Road
South Tamworth, NSW

Prepared for: [redacted]
September 2024
MAC242163-01RP1V3

Muller Acoustic Consulting

Document Information

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South Tamworth, NSW

Prepared for: [redacted]

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DOCUMENT ID	DATE	PREPARED	SIGNED	REVIEWED	SIGNED
MAC242163-01RP1V3	30 September 2024	[redacted]			

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1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by [redacted] to prepare a Noise Assessment (NA) to quantify emissions from the proposed Hungry Jacks Operation (the 'operation') to be established at 254-256 Goonoo Goonoo Road, South Tamworth, NSW.

The NA has quantified potential operational and sleep disturbance noise emissions from the operation and recommends reasonable and feasible noise controls where required.

This assessment has been undertaken in accordance with the following documents:

- NSW Environment Protection Authority (EPA), Noise Policy for Industry (NPI) 2017;
- NSW Department of Environment and Climate Change (DECCW) – NSW Interim Construction Noise Guideline (ICNG), July 2009;
- NSW Environment Protection Authority (EPA), Approved Methods for the measurement and analysis of environmental noise in NSW, 2022;
- Australian Standard AS 1055:2018 - Acoustics - Description and measurement of environmental noise - General Procedures; and
- International Organisation for Standardisation (ISO) 9613-1:1993 (ISO9613:1) - Acoustics - Attenuation of Sound During Propagation Outdoors.

A glossary of terms, definitions and abbreviations used in this report is provided in **Appendix A**.

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2 Project Description

2.1 Background

The operation is to be located at 254-256 Goonoo Goonoo Road, South Tamworth, NSW. The surrounding locality comprises primarily of residential, commercial and transport land uses. The operation site is bound to the south by Scott Road/New England Highway which carries approximately 17,000 vehicles per day. To the west of the site is Goonoo Goonoo Road, with an existing temporary accommodation receiver located on the opposing side of the road. The site is bound to the north by a commercial premises. The two nearest residential receivers located to the east of the site, at a setback approximately nine and 17 metres respectively from the project site boundary. There are additional residential receivers to the northeast of the site at a setback distance of approximately 19 metres from the site boundary. The proposed Hungry Jacks Operation will consist of a main building with dual drive-thru lane, car park spaces and loading dock. The project is proposed to operate 24 hours a day, seven days a week. **Appendix B** provides the site layout plans of the project.

2.2 Proposed Activities & Operating Hours

There are several key activities associated with the project that have the potential to generate acoustic impacts on nearby receivers. **Table 1** provides a summary of operation noise sources and the assessment period in which they propose to occur.

Table 1 Noise Generating Activities

Activity/Source	Period[1]	Operational
Customer Light Vehicles	Day	✓
	Evening	✓
	Night	✓
Truck Consumable Deliveries	Day	✓
	Evening	✓
	Night	X
Waste Collection	Day	✓
	Evening	✓
	Night	✓
Drive-Thru Operations	Day	✓
	Evening	✓
	Night	✓
Mechanical Plant	Day	✓
	Evening	✓
	Night	✓

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

2.2.1 Receiver Review

A review of residential receivers in close proximity to the operation has been completed and are summarised in **Table 2.** Receiver heights were set at various heights representative of the surrounding receiver buildings. **Figure 1** provides a locality plan showing the position of these receivers in relation to the operation.

Table 2 Receiver Locations

Receiver	Description	Receiver Height	Coordinates (MGA56)	
			Easting	Northing
R01	Residential	1.5m	301920	6556328
R02	Residential	1.5m	301919	6556356
R03	Residential	1.5m	301986	6556346
R04	Residential	1.5m	302025	6556331
R05	Residential	1.5m	302025	6556312
R06	Residential	1.5m	302021	6556288
R07	Residential	1.5m	302043	6556259
R08	Residential	1.5m	302027	6556257
R09	Residential	1.5m	302007	6556256
R10	Residential	1.5m	301983	6556254
R11	Residential	1.5m	301923	6556229
TA01	Temporary Accommodation	1.5m	301921	6556287
TA02	Temporary Accommodation	1.5m	301920	6556302
TA03	Temporary Accommodation	1.5m	301919	6556318
C01	Commercial	1.5m	301981	6556325
C02	Commercial	1.5m	301923	6556256

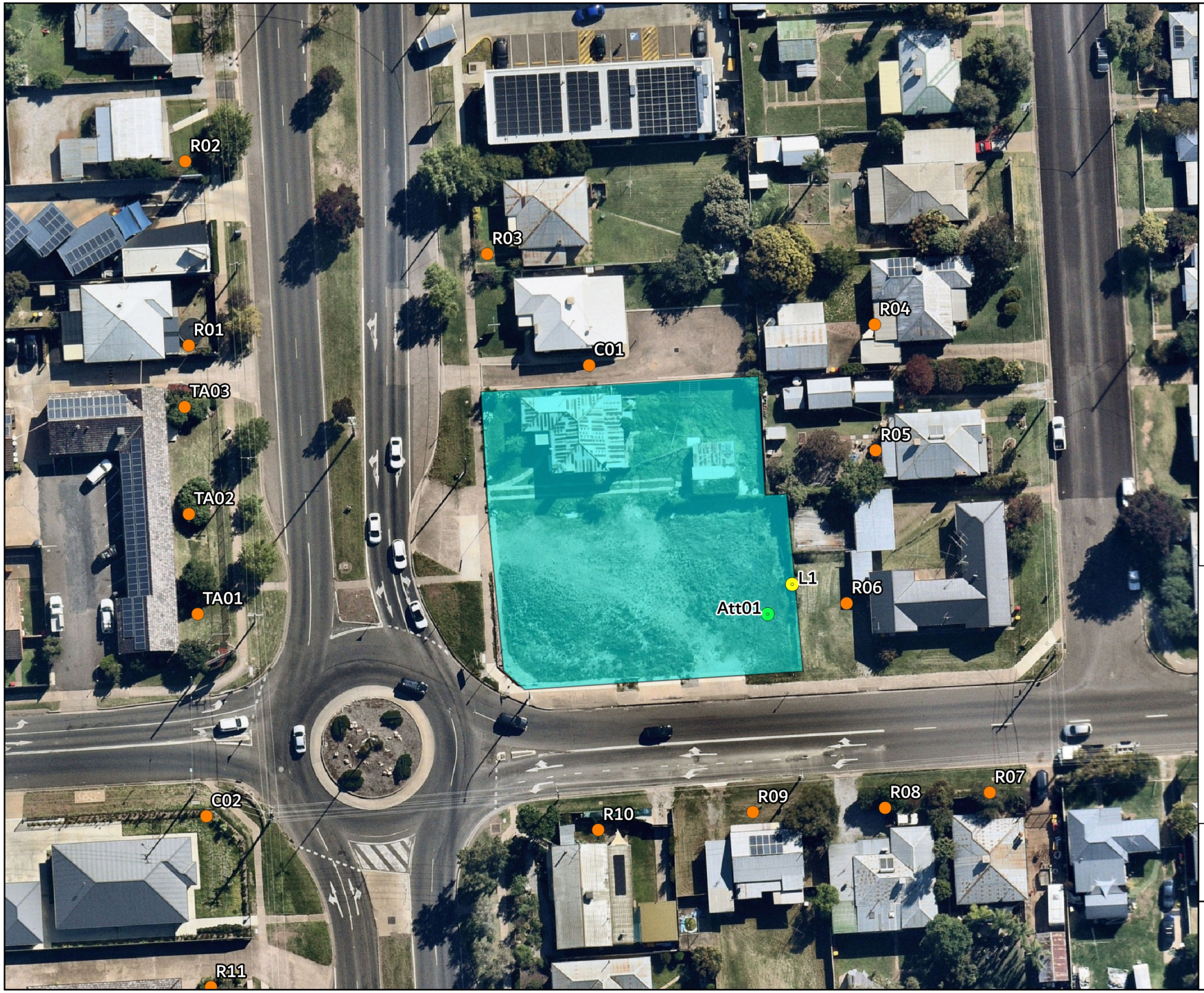

FIGURE 1

Locality Plan

MAC242163-01

Hungry Jack's

South Tamworth, NSW

KEY

- Receiver
- Unattended Noise Monitoring Location
- Attended Noise Monitoring Location
- Site Boundary

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3 Noise Policy and Guidelines

3.1 Noise Policy for Industry

The EPA released the Noise Policy for Industry (NPI) in October 2017 which provides a process for establishing noise criteria for consents and licenses enabling the EPA to regulate noise emissions from scheduled premises under the Protection of the Environment Operations Act 1997. The objectives of the NPI are to:

- provide noise criteria that is used to assess the change in both short term and long-term noise levels;
- provide a clear and consistent framework for assessing environmental noise impacts from industrial premises and industrial development proposals;
- promote the use of best-practice noise mitigation measures that are feasible and reasonable where potential impacts have been identified; and
- support a process to guide the determination of achievable noise limits for planning approvals and/or licences, considering the matters that must be considered under the relevant legislation (such as the economic and social benefits and impacts of industrial development).

The policy sets out a process for industrial noise management involving the following key steps:

1. Determine the Project Noise Trigger Levels (PNTLs) (ie criteria) for a development. These are the levels (criteria), above which noise management measures are required to be considered. They are derived by considering two factors: shorter-term intrusiveness due to changes in the noise environment; and maintaining the noise amenity of an area.
2. Predict or measure the noise levels produced by the development with regard to the presence of annoying noise characteristics and meteorological effects such as temperature inversions and wind.
3. Compare the predicted or measured noise level with the PNTL, assessing impacts and the need for noise mitigation and management measures.
4. Consider residual noise impacts - that is, where noise levels exceed the PNTLs after the application of feasible and reasonable noise mitigation measures. This may involve balancing economic, social and environmental costs and benefits from the proposed development against the noise impacts, including consultation with the affected community where impacts are expected to be significant.
5. Set statutory compliance levels that reflect the best achievable and agreed noise limits for the development.
6. Monitor and report environmental noise levels from the development.

3.1.1 Project Noise Trigger Levels (PNTL)

The policy sets out the procedure to determine the PNTLs relevant to an industrial development. The PNTL is the lower (ie, the more stringent) of the **Project Intrusiveness Noise Level** (PINL) and **Project Amenity Noise Level** (PANL) determined in accordance with Section 2.3 and Section 2.4 of the NPI.

3.1.2 Rating Background Level (RBL)

The Rating Background Level (RBL) is a parameter determined from noise monitoring and is used for assessment purposes. As per the NPI, the RBL is an overall single figure background level representing each assessment period (day, evening and night) over the noise monitoring period. The measured RBLs relevant to the project are contained in **Section 4**.

3.1.3 Project Intrusiveness Noise Level (PINL)

The PINL ($LA_{eq(15min)}$) is the RBL + 5dB and seeks to limit the degree of change a new noise source introduces to an existing environment. Hence, when assessing intrusiveness, background noise levels need to be measured.

Background noise levels need to be determined before intrusive noise can be assessed. The NPI states that background noise levels to be measured are those that are present at the time of the noise assessment and without the subject development operating. For the assessment of modifications to existing premises, the noise from the existing premises should be excluded from background noise measurements. It is note that the exception is where the premises has been operating for a significant period of time and is considered a normal part of the acoustic environment; it may be included in the background noise assessment under the following circumstances:

- the development must have been operating for a period in excess of 10 years in the assessment period/s being considered and is considered a normal part of the acoustic environment; and,
- the development must be operating in accordance with noise limits and requirements imposed in a consent or licence and/or be applying best practice.

Where a project intrusiveness noise level has been derived in this way, the derived level applies for a period of 10 years to avoid continuous incremental increases in intrusiveness noise levels. This approach is consistent with the purpose of the intrusiveness noise level to limit significant change in the acoustic environment. The purpose of the project amenity noise level is to moderate against background noise creep.

3.1.4 Project Amenity Noise Level (PANL)

The PANL is relevant to a specific land use or locality. To limit continuing increases in intrusiveness levels, the ambient noise level within an area from all combined industrial sources should remain below the recommended amenity noise levels specified in Table 2.2 (of the NPI). The NPI defines two categories of amenity noise levels:

- **Amenity Noise Levels (ANL)** – are determined considering all current and future industrial noise within a receiver area; and
- **Project Amenity Noise Level (PANL)** – is the recommended level for a receiver area, specifically focusing the project being assessed.

Additionally, Section 2.4 of the NPI states: "to ensure that 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":

PANL for new industrial developments = recommended **ANL** minus 5dBA.

The following exceptions apply when deriving the PANL:

- areas with high traffic noise levels;
- proposed developments in major industrial clusters;
- existing industrial noise and cumulative industrial noise effects; and
- greenfield sites.

The NPI states with respect to high traffic noise areas:

The level of transport noise, road traffic noise in particular, may be high enough to make noise from an industrial source effectively inaudible, even though the LAeq noise level from that industrial noise source may exceed the project amenity noise level. In such cases the project amenity noise level may be derived from the LAeq, period(traffic) minus 15 dB(A).

Where relevant this assessment has considered influences of traffic with respect to amenity noise levels (ie areas where existing traffic noise levels are 10dB greater than the recommended amenity noise level).

Furthermore, Section 2.4 of the NPI states "*where the project amenity noise level applies and it can be met, no additional consideration of cumulative industrial noise is required.* "

The recommended amenity noise levels as per Table 2.2 of the NPI are reproduced in **Table 3**.

Table 3 Amenity Noise Levels

Receiver Type	Noise Amenity Area	Time of day	Recommended amenity noise level dB LAeq(period)
Residential	Rural	Day	50
		Evening	45
		Night	40
	Suburban	Day	55
		Evening	45
		Night	40
	Urban	Day	60
		Evening	50
		Night	45
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks.	See column 4	See column 4	5dB above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day
School Classroom	All	Noisiest 1-hour period when in use	35 (internal) 45 (external)
Hospital ward			
- internal	All	Noisiest 1-hour	35
- external	All	Noisiest 1-hour	50
Place of worship - internal	All	When in use	40
Passive Recreation	All	When in use	50
Active Recreation	All	When in use	55
Commercial premises	All	When in use	65
Industrial	All	When in use	70

Notes: The recommended amenity noise levels refer only to noise from industrial noise sources. However, they refer to noise from all such sources at the receiver location, and not only noise due to a specific project under consideration. The levels represent outdoor levels except where otherwise stated.

Types of receivers are defined as rural residential; suburban residential; urban residential; industrial interface; commercial; industrial – see Table 2.3 and Section 2.7 of the NPI.

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

3.1.5 Maximum Noise Assessment Trigger Levels

The potential for sleep disturbance from maximum noise level events from a project during the night-time period needs to be considered. The NPI considers sleep disturbance to be both awakenings and disturbance to sleep stages.

Where night-time noise levels from a development/premises at a residential location exceed the following criteria, a detailed maximum noise level event assessment should be undertaken:

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

A detailed assessment should cover the maximum noise level, the extent to which the maximum noise level exceeds the rating background noise level, and the number of times this happens during the night-time period.

Other factors that may be important in assessing the impacts on sleep disturbance include:

- how often the events would occur;
- the distribution of likely events across the night-time period and the existing ambient maximum events in the absence of the development;
- whether there are times of day when there is a clear change in the noise environment (such as during early morning shoulder periods); and
- current understanding of effects of maximum noise level events at night.

The NPI outlines that additional guidance on maximum noise level assessments may be sourced from the EPA NSW Road Noise Policy (RNP). Section 5.4 of the RNP outlines that a maximum internal noise level of 50-55dBA is unlikely to awaken people from sleep. Taking into account a 10dB loss for a partially open window an external level of 65dBA in unlikely to awaken internal occupants. This level has been adopted to assess the impact of maximum noise events on occupant of commercial residential land uses to safeguard against sleep disturbance. The recommended ANL for the night period will be adopted for awakening assessment for these receivers.

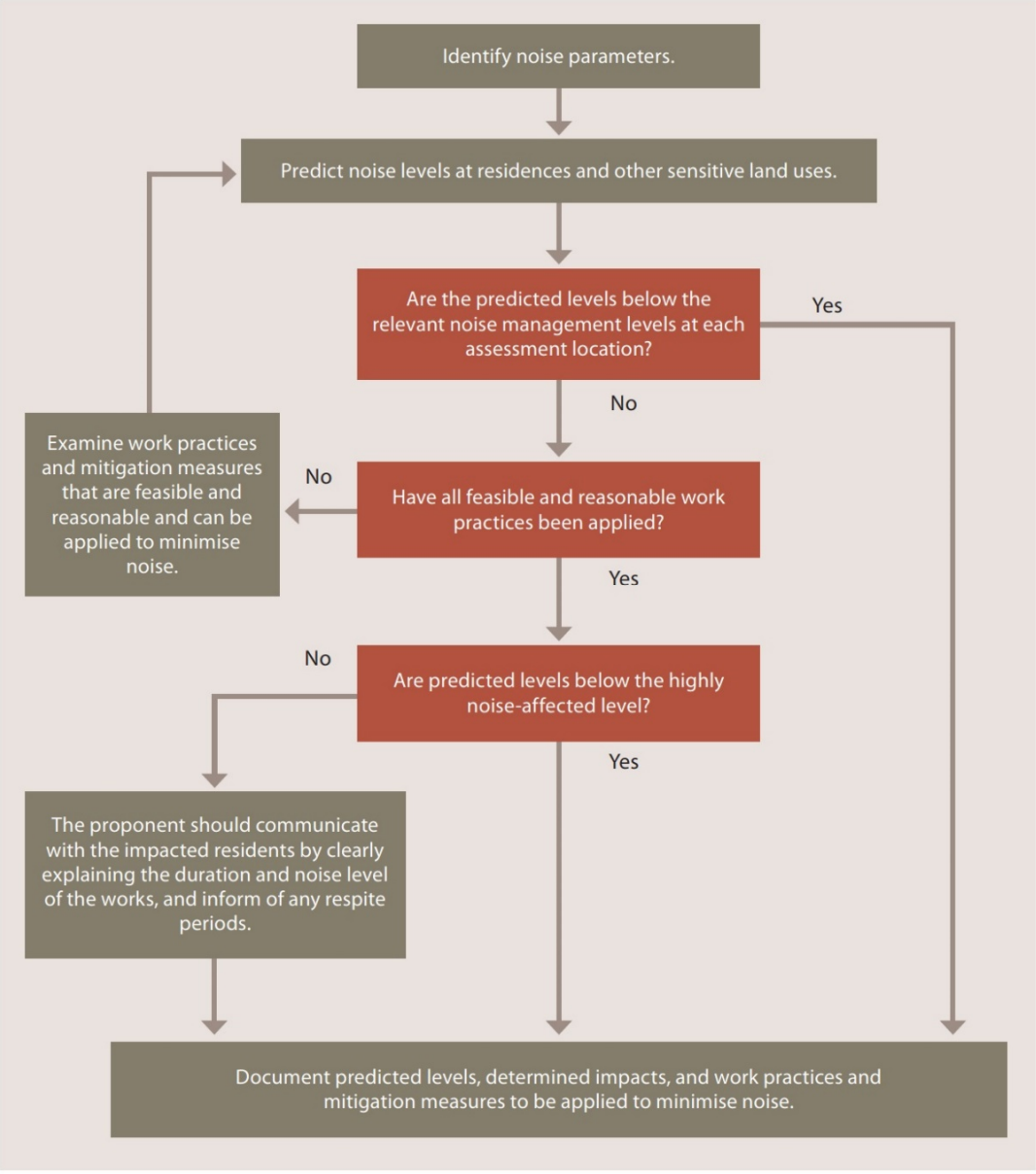
3.2 Interim Construction Noise Guideline

The ICNG sets out procedures to identify and address the impacts of construction noise on residences and other sensitive land uses. This section provides a summary of noise objectives that are applicable to the assessment. The ICNG provides two methodologies for the assessment of construction noise emissions:

- Quantitative, which is suited to major construction projects with typical durations of more than three weeks; and
- Qualitative, which is suited to short term infrastructure maintenance (< three weeks).

The qualitative assessment methodology is a more simplified approach that relies on noise management strategies. This NA has adopted a quantitative assessment approach which is summarised in **Figure 2.** The quantitative approach includes identification of potentially affected receivers, derivation of the construction noise management levels, quantification of potential noise impact at receivers via predictive modelling and, provides management and mitigation recommendations.

Figure 2 Quantitative Assessment Processes for Assessing and Managing Construction Noise



Source: Department of Environment and Climate Change, 2009.

3.2.1 Standard Hours for Construction

Table 4 presents the ICNG recommended standard hours for construction works.

Table 4 Recommended Standard Hours for Construction

Daytime	Construction Hours
Monday to Friday	7am to 6pm
Saturdays	8am to 1pm
Sundays or Public Holidays	No construction

These recommended hours do not apply in the event of direction from police, or other relevant authorities, for safety reasons or where required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm. Construction activities are anticipated to be undertaken during standard construction hours.

3.2.2 Construction Noise Management Levels

Section 4 of the ICNG details the quantitative assessment method involving predicting noise levels and comparing them with the Noise Management Level (NML) and are important indicators of the potential level of construction noise impact. **Table 5** reproduces the ICNG Noise Management Level (NML) for residential receivers. The NML is determined by adding 10dB (standard hours) or 5dB for Out of Hours (OOH) to the Rating Background Level (RBL) for each specific assessment period.

Table 5 Noise Management Levels		
Time of Day	Management Level LAeq(15min)[1]	How to Apply
Recommended standard hours: Monday to Friday 7am to 6pm Saturday 8am to 1pm No work on Sundays or public holidays.	Noise affected RBL + 10dB	The noise affected level represents the point above which there may be some community reaction to noise. Where the predicted or measured LAeq(15min) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level. The proponent should also inform all potentially impacted residents of the nature of work to be carried out, the expected noise levels and duration, as well as contact details.
	Highly Noise Affected 75dBA (HNA)	The highly noise affected level represents the point above which there may be strong community reaction to noise. Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account times identified by the community when they are less sensitive to noise such as before and after school for work near schools, or mid-morning or mid-afternoon for work near residences; and if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside recommended standard hours.	Noise affected RBL + 5dB	A strong justification would typically be required for work outside the recommended standard hours. The proponent should apply all feasible and reasonable work practices to meet the noise affected level. Where all feasible and reasonable practices have been applied and noise is more than 5dBA above the noise affected level, the proponent should negotiate with the community. For guidance on negotiating agreements see Section 7.2.2 of the ICNG.

Note 1: The Rating Background Level (RBL) is an overall single figure background level representing each assessment period over the whole monitoring period. The RBL is used to determine the construction noise management levels for noise assessment purposes and is the median of the ABL's.

3.2.3 Minimising Construction Noise

The ICNG outlines noise management and mitigation measures to minimise the noise impacts from construction activities on nearby sensitive receivers. Adopting the standard mitigation measures may result in an attenuation of up to 10dBA where space requirements place limitations on the attenuation options. Examples of standard mitigation measures are reproduced in **Table 6**, which may be adopted for the operation.

Table 6 Standard Mitigation Measures		
	Action Required	Details
Management Measures	Implement community consultation or notification measures	Notification detailing work activities, dates, and hours, impacts and mitigation measures, indication of work schedule over the night-time period, any operational noise benefits from the works (where applicable) and contact telephone number. Notification should be a minimum of 7 calendar days prior to the start of works. For projects other than maintenance works more advanced consultation or notification may be required. Please contact Roads and Maritime Communication and Stakeholder Engagement for guidance: - website (If required); - contact telephone number for community; - email distribution list (if required); and/or - community drop-in session (if required by approval conditions).
	Site Inductions	All employees, contractors and subcontractors are to receive an environmental induction. The induction must at least include: - all relevant project specific and standard noise and vibration mitigation measures; - relevant licence and approval conditions; - permissible hours of work; - any limitations on noise generating activities; - location of nearest sensitive receivers; - construction employee parking areas; - designated loading/unloading areas and procedures; - site opening/closing times (including deliveries); and - environmental incident procedures.
Site Controls	Minimise disturbance arising from delivery of goods to construction sites	Loading and unloading of materials/deliveries is to occur as far as possible from sensitive receivers. Select site access points and roads as far as possible away from sensitive receivers. Dedicated loading/unloading areas to be shielded if close to sensitive receivers. Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible. Avoid or minimise these out of hours movements where possible.
Path Controls	Shield stationary noise sources	Stationary noise sources should be enclosed or shielded whilst ensuring that the occupational health and safety of workers is maintained. Appendix D of AS2436:2010 lists materials suitable for shielding.
	Shield sensitive receivers from noise activities	Use structures to shield residential receivers from noise such as site shed placement; earth bunds; fencing; erection of operational stage noise barriers (where practicable) and consideration of site topography when situating plant.

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4 Existing Environment

4.1 Unattended Noise Monitoring

To quantify the existing background noise environment of the area, unattended noise monitoring was conducted at one location representative of the ambient environment surrounding the project site. The selected monitoring location is shown in **Figure 1** (L1) and is considered representative of surrounding residential receivers as per Fact Sheet B1.1 of the NPI. The unattended noise survey was conducted in general accordance with the procedures described in Standards Australia AS 1055:2018, "Acoustics – Description and Measurement of Environmental Noise".

The measurements were carried out using one Svantek 977 noise analyser from Tuesday 25 June 2024 to Thursday 4 July 2024. All acoustic instrumentation used carries appropriate and current NATA (or manufacturer) calibration certificates with records of all calibrations maintained by MAC as per Approved Methods for the measurement and analysis of environmental noise in NSW (EPA, 2022) and complies with AS/NZS IEC 61672.1-2019-Electroacoustics - Sound level meters - Specifications. Calibration of all instrumentation was checked prior to and following measurements. Drift in calibration did not exceed ±0.5dBA.

Observations on-site identified the surrounding locality was typical of an urban environment, with road and rail traffic, commercial noise and wildlife noise audible.

Data affected by adverse meteorological conditions have been excluded from the results in accordance with methodologies provided in Fact Sheet A4 of the NPI. Residential receivers situated in the surrounding area have been classified under the EPA's urban amenity category. This criteria is used in conjunction with the intrusiveness criteria to determine the limiting criteria. The summary results of long-term unattended noise monitoring are provided in **Table 7**. The measured daily ABLs for the background monitoring are provided in **Table C21** in **Appendix C** along with the daily noise monitoring charts.

Table 7 Background Noise Monitoring Summary

Location	Measured background noise level, RBL, dBA			Measured LA_{eq}, dBA		
	Day 7am to 6pm	Evening 6pm to 10pm	Night 10pm to 7am	Day 7am to 6pm	Evening 6pm to 10pm	Night 10pm to 7am
L1	52	46	33	62	63	56

Note: Excludes periods of wind or rain affected data. Meteorological data obtained from the Bureau of Meteorology weather station Tamworth Airport AWS 31.070S 150.83E 395m AMSL.

4.2 Attended Noise Monitoring

To supplement the unattended noise assessment and to quantify the changes in ambient noise in the community surrounding the operation, one 15 minute attended measurement was completed.

The attended noise survey was conducted in general accordance with the procedures described in Australian Standard AS 1055:2018, "Acoustics – Description and Measurement of Environmental Noise".

The acoustic instrumentation used carries current NATA calibration and complies with AS/NZS IEC 61672.1-2019-Electroacoustics - Sound level meters - Specifications. Calibration of all instrumentation was checked prior to and following measurements. Drift in calibration did not exceed ±0.5dBA. All equipment carries appropriate and current NATA (or manufacturer) calibration certificates with records of all calibrations maintained by MAC as per the EPA's Approved Methods for the measurement and analysis of environmental noise in NSW (EPA, 2022).

The attended noise monitoring was conducted using one Svantek 971 noise analyser at the site (see **Figure 1**) on Tuesday 25 June 2024 to quantify ambient background noise levels

The attended measurement was completed during calm and clear meteorological conditions and confirmed that ambient traffic and commercial noise dominated the surrounding environment. The results of the short-term noise measurement and observations are summarised in **Table 8**.

Table 8 Operator-Attended Noise Survey Results

Location	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		L_{Amax}	L_{Aeq}	L_{A90}		
ATT1	12:56	79	63	54	WD: NW WS: 1.0m/s Rain: Nil	Traffic 54-79

Note 1: Day – the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening – the period from 6pm to 10pm; Night – the remaining periods.

5 Assessment Criteria

5.1 Operational Noise Trigger Levels (Criteria)

This section outlines the determination of PNTLs and Maximum Noise Assessment Trigger Levels in accordance with NPI methodology.

5.1.1 Intrusiveness Noise Levels

The PINL for the project are presented in **Table 9** and have been determined based on the RBL +5dBA and only apply to residential receivers.

Table 9 Project Intrusiveness Noise Levels

Location	Receiver Type	Period[1]	Measured RBL dB LA_{90}	PINL dB $LA_{eq(15min)}$
L1	Residential	Day	52	57
		Evening	46	51
		Night	33	38

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

5.1.2 Determination of NPI Residential Receiver Amenity Category

Classification of residential receivers in the surrounding area have been determined by review of the measured RBLs and a tally of the features for each category described in Table 2.3 of the NPI. The overall tally of features and resulting classifications are provided in **Table 10**. The detailed assessment of receiver categories is provided in **Appendix D.** This classification is used in conjunction with the intrusiveness criteria to determine the limiting criteria.

Table 10 Determination of NPI Residential Receiver Category

Receiver/Location/Catchment	Rural	Suburban	Urban
L1	0	1	5

Observations at locations in the surrounding locality support the assessment of the receiver as an urban residential category.

5.1.3 Amenity Noise Levels and Project Amenity Noise Levels

The PANL for residential receivers and other receiver types (ie non-residential) potentially affected by the project are presented in **Table 11.**

Table 11 Amenity Noise Levels and Project Amenity Noise Levels

Receiver Type	Noise Amenity Area	Assessment Period[1]	NPI Recommended ANL dB $LA_{eq(period)}$ [2]	ANL dB $LA_{eq(period)}$	PANL dB $LA_{eq(15min)}$ [5]
Residential	Urban	Day	60	55[3]	58
		Evening	50	48[4]	51
		Night	45	41[4]	44
Hotels Motels	Rural/Urban/ Suburban	Day	65	60[3]	63
		Evening	55	50[3]	53
		Night	50	45[3]	48
Commercial	All	When in use	65	60[3]	63

Note 1: Day – the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening – the period from 6pm to 10pm; Night – the remaining periods.

Note 2: Recommended amenity noise levels as per Table2.2 of the NPI.

Note 3: Project Amenity Noise Level equals the Amenity Noise Level -5dB as there is other industry in the area.

Note 4: LAeq,period (traffic) as per section 2.4.1 of the NPI (i.e. existing LAeq Traffic -15dB).

Note 5: Includes a +3dB adjustment to the amenity period level to convert to a 15-minute assessment period as per Section 2.2 of the NPI.

5.1.4 Project Noise Trigger Levels

The PNTL are the lower of either the PINL or the PANL. **Table 12** presents the derivation of the PNTLs in accordance with the methodologies outlined in the NPI.

Table 12 Project Noise Trigger Levels

Receiver Type	Noise Amenity Area	Assessment Period[1]	PINL dB $LA_{eq(15min)}$	PANL dB $LA_{eq(15min)}$	PNTL dB $LA_{eq(15min)}$
Residential	Urban	Day	57	58	57
		Evening	51	51	51
		Night	38	44	38
Hotels Motels	Urban	Day	N/A	63	63
		Evening	N/A	53	53
		Night	N/A	48	48
Commercial	All	When in Use	N/A	63	63

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

5.1.5 Maximum Noise Trigger Levels

The maximum noise trigger levels shown in **Table 13** are based on night time RBLs and trigger levels as per Section 2.5 of the NPI. The trigger levels will be applied to transient noise events that have the potential to cause sleep disturbance.

Table 13 Maximum Noise Trigger Levels (Night)

NPI Residential Receivers			
$L_{Aeq(15min)}$		L_{Amax}	
40dB $L_{Aeq(15min)}$ or RBL + 5dB		52dB L_{Amax} or RBL + 15dB	
Trigger	40	Trigger	52
RBL +5dB	38	RBL +15dB	48
Highest	**40**	**Highest**	**52**
RNP Temporary Accommodation Receivers			
$L_{Aeq(15min)}$		L_{Amax}	
N/A		**65**	

Note: Monday to Saturday; Night 10pm to 7am. On Sundays and Public Holidays Night 10pm to 8am.

Note: NPI identifies that maximum of the two values is to be adopted which is shown in bold font.

5.2 Construction Noise Management Levels

The relevant Noise Management Levels (NMLs) for standard construction hours are presented in **Table 14**.

Table 14 Construction Noise Management Levels

Catchment	Assessment Period[1]	Adopted RBL dB L_{A90}	NML dB $L_{Aeq(15min)}$
Residential	Standard Hours	52	62 (RBL+10dBA)
Commercial Premises	When in use	N/A	70 (external)[2]

Note 1: Refer to Table 4 for Standard Recommended Hours for Construction.

Note 2: Includes Temporary Accommodation Receivers.

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6 Modelling Methodology

A computer model was developed to quantify project noise emissions to neighbouring receivers using DGMR (iNoise, Version 2024.1) noise modelling software. iNoise is an intuitive and quality assured software for industrial noise calculations in the environment. 3D noise modelling is considered industry best practice for assessing noise emissions from projects.

The model incorporated a three-dimensional digital terrain map giving all relevant topographic information used in the modelling process. Additionally, the model uses relevant noise source data, ground type, attenuation from barrier or buildings and atmospheric information to predict noise levels at the nearest potentially affected receivers. Where relevant, modifying factors in accordance with Fact Sheet C of the NPI have been applied to calculations.

The model calculation method used to predict noise levels was in accordance with ISO 9613:1 and ISO 9613:2 including corrections for meteorological conditions using CONCAWE[1]. The ISO 9613 standards are the most used noise prediction method worldwide. Many countries refer to ISO 9613 in their noise legislation. However, the ISO 9613 standard does not contain guidelines for quality assured software implementation, which leads to differences between applications in calculated results. In 2015 this changed with the release of ISO/TR 17534-3. This quality standard gives clear recommendations for interpreting the ISO 9613 method. iNoise fully supports these recommendations. The models and results for the 19 test cases are included in the software.

[1] Report no. 4/18, "the propagation of noise from petroleum and petrochemical complexes to neighbouring communities", Prepared by C.J. Manning, M.Sc., M.I.O.A. Acoustic Technology Limited (Ref.AT 931), CONCAWE, Den Haag May 1981

6.1 Mitigation Included in Design and Noise Control Recommendations

The noise model incorporated the following recommendations and noise controls:

- the project is constructed as per the site design and plans (as presented in **Appendix B**) which includes the barrier attenuation provided by the operation buildings orientation;
- the mechanical AC and refrigeration plant is located on the rooftop of the garbage area of the operation which is surrounded on the north and east of the plant platform by a solid acoustic barrier which extends a minimum of 500mm above the top of the highest item of plant. The barrier should be constructed of materials with a minimum density of 10kg/m^2 and not contain any gaps, additionally the plant area is surrounded by acoustic louvres on the west and south of the plant deck which also extend 500mm above the top of the highest item of plan; and
- construction of an acoustic barrier along the northern and eastern boundary of the site (see **Figure 3**). The barrier is to be a minimum height of 1,800mm above the ground level of FFL of the operation carpark and is to be constructed of materials with a minimum density of 10kg/m^2 and not contain any gaps.

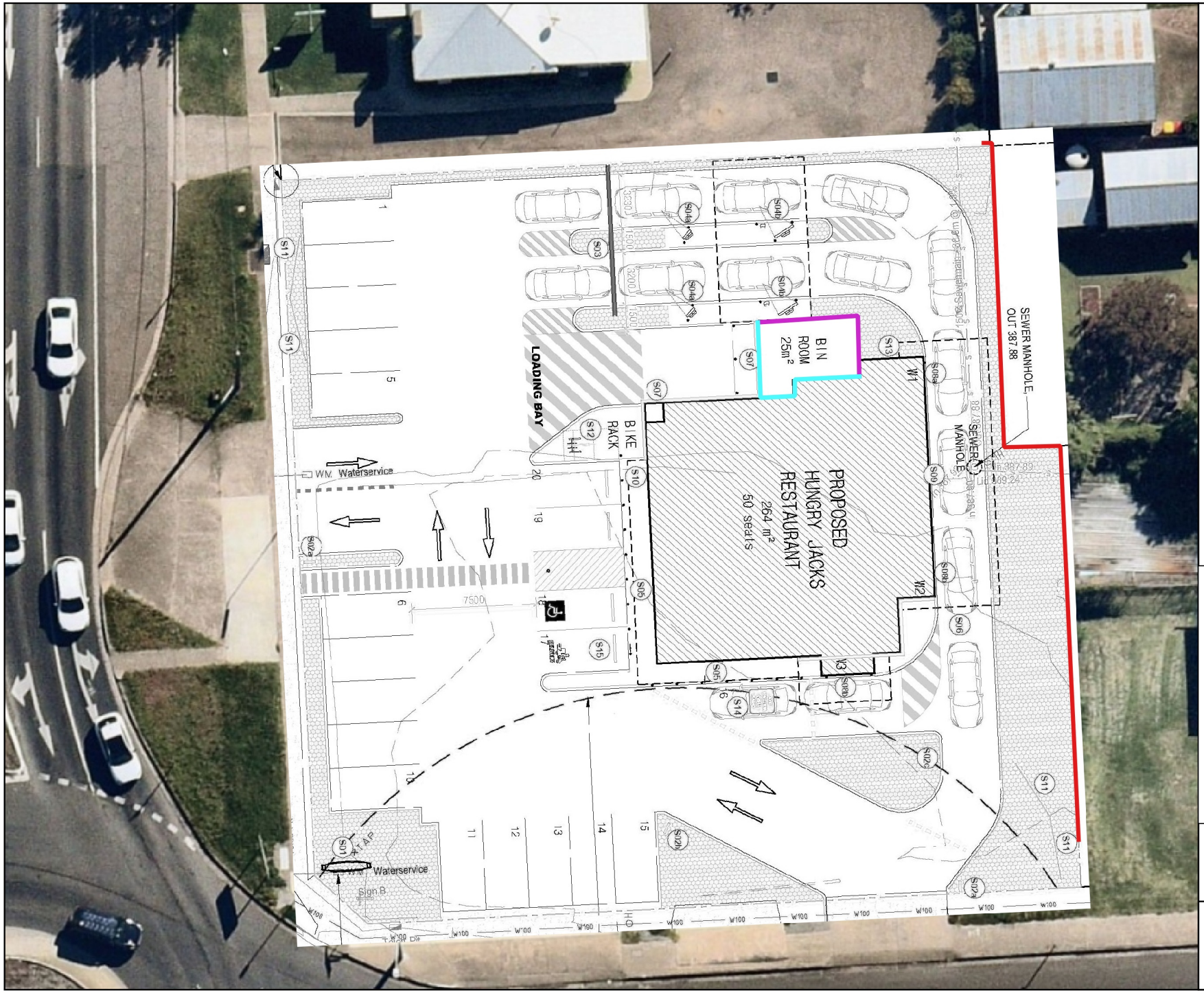

FIGURE 3

Barrier Plan

MAC242163-01

Hungry Jack's

South Tamworth, NSW

KEY

Barrier

- Acoustic Louvres
- 1.8m Acoustic Barrier
- Mechancial Plant Acoustic Barrier

0 2 4 6 8 10 m

N

MAC
Muller Acoustic Consulting

6.2 Sound Power Levels

Table 15 presents the sound power levels for each noise source modelled in this assessment. It is noted that sound power levels were sourced from manufacturer's specifications or from in-field measurements at similar project sites. Only high front-loading waste trucks have been considered as part of this assessment.

Table 15 Acoustically Significant Sources – Sound Power Levels dBA *(re 10^{-12} Watts)*

Item and quantity (per 15 minutes)	Sound Power Level dB LAeq	Total Sound Power Level dB LAeq(15min)	Source Height[1]
Operation			
KEX01 Extractor Fans (x1)	70	70	0.5m
KEX02 Extractor Fans (x1)	70	70	0.5m
MAF01 Make Up Fan (x1)	70	70	0.5m
MAF02 Make Up Fan (x1)	65	65	0.5m
GEF 01 Extractor Fan (x1)	58	58	0.5m
GEF 01 Extractor Fan (x1)	57	57	0.5m
TEF 01 Extractor Fan (x1)	57	57	0.5m
AC01 AC Condenser Plant (x1)	80	80	1.9m
AC02 AC Condenser Plant (x1)	78	78	1.9m
Refrigeration Condenser (x2)	76	79	1.2m
Customer Ordering Displays (x2)	75	78	1.0m
Truck Deliveries (x1)	92	92	1.0m
Waste Collection (x1)	86	86	2.5m
Car Idle, start up and drive off (x10)[2]	81	83	0.5m
Customers Vehicles travelling through Car Park (10 cars per 15min)[3]	81	83	0.5m
Customers Vehicles travelling through Drive-Thru (15 cars per 15min)[3]	81	85	0.5m
Sleep disturbance assessment (L_{Amax}), Night-time periods (10pm to 7am)			
Waste Collection Impact		104	3.0m
Car Door Slam		87	1.0m
Construction Fleet			
Combined Construction Fleet		108	1.5m

Note 1: Height above the relative ground or building below source.

Note 2: Includes a duration adjustment assuming vehicles operate for three (3) minutes continuously within a period of 15-minutes.

Note 3: There is a 50% reduction in the onsite vehicles during the night period.

7 Noise Assessment Results

This assessment has quantified operational noise levels at the nearest receivers.

7.1 Operational Noise Assessment

Noise predictions from all sources (excluding deliveries and waste collection) have been quantified at surrounding residential receivers to the operation site and are presented in **Table 16**.

Table 16 Operational Noise Predictions Excluding Deliveries or Waste Collection

Residential Receivers

Rec	Predicted Noise Level dB $L_{Aeq(15min)}$			PNTL dB $L_{Aeq(15min)}$			Compliant
	Day	Evening	Night	Day	Evening	Night	
R01	36	36	<35	57	51	38	✓
R02	<35	<35	<35	57	51	38	✓
R03	35	35	<35	57	51	38	✓
R04	<35	<35	<35	57	51	38	✓
R05	38	38	37	57	51	38	✓
R06	39	39	38	57	51	38	✓
R07	35	35	<35	57	51	38	✓
R08	39	39	37	57	51	38	✓
R09	40	40	38	57	51	38	✓
R10	38	38	36	57	51	38	✓
R11	<35	<35	<35	57	51	38	✓
TA01	37	37	35	63	53	48	✓
TA02	37	37	35	63	53	48	✓
TA03	37	37	35	63	53	48	✓

Other Receivers

Rec	Period	Predicted Noise Level dB $L_{Aeq(15min)}$	PNTL dB $L_{Aeq(15min)}$	Compliant
C01	When in use	43	63	✓
C02	When in use	36	63	✓

Note 1: Day – the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening – the period from 6pm to 10pm; Night – the remaining periods.

Noise levels from are predicted to satisfy the relevant NPI noise criteria at all receivers during all assessment periods.

Heavy vehicle deliveries are expected to be undertaken once per day, during the day or evening periods. Deliveries usually take several minutes, but to present a conservative assessment, it has been assumed that it would take up to an hour to complete. Fact Sheet C of the NPI allows for exceedance of the PNTL or adjustment of the PNTL for short term single events that may occur in any 24-hour period. Table C3 of the NPI allows an adjustment to the PNTL of +5dB for the daytime and evening periods when the event is expected to occur. **Table 17** presents results of the noise modelling for operations with heavy vehicle goods deliveries.

Table 17 Operational Noise Predictions Including Consumable Deliveries

Residential Receivers

Rec	Predicted Noise Level dB $LA_{eq(15min)}$		PNTL dB $LA_{eq(15min)}$		Compliant
	Day	Evening	Day	Evening	
R01	45	45	62	56	✓
R02	42	42	62	56	✓
R03	45	45	62	56	✓
R04	35	35	62	56	✓
R05	38	38	62	56	✓
R06	40	40	62	56	✓
R07	36	36	62	56	✓
R08	39	39	62	56	✓
R09	40	40	62	56	✓
R10	38	38	62	56	✓
R11	36	36	62	56	✓
TA01	45	45	68	58	✓
TA02	46	46	68	58	✓
TA03	46	46	68	58	✓

Other Receivers

Rec	Period	Predicted Noise Level dB $LA_{eq(15min)}$	PNTL dB $LA_{eq(15min)}$	Compliant
C01	When in use	51	68	✓
C02	When in use	39	68	✓

Note 1: Day – the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening – the period from 6pm to 10pm; Night – the remaining periods.

Noise levels from are predicted to satisfy the relevant NPI noise criteria at all receivers during all assessment periods.

Waste collections are expected to be undertaken once per day during the day, evening and night periods. Waste collection usually takes several minutes, but to present a conservative assessment, it has been assumed that it would take up to 15 minutes to complete. Fact Sheet C of the NPI allows for exceedance of the PNTL or adjustment of the PNTL for short term single events that may occur in any 24-hour period. Table C3 of the NPI allows an adjustment to the PNTL of +7dB for the daytime and evening periods and +2dB during the night period, when the event is expected to occur. **Table 18** presents results of the noise modelling for operations with waste collection.

Table 18 Operational Noise Predictions Including Waste Collection

Residential Receivers

Rec	Predicted Noise Level dB $L_{Aeq(15min)}$			PNTL dB $L_{Aeq(15min)}$			Compliant
	Day	Evening	Night	Day	Evening	Night	
R01	40	40	39	64	58	40	✓
R02	37	37	36	64	58	40	✓
R03	40	40	40	64	58	40	✓
R04	35	35	35	64	58	40	✓
R05	38	38	38	64	58	40	✓
R06	39	39	38	64	58	40	✓
R07	35	35	<35	64	58	40	✓
R08	39	39	38	64	58	40	✓
R09	40	40	38	64	58	40	✓
R10	38	38	36	64	58	40	✓
R11	35	35	33	64	58	40	✓
TA01	40	40	39	70	60	50	✓
TA02	40	40	39	70	60	50	✓
TA03	40	40	39	70	60	50	✓

Other Receivers

Rec	Period	Predicted Noise Level dB $L_{Aeq(15min)}$	PNTL dB $L_{Aeq(15min)}$	Compliant
C01	When in use	47	70	✓
C02	When in use	37	70	✓

Note 1: Day – the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening – the period from 6pm to 10pm; Night – the remaining periods.

Noise levels from are predicted to satisfy the relevant NPI noise criteria at all receivers during all assessment periods.

7.1.1 Maximum Noise Level Assessment

In assessing maximum noise events, typical LAmax noise levels from transient events were assessed at the nearest residential receivers. For the sleep disturbance assessment, a sound power level of 104dBA for a waste collection impact and 87dBA for a door slam in the southernmost car parking spaces are adopted for this assessment. Predicted noise levels from LAmax events for assessed receivers are presented in **Table 19.**

Table 19 Maximum Noise Trigger Level Assessment (Night)[1]

Night Period						
Rec	Predicted Noise Level dB LAmax				Trigger Level	
	Waste Impact In The Loading Bay	Door Slam Northern Car Park Space	Door Slam Western Car Park Space	Door Slam Southern Car Park Space	NPI dB LAmax	RNP dB LAmax
Residential Receivers						
R01	57	40	<35	36	52	65
R02	52	37	<35	<35	52	65
R03	58	<35	<35	<35	52	65
R04	52	<35	37	<35	52	65
R05	43	<35	40	<35	52	65
R06	42	<35	44	37	52	65
R07	42	<35	40	37	52	65
R08	43	<35	44	42	52	65
R09	37	38	46	43	52	65
R10	48	35	41	43	52	65
R11	53	<35	36	36	52	65
Temporary Accommodation Receivers						
Rec	Waste Impact In The Loading Bay	Door Slam Northern Car Park Space	Door Slam Western Car Park Space	Door Slam Southern Car Park Space	RNP[2] dB LAmax	
TA01	56	39	36	39	65	
TA02	58	40	35	38	65	
TA03	58	40	26	37	65	

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note 2: RNP for commercial residential receivers only.

The predicted maximum levels results show compliance with the maximum noise trigger levels for door slams. Maximum noise emissions levels from waste collection have the potential to be above the Maximum Noise Trigger Levels at several assessed receivers. Notwithstanding, in accordance with Section 2.5 of the NPI, a detail sleep disturbance assessment has been undertaken.

7.2 Detailed Sleep Disturbance Assessment

Section 5.2 of the NPI outlines the other factors that may be important in assessing the extent of impacts on sleep. These other factors include:

- how often high noise events will occur;
- the distribution of likely events across the night-time period and the existing ambient maximum events in the absence of the subject development;
- whether there are times of day when there is a clear change in the noise environment (such as during early-morning shoulder periods); and
- current scientific literature available at the time of the assessment regarding the impact of maximum noise level events at night.

Reviewing the proposed waste collection for the operation site, they will occur once a day and are proposed to be undertaken during either the day, evening or night assessment periods. Therefore, the maximum occurrence of high noise events from waste collection is once per day, with the majority of collections to be undertaken during the day or evening periods, resulting in no sleep disturbance events at all.

Additionally, the NPI outlines that additional guidance on maximum noise level assessments may be sourced from the EPA NSW Road Noise Policy (RNP). Section 5.4 of the RNP outlines that a maximum internal noise level of 50-55dBA is unlikely to awaken people from sleep. Taking into account a 10dB loss for a partially open window, an external level of 65dBA is unlikely to awaken internal occupants.

It is noted that no receiver is predicted to experience noise levels above 65dBA L_{Amax} sleep disturbance criteria from waste collection or deliveries.

Accordingly, due to the low occurrence of these events occurring during the night period which are not predicted to be above the maximum level of 65dBA, the potential for sleep disturbance is considered negligible.

7.3 Construction Noise Assessment

Table 20 presents the results of modelled construction noise emissions taking into account the additional 10dB attenuation provided by standard mitigation measures. Predictions identify that emissions from construction would remain below the Construction NMLs at all the assessed receivers with the inclusion of standard mitigation measures.

Table 20 Construction Noise Levels – All Receivers

Rec	Period[1]	Predicted Noise Level dB $L_{Aeq(15min)}$	Management Level dB $L_{Aeq(15min)}$	Compliant
R01	Day	49	62	✓
R02	Day	47	62	✓
R03	Day	38	62	✓
R04	Day	54	62	✓
R05	Day	56	62	✓
R06	Day	56	62	✓
R07	Day	50	62	✓
R08	Day	53	62	✓
R09	Day	53	62	✓
R10	Day	49	62	✓
R11	Day	47	62	✓
TA01	Day	50	70	✓
TA02	Day	50	70	✓
TA03	Day	50	70	✓
C01	Day	52	70	✓
C02	Day	48	70	✓

Note 1: See Table 4 of this report for Recommended Standard Hours for Construction.

8 Discussion and Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Assessment to quantify emissions from the Proposed Hungry Jacks Operation (the operation) to be located at 254-256 Goonoo Goonoo Road, South Tamworth, NSW.

The assessment has quantified potential operation emissions pertaining to customer generated noise, including light vehicles, truck deliveries and mechanical plant. The results of the Noise Assessment demonstrate that noise emissions from the project would satisfy the relevant PNTLs at all assessed receivers for all assessment periods once noise controls for the project are implemented (see **Section 6.1**):

- the project is constructed as per the site design and plans (as presented in **Appendix B**) which includes the barrier attenuation provided by the operation buildings orientation;
- the mechanical AC and refrigeration plant is located on the rooftop of the garbage area of the operation which is surrounded on the north and east of the plant platform by a solid acoustic barrier which extends a minimum of 500mm above the top of the highest item of plant. The barrier should be constructed of materials with a minimum density of 10kg/m^2 and not contain any gaps, additionally the plant area is surrounded by acoustic louvres on the west and south of the plant deck which also extend 500mm above the top of the highest item of plan; and
- construction of an acoustic barrier along the northern and eastern boundary of the site (see **Figure 3**). The barrier is to be a minimum height of 1,800mm above the ground level of FFL of the operation carpark and is to be constructed of materials with a minimum density of 10kg/m^2 and not contain any gaps

Furthermore, sleep disturbance is not anticipated, as emissions from maximum noise events (door slams) are predicted to satisfy the NPIs maximum noise trigger levels.

Sleep disturbance noise emissions from waste collection may have the potential to be above the Maximum Noise Trigger Levels, however a detailed sleep disturbance assessment demonstrated that due to the low occurrence of these events occurring during the night period which are not predicted to be above the maximum level of 65dBA.

Modelled noise emissions from construction activities identify that predicted noise emissions will remain below the applicable construction management levels at all receivers taking into account the standard mitigation measures (see **Table 6**).

In summary, the Noise Assessment supports the Development Application for the project incorporating the recommendations and controls outlined in this report.

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Appendix A – Glossary of Terms

A number of technical terms have been used in this report and are explained in **Table A1**.

Table A1 Glossary of Acoustical Terms

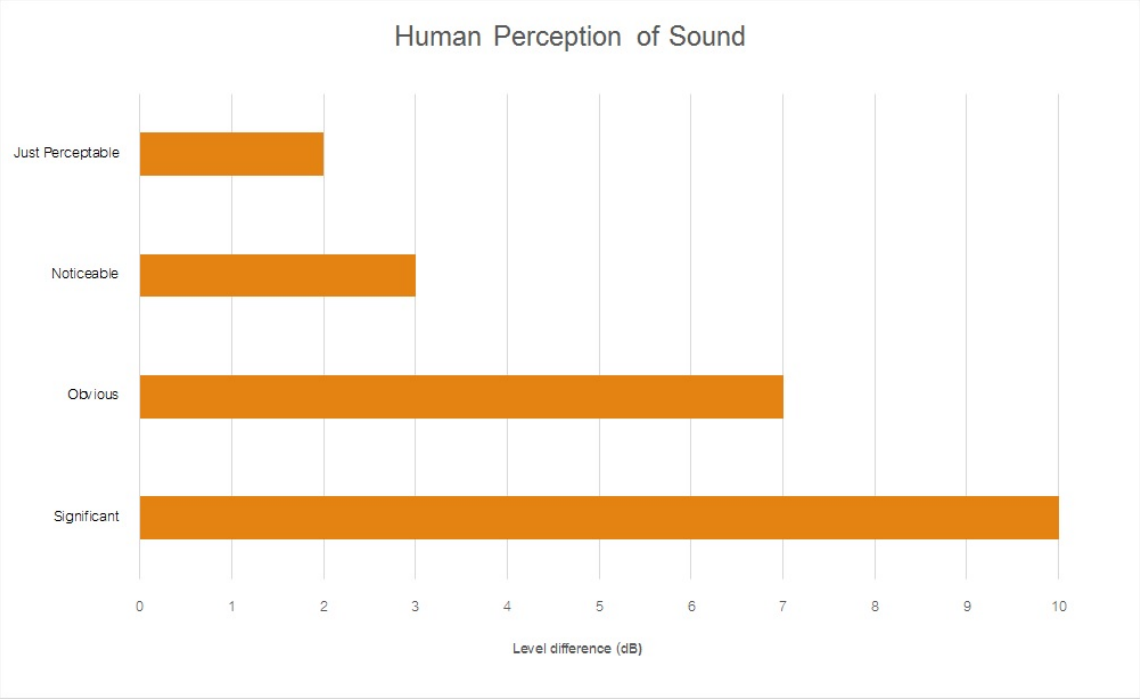
Term	Description
1/3 Octave	Single octave bands divided into three parts
Octave	A division of the frequency range into bands, the upper frequency limit of each band being twice the lower frequency limit.
ABL	Assessment Background Level (ABL) is defined in the NPI as a single figure background level for each assessment period (day, evening and night). It is the tenth percentile of the measured L90 statistical noise levels.
Ambient Noise	The total noise associated with a given environment. Typically, a composite of sounds from all sources located both near and far where no particular sound is dominant.
A Weighting	A standard weighting of the audible frequencies designed to reflect the response of the human ear to sound.
Background Noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is usually represented by the LA90 descriptor
dBA	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
dB(Z), dB(L)	Decibels Z-weighted or decibels Linear (unweighted).
Extraneous Noise	Sound resulting from activities that are not typical of the area.
Hertz (Hz)	The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz.
LA10	A sound level which is exceeded 10% of the time.
LA90	Commonly referred to as the background noise, this is the level exceeded 90% of the time.
LAeq	Represents the average noise energy or equivalent sound pressure level over a given period.
LAmax	The maximum sound pressure level received at the microphone during a measuring interval.
Masking	The phenomenon of one sound interfering with the perception of another sound. For example, the interference of traffic noise with use of a public telephone on a busy street.
RBL	The Rating Background Level (RBL) as defined in the NPI, is an overall single figure representing the background level for each assessment period over the whole monitoring period. The RBL, as defined is the median of ABL values over the whole monitoring period.
Sound power level (Lw or SWL)	This is a measure of the total power radiated by a source in the form of sound and is given by 10.log10 (W/Wo). Where W is the sound power in watts to the reference level of 10^{-12} watts.
Sound pressure level (Lp or SPL)	the level of sound pressure; as measured at a distance by a standard sound level meter. This differs from Lw in that it is the sound level at a receiver position as opposed to the sound 'intensity' of the source.

Table A2 provides a list of common noise sources and their typical sound level.

Table A2 Common Noise Sources and Their Typical Sound Pressure Levels (SPL), dBA

Source	Typical Sound Pressure Level
Threshold of pain	140
Jet engine	130
Hydraulic hammer	120
Chainsaw	110
Industrial workshop	100
Lawn-mower (operator position)	90
Heavy traffic (footpath)	80
Elevated speech	70
Typical conversation	60
Ambient suburban environment	40
Ambient rural environment	30
Bedroom (night with windows closed)	20
Threshold of hearing	0

Figure A1 – Human Perception of Sound



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Appendix B – Site Plans

HUNGRY JACK'S TAMWORTH SOUTH

254-256 GOONOO GOONOO ROAD, SOUTH TAMWORTH NSW 2340

LOCATION PLAN

DRAWING LIST

DA-	COVER PAGE & LOCATION PLAN
DA01	DEMOLITION SITE PLAN
DA02	SITE PLAN & SIGNAGE LOCATION PLAN
DA03	PROPOSED FLOOR PLAN
DA04	ELEVATIONS SHEET 1
DA05	ELEVATIONS SHEET 2
DA06	SIGNAGE DETAILS SHEET 1
DA07	SIGNAGE DETAILS SHEET 2
DA08	SIGNAGE DETAILS SHEET 3
DA09	DRIVE-THRU ORDER STATION DETAILS
DA10	EXTERNAL FINISHES SCHEDULE
DA11	3D VIEWS
DA12	PROPOSED ROOF PLAN
DA13	SECTION AA & BB
DA14	NOTIFICATION PLAN

VERIFY ALL DIMENSIONS AND LEVELS ON SITE AND REPORT ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORK. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE FROM DRAWINGS. THE COMPLETION OF THE ISSUE DETAILS CHECKED AND AUTHORISED SECTION IS CONFIRMATION OF THE STATUS OF THE DRAWING. THE DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ENDORSED 'FOR CONSTRUCTION' AND AUTHORISED FOR ISSUE.

CLIENT

HUNGRY JACK'S PTY. LTD.
L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	01.02.24	ISSUE FOR HJ REVIEW	SF
B	17.05.24	ISSUE FOR DISCUSSION	SF
C	02.09.24	ISSUE FOR DA	LL

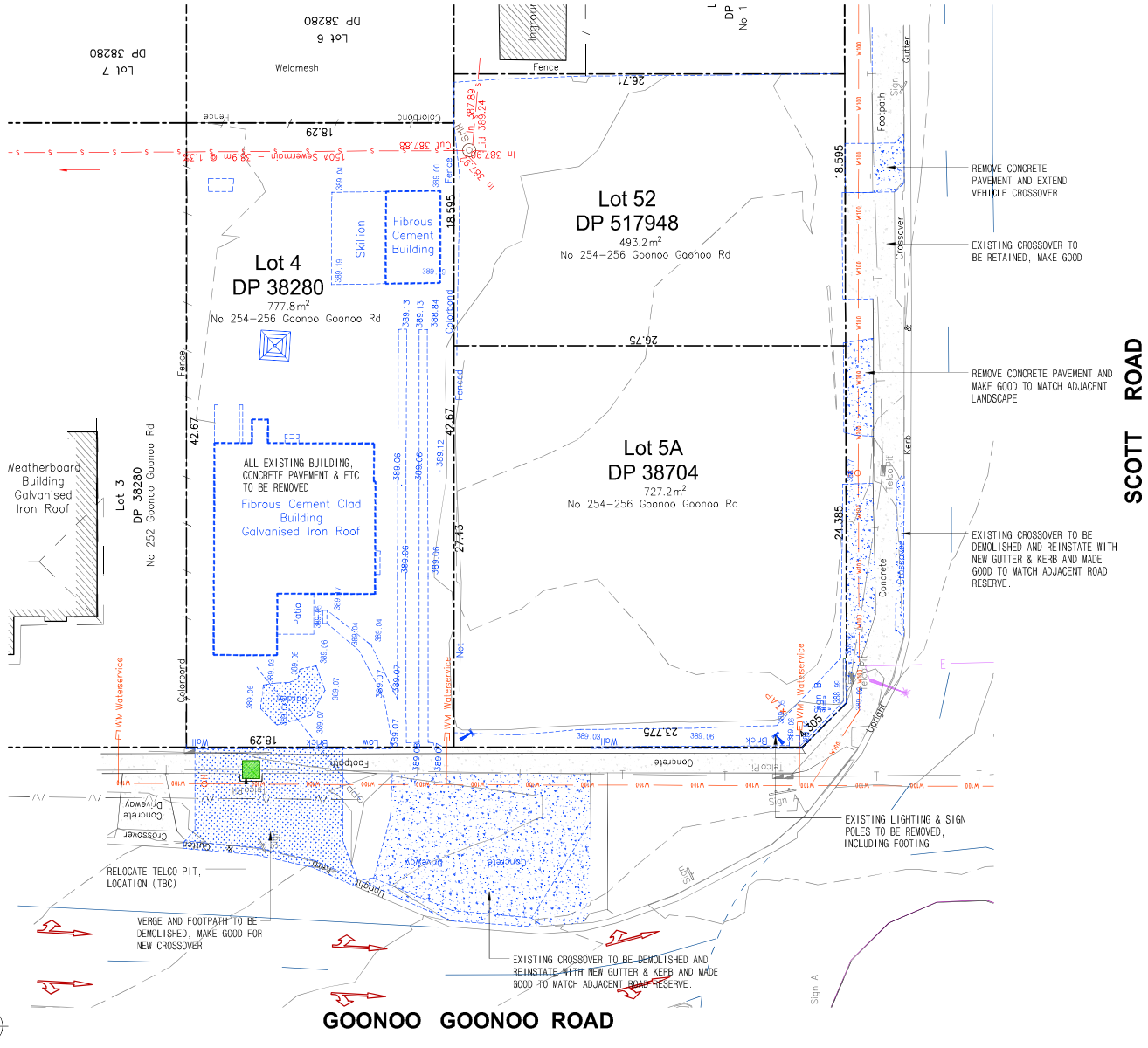
PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING **COVER PAGE & LOCATION PLAN**

PROJECT NO. 230905	DATE APRIL 2024	
SCALE NTS@A3	DRAWING NO. DA-	REV. C

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
PH : 02 8590 5185
info@fangarchitects.com.au
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS



LEGEND

TO BE RELOCATED

TO BE REMOVED

VERIFY ALL DIMENSIONS AND LEVELS ON SITE AND REPORT ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORK. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE FROM DRAWINGS. THE COMPLETION OF THE ISSUE DETAILS CHECKED AND AUTHORISED SECTION IS CONFIRMATION OF THE STATUS OF THE DRAWING. THE DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ENDORSED 'FOR CONSTRUCTION' AND AUTHORISED FOR ISSUE.

CLIENT

HUNGRY JACK'S PTY. LTD.
L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	22.04.24	ISSUE FOR HJ REVIEW	SF
B	16.08.24	ISSUE FOR HJ REVIEW	LL
C	20.08.24	ISSUE FOR COORDINATION	LL
D	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

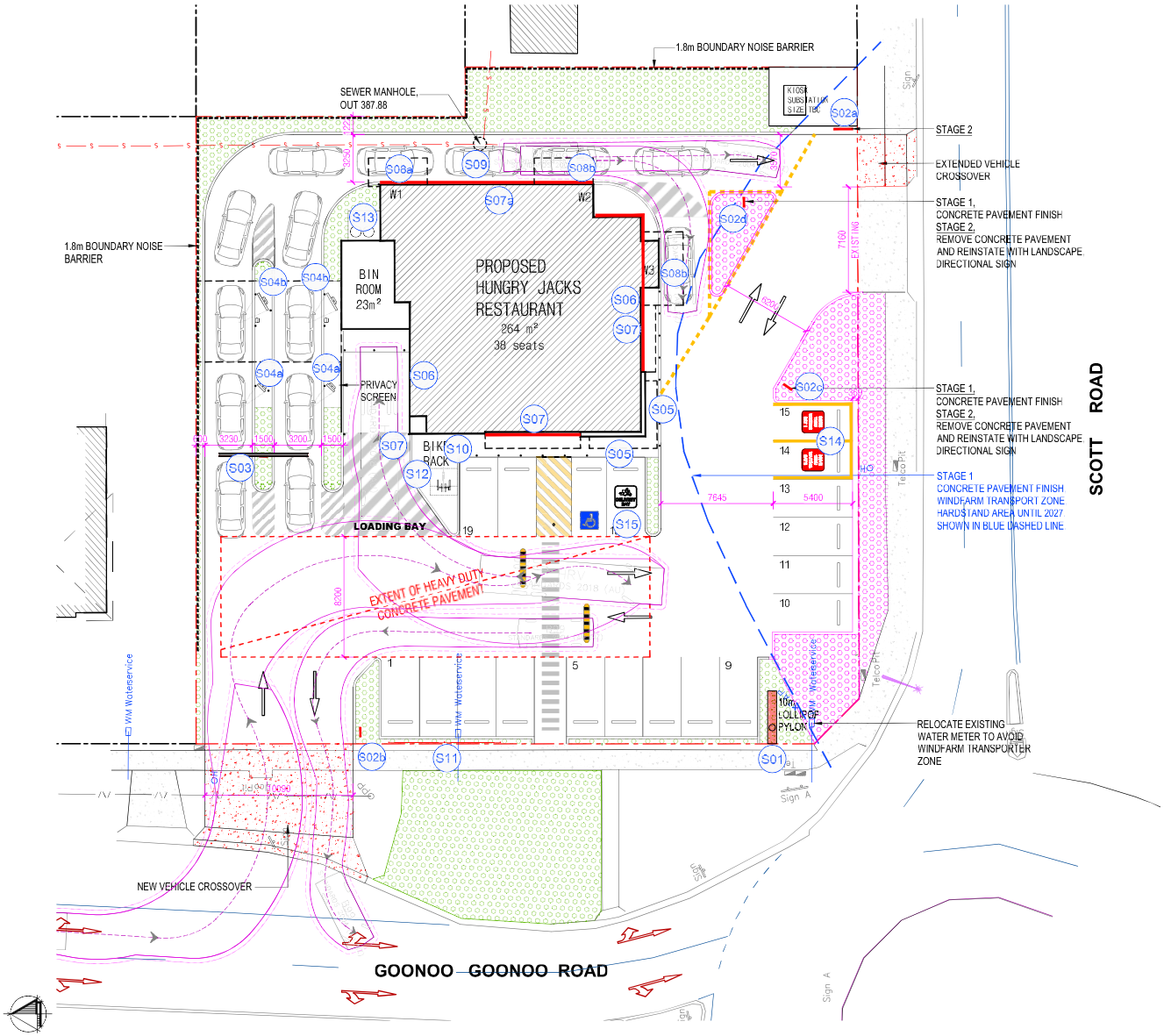
TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING

DEMOLITION SITE PLAN

PROJECT NO. 230905 | DATE APRIL 2024
SCALE 1:250@A3 | DRAWING NO. DA01 | REV. D

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
PH : 02 8590 5185
info@fangarchitects.com.au
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS



SIGNAGE LEGEND

REFER TO DA06-DA08 FOR SIGNAGE DETAILS

- S01 - 10m LOLLIPOP PYLON SIGN
- S02a - ILLUMINATED DIRECTIONAL SIGN (STAGE 2)
- S02b - ILLUMINATED DIRECTIONAL SIGN
- S02c - ILLUMINATED DIRECTIONAL SIGN (STAGE 2)
- S02d - ILLUMINATED DIRECTIONAL SIGN (STAGE 2)
- S03 - DRIVE THRU HEIGHT BAR
- S04a - DRIVE THRU PREVIEW BOARD
- S04b - DRIVE THRU SPEAKER BOX & MENUBOARD
- S05 - 2x 2.4m ILLUMINATED SQUARE BUN LOGO
- S06 - ILLUMINATED HUNGRY JACK'S LETTERSET
- S07 - ILLUMINATED RED FASCIA LIGHTBOX
- S07a - NON-ILLUMINATED RED FASCIA
- S08a - DRIVE THRU WINDOW 'PAY HERE' SIGN
- S08b - DRIVE THRU WINDOW 'PICK UP HERE' SIGN
- S08c - DRIVE THRU WINDOW 'WAITING BAY' SIGN
- S09 - PRINTED GRAPHIC (DT LANE)
- S10 - SPRAY PAINT GRAPHIC (SHOPFRONT)
- S11 - BANNER POLES
- S12 - BIKE SIGN POST
- S13 - PAINTED FLAME GRILLED LOGO
- S14 - WAITING BAY POST & GROUND MARKING SIGNS
- S15 - DELIVERY BAY GROUND MARKING

STAGE 2 WORKS. (FINISHED CONCRETE PAVEMENT AT STAGE 1, COMPLETE LANDSCAPE AND SIANAGE AT STAGE 2)

1.8m HIGH BOUNDARY NOISE BARRIER

HJs BUILDING AREA	264.0m²
BIN ROOM	23.0m²
Co2 ROOM	0.7m²
ACCESSIBLE PARKING :	1 SPACE
WAITING BAY :	2 SPACES
CAR PARKING :	16 SPACES
TOTAL:	19 SPACES

HJs Building Area measured from the internal face of external walls, exclude bin room, Co2 and playland.

EXTENT OF LANDSCAPE AREA

EXTENT OF BLACK CONCRETE PAVEMENT

NOTE: DRIVEWAY LEVEL TO MATCH INTERNAL FLOOR LEVEL AT SERVICE WINDOW.

VERIFY ALL DIMENSIONS AND LEVELS ON SITE AND REPORT ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORK. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE FROM DRAWINGS. THE COMPLETION OF THE ISSUE DETAILS CHECKED AND AUTHORISED SECTION IS CONFIRMATION OF THE STATUS OF THE DRAWING. THE DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ENDORSED 'FOR CONSTRUCTION' AND AUTHORISED FOR ISSUE.

CLIENT
HUNGRY JACK'S PTY. LTD.
L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

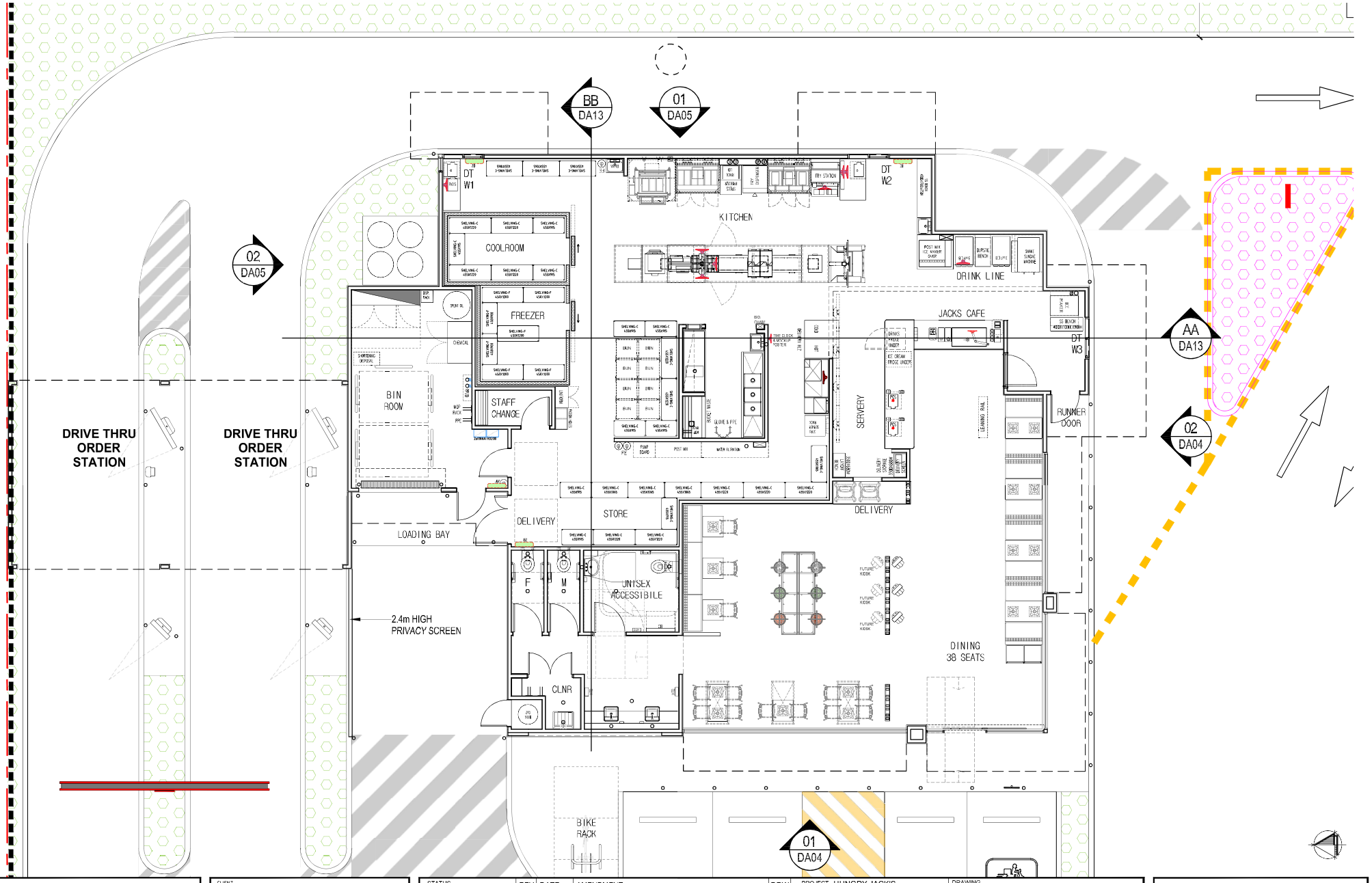
REV	DATE	AMENDMENT	DRW
M	20.08.24	ISSUE FOR COORDINATION	LL
N	02.09.24	ISSUE FOR DA	LL
O	10.09.24	REVISED SITE PLAN	LL
P	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S
TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
SITE PLAN & SITE SIGNAGE LOCATION PLAN

PROJECT NO. 230905	DATE APRIL 2024	
SCALE 1:300@A3	DRAWING NO. DA02	REV. P

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
PH : 02 8590 5185
info@fangarchitects.com.au
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS



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WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	22.04.24	ISSUE FOR HJ REVIEW	SF
B	24.04.24	REVISED SEATING	SF
C	20.08.24	ISSUE FOR COORDINATION	LL
D	30.08.24	4 SEATS REMOVED	SF
E	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO
ROAD SOUTH TAMWORTH
NSW 2340

DRAWING

PROPOSED FLOOR PLAN

PROJECT NO. 230905 | DATE APRIL 2024
SCALE 1:100@A3 | DRAWING NO. DA03 | REV. E

63 WYNDHAM STREET
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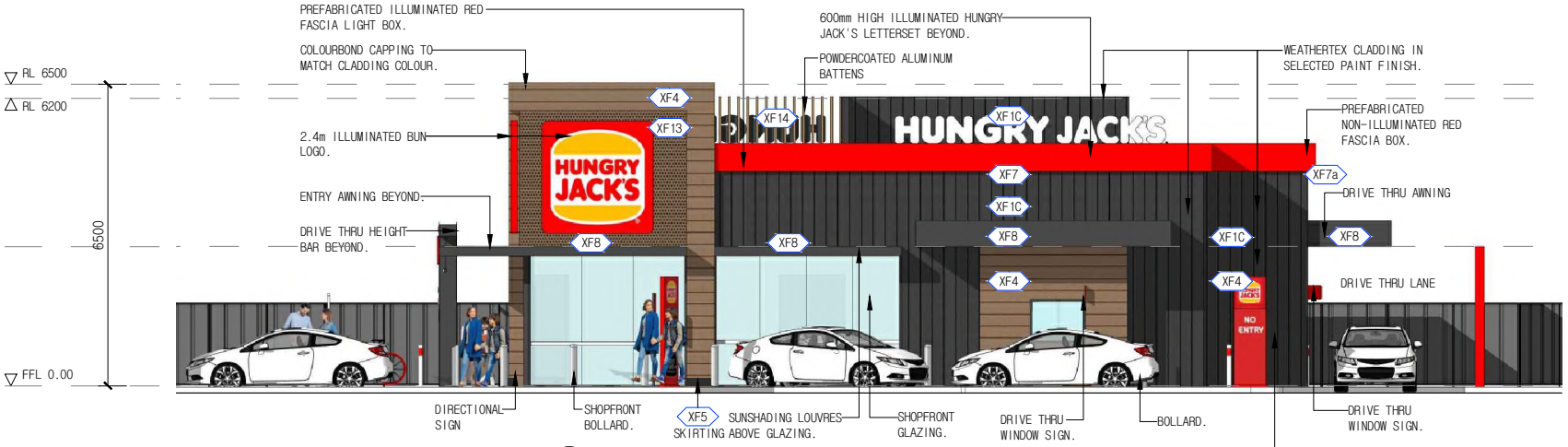
info@fangarchitects.com.au
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS

01 DA03 WEST ELEVATION
1:100



02 DA03 SOUTH ELEVATION
1:100

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HUNGRY JACK'S PTY. LTD.
L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
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- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	01.02.24	ISSUE FOR HJ REVIEW	NN
B	20.08.24	ISSUE FOR COORDINATION	AM
C	25.09.24	DT TUNNEL REMOVED	AM

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
ELEVATIONS- SHEET 1

PROJECT NO.	DATE	
230905	APRIL 2024	
SCALE	DRAWING NO.	REV.
1:100@A3	DA04	C

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ALEXANDRIA NSW 2015
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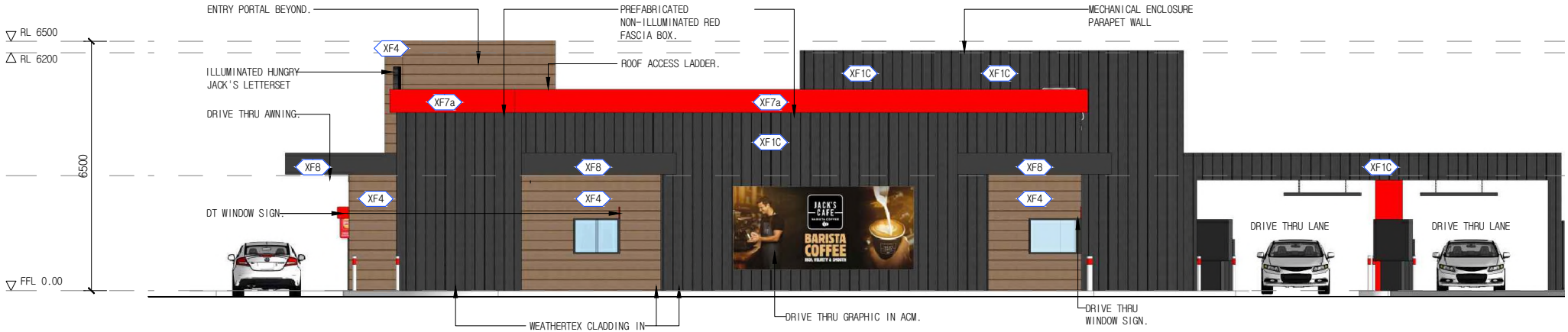
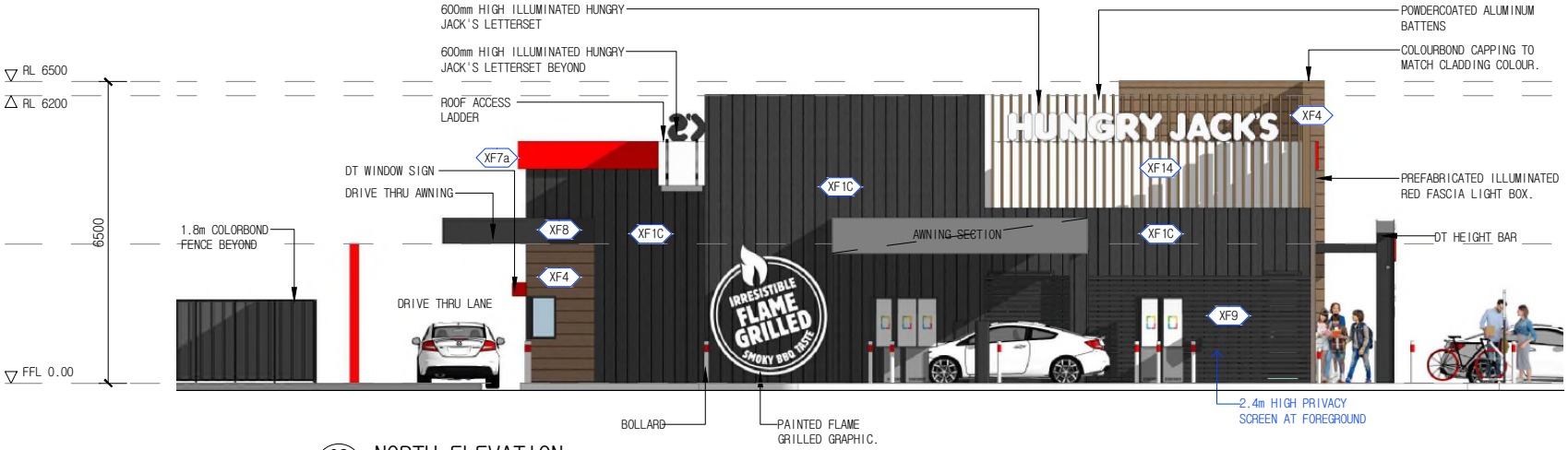
FANG ARCHITECTS



01 DA03 EAST ELEVATION
1:100



02 DA03 NORTH ELEVATION
1:100

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STATUS
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- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	01.02.24	ISSUE FOR HJ REVIEW	NN
B	20.08.24	ISSUE FOR COORDINATION	AM
C	25.09.24	DT TUNNEL REMOVED	AM

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
ELEVATIONS- SHEET 2

PROJECT NO. 230905
DATE APRIL 2024
SCALE 1:100@A3
DRAWING NO. DA05
REV. C

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
PH : 02 8590 5185
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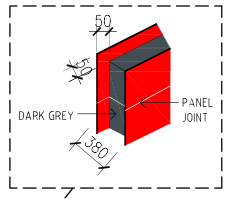
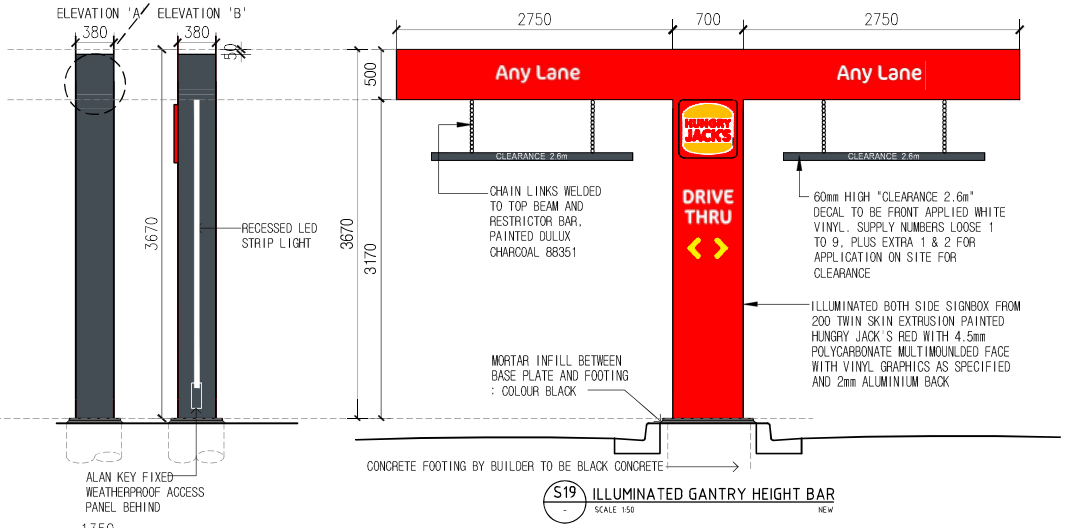
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS

S01 DA01 PYLON SIGN
SCALE 1:50

SUPPLY BY HJ'S, FOOTING & INSTALL BY BUILDER.

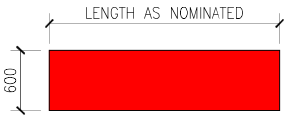




S19 - ILLUMINATED GANTRY HEIGHT BAR
SCALE 1:50 NEW

S06 DA02 ILLUMINATED LETTERSET
SCALE 1:50

INTERNALLY ILLUMINATED LETTERS WITH WHITE ACRYLLIC FACES. BLACK EDGES.



S07 DA02 ILLUMINATED REDBAND
SCALE 1:50

REFER TO ELEVATION FOR LOCATION.

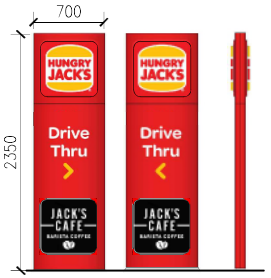
NOTES:
RIGHT HAND SIDE HEIGHT BAR
CHECK SITE PLAN FOR DIRECTION.

NOTES:

1. ALL SIGNAGE TO BE SUPPLIED BY HJ SIGNAGE CONTRACTOR UNLESS OTHERWISE NOTED. ALL EXISTING SIGNS (WHERE NOTED) IS TO BE REMOVED BY BUILDER.
2. CLEARANCE HEIGHT NUMBERS TO BE APPLIED ON SITE ONCE THE AVAILABLE CLEARANCE IS DETERMINED.
3. POSITION OF HEIGHT RESTRICTOR BAR IS TO BE 100mm BELOW THE LOWEST CLEARANCE POINT IN THE DRIVE THRU LANE.
4. HEIGHT BAR STRUCTURE TO ALSO BE AVAILABLE AS A MIRRORED OPTION.

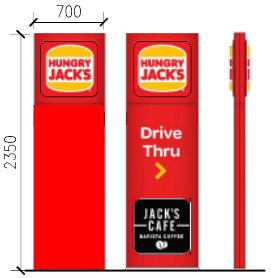
S02a DA01 ILLUMINATED DIRECTIONAL SIGN
SCALE 1:50

SUPPLIED BY HJ'S, FOOTING INSTALLED BY BUILDER.



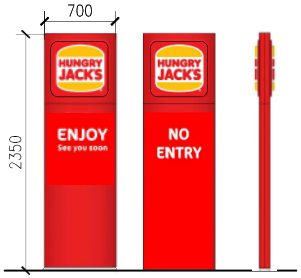
S02b DA01 ILLUMINATED DIRECTIONAL SIGN
SCALE 1:50

SUPPLIED BY HJ'S, FOOTING INSTALLED BY BUILDER.



S02c DA02 ILLUMINATED DIRECTIONAL SIGN
SCALE 1:50

SUPPLIED BY HJ'S, FOOTING INSTALLED BY BUILDER.



S02c DA02 ILLUMINATED DIRECTIONAL SIGN
SCALE 1:50

SUPPLIED BY HJ'S, FOOTING INSTALLED BY BUILDER.

NOTE:

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- STATUTORY SIGN AND ALL DOOR SIGN BY BUILDER UNLESS NOTED OTHERWISE
- REFER TO EQUIPMENT SCHEDULE FOR OTHER SIGNAGE & GRAPHICS SCOPE OF WORKS

CLIENT
HUNGRY JACK'S PTY. LTD.
L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	03.05.24	ISSUE FOR HJ REVIEW	SF
B	20.08.24	ISSUE FOR COORDINATION	LL
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
SIGNAGE DETAILS
SHEET 1

PROJECT NO.	DATE	
230905	APRIL 2024	
SCALE	DRAWING NO.	REV.
1:50@A3	DA06	C

63 WYNDHAM STREET
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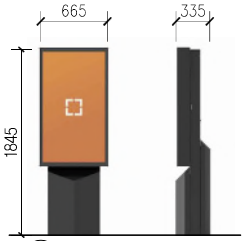
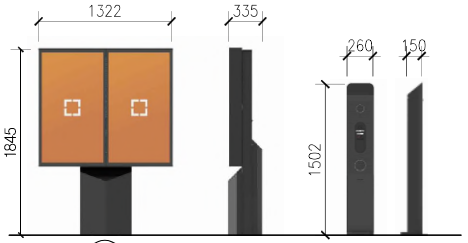
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS



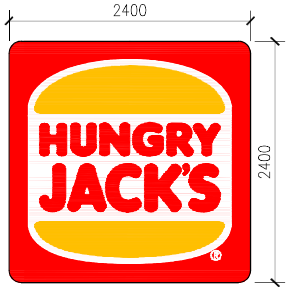
S04a DA02 DIGITAL PREVIEW BOARD
SCALE 1:50

DIGITAL DRIVE THRU PREVIEW MENUBOARD.
SUPPLY & INSTALLATION BY HJ'S. BUILDER TO INSTALL FOOTINGS, UNDERGROUND CONDUITS, POWER AND DATA. READY FOR FIT OFF.



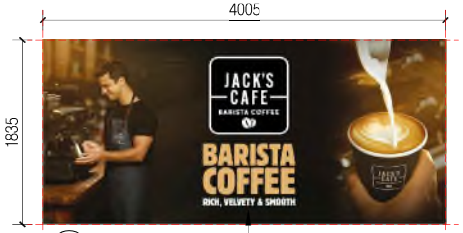
S04b DA02 SPEAKER & DIGITAL MENUBOARD
SCALE 1:50

DIGITAL DRIVE THRU PREVIEW MENUBOARD.
SUPPLY & INSTALLATION BY HJ'S. BUILDER TO INSTALL FOOTINGS, UNDERGROUND CONDUITS, POWER AND DATA. READY FOR FIT OFF.



S05 DA02 ILLUMINATED BUN LOGO
SCALE 1:50

SUPPLY BY HJ'S, INSTALL BY BUILDER.

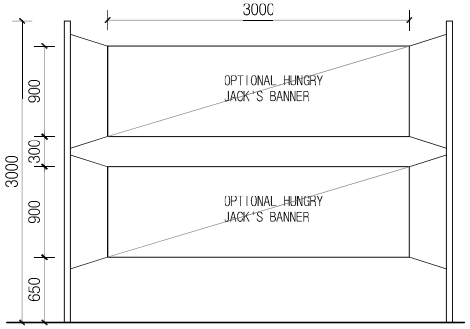


S09 DA02 PRINTED GRAPHIC
SCALE 1:50

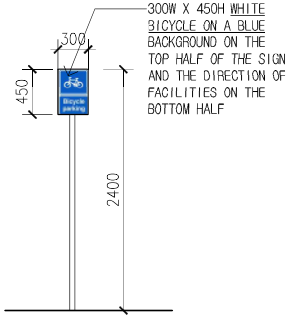
PRINTED GRAPHIC ON ACM, DIRECT STICK ON WALL BY HJ SIGNAGE CONTRACTOR.

S10 DA02 SPRAY-PAINT GRAPHIC
SCALE 1:50 REFER DA05 ELEVATION

SPRAY-PAINTED WALL GRAPHIC BY BUILDER

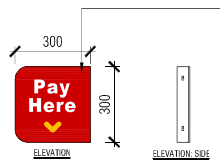


S11 DA02 BANNER POLES
SCALE 1:50 REFER DA02 FOR LOCATION

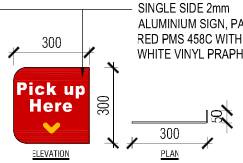


S12 DA02 BIKE SIGN POST
SCALE 1:50 REFER DA01 FOR LOCATION

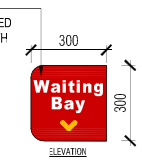
STANDARD ROAD SIGN COMPLY WITH VIC ROAD. SUPPLY & INSTALL BY BUILDER.



S08a DA02 DRIVE THRU WINDOW SIGNS
SCALE 1:20



S08b DA02 DRIVE THRU WINDOW SIGNS
SCALE 1:20



S08c DA02 DRIVE THRU WINDOW SIGNS
SCALE 1:20

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CLIENT
HUNGRY JACK'S PTY. LTD.
L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- DA/ PP
- AMENDED DA
- BA/CC
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- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	03.05.24	ISSUE FOR HJ REVIEW	SF
B	20.08.24	ISSUE FOR COORDINATION	LL
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S
TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
SIGNAGE DETAILS
SHEET 2

PROJECT NO. 230905	DATE APRIL 2024
SCALE 1:50@A3	DRAWING NO. DA07 / REV. C

63 WYNDHAM STREET
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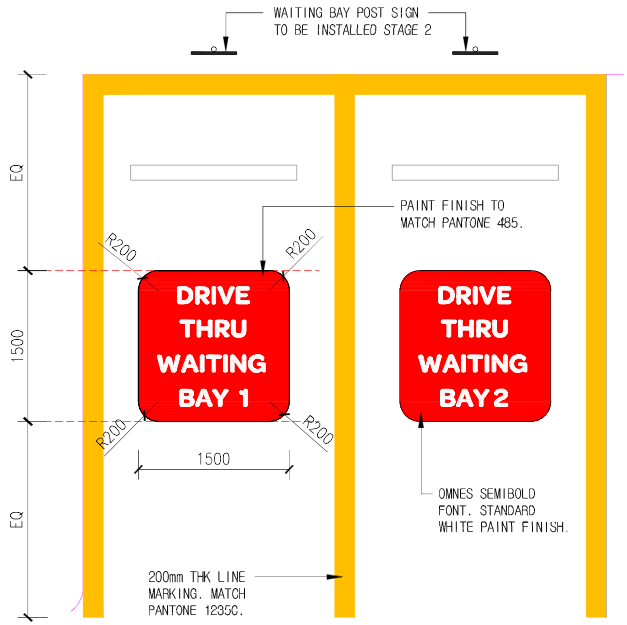
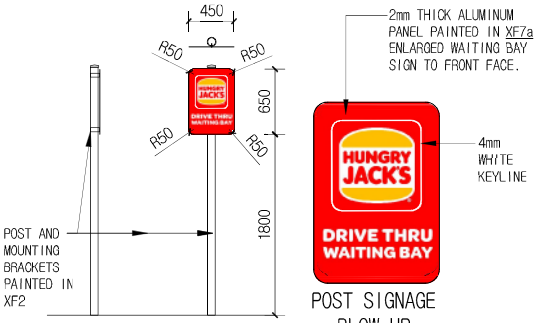


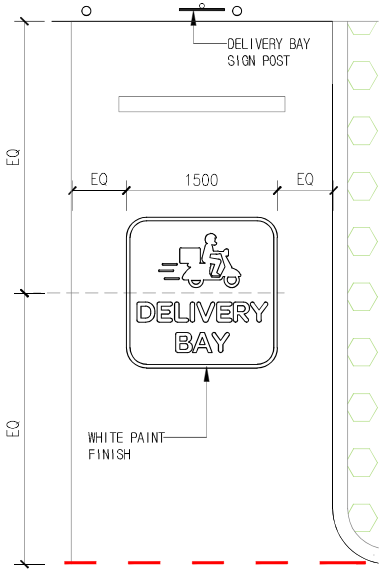
S14 WAITING BAY LINE MARKING
DA02 SCALE 1:50



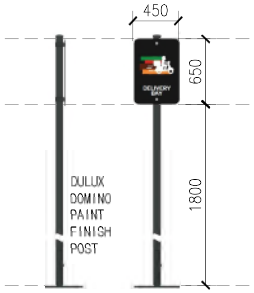
POST SIGNAGE
BLOW UP

S14 WAITING BAY SIGN POST
DA02 SCALE 1:50

S13 PAINTED FLAME GRILLED LOGO
DA02 SCALE 1:50 REFER DA05 ELEVATION



S15 DELIVERY BAY- PLAN
DA02 SCALE 1:50



S15 DELIVERY BAY SIGN POST
DA02 SCALE 1:50

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L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
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REV	DATE	AMENDMENT	DRW
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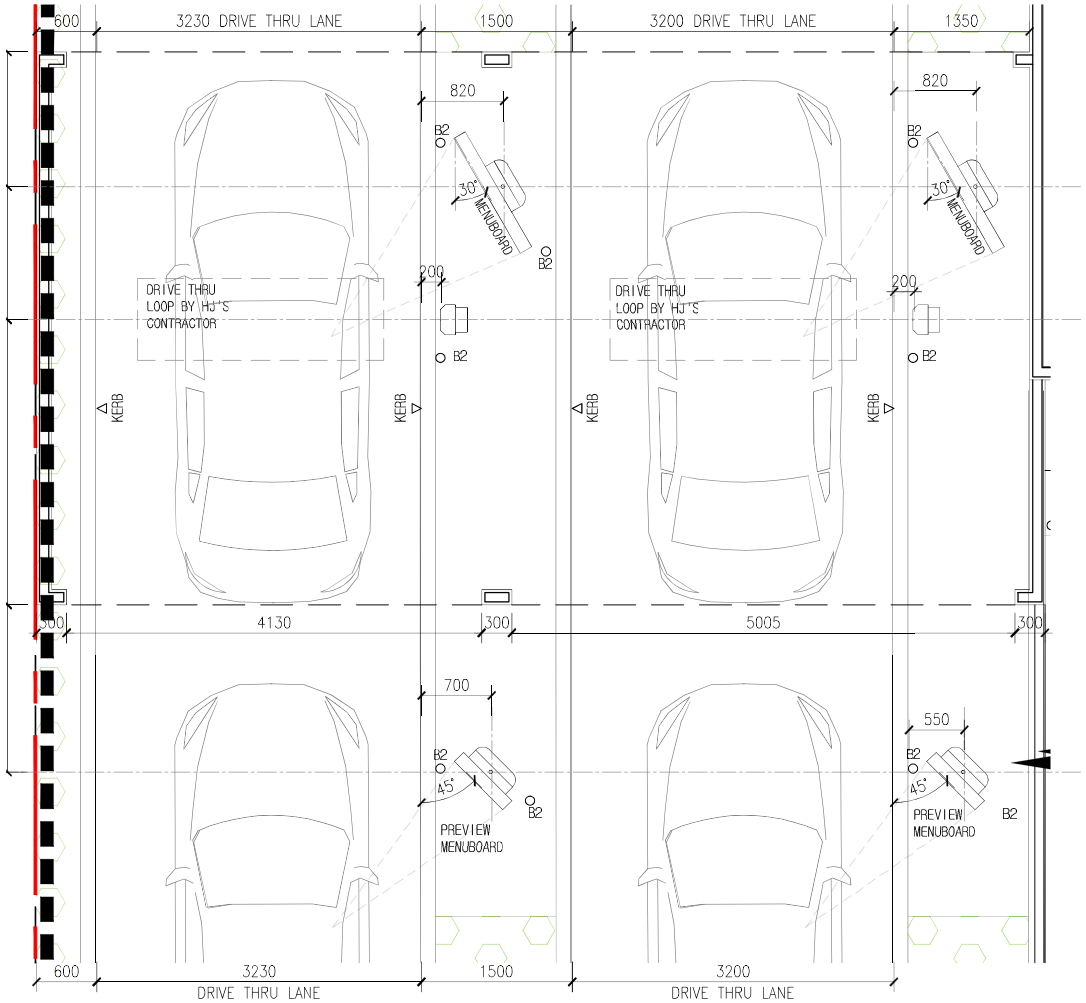
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S
TAMWORTH
254-256 GOONOO GOONOO
ROAD SOUTH TAMWORTH
NSW 2340

DRAWING
SIGNAGE DETAILS
SHEET 3

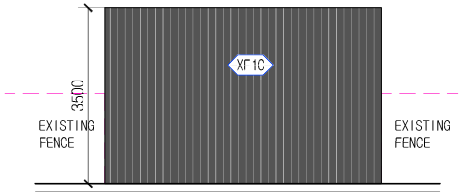
PROJECT NO. 230905 | DATE APRIL 2024
SCALE 1:50@A3 | DRAWING NO. DA08 | REV. C

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
PH : 02 8590 5185
info@fangarchitects.com.au
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS

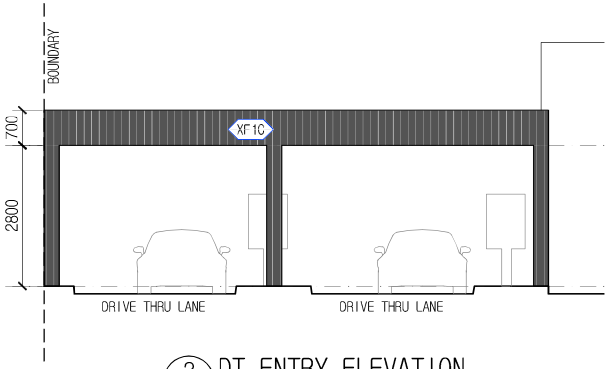


1 / - ORDER STATION CANOPY & MENUBOARD SETOUT
1:50

NOTE: MENUBOARD SETOUT TO BE CONFIRMED BY SUPPLIER



3 / - SIDE ELEVATION
1:100



2 / - DT ENTRY ELEVATION
1:100

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CLIENT
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L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
- SKETCH
- (●) DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	07.05.24	ISSUE FOR HJ REVIEW	SF
B	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S
TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
DRIVE THRU ORDER STATION DETAILS

PROJECT NO. 230905 | DATE APRIL 2024
SCALE 1:50 @A3 | DRAWING NO. DA09 | REV. B

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
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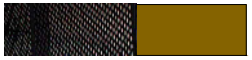
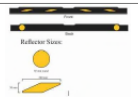
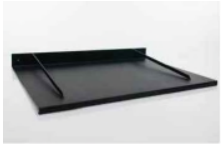
info@fangarchitects.com.au
Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS

EXTERNAL FINISHES SCHEDULE

NOTE: FINISHES LEGEND & SCHEDULES ARE TO BE READ IN CONJUNCTION WITH SPECIFICATION AND CONSTRUCTION DRAWINGS - REFER TO PLANS, ELEVATION & SECTION DRAWINGS AS DETAILED. CONTRACTORS ARE TO ENSURE ALL MATERIALS ARE TO BE ORDERED IN TIME TO MEET DEADLINE AS SCHEDULED OR CONTRACTOR SHALL BEAR THE COST OF AIR FREIGHTING MATERIALS IN TO MEET DEADLINE. ANY FINISHES RE-SELECTING WILL BE CHARGED TO BUILDER AT PER HOUR RATE ON ITEMS

CODE	DESCRIPTION	FINISH SPECIFICATION	LOCATION	SAMPLE PICTURE FOR REF. ONLY
XF1A	PAINT - WEATHERTEX (WEATHERGROOVE WOODSMAN 150)	BRAND: DULUX COLOUR :HEIFER (P14B2) FINISH: LOW SHEEN APPLY NON SACRIFICIAL ANTI GRAFFITI COATING TO WEATHERTEX	EXTERIOR WALLS / FASCIA	
XF1B	PAINT - WEATHERTEX (WEATHERGROOVE WOODSMAN 150)	BRAND: DULUX COLOUR : STRING S13B6 FINISH: LOW SHEEN APPLY NON SACRIFICIAL ANTI GRAFFITI COATING	EXTERIOR WALLS	
XF1C	PAINT - WEATHERTEX (WEATHERGROOVE WOODSMAN 150)	BRAND: DULUX COLOUR : DOMINO GR10 FINISH: LOW SHEEN	EXTERIOR WALLS	
XF2	PAINT - DARK GREY	BRAND: DULUX COLOUR NAME: DOMINO GR10 FINISH: SEMI-GLOSS	WALLS GUTTERS, FASCIA & DOOR	
XF3	POWDER COATED FINISH	BRAND: DULUX NAME: ZEUS CHARCOAL 90087732 FINISH: GLOSS	WINDOW & DOOR FRAMES (EXCLUDE DRIVE THRU WINDOW)	
XF4	WALL CLADDING WEATHERTEX-SELFLOK ECOGROOVE)	WOODSMAN 150, CONCEALED 300mm WOODSMAN OFF STUD JOINER COLOUR: TAUBMAN FOX TERRIER SATIN (2 COATS) (T15 105.5) ANTI GRAFITTI PAINT FINISH REQUIRED	EXTERIOR WALLS	
XF5	SKIRTING TILES	BRAND: SKHEME COLOUR: FORM BLACK GRIP GROUT: BLACK EPOXY GROUTING SIZE: 150 X 600mm	ENTRY PORTAL & EXTERNAL WALLS. REFER TO DRAWING FOR LOCATION	
XF6	PAINT - WHITE COMPRESSED FIBRE CEMENT CLADDING	BRAND: DULUX COLOUR NAME: LEXICON B16 FINISH: LOW SHEEN	EXTERIOR WALLS, SOFFITS AND CANOPY FASCIA	
XF7	ILLUMINATED LIGHT BOX	ILLUMINATED LIGHT BOX COLOUR: PMS 485 /3M 3630-143 POPPY RED	BUILDING FASCIA / METALWORK REFER TO ELEVATION & ROOF PLAN	
XF7a	NON-ILLUMINATED LIGHT BOX	FASCIA BOX COLOUR: PMS 485 /3M 3630-143 POPPY RED	BUILDING FASCIA / METALWORK REFER TO ELEVATION & ROOF PLAN	
XF8	PAINT - DARK GREY TO MATCH XF2	COLORBOND FINISH / POWDER COATED	AWNING/ GUTTERS / GATES TO SERVICES PLANT ENCLOUSRE	
XF9	SLATTED RECYCLED PLASTIC	BRAND: REPLAS SCREEN COLOUR : CHARCOAL PROFILE: RECTANGULAR 20X70x1500mm	LOADING SCREEN CONTACT- : KIMBERLEY WILLIAMS 0459 269 692 kimberley.williams@replas.com.au	

CODE	DESCRIPTION	FINISH SPECIFICATION	LOCATION	PICTURE FOR REFERENCE ONLY
XF11	POWDER COATED FINISH	BRAND: DULUX COLOUR NAME: COLORBOND SHALE GREY C4	ROOF	
XF13	PERFORATED SCREEN PANELS	LOCKER R25448 (25.5mmø @ 35mm CENTRES 48% OPEN AREA) FINISH: DULUX POWDERCOAT COLOUR JASPER MATT 2608252M	ENTRY PORTAL	
XF14	VERTICAL-ALUMINIUM BATTEN	BRAND: DULUX POWDERCOAT NAME: JASPER (MATT) 2608252M SIZE: 210 X 50 X 37001 SLAT	MECHANICAL ENCLOSURE ON ROOF	
	WHEELSTOP	PRODUCT: REPLAS WHEETSTOPS DIMENSION: 100mm X 135mm LENGTH: 1650mm COLOUR: BLACK WITH 4 DIAMOND REFLECTORS ON FRONT, 2 ROUND REFLECTORS ON BACK	CONTACT- KIMBERLEY WILLIAMS 0459 269 692 kimberley.williams@ replas.com.au	
	TGSI	PRODUCT: DTAC ULTIMAT TACTILE CLASSIC YELLOW URETHANE. SIZE: 300W X 300H X T2mm	KERB RAMP	
B1	BOLLARD (FACING SHOPFRONT GLAZING)	BELOW GROUND 90mm STAINLESS STEEL BEVELLED TOP BOLLARD BRAND: SAFETY XPRESS CODE: SKU-BOLBG90SSB WEIGHT: 22 KGS MATERIAL: 304 GRADE STAINLESS STEEL COLOUR: SILVER BRUSHED HEIGHT: 1200mm (900mm ABOVE GROUND, 300mm BELOW GROUND) DIAMETER: 90mm FIXINGS: ANCHOR ROD INCLUDED AT BASE WHICH CAN BE REMOVED WHEN CORE DRILLING INTO NEW CONCRETE OR INSERTED WHEN SETTING IN NEW CONCRETE	DRIVEWAY ALONG ENTRY AND FOH GLAZING	
B2	HEAVY DUTY BOLLARD	BELOW GROUND 90mm ø GALVANISED BOLLARD COLOUR: SILVER WITH CLASS 1 RED REFLECTIVE TAPE HEIGHT: 1300mm (1000mm ABOVE GROUND AND 300mm BELOW GROUND) FIXING: ANCHOR ROD INCLUDED AT BASE WHICH CAN BE REMOVED WHEN CORE DRILLING INTO EXISTING CONCRETE OR INSERTED WHEN SETTING IN NEW CONCRETE	LOADING AREA, DT LANES AND LPG STORAGE (IF APPLICABLE)	
HH	AWNING	PRODUCT: HEKA HOODS WIDTH: 900 mm DEEP COLOUR: DURATEC ZEUS- CHARCOAL (SATIN) CONTACT: LOUIS PURSEHOUSE PHONE: 07-54060886 EMAIL: HELLO@HEKAHOODS.COM.AU	LOADING BAY	

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L6 - 100 WILLIAM STREET
WOOLLOOMOOLOO NSW 2011

STATUS
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- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	07.05.24	ISSUE FOR HJ REVIEW	SF
B	20.08.24	XF14 ADDED	AM
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
EXTERNAL FINISHES SCHEDULE

PROJECT NO.	DATE	
230905	APRIL 2024	
SCALE	DRAWING NO.	REV.
NTS @A3	DA10	C

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
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Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS

NOTE: IMAGES FOR REFERENCE ONLY

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- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	07.05.24	ISSUE FOR HJ REVIEW	AM
B	20.08.24	ISSUE FOR COORDINATION	AM
C	25.09.24	DT TUNNEL REMOVED, SIT & LANDSCAPE REVISED	AM

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING

3D VIEWS

PROJECT NO.	DATE	
230905	APRIL 2024	
SCALE	DRAWING NO.	REV.
NTS@A3	DA11	C

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
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Nominated Architect: Shyan Fang (Reg 7958)
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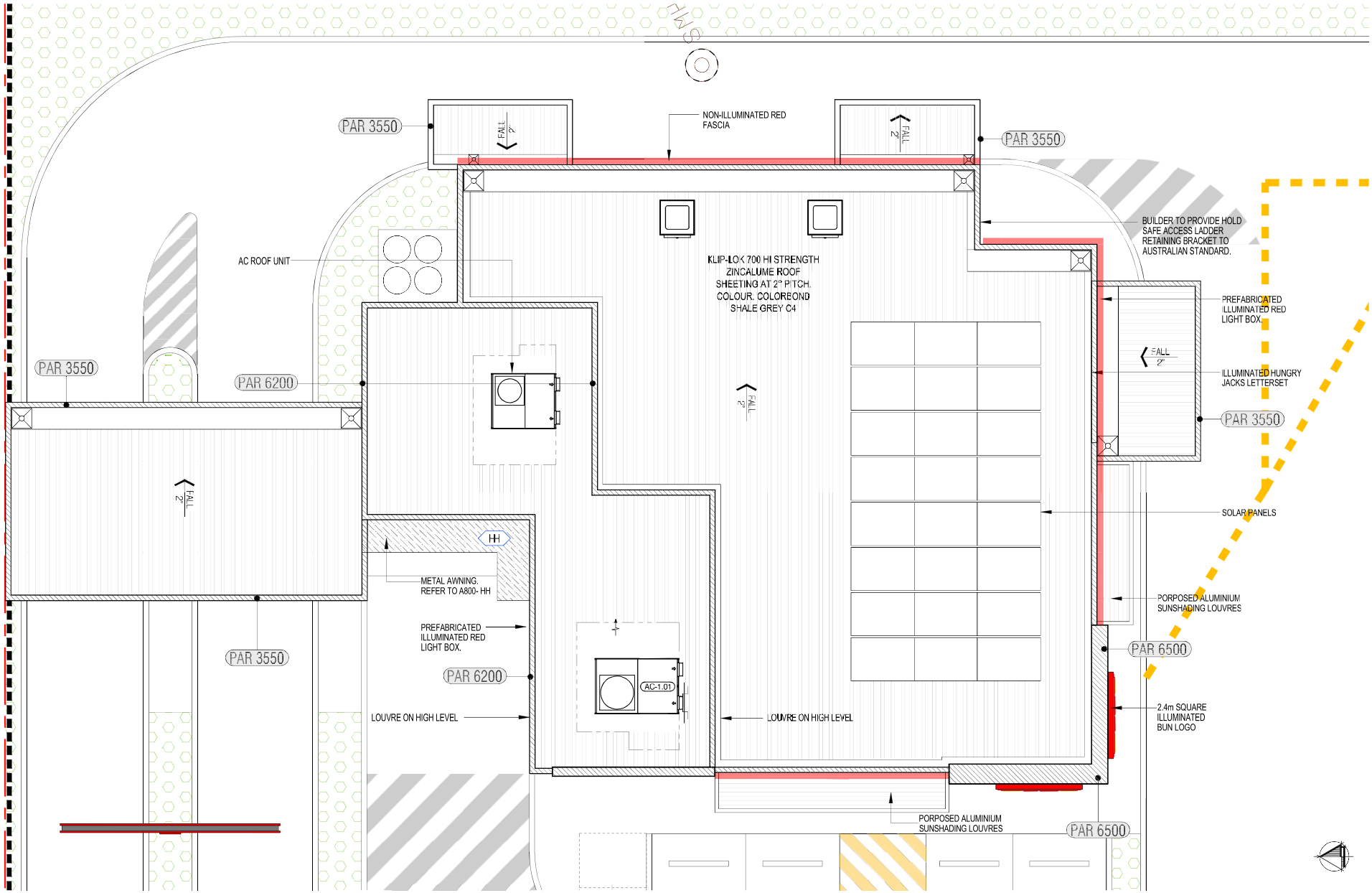

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- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	20.05.24	ISSUE FOR HJ REVIEW	SF
B	29.08.24	ISSUE FOR COORDINATION	LL
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING
PROPOSED ROOF PLAN

PROJECT NO. 230905 | DATE APRIL 2024
SCALE 1:100@A3 | DRAWING NO. DA12 | REV. C

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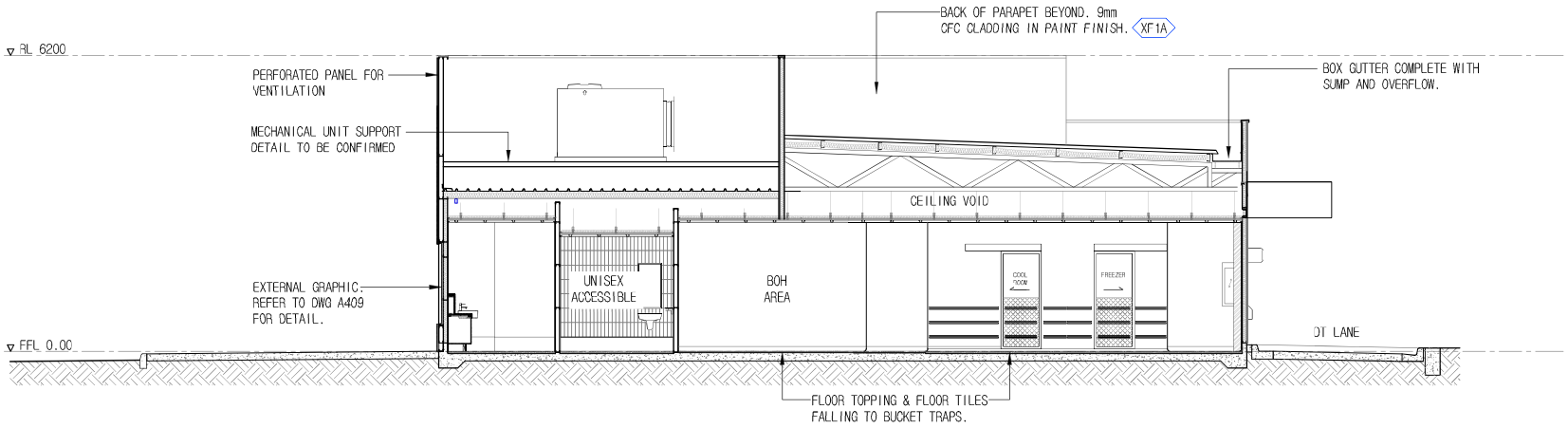
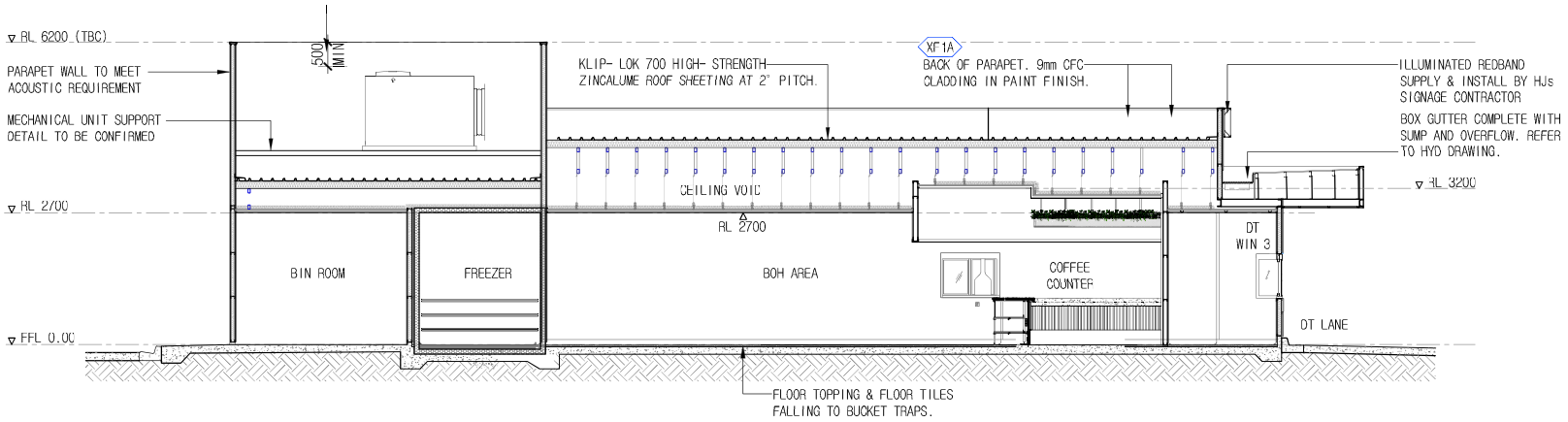
FANG ARCHITECTS



BB A100 **SECTION B-B**

SCALE 1:100



AA A100 **SECTION A-A**

SCALE 1:100

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STATUS
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- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	20.05.24	ISSUE FOR HJ REVIEW	SF
B	29.08.24	ISSUE FOR COORDINATION	LL
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING

SECTION AA & BB

PROJECT NO. 230905 | DATE APRIL 2024
SCALE 1:100@A3 | DRAWING NO. DA13 | REV. C

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Nominated Architect: Shyan Fang (Reg 7958)
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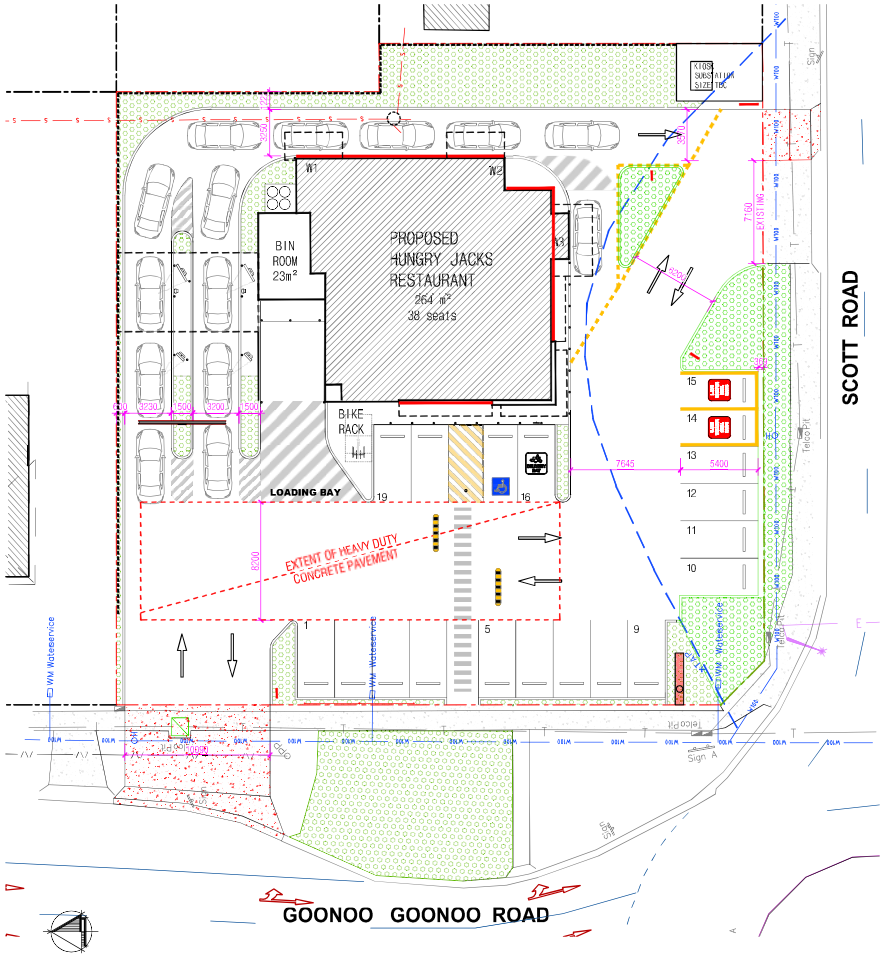

WEST ELEVATION

SOUTH ELEVATION

EAST ELEVATION

NORTH ELEVATION

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STATUS
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- DA/ PP
- AMENDED DA
- BA/CC
- TENDER
- CONSTRUCTION

REV	DATE	AMENDMENT	DRW
A	20.05.24	ISSUE FOR SUBMISSION	SF
B	20.08.24	ISSUE FOR COORDINATION	LL
C	25.09.24	ISSUE FOR DA	LL

PROJECT HUNGRY JACK'S

TAMWORTH
254-256 GOONOO GOONOO ROAD SOUTH TAMWORTH NSW 2340

DRAWING

NOTIFICATION PLAN

PROJECT NO.	DATE	
230905	APRIL 2024	
SCALE	DRAWING NO.	REV.
NTS@A3	DA14	C

63 WYNDHAM STREET
ALEXANDRIA NSW 2015
ABN 47 627 526 881
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Nominated Architect: Shyan Fang (Reg 7958)
FANG ARCHITECTS

Appendix C – Noise Monitoring Charts

Table C21 Background Noise Monitoring Summary – Unattended Noise Monitoring (L1)

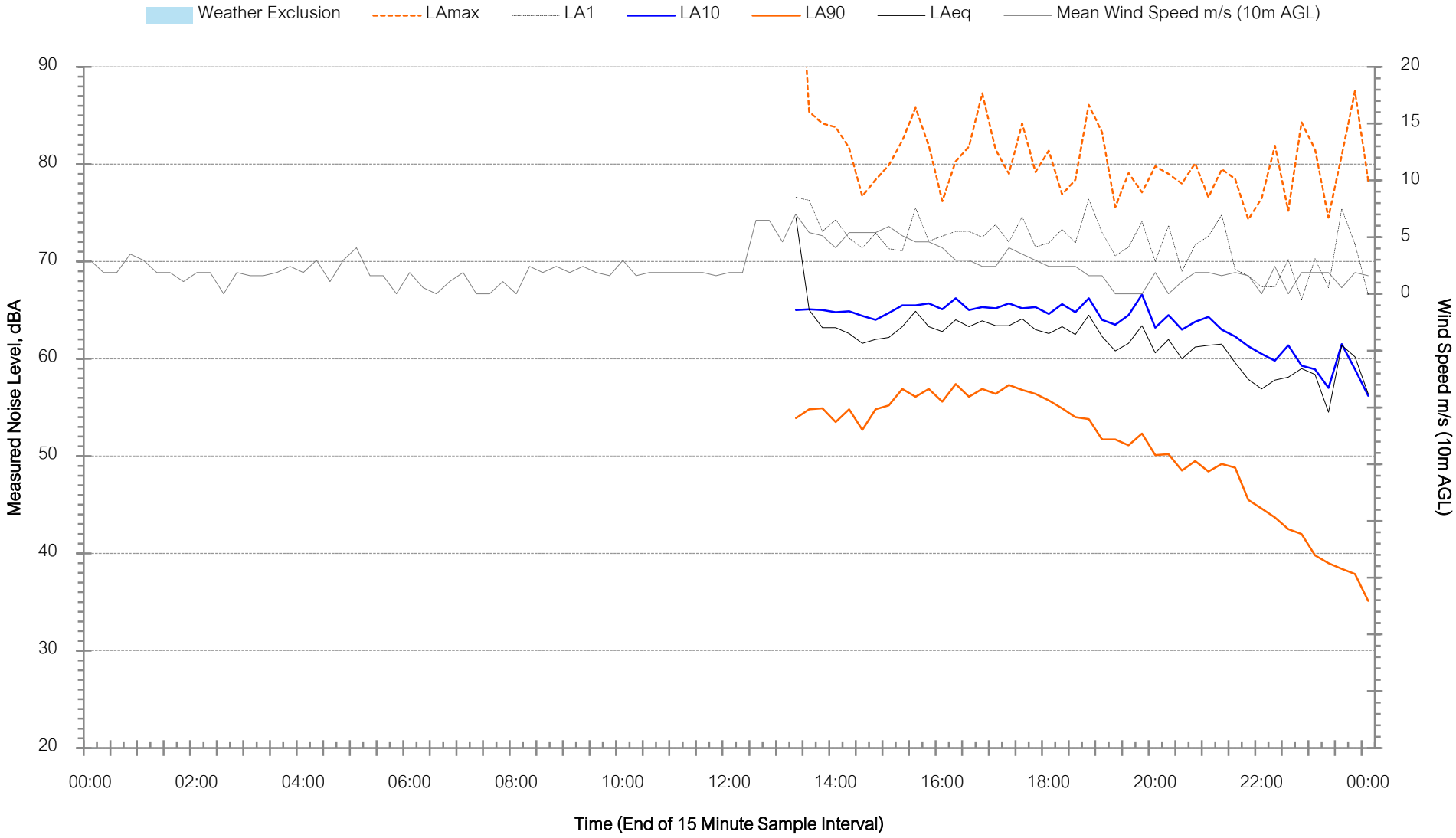
Date	Measured Background Noise Level (LA_{90}) dB ABL[1]			Measured dB $LA_{eq(period)}$		
	Day	Evening	Night	Day	Evening	Night
Tuesday 25 June 2024	-[2]	47	34	-[2]	62	57
Wednesday 26 June 2024	52	44	34	63	61	57
Thursday 27 June 2024	51	46	33	62	60	56
Friday 28 June 2024	51	64	-[2]	61	69	-[2]
Saturday 29 June 2024	52	48	35	61	60	55
Sunday 30 June 2024	55	43	29	65	61	56
Monday 1 June 2024	51	42	30	62	59	56
Tuesday 2 July 2024	52	45	32	62	61	56
Wednesday 3 July 2024	52	47	32	62	60	56
Thursday 4 July 2024	-[2]	-[2]	-[2]	-[2]	-[2]	-[2]
RBL / Leq Overall	52	46	33	62	63	56

Note 1: Assessment background level (ABL) – the single-figure background level representing each assessment period day, evening and night as per NPI Fact Sheet A.

Note 2: Measurement removed due to adverse weather as per NPI Fact Sheet A.

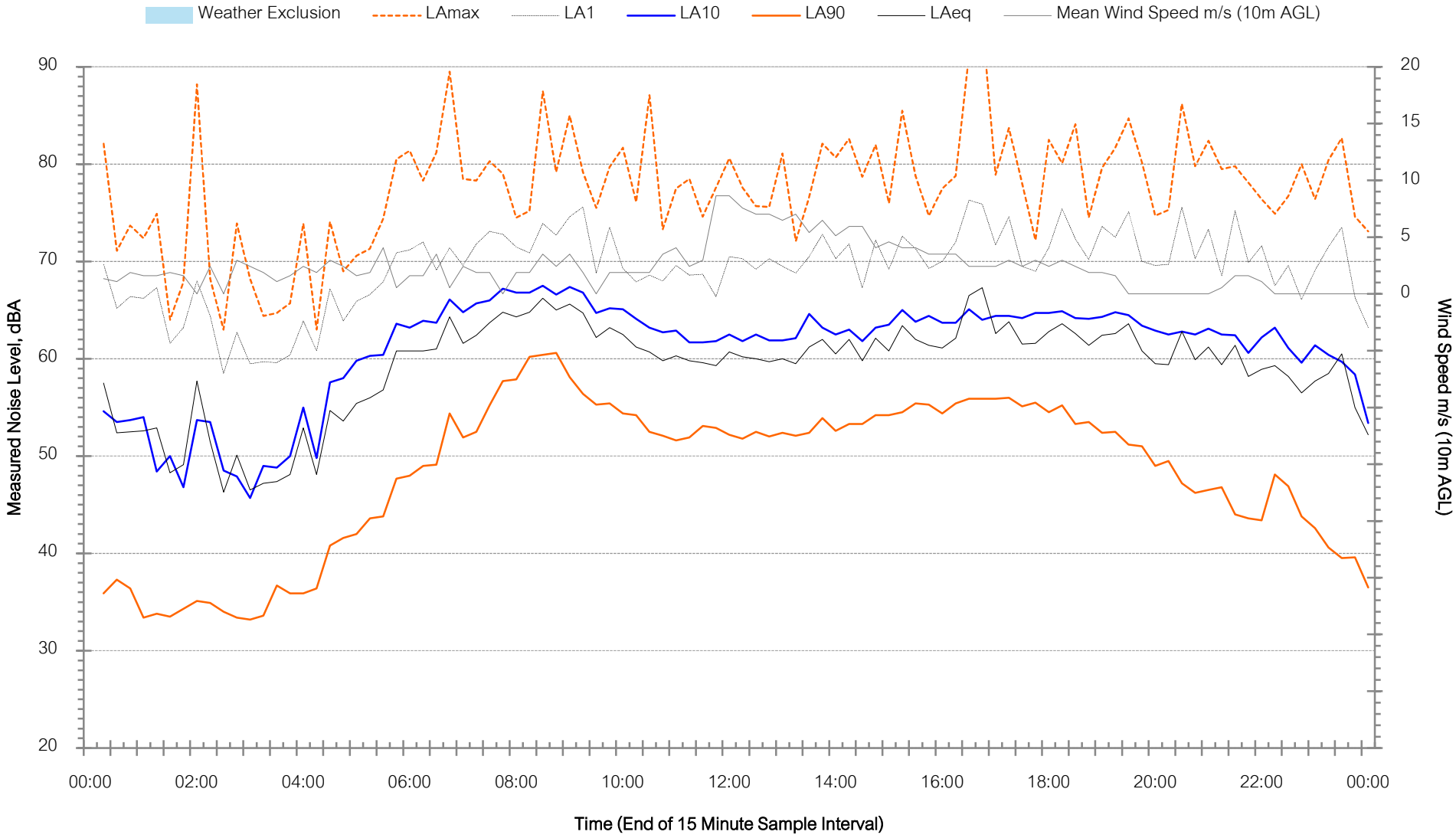
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Tuesday 25 June 2024



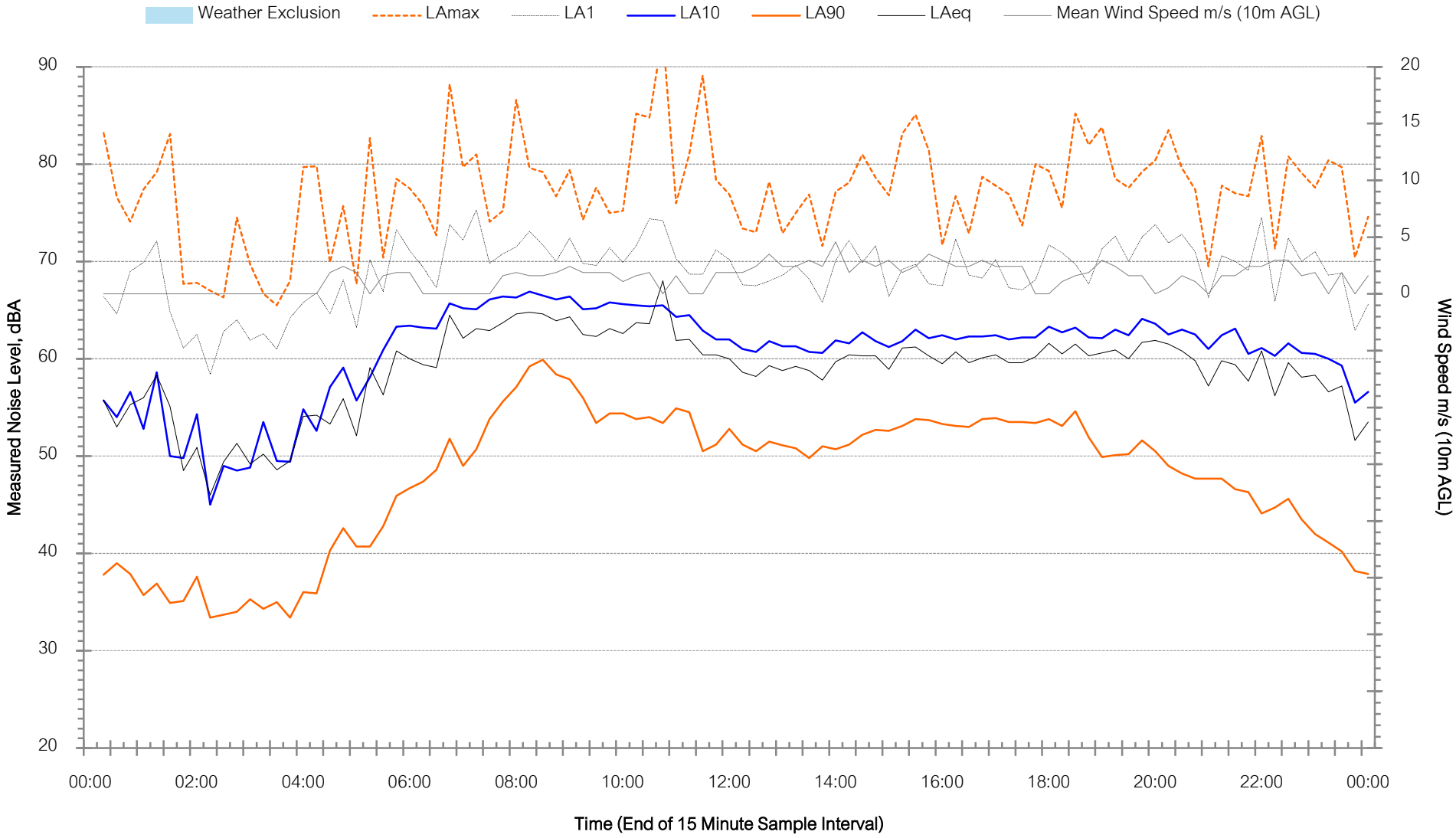
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Wednesday 26 June 2024



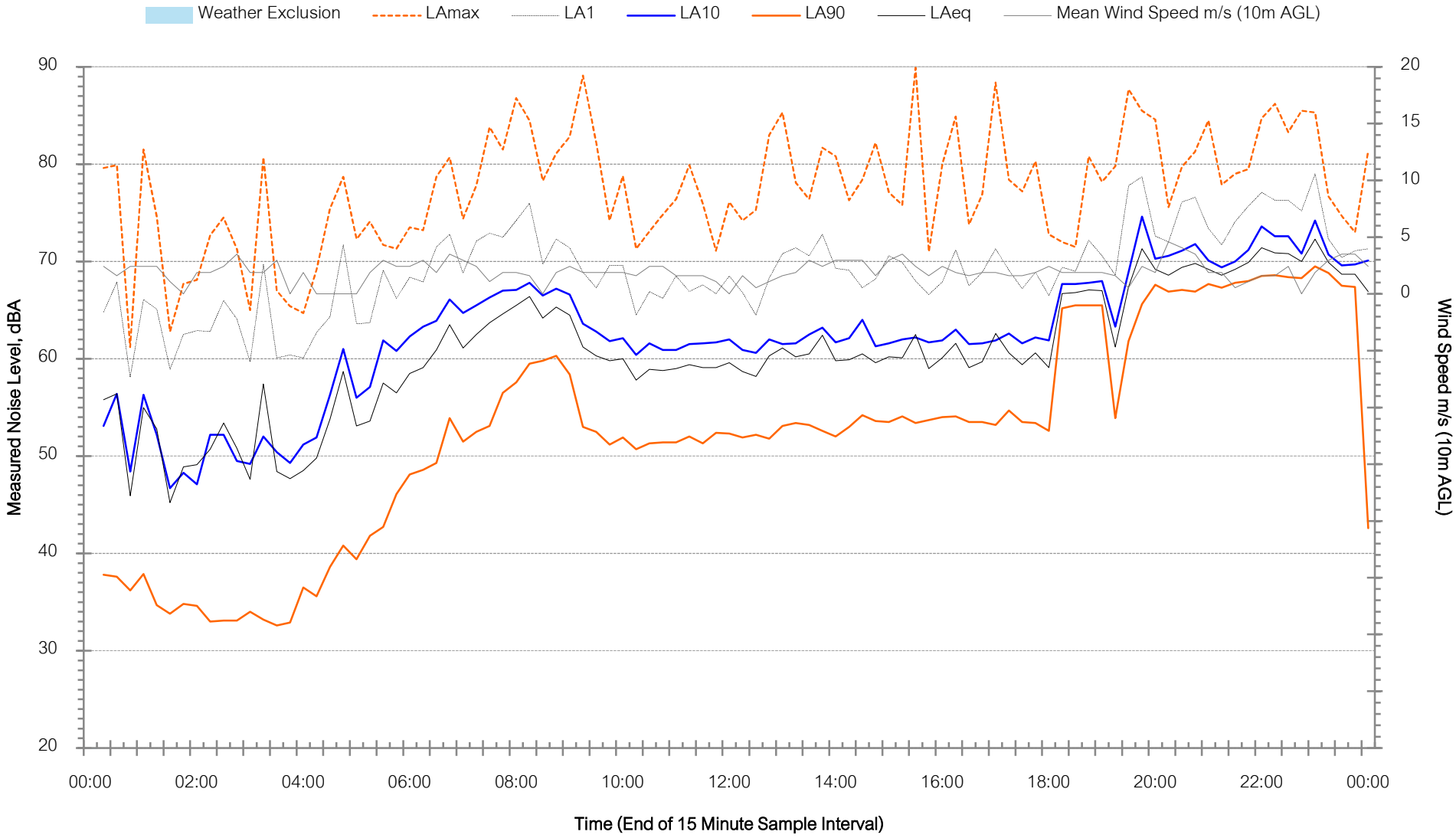
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Thursday 27 June 2024



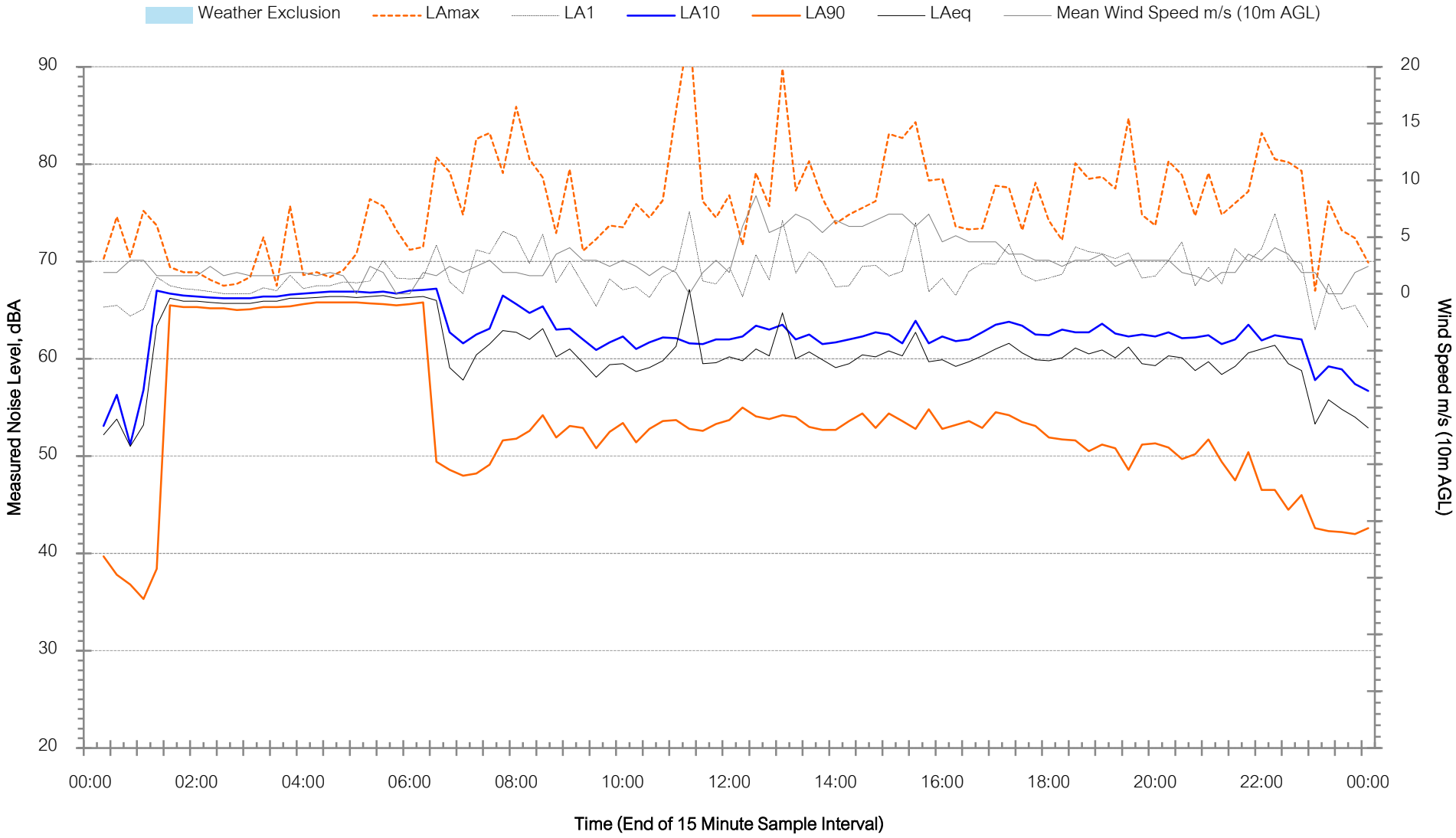
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Friday 28 June 2024



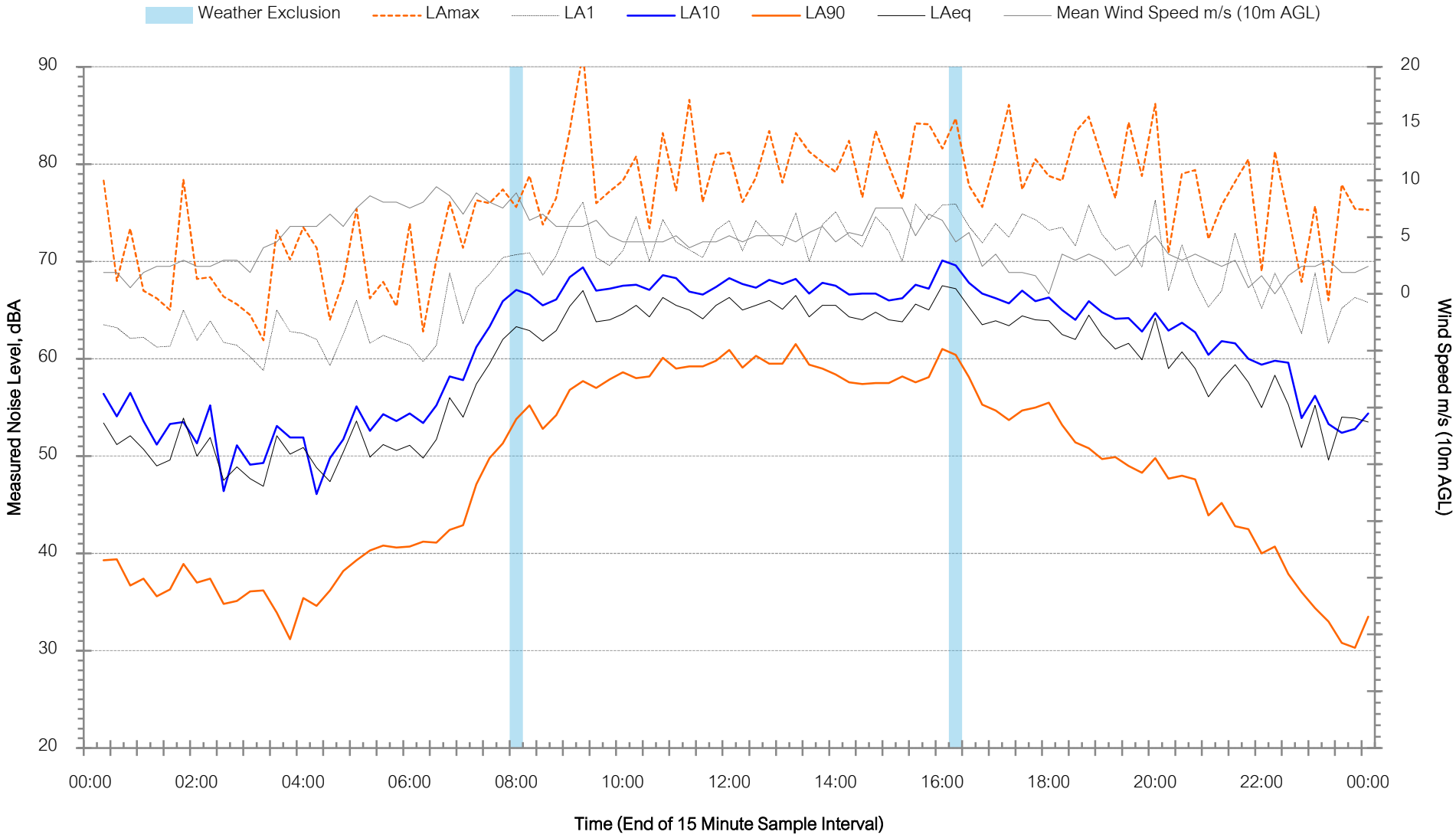
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Saturday 29 June 2024



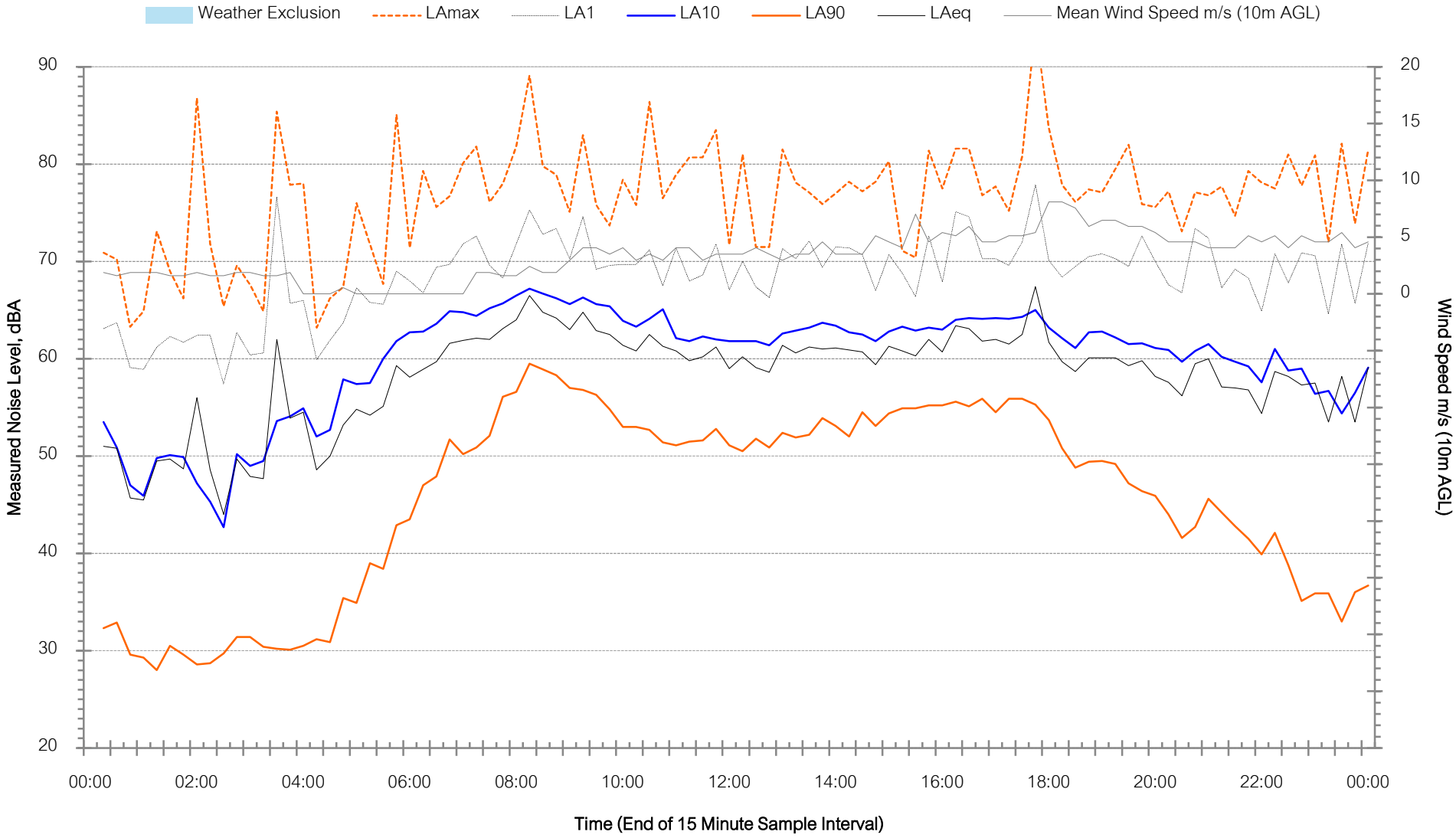
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Sunday 30 June 2024



Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Monday 1 July 2024

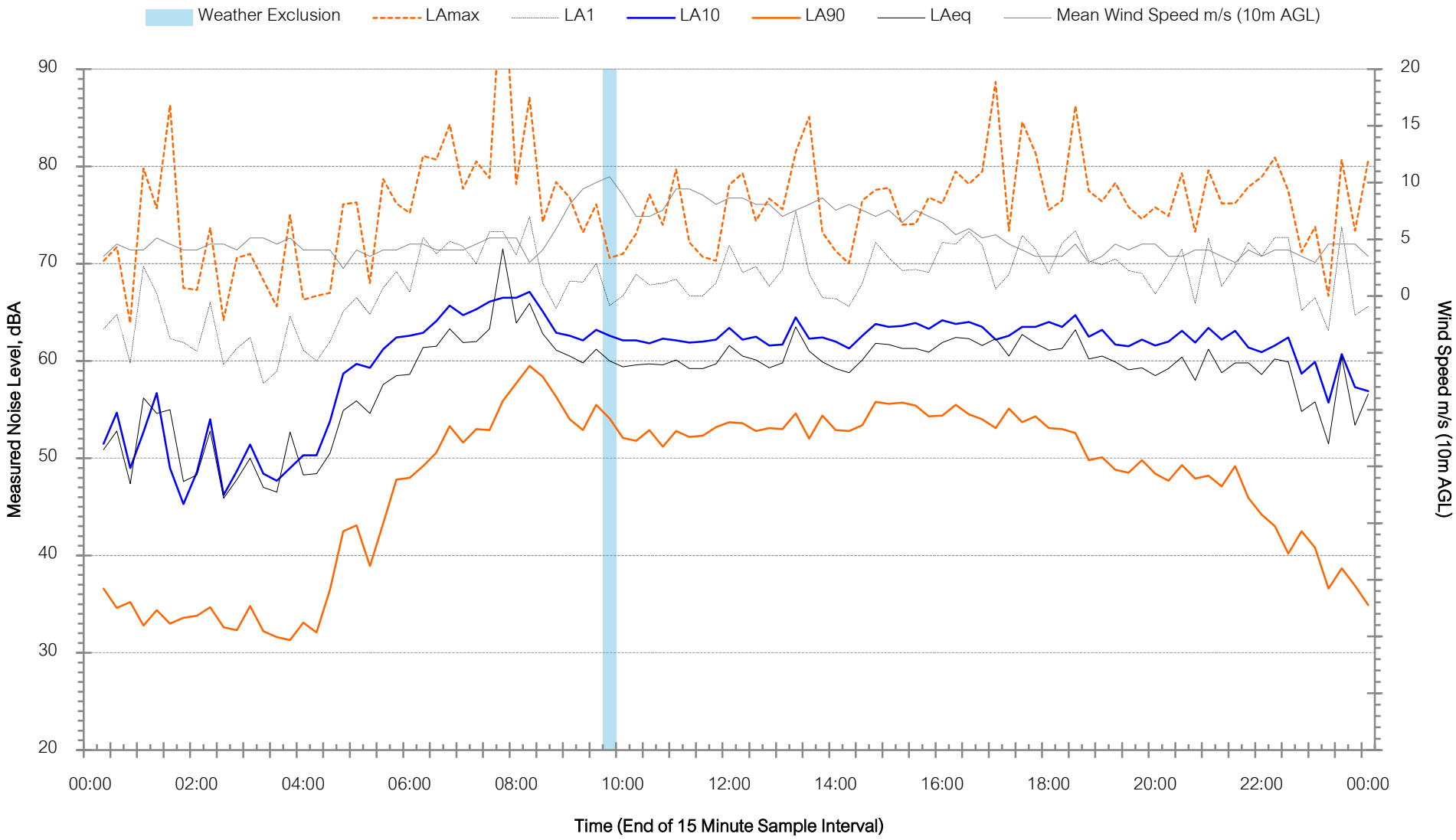


Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Tuesday 2 July 2024

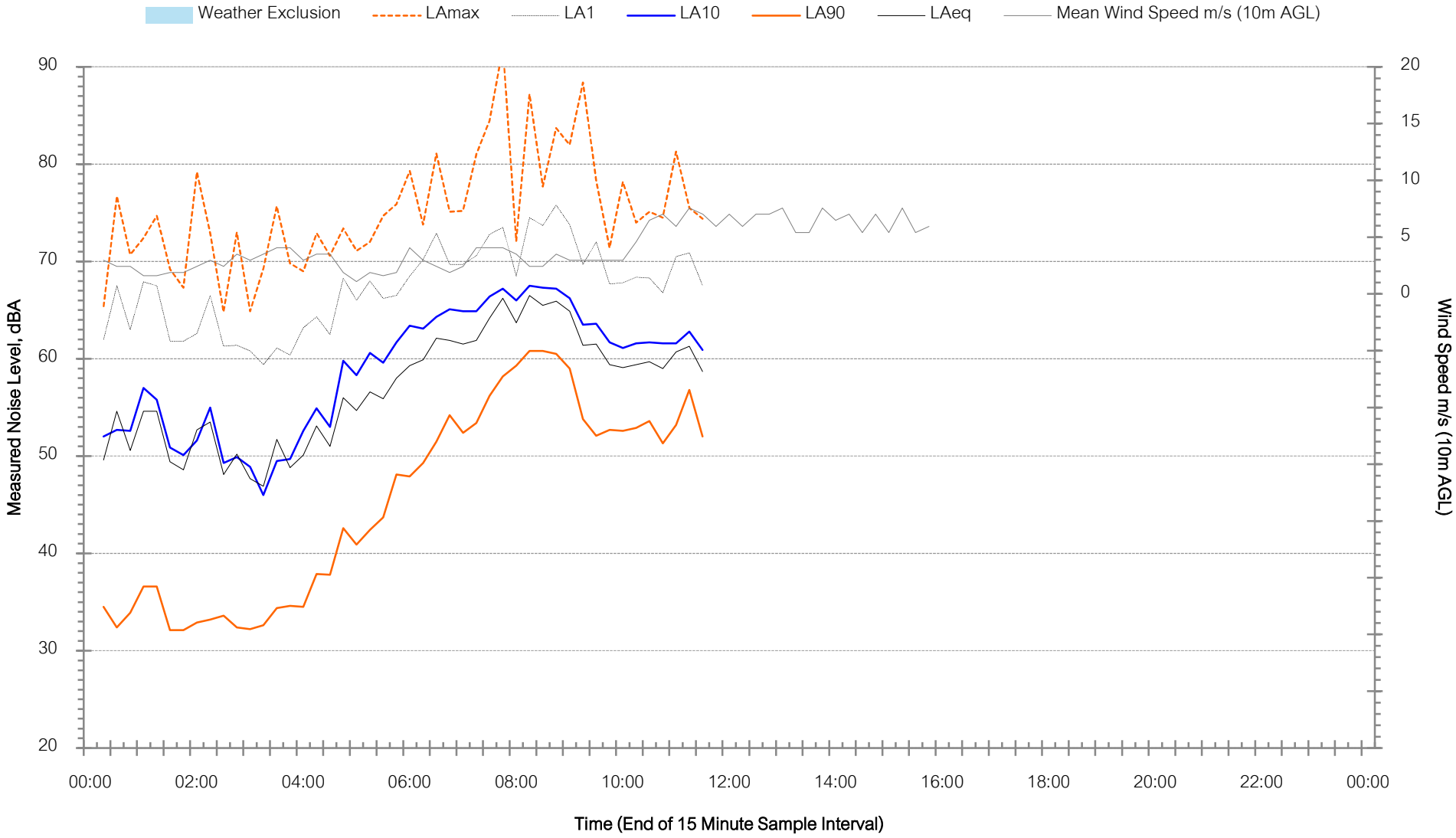
Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Wednesday 3 July 2024



Background Noise Levels

1 Scott Road, New England Highway, Tamworth South - Thursday 4 July 2024



Appendix D – Determination of NPI

Receiver Category

Table D21 - Determination of NPI Residential Receiver Category

Location/ Catchment	Period	Measured RBL dB $LA_{90(period)}$	Land Use Zone: RU1, RU2, RU4, R5, E4 (Rural)	RU5, RU6, R2, R3, R4, E2, E3 (Suburban)	R1, R4, B1, B2, B4 (Urban)	Others (Commercial, Industrial)	Typical Existing Background Noise Levels Table 2.3 NPI: RURAL Daytime <40 Eve <35 Night <30	SUBURBAN Daytime <45 Eve <40 Night <35	URBAN Daytime >45 Eve >40 Night >35	Rural Residential - an area with an acoustical environment that: is dominated by natural sounds.	having little or no road traffic noise	generally characterised by low background noise levels.	Settlement patterns would be typically sparse	Suburban Residential - an area that has: local traffic with characteristically intermittent traffic flows	or with some limited commerce or industry.	evening ambient noise levels defined by the natural environment and human activity.	Urban Residential- an area with an acoustical environment that: is dominated by 'urban hum' or industrial source noise	has through-traffic with characteristically heavy and continuous traffic flows during peak . .	is near commercial districts or industrial districts	has any combination of the above
Location 1	Day	52			✓				✓											✓
	Evening	46			✓				✓											✓
	Night	33			✓			✓												✓

where urban hum means the aggregate sound of many unidentifiable, mostly traffic and/or industrial related sound sources

Assessment

Location	Rural	Suburban	Urban				Rural - RBL	Suburban - RBL	Urban - RBL	Rural - Description				Suburban - Description			Urban - Description			
Location 1	0	1	**8**	0	0	3	0	1	2	0	0	0	0	0	0	0	0	0	0	3

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Ph: +61 2 4920 1833
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