Units 1-9 Crabtree Lane Manchester

Environmental Noise Survey and Noise Impact Assessment Report

33025/NIA

1 May 2026

For:
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Hann Tucker Associates

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Document Control

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0	01/05/2026	-	[redacted]		
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Hann Tucker Associates

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1.0 Introduction

Hann Tucker Associates Limited (Hann Tucker) has been commissioned by Triton Construction to undertake a noise assessment for a site in Manchester with a view to providing evidence for the discharge of Planning Condition

The site, which is located on Crab Tree Lane, is being considered for development of 9No. industrial units and associated delivery bays and car parking areas.

Baseline noise conditions have been established by means of a detailed noise survey, presented herein. The findings have subsequently been used to assess the suitability of the site for industrial use. Measures required to mitigate noise impacts for the proposed development have been discussed in context with relevant national & local planning policies, design standards and good practice guides.

2.0 Planning Conditions

2.1 Condition 14

14: Prior to commencement of the uses hereby approved a Noise Management Plan (NMP) shall be submitted to and approved in writing by the City Council as local planning authority. The NMP shall include an assessment of noise from all activities associated with the loading bays, service yards and loading dock areas. The scheme shall be implemented in full before the uses commence.

Reason - To safeguard the amenities of the occupiers of nearby residential properties, pursuant to saved policy DC26of the Unitary Development Plan for the City of Manchester, policies SP1 and DM1 of the Manchester Core Strategy (2012).

2.2 Condition 15

15: a) The premises shall be acoustically insulated and treated to limit the break out of noise in accordance with a noise study of the premises and a scheme of acoustic treatment that has been submitted to and approved in writing by the City Council as local planning authority. The scheme shall be implemented in full before the use commences.

b) Prior to occupation of the development a verification report shall be required to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic consultant's report. The report shall also undertake post completion testing to confirm that acceptable criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

Reason - To safeguard the amenities of the occupiers of nearby residential properties, pursuant to saved policy DC26 of the Unitary Development Plan for the City of Manchester, policies SP1 and DM1 of the Manchester Core Strategy (2012)

2.3 Condition 16

16: a) Externally mounted ancillary plant, equipment and servicing shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. Prior to commencement of the use hereby approved the scheme shall be submitted to and approved in writing by the City Council as local planning authority in order to secure a reduction in the level of noise emanating from the site. The scheme shall be implemented in full before the use commences or as otherwise agreed in writing by the City Council as local planning authority.

b) Prior to the operation of the scheme a verification report shall be submitted to and approved in writing by the City Council as local planning authority to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

Reason - To minimise the impact of the development and to prevent a general increase in pre-existing background noise levels around the site, pursuant to policies SP1 and DM1 of the Manchester Core Strategy (2012) and saved UDP policy DC26

3.0 Acoustic Terminology

For an explanation of the acoustic terminology used in this report please refer to Appendix A enclosed.

4.0 Site Description

4.1 Location

The site is located in Manchester. The location is shown in Figure 1 below.



Figure 1 Location Map (Map data ©2026 Google)

The site falls within the jurisdiction of Manchester City Council.

4.2 Description

The site is located on Crabtree Lane and is surrounded by nearby commercial food stores, industrial warehouses and residential properties. To the north of the site lies Ashton New Road, across from which lie rows of residential houses and fast-food restaurants. Adjoining the site to the north is an ALDI store and associated car park. To the immediate east of the site is a home bargains store, and to the south is an equipment supplier operating from a large warehouse. To the west of the site across Crabtree Lane is a car workshop, industrial yard, and public house.

The site is shown in Figure 2 below.



Figure 2 Site Plan (Imagery ©2026 Google, Map data ©2026)

5.0 Proposed Development

The proposals are for the development of 9no. industrial units and associated car parks and delivery bays on Crabtree Lane. At this stage of the development, it is not known how the units will be occupied, so a worst-case assessment based on historical industrial noise activity has been carried out.

The application is supported by an Illustrative Masterplan (IMP), which sets out one possible way in which the development could come forward at the reserved matters stage. The IMP demonstrates how the floorspace could be accommodated on the site.

The site is shown in Figure 3 below.



Figure 3 Plan showing Project Proposals (23168-UMC-XXX-SI-DR-A-0601)

6.0 Planning Policies, Standards & Guidance

6.1 Policies & Guides

In order to provide a suitable assessment a number of national planning policies have been considered, including:

- The National Planning Policy Framework (NPPF) 2025
- The Noise Policy Statement for England (NPSE), 2010
- Planning Practice Guidance – Noise (PPGN), 2019

The above documents highlight the importance of considering the potential noise effects on any new residential development and provide a qualitative approach to assessment. However, each of the above does not provide any quantitative guidance. As such, all quantitative guidance used to form a noise impact assessment is taken from various other standards, guidance, and Local Authority requirements as summarised below:

- Local Planning Policy
- ProPG : Planning & Noise: 2017
- British Standard 4142:2014 + A1:2019

Detailed information for relevant planning policies and guidance can be found within Appendix B.

7.0 Baseline Noise Survey

7.1 Procedure

Fully automated environmental noise monitoring was undertaken by Christopher Fisk AMIOA and assisted by Euan Ellis BA(Hons) from approximately 11:00 hours on Tuesday 7 April 2026 to 11:30 hours on Friday 10 April 2026, to establish full daytime and night-time noise levels over a typical weekday and weekend period. Measurements were taken continuously of the A-weighted (dBA) L_{90}, L_{eq}, and L_{max} sound pressure levels over discrete 2 and 15-minute periods.

Additional attended measurements were performed between 11:00 hours and 15:00 hours on Tuesday 7 April 2026 with the purpose of establishing noise levels at potential noise sensitive receptors around the site.

7.2 Measurement Position

The noise level measurements were undertaken at 6 positions as described in the Table 1 below.

Table 1 Noise Monitoring Location details

Position	Type	Description
1	Unattended	Located approximately 170m to the south of the site and attached to a lamp post on Crabtree Lane. Microphone approximately 2m above ground level and in free field conditions.
2	Unattended	Located approximately 70m to the northeast of the site and attached to a lamp post on Ashton New Road. Microphone approximately 2m above ground level and in free field conditions.
3	Attended	Located approximately 100m to the east of the site within a commercial carpark. Microphone attached to a tripod approximately 1.5m above ground level and in free field conditions.
4	Attended	Located approximately 70m to the northeast of the site and attached to a lamp post on Ashton New Road. Microphone approximately 2m above ground level and in free field conditions.
5	Attended	Located approximately 60m to the west of the site and attached to a tripod approximately1.5m above ground level. Microphone in free field conditions.
6	Attended	Located to the immediate west of the site on Crabtree Lane and attached to a tripod approximately 1.5m above ground level. Microphone in free field conditions.

The positions are shown in *Figure 4* below.

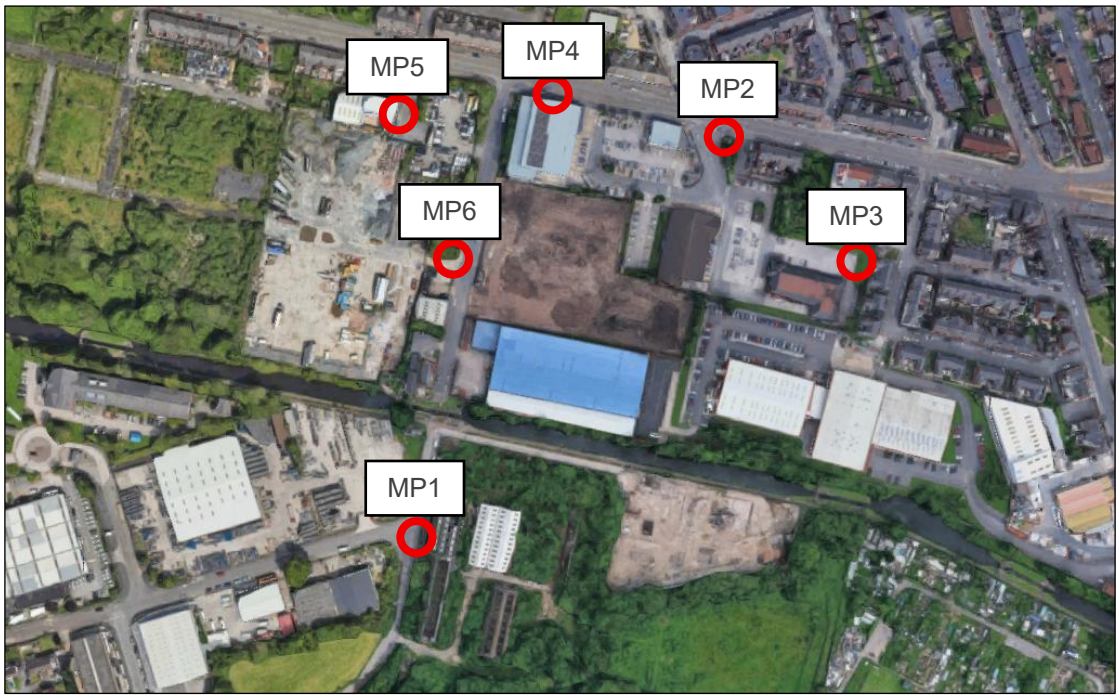


Figure 4 Plan Showing Measurement Positions (Imagery ©2026 Google, Imagery ©2026 Airbus, Maxar Technologies, Map data ©2026 - see above)

7.3 Weather Conditions

For the unattended survey between Tuesday 7 April 2026 and Friday 10 April 2026, local weather reports indicated no notable periods of prolonged rainfall, with temperatures ranging from 6 °C (night) to 22 °C (day) and wind speeds less than 5 m/s. During our time on site, skies were overcast/clear/largely clear with patchy cloud cover, wind conditions were light and from a southerly direction and road surfaces were dry.

During the attended survey on Tuesday 7 April 2026, the weather was generally clear and dry with no periods of rainfall and light wind conditions.

7.4 Instrumentation

The instrumentation used during the survey is presented in the *Table 2* overleaf:

Table 2 Equipment Details & Calibration Information

Position	Description	Manufacturer	Type	Serial Number	Calibration
1	Type 1 Data Logging Sound Level Meter	Larson Davis	824	3838	Calibration on 05/08/2025
	Type 1 ½" Condenser Microphone	PCB	3777B02	132146	
	Pre Amp	Larson Davis	PRM902	4215	
2	Type 1 Data Logging Sound Level Meter	Larson Davis	LxT	4086	Calibration on 05/01/2026
	Type 1 ½" Condenser Microphone	Larson Davis	3777B02	174436	
	Pre Amp	Larson Davis	PRMLxTL1	42843	
3,4	Type 1 Data Logging Sound Level Meter	Brüel and Kjær	2250	3025254	25/02/2026
	Type 1 Calibrator	Bruel & Kjaer	4231	2308993	04/03/2026
5,6	Type 1 Data Logging Sound Level Meter	Larson Davis	LxT	LxT	30/05/2024
	Type 1 ½" Condenser Microphone	Larson Davis	3777B02	317684	
	Pre Amp	Larson Davis	PRMLxTL1	42842	
1, 2, 5, 6	Type 1 Calibrator	Bruel & Kjaer	Cal200	3083	Calibrated on 04/03/2026

Each sound level meter, including the extension cable, was calibrated prior to and on completion of the surveys. No significant changes were found to have occurred (no more than 0.3 dB).

Each sound level meter was located in an environmental case with the microphone connected to the sound level meter via an extension cable. Each microphone was fitted with a windshield.

7.5 Results

The results have been plotted on Time History Graphs 33025/TH1 to 33025/TH2 enclosed presenting the 15-minute A-weighted (dBA) L_{90}, L_{eq} and L_{max} levels at each measurement position throughout the duration of the survey.

In order to compare the results of our survey with the relevant guidelines it is necessary to convert the measured $L_{Aeq(15\,minute)}$ noise levels into single figure daytime $L_{Aeq(16\text{-}hour)}$ (07:00-23:00 hours) and night-time $L_{Aeq(8\text{-}hour)}$ (23:00-07:00 hours) levels.

The following histograms present the measured L_{90} background noise levels at unattended Measurement Positions 1 and 2.

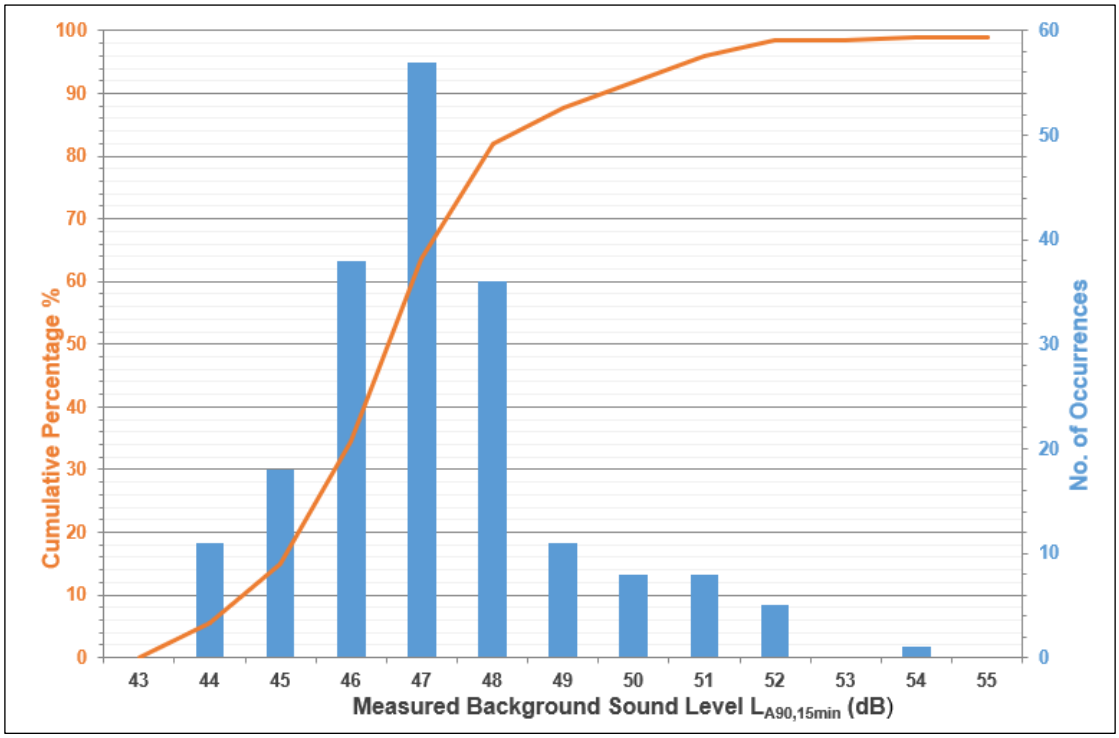


Figure 5 MP 1 Measured Daytime Background Noise Level (07:00 – 23:00)

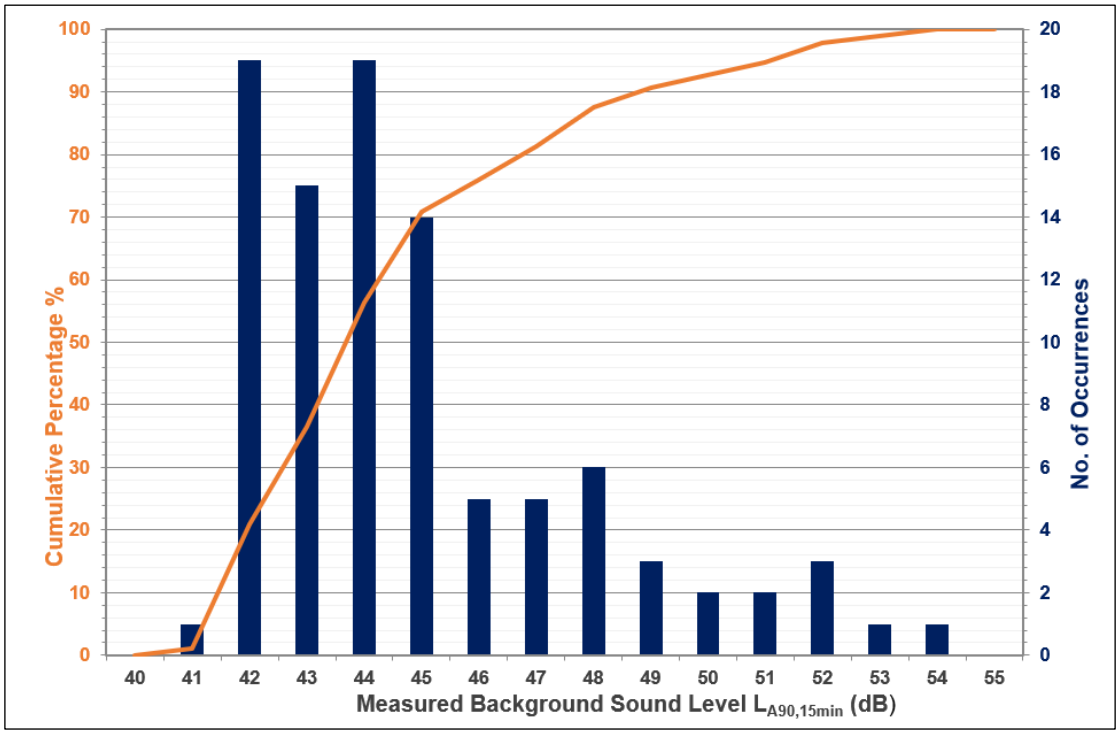


Figure 6 MP 1 Measured Daytime Background Noise Level (23:00 – 07:00)

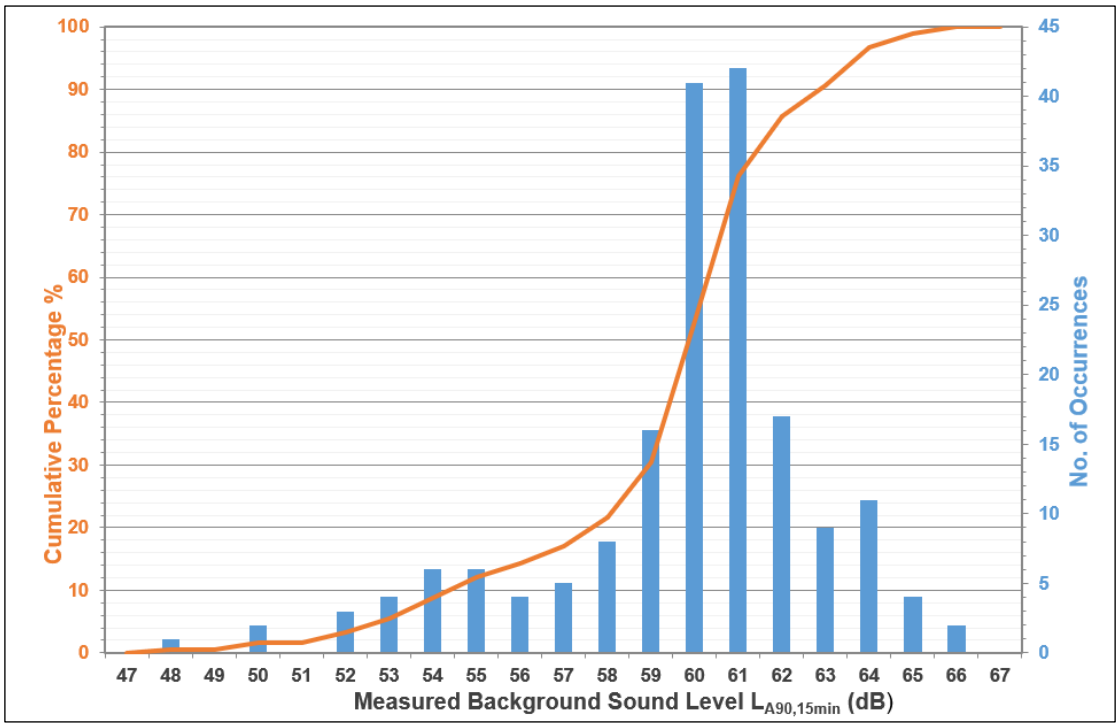


Figure 7 MP 2 Measured Daytime Background Noise Level (07:00 – 23:00)

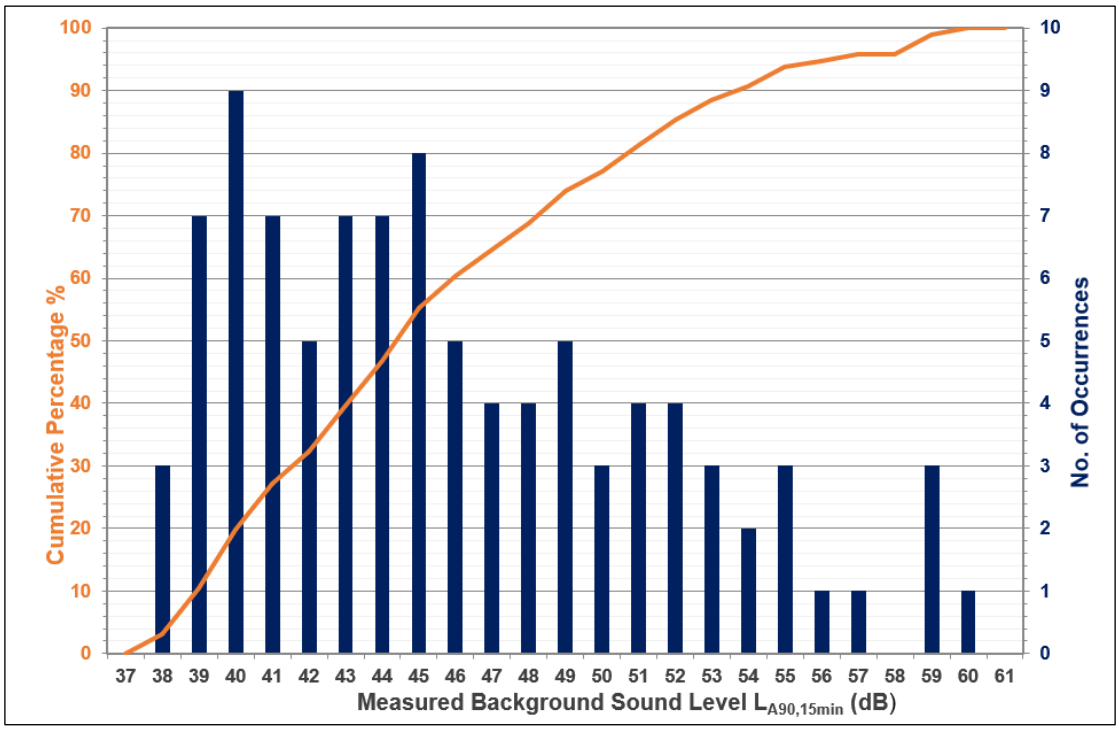


Figure 8 MP 2 Measured Daytime Background Noise Level (23:00 – 07:00)

A summary of the results, as used to inform subsequent assessments against current guidelines, is presented in Table 3 below. The L_{A90} values presented are the 'representative' levels determined through statistical analysis of the 15-minute readings, in line with BS 4142.

Table 3 Unattended Measure Results

Position	Day/Period	Daytime (07:00 – 23:00 hrs)		Night-time (23:00 – 07:00 hrs)		
		$L_{Aeq,16hr}$	L_{A90}	$L_{Aeq,8hr}$	L_{A90}	L_{Amax}
1	07/04/2026	53	47	53	42	73
	08/04/2026	55		55		73
	09/04/2026	55		51		69
	10/04/2026	56		-		-
2	07/04/2026	71	59	67	40	89
	08/04/2026	71		67		90
	09/04/2026	72		68		88
	10/04/2026	72		-		-

Table 4 below summarises noise levels recorded at each of the attended measurement positions.

Table 4 Attended Measurement Results

Position	Date	Period	Sound Pressure Level (dB)		
			$L_{Aeq,T}$	$L_{A90,T}$	$L_{Amax,T}$
3	07/04/2026	12:15:00 – 12:30:00	48	45	65
		13:15:00 – 13:30:00	51	44	78
4	07/04/2026	12:45:00 -13:00:00	71	57	92
		14:00:00 – 14:15:00	72	58	94
5	07/04/2026	13:00:00 – 13:15:00	61	48	84
		14:00:00 – 14:15:00	61	52	83
6	07/04/2026	12:30:00 – 12:45:00	54	50	78
		13:30:00 – 13:45:00	53	46	70

7.6 Discussion of Noise Climate

7.6.1 Unattended Noise Climate

Due to the nature of the survey, i.e. unattended, it is not possible to accurately describe the dominant noise sources, or specific noise events throughout the entire survey period. However, at the beginning and end of the survey period the noise climate was noted to be dominated by road traffic noise.

During the attended survey, the noise climate was dominated by road traffic noise in all positions. In position 3, nearby extract fans associated with the commercial store were audible. It was also noted that tram pass-bys caused significant elevations in L_{max} readings at position 4.

8.0 Noise Emission Criteria

8.1 Emission Limits

Noise egress from the site will need to comply with local planning/environmental authority requirements and statutory noise nuisance legislation.

Based on the results of the noise survey and the requirements of the Local Authority we propose that the following emission criteria be achieved incident at the nearest noise sensitive residential windows, in free-field conditions, with all plant operating simultaneously. See Table 5 below.

Table 5 Proposed Noise Egress Limits

NSR Location	Plant Noise Emission Criteria ($L_{Aeq,T}$, dB)	
	Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)
1	42	37*
2	54	37
3	54	37*

Predicted nighttime noise limit based on distance corrections from unattended positions and change in background noise levels between daytime and nighttime noise levels captured by unattended positions (*)

The above limits should be achieved with all industrial units operating simultaneously.

Noise shall be assessed in accordance with BS 4142:2014 with corrections applied for any plant emitting noise of a tonal or irregular quality.

It should be noted that the above are subject to the final approval of the Local Authority.

8.2 Noise Sensitive Receptor Locations

Figure 9 below highlights the locations where the nearest noise sensitive receptors (NSRs) have been identified.

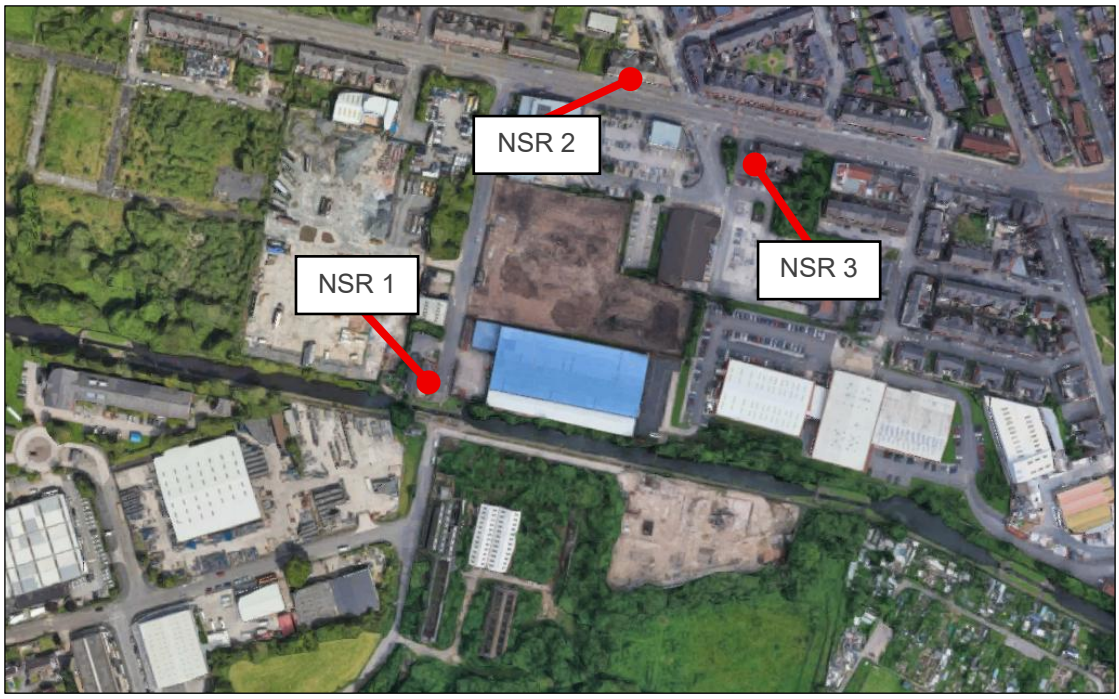


Figure 9 NSR Locations (Imagery ©2026 Airbus, Maxar Technologies, Map data ©2026)

NSR 1 has been identified as the Strawberry Duck public house located approximately 40m to the southwest of the site the boundary of the proposed site. This receptor is understood to have first floor residential dwellings.

NSR 2 is located approximately 70m to the north proposed site and is understood to be commercial units with first floor residential dwellings.

NSR 3 is identified as residential properties located approximately 90m from the east boundary of the proposed site.

9.0 Assessment Overview

The following sections present the findings of our indicative assessment of industrial noise.

Operational Activities Noise Assessment: The control of noise egress to proposed residential properties from internal noise sources;

HGV Noise Impact Assessment: The noise impact of potential goods vehicle movements and loading/unloading service yard activities;

Car Park Noise Impact Assessment: The noise impact of private vehicle arriving, manoeuvring and leaving the proposed car park plots.

9.1 Plant Noise Impact Assessment

At the time of writing, details of proposed plant are not known. Therefore, a plant noise assessment to the nearest noise sensitive receptors should conducted once this information is known.

It is likely this will be once a tenant is known and it will be the responsibility of the tenant to discharge Condition 16.

9.2 HGV Noise Impact Assessment

9.2.1 Assessment Overview

In the absence of any specific information regarding the potential goods vehicle movements or loading/unloading service yard activities, we have calculated the maximum permissible number of events consistent with maintaining a noise rating level equal to or less than the prevailing background sound level.

Our assessment has been based on historic noise level data for similar industrial units to judge the significance of potential noise impacts on nearby dwellings.

9.2.2 Source Noise Data

Historical noise levels measured from goods vehicle movements undertaken by Hann Tucker Associates are presented in Table 6 below. These are considered to be representative of ‘worst-case’ noise levels.

Table 6 Delivery Source Noise Data

Event	Duration (Seconds)	Specific Sound Level (dBA) at 5m*
HGV entering	5	70
HGV manoeuvring, reversing & door slam	30	65
HGV departing site	5	72
Loading/unloading	Up to 780	71

*Corrected for prevailing background noise levels at time of measurement

9.3 Assessment Assumptions

Our 'worst case' speculative assessment of noise impact from the proposed industrial units has been based on the following assumptions:-

- For daytime (07:00-23:00), we have determined the maximum permissible delivery "events" that can occur within a single one-hour assessment period before the limits are likely to be exceeded.
- For night-time (23:00-07:00), we have considered the maximum permissible delivery "events" that can occur within a single 15-minute assessment period before the limits are likely to be exceeded.
- A delivery "event" would comprise an HGV arriving onto site, manoeuvring/reversing into the service yard, loading/unloading activities and the HGV departing site.

Figure 10 below highlights the locations where deliveries are expected to occur.

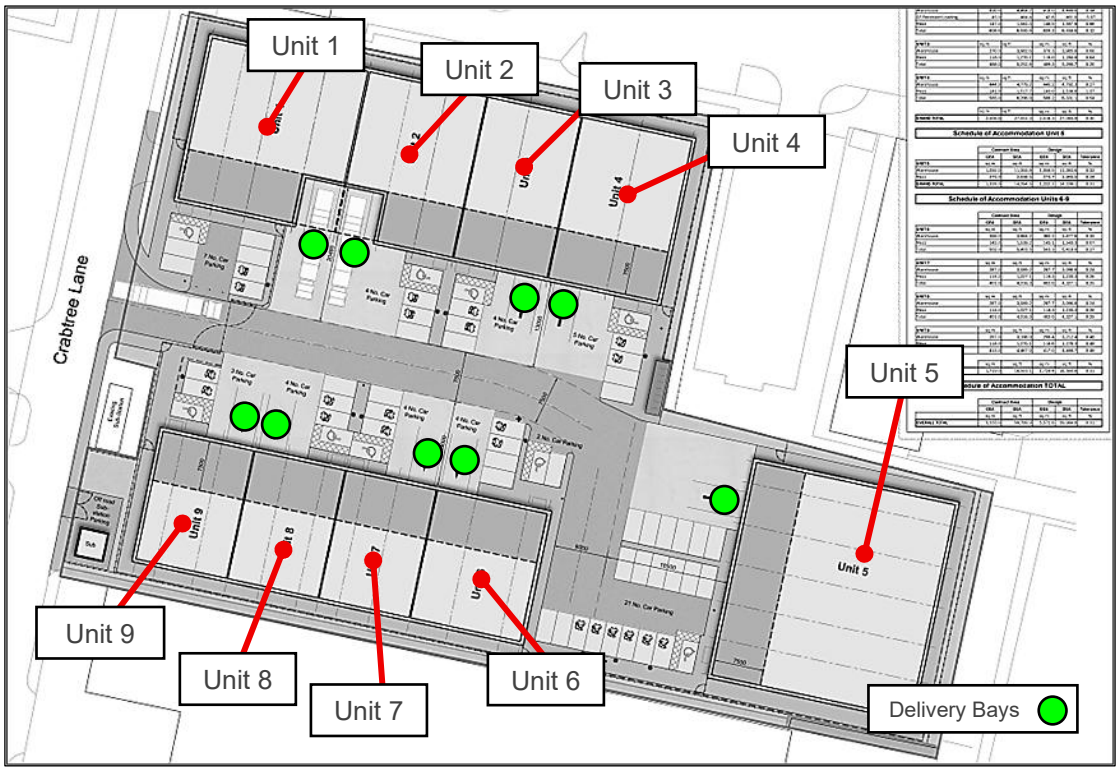


Figure 10 Plan to show expected delivery locations (23168-UMC-XXX-SI-DR-A-0601)

9.4 Delivery Noise Assessment

This section assesses predicted delivery noise levels associated with the 9No proposed industrial units.

A +3dB penalty has been applied for impulsivity for delivery vehicle doors being shut, in line with BS4142 character corrections.

To provide a worst-case assessment, 9no. deliveries (i.e. 1no. delivery per unit) have been assumed to take place during any 1-hour period during daytime hours (07:00-23:00) and every 15-minutes during nighttime hours (23:00-07:00).

Table 7 Delivery Assessment to NSR 1

NSR 1				
Assessment Period	**No. Deliveries**	**Combined Noise level (dBA)**	**Noise Egress Limit, L_{ArTr} (dBA)**	**Difference (dBA)**
Daytime 07:00 – 23:00 hrs	9	36	45	-3
Nighttime 23:00 – 07:00 hrs	9	42	37	+5

Table 8 Delivery Assessment to NSR 2

NSR 2				
Assessment Period	**No. Deliveries**	**Combined Noise level (dBA)**	**Noise Egress Limit, L_{ArTr} (dBA)**	**Difference (dBA)**
Daytime 07:00 – 23:00 hrs	9	26	54	-28
Nighttime 23:00 – 07:00 hrs	9	32	37	-5

Table 9 Delivery Assessment to NSR 3

NSR 3				
Assessment Period	**No. Deliveries**	**Combined Noise level (dBA)**	**Noise Egress Limit, L_{ArTr} (dBA)**	**Difference (dBA)**
Daytime 07:00 – 23:00 hrs	9	27	54	-27
Nighttime 23:00 – 07:00 hrs	9	33	37	-4

Noise from deliveries to the units is predicted to exceed the night-time criterion at NSR1 by 5 dB(A). However, it should be noted that the adopted criterion is 5 dB below the measured representative LA90,T background sound level. On this basis, and in accordance with the BS 4142:2014+A1:2019 methodology, the predicted rating level would be broadly comparable with the existing background sound level and would therefore be indicative of a low impact.

The assessment also assumes that all units would receive deliveries simultaneously, which is considered to represent a conservative worst-case scenario and may not be realistic in practice.

The maximum number of simultaneous night-time deliveries that could occur while still achieving the adopted night-time criterion at NSR1 is 3 No. deliveries. This is considered to be a more realistic scenario having regard to the size and likely operation of the units.

Given the above, and noting that the predicted delivery noise levels comply with the relevant criteria at all other receptors during both the daytime and night-time periods, even with 9 No. simultaneous deliveries, it is anticipated that no dedicated mitigation measures would be required to control delivery noise egress.

9.5 Operational Noise Breakout Assessment

9.5.1 Assessment Overview

It is expected that industrial units could operate both day and night. Therefore, we have carried out an indicative noise assessment of internal breakout from operational activities to the nearby receptors to both daytime and night-time background noise levels.

Our assessment has been based on historic noise level data for similar industrial units to judge the significance of potential noise impacts on nearby receptors.

9.5.2 Source Noise Data

Based on previous measurements within similar light industrial units and distributions, internal reverberant noise levels are unlikely to exceed **75 dB $L_{Aeq,1hr}$** within these unit types.

9.5.3 Assessment Assumptions

We have assessed internal activity noise breakout from the proposed industrial units to the nearest residential receptors based on the following assumptions:

- Noise will be dominated by general reverberant noises within each unit, rather than specific activities or machinery operating close to the unit walls/roof.
- Multiple units could operate simultaneously.
- The units are assumed to be constructed from typical thermally-insulated lightweight metal cladding with masonry walls at low level.
- At the front of the units, large roller shutter doors will be included to allow goods deliveries. We assume these doors open directly onto the warehouse space. Our assessment will consider these closed (normal use).

9.5.4 Operational Assessment Summary

Based on the design of the site (i.e size and number of units, and distance from receptors), noise egress levels from internal operational activities should have low impact on surrounding receptors during both the day and night time periods.

Noise levels from internal operational activities are presented in *Table 10* below with all units operating simultaneously.

Table 10 Operational Noise Assessment Table

NSR	Time Period	Acoustic feature penalties	Calculated Noise Level* (dB, BS 4142 Rating Level)	Noise Egress Limit, L_{ArTr} (dBA)	Excess Over/Under Limit (dB)
1	Daytime 07:00 – 23:00 hrs	+3dB (impulsivity)	32	45	-13
	Nighttime 23:00 – 07:00 hrs			37	-7
2	Daytime 07:00 – 23:00 hrs		33	54	-16
	Nighttime 23:00 – 07:00 hrs			37	-2
3	Daytime 07:00 – 23:00 hrs		28	54	-26
	Nighttime 23:00 – 07:00 hrs			37	-9

Based on the above, noise breakout from the proposed units is unlikely to exceed the required noise limits.

9.6 Carpark Noise assessment

The following section outlines our noise level predictions for car park operations based on library noise data obtained by Hann Tucker. As it is not possible to know at this time the exact number of cars expected to enter and exit the site, the maximum permissible car movements over a 1-hour period during the day and 15-minute period during the night will be calculated.

The library noise data for car park operations includes a car arriving, manoeuvring, a door/boot closure, and car leaving. These are grouped and defined as a “car event” herein.

For simplicity of the assessment, car events have been assessed from the nearest site boundary to the noise sensitive receptors to represent a worst case and robust assessment. This approach should be considered acceptable as car park activity in will likely have minimal noise impact on the receptors when factoring distance and screening from the proposed industrial units.

Table 11, Table 12 and Table 13 present the calculated maximum car events within any 1-hour period during the day and within every 15 minutes during night. A 3 dB penalty has also been applied for potential impulsivity from car doors being shut.

Table 11 Maximum Permissible Car Events to NSR 1

Description (NSR 1)	Daytime Period (07:00 – 23:00 hours)	Nighttime Period (23:00 – 07:00 hours)
Calculated Maximum Permissible Car events	No Practical Limit (Per Hour Period)	80 (Per 15-minute period)

Table 12 Maximum Permissible Car Events to NSR 2

Description (NSR 2)	Daytime Period (07:00 – 23:00 hours)	Nighttime Period (23:00 – 07:00 hours)
Calculated Maximum Permissible Car events	No Practical Limit (Per hour period)	200 (Per 15-Minute period)

Table 13 Maximum Permissible Car Events to NSR 3

Description (NSR 3)	Daytime Period (07:00 – 23:00 hours)	Nighttime Period (23:00 – 07:00 hours)
Calculated Maximum Permissible Car events	No Practical Limit (Per hour period)	No Practical Limit (Per 15-Minute period)

Our calculations indicate that noise from car park operations should not cause adverse effect on surrounding noise sensitive receptors as the number of permissible “car events” is considerably higher than what would be expected to realistically occur.

Where “No practical limit” has been stated in the tables above, the number of car events possible without causing exceedance of the noise limit criteria would by far greater than would be possible for a site of this size. Therefore, mitigation is not considered necessary to control noise associated with car park operation.

10.0 Conclusions

A detailed environmental noise survey has been undertaken in order to establish the currently prevailing environmental noise climate around the site.

The environmental noise impact upon the surrounding receptors has been assessed in the context of building regulations, and national and local planning policies.

Plant noise emission criteria have been recommended based on the results of the noise survey and with reference to the Local Authority's requirements.

Indicative noise egress assessments have been carried out to demonstrate that the relevant conditions can be met and noise levels at existing noise sensitive receptors can practically be achieved. Our assessments indicate the following regarding potential industrial impacts:

- It is considered that noise break-out from internal operations can achieve a noise rating level below the Local Authority Criteria for daytime and nighttime periods, assuming typical construction build-ups for the potential buildings.
- HGV delivery noise should be able to meet the noise level criteria during daytime hours and nighttime hours. It should be noted that theoretically there could be a night-time exceedance at NSR1 if all units accept deliveries at once. However, given the size of the units, this is considered unlikely.
- Noise levels associated with the use of the proposed car park during periods can achieve a noise rating level less than the Local Authority Criteria.

The assessment concludes that delivery activity, car park operations and industrial break-out noise have been appropriately assessed, and that the development is capable of operating in accordance with the stated planning conditions. Condition 14, 15 are considered suitable for discharge.

However, there are no details to discharge condition 16 and it may be that this will be for the tenants to discharge once their plant requirements are known.

Appendix A

Acoustic Terminology

The acoustic terms used in this report are defined as follows:

dB — Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form. The relationships between Decibel levels do not work in the same way that non-logarithmic (linear) numbers work (e.g. 30dB + 30dB = 33dB, not 60dB).

dBA — The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The $_A$ subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted

It should be noted that levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is just perceptible.

$L_{90,T}$ — L_{90} is the noise level exceeded for 90% of the period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.

$L_{eq,T}$ — $L_{eq,T}$ is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, *T*.

L_{max} — L_{max} is the maximum sound pressure level recorded over the period stated. L_{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L_{eq} noise level.

L_p — Sound Pressure Level (SPL) is the sound pressure relative to a standard reference pressure of 2×10^{-5} Pa. This level varies for a given source according to a number of factors (including but not limited to: distance from the source; positioning; screening and meteorological effects).

L_w — Sound Power Level (SWL) is the total amount of sound energy inherent in a particular sound source, independent of its environment. It is a logarithmic measure of the sound power in comparison to a specified reference level (usually 10^{-12} W).

Appendix B

Planning Policies, Standards & Guidance

B.1 Noise Policy Statement for England

The Noise Policy Statement for England (NPSE) was published in March 2010 (i.e. before the NPPF). The NPSE is the overarching statement of noise policy for England and applies to all forms of noise other than occupational noise, setting out the long term vision of Government noise policy which is to:

"Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development."

That vision is supported by the following NPSE noise policy aims which are reflected in three of the four aims of planning policies and decisions in paragraph 123 of the NPPF (see paragraph 8.2 (b) below):

"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *avoid significant adverse impacts on health and quality of life;*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life."*

The Explanatory Note to the NPSE has three concepts for the assessment of noise in this country:

NOEL – No Observed Effect Level
This is the level below which no effect can be detected and below which there is no detectable effect on health and quality of life due to noise.

LOAEL – Lowest Observable Adverse Effect Level
This is the level above which adverse effects on health and quality of life can be detected.

SOAEL – Significant Observed Adverse Effect Level
This is the level above which significant adverse effects on health and quality of life occur.

None of these three levels are defined numerically and for the SOAEL the NPSE makes it clear that the noise level is likely to vary depending upon the noise source, the receptor and the time of day/day of the week, etc. The need for more research to investigate what may represent an SOAEL for noise is acknowledged in the NPSE and the NPSE asserts that not stating specific SOAEL levels provides policy flexibility in the period until there is further evidence and guidance.

The NPSE concludes by explaining in a little more detail how the LOAEL and SOAEL relate to the three NPSE noise policy aims listed above. It starts with the aim of avoiding significant adverse effects on health and quality of life, then addresses the situation where the noise impact falls between the LOAEL and the SOAEL when *"all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development."* The final aim envisages pro-active management of noise to improve health and quality of life, again taking into account the guiding principles of sustainable development which include the need to minimise travel distance between housing and employment uses in an area.

B.2 National Planning Policy Framework (NPPF)

The following paragraphs are from the NPPF (published December 2024, amended February 2025):

198. Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;

b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and

c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

200. Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed."

Paragraph 198 also references the Noise Policy Statement for England (NPSE). This document does not refer to specific noise levels but instead sets out three aims:

- "Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.
- Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.
- Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development."

B.3 Planning Practice Guidance on Noise

Planning Practice Guidance (PPG) under the NPPF has been published by the Government as a web based resource at http://planningguidance.planningportal.gov.uk/blog/guidance/. This includes specific guidance on Noise although, like the NPPF and NPSE the PPG does not provide any quantitative advice. It seeks to illustrate a range of effect levels in terms of examples of outcomes as set out in the following table:

Perception	Examples of Outcomes	Increasing effect level	Action
Not noticeable	No effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	

Perception	Examples of Outcomes	Increasing effect level	Action
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

B.4 British Standard 4142:2014 + A1:2019

When setting plant noise emission criteria reference is commonly made to BS 4142:2014 "*Methods for rating and assessing industrial and commercial sound".*

The procedure contained in BS 4142:2014 provides an assessment of the likely effects of sound on people when comparing the specific noise levels from the source with representative background noise levels. Where the noise contains "a tone, impulse or other characteristic" then various corrections can be added to the specific (source) noise level to obtain the "rating level".

BS 4142 states that: *"The significance of sound of an industrial and/or commercial nature depends upon both the margin by which the rating level of the specific sound source exceeds the background sound level and the context in which the sound occurs". An estimation of the impact of the specific noise can be obtained by the difference of the rating noise level and the background noise level and considering the following:*

• *"Typically, the greater this difference, the greater the magnitude of the impact."*

• *"A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context."*

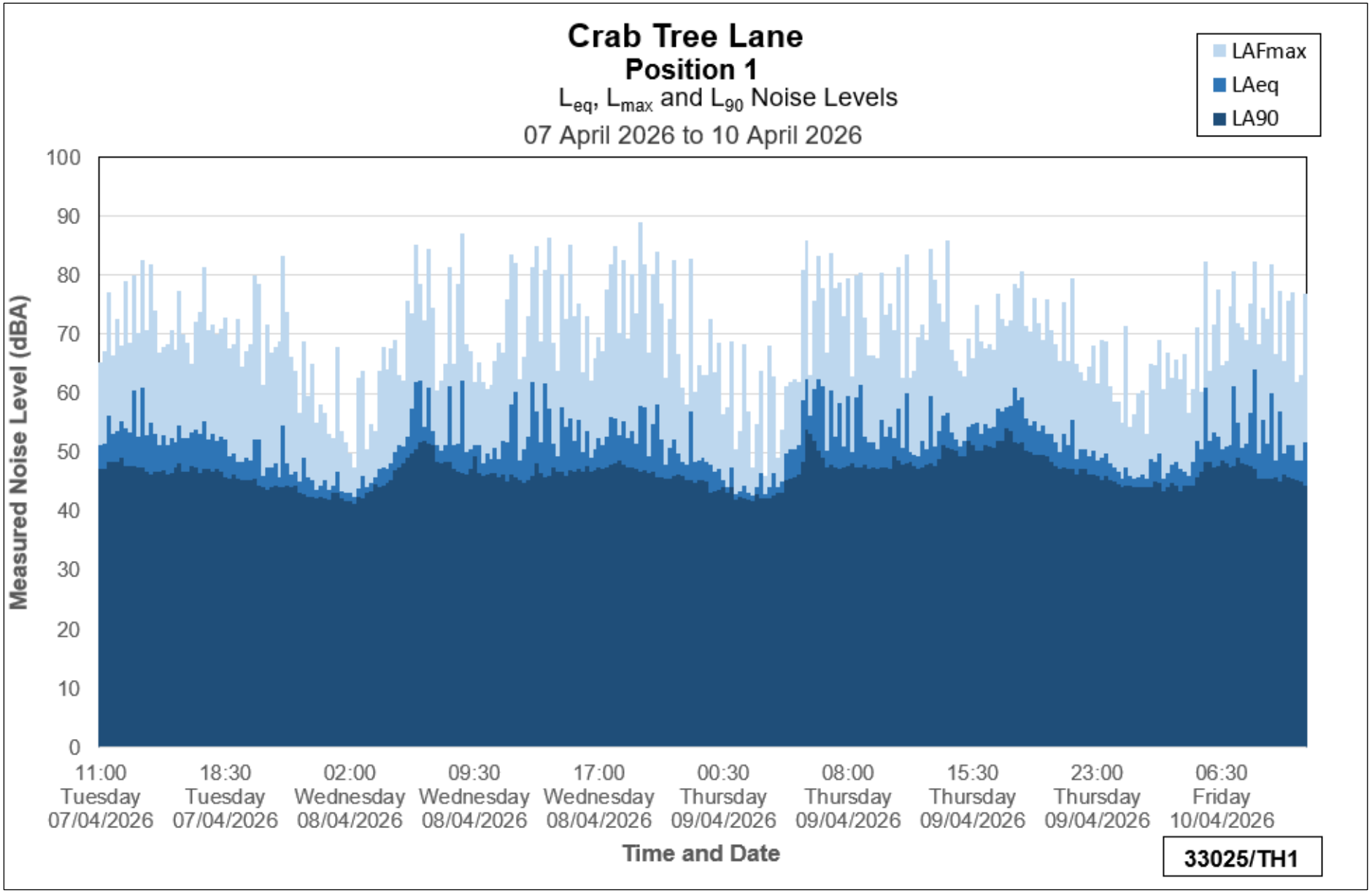
• *“A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context.”*

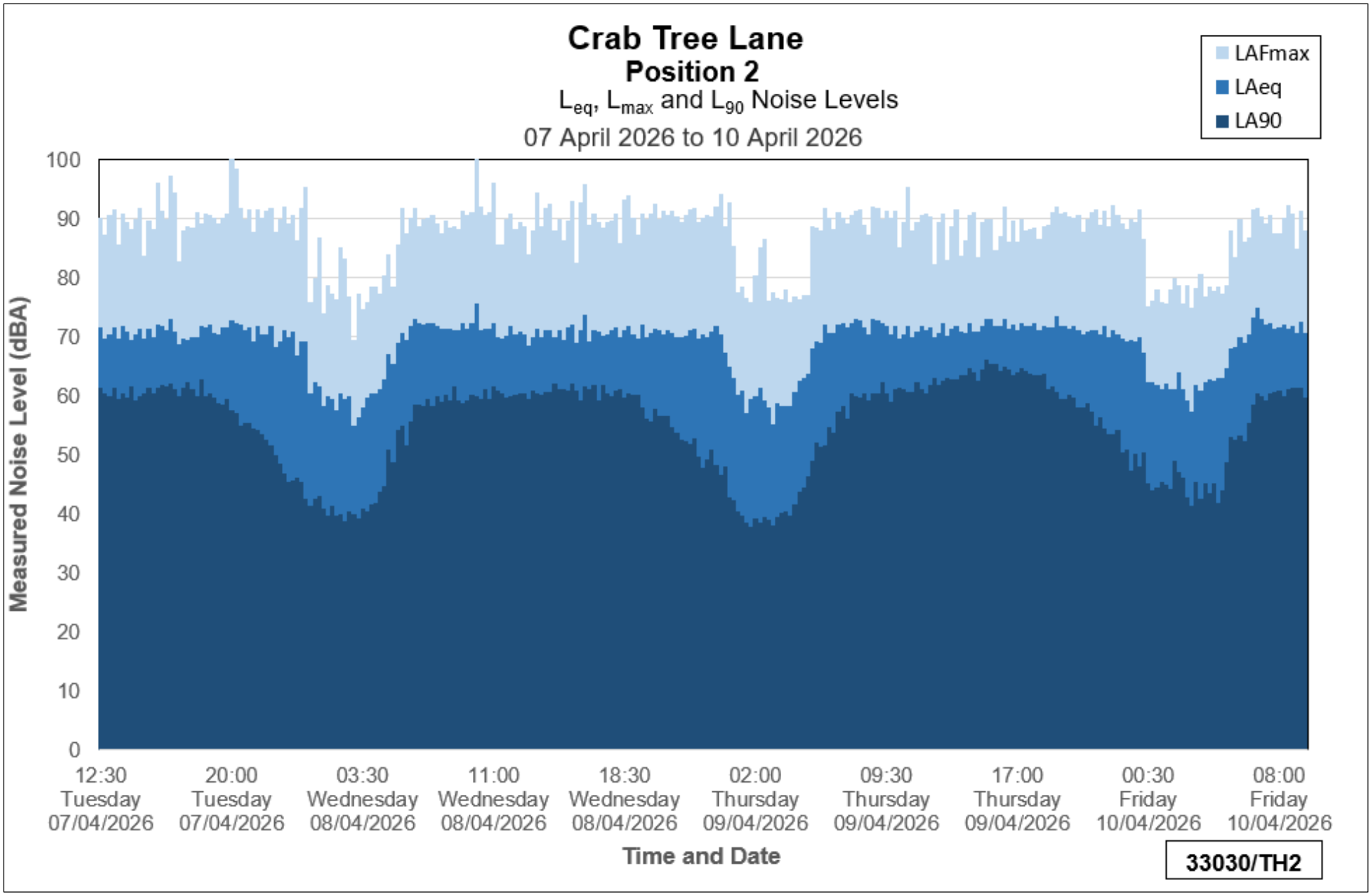
• *“The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.”*

The determination of the “rating level” and the “background level” are both open to interpretation, depending on the context.

Appendix C

Time History Graphs


Crab Tree Lane
Position 1
L_{eq}, L_{max} and L_{90} Noise Levels
07 April 2026 to 10 April 2026
LAFmax
LAeq
LA90
Measured Noise Level (dBA)
100
90
80
70
60
50
40
30
20
10
0
11:00 Tuesday 07/04/2026
18:30 Tuesday 07/04/2026
02:00 Wednesday 08/04/2026
09:30 Wednesday 08/04/2026
17:00 Wednesday 08/04/2026
00:30 Thursday 09/04/2026
08:00 Thursday 09/04/2026
15:30 Thursday 09/04/2026
23:00 Thursday 09/04/2026
06:30 Friday 10/04/2026
Time and Date
33025/TH1


Crab Tree Lane
Position 2
L_{eq}, L_{max} and L_{90} Noise Levels
07 April 2026 to 10 April 2026
LAFmax
LAeq
LA90
Measured Noise Level (dBA)
100
90
80
70
60
50
40
30
20
10
0
12:30 Tuesday 07/04/2026
20:00 Tuesday 07/04/2026
03:30 Wednesday 08/04/2026
11:00 Wednesday 08/04/2026
18:30 Wednesday 08/04/2026
02:00 Thursday 09/04/2026
09:30 Thursday 09/04/2026
17:00 Thursday 09/04/2026
00:30 Friday 10/04/2026
08:00 Friday 10/04/2026
Time and Date
33030/TH2