

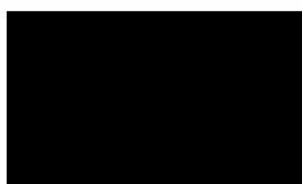
Noise Management Plan

Acoustic Consultancy Report
36784/3/1/12

Report Prepared For

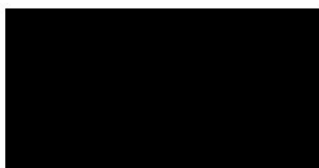
Design I. D.
The Anchor Inn, 46 High Street, Storrington, RH20 4HJ
09 March 2026

Report Author



Victoria Bond BSc MIOA (D)

Checked By



M Balsom MSc MIOA (D) (E)

Telephone
0118 918 6460
Facsimile
0118 918 6480

enquiries@lcpacoustics.co.uk
www.lcpacoustics.co.uk

LCP
Riverside House
3 Winnersh Fields
Gazelle Close
Winnersh
Wokingham
RG41 5QS

**A division of Caice
Acoustic Air Movement Ltd.**

Company Registration Number
2790667
VAT Registration Number
GB614683632



Contents

i) Executive Summary.....	3
ii) Document History	3
1. Introduction.....	4
2. Noise Management Plan.....	4
Appendix A: Noise Monitoring Form	6
Appendix B: Survey and Measurement Data	7
Appendix C: Site Plan with Measurement Positions	11
Appendix D: Measurement Data Graph	12
Appendix E: Approved Site Plan 25.045.SG.R 101	13
Appendix F: Glossary	14

i) Executive Summary

LCP has been commissioned to carry out an acoustic environment survey and to use the obtained data to provide a practical operational manual for pub management on controlling noise in compliance with Condition 3 of Application Approval Ref. DC/25/1203, and to fully discharge that condition.

A noise management plan is provided in section 2.

ii) Document History

Issue	Date	Issue Details	Issued By	Checked By
1	30 th January 2026	Initial Issue	VB	MB
2	2 nd February 2026	Amendment	VB	-
3	6 th February 2026	Amendment following comments from Design I.D. Ltd.	VB	-
4	9 th March 2026	Device reference removal	VB	MB

1. Introduction

LCP has been commissioned to carry out an acoustic environment survey and to use the obtained data to provide a practical operational manual for pub management on controlling noise in compliance with Condition 3 of Application Approval Ref. DC/25/1203, and to fully discharge that condition.

The guidance contained in this report is given on the basis that the operational period of The Anchor Inn may potentially be between 11:00 and 22:30hrs.

2. Noise Management Plan

To ensure that the ambient noise levels in the local area remain unchanged due to activity within The Anchor Inn, the following advise should be followed.

- Hours of operation - The guidance contained in this report is given on the basis that the operational period may potentially be between 11:00 and 22:30hrs.
- Details on how staff will monitor noise levels – Staff should be suitable training in awareness of noise levels. If there are concerns about noise levels becoming excessive, or when complaints are received, a noise monitoring device should be installed and maintained on the sites external boundary to check levels are within a suitable range and notify The Anchor Inn when the noise goes above a certain level. The current ambient noise levels, during the proposed operational hours, discussed in Appendix B, is 55dB(A), ranging from 48 – 63dB(A). It is advised that noise levels at the boundary should never exceed 65dB(A) and if this is exceeded immediate actions should be taken and logged.
- Management responsibilities during all operating hours – All staff should be suitable training in awareness of noise levels and managers should be made aware of any noise concerns immediately. The maintenance, of any noise monitoring device, will be the manager of The Anchor Inn responsibility. Ventilation should be controlled by mechanical services to ensure all doors and windows are kept closed at all times. Staff should be responsible that windows and doors remain closed. There is currently an entrance lobby which should remain and self-closing devices should be fitted where appropriate.
- What steps will be taken to reduce volume if music is clearly audible outside noise sensitive premises - In the event when staff are alerted to the noise levels becoming excessive/exceeding the requirements, they will take immediate action and warn patrons/ internal speaker systems operator that levels are becoming excessive and may even ask patrons to leave/reduce the internal speaker systems noise levels to an appropriate level.
- The management to keep a written log to record any incidents of anti-social behaviour - A record log should be used and kept as a historic record, which may be share with the Environmental Health/Police in instances where a complaint has been made. An example form to be used by The Anchor Inn is provided in Appendix A.
- Measures to control noise from all activities and operations at the site (including the operation of any equipment) and minimising noise from the garden area - It is advised to utilise signage

around the site to encourage patrons to be respectful of the neighbouring residents and to be conscious of noise levels.

As this is an existing public house, there are to be no change in the external mechanical plant. Should the design change at a later date a noise impact assessment in accordance with BS4042:2014+A1:2019 will be undertaken. Similarly, should there be a change in the deliveries or collections, this should be assessed.

Under this application, there is to be no amplified speaker systems used externally in order to protect the neighbouring residents.

[illegible]

Appendix B: Survey and Measurement Data

Site Description

The site layout together with the measurement position is shown in the drawing contained within Appendix A.

Receiver Location

The site was surveyed to determine the location of the most affected receiver. The nearest residential receiver with direct line of sight to The Anchor Inn are the properties along Hanover Walk to the south of The Anchor Inn car park. In addition, there is a residential dwelling above a commercial unit along 40 High Street to the west of The Anchor Inn. This is shown in the site plan in Appendix A.

Local Noise Climate

The predominant local noise sources were frequent road traffic along Manley's Hill, School Hill, and High Street Junction.

Measurements

The noise monitoring took place between 11:30hrs on the 18th of December 2025 to 11:15hrs on the 22nd of December 2025. The measurement period was considered sufficient to establish the representative background sound levels corresponding to the operational period of the activity. The weather conditions monitored during the survey are shown in the following table.

Table 1: Weather Conditions at Measurement Location

Weather	Value				
	18/12/25	19/12/25	20/12/25	21/12/25	22/12/25
Average Wind Speed	2m/s	1m/s	1m/s	1m/s	1m/s
Wind Direction	North	North-East	North	West	North
Cloud Cover	80%	20%	40%	50%	30%
Max. Temperature	12°C	11°C	11°C	11°C	11°C
Min. Temperature	11°C	6°C	7°C	7°C	5°C
Precipitation	11:30 to 16:00 - Heavy rain	None	None	None	None

Measurement Results - Ambient Noise

The ambient sound level(s) obtained, during the operational hours of 11:00hrs to 22:30hrs, being as follows:

Table 2: Ambient sound levels, dB re 2×10^{-5} Pa

Measurement Position	L _{Aeq} 11 hours Day*
MP1	55

Measurement Results - Background Noise

The lowest background sound level(s) obtained, during the operational hours of 11:00hrs to 22:30hrs, being as follows:

Table 3: Lowest background sound levels, dB re 2×10^{-5} Pa

Measurement Position	$L_{A90, 15 \text{ mins}}$ Day*
MP1	44

* Day and Night periods are defined as between 07:00 - 23:00 and 23:00 - 07:00 respectively.

Criteria - BS4142:2014

Relating to mechanical plant but worth considering, BS4142:2014 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.

Table 4: BS4142 assessment based upon rating level

Difference between background noise and rating levels	Assessment
+ 10 dB	Indication of a significant adverse impact
+ 5 dB	Indication of an adverse impact
0 dB	Indication of low impact

Certain acoustic features can increase the significance of impact. The specific sound level should be corrected if a tone, impulse or other acoustic feature is expected to be present.

Table 5: Corrections for acoustic features, subjective method

Acoustic Feature	Correction, dB		
	Just Perceptible	Clearly Perceptible	Highly Perceptible
Tonality	2	4	6
Impulsivity	3	6	9
Other Characteristics	3		
Intermittency	3		

Typically the acoustic feature correction would not be expected to exceed 10dB.

Where the level of uncertainty could affect the conclusion, take reasonably practicable steps to reduce the level of uncertainty.

Criteria - World Health Organisation (WHO) Guidelines for Community Noise (1999)

The WHO's 'Guidelines for Community Noise' gives the following relevant noise criteria:

Table 6: Guideline values for community noise, from Guidelines for Community Noise (WHO, 1999)

Specific Environment	L _{Aeq, T} dB	Time Base (hours)	L _{Amax, fast} dB
Outdoor living area (serious annoyance, daytime and evening)	55	16	-
Outdoor living area (moderate annoyance, daytime and evening)	50	16	-
Dwelling, indoors	35	16	-
Inside bedrooms	30	8	45
Outside bedrooms	45	8	60
Outdoors in parkland and conservation areas*	-	-	-

* Existing quiet outdoor areas should be preserved and the ratio of intruding noise to natural background sound should be kept low

The WHO's 'Guidelines for Community Noise' also gives the following general guidance on the expected sound insulation performance of a façade with a partly open window, it states that *"At night, sound pressure levels at the outside facades of the living spaces should not exceed 45 dB L_{Aeq} and 60 dB L_{Amax}, so that people may sleep with bedroom windows open. These values have been obtained by assuming that the noise reduction from outside to inside with the window partly open is 15 dB."*

Criteria - BS8233:2014

The criteria offered in BS8233 for residential buildings are largely based on the recommendations made in the Guidelines for Community Noise.

Using the general guidance from above, on the expected sound insulation performance of a façade with a partly open window, the criteria shown in the table below have been adapted from the criteria offered in table 4 of BS8233 in order to obtain acceptable external noise levels.

The noise levels shown should be treated as overall noise levels, i.e., the combination of all existing noise levels at the site, and noise levels from any proposed plant or activity.

Table 7: External ambient noise levels for dwellings, based on BS8233, dB re 2x10⁻⁵ Pa

Activity	Location	Time period	
		07:00 to 23:00	23:00 to 07:00
Resting	Living Room	50 L _{Aeq,16 hour}	-

Activity	Location	Time period	
		07:00 to 23:00	23:00 to 07:00
Dining	Dining Room/area	55 L _{Aeq} , 16 hour	-
Sleeping (daytime resting)	Bedroom	50 L _{Aeq} , 16 hour	45 L _{Aeq} , 8 hour

In addition to the above criteria, BS8233 goes on to say:

"For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 L_{Aeq, T}, with an upper guideline value of 55 dB L_{Aeq, T} which would be acceptable in noisier environments."

The above criteria are in line with the recommendations made in WHO's 'Guidelines for Community Noise'.

Recommended Residential Design Rating Level

On the basis of the above the recommended residential design rating level should therefore be:

Residential Design Rating Level
Lowest L _{A90} , 15 mins dB

Advised Rating Levels

The noise levels to be advised for this project are set out in the following table.

Table 8: Advised rating levels due to activity from The Anchor Inn, dB re 2x10⁻⁵ Pa

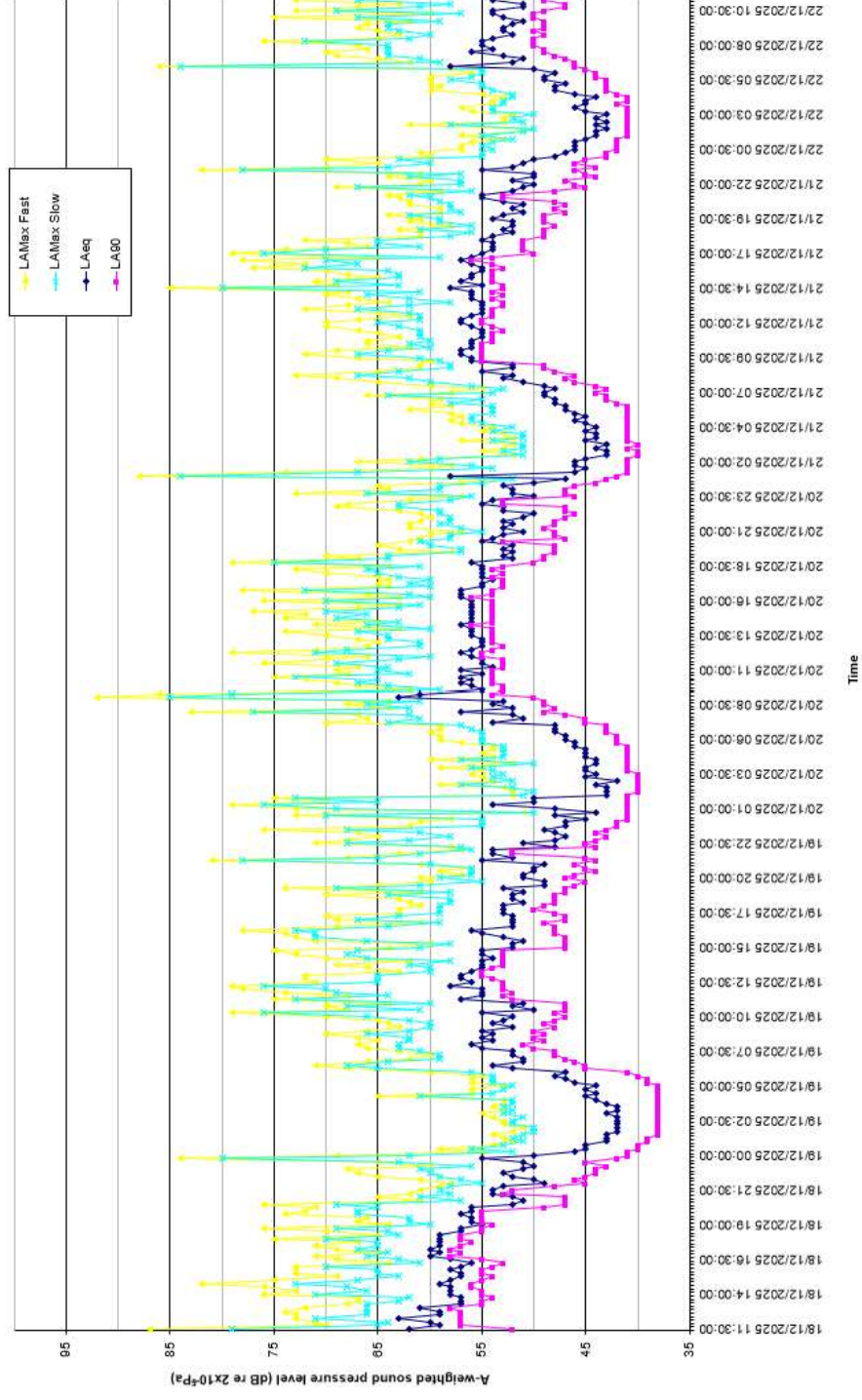
Receiver Premises	Approximate Distance (m)	Noise Level (Day) L _{Aeq} , 16 hr
Nearest residential window of dwellings of 40 High Street	17	44
Nearest residential window of dwellings along Hanover Walk	18	44
Outdoor living area of dwellings along Hanover Walk	16	50

Appendix C: Site Plan with Measurement Positions



Approximate measurement position (Latitude & Longitude) 50°55'3.45"N, 0°27'12.66"W.

Appendix D: Measurement Data Graph



Sound pressure level measurements were obtained using the following instrumentation complying with the Class 1 specification of BS EN 61672:2003

- Svantek 959 Sound Level Meter S/N: 11207 (next cal due 28/07/2027) Start gain +1.63 End gain +1.71
- Svantek pre-amplifier SV12L S/N: 49860 with GRAS microphone capsule 40AE S/N: 215511

Calibration checks were made prior to and after completion of measurements using a Svantek SV33 calibrator, S/N: 43066 (next cal due 07/03/2026) complying with Class 1 specification of BS EN 60942:2003, calibration level 111.4.0 dB @ 1.0 kHz. All acoustic instrumentation carried current manufacturer's certificates of conformance.

Appendix F: Glossary

The list below details the major acoustical terms and descriptors, with brief definitions:

'A' Weighting

Weighting applied to the level in each stated octave band by a specified amount, in order to better represent the response of the human ear. The letter 'A' will follow a descriptor, indicating the value has been 'A' weighted. An 'A' weighted noise level may also be written as dB(A).

Airborne Noise

Noise transmitted through air.

Ambient Noise

The total noise level including all 'normally experienced' noise sources.

dB or Decibel

Literally meaning 'a tenth of a bel', the bel being a unit devised by the Bell Laboratory and named after Alexander Graham Bell. A logarithmically based descriptor to compare a level to a reference level. Decibel arithmetic is not linear, due to the logarithmic base. For example:

30 dB + 30 dB $\neq$ 60 dB

30 dB + 30 dB = 33 dB

$D_{nT\omega} + C_{tr}$

The weighted, normalised difference in airborne noise levels measured in a source room (L1) and a receive room (L2) due to a separating partition.

D	Is simply $L_1 - L_2$.
D_{nT}	Is the normalisation of the measured level difference to the expected (in comparison to the measured) reverberation time in the receiving room.
$D_{nT\omega}$	Is the weighted and normalised level difference. This value is the result of applying a known octave band weighting curve to the measured result.
C_{tr}	Is a correction factor applied to the $D_{nT\omega}$ to account for the known effects of particular types of noise, such as loud stereo music or traffic noise.

Frequency (Hz)

Measured in Hertz (after Heinrich Hertz), and represents the number of cycles per second of a sound or tone.

Insertion Loss, dB

The amount of sound reduction offered by an attenuator or louvre once placed in the path of a noise level.

$L_{A90, T}$

The 'A' weighted noise level exceeded for 90% of the time period T, described or measured. The '90' can be substituted for any value between 1 and 99 to indicate the noise level exceeded for the corresponding percentage of time described or measured.

$L_{Aeq, T}$

The 'A' weighted 'equivalent' noise level, or the average noise level over the time period T, described or measured.

L_{Amax}

The 'A' weighted maximum measured noise level. Can be measured with a 'slow' (1 sec) or 'fast' (0.125 sec) time weighting.

L_{Amin}

The 'A' weighted minimum measured noise level.

NR

Noise Rating (NR) level. A frequency dependent system of noise level curves developed by the International Organisation for Standardisation (ISO). NR is used to categorise and determine the acceptable indoor environment in terms of hearing preservation, speech communication and annoyance in any given application as a single figure level. The US predominantly uses the Noise Criterion (NC) system.

Octave

The interval between a frequency in Hz (f) and either half or double that frequency (0.5f or 2f).

Pa

Pascals, the SI unit to describe pressure, after physicist Blaise Pascal.

Reverberation Time, T_{mf} , RT60, RT30 or RT20

The time taken in seconds for a sound to diminish within a room by 1,000 times its original level, corresponding to a drop in sound pressure of 60 dB. When taking field measurements and where background noise levels are high, the units RT20 or RT30 are used (measuring drops of 20 or 30 dB respectively). Sometimes given as a mid-frequency reverberation time, T_{mf} which is the average of reverberation time values at 500Hz, 1kHz and 2kHz.

R_w

The sound reduction value(s) of a constructional element such as a door, as measured in a laboratory, with a known octave band weighting curve applied to the result.

Sound Power Level

A noise level obtained by calculation from measurement data, given at the face of an item of plant or machinery. Referenced to 10^{-12} W or 1pW.

Sound Pressure Level

A noise level measured or given at a distance from a source or a number of sources. Referenced to 2×10^{-5} Pa.

Subjective Effect of Changes in Sound Pressure Level

The table below details the subjective effects of variations in sound pressures (adapted from Bies and Hansen).

Difference between background noise and rating levels	Increase in ambient noise level in 'real terms'	Change in apparent loudness
+ 10 dB	+ 10 dB	Twice as loud
+ 5 dB	+ 6 dB	Clearly noticeable
0 dB	+ 3 dB	Just perceptible
-10 dB	0 dB	No change

W

Watts, the SI unit to describe power, after engineer James Watt.