Acoustic Planning Report
Exeter Airport Commercial Site

DATE OF ISSUE: **21 FEBRUARY 2022**

ISSUE: **01**

HM REFERENCE: **30695-RP-AC-001**

PROJECT:

EXETER AIRPORT COMMERCIAL SITE
WESTCOTT LANE
DEVON
EX5 2UL

CLIENT:

PARAGON
THE HARLEQUIN BUILDING
65 SOUTHWARK STREET
LONDON SE1 0HR

PROJECT NAME:	**EXETER AIRPORT COMMERCIAL SITE**
REPORT NAME:	**Acoustic Planning Report** **Exeter Airport Commercial Site**
ISSUE STATUS:	**FINAL**
HM REFERENCE:	**30695-RP-AC-001**
DATE OF ISSUE:	**21 FEBRUARY 2022**
ISSUE:	**01**
AUTHOR:	**J RICHARDSON**
CHECKER:	**J RICHARDSON**
APPROVER:	**J WILLMOTT**

HM OFFICE: **ONE DISCOVERY PLACE**
COLUMBUS DRIVE
FARNBOROUGH
HAMPSHIRE
GU14 0NZ

T: +44 (0)1252 550 500
HILSONMORAN.COM
INFO@HILSONMORAN.COM

DOCUMENT HISTORY:

ISSUE	DATE	DETAILS
00	29/4/2021	ISSUE
01	21/2/2022	FINAL ISSUE

Contents

1. Introduction 1

2. The Site, Site Setting and Proposed Development 2
2.1. Site Description 2
2.2. Noise Climate in Summary 3
2.3. Noise Sensitive Receptors 3
2.4. Proposed Development 3

3. Noise Guidance and Planning Policy 4
3.1. Local Authority Consultation 4

4. Environmental Noise Survey 5
4.1. Methodology 5
4.2. Results 6

5. External Noise Emission Limits 9

6. Outline Mitigation Measures 10

Appendix A – Glossary of Acoustic Terminology 11

Appendix B – Legislation, Planning Policy and Noise Guidelines 14

1. Introduction

This noise assessment has been prepared by Hilson Moran on behalf of Paragon in support of an application to obtain planning permission to redevelop land near Exeter Airport, Devon. The proposed development will comprise Class B8 units, associated car parking and hardstanding.

This assessment considers the proposed development within the context of existing properties in the area and considers the potential impacts of the development on nearby noise sensitive receptors (NSRs).

As part of the assessment the following works have been carried out:

- Correspondence with East Devon Council (EDC) over the preparation of this study to ensure it meets the local authority's noise assessment requirements.
- Undertaking of a baseline environmental noise level survey to quantify the existing climate affecting the site and at nearby sensitive receptors.
- Specification of appropriate noise emission limits for new fixed building services plant to adhere.
- Provision of outline recommendations for the control of noise emissions from building services.

A glossary of the acoustic terminology used in this report is presented in Appendix A.

2. The Site, Site Setting and Proposed Development

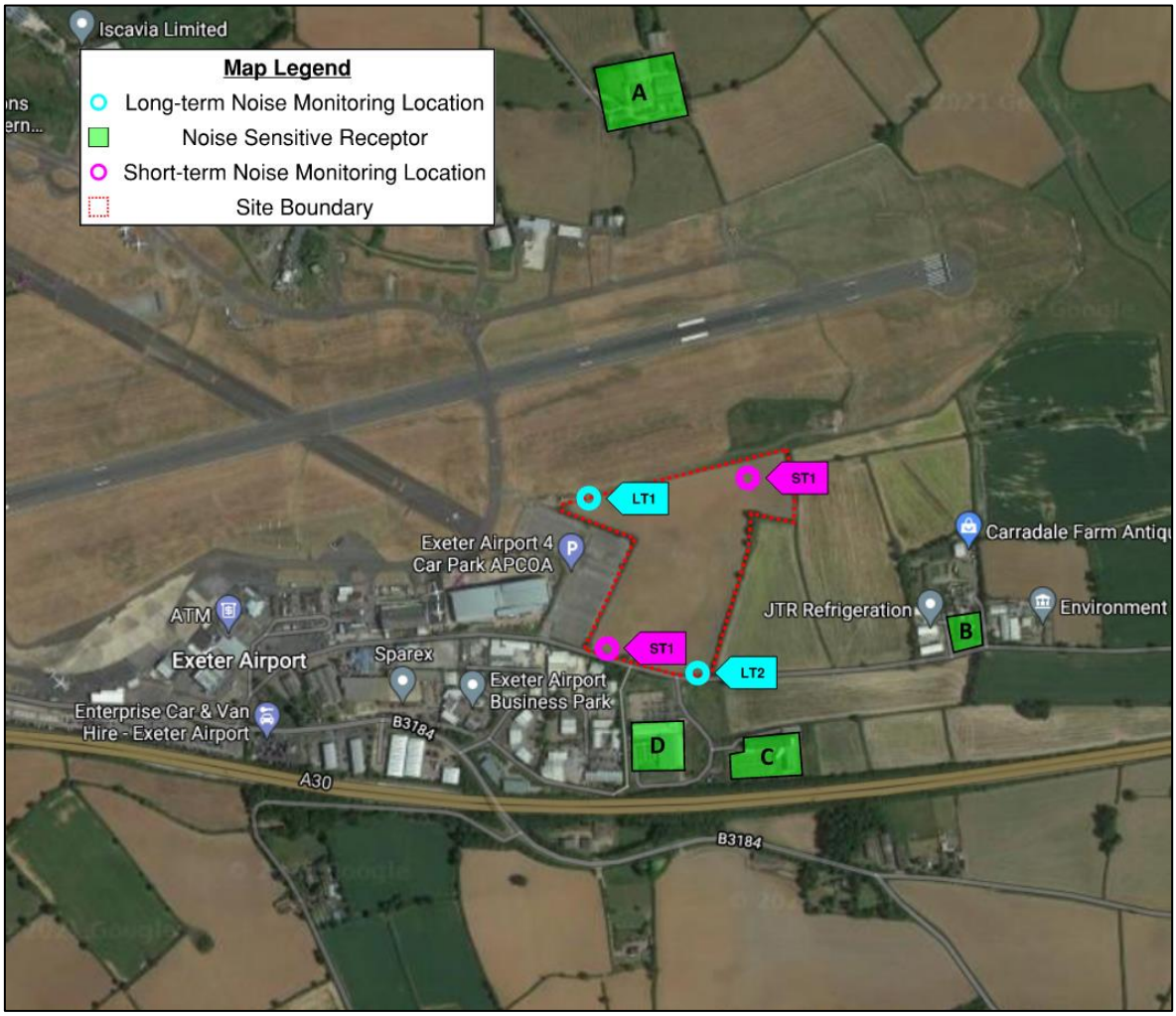
2.1. Site Description

The application site (National Grid Reference SY 00859 93382) is approximately 7.5 hectares in area and is currently green field land situated near Westcott Road, Cyst Honiton, Cranbrook, East Devon EX5 (hereby the 'Proposed Development').

The site is bound to the north and west by Exeter Airport and associated facilities. Existing commercial units are located immediately to the south of the site. Further afield, the site is surrounded by a large portion of agricultural land to the north and east. The A30 is located approximately 0.2km south of the development site.

The site location map is illustrated in Figure 2.1, showing the location of the site and orientation with respect to other existing developments and the rail and road network for the area.

Figure 2.1: Location Plan



2.2. Noise Climate in Summary

Noise levels at the site are dominated by constant road traffic movement on the A30 to the south of the site. Noise from regular aircraft movement associated with Exeter Airport also contributes to the local noise climate. Noise from the local rural road network also influences the noise climate, to some extent.

2.3. Noise Sensitive Receptors

For planning purposes, the impact of the noise emission from the Proposed Development on existing sensitive receptors in the vicinity of the site needs to be assessed. Noise Sensitive Receptors (NSRs) are defined as properties that are most at risk of potential noise impact, such as residential dwellings, hotels, healthcare facilities, schools, etc. Where many NSRs are present in one area, it is appropriate to assume the noise levels at the nearest NSRs to the Proposed Development represent the level at NSRs further away. The nearest NSRs identified to the Proposed Development are described in Table 2.1.

Table 2.1: Noise Sensitive Receptors

NSR Identifier	Description	Address / Nearest Postcode
A	Treasbeare Farm (Diary farm)	Cranbrook, EX5 2DY
B	Residential Dwellings	EX5 2LL
C	Hampton By Hilton Airport (Hotel)	EX5 2LJ
D	Virtual Job Centre (Flight school)	EX5 2LJ

2.4. Proposed Development

Development layout plans are not yet fixed however reference should be made to the illustrative masterplans presented in the PHP Design Parameters Document. In principle, it is understood the development will comprise a number of trade counter industrial units (Use Class B8), with associated car parking and hard standing. New items of fixed external building services plant will also be introduced as part of the development.

3. Noise Guidance and Planning Policy

When selecting appropriate criteria for assessment, reference has been made to relevant planning policy, regulation and guidance concerning the Proposed Development. Due consideration of advice contained within the National Planning Policy Framework (NPPF), the Noise Statement for England (NPSE) and Noise Planning Practice Guidance, although no specific numerical criteria are detailed in these documents.

With regard to acoustic design and noise control, the NPPF provides a set of overarching aims, broadly reflecting already contained in the NPSE. They are directed towards the avoidance of significant adverse impacts and reduction of other adverse impacts on health and quality of life; set within the context of the government's policy on sustainable development.

Relevant legislation, policy and guidance documents are described in further detail in Appendix B of this report.

3.1. Local Authority Consultation

We corresponded with Robert Parkinson of the environmental health team at East Devon Council on the 6th April 2021 in order to agree the assessment approach and establish the council's requirements regarding plant noise from the Proposed Development. The Council requested that noise limits be set, and the impact of noise from the development be assessed according to BS 4142:2014. There is no numerical criteria or standard plant policy adopted by the Council, and therefore Hilson Moran has developed the criteria based on relevant industry standards.

In absence of standard plant noise policy, HM has set appropriate noise level limits which the cumulative level of noise from external building services must be controlled to meet at nearby sensitive properties.

4. Environmental Noise Survey

4.1. Methodology

An environmental baseline noise survey was undertaken at the site between Thursday 8th April and Friday 9th April 2021 in order to establish the existing noise climate in the local area of the proposed development site. Long-term unattended noise monitoring was set up in two key locations to capture the background noise levels representative of the nearest noise sensitive receptors (NSRs) in the area and understand the prevailing levels of noise incident on the development site. Supplementary short-term measurements were also taken to determine the spatial variation of noise across the site. The monitoring locations are described in Table 4.1 and illustrated on Figure 2.1.

Table 4.1: Measurement Locations

Measurements	Description	Observations
LT1	Free-field measurement at the north west site boundary. Microphone affixed to a perimeter fence post at a height of 2.5m above ground level (AGL).	Road traffic noise from A30 dominates in the measurement location. Maximum noise events are typically from ground and airborne activities associated with Exeter Airport. Nature sounds contribute to the noise climate in quieter periods.
LT2	Free-field measurement at the south east site boundary. Microphone fixed in a position 1.0m from the roadside and 2.0m AGL.	Road traffic noise from A30 dominates in the measurement location. Maximum noise events are typically from vehicle noise along the unnamed road to the south of the site.
ST1	Free-field measurement at the north east of the site. Microphone fixed to a tripod 10.0m from the perimeter fence and 1.5m AGL.	Road traffic noise from A30 dominates in the measurement location. Maximum noise events are typically from ground and airborne activities associated with Exeter Airport. Nature sounds contribute to the noise climate in quieter periods.
ST2	Free-field measurement at the south west site boundary. Microphone fixed to a tripod 4.0m from the roadside and 1.5m AGL.	Road traffic noise from A30 dominates in the measurement location. Maximum noise events are typically from vehicle noise along the unnamed road to the south of the site.

All measurements of noise were undertaken in accordance with BS 7445-1:2003 which defines parameters, procedures and instrumentation required for noise measurement and analysis. Each Class 1 sound level meter was set-up to continuously record, integrating over 125 ms fast response time constant intervals the L_{eq}, L_{90}, L_{10}, L_{Fmax} and L_1 noise indices in the A-weighting network for the duration of the survey. These indices describe in turn the average, background, road traffic, maximum and maximum noise level that discounts one-off events. Full details of the instrumentation used for the noise measurements, including equipment calibration certificates are available on request.

Meteorological conditions were noted to be ideal for the measurement of noise, being clear and dry with only light prevailing winds (<5^{-2} ms).

In order to corroborate the measured noise levels with typical airport activity, the measured data is compared to a noise contour plot showing the predicted contribution of noise from Exeter airport's main runway to the surrounding area, taken from a study undertaken by Bickerdike Allen Partners[1] dated 3rd May 2016.

4.2. Results

A summary of the baseline noise monitoring results is presented in Table 2.1 and the long term unattended monitoring results are displayed graphically in Figure 4.1 to 4.2.

Table 4.2: Summary of Measured Noise Levels

Position	Duration	dB $L_{Aeq,5mins}$	dB $L_{A10,5mins}$	dB $L_{A90,15mins}$	dB $L_{AFmax,5mins}$
		Ave[1]	Ave[2]	Range (Ave[2])	Range (15th Highest[3])
LT1	Daytime, 16 hours	63	57	42 – 72 (49)	47 – 97 (80)
	Night-time, 8 hours	56	52	39 – 55 (44)	49 – 88 (62)
LT2	Daytime, 16 hours	62	62	47 – 62 (54)	61 – 89 (81)
	Night-time, 8 hours	57	58	42 – 57 (46)	58 – 82 (70)
ST1	Daytime, 30 mins	63	60	53	86[4]
ST2	Daytime, 30 mins	59	61	54	71[4]

Notes: [1] Logarithmic average over the survey period; [2] Arithmetic average over the survey period; [3] 15th Highest value taken over the survey period, considered representative of the highest noise level experienced excluding anomalies; [4] Maximum noise level recorded.

The measured data results align with the noise contour plot displayed in Figure 4.3, showing daytime noise levels from airport activity in the 60 dB L_{Aeq} category in a position to the north of the proposed development site. It was noted that a significant contributor to background noise levels was road traffic noise from the A30, which can explain the higher noise levels across the site. The measured noise levels presented are therefore considered representative of the typical climate.

[1] Bikerdike Allen Partners LLP, A9894-R03-PH 'Update Noise Impact Assessment, Exeter International Airport: Parts 1&2' (3rd May 2016)

Figure 4.1: Noise Level Time History at Position LT1

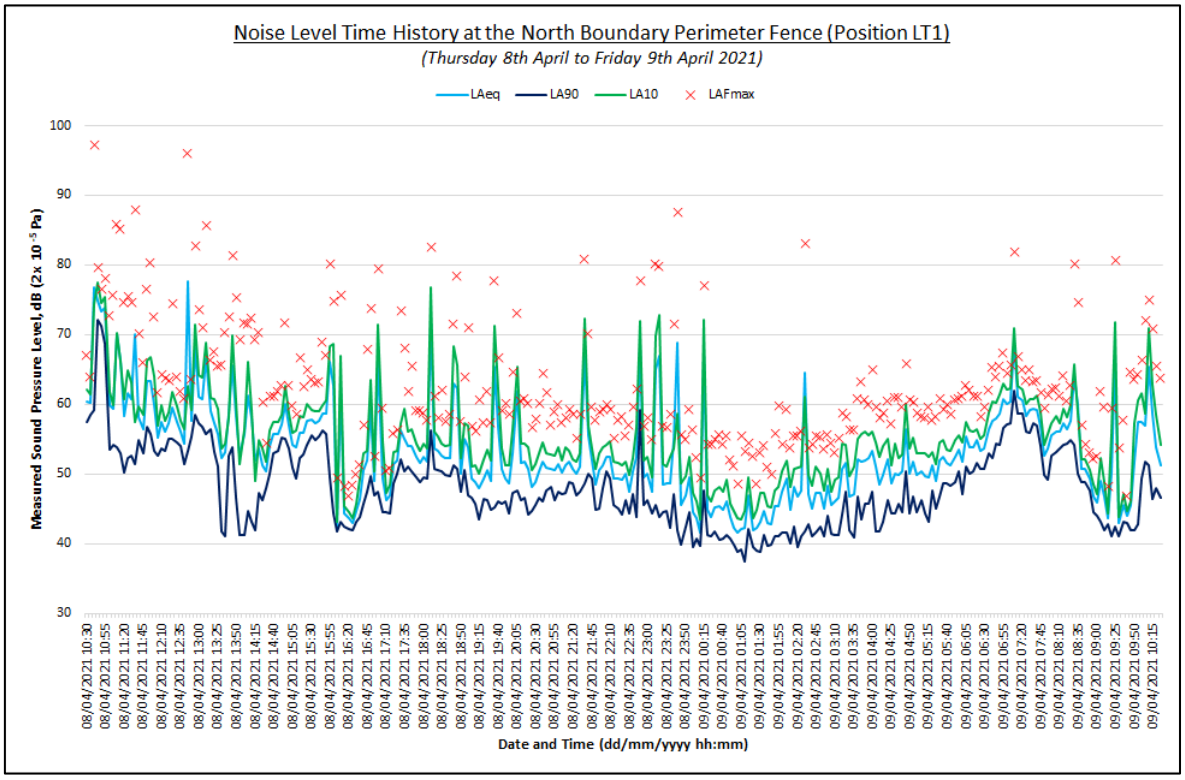


Figure 4.2: Noise Level Time History at Position LT2

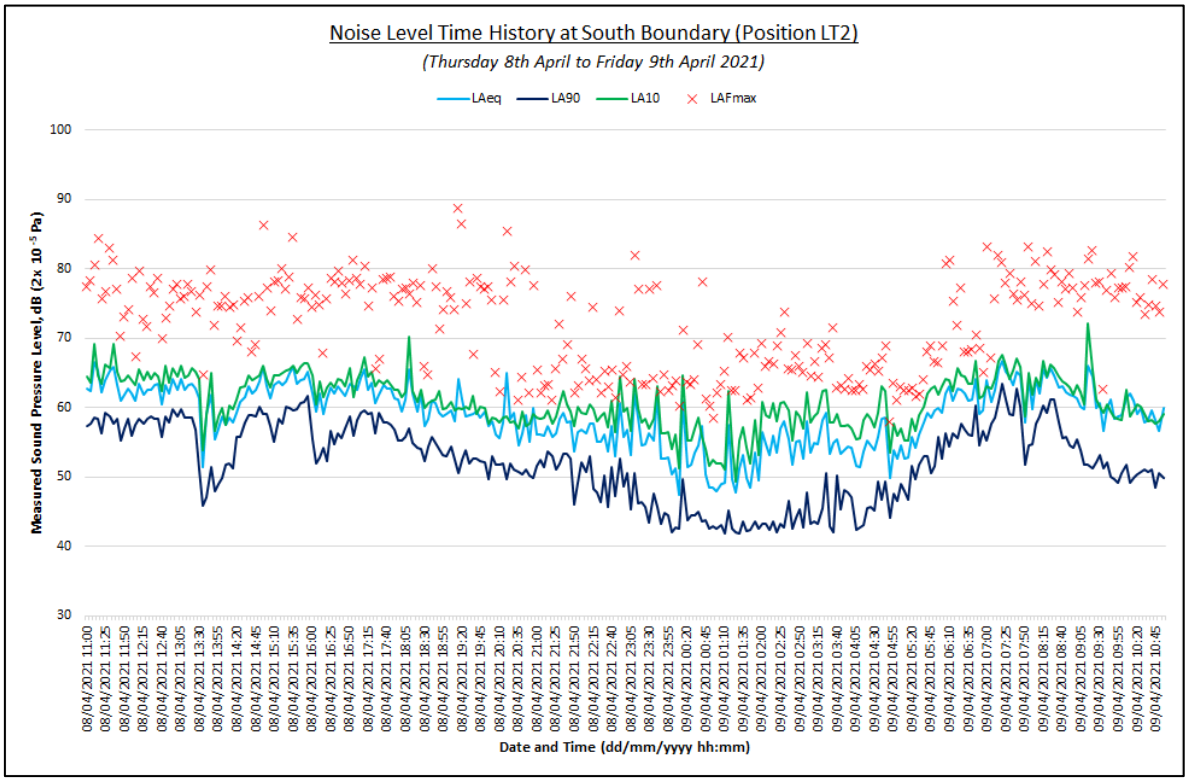
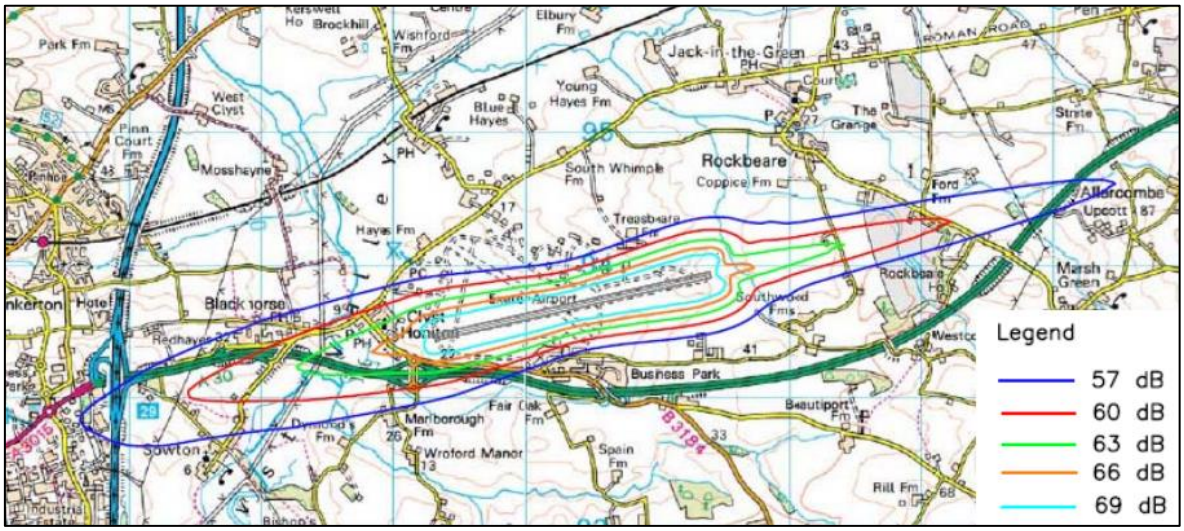


Figure 4.3: Exeter Airport Summer 2015 Noise Contour Plot Daytime L_{Aeq} (taken from Bickerdike Allen Report Reference: A9894-R03-PH)



5. External Noise Emission Limits

In absence of standard plant noise criteria from the local authority (East Devon Council), Hilson Moran have proposed noise limiting criteria based on the most relevant industry standard guidance available.

BS4142:2014+A1:2019 provides a methodology for the rating and assessing industrial and commercial noise. In brief, a noise rating level is established based on characteristics of the specific noise from new sources introduced as part of the proposed development. This rating level is then compared to the existing background noise level at surrounding sensitive property in order to assess the impact of noise from the proposed development. In alignment with BS 4142, an appropriate plant noise rating level limit is established in this section.

BREEAM New Construction 2018 Pol 05 'Reduction of Noise Pollution' seeks to minimise nuisance noise to neighbours and local wildlife from new development. The assessment criteria for Pol 05 states that:

'the noise level from the assessed building, as measured in the locality of the nearest or most exposed noise-sensitive development, must be at least 5 dB lower than the background noise throughout the day and night.'

Therefore, we propose that the cumulative contribution of noise from all fixed items of building services plant associated with the Proposed Development is controlled so as not to exceed the limits presented in Table 5.1 at a position 1.0m from the windows of the identified NSRs.

Table 5.1: External Cumulative Plant Noise Level Limits

Location	Period[1]	Measured Background Noise Level, L_{A90}	Plant Noise Rating Level, $L_{Ar,Tr\ dB}$
NSR A	Daytime (07:00–23:00)	49	44
	Night-time (23:00-07:00)	44	39
NSR B, C and D	Daytime (07:00–23:00)	54	49
	Night-time (23:00-07:00)	46	41

Notes: [1] Building services plant is anticipated to normally operate during the daytime period.

The emissions from plant introduced as part of the proposed development should be rated in accordance the methodology in BS 4142:2014+A1:2019, including corrections applied to account for acoustic characteristics that are discernible at the receptor locations. Note these limits are subject to agreement by the Council.

6. Outline Mitigation Measures

At this stage, the scheme is not sufficiently developed to allow for a detailed assessment of noise impact. That said, it is deemed the design of new plant is flexible and can incorporate the necessary measures in order to meet the Council's requirements. The following measures are typically provided as good acoustic design practice, where appropriate and should therefore be considered at this stage:

- Selection and procurement of low noise equipment.
- Housing of noise generating equipment internally within a plant room/area to help reduce noise pollution to the environment.
- Strategic zoning of plant, with consideration of the most favourable orientation, natural screening, distance, etc.
- Provision of local screening i.e. acoustic fencing, earth bunding, etc.
- Use of plant casings and enclosures to minimise noise breakout.
- Installation of appropriately specified atmospheric ductwork attenuators.
- Application of acoustic lagging on exposed ductwork.

Appendix A – Glossary of Acoustic Terminology

The following table contains a list of the some of the most frequently used acoustic terms we use in our reports. An explanation of what each of the terms means is also provided.

Term	Description
Decibel, dB	The decibel is a logarithmic unit of measurement used for quantifying sound. It is derived from the logarithm to base 10 of the ratio of two quantities. Use of a logarithmic scale has the advantage that it compresses the very wide range of sound pressures to which the ear may typically be exposed to a more manageable range of numbers.
Frequency, Hz	In sound, the number of cycles per second of a pressure fluctuation and frequency in sound is proportional to its pitch. Different frequencies are divided into octave and one third octave bands.
Sound Pressure Level, *Lp*	This is the unweighted or linear level which is measured prior to any weightings being applied. The sound pressure level is 20 times the logarithm to base 10 of the ratio of the reference sound pressure ($2x10^{-5}$) and the measured sound pressure.
Sound Power Level, L_w	This is the total sound energy radiated from a given source. The sound power Level is 10 times the logarithm to base 10 of the ratio of the reference sound power level ($1x10^{-12}$) and the measured power.
Frequency Weightings	Weightings can be applied to a spectrum of sound and act as a filter to account for different sensitivities and conditions.
Time Weightings	A time weighting to denote the response of the sound level meter. For most measurements the Fast time weighting is selected (F) however, a slow time weighting (S) is often used to for the measurement train noise and vibration.
A-weighted sound pressure level, L_{pA}	The sound pressure level with the A-weighting applied. The A-weighting is used for most environmental noise measurements and is used to weight a spectrum of sound to match the sensitivity of the human ear.
Equivalent continuous A-weighted sound pressure level, $L_{Aeq,T}$	The L_{Aeq} is an energy average and defined as the level of sound which, over a given period of time, would equate to the same A-weighted sound energy as the actual fluctuating sound.
Octave Bands	A band of frequencies in which the upper limit of the band is twice the frequency of the lower limit.
Maximum noise Level, L_{AFmax}	The maximum instantaneous noise level measured during a given period of time. The time weighting to which the meter is set for this measurement parameter is always indicated by either an F or S.
Minimum Noise level, L_{AFmin}	The minimum instantaneous noise level measured during a given period of time. The time weighting to which the meter is set for this measurement parameter is always indicated by either an F or S.
Percentile level, $L_{AN,T}$	A-weighted sound pressure level obtained using time-weighting F, which is exceeded for N% of a specified time interval. An example of this is background noise which is quantified with the L_{A90} descriptor, which is the A-weighted level which is exceeded for 90% of the measurement period.
Sound exposure level L_{AE}	A level of a sound, of 1 s duration, that has the same sound energy as the actual noise event considered.

Rating Level, $L_{Ar,Tr}$	The equivalent continuous A-weighted sound pressure level of the noise, plus any adjustment for the characteristic features of the noise.
Ambient Noise Level	The noise level in a given environment whilst it is subject to all of its normal sources of noise.
Background Sound / Noise Level, L_{A90}	These are amongst the lowest noise levels measured over a given period of time and exclude short term, intermittent noise sources. The background noise level is quantified by the L_{A90} descriptor and is therefore the level which is exceeded for 90% of a given period of time.
Reverberation Time, T	The time that would be required for the sound pressure level to decrease by 60 dB after the sound source has stopped. The descriptor T, often includes other nomenclature to describe the type of reverberation time measurement or if the reverberation time is an average taken for specific frequencies. For example a T_{mf} is the mid-frequency reverberation time.
Absorption Coefficient, α	The fraction of reverberant sound energy absorbed by a material. It is expressed as a value between 1.0 which equates to perfect absorption and 0 which equates to zero absorption.
Absorption, A	The acoustic absorption derived from the multiplication of the absorption coefficient by the surface area of a given material.
Acoustic Class, A - E	Classification of sound absorbers into Sound Absorption Classes A-E, according to BS EN ISO 11654, including frequencies 200-5000 Hz
NRC	A single-number rating system used to compare the sound-absorbing characteristics of building materials. A measurement of the acoustical absorption performance of a material, calculated by averaging its Sound Absorption Coefficients at 250, 500, 1000 and 2000 Hz
Sound Reduction Index, R	The laboratory measured sound insulation properties of a material or building element in octave or third octave bands.
Weighted Sound Reduction Index, R_w	A single number which represents the sound reduction of a material. It is derived by plotting the sound reduction index against a set of reference curves. The curves are shifted until a best-fit is established and the curve which best fits the sound reduction spectrum is used to represent the single figure value.
Weighted Level Difference, D_w	The weighted level difference between a pair of rooms, stated as a single figure.
Standardized Weighted Level Difference, $D_{nT'w}$	The standardized, weighted difference in sound level between a pair of rooms, stated as a single figure. The level difference in octave bands is first normalized to a reference reverberation time and then plotted against a set of reference curves to establish a single figure value.
Weighted, Normalised Flanking Level Difference, D_{nFw}	The normalised, weighted difference in sound level between a pair of rooms via a flanking element, such as mullion or ceiling detail. The level difference in octave bands is first normalized to a reference amount of absorption and then plotted against a set of reference curves to establish a single figure value.
Normalised Element Level Difference D_{ne}	The normalised difference in sound level between a pair of rooms via a small element such as a trickle ventilator. The level difference in octave bands is normalized to a reference amount of absorption.
Weighted, Normalised Element Level Difference, D_{new}	The normalised, weighted difference in sound level between a pair of rooms via a small element such as a trickle ventilator, stated as a single figure. The level difference in octave bands is normalized to a reference amount of

	absorption and then plotted against a set of reference curves to establish a single figure value.
C_{tr}	A correction term applied to the sound insulation single-number values (R_w, D_w, and $D_{nT,w}$). Applying the C_{tr} penalises a construction's performance if its low frequency performance is poor in relation its performance at higher frequencies.
Impact Sound	The noise generated by an impact on a structure. This is normally used to describe the noise created by people walking on a floor structure.
Weighted standardized impact sound pressure level, $L_{nT,w}$	A single-number quantity used to characterize the impact sound insulation of floors over a range of frequencies.
Cross-talk	Noise transmission between one room and another room or space via a duct or other path.
Insertion Loss, IL	The reduction of noise level due to the presence of a noise control device such as an attenuator, excluding any regeneration noise created by its presence.
Dynamic Insertion Loss, DIL	The reduction of noise level due to the presence of a noise control device such as an attenuator, including any regeneration noise created by its presence.
NR	The Noise Rating level. This is a single figure value derived by plotting a noise spectrum against a set of curves. The curve under which the spectrum fits is the resulting NR level.

Appendix B – Legislation, Planning Policy and Noise Guidelines

Control of Pollution Act (1974)

The Control of Pollution Act 1974 gives local authorities special powers for controlling noise and vibration arising from construction and demolition works. These powers may be exercised either before or after works have been started.

Section 60 enables the local authority of an area in which works are scheduled or currently underway, to serve a notice of its requirements for the control of construction site noise/vibration on the person who appears to the local authority to be undertaking the works.

Section 61 provides a mechanism for the contractor or developer to take the initiative in approaching the local authority to ascertain its noise/vibration requirements before construction work starts.

The Act also covers Noise Abatement Zones, Codes of Practice and Best Practicable Means (BPM) regarding noise pollution.

Environmental Protection Act (1990)

Section 79 of the Environmental Protection Act 1990 defines statutory nuisances and the requirement for local authorities to inspect their area for statutory nuisances, taking such steps as are reasonably practicable to investigate any complaint of a statutory nuisance.

Section 80 of the act gives local authorities the right, where a statutory nuisance exists or is likely to be caused, to serve an abatement notice requiring the abatement, prohibition or restriction of the nuisance.

Section 82 of the act allows a person aggrieved by a statutory nuisance to make a complaint to a Magistrates Court in an attempt to seek an abatement notice served on the person responsible for the nuisance.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) seeks to contribute to and enhance the natural and local environment, including preventing new and existing developments from contributing to, and/or, being put at an unacceptable risk from noise pollution. In support of this, paragraph 180 of the NPPF states that:

> *'Planning policies and decisions should 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:*
>
> - *mitigate and reduce to a minimum potential adverse impact resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and quality of life.*
> - *identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.'*

Noise Policy Statement for England

The Noise Policy Statement for England (NPSE) was published in March 2010 by the Department for Environment, Food and Rural Affairs (DEFRA) and forms the overarching statement of noise policy for England. It sets 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.'*

The policy aims, through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development, to:

- Avoid significant adverse effects on health and quality of life.
- Mitigate and minimise adverse effects on health and quality of life.
- Where possible, contribute to the improvement of health and quality of life.

The NPSE sets out three terms with regard to noise effects:

- No Observed Effect Level (NOEL) – the level below which no effect can be detected and below which no detectable effect on health and quality of life due to noise can be established.
- Lowest Observed Adverse Effect Level (LOAEL) – the level above which adverse effects on health and quality of life can be detected.
- Significant Observed Adverse Effect Level (SOAEL) – the level above which significant adverse effects on health and quality of life occur.

The above terms are not defined numerically in terms of absolute levels within the NPSE which acknowledges that these will change depending on, but not limited to, the noise source, the receiver type and the time of day/day of week.

British Standard BS 4142:2014+A1:2019 '*Acoustics – Methods for rating and assessing industrial and commercial sound*'

It is common industry practice for plant noise levels to be determined in accordance with BS 4142: 2014 'Methods for rating and assessing industrial and commercial sound' .

BS 4142 describes methods for rating and assessing sound of an industrial and/or commercial nature for the purposes of: (a) investigating complaints, (b) assessing sound from proposed, new, modified or additional sources of sound of an industrial/commercial nature, and, (c) assessing sound at proposed new residential premises.

In summary, the procedure compares the measured (or predicted) sound level from the source known as the Specific sound level (notated $L_{Aeq,T}$) 1 metre outside of the habitable windows of the dwellings, with the background sound level (notated $L_{A90,T}$) that exists in the absence of the source in question. If the sound is tonal, impulsive, intermittent or otherwise distinctive in character at the assessment location, a character correction of between 0 dB and +9 dB is added to the Specific sound level (correcting for the influence from any residual sound) to obtain the Rating level (notated $L_{Ar,Tr}$).

After making any relevant corrections, the background sound level is compared to the Rating level and an initial estimate of the potential impact of the sound source in question is made with consideration to the following:

- typically, the greater this difference, the greater the magnitude of the impact.
- a difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.
- a difference of around +5 dB or more 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.