



REPORT REFERENCE:

IMP8048

INDUSTRIAL NOISE IMPACT ASSESSMENT INSTALLATION OF AIR CONDITIONING UNITS

British Standard 4142: 2014 +A1: 2019

CLIENT:

Doyle Hamilton Associates

SITE:

Village Vets Royston
67 Kneesworth Street
Royston
SG8 5AQ

SURVEY DATE:

15th – 19th January 2026

[Impact Acoustics Ltd](#)

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1 EXECUTIVE SUMMARY

1.1 Instruction

Impact Acoustics Ltd have been instructed to undertake a background noise survey at the existing premises at Village Vets Royston, 67 Kneeworth Street, Royston, SG8 5AQ to understand the level of impact at the existing site in relation to the three existing and one proposed AC Units and calculate the resultant noise level at the nearest affected window at first floor and carry out assessments to BS 4142: 2014 +A1: 2019.

1.2 Scope of Report

The measurements have been undertaken in accordance with British Standard 4142: 2014 +A1: 2019 and ISO 1996 – Part 2: 2017 to establish if the proposed site has a demonstrable adverse effect in terms of noise that outweigh the benefits of the development. This report aims to establish the following:

- Existing background noise levels at the residential façade (L_{A90});
- Noise levels from the Proposed Plant (L_{Aeq});
- Impact on the nearest noise sensitive property.
- Mitigation Levels if Required.

1.3 Summary of Report

1.3.1 Measured Background Noise Levels

Continuous background noise measurements were undertaken between 15th – 19th January 2026 at the Assessment Position 1. The day time background noise levels between 07:00 and 23:00 were found to be $L_{A90,1 \text{ hour}}$ 48 dB. The plant will not operate during night time periods.

Daytime Equivalent Existing Background Noise Levels	Measured Levels at Assessment Position 1	$L_{A90, t}$ 48 dB
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1.4 Proposed Plant

The following plant is to be installed externally and ducted to high level atmospherically generally as detailed within this report. The plant will operate during daytime hours and therefore night time assessments have not been made.

Plant	Existing or New	dB(A)
Mitsubishi MSZ-HR71VF	New	65
Mitsubishi MV2-HR71VF	Existing	63
Fujitsu AOYR09LGC	Existing	45
Daikin RZQ71D3VIB	Existing	64

1.5 Assessment

1.5.1 Daytime Assessment

Rating Level	40 dB	9.1	The acoustic feature correction is added to the specific noise level
Background Noise Level $L_{A90,1 \text{ hour}}$	48 dB	8.1	Modal Background Noise Level (0700 – 2300)
Assessment Level	-8 dB	11	The background level is subtracted from the rating level.
Conclusion BS 4142:2014 +A1: 2019 ^[1]	+10 dB Significant Adverse Effects, +5 dB Adverse Effects, +0 dB Low Impact		
Assessment	-8 dB		
Conclusion	The assessment level is 'Low Impact'		

1.6 Conclusions

The operation of the plant has been assessed to establish if the development will have a demonstrable adverse effect in terms of noise that outweighs the benefits of the development. Measurements have been undertaken in accordance with British Standard 4142: 2014 +A1: 2019 and ISO 1996 – Part 2: 2017. This report has established the existing background noise levels at the closest residential façade to the site and the assessment of the impact of the site operation on nearby residential properties. The resulting emissions from the site running on a worst case scenario show no conflict with 'low impact' criteria and give a strong indication that complaint and impact on the local amenity is unlikely. Therefore, no further remedial works are required at this time, and the AC Unit complies with BS 4142: 2014 +A1:2019.

1.7 NPPF 2024

National Planning Policy Framework 2024 suggests that planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the framework taken as a whole, or specific policies in the framework indicate the application should be restricted.

1.8 Planning Approval Recommendation

Based on the calculations and assessments made within this report it is the professional opinion of Impact Acoustics that the proposed development can demonstrate compliance with the National Planning Policy Framework 2024, NPPF & NPSE and that, with regards to sound, planning permission can be granted.

2 INTRODUCTION

2.1 Instruction

Impact Acoustics Ltd have been instructed to undertake a background noise survey at the existing premises at Village Vets Royston, 67 Kneeworth Street, Royston, SG8 5AQ to understand the level of impact at the existing site in relation to the three existing and one proposed AC Units and calculate the resultant noise level at the nearest affected window at first floor and carry out assessments to BS 4142: 2014 +A1: 2019.

The purpose of this assessment is to ensure the acoustic protection of noise sensitive premises closest to the proposed plant. Noise sensitive premises are not restricted to residential dwellings as offices can be affected by unwanted external noise. These have been established as the residential directly adjacent the AC Unit discharge.

2.2 Ambient and Background Measurements

External noise levels are to be recorded over, what has been considered for the site, an average / typical time period in order to assess the daytime noise levels. Levels have been recorded over more than one day in order to ensure the uncertainty of measurement aspects of BS 4142: 2014 +A1: 2019 have been satisfied and that the data recorded is representative for the purpose of a robust assessment.

2.3 BS 4142: 2014 +A1: 2019

British Standard 4142: 2014 +A1: 2019 is to be adopted for the basis of this background noise level assessment. A BS 4142: 2014 +A1: 2019 noise assessment will be carried out in order to demonstrate the acoustic impact the proposed plant could have on the nearest affected premises and make suitable recommendations in order to demonstrate this unit will not have a significant and demonstrable adverse impact on the nearest noise sensitive premises in accordance with the National Planning Policy Framework, once remedial works are completed.

2.4 National Planning Policy Framework 2024 & Noise Policy Statement for England 2010

References and evaluations are to be made to the National Planning Policy Framework 2024 (NPPF) and the Noise Policy Statement for England 2010 (NPSE). The purpose of this document is to include all aspects of environmental noise within assessments i.e. environmental noise, neighbour noise and neighbourhood noise. Noise is to be considered alongside other relevant issues relating to the site and should not be considered in isolation, according to the NPSE. There are several key phrases within the NPSE aims and these are discussed below.

2.5 “Significant adverse” and “adverse”

There are two established concepts from toxicology that are currently being applied to noise impacts, for example, by the World Health Organisation. They are:

2.6 NOEL – No Observed Effect Level

This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

2.7 LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected.

Extending these concepts for the purpose of this NPSE leads to the concept of a significant observed adverse effect level.

2.8 SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur.

It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.

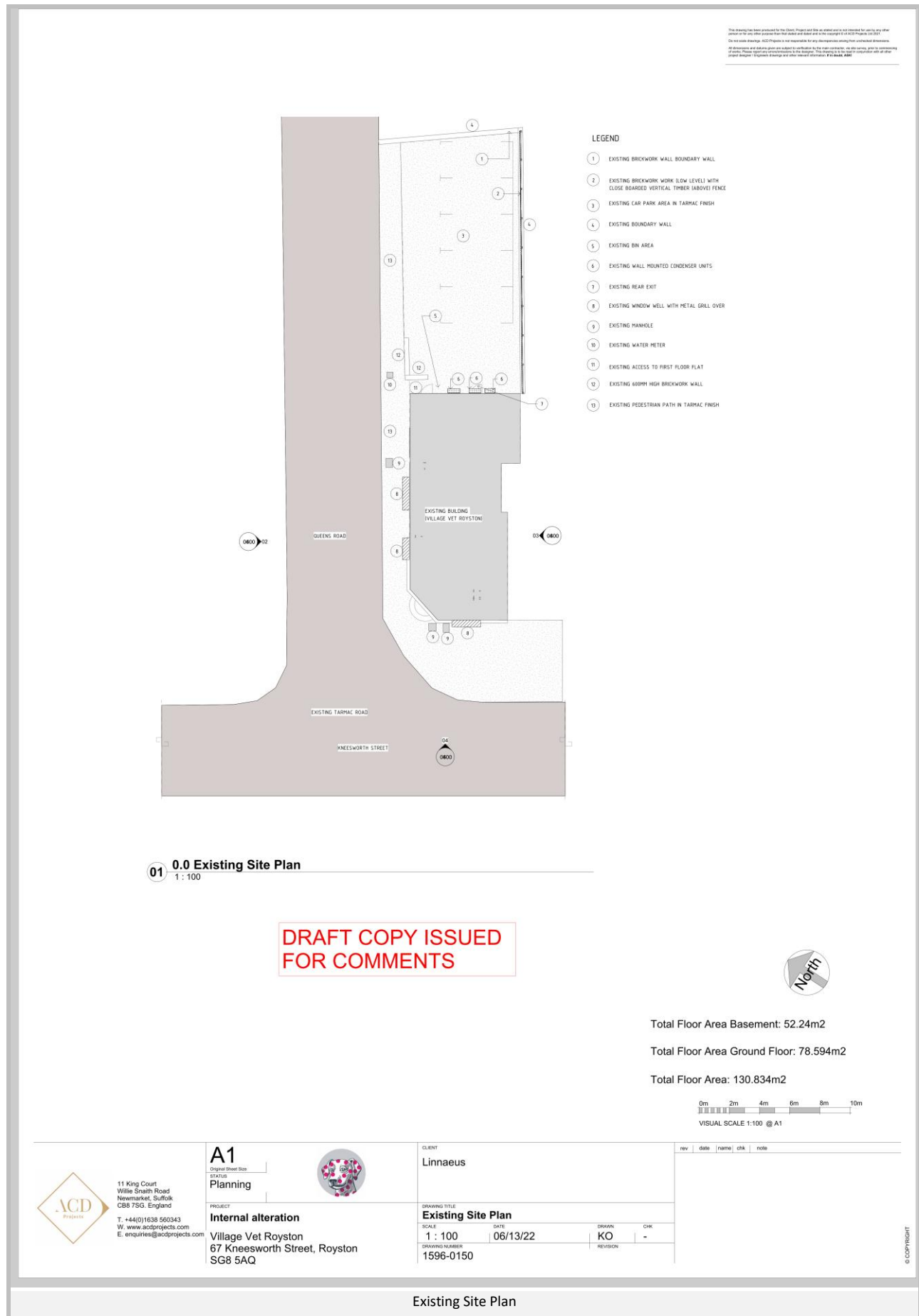
3 SITE LOCATION

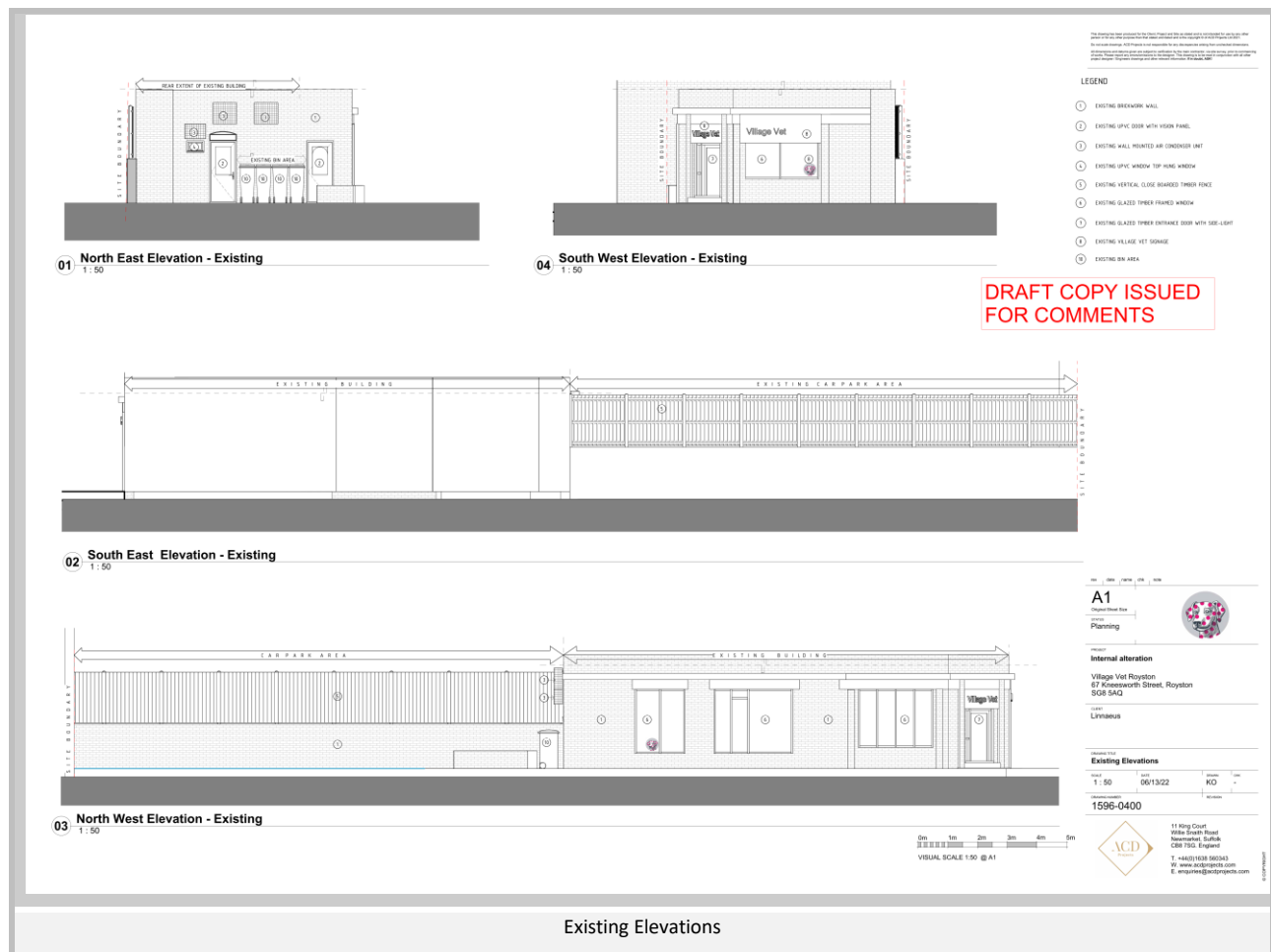
3.1 Position of Site in Wider Area

- Yellow – measurement position
- Red - NSP (Residential Below AC Unit Discharge)

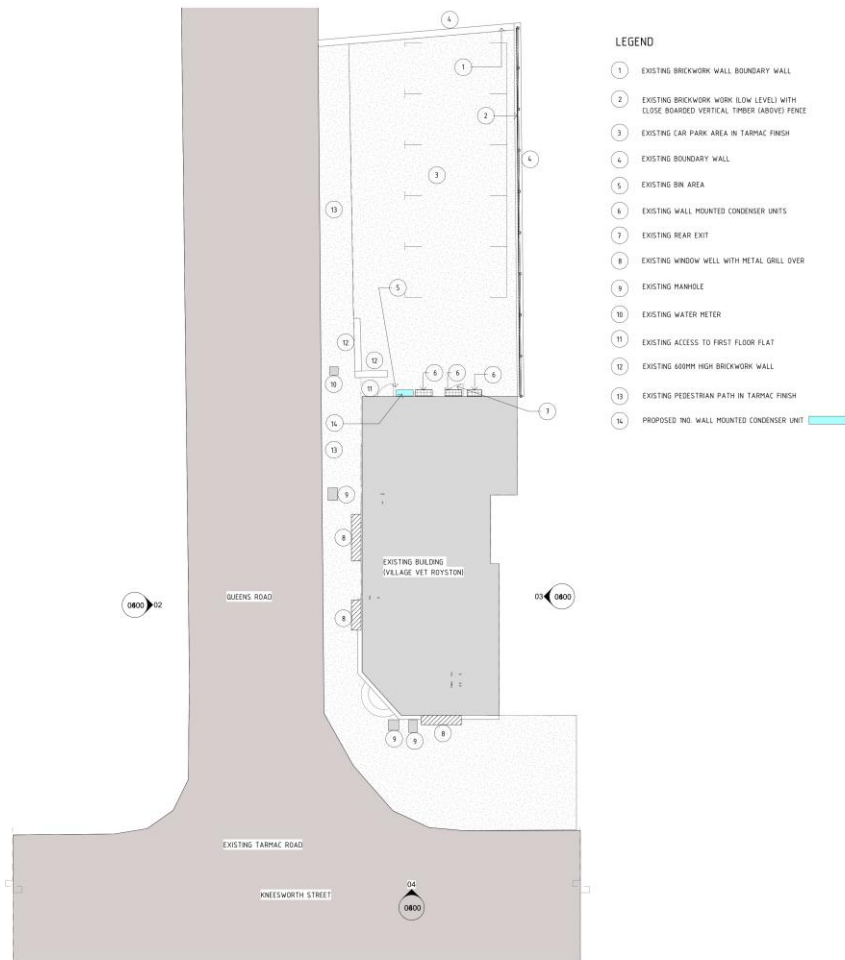


3.2 Proposed Building Works





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01 0.0 Proposed Site Plan

1 : 100

**DRAFT COPY ISSUED
FOR COMMENTS**

Total Floor Area Basement: 52.24m²Total Floor Area Ground Floor: 78.594m²Total Floor Area: 130.834m²

0m 2m 4m 6m 8m 10m
VISUAL SCALE 1:100 @ A1



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A1
Original Sheet Size
STATUS
Planning



PROJECT
Internal alteration
Village Vet Royston
67 Kneesworth Street, Royston
SG8 5AQ

CLIENT
Linnaeus

DRAWING TITLE
Proposed Site Plan

SCALE
1 : 100
DATE
06/13/22
DRAWING NUMBER
1596-0160

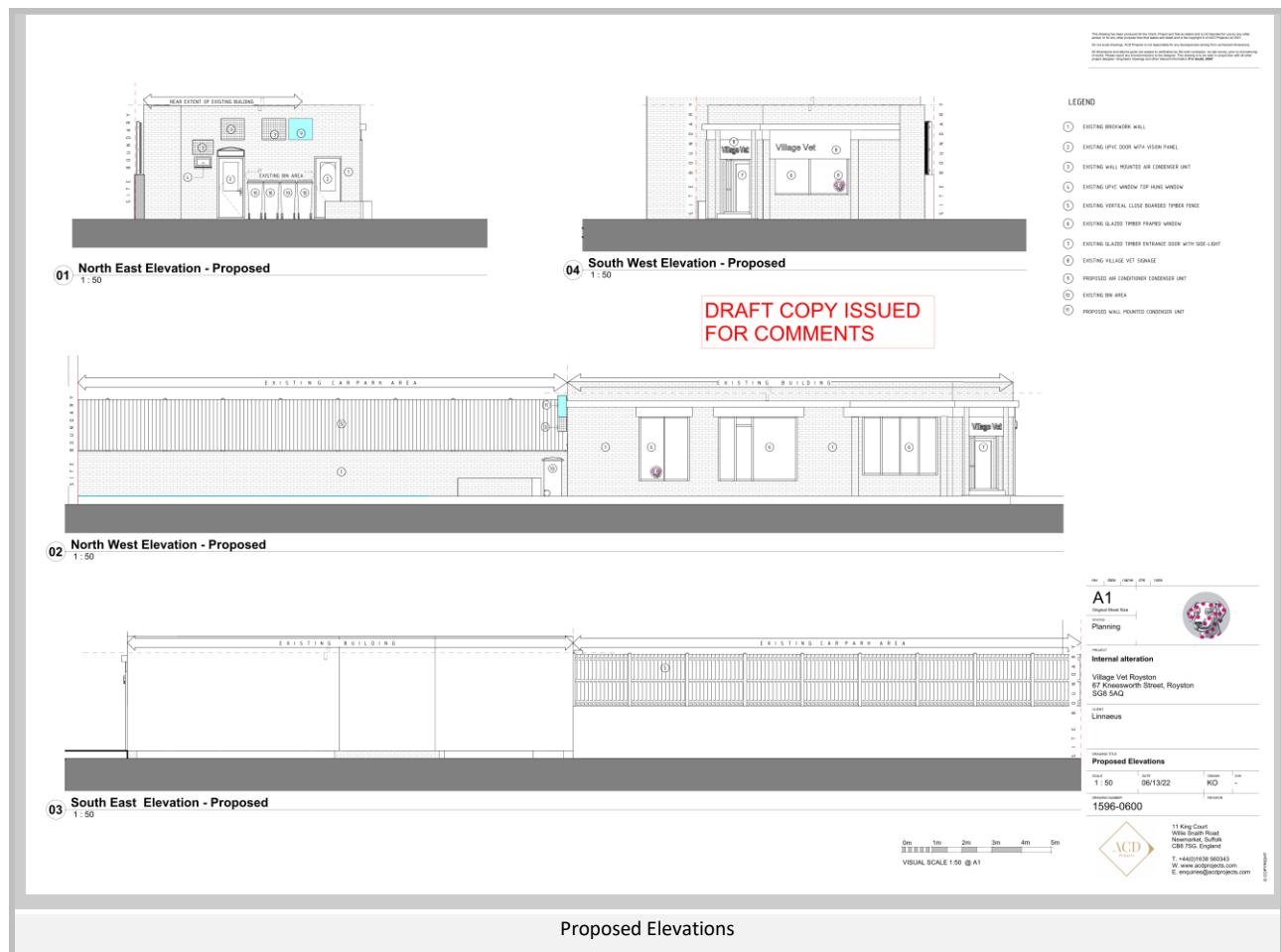
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rev date name chk note

Proposed Site Plan

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4 BACKGROUND NOISE LEVELS

Continuous background noise measurements were undertaken between 15th – 19th January 2026 at the Assessment Position 1. The day time background noise levels between 07:00 and 23:00 were found to be $L_{A90,1\text{ hour}}$ 48 dB. The extract will not operate during night time periods.

Daytime Equivalent Existing Background Noise Levels	Measured Levels at Assessment Position 1	$L_{A90, t}$ 48 dB
--	--	--------------------

5 APPARATUS

5.1 Equipment Calibration

The equipment was calibrated using a sound pressure level of 114.0 dB at an octave band centre frequency of 1000Hz with reference to $2 \times 10^{-5} \text{ Nm}^{-2}$ before and after the tests and the equipment set to have no inaccuracy greater than 0.2 dB.

All the following equipment was calibrated in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service (UKAS) on the following dates.

5.2 Position 1

Description	Make	Type	Serial No.	Calibration Intervals	Cert No.	Last Calibrated	Next Due Calibration
Integrated Sound Level Meter	Norsonic	140	1403140	2 YEARS	C00485	03.06.2024	03.06.2026
12.5mm Microphone (with windshield)	Norsonic	1225	579775	2 YEARS		03.06.2024	03.06.2026
Microphone Pre – Amplifier	Norsonic	1206	12486	2 YEARS		03.06.2024	03.06.2026

The noise meter was calibrated before and after the assessment period and found to be within the tolerance of the manufacturer's guidance. Full Calibration certificates are available upon request.

6 CALCULATIONS

6.1 Proposed Plant

The following plant is to be installed externally and ducted to high level atmospherically generally as detailed within this report. The plant will operate during daytime hours and therefore night time assessments have not been made.

Plant	Existing or New	dB(A)
Mitsubishi MSZ-HR71VF	New	65
Mitsubishi MV2-HR71VF	Existing	63
Fujitsu AOYR09LGC	Existing	45
Daikin RZQ71D3VIB	Existing	64

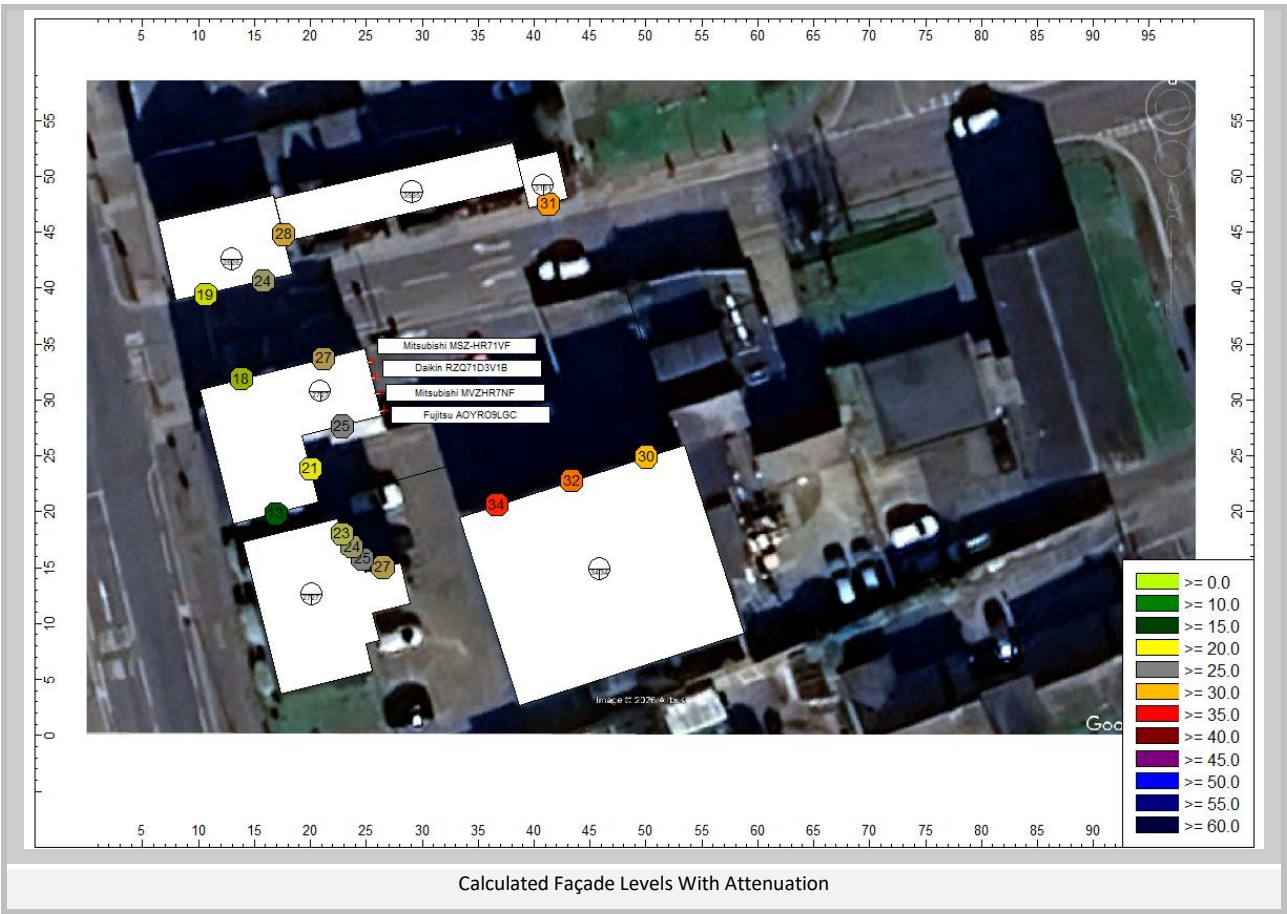
6.2 Inputted Noise Levels

The above sound power levels have been inputted into the CADNA A 3D Model.

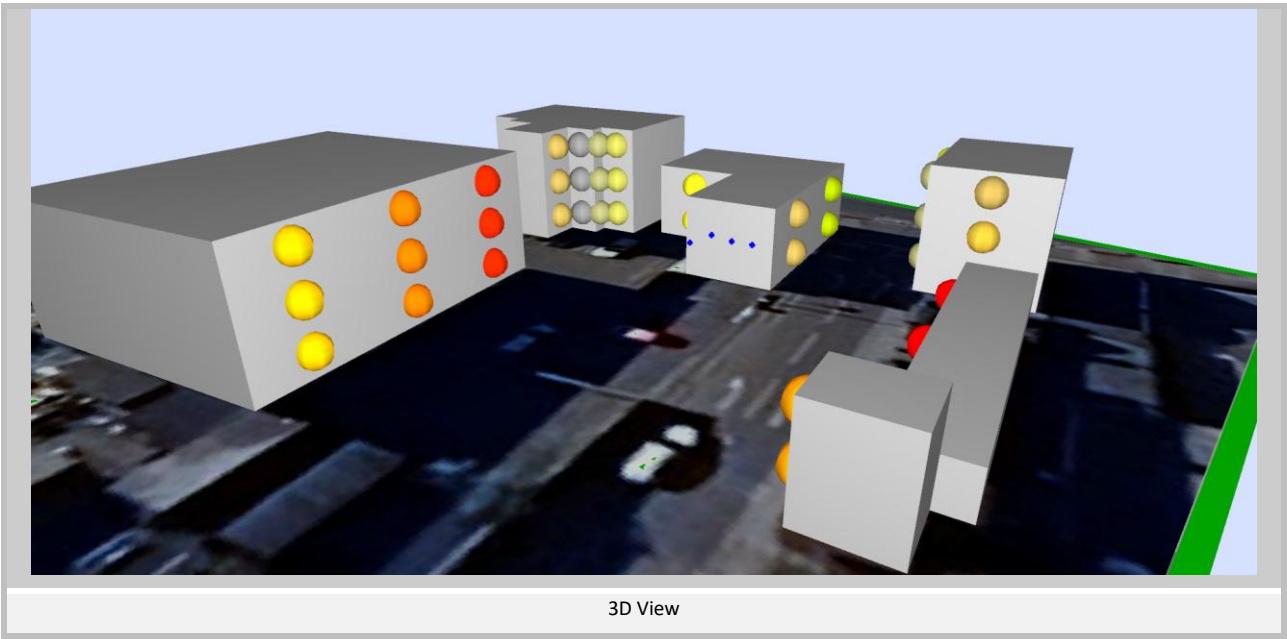
Point Source																			
Close Edit... Sync. Graphic Copy... Print... Font... Help																			
Name	M. ID	Result: PWL			Lw / Li		Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height
		Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area	Day	Special	Night				
		(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)	(min)	(min)	(min)	(dB)	(Hz)		(m)
Fujitsu AOYR09LGC		45.0	45.0	45.0	Lw	45		0.0	0.0	0.0						0.0	1000	(none)	2.40 r
Mitsubishi MVZHR7NF		63.0	63.0	63.0	Lw	63		0.0	0.0	0.0						0.0	1000	(none)	3.20 r
Daikin RZQ71D3V1B		64.0	64.0	64.0	Lw	64		0.0	0.0	0.0						0.0	1000	(none)	3.00 r
Mitsubishi MSZ-HR71VF		65.0	65.0	65.0	Lw	65		0.0	0.0	0.0						0.0	1000	(none)	3.00 r

Inputted Noise Levels

6.3 Calculated Façade Levels



6.4 3D View



7 BS4142: 2014 +A1: 2019 NOISE ASSESSMENT

7.1 Criteria

We have calculated the nearest noise sensitive premises to that of the residential accommodation nearby with the proposed plant being no closer than 12m away.

7.2 Scope of British Standard 4142: 2014

In the assessment of the existing surrounding commercial premises, consideration has been given to the scope of British Standard 4142:2014+A1:2019, which in section 1, details applicability of this standard to rating assessing sound of an industrial and/or commercial nature. It is considered appropriate that both the background noise levels and the rating noise levels obtained fall within the scope of British Standard 4142:2014+A1:2019 by using outdoor sound levels to assess the effect of sound on local residents.

7.3 Terms and Definitions

Symbol	Term	Definition
AP	Assessment Position	Position externally at the façade property under investigation at which the assessment is undertaken which is usually 1m from the 1 st floor bedroom window.
EP	Equivalent Position	Position at which the background noise levels are measured if there is no access to the assessment position or if source under investigation is audible.
$L_s = L_{Aeq, T}$	Specific Level	The average continuous equivalent sound pressure level of the source at the assessment position.
$L_{Ar, Tr}$	Rating Level	The average continuous equivalent sound pressure level of the source at the assessment position with a correction to account for the characteristic features.
$L_r = L_{Aeq, T}$	Residual Level	The average continuous equivalent sound pressure level at the assessment position without the source operating.
$L_{A90, T}$	Background Level	The sound pressure level that is not exceeded 90% of the time at the assessment position.
$L_a = L_{Aeq, T}$	Ambient Level	The totally encompassing sound at the assessment position including the residual and specific noise.

7.4 Assessment Position

The assessment position 1 was established as the residential accommodation premises nearby and no closer than 12m from the proposed plant.

7.5 Rating Levels (Character Correction)

It is appropriate to add a character correction where there is a new source that cannot be measured in line with BS 4142:2014+A1:2019. There are 3 methods for approaching this.

- Subjective method
- Objective method (for tonality)
- Reference method

7.6 Subjective Method

The subjective method establishes a rating penalty that is added to the specific noise level if any of the following is present at the assessment position. If a tone is expected to be present a character correction of 0 dB to 6 dB is added depending on how perceptible it is at noise sensitive locations.

BS 4142:2014+A1:2019 – Section 9.2 Subjective Method	Perceptibility to noise sensitive facades	Correction
Tonality Ranging from not tonal to prominently tonal	Not tonal	+0
	Just perceptible	+2
	Clearly perceptible	+4
	Highly perceptible	+6

If the source is expected to be impulsive a character correction of 0 dB to 9 dB is added depending on how perceptible it is at noise sensitive locations.

BS 4142:2014+A1:2019 – Section 9.2 Subjective Method	Perceptibility to noise sensitive facades	Correction
Impulsivity Considering both the rapidity and any overall change in sound levels	Not impulsive	+0
	Just perceptible	+3
	Clearly perceptible	+6
	Highly perceptible	+9

When the sound features are neither tonal nor impulsive, a character correction of +3 is added for the readily distinctive quality against the acoustic environment or for the intermittency of the source.

BS 4142:2014+A1:2019 – Section 9.2 Subjective Method	Perceptibility to noise sensitive facades	Correction
Readily Distinctive	Is not present	+0
	Is present	+3
Intermittency	Is not present	+0
	Is present	+3

7.7 Assessment Criterion

The significance of the resulting noise on the residential property depends on the margin by which it exceeds the background noise levels. British Standard 4142:2014+A1:2019 provides the following guidance within section 11.

Difference	Assessment of Impact
+10 dB	Indication of a significant adverse impact
+5 dB	Indication of an adverse impact
+0 dB	Indication of low impact

7.8 Assessments

7.8.1 Daytime 07:00 – 23:00 Calculated Façade Levels

Rating Industrial Noise affecting Mixed Industrial and Residential Areas			
British Standard 4142: 2014 +A1: 2019 Day Time (07:00 to 23:00)			
Source	Operating Times		Source Position
	07:00 to 23:00 7 days per week Worst case scenario		See Plans
Assessment Position	Village Vets Royston, Kneeworth Street, Royston, SG8 5AQ		
Background Position	At the assessment position		
Item	Calculation	Clause	Commentary
Specific Noise Level $L_{Aeq,1\text{ hour}}$	35 dB	7	Calculated using ISO 9613:1996 ^[3] .
Tonality	+2 dB	8.1	Tonality Characteristic
Impulsivity	+3 dB	8.1	Impulsivity Characteristic
Rating Level	40 dB	9.1	The acoustic feature correction is added to the specific noise level
Background Noise Level $L_{A90,1\text{ hour}}$	48 dB	8.1	Modal Background Noise Level (07:00 – 23:00)
Assessment Level	-8 dB	11	The background level is subtracted from the rating level.
Conclusion BS 4142:2014 +A1: 2019 ^[1]	+10 dB Significant Adverse Effects, +5 dB Adverse Effects, +0 dB Low Impact		
Assessment	-8 dB		
Conclusion	The assessment level is ‘Low Impact’		

7.9 Tonal Penalty

A +2 dB penalty has been applied to the specific noise level to allow for any minor tonal elements that may be present from the proposed plant.

7.10 Impulsivity Penalty

A +3 dB penalty has been applied to the specific noise level to allow for any minor impulsive elements that may be present from the proposed plant.

7.11 Assessment Conclusion

It can be seen from the above assessments that with the AC Unit operational, an assessment conclusion of 'Low Impact' could be expected. Therefore, no further remedial works are required at this time, and the AC Units complies with BS 4142: 201 +A1:2019.

8 NPPF & NPSE

The National Planning Policy Framework 2024 (NPPF) and assessments to the Noise Policy Statement for England 2010 (NPSE) should be made in conjunction with each other. Paragraphs 198 - 201 of the National Planning Policy Framework 2024 (NPPF) states the following:

Paragraph 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.

Paragraph 199 Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications.

Paragraph 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 201 The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities

The Noise Policy Statement for England gives various levels of effect as detailed within this report.

With the glazing / ventilation specifications achieved within this report, the development can be implemented within the guidelines of the aforementioned documents and ensure a conclusion of **NOEL – No Observed Effect Level**. This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

9 CONCLUSIONS

9.1 Summary of Report

9.1.1 Measured Background Noise Levels

Continuous background noise measurements were undertaken between 15th – 19th January 2026 at the Assessment Position 1. The day time background noise levels between 07:00 and 23:00 were found to be $L_{A90,1 \text{ hour}}$ 48 dB. The plant will not operate during night time periods.

Daytime Equivalent Existing Background Noise Levels	Measured Levels at Assessment Position 1	$L_{A90, t}$ 48 dB
---	--	--------------------

9.2 Proposed Plant

The following plant is to be installed externally and ducted to high level atmospherically generally as detailed within this report. The plant will operate during daytime hours and therefore night time assessments have not been made.

Plant	Existing or New	dB(A)
Mitsubishi MSZ-HR71VF	New	65
Mitsubishi MV2-HR71VF	Existing	63
Fujitsu AOYR09LGC	Existing	45
Daikin RZQ71D3VIB	Existing	64

9.3 Assessment

9.3.1 Daytime Assessment

Rating Level	40 dB	9.1	The acoustic feature correction is added to the specific noise level
Background Noise Level $L_{A90,1 \text{ hour}}$	48 dB	8.1	Modal Background Noise Level (0700 – 2300)
Assessment Level	-8 dB	11	The background level is subtracted from the rating level.
Conclusion BS 4142:2014 +A1: 2019 ^[1]	+10 dB Significant Adverse Effects, +5 dB Adverse Effects, +0 dB Low Impact		
Assessment	-8 dB		
Conclusion	The assessment level is 'Low Impact'		

9.4 Conclusions

The operation of the plant has been assessed to establish if the development will have a demonstrable adverse effect in terms of noise that outweighs the benefits of the development. Measurements have been undertaken in accordance with British Standard 4142: 2014 +A1: 2019 and ISO 1996 – Part 2: 2017. This report has established the existing background noise levels at the closest residential façade to the site and the assessment of the impact of the site

operation on nearby residential properties. The resulting emissions from the site running on a worst case scenario show no conflict with 'low impact' criteria and give a strong indication that complaint and impact on the local amenity is unlikely. Therefore, no further remedial works are required at this time, and the AC Unit complies with BS 4142: 201 +A1:2019.

9.5 NPPF 2024

National Planning Policy Framework 2024 suggests that planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the framework taken as a whole, or specific policies in the framework indicate the application should be restricted.

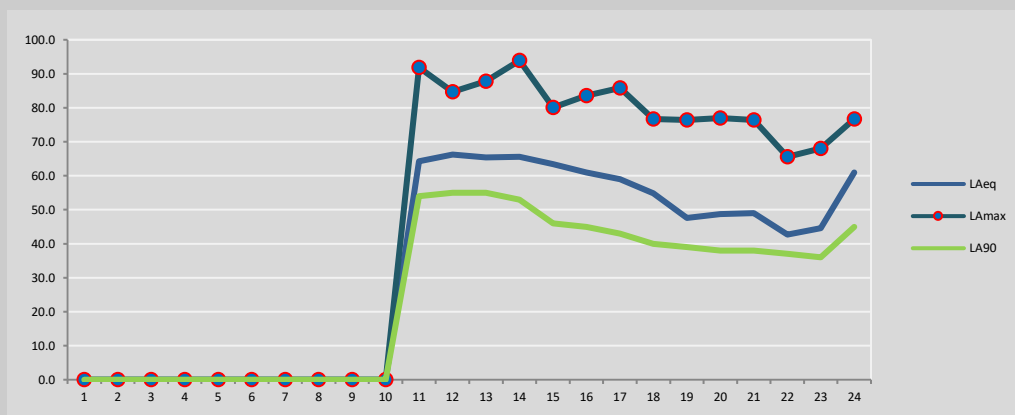
9.6 Planning Approval Recommendation

Based on the calculations and assessments made within this report it is the professional opinion of Impact Acoustics that the proposed development can demonstrate compliance with the National Planning Policy Framework 2024, NPPF & NPSE and that, with regards to sound, planning permission can be granted.

10 APPENDIX A – RESULTS

10.1 15th – 16th January 2026

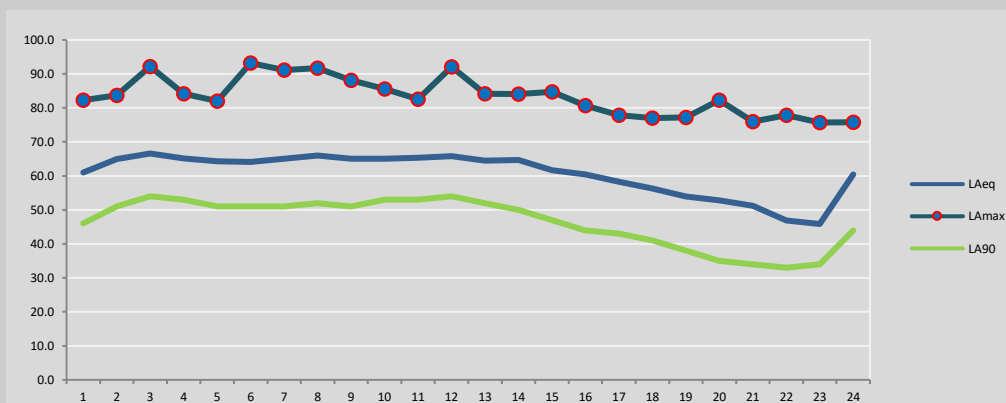
Time	L _{Max}	Minimum 15 minute		1 Hour		Day and Night	
Period		L _{Aeq,15 min}	L _{A90, 15 min}	L _{Aeq, 1 hour}	L _{A90, 1 hour}	L _{Aeq, t}	L _{A90, 16hours}
07:00 – 08:00	0.0	0.0	0.0	0.0	0.0	64.6	53.0
08:00 – 09:00	0.0	0.0	0.0	0.0	0.0		
09:00 – 10:00	0.0	0.0	0.0	0.0	0.0		
10:00 – 11:00	0.0	0.0	0.0	0.0	0.0		
11:00 – 12:00	0.0	0.0	0.0	0.0	0.0		
12:00 – 13:00	0.0	0.0	0.0	0.0	0.0		
13:00 – 14:00	0.0	0.0	0.0	0.0	0.0		
14:00 – 15:00	0.0	0.0	0.0	0.0	0.0		
15:00 – 16:00	0.0	0.0	0.0	0.0	0.0		
16:00 – 17:00	0.0	0.0	0.0	0.0	0.0		
17:00 – 18:00	91.9	44.9	38.0	64.2	54.0		
18:00 – 19:00	84.7	65.3	55.0	66.2	55.0		
19:00 – 20:00	87.8	64.5	52.0	65.4	55.0	53.2	39.0
20:00 – 21:00	93.9	64.7	50.0	65.6	53.0		
21:00 – 22:00	80.1	62.0	45.0	63.4	46.0		
22:00 – 23:00	83.6	58.8	43.0	61.0	45.0		
23:00 – 00:00	85.8	55.4	41.0	59.0	43.0		
00:00 – 01:00	76.7	51.8	39.0	54.8	40.0		
01:00 – 02:00	76.4	43.7	38.0	47.6	39.0		
02:00 – 03:00	77.0	39.4	38.0	48.7	38.0		
03:00 – 04:00	76.4	42.7	38.0	49.0	38.0		
04:00 – 05:00	65.6	41.5	36.0	42.7	37.0		
05:00 – 06:00	68.0	41.1	35.0	44.5	36.0		
06:00 – 07:00	76.7	46.4	38.0	61.0	45.0		



Sound Pressure Levels, dB. Reference level of $2 \times 10^{-5} \text{ Nm}^{-2}$

10.2 16th – 17th January 2026

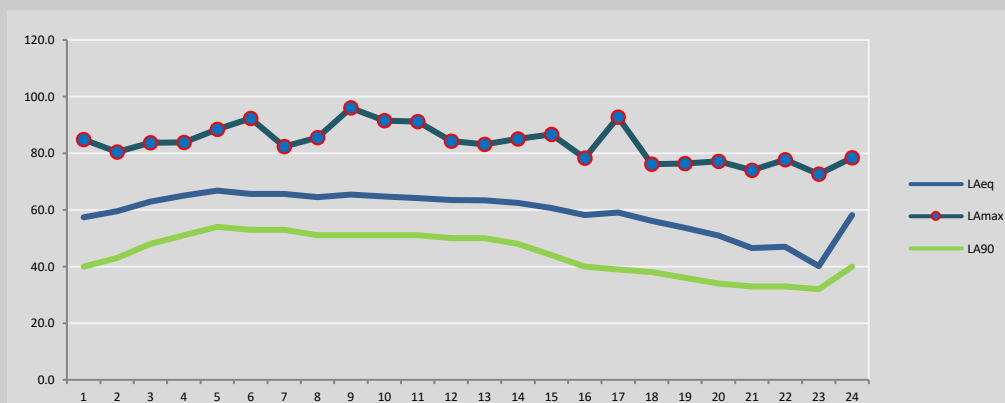
Time	L _{Max}	Minimum 15 minute		1 Hour		Day and Night	
Period		L _{Aeq,15 min}	L _{A90, 15 min}	L _{Aeq, 1 hour}	L _{A90, 1 hour}	L _{Aeq, t}	L _{A90, 16hours}
07:00 – 08:00	82.3	59.3	43.0	61.0	46.0	64.6	52.0
08:00 – 09:00	83.7	64.4	49.0	65.0	51.0		
09:00 – 10:00	92.2	66.0	52.0	66.6	54.0		
10:00 – 11:00	84.2	63.4	50.0	65.1	53.0		
11:00 – 12:00	82.0	63.6	50.0	64.3	51.0		
12:00 – 13:00	93.2	63.3	50.0	64.1	51.0		
13:00 – 14:00	91.1	64.1	50.0	65.0	51.0		
14:00 – 15:00	91.7	64.0	50.0	66.0	52.0		
15:00 – 16:00	88.1	64.2	49.0	65.1	51.0		
16:00 – 17:00	85.6	63.8	51.0	65.0	53.0		
17:00 – 18:00	82.6	64.4	50.0	65.3	53.0		
18:00 – 19:00	92.1	64.3	53.0	65.8	54.0		
19:00 – 20:00	84.2	64.1	51.0	64.5	52.0		
20:00 – 21:00	84.1	63.3	48.0	64.7	50.0		
21:00 – 22:00	84.7	60.3	45.0	61.6	47.0		
22:00 – 23:00	80.7	58.7	43.0	60.4	44.0	53.7	38.0
23:00 – 00:00	77.9	56.0	42.0	58.3	43.0		
00:00 – 01:00	77.0	53.9	40.0	56.2	41.0		
01:00 – 02:00	77.2	51.1	36.0	53.9	38.0		
02:00 – 03:00	82.3	43.8	33.0	52.8	35.0		
03:00 – 04:00	76.0	47.4	33.0	51.2	34.0		
04:00 – 05:00	77.9	40.0	32.0	46.8	33.0		
05:00 – 06:00	75.7	38.6	33.0	45.9	34.0		
06:00 – 07:00	75.8	44.1	35.0	60.4	44.0		



Sound Pressure Levels, dB. Reference level of $2 \times 10^{-5} \text{ Nm}^{-2}$

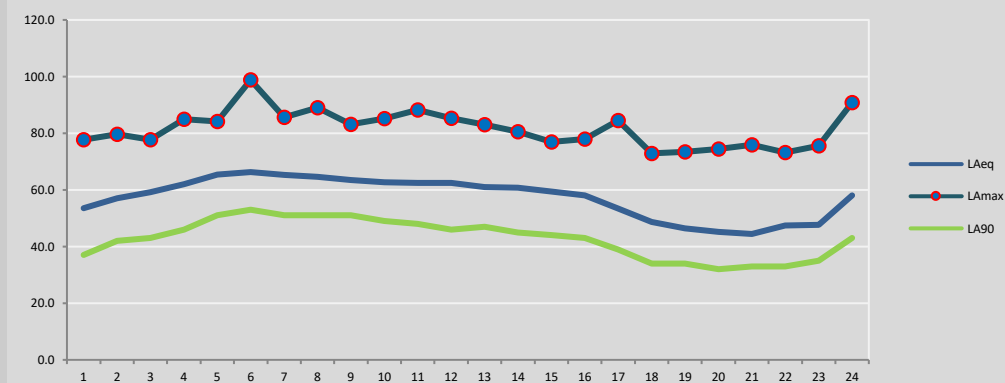
10.3 17th – 18th January 2026

Time	L _{Max}	Minimum 15 minute		1 Hour		Day and Night	
Period		L _{Aeq,15 min}	L _{A90, 15 min}	L _{Aeq, 1 hour}	L _{A90, 1 hour}	L _{Aeq, t}	L _{A90, 16hours}
07:00 – 08:00	84.8	54.6	38.0	57.3	40.0	63.8	50.0
08:00 – 09:00	80.4	58.1	41.0	59.5	43.0		
09:00 – 10:00	83.7	60.6	46.0	63.0	48.0		
10:00 – 11:00	83.8	64.8	49.0	65.1	51.0		
11:00 – 12:00	88.5	66.3	51.0	66.8	54.0		
12:00 – 13:00	92.3	65.1	51.0	65.7	53.0		
13:00 – 14:00	82.4	65.0	52.0	65.6	53.0		
14:00 – 15:00	85.5	64.2	49.0	64.6	51.0		
15:00 – 16:00	96.0	63.8	50.0	65.4	51.0		
16:00 – 17:00	91.5	63.4	50.0	64.7	51.0		
17:00 – 18:00	91.2	62.8	48.0	64.2	51.0		
18:00 – 19:00	84.3	62.7	49.0	63.5	50.0		
19:00 – 20:00	83.2	62.8	49.0	63.4	50.0		
20:00 – 21:00	85.1	61.2	47.0	62.5	48.0		
21:00 – 22:00	86.7	58.3	43.0	60.6	44.0		
22:00 – 23:00	78.3	56.9	38.0	58.1	40.0	53.5	36.0
23:00 – 00:00	92.7	56.7	39.0	59.1	39.0		
00:00 – 01:00	76.1	55.7	37.0	56.1	38.0		
01:00 – 02:00	76.4	48.6	35.0	53.6	36.0		
02:00 – 03:00	77.2	44.9	33.0	51.0	34.0		
03:00 – 04:00	74.0	40.5	33.0	46.6	33.0		
04:00 – 05:00	77.7	39.5	32.0	47.0	33.0		
05:00 – 06:00	72.6	39.1	31.0	40.2	32.0		
06:00 – 07:00	78.4	42.9	34.0	58.1	40.0		

Sound Pressure Levels, dB. Reference level of $2 \times 10^{-5} \text{ Nm}^{-2}$

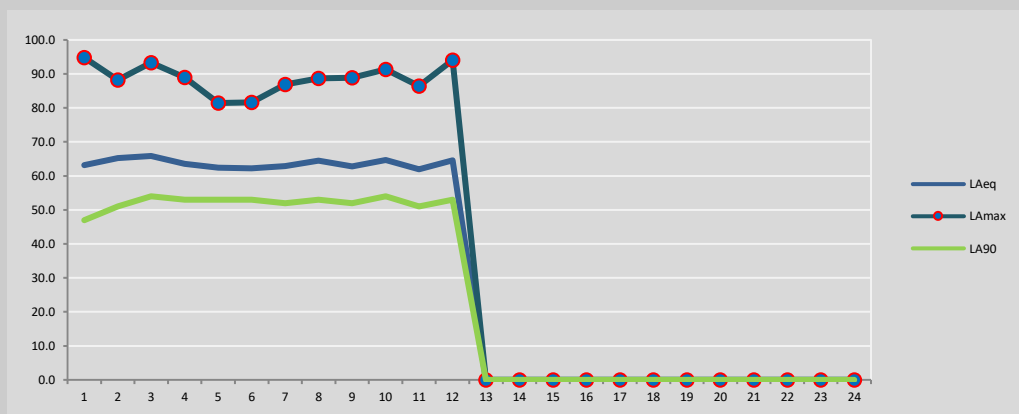
10.4 18th – 19th January 2026

Time	L _{Max}	Minimum 15 minute		1 Hour		Day and Night	
Period		L _{Aeq,15 min}	L _{A90, 15 min}	L _{Aeq, 1 hour}	L _{A90, 1 hour}	L _{Aeq, t}	L _{A90, 16hours}
07:00 – 08:00	77.7	48.9	35.0	53.5	37.0	62.5	48.0
08:00 – 09:00	79.6	56.0	40.0	57.1	42.0		
09:00 – 10:00	77.7	56.4	43.0	59.2	43.0		
10:00 – 11:00	84.9	59.4	44.0	62.0	46.0		
11:00 – 12:00	84.2	64.9	49.0	65.4	51.0		
12:00 – 13:00	98.8	64.9	51.0	66.3	53.0		
13:00 – 14:00	85.6	64.4	51.0	65.3	51.0		
14:00 – 15:00	89.0	64.4	50.0	64.6	51.0		
15:00 – 16:00	83.2	62.5	49.0	63.5	51.0		
16:00 – 17:00	85.2	61.4	48.0	62.7	49.0		
17:00 – 18:00	88.2	61.1	47.0	62.4	48.0		
18:00 – 19:00	85.3	59.9	44.0	62.4	46.0		
19:00 – 20:00	83.0	59.5	47.0	61.0	47.0		
20:00 – 21:00	80.6	60.4	44.0	60.8	45.0		
21:00 – 22:00	76.9	58.1	42.0	59.4	44.0		
22:00 – 23:00	78.0	56.6	42.0	58.1	43.0		
23:00 – 00:00	84.5	50.6	36.0	53.5	39.0	51.1	36.0
00:00 – 01:00	72.9	42.3	33.0	48.7	34.0		
01:00 – 02:00	73.4	40.7	33.0	46.5	34.0		
02:00 – 03:00	74.4	40.6	31.0	45.1	32.0		
03:00 – 04:00	75.9	37.4	32.0	44.4	33.0		
04:00 – 05:00	73.2	38.3	32.0	47.4	33.0		
05:00 – 06:00	75.6	42.4	34.0	47.7	35.0		
06:00 – 07:00	90.8	45.6	37.0	58.1	43.0		

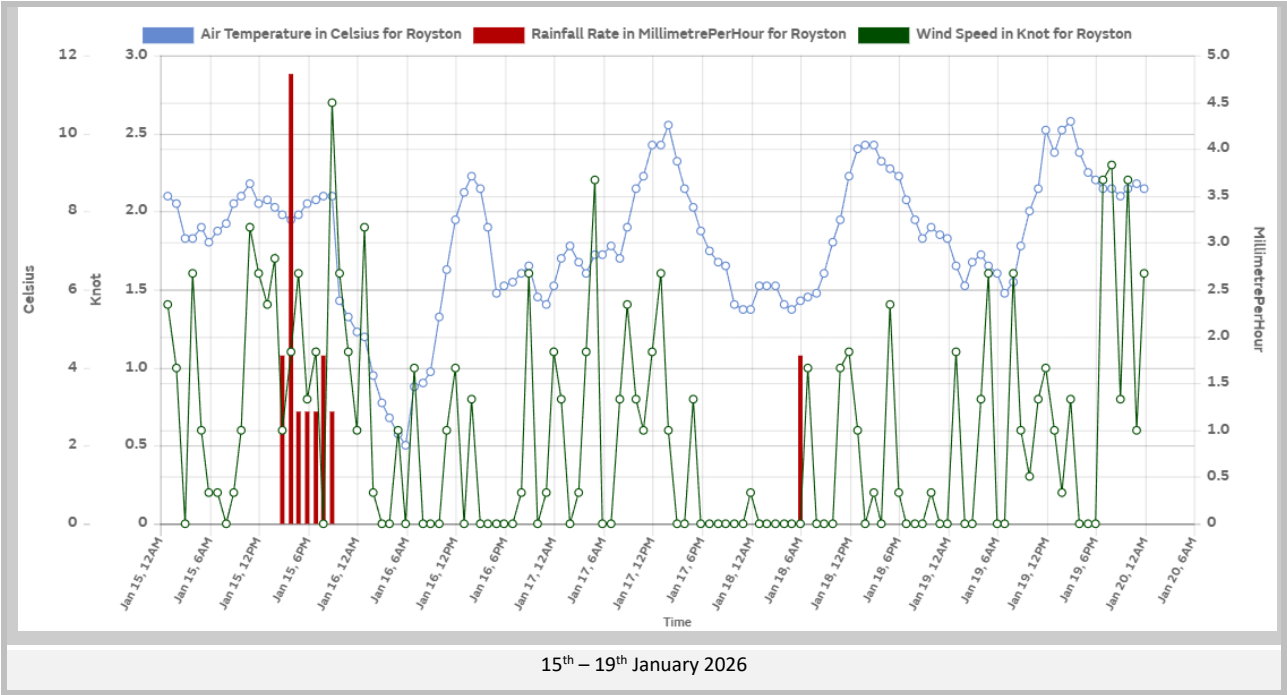
Sound Pressure Levels, dB. Reference level of $2 \times 10^{-5} \text{ Nm}^{-2}$

10.5 19th January 2026

Time	L _{Max}	Minimum 15 minute		1 Hour		Day and Night	
Period		L _{Aeq,15 min}	L _{A90, 15 min}	L _{Aeq, 1 hour}	L _{A90, 1 hour}	L _{Aeq, t}	L _{A90, 16hours}
07:00 – 08:00	94.8	60.8	43.0	63.2	47.0	63.8	52.0
08:00 – 09:00	88.2	63.9	50.0	65.2	51.0		
09:00 – 10:00	93.3	64.7	53.0	65.9	54.0		
10:00 – 11:00	89.0	62.7	49.0	63.5	53.0		
11:00 – 12:00	81.4	61.3	51.0	62.4	53.0		
12:00 – 13:00	81.6	61.5	52.0	62.3	53.0		
13:00 – 14:00	86.9	61.8	51.0	62.9	52.0		
14:00 – 15:00	88.7	62.2	52.0	64.5	53.0		
15:00 – 16:00	88.9	61.8	51.0	62.8	52.0		
16:00 – 17:00	91.3	63.3	52.0	64.6	54.0		
17:00 – 18:00	86.4	61.7	50.0	62.0	51.0		
18:00 – 19:00	94.1	63.4	51.0	64.6	53.0		
19:00 – 20:00	0.0	0.0	0.0	0.0	0.0		
20:00 – 21:00	0.0	0.0	0.0	0.0	0.0		
21:00 – 22:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22:00 – 23:00	0.0	0.0	0.0	0.0	0.0		
23:00 – 00:00	0.0	0.0	0.0	0.0	0.0		
00:00 – 01:00	0.0	0.0	0.0	0.0	0.0		
01:00 – 02:00	0.0	0.0	0.0	0.0	0.0		
02:00 – 03:00	0.0	0.0	0.0	0.0	0.0		
03:00 – 04:00	0.0	0.0	0.0	0.0	0.0		
04:00 – 05:00	0.0	0.0	0.0	0.0	0.0		
05:00 – 06:00	0.0	0.0	0.0	0.0	0.0		
06:00 – 07:00	0.0	0.0	0.0	0.0	0.0		

Sound Pressure Levels, dB. Reference level of $2 \times 10^{-5} \text{ Nm}^{-2}$

11 APPENDIX B – WEATHER CONDITIONS



END OF REPORT