

2026

re:shape

Noise & Vibration Impact Assessment

Ashley Park





Ashley Park, London

Noise and Vibration Impact Assessment

Prepared for:
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EXECUTIVE SUMMARY

Trium Environmental Consulting LLP (Trium) has been appointed to undertake a Noise and Vibration Impact Assessment for the Proposed Development at Ashley House, London (the “Site”) within the London Borough of Haringey (LBH).

The Proposed Development comprises the demolition of the existing buildings and the erection of a mixed-use development including a shared-living building of up to 23 storeys providing 522 shared-living studios, and a six-storey building providing 87 affordable homes. The development also includes 355.5 m² of flexible ancillary commercial, employment and community floorspace (Use Classes E and F2), ancillary residential facilities, plant, servicing arrangements, blue badge car parking, cycle storage, publicly accessible and private open space, landscaping and associated works. No basement is proposed.

As the proposal includes the introduction of residential uses, an acoustic site suitability assessment has been completed.

The assessment concludes that appropriate internal and external noise conditions will be provided in all newly proposed accommodation with the adoption of appropriately specified acoustic measures.

The noise emissions associated with the proposal are limited to the installation of new building services plant and commercial units. Recommendations for noise emission limits from building services plant have been provided.

A qualitative assessment of the commercial units has been undertaken, concluding that noise emissions from these uses will not result in unacceptable noise impacts at new or existing receptors, subject to standard acoustic design measures and operational management.

The Proposed Development is effectively car-free, with only limited Blue Badge parking provided. Operational vehicle movements will mainly comprise servicing and deliveries. The associated increases in traffic flows are sufficiently small that they are not expected to result in a material increase in road traffic noise on the surrounding highway network.

Potential noise and vibration effects associated with enabling and construction works, including construction traffic, are assessed within **Environmental Statement Chapter 7: Noise and Vibration**. The assessment is based on reasonable assumptions regarding the likely works, plant and construction activities, reflecting the level of information available at this stage.

The potential for noise from the nearby Mother Kelly’s bar to affect the Proposed Development has been assessed in accordance with the Agent of Change principle. Appropriate residential conditions can be achieved without imposing unreasonable restrictions on the continued operation of the venue.

An evaluation of vibration and groundborne noise has been completed, which indicates that adverse impacts on the future occupants of the site are unlikely. Mitigation measures are not required for the Proposed Development to achieve suitable internal vibration and groundborne noise conditions.

On the basis of the relevant acoustic standards, the site is considered appropriate for a noise sensitive development.

INTRODUCTION

- 1 Trium has been appointed to undertake a Noise and Vibration Impact Assessment for the Proposed Development at Ashley House, Tottenham, London.
- 2 An environmental noise and vibration survey was conducted between 7th July and 13th July 2026. This survey has been used to evaluate the potential impacts at receptors that surround the site and at the proposed introduced noise sensitive uses, i.e. residential dwellings.
- 3 This report presents the survey method, results and the evaluation of the noise and vibration impacts at surrounding existing receptors, and at those introduced.

STATEMENT OF COMPETENCY

- 4 The measurements and assessment were completed by Luke Papini, an Associate Member of the Institute of Acoustics (AMIOA).
- 5 The measurements and assessment have been reviewed by Stuart Heather, a Corporate Member of the Institute of Acoustics (MIOA).

DEVELOPMENT PROPOSALS

- 6 The Proposed Development comprises the demolition of the existing buildings and the erection of a mixed-use development including a shared-living building of up to 23 storeys providing 522 shared-living studios, and a six-storey building providing 87 affordable homes. The development also includes 355.5 m² of commercial and community floorspace (Use Classes E and F2), ancillary residential facilities, plant, servicing arrangements, blue badge car parking, cycle storage, publicly accessible and private open space, landscaping and associated works. No basement is proposed.

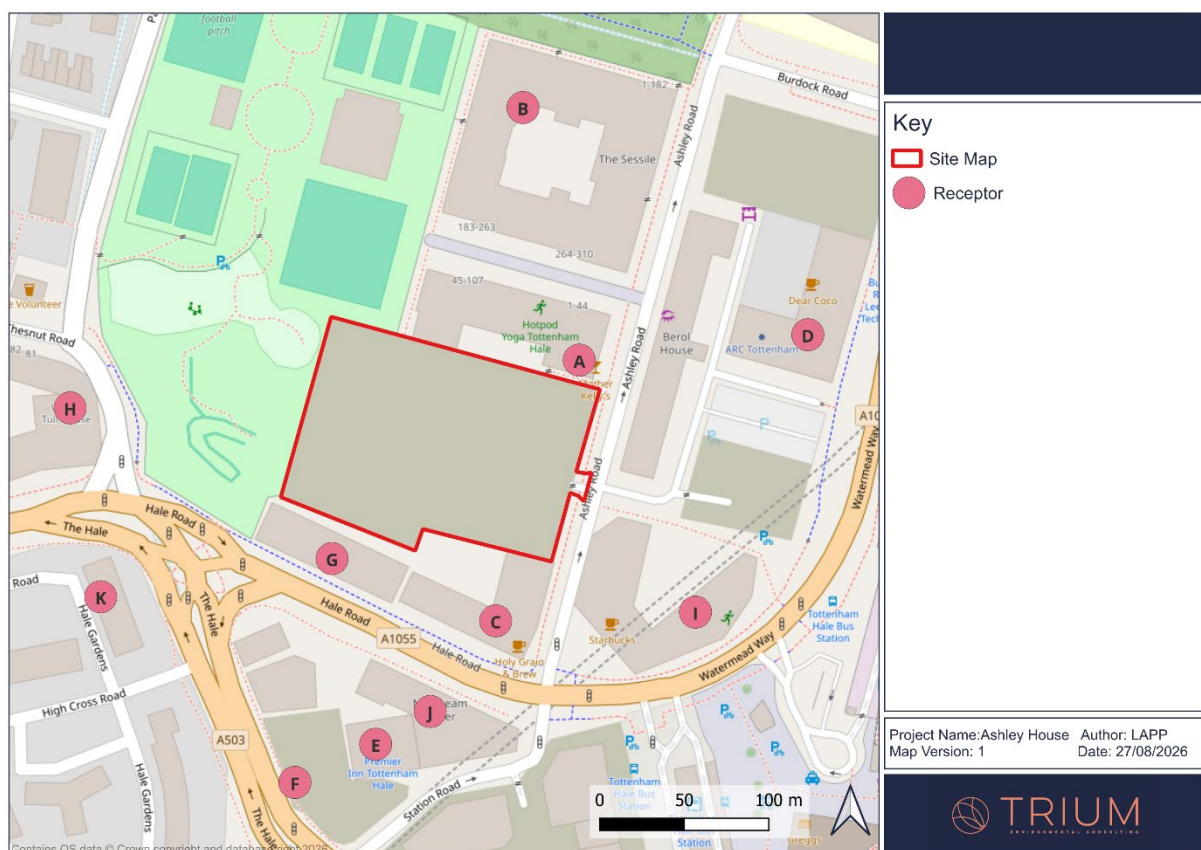
SITE DESCRIPTION

- 7 The Proposed Development is located at the former Ashley House site, located on Ashley Road in Tottenham within the London Borough of Haringey (LBH). The Site is rectangular in shape, and currently a cleared, hoarded site. The Site is bordered to the north by residential apartments located on Ashley Road, to the east by Ashley Road, to the south by residential apartments and terraced housing located on Hale Road, and to the west by the Down Lane Park play area. The licensed bar venue Mother Kelly's is a short distance from the site's north-east corner. An underground tunnel taking out of service Victoria Line trains to the Northumberland Park depot is located approximately 40m to the south east of the site.
- 8 The Site is approximately 125m to the west of Tottenham Hale station, serving Victoria Line and Network Rail trains including the Stansted Express. The immediate surroundings also consist of mostly residential usage with some green space, leisure, hotel, health, food and beverage, education, co-working, and commercial land usage. There are several new developments under construction in the area.
- 9 The Site location in relation to its surroundings is shown in Figure 1.
- 10 The surrounding noise sensitive receptors are:
 - A) Residential: Rosa Luxemburg Apartments, Ashley Road;
 - B) Residential: The Sessile Apartments, Ashley Road;
 - C) Residential: West Apartments, Ashley Road;
 - D) Residential: Gessner Apartments, Watermead Way;
 - E) Hotel: Premier Inn London Tottenham Hale Hotel;
 - F) Residential: Ferry Island North Apartments;
 - G) Residential: 1-19 Hale Road;

- H) Residential: Walter Tull House, Chestnut Road;
- I) Residential: East Apartments, Ashley Road;
- J) Residential: Millstream Tower, Station Road; and
- K) Residential: 165-191 High Cross Road.

- 11 The dominant noise sources were road traffic associated with Hale Road, Watermead Way and occasional traffic movements on Ashley Road. There was also some noise from occasional aircraft movements and local construction works. Noise from trains was mostly inaudible at the site.

Figure 1 The Site and Surrounding Receptors (A-K)



NOISE IMPACT ASSESSMENT GUIDANCE

National Planning Policy Framework (NPPF)¹

- 12 Paragraph 198 of the National Planning Policy Framework (NPPF) states the following:

“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:

¹ National Planning Policy Framework, Ministry of Housing, Communities & Local Government, December 2024 (with minor updates in February 2025)

- 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.*

- 13 Accordingly, planning decisions need to consider noise and include mitigation that reduces to a minimum adverse impact and avoids significant adverse impacts.

Noise Policy Statement England (NPSE)²

- 14 The Noise Policy Statement for England (NPSE) sets out the long-term vision of Government noise policy. The NPSE states that its aims are as follows:

“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.”*

- 15 The NPSE adopts established concepts from toxicology that can be applied to noise impacts. The concept details noise levels, at which the effects of an exposure may be classified into a specific category. The classification categories as detailed within the NPSE are as follows:

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

- 16 The SOAEL does not have a single objective noise level that is applicable to all sources of noise in all situations and therefore, the SOAEL is likely to be different for different sources, different receptors and at different times of the day.

- 17 The first aim of the NPSE is to avoid significant adverse effects on health and quality of life, taking into account the guiding principles of sustainable development. The second aim considers situations where impacts are established between the LOAEL and SOAEL. In such circumstances, all reasonable steps should be taken to mitigate and minimise the effects. However, this does not mean that such adverse effects cannot occur. The third aim seeks to improve health and quality of life, where possible, through the pro-active management of noise, whilst also taking account of the guiding principles of sustainable development.

The London Plan 2021³

- 18 The London Plan was adopted in March 2021 and sets out policies for development in London. Two policies, namely D13 ‘Agent of Change’ and D14 ‘Noise’, are the most applicable with respect to noise.

- 19 Policy D13 ‘Agent of Change’ requires that new developments take responsibility for mitigating noise impacts. This includes controlling noise emissions affecting existing sensitive receptors and incorporating measures to ensure existing noise-generating uses can continue operating without unreasonable restrictions. The Agent of Change principle places the onus on the new development to manage the effects of noise and other nuisances.

² Department for Environment Food and Rural Affairs, March 2010, Noise Policy Statement for England

³ Greater London Authority, March 2021 The London Plan: The Spatial Development Strategy for Greater London

- 20 Policy D14 “Noise” promotes the effective management of noise, both internally and externally, to support good health and quality of life. The policy refers to broader acoustic standards including BS 8233:2014 and BS 4142 as relevant for assessing and controlling noise.

The London Borough of Haringey Local Plan⁴

- 21 The Haringey Development Management DPD (2017) Policy DM23 seeks to ensure that noise-sensitive development is located away from existing or planned sources of noise pollution and that potentially noisy development incorporates measures to mitigate its effects. Noise assessments are required where proposals introduce noise-sensitive uses or activities with the potential to generate noise.
- 22 Policy DM1 additionally requires development to protect the amenity of future occupiers and neighbouring properties. Together, these policies require noise and vibration to be addressed through the location, layout, design and operation of development, with appropriate mitigation secured where necessary.

BS 8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings⁵

- 23 BS 8233:2014 *Guidance on sound insulation and noise reduction for buildings* (BS 8233) includes recommendations on noise control within buildings. The scope of BS 8233 states that it is intended for the design of new or refurbished buildings.
- 24 The recommended indoor ambient noise levels listed in Section 7.7.2 for bedrooms are provided in Table 1.

Table 1 Recommended Indoor Ambient Noise Levels for Residential Properties

Location	07:00 to 23:00	23:00 to 07:00
Living Room	$L_{Aeq,16h}$ 35 dB	-
Dining Room/Area	$L_{Aeq,16h}$ 40 dB	-
Bedroom	$L_{Aeq,16h}$ 35 dB	$L_{Aeq,8h}$ 30 dB

- 25 Compliance with the recommendations in Table 1 would result in appropriate internal noise conditions for residential dwellings.

Pro:PG Planning & Noise – New Residential Development

- 26 ProPG Planning & Noise was published in May 2017 and includes an approach that encourages good acoustic design of residential developments. ProPG is intended for the evaluation of noise from transportation (road, rail and aircraft) and other sources of noise should be evaluated using other methodologies (e.g. BS 4142).
- 27 The ProPG methodology outlined includes a two-stage approach, with the initial evaluation (Stage 1) and a full detailed assessment (Stage 2).
- 28 The purpose of the initial Stage 1 evaluation is to inform the development prior to the submission of any planning application, without the adoption of mitigation measures. The purpose of the assessment is to identify whether mitigation measures and a Stage 2 assessment is required.
- 29 The Stage 2 assessment is to include the development proposals and demonstrate that appropriate conditions for residential development can be achieved. The Stage 2 evaluation references internal ambient sound levels recommended in BS 8233 (Table 1), providing external amenity (i.e. gardens) where suitable sound levels are achieved and limiting maximum internal sound pressure levels to L_{AFmax} 45 dB (no more than 10 times a night) during the night.
- 30 The outcome of the Stage 2 assessment is to provide a recommendation to the decision maker (the Local Planning Authority) on whether to approve of the proposed development with or without planning conditions being imposed.

⁴ Planning London Borough of Haringey (2017). *Development Management Development Plan Document (DPD)*. Adopted July 2017.

⁵ British Standards (BS) 8233:2014 *Guidance on sound insulation and noise reduction for buildings*, February 2014

BS 4142:2014+A1:2019 Methods for Rating and Assessing Industrial and Commercial Sound⁶

- 31 BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound (BS 4142) is used to determine the likely impact of sound generated by industrial and manufacturing operations and fixed building services plant at noise sensitive properties. BS 4142 is limited in scope to industrial and commercial operations and typically not used to evaluate people talking or music (amongst other sources), even when these might arise from commercial properties.
- 32 BS 4142 suggests that the greater the difference between the rating and background sound level, the greater the impact. The evaluation of the impact, as set out in BS 4142, is described below:
- 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 is likely to be an indication of an adverse impact, depending on the context; and
 - 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.
- 33 As noted in Section 11 of BS 4142, the impact of the sound source has to consider context. BS 4142 mentions three types of context that can be considered, which can be summarised as:
- The absolute level of sound;
 - The character and level of the residual sound compared to the character and level of the specific sound; and
 - The sensitivity of the receptor and whether the residential receptor incorporates design measures that secure good internal and/or outdoor acoustic conditions e.g. façade sound insulation treatment and ventilation and cooling that does not rely on opening windows.

BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings - Part 1: Vibration sources other than blasting

- 34 BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings - Part 1: Vibration sources other than blasting (BS 6472-1) is used for application of methods of measuring and evaluating vibration in order to assess the likelihood of adverse comment.
- 35 Table 2 provides guidance on how to interpret vibration levels in residential buildings based on Vibration Dose Values (VDV), which indicate the total exposure to vibration over a given period.

Table 2 Vibration Dose Value Ranges Which Might Result In Various Probabilities Of Adverse Comment Within Residential Buildings

Place And Time	Low Probability of Adverse Comment ($m.s^{-1.75}$)*	Adverse Comment Possible ($m.s^{-1.75}$)	Adverse Comment Probable ($m.s^{-1.75}$)**
Residential buildings 16h day	0.2 to 0.4	0.4 to 0.8	0.8 to 1.6
Residential buildings 8h night	0.1 to 0.2	0.2 to 0.4	0.4 to 0.8

* Below these ranges adverse comment is not expected.

** Above these ranges adverse comment is very likely.

Transport for London – G1323 Noise and Vibration Asset Design Guidance

- 36 Transport for London's G1323 guidance define noise and vibration methodologies and criteria that should be used in the design of new operational assets, to reduce complaints received from noise sensitive uses, such as residential properties.

⁶ British Standards (BS) 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound, October 2014

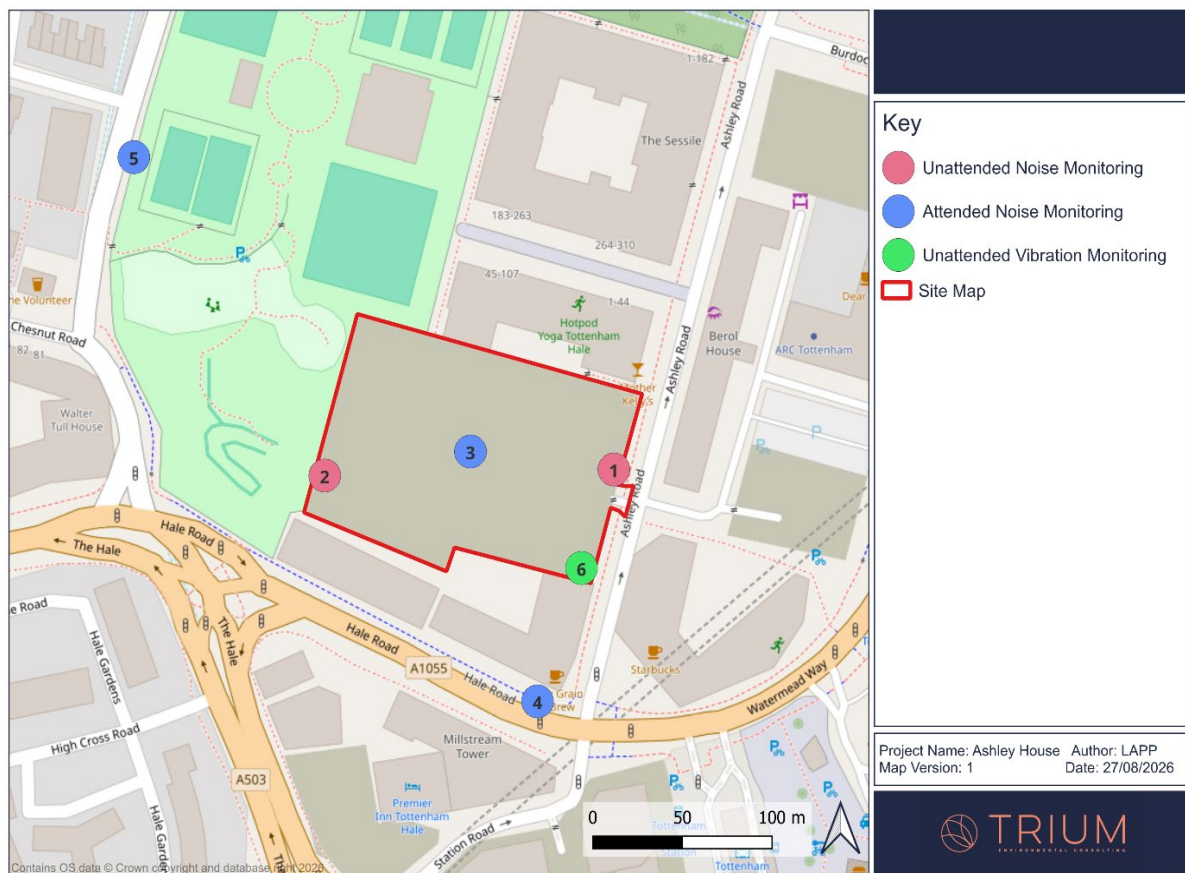
- 37 Section 3.4 of G1323 sets out groundborne noise and vibration criteria. The section outlines that there are no legislative standards or criteria that defines when groundborne noise becomes significant. The values provided are based on experience of when complaints are received from sub surface and underground railways.
- 38 Section 3.4.2 of G1323 states that groundborne noise from underground railways should not be considered significant if it does not give rise to an average maximum noise level of L_{AFmax} 40 dB (based on at least 10 trains). In addition, Section 3.4.3 states that reasonable endeavours should be applied to meet a more stringent criterion of L_{AFmax} 35 dB.

Criteria for Assessing Noise and Vibration Impacts

- 39 LBH's Local Plan does not specify any particular criteria or guidance for assessing noise and vibration impacts associated with proposed developments, as is typical. Accordingly, a review of recently approved schemes within LBH have been reviewed and criteria from planning conditions provided.
- 40 The criteria for evaluating noise and vibration impacts is based on:
- Building services plant noise emissions being 10 dB below the background sound level at 1 m from the façade of the nearest existing noise sensitive properties;
 - Evaluation of airborne noise intrusion in line with BS 8233;
 - Assessment of external amenity in line with guidance within ProPG and BS 8233;
 - Tactile vibration evaluated with reference to BS 6472-1; and
 - Groundborne noise to be evaluated with reference to TfL guidance.

ENVIRONMENTAL NOISE AND VIBRATION SURVEY

- 41 The noise survey comprised:
- Unattended noise monitoring at two positions;
 - Attended noise monitoring at three positions; and
 - Unattended vibration monitoring at one position.
- 42 The measurement positions relative to the site boundary (outlined in red) are shown in Figure 2.

Figure 2 Noise and Vibration Survey Locations

43 Unattended noise measurements were completed at Positions 1 to 2; attended noise measurements were completed at Positions 3 to 5; unattended vibration measurements were completed at Position 6.

44 Details of the weather and equipment used are provided in Appendix A. The equipment was installed and collected by Luke Papini.

Position 1

45 The unattended measurements at Position 1 were taken over 15-minute periods between 13:04 on 7th July 2026 and 10:49 on 13th July 2026.

46 The microphone was affixed to the site hoarding approximately 2.8m above ground level and at least 3.5m from continuous vertically reflective surfaces, i.e. free-field level conditions.

47 The dominant noise source observed during installation and pick up was road traffic from Ashley Road and Hale Road.

48 Figure 3 illustrates the noise monitoring at Position 1.

Figure 3 Photograph of Noise Monitoring at Position 1

49 Table 3 summarises the day, evening and night ambient sound pressure levels measured at Position 1.

Table 3 Summary of Sound Pressure Levels Measured at Position 1

Date	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)
	$L_{Aeq,12h}$ (dB)	$L_{Aeq,4h}$ (dB)	$L_{Aeq,8h}$ (dB)
07/07/2026	57*	56	54
08/07/2026	58	56	52
09/07/2026	57	55	53
10/07/2026	57	55	54
11/07/2026	56	57	55
12/07/2026	56	56	53
13/07/2026	58*	-	-

*Measurements not completed over entire time period

50 The time history graphs illustrating the sound pressure levels measured across the survey period are provided in Appendix B.

51 The statistical analysis of the background sound levels is provided in Appendix C. The representative background sound level has been assessed to be $L_{A90,15min}$ 53 dB during the day and $L_{A90,15min}$ 48 dB during the night.

52 The tenth highest maximum noise level measured across the nighttime periods ranged between L_{AFmax} 62 – 74 dB. The maximum noise levels were likely determined by the local road network.

Position 2

53 The unattended measurements at Position 2 were taken over 15-minute periods between 12:30 on 7th July 2026 and 11:00 on 13th July 2026.

- 54 The microphone was positioned approximately 3m above the ground level and at least 3.5m from continuous vertically reflective surfaces, i.e. free-field level conditions.
- 55 The dominant noise source observed during installation and pick up was road traffic from Hale Road.
- 56 Figure 4 illustrates the noise monitoring at Position 2.

Figure 4 Photograph of Noise Monitoring at Position 2



- 57 Table 4 summarises the day, evening and night ambient sound pressure levels measured at Position 2.

Table 4 Summary of Sound Pressure Levels Measured at Position 2

Date	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)
	$L_{Aeq,12h}$ (dB)	$L_{Aeq,4h}$ (dB)	$L_{Aeq,8h}$ (dB)
07/07/2026	57*	56	55
08/07/2026	57	56	53
09/07/2026	57	56	54
10/07/2026	58	57	53
11/07/2026	57	57	55
12/07/2026	56	58	54
13/07/2026	58*	-	-

*Measurements not completed over entire time period

- 58 The time history graphs illustrating the sound pressure levels measured across the survey period are provided in Appendix B.
- 59 The statistical analysis of the background sound levels is provided in Appendix C. The representative background sound level has been assessed to be $L_{A90,15min}$ 54 dB during the day and $L_{A90,15min}$ 47 dB during the night.

- 60 The tenth highest maximum noise level measured across the nighttime periods ranged between L_{AFmax} 62 – 75 dB. Based on site observations, the maximum noise levels were likely determined by traffic from Hale Road and Park View Road.

Position 3

- 61 The attended measurements at Position 3 were completed on 13th July 2026.
- 62 The microphone was positioned 1.5m above the ground and approximately 3.5m from other vertically reflective surfaces, i.e. free-field level conditions.
- 63 Position 3 was considered to provide a representative indication of sound levels at the centre of the site.
- 64 Figure 5 illustrates the noise monitoring at Position 3.

Figure 5 Photograph of Noise Monitoring at Position 3



- 65 Table 5 summarises the day ambient sound levels measured at Position 3.

Table 5 Summary of Sound Pressure Levels Measured at Position 3

Date	Time	Sound Pressure Level (dB)		
		$L_{Aeq,15min}$	$L_{A90,15min}$	$L_{AFmax,15min}$
13/07/2026	11:14	54	51	84
	11:29	54	50	72

Position 4

- 66 The attended measurements at Position 4 were completed on 13th July 2026.
- 67 The microphone was positioned 1.5m above the ground and approximately 3.5m from other vertically reflective surfaces, i.e. free-field level conditions.
- 68 Position 4 was considered to be a reliable representation of the sound levels experienced towards the southern boundary of the site, namely road traffic from Hale Road.
- 69 Figure 6 illustrates the noise monitoring at Position 4.

Figure 6 Photograph of Noise Monitoring at Position 4



- 70 Table 6 summarises the day ambient sound levels measured at Position 4.

Table 6 Summary of Sound Pressure Levels Measured at Position 4

Date	Time	Sound Pressure Level (dB)		
		$L_{Aeq,15min}$	$L_{A90,15min}$	$L_{AFmax,15min}$
13/07/2026	11:54	72	65	90
	12:09	70	63	83

Position 5

- 71 The attended measurements at Position 5 were completed on 13th July 2026.
- 72 The microphone was positioned 1.5m above the ground and approximately 3.5m from other vertically reflective surfaces, i.e. free-field conditions.
- 73 Position 5 was considered to provide a representative indication of sound levels experienced towards the western boundary of the site, namely road traffic noise from Park View Road and Hale Road.
- 74 Figure 7 illustrates the noise monitoring at Position 5.

Figure 7 Photograph of Noise Monitoring at Position 5

75 Table 7 summarises the day ambient sound levels measured at Position 5.

Table 7 Summary of Sound Pressure Levels Measured at Position 5

Date	Time	Sound Pressure Level (dB)		
		$L_{Aeq,15min}$	$L_{A90,15min}$	$L_{AFmax,15min}$
13/07/2026	12:30	60	50	82
	12:45	61	51	82

Position 6

76 The unattended vibration measurements at Position 6 were taken over 30 second periods between 12:39 on 7th July 2026 and 12:24 on 13th July 2026.

77 The vibration meter was located near to the south east of the site, at the point of the site closest to the underground service tunnel for Victoria line trains.

78 The Y axis of the geophone was positioned towards the alignment of the railway.

79 Figure 8 illustrates the vibration monitoring at Position 6.

Figure 8 Unattended Vibration Measurements at Position 6

Table 8 summarises the vibration dose values measured at Position 6.

Table 8 Unattended Vibration Measurement Results at Position 6

Date	Time	Measured Vibration Dose Value ($\text{m/s}^{1.75}$)		
		X Axis	Y Axis	Z-Axis
07/07/2026	Night	0.01	0.01	0.02
08/07/2026	Day	0.00	0.00	0.02
	Night	0.00	0.00	0.02
09/07/2026	Day	0.00	0.00	0.02
	Night	0.00	0.00	0.02
10/07/2026	Day	0.01	0.01	0.03
	Night	0.00	0.00	0.02
11/07/2026	Day	0.00	0.00	0.02
	Night	0.00	0.00	0.02
12/07/2026	Day	0.00	0.00	0.02
	Night	0.00	0.00	0.02
13/07/2026	Day	0.00	0.00	0.02

NOISE AND VIBRATION IMPACT ASSESSMENT

Vibration and Groundborne Noise

Tactile Vibration

- 80 The tactile vibration levels measured at Position 6 have been evaluated to be 0.02 m/s^{1.75} during the day (Z axis) and 0.02 m/s^{1.75} during the night (Z axis). The measured VDV is significantly below the thresholds for adverse comment within BS 6472-1 (Table 2) for the day and night time periods, which aligns with the subjective observations of the attending site engineer during the survey.
- 81 **The results demonstrate that tactile vibration is not a concern on the site.**

Groundborne Noise

- 82 The 1/3 octave band maximum acceleration levels during each 10-second period have been analysed.
- 83 The maximum sound pressure levels from the events have been calculated at the measurement position. The calculations follow the guidance provided in the ANC Red Book⁷ and Transportation Noise Reference Handbook⁸.
- 84 During site attendance, train movements using the Victoria Line service tunnel were not perceptible, and so the attending site engineer was not able to discern individual train movements. The Victoria Line Working Timetable⁹ indicates that the tunnel is not regularly in use during daytime hours, and the most intensive periods of use are at the beginning of daily passenger service (04:00 – 06:00) and at the end of daily passenger service (00:30 – 02:00). Based on this timetable, these periods have been used for assessment.
- 85 The evaluated average groundborne noise level in the apartments is generally in the region of L_{AFmax} 21 - 26 dB during the assessed period, with sporadic events in the region of L_{AFmax} 11 - 31 dB. The evaluated maximum sound pressure levels were calculated taking into account the coupling losses of a large building on piles, the increase in sound associated with a “high” on-floor amplification factor and reduction in sound level through attenuation in the structure to Level 1.
- 86 **The analysis indicates that groundborne noise is not a concern on the site**, and that specialist design measures are not necessary to meet acceptable conditions.

Building Services Plant

- 87 Table 9 details proposed cumulative limits for the building services plant based on LBH’s typical requirements (10 dB below the background sound pressure level).

Table 9 Proposed Building Services Plant Noise Limits

Cumulative Building Services Noise Limit ($L_{Ar,Tt}$) dB at 1m from Noise Sensitive Receptor Façades	
Day (07:00-23:00)	Night (23:00-07:00)
43	37

- 88 The limits in Table 9 are to be met cumulatively (all plant operating at the same time) at 1 m from the façade of the receptors.
- 89 The limits presented do not account for acoustic features, as described in BS 4142. If the plant noise includes noticeable acoustic characteristics at the receptor, then appropriate rating adjustments will be required.
- 90 It is recommended that a suitable planning condition be imposed on the development to ensure that sufficient details are submitted to LBH when plant designs and selections have been sufficiently progressed.

⁷ Acoustics & Noise Consultants, March 2020, *Measurement and Assessment of Groundborne Noise and Vibration (Red Book)*

⁸ Paul Nelson et al, July 1987, *Transportation Noise Reference Handbook*

⁹ TfL, September 2019, *Vicotria Line Working Timetable 42*, available at: <https://content.tfl.gov.uk/vic-wtt-42.pdf>

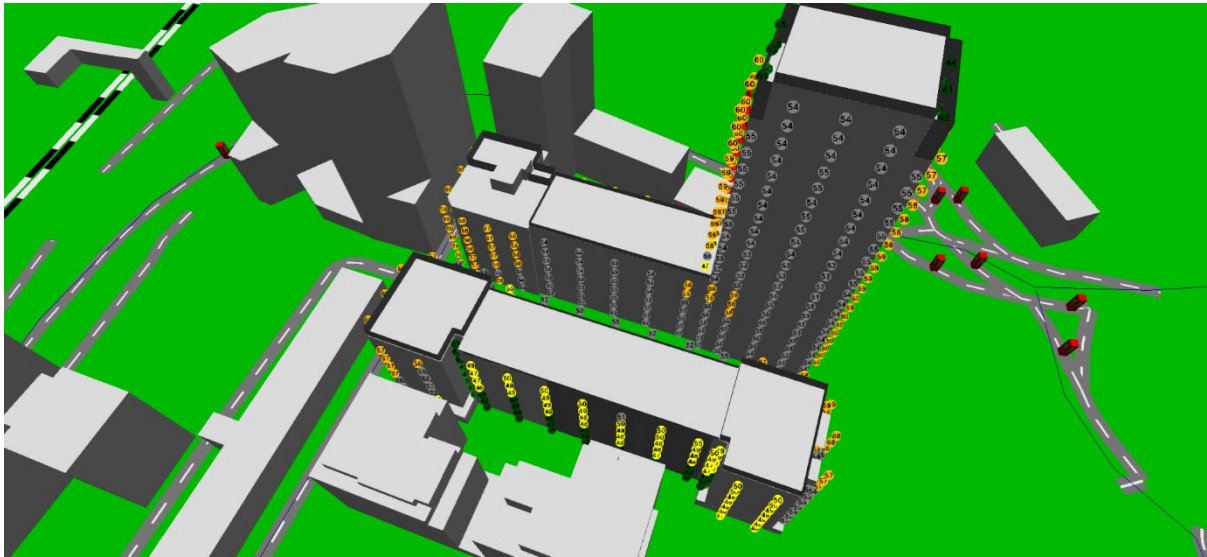
Internal Ambient Noise Levels

- 91 The development includes bedrooms and living spaces associated with residential uses. The overall objective of evaluating the site suitability with respect to residential developments is whether appropriate internal noise conditions can be met, i.e. compliance with the Table 1 ambient noise criteria.

Modelling

- 92 An environmental noise model (CadnaA version 2026) of the site and surroundings has been produced and calibrated using the measurement results. The model includes acoustically reflective ground and façades and includes two orders of reflections. All calculations have been completed with respect to ISO 9613-2¹⁰.
- 93 The ambient sound levels from surrounding roads have been modelled as line sources. The maximum events (from the roads) have been modelled as point sources.
- 94 Images from the model are shown in Figure 9 to Figure 16.

Figure 9 Daytime Ambient Sound Pressure Levels – North Elevation



¹⁰ International Standards Institute, 2024, ISO 9613-2: Acoustics — Attenuation of sound during propagation outdoors Part 2: Engineering method for the prediction of sound pressure levels outdoors

Figure 10 Night Time Ambient Sound Pressure Levels – North Elevation

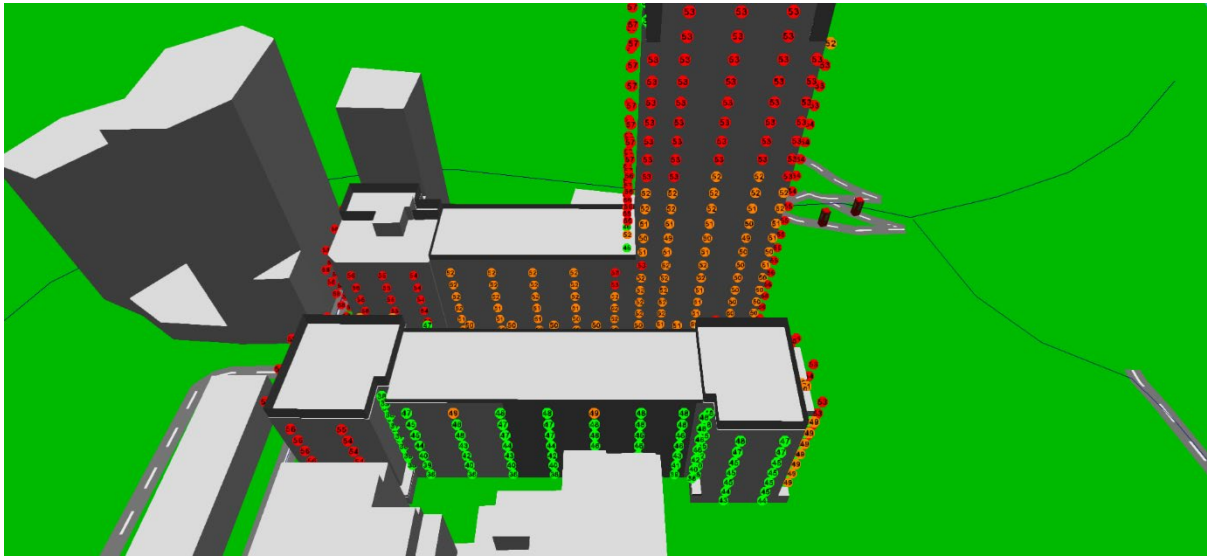


Figure 11 Daytime Ambient Sound Pressure Levels – East Elevation



Figure 12 Night Time Ambient Sound Pressure Levels – East Elevation

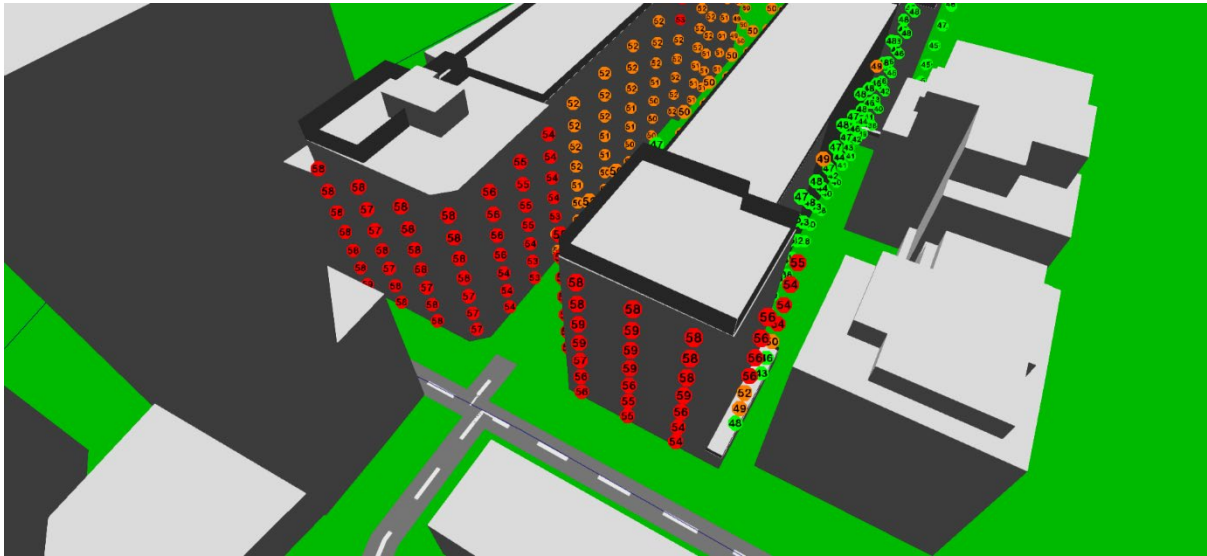


Figure 13 Daytime Ambient Sound Pressure Levels – South Elevation

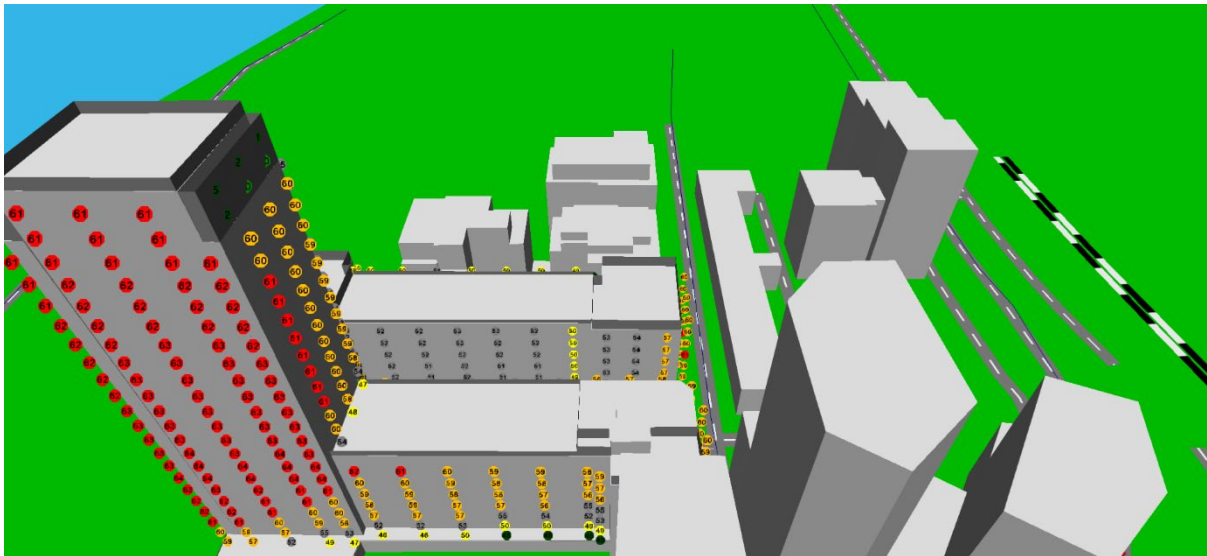


Figure 14 Night Time Ambient Sound Pressure Levels – South Elevation

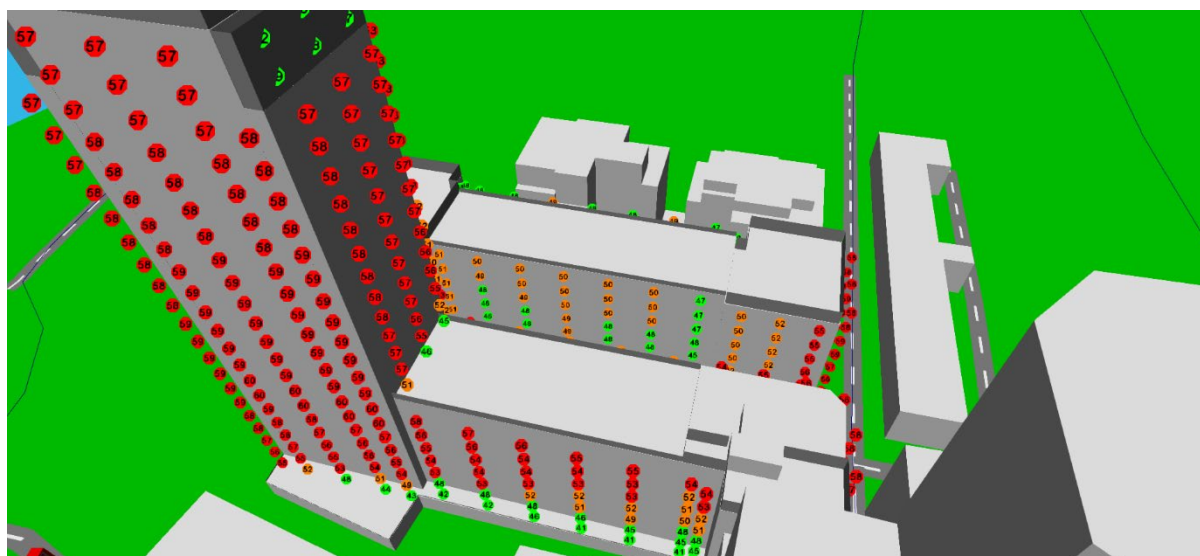


Figure 15 Daytime Ambient Sound Pressure Levels – West Elevation

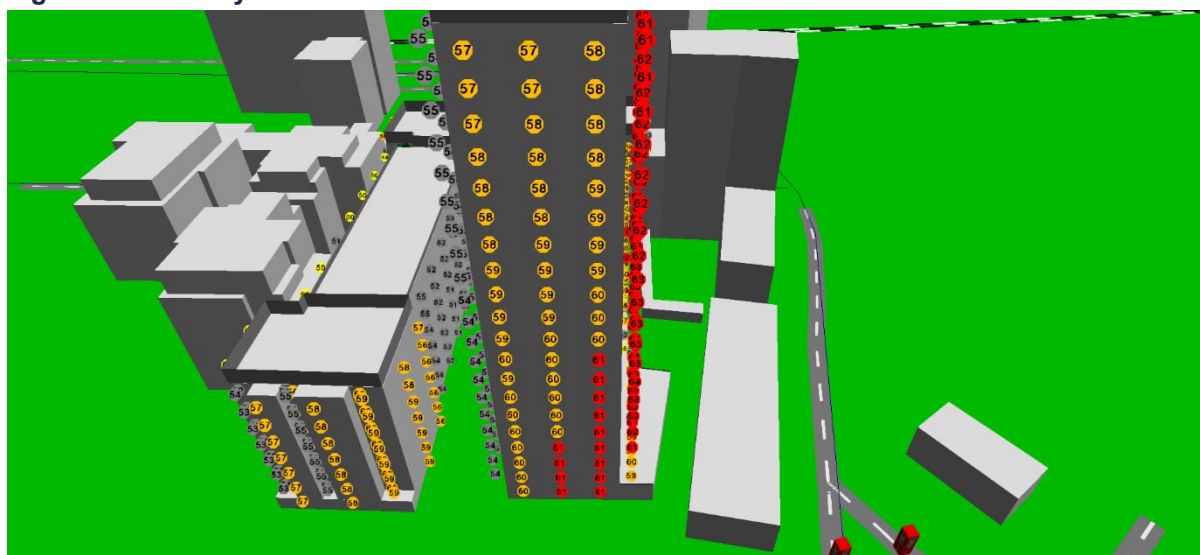
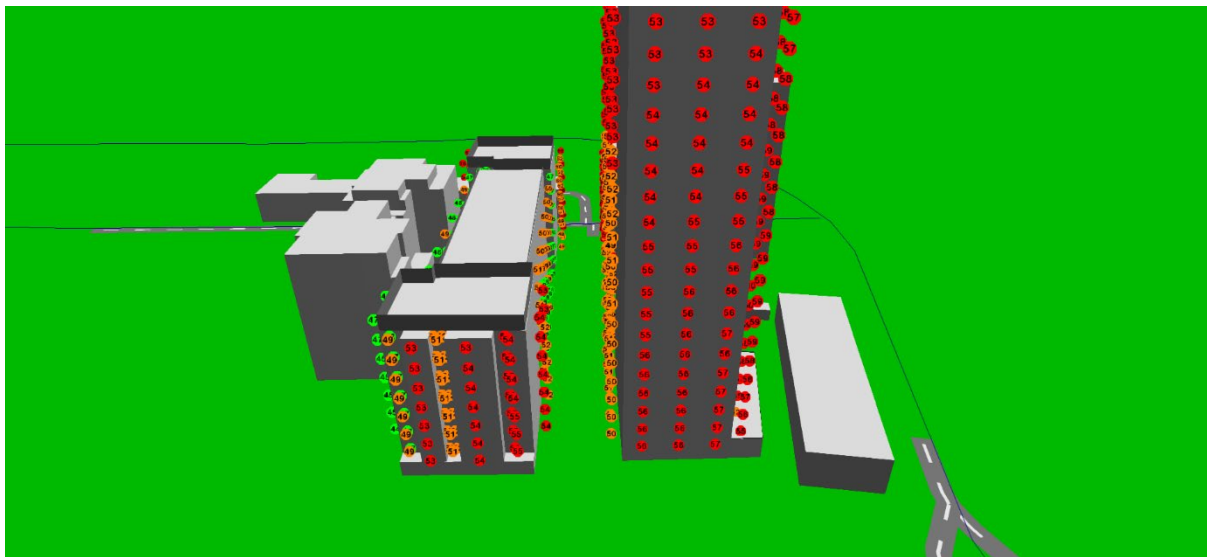


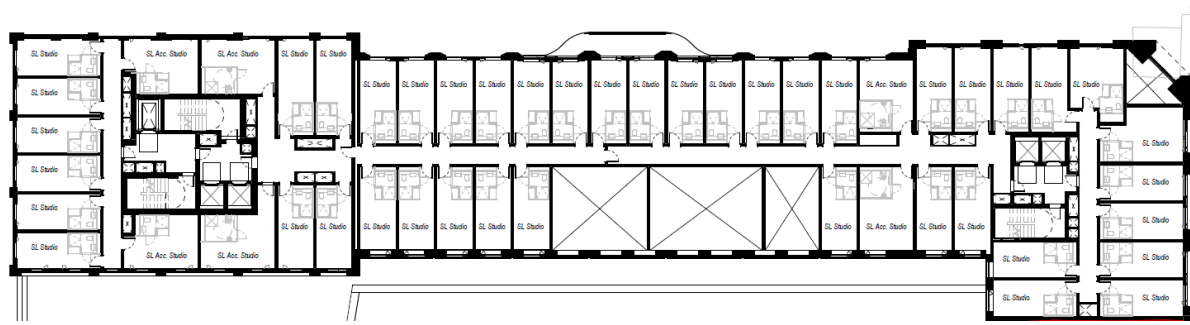
Figure 16 Night Time Ambient Sound Pressure Levels – West Elevation

Evaluation of Façade Sound Insulation

- 95 The Proposed Development is being provided within two buildings, namely Block A in the south of the site comprising the shared living building and Block B in the north of the site comprising the affordable housing building.
- 96 Typically, windows to the apartments will be closed with background mechanical ventilation provided. In these instances, the sound insulation performance of the façade is a key design consideration.
- 97 During periods of overheating, it will be preferable to use openable windows to increase ventilation. The design of the buildings has also considered the impact of overheating. In most locations an enhanced mechanical system will be adopted so that occupants do not need to rely on an opening window to reduce night-time overheating. The issue of overheating, including noise impacts, is covered by Requirement O of The Building Regulations, so is not considered further in this report. An assessment is provided within the Energy Strategy prepared by Meinhardt.
- 98 Block A, is located to the south of the site, adjacent to Hale Road. Block A includes purpose built shared living units, with the typical floor layout shown in Figure 17.

Figure 17 Typical Layout of Block A

- 99 Block B is located to the north of the site, adjacent to Down Lane Park. Block B includes affordable housing, with the typical floor layout shown in Figure 18.

Figure 18 Typical Layout of Block B

- 100** Table 10 presents the highest day and night sound pressure levels at each façade, and the required sound insulation performance for each façade to achieve the recommended internal sound levels.

Table 10 Highest Façade Sound Levels

Block	Façade	Day (07:00-23:00)	Night (23:00-07:00)	Night (23:00-07:00)	Overall Façade Sound Insulation Performance ($R'_w + C_{tr}$ dB)
		$L_{Aeq,16h}$ (dB)	$L_{Aeq,8h}$ (dB)	10 th Highest $L_{AFMax,8h}$ (dB)	
A (South)	North	58	54	68	26
	East	61	58	72	30
	South	65	61	76	32
	West	61	57	73	30
B (North)	North	51	47	65	22
	East	61	59	75	31
	South	57	53	76	27
	West	60	55	72	29

- 101** The required façade sound insulation can be achieved through an appropriate combination of glazing and non-glazing elements. Based on the detailed drawings, the highest façade sound insulation performance can be achieved when windows/doors achieve the following:
- $R'_w + C_{tr}$ 39 dB for bedrooms and living rooms in Block A; and
 - $R'_w + C_{tr}$ 33 dB for bedrooms in Block B.
- 102** The above window/door acoustic performances assume that the remainder of the façade would be capable of achieving an airborne sound insulation performance of $R'_w + C_{tr}$ 50 dB.
- 103** Table 11 includes the example glazing configurations that would meet the highest façade sound insulation requirement.

Table 11 Example Glazing Configurations

Recommended Façade Sound Insulation ($R'_w + C_{tr}$ dB)	Example Double Glazing	Example Triple Glazing
≤28	6mm glass/16mm cavity/6mm glass	6 mm glass/16 mm cavity/ 4 mm glass/ 16 mm cavity/ 16 mm glass
28-29	8mm glass/16mm cavity/6mm glass	4mm glass/ 12mm cavity/ 4 mm glass/ 12mm cavity/ 8.4 acoustic laminate glass
30-32	6.8mm acoustic laminate glass/16mm cavity/6mm glass	
33-35	8.8mm acoustic laminate glass/16mm cavity/6mm glass	10mm glass/ 12mm cavity/ 6 mm glass/ 12mm cavity/ 8.4 acoustic laminate glass

External Residential Amenity Areas

- 104** The Proposed Development will provide external amenity as private balconies, in addition to public, communal, and private amenity spaces across ground floor level and roof level of Block A (southern building).
- 105** Table 12 presents the colour coding used in the evaluation of these spaces.

Table 12 External Amenity Spaces – Colour Codes

Colour	Sound Pressure Level ($L_{Aeq,16h}$ dB)	Additional Notes
	<50	Below guidance sound pressure levels
	50-55	Complies with guidance sound pressure level
	56-60	Marginally above guidance sound levels. However, noise levels are unlikely to significantly affect how private amenity is used by occupants.
	61-65	Above the guidance sound pressure levels. However, ability to understand speech over short distances should not be adversely affected, though other aspects of amenity may be compromised.
	>65	Exceeds guidance sound levels. Resident's ability to use these locations for amenity is compromised.

Private Balconies

- 106** Figure 19 to Figure 22. represent the daytime sound pressure levels incident on the private balconies, relative to the colour coding in Table 12.

Figure 19 Balconies on East/North Elevation - Daytime Ambient Sound Levels ($L_{Aeq,16h}$)

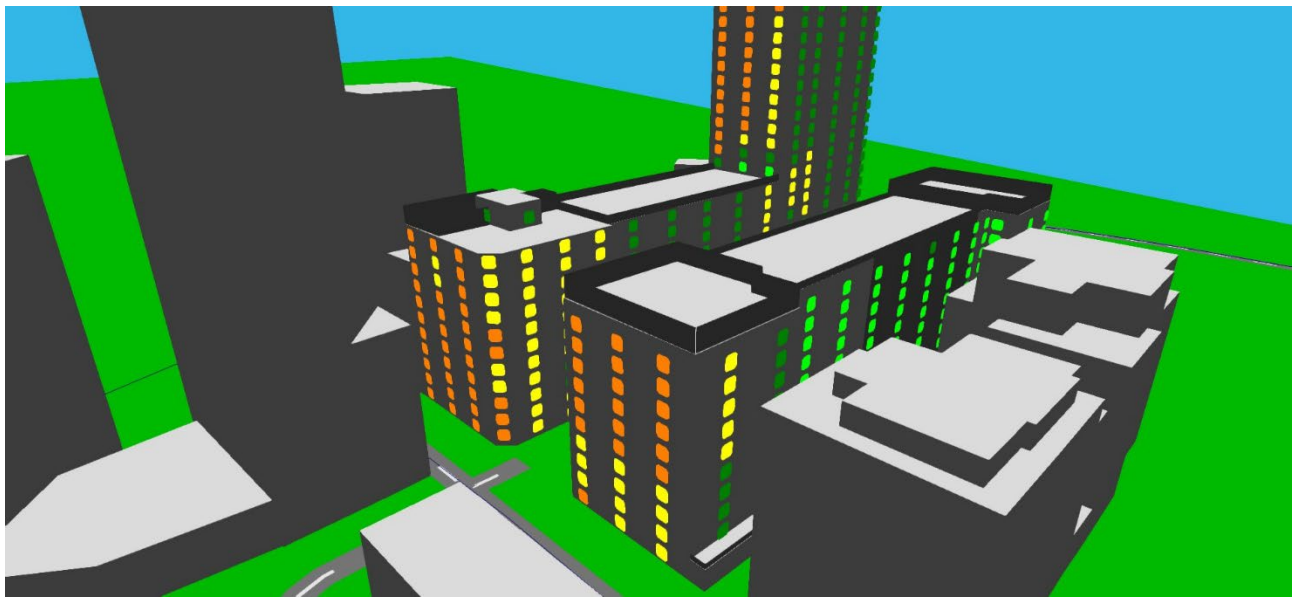


Figure 20 Balconies on South Elevation - Daytime Ambient Sound Levels ($L_{Aeq,16h}$)



Figure 21 Balconies on North/East Elevation - Daytime Ambient Sound Levels ($L_{Aeq,16h}$)

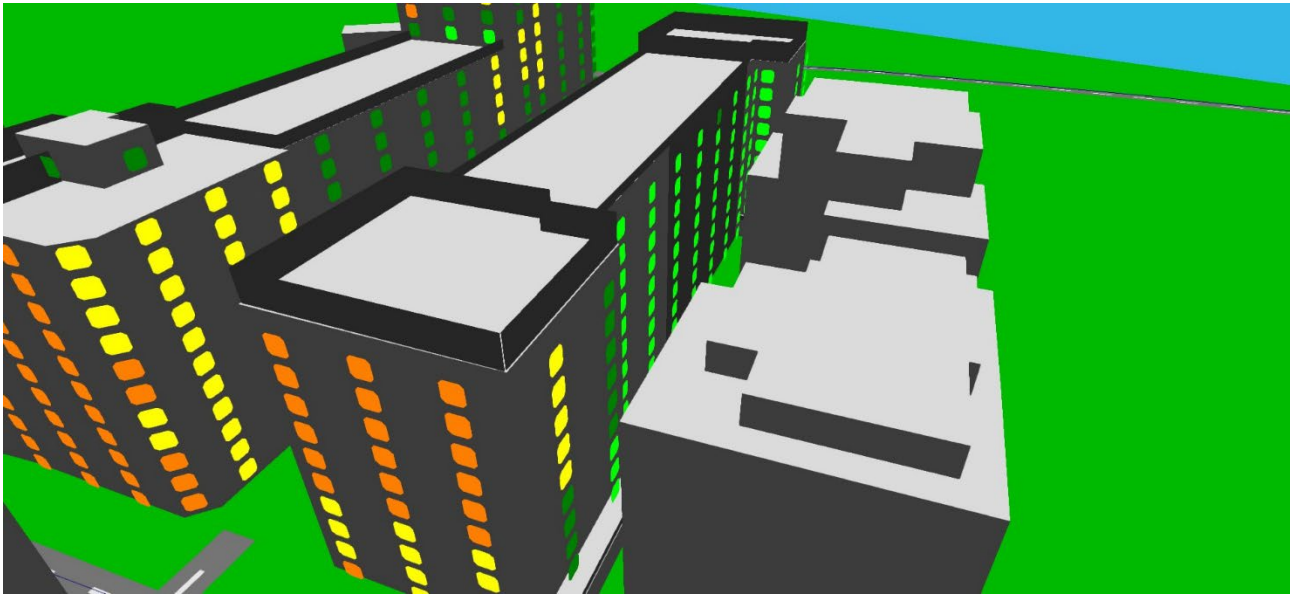
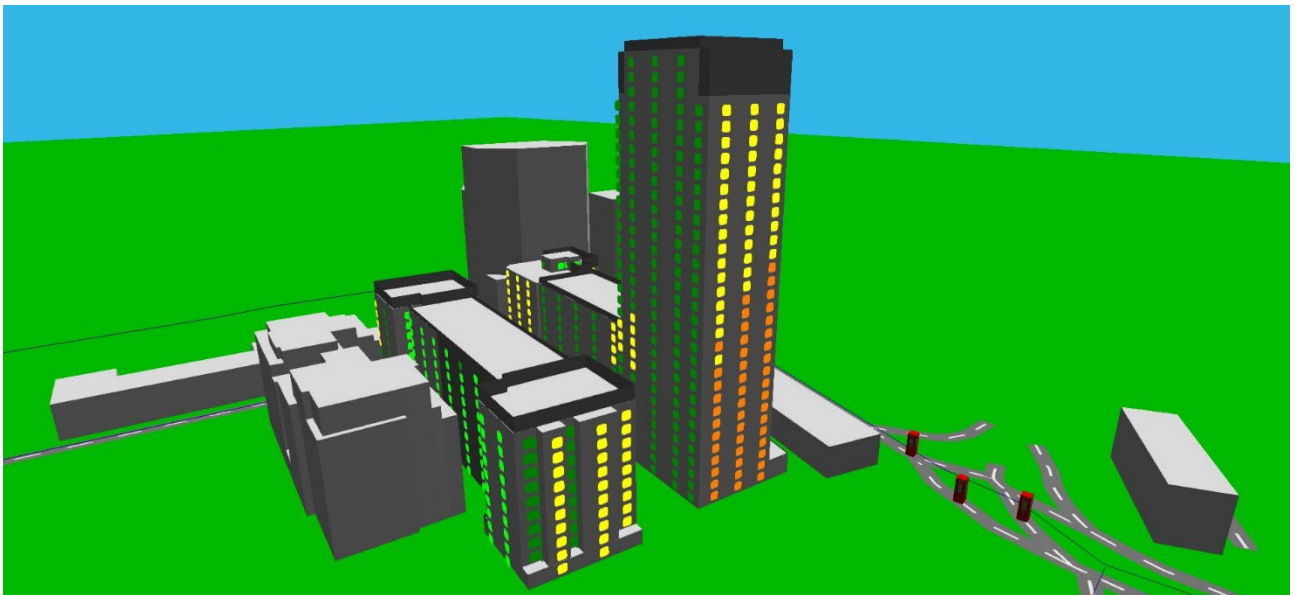


Figure 22 Balconies on West Elevation - Daytime Ambient Sound Levels ($L_{Aeq,16h}$)

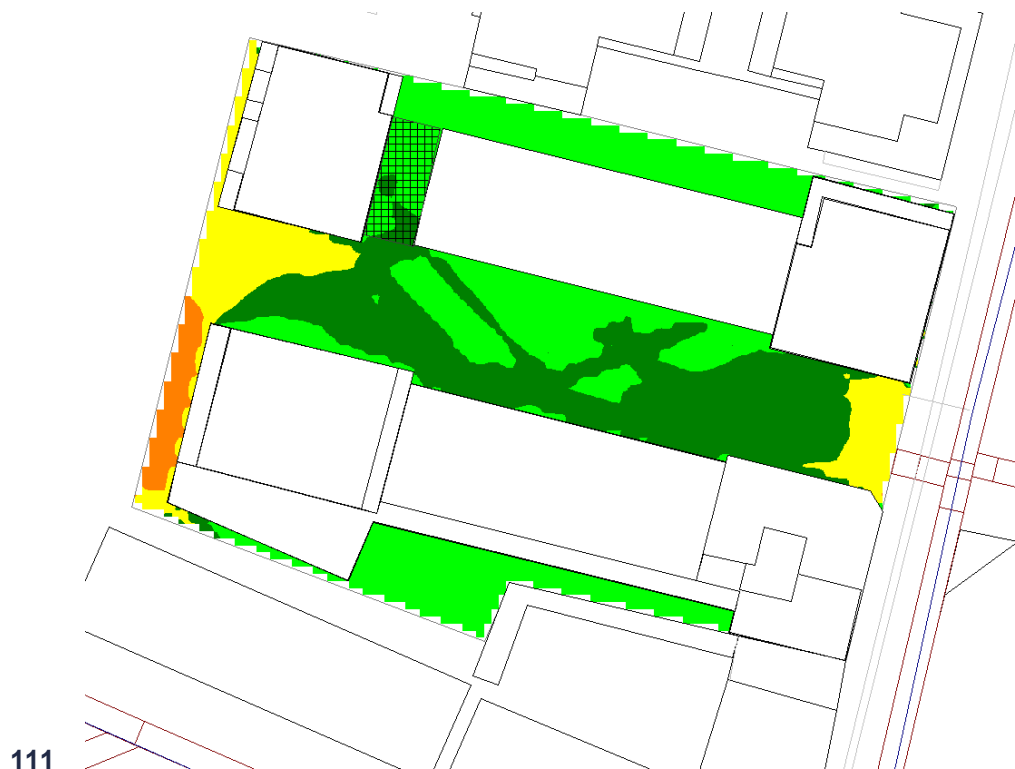


- 107** The images show limited instances where the BS 8233 guidance is expected to be fully achieved. Most balcony positions would likely experience sound levels that are above or marginally above the recommendations in BS 8233 and are subject to noise levels that could compromise their intended use. This is not unusual for private balconies in London, and as noted in BS 8233, is not typically a reason for development not to be permitted.
- 108** The northern façades of Block A (south building) and Block B (north building), and the southern façade of Block B (north building) contain some areas where the predicted sound levels meet the BS 8233 guidance.

External Amenity Areas – Ground Floor Level Assessment

- 109 Figure 23 illustrates the predicted noise impact on external amenity areas at ground floor level relative to the noise categories outlined in Table 12.
- 110 The modelling at ground floor level indicates that relatively large areas of the ground floor level can meet the recommendations in BS 8233 when the Proposed Development is complete. These areas include the space between the two blocks, and the southern and northern edges of the site.

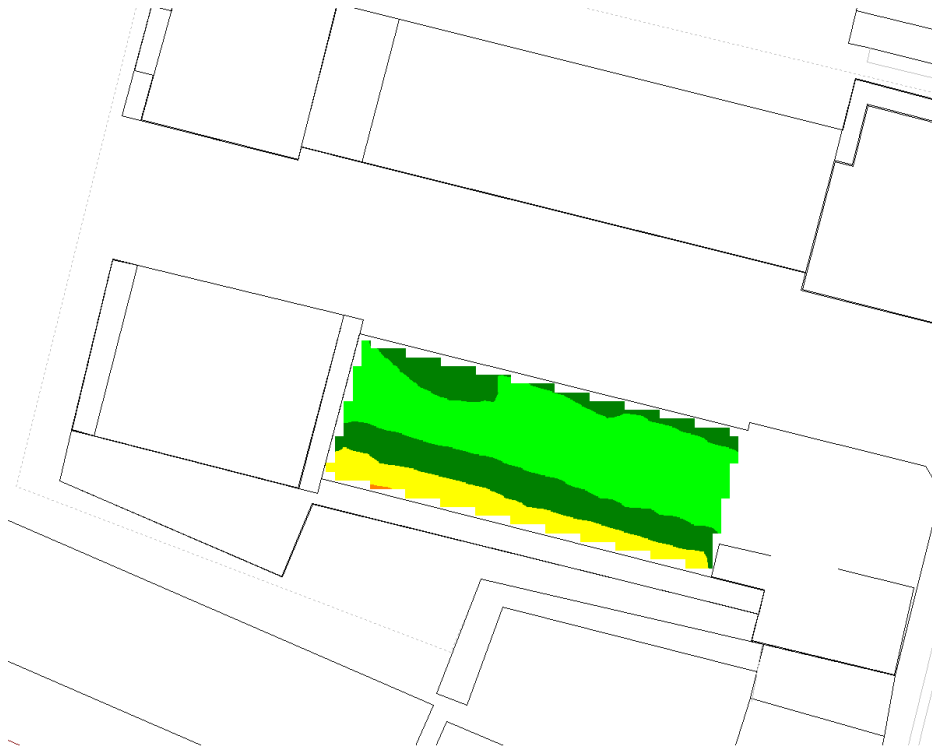
Figure 23 Predicted Daytime Ambient Sound Levels at Ground Floor Level External Shared Amenity Area



External Amenity Areas – Roof of Block A (South Building) Assessment

- 112 Figure 24 illustrates the predicted noise impact on external amenity areas at the roof level of Block A (south building) level relative to the noise categories outlined in Table 12.
- 113 The modelling indicates that relatively large areas of the roof level can meet the recommendations in BS 8233 when the Proposed Development is complete.

Figure 24 Predicted Daytime Ambient Sound Levels at Roof Level of Block A External Shared Amenity Area



Noise and Vibration during Enabling and Construction

- 114** The potential noise and vibration effects associated with the enabling and construction works, including construction traffic, are to be assessed within the **Environmental Statement Chapter 7 Noise and Vibration**. The assessment considers adverse effects from the activities likely to generate noise and vibration during the enabling and construction phases, together with the potential effects of construction-related vehicle movements on the surrounding road network and nearby sensitive receptors. As detailed construction information is not yet available, the assessment is based on reasonable assumptions regarding the likely construction methodology, plant and equipment, duration and location of activities, and anticipated construction traffic movements. These assumptions provide an appropriate basis for identifying the likely scale of effects and the mitigation measures that may be required.

Ground Floor – Commercial Units

- 115** The ground floor commercial units are proposed across both Block A and Block B.
- 116** While the end users are not currently known, an outline assessment of noise from the units has been undertaken based on typical uses of such spaces and the provision of standard operational management measures that would inherently limit noise levels.
- 117** Internal ambient sound pressure levels within the commercial units are anticipated to range between $L_{Aeq,T}$ 50-65 dB when in use. With any standard sealed thermal glazing system installed on the ground floor, the noise emissions from typical usages here will be limited to approximately $L_{Aeq,T}$ 30 dB at 3 m away (free-field) from the units. The predicted noise emissions from typical commercial use are 27 dB below the existing ambient sound pressure level measured at Positions 1 and 2 during day and evening periods ($L_{Aeq,T}$ 57 dB) and would not result in adverse impacts at Proposed Development receptors or existing offsite receptors.

- 118 The noise emissions from the ground floor uses will be adequately controlled by virtue of the sound insulation provided inherently by the building fabric, without reliance on planning conditions. No further control measure is required.

Agent of Change – Mother Kelly's Bar

- 119 In accordance with the Agent of Change principle set out in Paragraph 200 of the NPPF and the London Plan Policy D13, the potential for noise from the nearby Mother Kelly's bar to affect the proposed residential accommodation has been considered.
- 120 Position 1 was located approximately 20m to the south of the Mother Kelly's premises, and the survey period included a full capacity World Cup football screening that extended beyond the venue's normal Saturday closing time (England vs Norway, 11th July). Measured sound levels during both the evening and night-time periods were comparable with those recorded on other survey days, indicating that operation of the venue did not materially influence the prevailing acoustic environment at the survey locations.
- 121 The venue also operates under licensing conditions and event management procedures that require the external terrace to be closed by 22:00 hours, include a customer dispersal policy and additional measures to limit the potential for external patron noise during major events including games at the Tottenham Hotspur stadium.
- 122 Whilst the nearest façades of the Proposed Development will be closer to the venue than the survey position, any local increase in noise will be limited to daytime and evening periods and can be addressed through the detailed façade design where necessary. The Proposed Development can therefore achieve appropriate residential acoustic conditions without imposing unreasonable restrictions on the continued operation of Mother Kelly's bar, in accordance with the Agent of Change principle.

Road Traffic

- 123 The Proposed Development will introduce a limited number of Blue Badge-only parking spaces, with no provision for general car parking. Notwithstanding this, the Transport Assessment accounts for vehicle movements associated with servicing, deliveries and other operational activities. The Transport Assessment predicts increases in traffic flows of approximately 5% to 8% across the assessed road links as a result of the Proposed Development, with HGV proportions of the flows also staying similar.
- 124 Changes in road traffic flow of this magnitude would correspond to an increase in road traffic noise of approximately 0.2 to 0.3 dB, assuming other factors such as speed limit and surfacing remain unchanged. Such a change would be negligible and would not be perceptible in practice. The Proposed Development is therefore not expected to result in a material increase in road traffic noise on the surrounding road network.

CONCLUSIONS

- 125 Trium has completed a Noise and Vibration Impact Assessment for the Proposed Development at Ashley House, London
- 126 Building services plant noise emission limits that align with suitable criteria have been provided. This can be secured with an appropriately worded planning condition.
- 127 An evaluation of vibration and groundborne noise has been completed, which indicates that the site is not affected by vibration and does not need to rely on mitigation measures. No further action is necessary.
- 128 The Proposed Development introduces residential uses. The evaluation of indoor sound pressure levels indicates that mitigation measures will be required to comply with typical criteria. As per other residential developments, an appropriately worded planning condition would be expected to secure meeting the criteria included.

- 129** The evaluation of external ambient sound pressure levels shows that the future occupants will have access to private or shared locations where appropriate noise conditions are predicted.
- 130** Overall, the proposals adhere to the relevant national and regional policy requirements regarding minimising and managing noise and vibration impacts. With the recommended mitigation and design measures in place, the development is considered acceptable.

APPENDIX A – Survey Details

Equipment

- A.1** The noise measurements were completed using one NL-53 sound level meter and one NSRT_mk4 sound level meter. The vibration measurements were completed using one VM-56 vibration level meter.
- A.2** Calibration details for the noise monitoring equipment are provided in Table A.1.

Table A.1 Calibration Information

Position(s)	Equipment	Manufacturer	Calibration Expiry	Calibration Certification
1, 3-5	NL-53	RION	15/04/28	UCRT24/1652
2	NSRT_mk4	Convergence	15/02/27	Cvp2hNU6c3UfoDPy4yr5nD
6	VM-56	RION	04/03/27	TCRT26/2166

- A.3** Calibration checks were completed before and after the noise measurements. No significant deviation in calibration was noted.

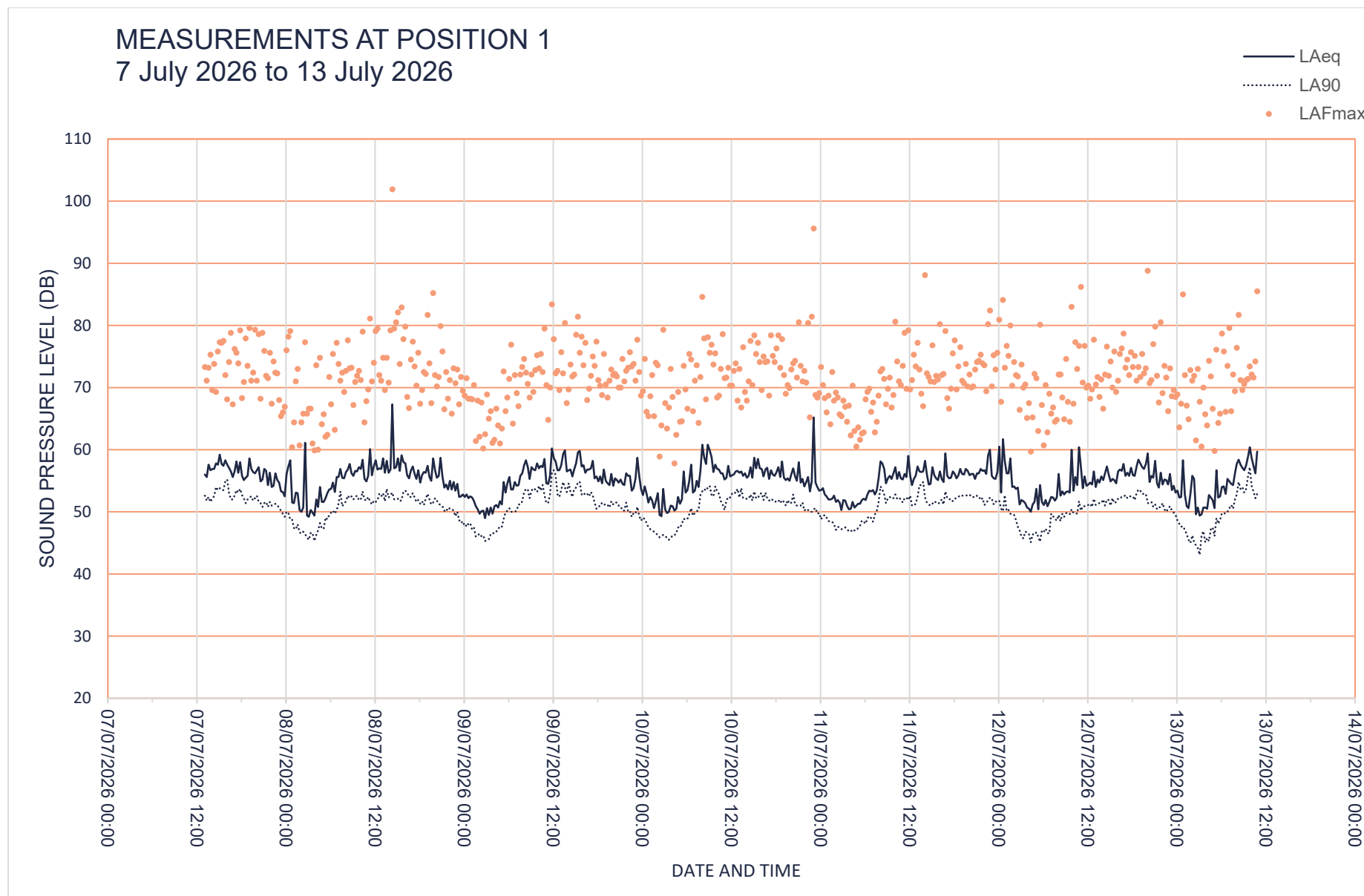
Weather Conditions

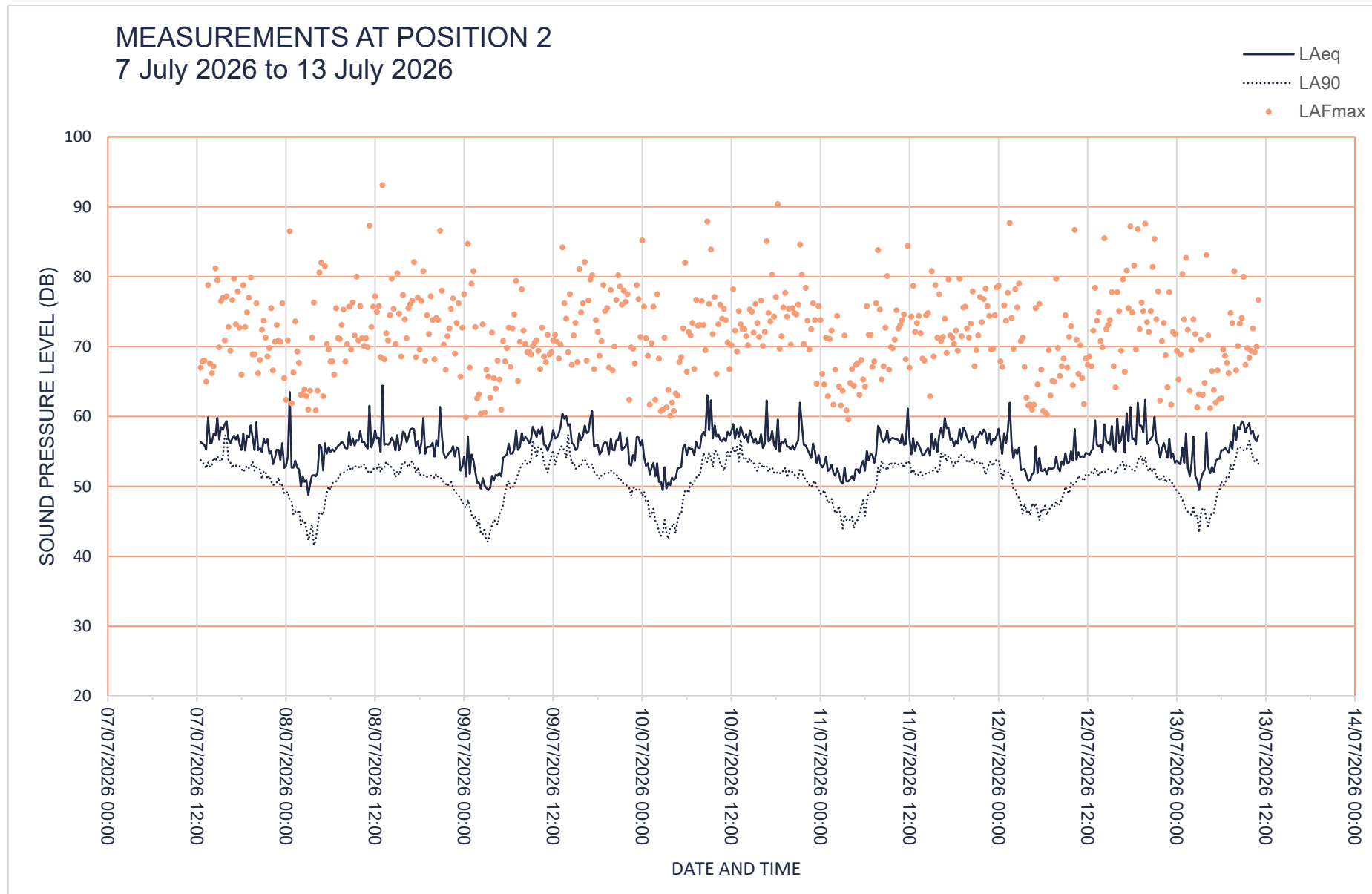
- A.4** Weather monitoring was not completed on the site during the survey. Data from a weather station located at 51.59° N, 0.06° W (ILONDO800) has been referenced and is provided in Table A.2. This is considered appropriate given the length and type of survey.

Table A.2 Summary of Weather Data (07/07/26-13/07/26)

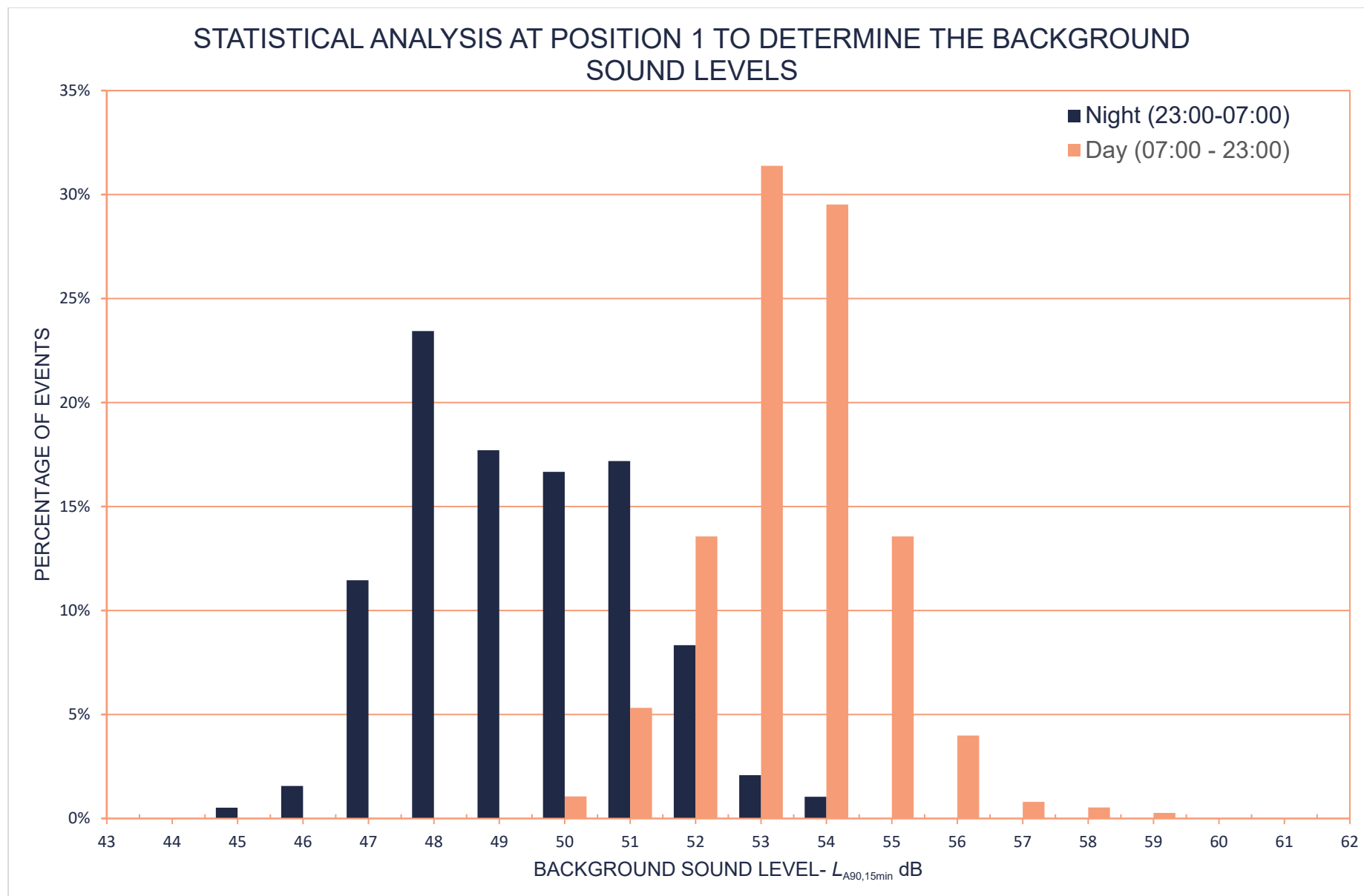
Date	Temperature Range (°C)	Precipitation (mm)	Wind Direction	Average Wind Speed (km/h)
07/07/2026	20-38	0.00	WSW	3.7
08/07/2026	22-37	0.00	WSW	1.1
09/07/2026	23-40	0.00	WSW	2.6
10/07/2026	22-36	0.00	WSW	0.6
11/07/2026	20-34	0.00	WSW	0.7
12/07/2026	19-35	0.00	WSW	1.3
13/07/2026	17-32	0.00	WSW	1.6

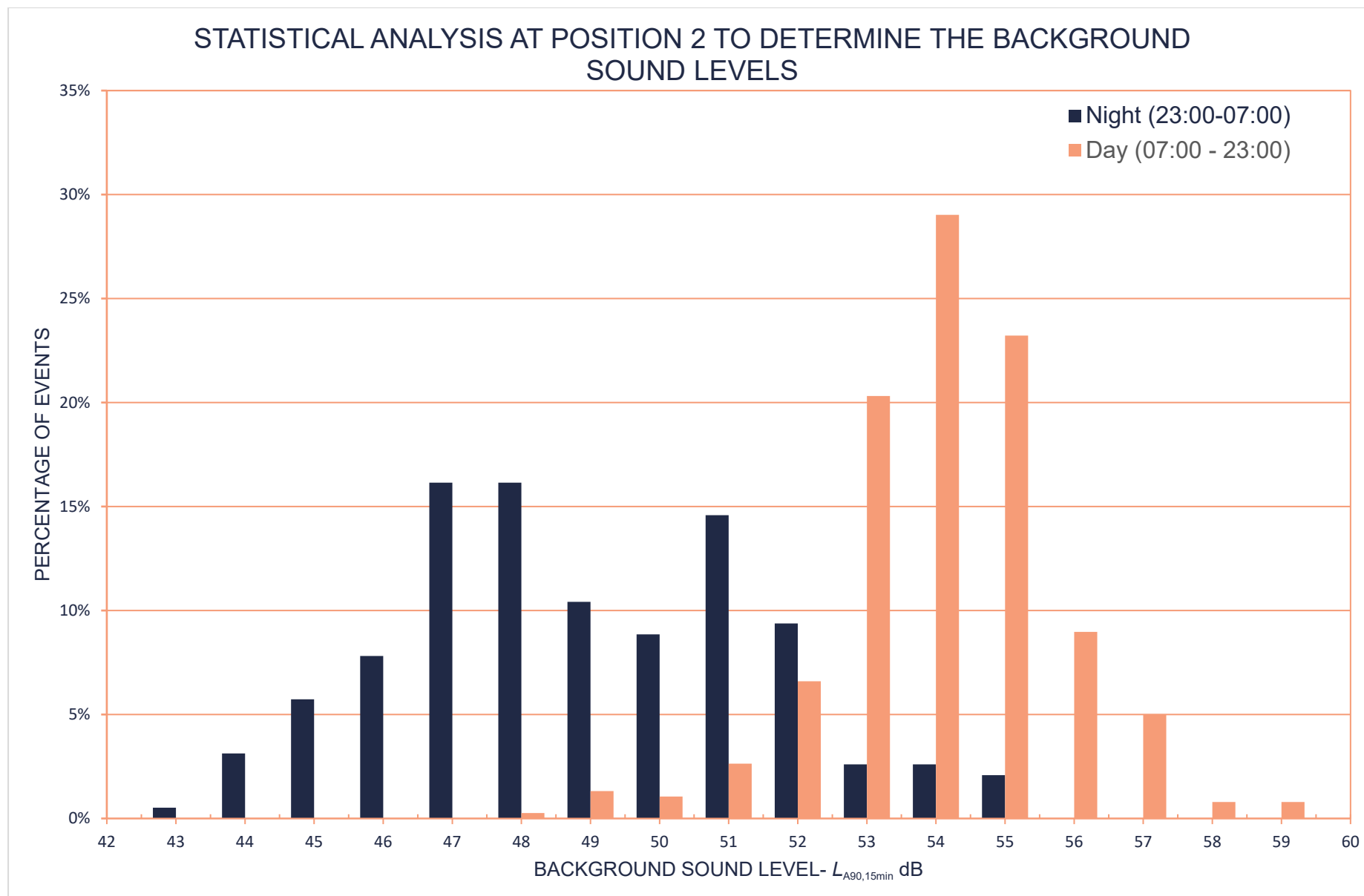
APPENDIX B – TIME HISTORY MEASUREMENT RESULTS





APPENDIX C – STATISTICAL ANALYSIS





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