

MILLER GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING

NOISE ASSESSMENT: CONDITION 18(a)

on behalf of

RAPLEYS LLP

for the site at

FORMER RUSHOLME BUS DEPOT, 263 WILMSLOW RD, MANCHESTER M14 5LN

REPORT DATE: 13 JULY 2026

REPORT NUMBER: 103218-2

Miller Goodall Ltd
Ground Floor
Ashworth House
Deakins Business Park
Blackburn Road
Egerton
Bolton
Lancashire
BL7 9RP

Tel: 01204 596166

www.millergoodall.co.uk

Company registration number5201673

Summary

A noise impact assessment has been undertaken to predict the potential impact of the mechanical plant at the proposed new Lidl store at the Former Rusholme Bus Depot, 263 Wilmslow Rd, Manchester M14 5LN. This is to address the requirements of part a) of Condition 18 of the application's conditional planning approval.

Background sound levels were previously surveyed and provided in report *ref NA103218_V3 - Former Rusholme Bus Depot* dated 20th March 2025. The results of that survey and representative background sound levels established in the original report have been carried forward for this assessment.

A noise model has been assembled for the proposed development site, the results from which are provided within this report.

The assessment indicates that so long as recommended mitigation measures are implemented, the requirements of part a) of Condition 18 will be met. Once installed, this will need to be confirmed with post-completion validation testing to satisfy part b) of Condition 18.

Prepared By:	William Wright MIOA	**Reviewed By:**	Lise W. Tjellesen MIOA
Signed:		**Signed:**	
Date:	13 July 2026	**Date:**	13 July 2026

Record of changes

Version	Date	Change	Initials
1	13 July 2026	First issue	WW

Advisories

It is recommended that you confirm the suitability of all recommended noise mitigation measures with your architects, structural engineers, building contractors, fire consultants and material manufacturers prior to procurement and field application so that when the recommended noise control measures are implemented on-site they will satisfy the requirements of all disciplines, therefore, should not cause any health and safety issues.

Contents

Summary 1
Advisories 2
Contents 3
1 Introduction 4
2 Site Description 4
3 Proposed Development 5
4 Policy, Guidance and Assessment Methodology 6
5 Local Authority Consultation 6
6 Measurements of Existing Noise Sources 6
7 Monitoring Results 7
8 Noise Modelling 7
9 BS 4142 Assessment 11
9.1 Introduction 11
9.2 Daytime assessment - mechanical services plant 11
9.6 Night-time assessment - mechanical services plant 13
10 Mitigation Measures 14
10.1 C04 – Daikin RYYQ_16U Mitigation Measures 14
10.2 Daytime assessment – Mitigated Mechanical Service Plant Noise 15
11 Summary and Conclusions 16
APPENDICES 18
Appendix 1: Planning Policy 19
Appendix 2: Acoustic Standards and Guidance 23
Appendix 3: Monitoring Position 25
Appendix 4: Measurement Data 27
Appendix 5: Noise Grid Maps 30
Glossary of Terms 34

1 Introduction

1.1 Miller Goodall Ltd has undertaken a noise assessment in respect of the impact of noise from a proposed new retail unit at the Former Rusholme Bus Depot, 263 Wilmslow Rd, Manchester M14 5LN.

1.2 A noise impact assessment of the previously proposed mechanical plant schedule and HGV deliveries has been undertaken and is presented in report *ref NA103218_V3 - Former Rusholme Bus Depot* dated 20th March 2025 (NA103218_V3).

1.3 The application was granted conditional planning approval. Condition 18 relates to the mechanical fixed plant noise impact;

"a) Any externally mounted ancillary plant, equipment and servicing to be installed shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. Prior to its installation, the scheme shall be submitted to and approved in writing by the City Council as Local Planning Authority in order to secure a reduction in the level of noise emanating from the site.

b) Prior to any externally mounted ancillary plant, equipment and servicing to be installed becoming operational, an approved verification report shall be submitted to and approved in writing by the City Council as Local Planning authority to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria have been met. Any instances of non - conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

1.4 This noise assessment addresses part a) of condition 18, ensuring that the proposed mechanical services plant is predicted to achieve a rating level of 5 dB below the typical L_{A90} background level.

2 Site Description

2.1 The site is located at the Former Rusholme Bus Depot, 263 Wilmslow Rd, Manchester M14 5LN.

2.2 The surrounding site area is predominantly residential, with some commercial units nearby. The nearest residences are on Marcus Grove to the east of the site which are adjacent to the site boundary. To the south of the site is Farnworth Drive and a residential tower, while the northern

boundary adjoins what appears to be offices mixed with residential apartments. To the west, the site is bounded by Wilmslow Road (A6010) with commercial units to the northwest and Platt Fields Park to the Southwest.

3 Proposed Development

3.1 The proposal is to build a new Lidl store at the site with parking for 89 cars, plus a single HGV delivery bay. The new building will include mechanical services plant serving the bakery, welfare areas, main shopping areas and other ancillary spaces.

3.2 Parking spaces are located primarily to the north of the proposed building, with limited parking at the west of the building adjacent to Wilmslow Road. An external plant deck is located at the northeast corner of the building at first floor level, and the loading dock for deliveries is at the east side of the building with vehicular access via the main car park.

3.3 It is understood that opening hours for the store are likely to be as follows:

- 08:00 – 22:00, Monday to Saturday
- 10:00 – 16:00, Sunday

3.4 The client has requested as much flexibility with delivery hours as possible, depending on the results of the noise impact assessment. Given the proximity of the nearest dwellings to the proposed delivery bay, deliveries are expected to be feasible only during daytime hours, i.e. 07:00 – 23:00.

3.5 Condenser and dry cooler mechanical plant is proposed to operate 24/7 for refrigerators and freezers; however, air handling units and mechanical extract ventilation plant are not expected to operate outside of store opening hours. Condenser and dry cooler plant are also expected to operate at a lower capacity over the night-time period.

3.6 The M&E consultant for this application has confirmed that a selection of the condenser units will operate at around 60% capacity during the night-time when cooling requirements due to ambient temperature and patron usage is significantly lower. Sound levels for the 60% capacity operation have been provided by the M&E consultant.

4 Policy, Guidance and Assessment Methodology

4.1 National planning policy is outlined in **Appendix 1: Planning Policy**. The acoustic standards and assessment techniques referred to in this assessment are outlined in **Appendix 2: Acoustic Standards and Guidance**.

5 Local Authority Consultation

5.1 General noise impact survey and assessment methodology were previously approved for report *ref NA103218_V3*. Karen Williamson at MCC was consulted in respect of the methodology used in that assessment[1]. It was agreed that an unattended noise survey encompassing a weekend period would be undertaken to quantify the quietest part of the operational period of the proposed store, when it is likely to have the highest impact.

5.2 Noise from mechanical services plant, deliveries and HGV movements would be modelled based on manufacturer's noise data where possible, and from Miller Goodall's extensive library of noise measurement data where appropriate. This would then be assessed against BS4142:2014+A1:2019[2] (BS 4142) using the measured background noise levels at the site, and mitigation proposed as required to achieve a low impact at the worst affected receptors.

5.3 The same approach will now be applied to the assessment of the known final schedule of mechanical fixed plant to satisfy condition 18 part a).

6 Measurements of Existing Noise Sources

6.1 Noise monitoring was undertaken in October 2024 by Miller Goodall for the noise impact assessment report *ref NA103218_V3.* Survey methodology and weather information are presented within that report.

[1] Email to laura.miller@manchester.gov.uk dated 11/10/2024. Response from karen.williamson@manchester.gov.uk dated 21/10/2024

[2] BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound

7 Monitoring Results

7.1 A summary of the October 2024 broadband measurement data is provided in **Table 1** below with a time history graph of 15-minute data shown in **Appendix 4: Measurement Data**. All data are sound pressure levels in dB re 20 μPa.

Table 1: Summary of noise measurements at MP1

Period	Start Time (hh:mm)	Elapsed Time (hh:mm)	$L_{Aeq,T}$ (dB)	Overall $L_{AF,max}$ (dB)	$L_{A90,T}$ (dB)
Saturday Day	14:45	08:15	60.1	80.2	51
Saturday Night	23:00	08:00	50.3	91.9	43
Sunday Day	07:00	16:00	47.2	82.9	41
Sunday Night	23:00	08:00	44.3	76.2	37
Monday Day	07:00	07:00	48.1	76.6	42

7.2 Representative background sound levels were established from the unattended noise monitoring carried out from Saturday 12th October 2024 to Monday 14th October 2024 for report *ref NA103218_V3* and have been carried forward for this assessment. The representative background sound levels are 41 dB during the daytime and 35 dB during the night-time. This results in Condition 18 part a) rating level criteria of 36 dB and 30 dB for daytime and night-time, respectively.

8 Noise Modelling

8.1 Prediction of noise levels at sensitive receptors from proposed mechanical plant and HGV deliveries was carried out using CadnaA software package. The data from measurements taken was used to populate an environmental noise model.

8.2 The final schedule of mechanical fixed plant assessed in this report has been taken from M&E consultant's drawing *ref 25/4656/ME-08 'External Plant Layout'* (dated January 2026). The location of the external plant deck, at the northeast corner of the building at first floor level, is unchanged from that assessed in report *ref NA103218_V3*

8.3 The general horizontal plan information of the area surrounding and including the proposed development site was imported from Google Earth. This was used to determine road positions,

building footprint areas and relative locations and is considered accurate to within 5 %. Building height information was based on site observations.

8.4 The following parameters were assigned to the model:

- Propagation of noise using algorithms within ISO 9613-2:2024 *Acoustics - Attenuation of sound during propagation outdoors*.
- HGV movements were modelled as line sources at a height of 1.5 m above ground level and calibrated using spectral data previously recorded by Miller Goodall ltd.
- HGV refrigeration units were modelled as line sources (when moving) and point sources (during loading / unloading operations) at a height of 3 m above ground level and calibrated using spectral data previously recorded by Miller Goodall Ltd.
- Mechanical services plant at approximate height of terminations, dependent on item
- Default ground absorption G = 0.2
- Ground attenuation: spectral all sources
- No adverse meteorological effects
- Three orders of reflection
- Topographical data was obtained using DEFRA LIDAR contours for the site and surrounding assessment area.

8.5 The octave band L_{eq} source data shown in **Table 2** were imported directly into the model. This data was taken from Miller Goodall's library of recorded data for such sources. Sound power level data shown in **Table 3** was taken directly from manufacturer's documentation and imported directly into the model.

Table 2: Sound Pressure Level source data used within CadnaA

Description	Distance (m)	Sphere Part (50%)	Sound Pressure Level (dB) at Octave Band Centre Frequency (Hz)								Sound Power Level dB(A)
			63	125	250	500	1k	2k	4k	8k	
HGV Passby	10	50	60	65	64	68	70	67	63	62	102
HGV Refrigeration Unit	11.5	50	82	69	63	62	60	53	47	40	94
Dry Cooler	5	50	70	60	53	47	44	42	43	45	75

Table 3: Sound Power Level source data used within CadnaA

Description	Sound Power Level (dB) at Octave Band Centre Frequency (Hz)								dB(A)
	63	125	250	500	1k	2k	4k	8k	
3 x Daikin RXYSQ8TY1	82	82	72	71	68	64	58	54	74
2 x Daikin RXYSQ4TV9	68	68	68	66	64	59	54	43	68
Daikin RYYQ_16U	89	89	83	85	82	76	71	75	87
3 x Daikin RXYSQ8TY1 60% Capacity	71	71	61	60	57	53	47	43	71
2 x Daikin RXYSQ4TV9 60% Capacity	64	64	64	62	60	55	50	39	64
Daikin RYYQ_16U 60% Capacity	74	74	68	70	67	61	56	60	74
AHU01 Intake	61	67	65	60	58	58	61	52	66
AHU01 Intake Fan Breakout	59	59	56	57	52	45	40	23	57
AHU01 Exhaust	68	73	72	74	75	73	72	64	80
AHU01 Exhaust Fan Breakout	59	59	56	56	51	45	40	23	57
EF01 Customer WC	66	63	52	51	43	45	31	25	53
EF02 Bakery	61	67	65	67	67	66	60	51	72
EF03 Staff WC	78	65	55	52	47	40	30	27	56
SF01 & SF02 Cold Room	74	69	66	57	53	55	54	36	63
Welfare MVHR	74	66	63	59	55	52	46	39	61
DRS MVHR	71	63	60	57	51	48	44	39	58
HGV Delivery	97	91	85	84	87	85	81	74	91

8.6 AHU, EF, SF and MVHR plant is not proposed to operate outside of opening hours and will therefore only operate during daytime hours.

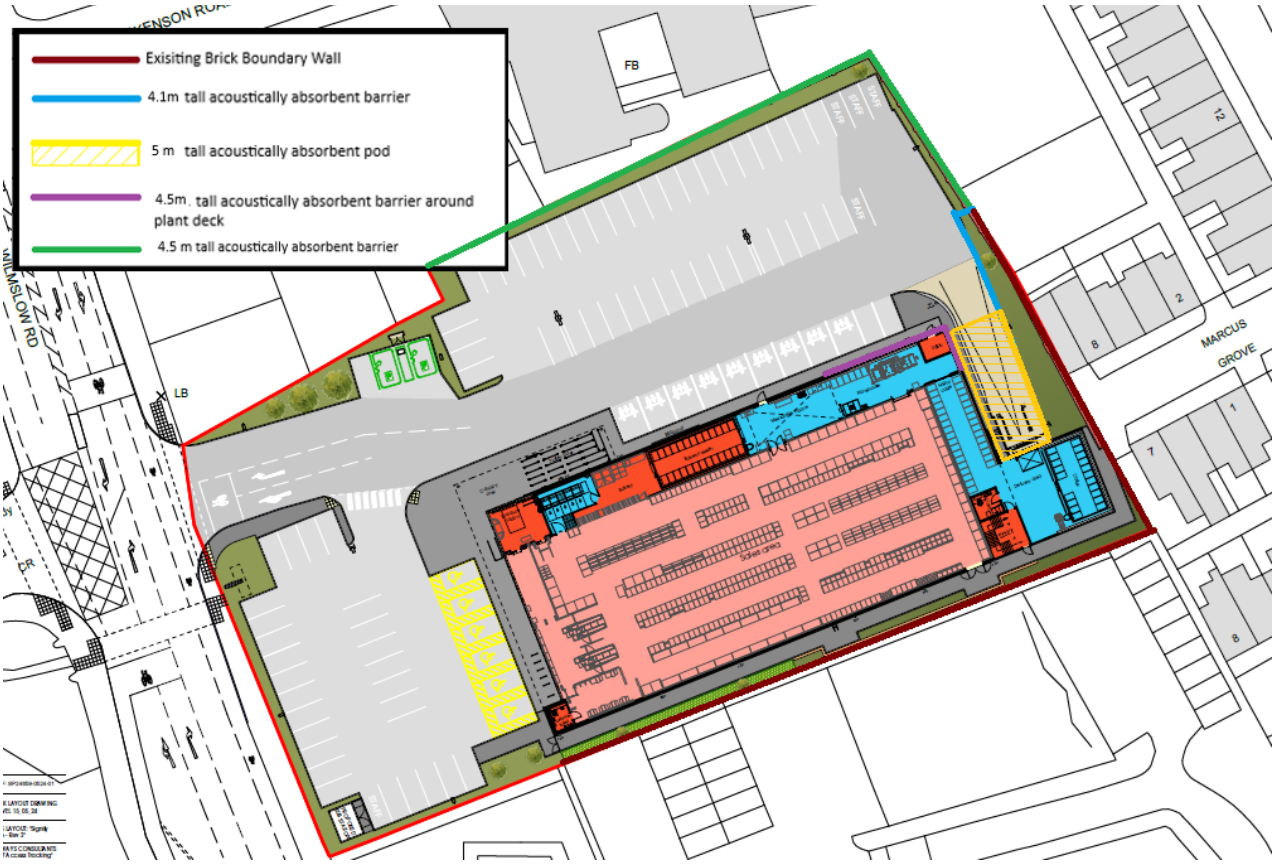
8.7 The sound levels presented in **Table 3** represent 100% capacity operation except where stated to be 60%. Miller Goodall Ltd. have been provided with the sound level data for both capacities for each applicable unit by the M&E consultant.

8.8 The reduction in overall sound level has been applied to the relevant sound sources in the noise model for night-time operations.

8.9 Graphic reports from the noise model indicating the noise contours and the highest predicted broadband L_{Aeq} noise levels at the nearest noise-sensitive receivers are shown in **Appendix 5: Noise Grid Maps**.

8.10 Mitigation recommended in the original report ref *NA103218_V3* has been agreed by the client and Local Authority and is included within the model. This includes a podded HGV delivery bay, a plant deck barrier and multiple perimeter barrier sections of varying heights, as indicated in **Figure 1**, below:

Figure 1: Locations of proposed barriers and pod



9 BS 4142 Assessment

9.1 Introduction

9.1.1 A BS 4142 noise impact assessment has been undertaken in order to assess the potential noise impact at the most affected location of the proposed development site and is detailed in this section of the report.

9.2 Daytime assessment - mechanical services plant

9.2.1 The following BS 4142 assessment considers the daytime impact (i.e. 07:00 – 23:00) of the final mechanical services plant selection with all previously recommended mitigation in place.

9.2.2 Based on the above assumptions, the BS 4142 assessment of noise impact at the most affected NSR is shown in **Table 4**

Table 4: BS 4142 Mechanical Plant Noise Impact Assessment: Daytime

Results		Relevant Clauses of BS 4142	Commentary
Background Sound Level	$L_{A90,1\text{-hour}}$ = 41 dB	8.1.2 8.3	Determined using the Little Red Book of Acoustics statistical analysis method for determining the representative background sound level.
Assessment made during the daytime, so the reference interval is 1 hour		7.2	
Specific Sound Level	$L_{Aeq,1hour}$ = 40 dB		Results of CadnaA 3D noise model
Acoustic character correction	+ 0 dB	9.2	New modern plant selection that is well maintained should not exhibit any acoustic characteristics that would trigger a penalty correction to the rating level.
Rating Level	(40 + 0) = 40 dB		
Excess of Rating Level over Background Sound Level	(40 – 41) = -1 dB		The resultant rating level at the worst-affected NSR is 1 dB below the representative background sound level.
Assessment indicates the likelihood of negligible to low impact		11	Initial estimate only
Context		11 8.5	Mechanical plant is expected to operate continuously with resultant rating level below the representative

Results	Relevant Clauses of BS 4142	Commentary
		background sound level in the worst-case during the daytime.
Uncertainty of the assessment	10	There is an inherent margin of error within the CadnaA noise modelling software however this is considered to be negligible in relation to the assessment

9.3 It can be seen from the above table that the initial estimate of noise impact of the Lidl store operations, based on the BS 4142 methodology, indicated a likelihood of a low impact at the worst-affected NSR.

9.4 Condition 18 part a) requires a resultant rating level at the worst-affected NSR of no higher than 5 dB below the background level. Initial daytime mechanical plant noise is predicted to exceed this by 4 dB.

9.5 Further mitigation will be required for the mechanical fixed plant operations to meet the requirements of Condition 18 part a) during daytime hours.

9.6 Night-time assessment - mechanical services plant

9.6.1 The following BS 4142 assessment considers the daytime impact (i.e. 23:00 – 07:00) of the final mechanical services plant selection with all previously recommended mitigation in place.

9.6.2 Based on the above assumptions, the BS 4142 assessment of noise impact at the most affected NSR is shown in **Table 5** below:

Table 5: BS 4142 Mechanical Plant Noise Impact Assessment: Night-time

Results		Relevant Clauses of BS 4142	Commentary
Background Sound Level	$L_{A90,15mins}$ = 35 dB	8.1.2 8.3	Determined using the Little Red Book of Acoustics statistical analysis method for determining the representative background sound level.
Assessment made during the night-time, so the reference interval is 15 min		7.2	
Specific Sound Level	$L_{Aeq,15mins}$ = 30 dB		Results of CadnaA 3D noise model
Acoustic character correction	+ 0 dB	9.2	New modern plant selection that is well maintained should not exhibit any acoustic characteristics that would trigger a penalty correction to the rating level.
Rating Level	(30 + 0) = 30 dB		
Excess of Rating Level over Background Sound Level	(30 – 35) = -5 dB		The resultant rating level at the worst-affected NSR is 5 dB below the representative background sound level.
Assessment indicates the likelihood of a negligible to low impact		11	Initial estimate only
Context		11 8.5	Mechanical plant is expected to operate continuously with a resultant rating level below the representative background sound level in the worst-case during the night-time.
Uncertainty of the assessment		10	There is an inherent margin of error within the CadnaA noise modelling software however this is considered to be negligible in relation to the assessment

9.7 It can be seen from the above table that the initial estimate of noise impact of the Lidl store operations, based on the BS 4142 methodology, indicated a likelihood of low impact at the worst-affected NSR.

9.8 Condition 18 part a) requires a resultant rating level at the worst-affected NSR of no higher than 5 dB below the background level. Initial night-time mechanical plant noise is predicted to achieve this.

9.9 Daytime plant noise will need to be further mitigated in order to achieve the requirements of Condition 18 part a).

9.10 'Part-level' analysis of the worst-affected NSR shows a significant contribution from the C04 RYYQ 16U unit, both directly and through the louvred north-facing plant-deck barrier. It has been found that by mitigating the C04 unit by no less than 11 dB, the daytime mechanical plant scenario predicts a rating level of 36 dB. This meets the 5 dB below background level requirements of Condition 18 part a).

9.10.1 Further details on these recommended mitigation measures are provided in section **10 Mitigation Measures**.

10 Mitigation Measures

10.1 C04 – Daikin RYYQ_16U Mitigation Measures

10.1.1 The M&E consultant has confirmed that this unit cannot operate at a reduced capacity during the daytime and meet the load required by the store. Operating C04 in a set-back mode is therefore not possible during daytime hours.

10.1.2 Barriers around the plant deck have previously been recommended and agreed and are included in the modelled scenarios. It has been confirmed by the client and M&E consultant that additional height to these barriers will not be possible due to visual impact and, more crucially in practical terms, mechanical plant airflow requirements.

10.1.3 It is recommended that the C04 unit be installed within a bespoke acoustic enclosure that provides 11 dB reduction. 11 dB is feasibly and practicably achievable with a louvred labyrinth type enclosure designed to cater to the unit's airflow and space requirements.

10.2 Daytime assessment – Mitigated Mechanical Service Plant Noise

10.2.1 The following BS 4142 assessment considers the mitigated scenario daytime impact (07:00 – 23:00) with the mechanical services plant operating and the recommended mitigation measures in place.

10.2.2 Based on the above assumptions, the BS 4142 assessment of noise impact at the most affected location of the proposed development site is shown in **Table 6** below:

Table 6: BS 4142 Mitigated Mechanical Plant Noise Impact Assessment: Daytime

Results		Relevant Clauses of BS 4142	Commentary
Background Sound Level	$L_{A90,1\text{-hour}}$ = 41 dB	8.1.2 8.3	Determined using the Little Red Book of Acoustics statistical analysis method for determining the representative background sound level.
Assessment made during the daytime, so the reference interval is 1 hour		7.2	
Specific Sound Level	$L_{Aeq,1hour}$ = 36 dB		Results of CadnaA 3D noise model
Acoustic character correction	+ 0 dB	9.2	New modern plant selection that is well maintained should not exhibit any acoustic characteristics that would trigger a penalty correction to the rating level.
Rating Level	(36 + 0) = 36 dB		
Excess of Rating Level over Background Sound Level	(36 – 41) = -5 dB		The resultant rating level at the worst-affected NSR is 5 dB below the representative background sound level.
Assessment indicates the likelihood of low impact		11	Initial estimate only
Context		11 8.5	Mechanical plant is expected to operate continuously with resultant rating level below the representative background sound level in the worst-case during the daytime.
Uncertainty of the assessment		10	There is an inherent margin of error within the CadnaA noise modelling software however this is considered to be negligible in relation to the assessment

10.2.3 It can be seen from the above table that the mitigated scenario assessment of mechanical plant noise impact during the daytime, based on the BS 4142 methodology, indicates a likelihood of low impact at the closest area of the proposed development site.

10.2.4 The mechanical plant rating level is predicted to achieve the requirements of Condition 18 part a), being 5 dB below the representative background sound level.

10.2.5 Provided that the C04 unit is mitigated by no less than 11 dB, the requirements of Condition 18 part a) are predicted to be met.

11 Summary and Conclusions

11.1 A noise assessment has been undertaken at Former Rusholme Bus Depot, 263 Wilmslow Rd, Manchester M14 5LN in respect of the impact of noise from a proposed Lidl Store onto the closest noise sensitive receptors (NSRs), to address part a) of Condition 18 of the planning approval.

11.2 Condition 18 part a) requires that externally mounted plant be selected and/or acoustically treated so as to achieve a rating level of 5 dB (L_{Aeq}) below the typical background (L_{A90}) sound level at the nearest noise sensitive location.

11.3 Representative background sound levels were established from unattended noise monitoring carried out from Saturday 12th October 2024 to Monday 14th October 2024 for report *ref NA103218_ V3*, and have been carried forward for this assessment. The representative background sound levels are 41 dB during the daytime and 35 dB during the night-time. This results in Condition 18 part a) rating level criteria of 36 dB and 30 dB for daytime and night-time, respectively.

11.4 CadnaA noise modelling was utilised to predict the impact of the noise resulting from the operation of the finalised schedule of mechanical fixed plant at the closest NSRs. The noise impact was assessed against BS 4142 as well as the Condition 18 criteria.

11.5 With mitigation previously recommended and agreed for report *ref NA103218_ V3* in place, the night-time plant rating level is predicted to be 30 dB, meeting the night-time requirement of Condition 18 part a). The daytime plant rating level is predicted to be 40 dB which, whilst indicating a low impact under BS 4142, does not meet the more onerous daytime requirement of Condition 18 part a), exceeding by 4 dB.

11.6 Part-level analysis identified the C04 (Daikin RYYQ 16U) unit as the dominant daytime contributor, both directly and through the louvred plant-deck barrier. As this unit cannot operate at reduced

capacity during the daytime, and plant deck barriers cannot be raised any further on visual and airflow grounds, it is recommended that C04 be installed within a bespoke louvred acoustic enclosure providing no less than 11 dB attenuation. With this measure in place, the daytime plant rating level is predicted to be 36 dB, meeting the daytime requirements of Condition 18 part a).

11.7 Along with the previously agreed mitigation package, the additional C04 acoustic enclosure is predicted to ensure that the cumulative mechanical plant rating level achieves the required 5 dB below typical background sound level for both day and night-time periods at the NSR.

11.8 Provided the above mitigation is installed, the requirements of Condition 18 part a) will be achieved. Once plant and mitigation are installed, compliance will need to be confirmed by post-completion validation testing to satisfy part b) of Condition 18.

APPENDICES

Appendix 1: Planning Policy

Noise Policy Statement for England

The Noise Policy Statement for England (NPSE[3]), published in March 2010, sets out the long-term vision of Government noise policy. The Noise Policy aims, as presented in this document, are:

> "*Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development*:
>
> - *avoid significant adverse effects on health and quality of life;*
> - *mitigate and minimise adverse effects on health and quality of life; and*
> - *where possible, contribute to the improvement of health and quality of life*."

The NPSE makes reference to the concepts of NOEL (No Observed Effect Level) and LOAEL (Lowest Observed Adverse Effect Level) as used in toxicology but applied to noise impacts. It also introduces the concept of SOAEL (Significant Observed Adverse Effect Level) which is described as the level above which significant adverse effects on health and the quality of life occur.

The first aim of the NPSE is to avoid significant adverse effects, taking into account the guiding principles of sustainable development (as referenced in Section 1.8 of the Statement). The second aim seeks to provide guidance on the situation that exists when the potential noise impact falls between the LOAEL and the SOAEL, in which case:

> "*…all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development*".

Importantly, the NPSE goes on to state:

> "*This does not mean that such adverse effects cannot occur*".

The Statement does not provide a noise-based measure to define SOAEL, acknowledging that the SOAEL is likely to vary depending on the noise source, the receptor and the time in question. NPSE advises that:

> "*Not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available*"

[3] Noise Policy Statement for England, Defra, March 2010

It is therefore likely that other guidance will need to be referenced when applying objective standards for the assessment of noise, particularly in reference to the SOAEL, whilst also taking into account the specific circumstances of a proposed development.

National Planning Policy Framework

The National Planning Policy Framework (NPPF[4]) initially published in March 2012, was updated most recently in December 2023. One of the documents that the NPPF replaces is Planning Policy Guidance Note 24 (PPG 24) "Planning and Noise"[5].

The revised NPPF advises that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives). One of these is an environmental objective which is described in par. 8 (c):

> *"to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."*

At par. 180 we are advised that:

> *"Planning policies and decisions should contribute to and enhance the natural and local environment by:*
>
> *e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans…"*

Par. 191 goes on to state:

> *"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*

[4] National Planning Policy Framework, Ministry of Housing, Communities and Local Government, December 2023

[5] Planning Policy Guidance 24: Planning and Noise, DCLG, September 1994

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; …"

Par. 193 seeks to ensure that any development does not prejudice the legally permitted operations and activities of other, existing non-residential uses, stating:

"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."

Planning Practice Guidance – Noise

As of March 2014, a Planning Practice Guidance[6] for noise was issued which provides additional guidance and elaboration on the NPPF, the guidance was updated in July 2019. It advises that when plan-making and decision-taking, the Local Planning Authority should consider the acoustic environment in relation to:

- Whether or not a significant adverse effect is occurring or likely to occur;
- Whether or not an adverse effect is occurring or likely to occur; and
- Whether or not a good standard of amenity can be achieved.

In line with the Explanatory Note of the NPSE, the PPG goes on to reference the LOAEL and SOAEL in relation to noise impact. It also provides examples of outcomes that could be expected for a given perception level

[6] Planning Practice Guidance – Noise, https://www.gov.uk/guidance/noise--2 22nd July 2019.

of noise, plus actions that may be required to bring about a desired outcome. However, in line with the NPSE, no objective noise levels are provided for LOAEL or SOAEL although the PPG acknowledges that:

> *"…the subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation".*

Examples of these factors include:

- The source and absolute noise level of the source along with the time of day that it occurs;
- Where the noise is non-continuous, the number of noise events and pattern of occurrence;
- The frequency content and acoustic characteristics of the noise;
- The effect of noise on wildlife;
- The acoustic environment of external amenity areas provided as an intrinsic part of the overall design;
- The impact of noise from certain commercial developments such as night clubs and pubs where activities are often at their peak during the evening and night.

The PPG also provides general advice on the typical options available for mitigating noise. It goes on to suggest that Local Plans may include noise standards applicable to proposed developments within the Local Authority's administrative boundary, although it states that:

> *"Care should be taken, however, to avoid these being implemented as fixed thresholds as specific circumstances may justify some variation being allowed".*

The PPG was amended in December 2014 to clarify guidance on the potential effect of noise from existing businesses on proposed new residential accommodation. Even if existing noise levels are intermittent (for example, from a live music venue), noise will need to be carefully considered and appropriate mitigation measures employed to control noise at the proposed accommodation.

Appendix 2: Acoustic Standards and Guidance

BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'

BS 4142:2014+A1:2019[7] provides guidance on the assessment of the likelihood of complaints relating to noise from industrial sources. It replaced the 1997 edition of the Standard in October 2014 and was amended in June 2019. The amended version corrected a number of printing errors and further clarified that the standard is used to assess external noise levels, and not internal noise levels (although this can form part of the discussion regarding context). The key aspects of the Standard are summarised below.

The standard presents a method of assessing potential noise impact by comparing the noise level due to industrial sources (the Rating Level) with that of the existing background noise level at the nearest noise sensitive receiver in the absence of the source (the Background Sound Level).

The Specific Noise Level - the noise level produced by the source in question at the assessment location - is determined and a correction applied for certain undesirable acoustic features such as tonality, impulsivity or intermittency. The corrected Specific Noise Level is referred to as the Rating Level.

In order to assess the noise impact, the Background Sound Level is arithmetically subtracted from the Rating Level. The standard states 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 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.*

[7] BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound

In addition to the margin by which the Rating Level of the specific sound source exceeds the Background Sound Level, the 2014+A1:2019 edition places emphasis upon an appreciation of the context, as follows:

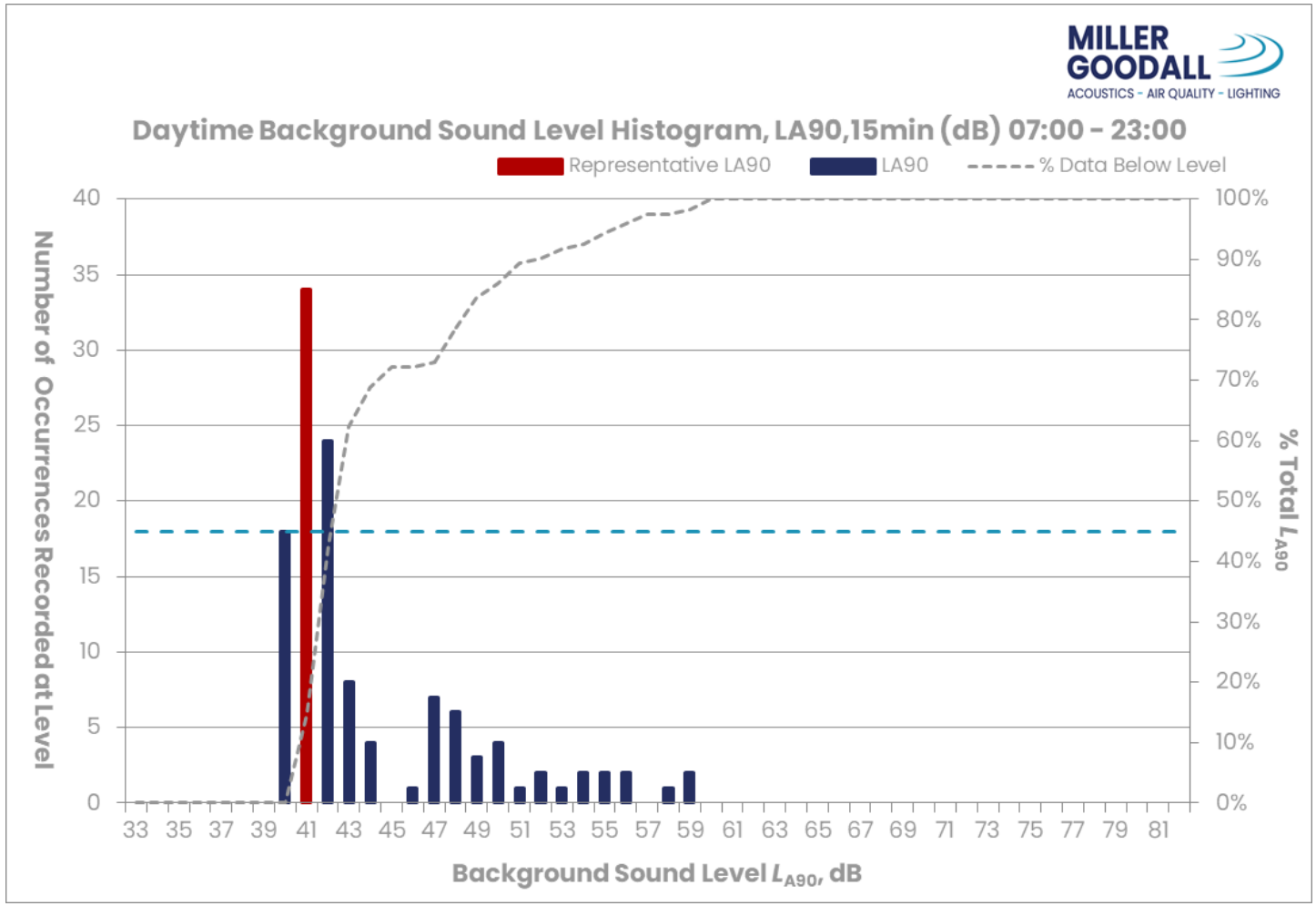
> *An effective assessment cannot be conducted without an understanding of the reason(s) for the assessment and the context in which the sound occurs/will occur. When making assessments and arriving at decisions, therefore, it is essential to place the sound in context.*

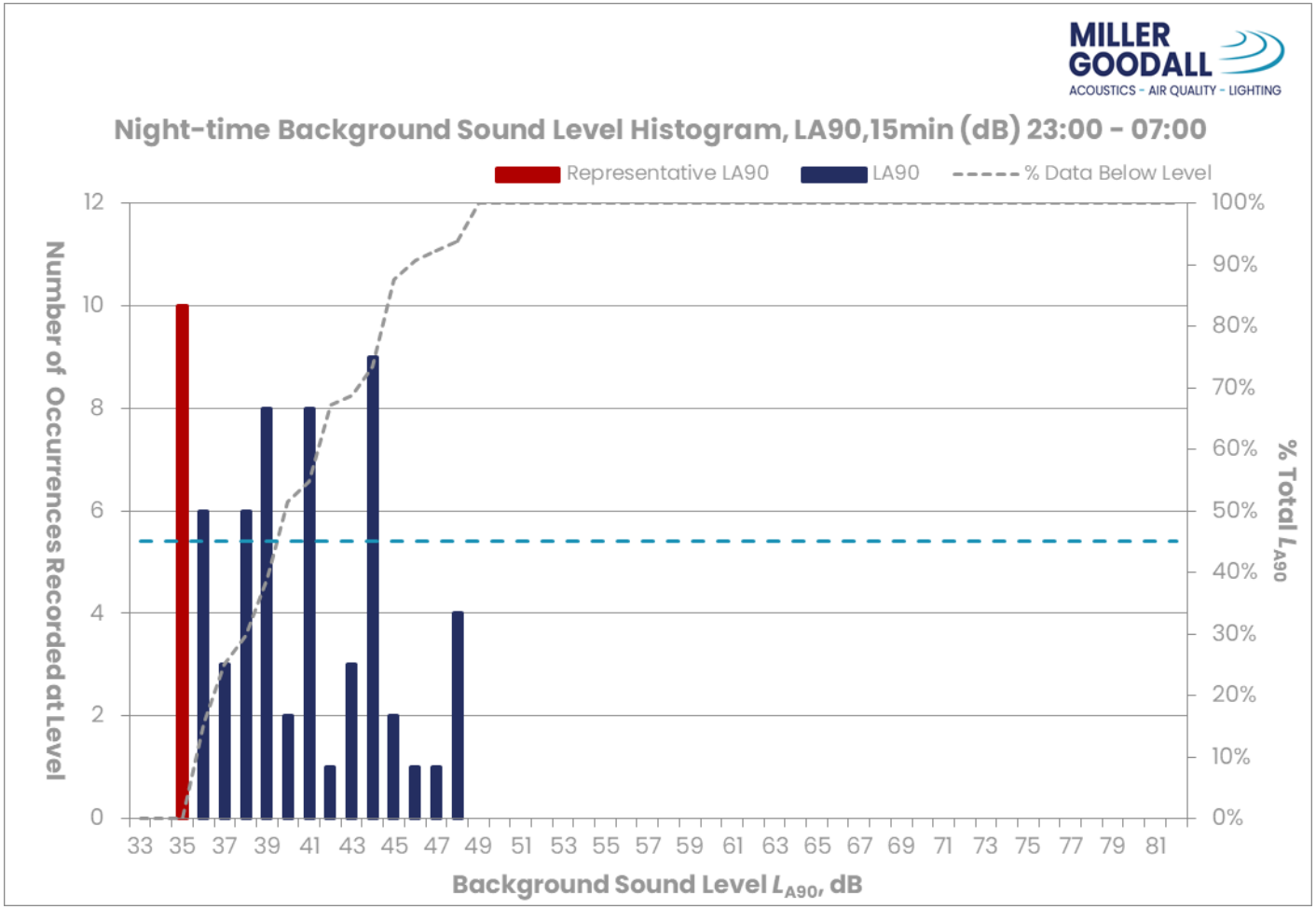
The 2014 edition of BS 4142 also introduced a requirement to consider and report the uncertainty in the data and associated calculations and to take reasonably practicable steps to reduce the level of uncertainty.

Appendix 3: Monitoring Position


Legend
MP1
Red Line Boundary
MP1
Project: Former Rusholme Bus Depot, 263 Wilmslow Rd, Manchester M14 5LN
Report Number: 103218
Drawn by: WW
Disclaimer: the scale is for indicative purposes only as the map may be skewed once it is an image, for instance during printing.
MILLER GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING
Date: 12/12/2024
Base Map: OS Map
1:925
0 10 20 m
Dickenson Road
Wilmslow Road
B5117
A6010
Platt Lane
Marcus Grove
Stanley Avenue
Farnworth Drive
Rusholme Pharmacy
Curtis Law Solicitors
Royal Jewellers
Wudl

Appendix 4: Measurement Data




MILLER GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING
Night-time Background Sound Level Histogram, LA90,15min (dB) 23:00 - 07:00
Representative LA90
LA90
% Data Below Level
Number of Occurrences Recorded at Level
% Total L_{A90}
0
2
4
6
8
10
12
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81
Background Sound Level L_{A90}, dB

MILLER GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING

& Former Rusholme Bus Depot, 263 Wilmslow Rd, Manchester M14 5LN

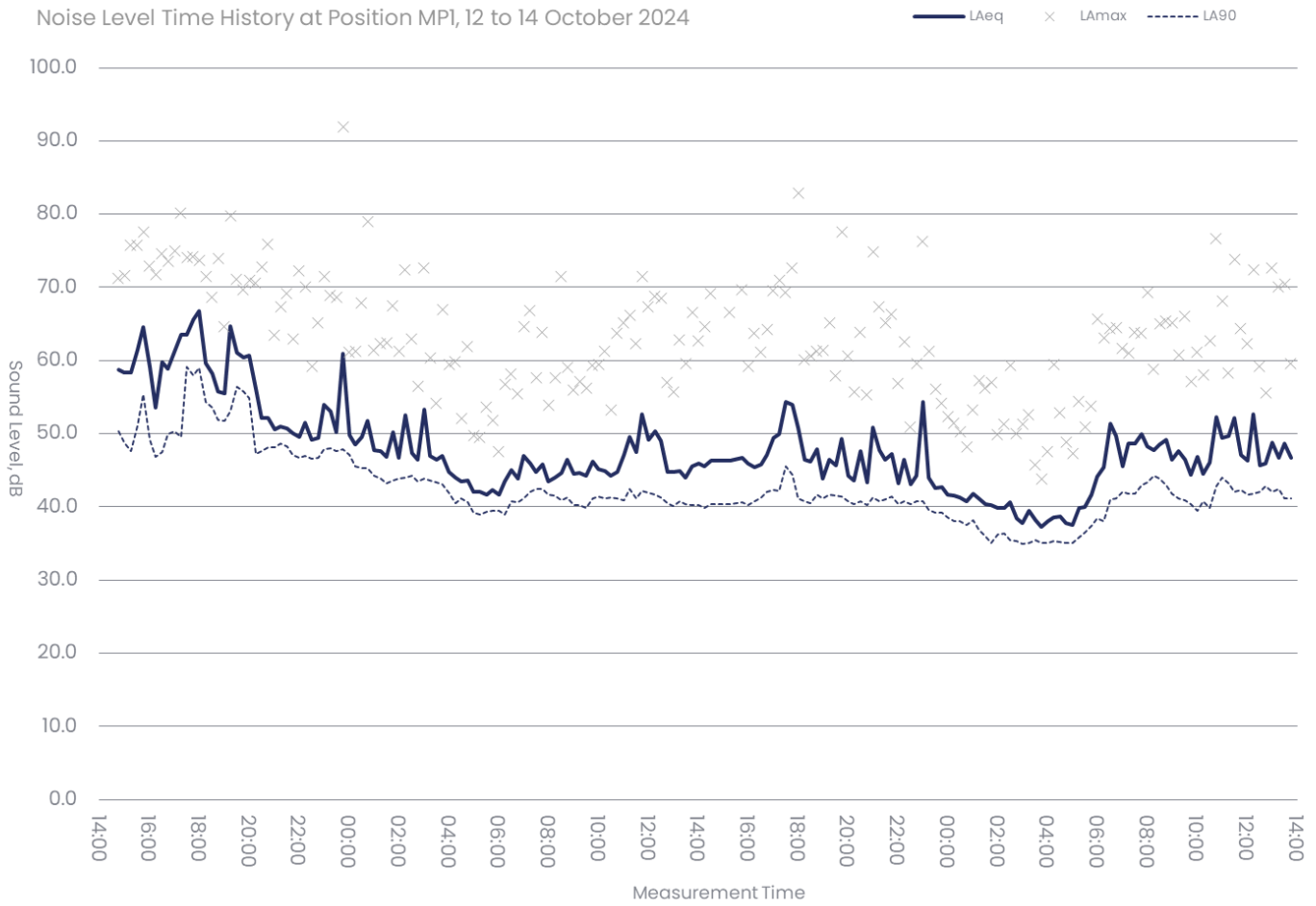
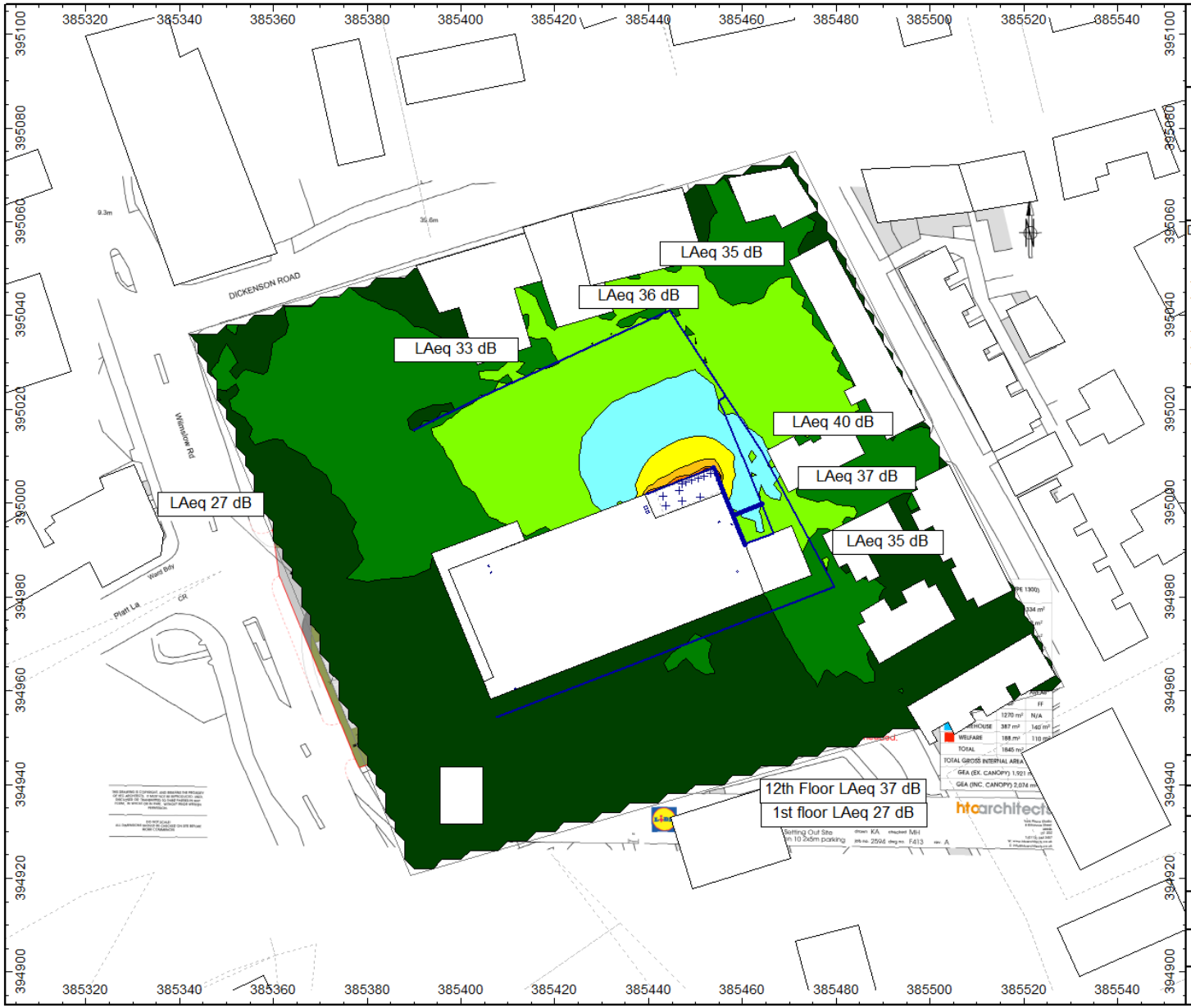


Figure 103218/TH01

Appendix 5: Noise Grid Maps



Predicted LAeq,T from
Daytime Un-mitigated Plant

Miller Goodall Ltd
Ashworth House
Deakins Business Park
Egerton, Bolton
BL7 9RP
Tel: 01204 596166
E-mail: info@millergoodall.co.uk
www.millergoodall.co.uk

Drawing Notes:

- Grid Prediction to 4 m AOD
- Reduced night-time mechanical plant in operation
- 0.2 General Ground Absorption
- Three orders of reflection
- All 103218_V3 mitigation recommendations in place

Noise Contour Colour Legend:

- ... <= 30 dB LAeq,16hr
- 30 < ... <= 35 dB LAeq,16hr
- 35 < ... <= 40 dB LAeq,16hr
- 40 < ... <= 45 dB LAeq,16hr
- 45 < ... <= 50 dB LAeq,16hr
- 50 < ... <= 55 dB LAeq,16hr
- 55 < ... <= 60 dB LAeq,16hr
- 60 < ... <= 65 dB LAeq,16hr
- 65 < ... <= 70 dB LAeq,16hr
- 70 < ... <= 75 dB LAeq,16hr
- 75 < ... <= 80 dB LAeq,16hr
- 80 < ... <= 85 dB LAeq,16hr
- 85 < ... dB LAeq,16hr

Rev.	Date	Purpose	Drawn By	Approved By
1	07/07/2026	Condition 18	WW	CI

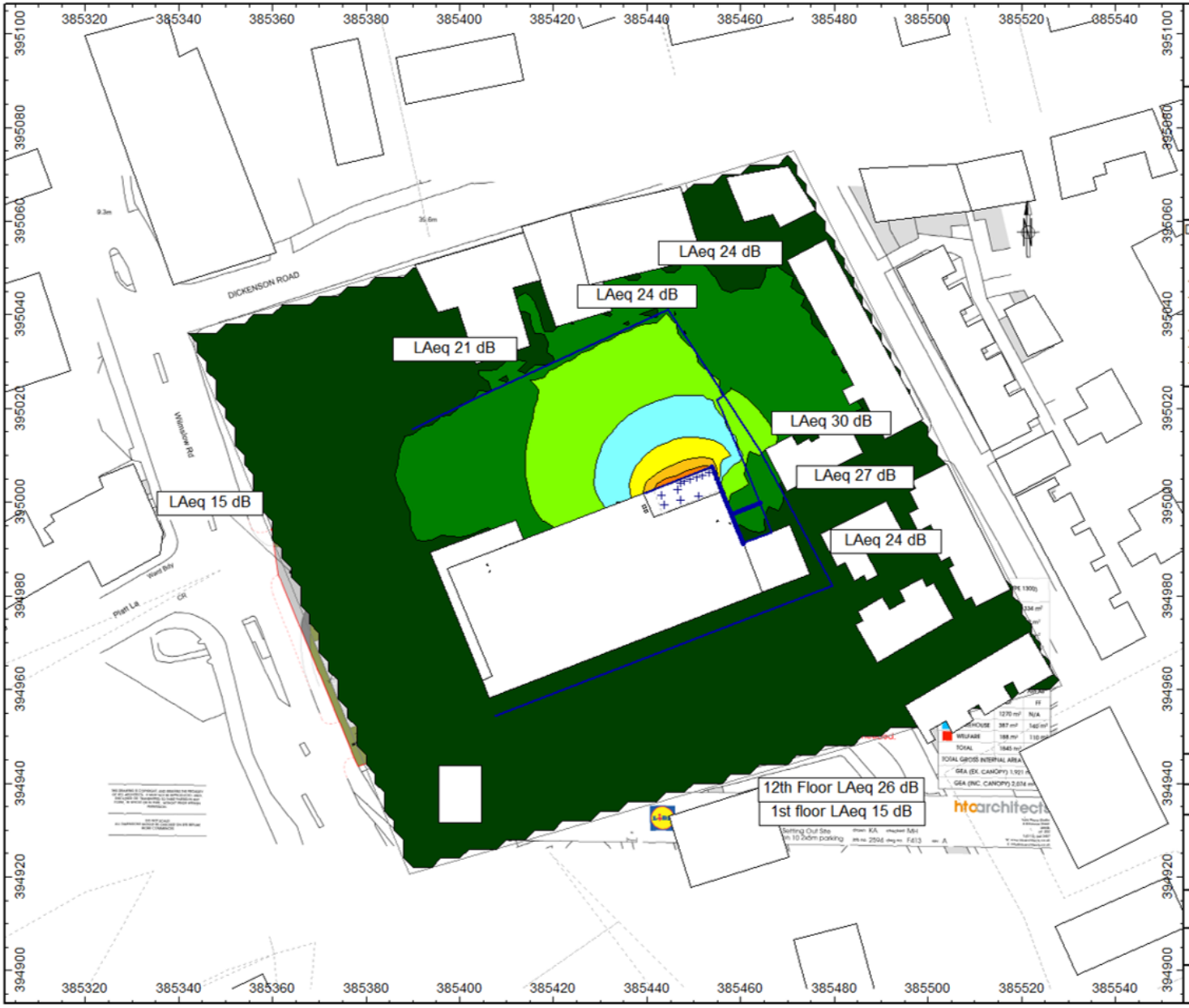
MILLER GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING

Project: Former Rusholme Bus Depot, Wilmslow Road, Rusholme

Client: Rapleys LLP

NTS
Once Resized

Report Number: 103218-2



Predicted LAeq,T from
Night-time Un-mitigated Plant

Miller Goodall Ltd
Ashworth House
Deakins Business Park
Egerton, Bolton
BL7 9RP
Tel: 01204 596166
E-mail: info@millergoodall.co.uk
www.millergoodall.co.uk

Drawing Notes:

- Grid Prediction to 4 m AOD
- Reduced night-time mechanical plant in operation
- 0.2 General Ground Absorption
- Three orders of reflection
- All 103218_V3 mitigation recommendations in place

Noise Contour Colour Legend:

- ... <= 30 dB LAeq,16hr
- 30 < ... <= 35 dB LAeq,16hr
- 35 < ... <= 40 dB LAeq,16hr
- 40 < ... <= 45 dB LAeq,16hr
- 45 < ... <= 50 dB LAeq,16hr
- 50 < ... <= 55 dB LAeq,16hr
- 55 < ... <= 60 dB LAeq,16hr
- 60 < ... <= 65 dB LAeq,16hr
- 65 < ... <= 70 dB LAeq,16hr
- 70 < ... <= 75 dB LAeq,16hr
- 75 < ... <= 80 dB LAeq,16hr
- 80 < ... <= 85 dB LAeq,16hr
- 85 < ... dB LAeq,16hr

Rev.	Date	Purpose	Drawn By	Approved By
1	07/07/2026	Condition 18	WW	CI

MILLER GOODALL
ACOUSTICS · AIR QUALITY · LIGHTING

Project: Former Rusholme Bus Depot, Wilmslow Road, Rusholme

Client: Rapleys LLP

NTS Once Resized	Report Number: 103218-2



Predicted LAeq,T from
Daytime mitigated Plant

Miller Goodall Ltd
Ashworth House
Deakins Business Park
Egerton, Bolton
BL7 9RP
Tel: 01204 596166
E-mail: info@millergoodall.co.uk
www.millergoodall.co.uk

Drawing Notes:

- Grid Prediction to 4 m AOD
- Reduced night-time mechanical plant in operation
- 0.2 General Ground Absorption
- Three orders of reflection
- All 103218_V3 and C04 Enclosure mitigation recommendations in place

Noise Contour Colour Legend:

- ... <= 30 dB LAeq,16hr
- 30 < ... <= 35 dB LAeq,16hr
- 35 < ... <= 40 dB LAeq,16hr
- 40 < ... <= 45 dB LAeq,16hr
- 45 < ... <= 50 dB LAeq,16hr
- 50 < ... <= 55 dB LAeq,16hr
- 55 < ... <= 60 dB LAeq,16hr
- 60 < ... <= 65 dB LAeq,16hr
- 65 < ... <= 70 dB LAeq,16hr
- 70 < ... <= 75 dB LAeq,16hr
- 75 < ... <= 80 dB LAeq,16hr
- 80 < ... <= 85 dB LAeq,16hr
- 85 < ... dB LAeq,16hr

Rev.	Date	Purpose	Drawn By	Approved By
1	07/07/2026	Condition 18	WW	CI

MILLER GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING

Project: Former Rusholme Bus Depot, Wilmslow Road, Rusholme

Client: Rapleys LLP

NTS Once Resized	Report Number: 103218-2

Glossary of Terms

Decibel (dB) The unit used to quantify sound pressure levels; it is derived from the logarithm of the ratio between the value of a quantity and a reference value. It is used to describe the level of many different quantities. For sound pressure level the reference quantity is 20 μPa, the threshold of normal hearing is in the region of 0 dB, and 140 dB is the threshold of pain. A change of 1 dB is usually only perceptible under controlled conditions.

dB L_A Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a similar way to the human ear. Measurements in dB L_A broadly agree with an individual's assessment of loudness. A change of 3 dB L_A is the minimum perceptible under normal conditions, and a change of 10 dB L_A corresponds roughly to halving or doubling the loudness of a sound. The background noise level in a living room may be about 30 dB L_A; normal conversation about 60 dB L_A at 1 meter; heavy road traffic about 80 dB L_A at 10 meters; the level near a pneumatic drill about 100 dB L_A.

$L_{A90,T}$ The A weighted noise level exceeded for 90% of the specified measurement period (T). In BS 4142: 2014+A1:2019 it is used to define background noise level.

$L_{Aeq,T}$ The equivalent continuous sound level. The sound level of a notionally steady sound having the same energy as a fluctuating sound over a specified measurement period (T). $L_{Aeq,T}$ is used to describe many types of noise and can be measured directly with an integrating sound level meter.

L_{Amax} The highest A weighted noise level recorded during the time period. It is usually used to describe the highest noise level that occurred during the event.


MILLER
GOODALL
ACOUSTICS - AIR QUALITY - LIGHTING