

Fallowfield Retail Park, Birchfields Rd, Manchester M14 6FS

Appeal Statement for
Lidl Great Britain Limited

May 2023
Our Ref: 20-00934



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Quality Assurance

This report has been prepared within the quality system operated at Rapleys LLP according to British Standard ISO 9001:2015.

We confirm that the undersigned is an appropriately qualified and experienced Chartered Planner in the commercial property sector.

Created by: Joshua Ambrus MPLAN MRTPI
Joshua.ambrus@rapleys.com

Signature: Joshua Ambrus
Joshua Ambrus (May 19, 2023 16:49 GMT+1)

Checked by: Jonathan Harper MA (Hons) MTCP MRTPI AssocRICS
Jonathan.harper@rapleys.com

Signature: J. R. Harper
J. R. Harper (May 19, 2023 16:53 GMT+1)

1 INTRODUCTION

- 1.1 This Appeal Statement has been prepared by Rapleys LLP on behalf of Lidl Great Britain Limited ('the appellant') against the refusal of a Section 73 application proposing an extension to the permitted delivery hours restricted under Condition 10 of Planning Permission Ref: 130189/FO/2021 at Fallowfield Retail Park, Birchfields Road, Manchester, M14 6FS.
- 1.2 The Section 73 planning application was submitted to Manchester City Council on 12th September 2022 and validated with an application reference of 134931/JO/2022. The application was accompanied by a Noise Assessment Addendum, prepared by Miller Goodall.
- 1.3 This Statement will set out the overview of the case and reasons for the proposed development, prior to assessing how the proposed development complies with the relevant planning policies as well as addressing key considerations relevant to the proposal.

2 BACKGROUND

- 2.1 An application (Ref: 130189/FO/2021) for the demolition of existing units 4, 5, 6, 7, 8, and 10 and erection of a single storey building to form new retail foodstore (Use Class E) and separate hot food delivery unit (sui generis) with associated car parking and landscaping at Fallowfield Retail Park was approved on 12th May 2022.
- 2.2 Condition 10 of application ref. 130189/FO/2021 states:
- Deliveries, servicing and collections, including waste collections shall not take place outside of the following hours:*
- 07.30 to 20.00 hrs Monday to Saturday;*
- No deliveries/waste collections on Sundays and Bank Holidays.*
- 2.3 An application to vary Condition 10 to allow servicing Monday to Sunday (including Bank Holiday) 05:00 to 00:00 hrs was submitted on 12th September 2022. The application reference was 134931/JO/2022.
- 2.4 The proposed variation sought to Condition 10 was:
- Deliveries, servicing and collections, including waste collections shall not take place outside of the following hours:*
- 05:00 to 00:00 Monday to Sunday (including Bank Holiday)*
- 2.5 The Council's Environmental Health Officer provided comments via the Case Officer on 24th October 2022, and a response and further information was submitted by the applicant on 27th October 2022. On the 18th November 2022, the Council confirmed that the application was not supported by Environmental Health and would therefore be refused.
- 2.6 The application was subsequently refused on 21st November 2022, with a single reason for refusal included on the Decision Notice.
- 2.7 Reason for Refusal 1 states:
- The additional servicing hours proposed would have a detrimental impact upon the level of amenity afforded to nearby residential occupiers to the opposite side of Birchfields Road. The additional hours sought would generate an unacceptable level of additional activity, vehicle movements and general noise and disturbance at unsociable hours. The proposed application is therefore contrary to saved policy DC26 of Unitary Development Plan for the City of Manchester and policies DM1 and SP1 of the Manchester Core Strategy.*
- 2.8 The Decision Notice is included at **Appendix 1**.

3 THE SITE

The Site and Surroundings

- 3.1 The application site forms part of the existing Fallowfield Retail Park which is proposed to be redeveloped pursuant to planning permission referenced 130189/FO/2021 which allowed for the demolition of existing units 4, 5, 6, 7, 8, and 10 and erection of a single storey building to form new retail foodstore (Use Class E) and separate hot food delivery unit (sui generis) with associated car parking and landscaping. It is proposed that the retail store be operated by Lidl.
- 3.2 Fallowfield Retail Park is an out of centre retail park comprising 9no. single storey units, eight of which are retail units and with one unit is used as a medical centre.
- 3.3 The application site forms the southern extent of the existing retail park. Fallowfield Retail Park is bound by Birchfields Road to the west, Moseley Road to the south, railway lines to the east. The wider area surrounding the site is contains a mixture of residential and educational institutions to the west and north, commercial units to the south; and railway lines to the east.

Relevant Site Planning History

- 3.4 A search of the Council's online planning register revealed a long planning history, with the key applications summarised in the table below.

Reference	Description	Decision
038328	Erection of non-food retail buildings, garden centre and restaurant	Withdrawn 10 th July 1991
042615	Erection of buildings to form a neighbourhood shopping centre including a restaurant/leisure facility with 303 vehicle parking spaces after demolition of existing bus depot	Approved 21 st January 1993
043793/MO/CENTL2/93	Erection of a neighbourhood shopping centre comprising 8 retail units and a "drive-thru" restaurant including 258 car parking spaces after demolition of existing bus depot	Approved 23 rd September 1993
070183/OO/2003//N2	OUTLINE APPLICATION for siting and means of access to increase shopping floorspace by 614 sqm with alterations to car park	Approved 18 th February 2004
076259/FO/2005/N2	Erection of a detached single storey retail unit (500 sqm) adjacent to Blockbusters involving alterations to car park and landscaping	Withdrawn 13 th September 2005
079605/FO/2006/N2	Erection of single storey building (494sqm total) comprising class A1 retail use. Associated alterations to existing parking and landscaping	Approved 3 rd August 2006
090133/FO/2009/N2	Change of use of retail unit (Class A1) to health centre (Class D1) and associated external alterations	Approved 16 th July 2009
128975/DEM/2020	Prior Approval for the demolition of the overhead canopy relating to units 3 and 4 Fallowfield Shopping Centre Birchfields Road Manchester M14 6FS	Approved 26 th January 2021
131990/DEM/2021	Prior Approval for the demolition of units 4-8 and 10 at Fallowfield Shopping Centre	Approved 25 th November 2021

130189/FO/2021	Demolition of existing units 4, 5, 6, 7, 8, and 10 and erection of a single storey building to form new retail foodstore (Use Class E) and separate hot food delivery unit (sui generis) with associated car parking and landscaping.	Approved 12 th May 2022
CDN/22/0687	Discharge of condition numbers 12 (Cycle Parking), 18 (Car Park Management) and 30 (noise management plan) from Planning Permission 130189/FO/2021	Approved 26 th October 2022
134931/JO/2022	Variation of condition 10 (servicing hours) attached to planning permission referenced 130189/FO/2021 to allow servicing Monday to Sunday (including Bank Holiday) 05:00 to 00:00 hrs	Refused 21 st November 2022

4 PLANNING POLICY

4.1 This section summarises relevant national and local planning policy and guidance.

National Planning Policy and Guidance

4.2 The Government published the latest iteration of the National Planning Policy Framework (NPPF) in July 2021. The document confirms that the purpose of the planning system is to contribute to the achievement of sustainable development via three overarching objectives: an economic objective, a social objective and an environmental objective.

4.3 At the heart of the NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking. For decision taking this means:

- Approving development proposals that accord with an up-to-date development plan without delay, or
- Where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:
 - The application of policies in this Framework that protect areas or assets of particular importance provide a clear reason for refusing the development proposed, or
 - Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

4.4

4.5 Turning to planning conditions and obligations, **Paragraph 56** states that planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision-making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification.

4.6 In building a strong and competitive economy, **Paragraph 81** requires Local Planning Authorities to place significant weight on the need to support economic growth and productivity by taking into account local business needs.

4.7 **Paragraph 174** relates to conserving and enhancing the natural environment and states that planning policies and decisions should contribute to and enhance the natural and local environment by, inter alia:

- Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of noise pollution. Development should, wherever possible, help to improve local environmental conditions.

Local Planning Policy

4.8 The adopted Development Plan for Manchester City Council consists of the 'Saved policies' of the Unitary Development Plan for the City of Manchester (1995) and Manchester Core Strategy (2012).

4.9 The following policies are considered to be relevant to the proposed development:

4.10 **Policy DM1** (Development Management) states that all proposals for new development should have regard to:

- Appropriate siting, layout, scale, form, massing, materials and detail;
- Impact on the surrounding area in terms of design, scale and appearance as well as character;
- Effects on amenity including privacy, light, noise, air quality and litter;
- Accessibility by sustainable modes of transport and for disabled people;
- Community safety and crime prevention;
- Vehicular access and car parking;
- Ecology, flood risk and drainage; and
- Refuse storage and collection.

4.11 **Policy DC26** (Development and Noise) states that the Council intends to use the development control process to reduce the impact of noise on people living and working in the City. In particular, consideration will be given to the effect of new development proposals which are likely to be generators of noise.

5 THE APPELLANT'S CASE

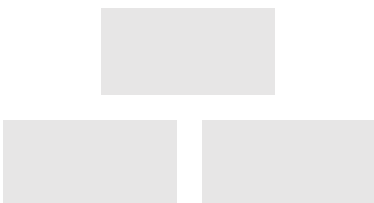
- 5.1 This section sets out the Appellant's case for the variation of condition 10 of planning application 130189/FO/2021 to allow servicing Monday to Sunday (including Bank Holiday) 05:00 to 00:00 hrs should be allowed.
- 5.2 The principle issue in relation to this appeal is whether or not the additional servicing hours proposed would have a detrimental impact upon the level of amenity afforded to nearby residential occupiers to the opposite side of Birchfields Road.
- 5.3 At a national level, Paragraph 174 of the NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by:
- 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.
- 5.4 Local policy (Policy DM1) requires development to have regard to specific issues such as the appropriate siting and appearance of development, the impact upon the surrounding area, the effects on amenity, accessibility, community safety and crime prevention, health, the adequacy of internal accommodation and amenity space and refuse storage/collection.
- 5.5 Saved Policy DC26 of the Unitary Development Plan states that consideration will be given to the effect of new development proposals which are likely to generate noise.
- 5.6 As previously set out, delivery hours are restricted by Condition 10 attached to Planning Permission Ref: 130189/FO/2021. The proposal seeks permission to allow the proposed Lidl foodstore to extend the permitted delivery hours. Varying Condition 10 will allow the proposed Lidl store to receive a necessary delivery on a Sunday and a Bank Holiday within the permitted delivery hours. No deliveries on a Sunday and a Bank Holiday causes operational issues for the store and make servicing the proposed store difficult.
- 5.7 The planning application, to which this appeal relates, was supported by an Addendum Noise Report, prepared by Miller Goodall. Noise from deliveries was assessed and worst-case noise monitoring was undertaken at the site to determine whether extended delivery hours were possible at the site.
- 5.8 The Noise Addendum concluded that the impact of deliveries from noise emissions from the proposed Lidl store is low when assessed to BS 4142:2014+A1:2019 and it is considered that extended delivery hours are appropriate for the site and the condition (10) can be amended.
- 5.9 Miller Goodall consider that HGV deliveries within the proposed extension of hours will not materially increase average noise levels at Birchfields Road residences.
- 5.10 The Addendum Noise Report determined that delivery hours between 05:00 to 00:00 Monday to Sunday, including Bank Holidays would be acceptable at the site. The Addendum Noise Report is included at **Appendix 2**. The original Noise Assessment (Ref. 102452_V3) is included at **Appendix 3** for reference.
- 5.11 This appeal is also supported by a separate letter of representation from Miller Goodall, which confirms their previous conclusions within the Addendum Noise Report and that from a technical perspective, they consider that Manchester City Council's reason for refusal is not justified. This is included at **Appendix 4**.
- 5.12 Regard should also be had to the nature of the deliveries which would take place at the site. Lidl are mindful of the need to minimise any disturbance to neighbouring residents and landowners. To assist in achieving this, each store has only one or two dedicated deliveries per day. This provides all the necessary products for the store, including frozen and chilled goods, which are carried using individual temperature-controlled units that can be loaded on to the vehicle. This ensures minimum disruption by removing the need for noisy air conditioning units on the vehicle.
- 5.13 During deliveries, it is company policy that vehicle engines are switched off to reduce noise and disturbance. New stores also feature graded ramps in the delivery bay and manual dock levellers, negating the need for noisy scissor or tail lifts. The total unloading time for deliveries is approximately 45 minutes.
- 5.14 On this basis, not only is the noise impact associated with deliveries taking place limited, the frequency of the deliveries themselves and the nature of the deliveries ensure that any impacts on the wider surrounding area are also limited. In this context, it is considered that the variation of condition 10 should

be supported, as the amendment complies with relevant planning policies included within the Development Plan and the requirements of the NPPF.

6 CONCLUSION

- 6.1 This Appeal Statement has been prepared by Rapleys LLP on behalf of Lidl Great Britain Limited ('the appellant') against the refusal of a Section 73 application proposing an extension to the permitted delivery hours restricted under Condition 10 of Planning Permission Ref: 130189/FO/2021 at Fallowfield Retail Park, Birchfields Road, Manchester, M14 6FS.
- 6.2 As demonstrated by Miller Goodall, through the Addendum Noise Assessment, it is not considered that extended servicing hours would negatively impact the amenity level for residents on Birchfields Road. The additional servicing hours would not cause unacceptable impacts.
- 6.3 In these terms, it is respectfully requested that the appeal is allowed.

Decision Notice



Town & Country Planning Act 1990 (as amended)

Refusal of Planning Permission

Applicant

Lidl Great Britain Limited
C/o Agent

Agent (if used)

Mr Joshua Ambrus
Rapleys
York House
York Street
Manchester
M2 3BB

Part 1 – Particulars of the application/development

Proposal: Variation of condition 10 (servicing hours) attached to planning permission referenced 130189/FO/2021 to allow servicing Monday to Sunday (including Bank Holiday) 05:00 to 00:00 hrs

Location: Fallowfield Shopping Centre , Birchfields Road, Manchester, M14 6FS

Date of application: 12 September 2022

Application number: 134931/JO/2022

Part 2 – Particulars of decision

Manchester City Council gives notice that the development referred to in Part 1 has been **Refused** in accordance with the application and plans submitted for the reason(s) listed below.

Article 35 Declaration

Officers have worked with the applicant in a positive and proactive manner based on seeking solutions to problems arising in relation to dealing with the planning application. Officers have communicated their concerns about this proposal to the applicant during the course of the planning application, but these concerns have not been overcome. The proposal is considered to be contrary to the development plan and therefore refused in a timely manner.

Reason(s) for decision

1) The additional servicing hours proposed would have a detrimental impact upon the level of amenity afforded to nearby residential occupiers to the opposite side of Birchfields Road. The additional hours sought would generate an unacceptable level of additional activity, vehicle movements and general noise and disturbance at unsociable hours. The proposed application is therefore contrary to saved policy DC26 of Unitary

Development Plan for the City of Manchester and policies DM1 and SP1 of the Manchester Core Strategy.

Date: 21 November 2022

Signed: 

Julie Roscoe
Director of Planning, Building Control & Licensing

Manchester City Council, P O Box 532, Town Hall, Manchester M60 2LA

Notes

1. This decision relates only to that required under the Town and Country Planning Act 1990 does not include any consent or approval under any other enactment, byelaw, order or regulation.

2. If the applicant is aggrieved by the decision of the local planning authority to refuse permission or approval for the proposed development, or to grant permission or approval subject to conditions, they may appeal to the Secretary of State in accordance with Section 78(1) of the Town and Country Planning Act 1990 within six months of the date of the notice of the decision. However, if an enforcement notice has been served for the same or very similar development within the previous 2 years, the time limit is:

- 28 days from the date of the LPA decision if the enforcement notice was served before the decision was made yet not longer than 2 years before the application was made.
- 28 days from the date the enforcement notice was served if served on or after the date the decision was made (unless this extends the appeal period beyond 6 months).

The Planning Inspectorate have introduced an online appeals service that can be used to make appeals online. This service is available through the gov.uk website – www.gov.uk/planning-inspectorate. The Inspectorate will publish details of your appeal on the internet. Alternatively If you are unable to access the online appeal form, please contact the Planning Inspectorate to obtain a paper copy of the appeal form on tel: 0303 444 5000.

The Secretary of State has power to allow a longer period for the giving of a notice of appeal but they will not normally be prepared to exercise this power unless there are special circumstances that excuse the delay in giving notice of appeal.

If you intend to submit an appeal that you would like examined by inquiry then you must notify the City Council (planning@manchester.gov.uk) and the Planning Inspectorate (inquiryappeals@planninginspectorate.gov.uk) at least 10 days before submitting the appeal. Further details are on GOV.UK.

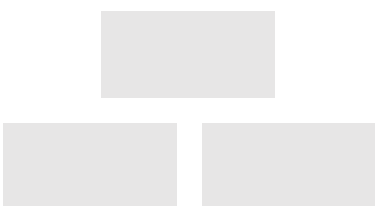
3. The statutory requirements are those set out in Section 79(6) of the Town and Country Planning Act 1990, namely Sections 70(1) and 72(1) of the Act.

4. If either the local planning authority or the Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that they can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase their interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990

5. In certain circumstances, a claim may be made against the local planning authority for compensation, where permission is refused or granted subject to conditions by the Secretary of State on appeal or on a reference of the application to them. The circumstances in which such compensation is payable are set out in Section 114 of the Town and Country Planning Act 1990.

Addendum Noise Report



Summary

A Noise Assessment was undertaken with respect to the impact of noise from a proposed Lidl Store on the Fallowfield Retail Park site (report ref 102452_V3), submitted in support of a planning application for the site (application number 130189/FO/2021).

The proposed Lidl store has the following condition (10) for delivery hours:

Deliveries, servicing, and collections, including waste collections shall not take place outside the following hours:

07:30 to 20:00 hrs Monday to Saturday

No deliveries/waste collections on Sundays or Bank Holidays.

This report assesses noise from deliveries and is an addendum to Miller Goodall report ref 102452_V3 to support a section 73 variation to the delivery hours condition. Noise from deliveries was assessed and worst-case noise monitoring was undertaken at the site to determine whether extended delivery hours were possible at the site.

Based on the available information within Noise Assessment 102452_V3, and this addendum report, the impact of deliveries from noise emissions from the proposed Lidl store is low when assessed to BS 4142:2014+A1:2019 and it is considered that extended delivery hours are appropriate for the site and the condition (10) can be amended.

Our assessment has determined that delivery hours between 05:00 to 00:00 Monday to Sunday, including bank holidays would be acceptable at the site.

Record of changes

Prepared By Jo Miller MIOA

Reviewed By

Michael Rickard MIOA

Signed

Signed

Date

7 September 2022

Date

7 September 2022

Version	Date	Change	Initials
1	7 September 2022	Initial Issue	JLM

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1 Introduction

1.1 Miller Goodall provided a noise assessment (report ref 102452_V3) in support of a planning application (application number 130189/FO/2021) to erect a new Lidl store on the Fallowfield Retail Park site.

1.2 The application was approved with a condition which restricted the delivery hours as follows for the site:

Deliveries, servicing, and collections, including waste collections shall not take place outside the following hours:

07:30 to 20:00 hrs Monday to Saturday

No deliveries/waste collections on Sundays or Bank Holidays.

1.3 These delivery hours would make servicing the site difficult, particularly at weekends.

1.4 This addendum report provides additional noise monitoring data for the site to determine the impact of extended delivery hours on the site. Noise monitoring was based on a worst case, i.e. quietest Sunday times, to determine the impact at this time.

1.5 Monitoring Results

1.5.1 A further assessment was undertaken on 14th August 2022, between 03:55 and 07:00 on a Sunday morning. A summary of the broadband measurement data is provided in Table 1 below and is shown graphically in Chart 1. All data are sound pressure levels in dB re 20 µPa. T

1.5.2 It is worth noting that Background Sound Levels in the area would increase later during the day and during the weekday, due to increases in road traffic noise locally.

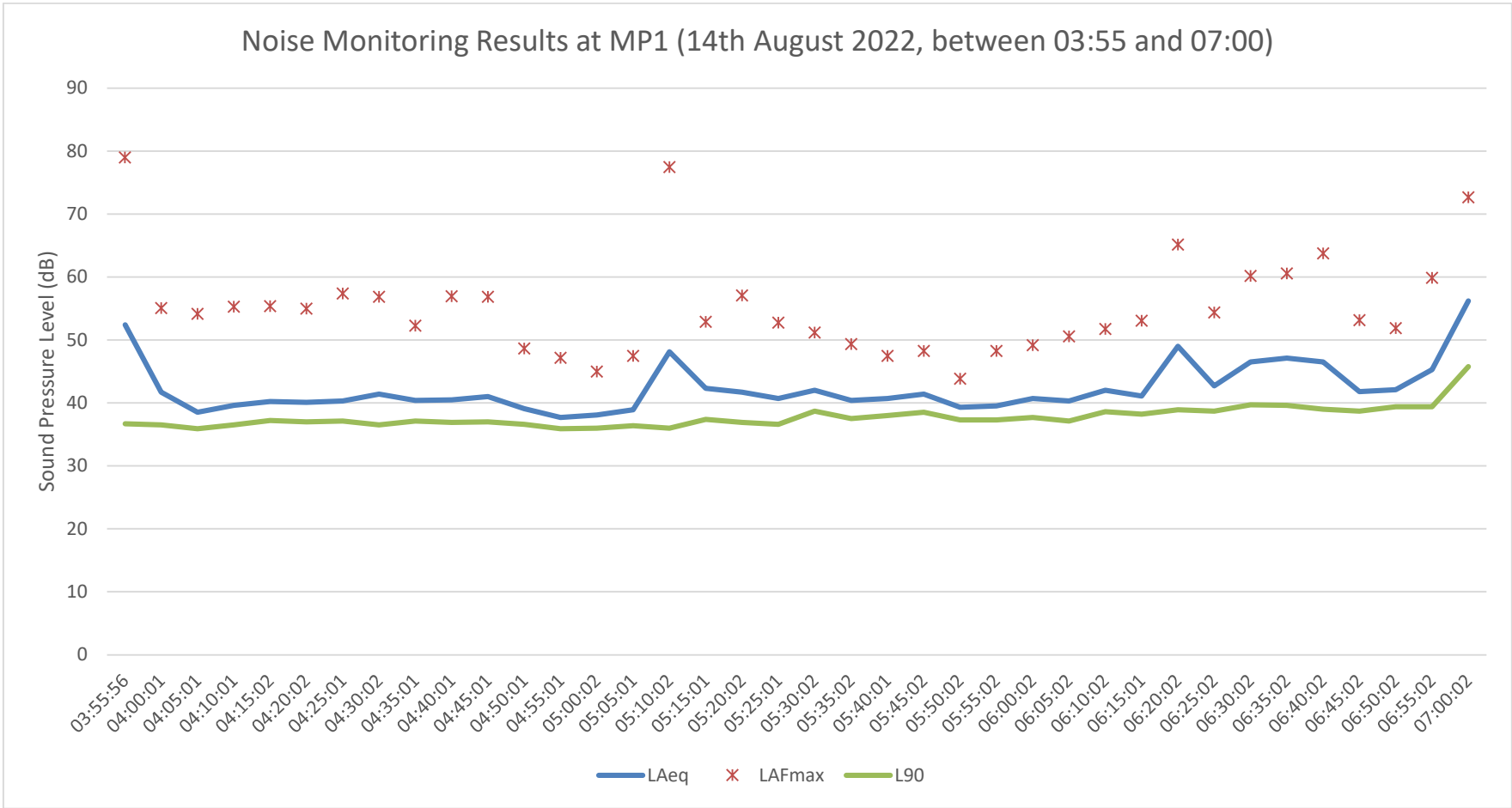
Table 1: Summary of noise measurements at MP1 from 14/08/2022 03:55 – 07:00

Measurement Location	$L_{Aeq,2hour}$ (dB)	$L_{AFmax,5min}$ Range (dB)	Mode $L_{AF90,5min}$ (dB)
MP1	45	44- 79	37

1.5.3 The $L_{AFmax,5min}$ events in the table above were either delivery or stock related activity (however no HGV movement was observed) ongoing at the retail park, that was clearly audible and distinctive against the ambient acoustic environment, which continued until approximately 05:00. Prominent bangs and crashes, roller doors, what sounded like metal scraping along the ground, etc were all audible from the retail park between 04:00-05:00.

1.5.4 The 1 second noise levels have not been presented in this report but are kept on file for future reference.

Chart 1: Time History of Measured Sound Levels at MP1



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1.6 Determination of Representative Background Sound Level

- 1.6.1 $L_{AF90,5min}$ data has been analysed in accordance with BS 4142:2014+A1:2019 to determine a representative Background Sound Level during the noise monitoring. The modal L_{A90} value was 37 dB. This value is in line with the former survey for the site, which was L_{A90} 37 – 39 dB.
- 1.6.2 However, careful consideration should be given to the fact that the monitoring period represents one of the quietest and most sensitive times of the week. Weekday mornings for example, will have higher Background Sound Levels.

2 Noise Modelling

- 2.1 The proposed noise sources were incorporated into the existing model of the site associated with noise assessment 102452_V3. The same modelling data was used as provided within the former report.

2.2 Noise Model Results

- 2.2.1 Full noise model results and grids are shown in Appendix 1A and 1B.
- 2.2.2 The Specific Noise Level resulting from the cumulative contributions of plant and HGV delivery noise was 34 dB $L_{Aeq,1hour}$ for the daytime and 35 dB $L_{Aeq,15min}$ for the night time.
- 2.2.3 It should be noted that the noise levels above are rounded to the closest dB level.
- 2.2.4 The noise modelling results also show that noise levels are considerably higher at the most affected receptor than other nearby receptors. This is due to an opening in the earth bund that the railway runs along (the railway continues over the gap via a bridge). At present the gap is visually screened by greenery, but this does not form acoustic screening. The unscreened area of the railway line is marked in Figure 1.

Figure 1: Screening Provided by Railway Line



2.3 BS 4142:2014+A1:2019 Assessment

- 2.3.1 A BS 4142 noise impact assessment has been undertaken 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.
- 2.3.2 37 dB $L_{AF90,15min}$ was determined to be the representative Background Sound Level from both Sunday morning assessments undertaken. When considering the impact on a weekday early morning period, it must be noted that the typical Background Sound Level is likely to be higher than the 37 dB $L_{AF90,15min}$ measured on a Sunday.
- 2.3.3 Table 2 provides an assessment for the HGV deliveries for the worst-case assessment for a Sunday early morning.

Table 2: BS 4142:2014+A1:2019 Cumulative Impact of Plant and HGV Delivery Noise

Assessment Period	Predicted Specific Noise Level (dB)	Acoustic Feature Correction (dB)	Rating Level (dB)	Background Sound Level ($L_{AF90,5min}$, dB)	Excess of Rating Level over Background Sound Level (dB)	Initial Estimate of Impact
Weekend Night-time (23:00-07:00)	35 ($L_{Aeq,1hour}$)	+ 3 (Impulsivity)	38	37	+1	Low Impact
Daytime (07:00-23:00)	34 ($L_{Aeq,15min}$)	+ 3 (Impulsivity)	37	>37	0 (minimum below)	Low Impact

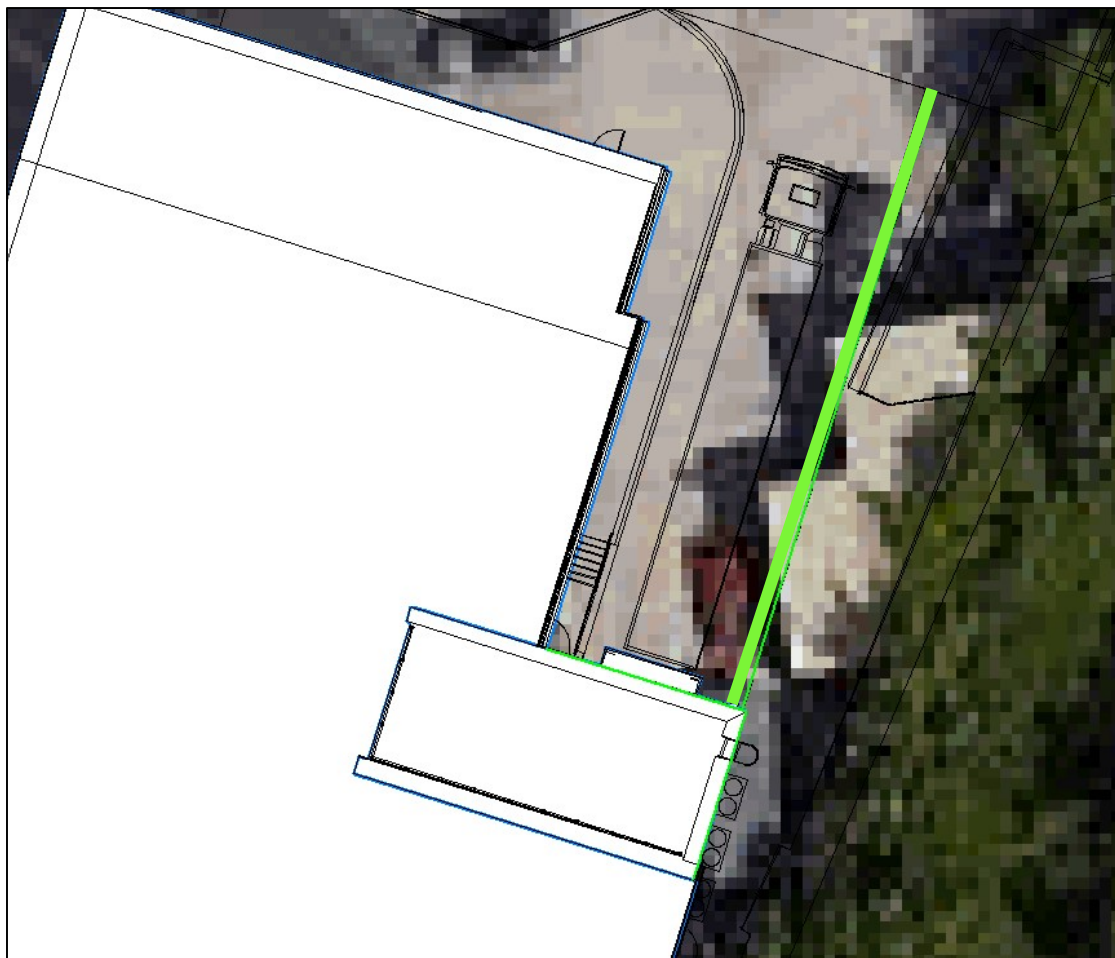
- 2.3.4 A 3 dB Character Correction has been applied for impulsivity. A 6 dB Character Correction has not been applied because, the HGV backs up directly to the loading bay, allowing the goods to be moved directly into the store from the back of the wagon. Impulsive characteristics caused by the unloading of goods is effectively an internal process and would therefore not be as perceptible at the receptors, as for example, a delivery where the goods exited the HGV via a tail-lift and were rolled externally into the store.
- 2.3.5 Although the above assessment does not meet the Local Authority Criteria of a Rating Level 5 dB below the Background Sound Level, it should be recognised that the delivery process incorporates a number of control and noise management measures (described in Section 7.2 of report ref:102452V3), and that the assessment above is based on the Background Sound Level of what is likely to be one of the quietest periods of the week.
- 2.3.6 It is likely that during a Sunday daytime, the Local Authority's criteria will be achieved by a significant margin.
- 2.3.7 It should also be noted that delivery activities were observed just after 06:00 hrs during the noise survey. We are not aware of any complaints to date in relation to existing deliveries at the site. We would therefore recommend that delivery hours are extended to 05:00-00:00 hrs daily.

3 Mitigation Measures

3.1 Acoustic Barrier

- 3.1.1 As discussed in 102542V3, it is recommended that a noise barrier is erected to provide additional screening to the loading bay area, due to a gap in the mound of earth upon which the railway line runs, which exposes some residential properties along Peaceville Road. The barrier results in a reduction of 7 dB within the noise model.
- 3.1.2 The barrier is to be constructed from continuous, imperforate material with a minimum mass of 12 kg/m^2 and is to extend from the ground to a minimum height of 2.5 m above the level of the site. The barrier must not be within the recessed loading bay area (e.g., the barrier is in addition to the screening provided by the recessed loading bay, and the recessed loading bay does not form part of the 2.5 m of screening required) Close-boarded or overlapped timber panelling would be suitable in this regard; hit-and-miss fencing would not. Alternatively, a proprietary acoustic fence with a minimum weighted sound reduction index of 25 dB R_w would be appropriate.
- 3.1.3 The location of the proposed barrier is indicated in Figure 2, below:

Figure 2: Location of Barrier (marked in green)



- 3.2 It should be noted that the barrier extends further than the 15 m length of the HGV. The gap in the earth mound is directly north east of the loading bay area, and the barrier would become less effective if the length of barrier were to be reduced.
- 3.3 Often, the visual impact of barriers on residents is considered. In the case of the recommended barrier, it would be screened from view entirely from properties along Peaceville Road due to the elevated railway line. The gap in the earth directly to the north east is entirely screened from view with greenery within the Network Rail land, therefore preventing any potential visual impact to the residents.

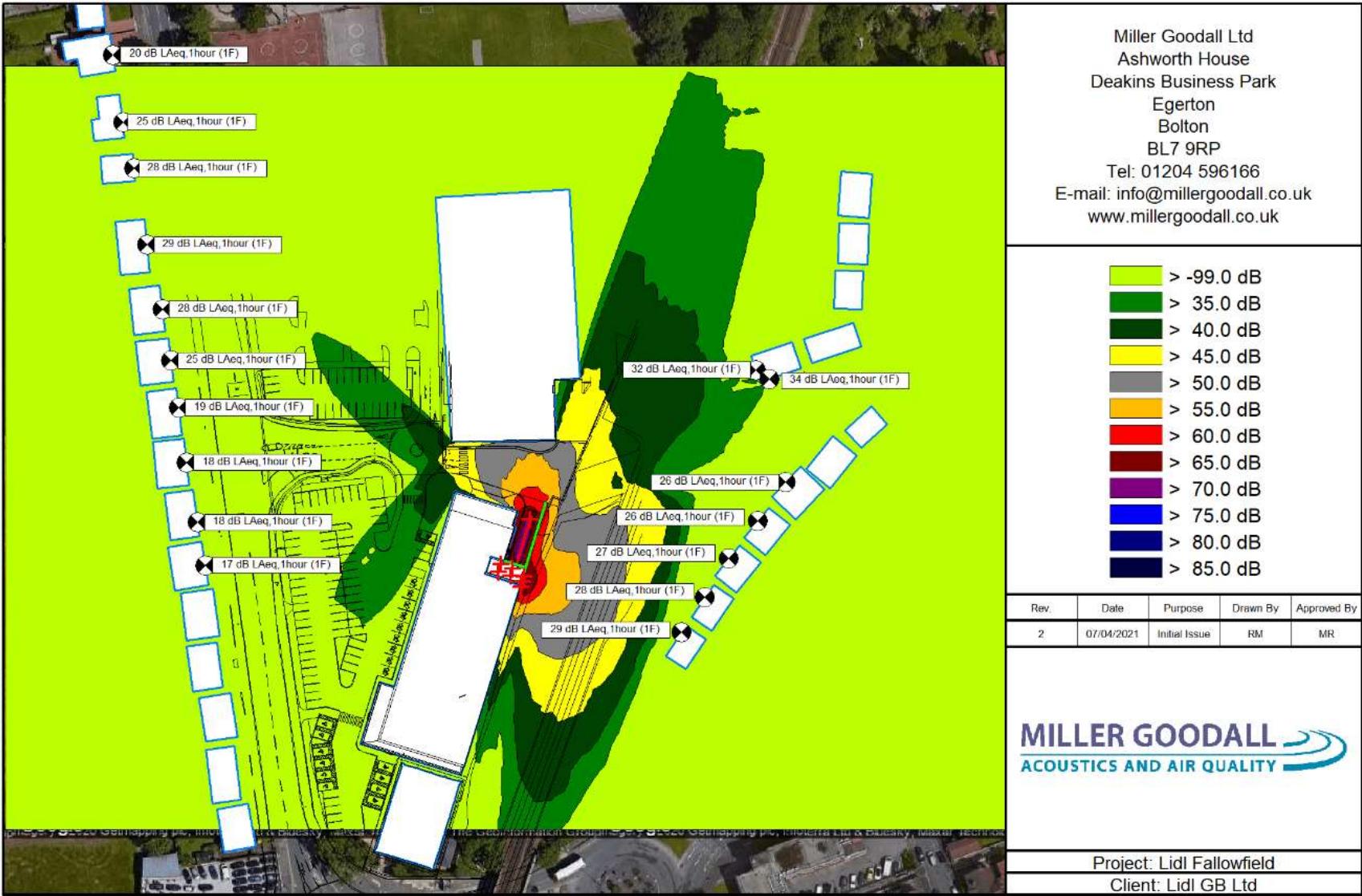
4 Conclusions

- 4.1 A Noise Assessment was undertaken with respect to the impact of noise from a proposed Lidl Store on the Fallowfield Retail Park site (report ref 102452_V3), submitted in support of a planning application for the site (application number 130189/FO/2021).
- 4.2 The approval has been granted with a condition restricting delivery to the site on Sunday's and Bank Holidays. This addendum report has been undertaken to determine whether deliveries at the site can be extended.
- 4.3 This report assesses noise from fixed plant and HGV's associated the Lidl store and is an addendum to Miller Goodall report ref 102452_V3. Further background noise monitoring has been undertaken at the quietest time during a Sunday morning to determine a representative background sound level.
- 4.4 Based on the available information within Noise Assessment 102452_V3, and this addendum report, the impact of noise from HGV deliveries is low when assessed to BS 4142:2014+A1:2019. Consequently, it is recommended that the delivery hours are extended on the site to:

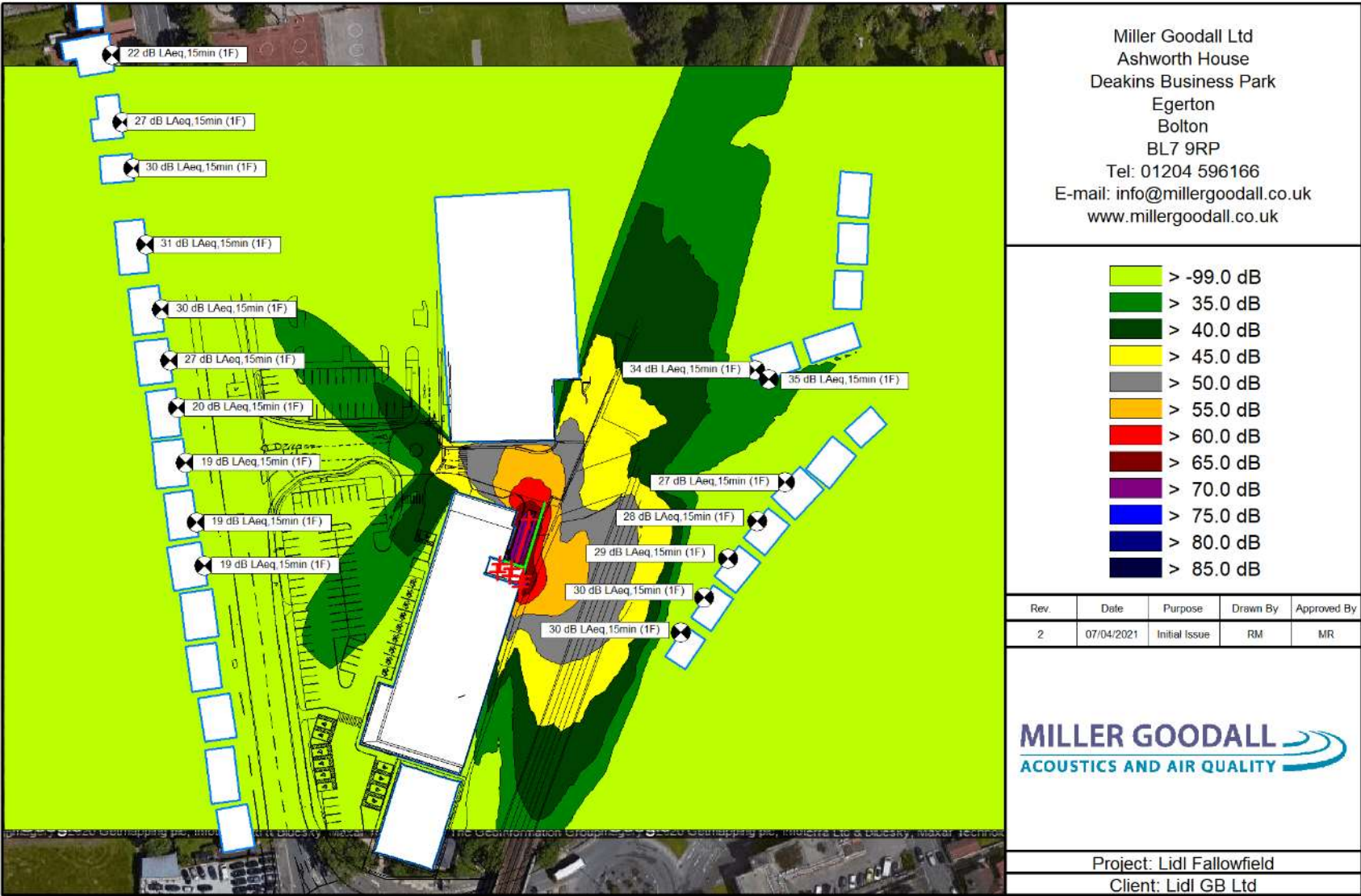
Monday to Sunday (including Bank Holiday)

05:00 to 00:00.

Appendix 1A: Predicted Daytime HGV Delivery and Plant Noise Specific Noise Level – 4.0m Grid Height (dB)



Appendix 1B: Predicted Night-time HGV Delivery and Plant Noise Specific Noise Level – 4.0m Grid Height (dB)



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: 1997 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.



Noise Assessment (102452 V3)



NOISE ASSESSMENT

on behalf of

LIDL GB LTD

for the site at

**FALLOWFIELD RETAIL PARK,
MANCHESTER M14 6FS**

REPORT DATE: 16TH APRIL 2021

REPORT NUMBER: 102452_V3

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 number 5201673



Summary

A noise assessment was undertaken to predict the potential impact of HGV Deliveries and fixed plant for a proposed new Lidl store at Fallowfield Retail Park, Manchester M14 6FS. This was prepared to support a full planning application for the development. The development also includes a sub-let unit, and noise impact associated with the unit will need to be addressed at a later date by the future tenant.

Measurements were made at the location of the nearest residential dwellings to the proposed site to identify the pre-development background noise levels. The potential impact of HGV deliveries and fixed plant was predicted within a CadnaA noise model of the site and assessed in accordance with BS 4142:2014+A1:2019.

The assessment concluded that the impact of fixed plant and deliveries would be low when assessed to BS 4142:2014+A1:2019 and recommends that delivery hours are initially granted from 05:00-00:00 hrs daily.

Record of changes

Prepared By Reid Malster AMIOA Reviewed By Michael Rickard MIOA

Signed



Signed



Date

16th April 2021

Date

16th April 2021

Version	Date	Change	Initials
1	7 th January 2021	Initial Issue	RM
2	13 th April 2021	Revised Plant Layout	RM
3	16 th April 2021	Reference to sub-let Unit 4	RM

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1 Introduction

- 1.1 Miller Goodall Ltd has, on behalf of Lidl GB Ltd, undertaken a noise assessment in respect of the impact of noise from HGV Deliveries and fixed plant associated with a proposed Lidl store on Fallowfield Retail Park, Manchester.

2 Site Description

- 2.1 The site is located at Fallowfield Retail Park, Manchester M14 6FS. The site location is shown outlined in red in Appendix 1. At present the existing site is occupied by commercial tenants, with plant mounted on the eastern facades of the units, and the on the roof (see Figure 1). Existing deliveries have been observed at the site at 06:00 hrs on a Sunday morning.
- 2.2 The site is located off Birchfield Road, which bounds the site to the west. Semi-detached residential dwellings are located on the opposite side of Birchfield Road, with ground floor and first floor windows facing the retail park.
- 2.3 Directly north of the site Birchfield Primary School is located.
- 2.4 To the south of the site, the B5094 Moseley Road and the A34/A5079 Kingsway, both main routes through the area meet. A few commercial premises are also located to the south of the site.
- 2.5 The site is bounded to the east by a railway line (the Styal Line), a commuter line that links Manchester to Manchester airport. On the other side of the railway line residential dwellings are located along Peaceville Road and Kingsmere Avenue, with ground floor and first floor windows. Some properties also have second floor windows. These properties are the closest to the proposed loading bay and plant area.
- 2.6 The railway line is significant within the context of this noise assessment since it is elevated to the site and provides significant screening to the many residential dwellings along Peaceville Road and Kingsmere Avenue (see Figure 1 below).

Figure 1: The existing site



3 Proposed Development

- 3.1 The proposed development consists of a Lidl supermarket and sub-let unit, with 82 parking spaces. The existing retail units would be demolished as part of the proposals. The proposed development plans are shown in Appendix 2.
- 3.2 The plans show that the HGV loading area is proposed for the eastern side of the site, between the new Lidl store and the railway line. Dry-Coolers and pumping station plant are proposed to be sited within a rooftop plant area, above the HGV Loading bay, and outdoor VRF units are proposed on the east side of the store at ground level, where the railway line provides significant acoustic screening.
- 3.3 The plans also show a loading area for the sub-let unit (Unit 4). Noise emissions associated with Unit 4 are outside the scope of this assessment and will need to be addressed by the future tenant at a later date.

4 Policy Context

4.1 Noise Policy Statement for England

- 4.1.1 The Noise Policy Statement for England (NPSE¹), 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.”

- 4.1.2 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.

- 4.1.3 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”.

- 4.1.4 Importantly, the NPSE goes on to state:

¹Noise Policy Statement for England, Defra, March 2010

“This does not mean that such adverse effects cannot occur”.

- 4.1.5 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”

- 4.1.6 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.

4.2 National Planning Policy Framework

- 4.2.1 The National Planning Policy Framework (NPPF²) initially published in March 2012, was updated in June 2019. One of the documents that the NPPF replaces is Planning Policy Guidance Note 24 (PPG 24) “Planning and Noise”³.

- 4.2.2 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 contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.”

- 4.2.3 At par. 170 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.

- 4.2.4 Par. 180 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 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:

² National Planning Policy Framework, Ministry of Housing, Communities and Local Government, June 2019

³ Planning Policy Guidance 24: Planning and Noise, DCLG, September 1994

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.

4.3 Planning Practice Guidance – Noise

4.3.1 As of March 2014, a Planning Practice Guidance⁴ 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.

4.3.2 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 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”.

4.3.3 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.

4.3.4 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”.

⁴ Planning Practice Guidance – Noise, <https://www.gov.uk/guidance/noise--2> 22nd July 2019.

- 4.3.5 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.

4.4 Local Planning Policy

- 4.4.1 Manchester City Council's (MCC's) Planning and Noise Technical Guidance states the following in '3.6.1.5 Industrial/Commercial Developments':

"BS 4142 should be used to assess the likely impact of noise from industrial and commercial sources at noise sensitive premises (section 3.5) One of the indications of the impact of a BS 4142 assessment is 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 have a low impact, depending on the context.

The council consider that new developments should contribute and enhanced the area in which they are located and where possible, contribute to the improvement of people's health and quality of life as per the NPSE. With this in mind the design objective should be:

'The development should be designed so as to achieve a rating of 5 dB (L_{Aeq}) below the typical background (L_{A90}) level at the nearest noise sensitive location.'

Where this criterion cannot be achieved, the various noise control measures considered as part of the assessment should be fully explained (i.e. relocation of noise sources, use of quieter equipment, enclosures, screening, restriction of the hours of operation) and the achievable noise level should be identified. This information will allow us to make a judgement concerning the application and its likely impact on the surrounding area.

In addition to the above, maximum noise levels should also be adequately controlled. Where uses generate high noise levels of a short duration (e.g. loud bangs) on a regular basis, these should aim to be controlled so as not to exceed 60 dB (L_{Amax}) at the façade of noise sensitive premises nearby in accordance with the recommendations of the World Health Organisation.

Deliveries and collections are usually controlled by restricting operational hours but depending on the extent of these activities a Noise Management Plan (NMP) may be requested, which would include an assessment of noise. This would usually involve assessing the noise upon arrival, loading/unloading period and then departure.

The NMP may also need to include controls such as acoustically sealed delivery bays, and restrictions on vehicle mounted refrigeration units and audible alarm systems. Where applicable, the noise assessment will take account of multiple noise sources operating simultaneously and state the cumulative level of these."

- 4.4.2 The guidance then goes on to explain that noise emissions from plant should also be controlled to a Rating level 5 dB below the Background Sound Level in Section 3.6.1.5.1.

5 Acoustic Standards and Guidance

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

5.1.1 BS 4142:2014+A1:2019⁵ 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.

5.1.2 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).

5.1.3 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.

5.1.4 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.*

5.1.5 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.

5.1.6 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.

⁵ BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound

6 Noise Survey

6.1 Measurements of Existing Noise Sources

6.1.1 Noise measurements were undertaken at a location representative of the nearest residential receptors in accordance with BS 7445-1: 2003⁶ by Reid Malster of Miller Goodall Ltd. The calibration of the sound level meter was checked before and after measurements with negligible deviation (<0.1 dB). Details of the equipment used are shown in Table 1, below.

Table 1: Noise monitoring equipment

Equipment Description	Type Number	Manufacturer	Serial No.	Date Calibrated	Calibration Certification Number
Outdoor microphone housing	NOR 1217	Norsonic	12175146	N/a	N/a
Class 1 ^{7,8} Integrating Real Time 1/3 Octave Sound Analyser	NOR 140	Norsonic	1406017	22/10/19	U33164
Microphone	NOR 1225	Norsonic	358159	22/10/19	33163
Class 1 Calibrator ⁹	Type 4231	Brüel & Kjær	2478249	20/07/20	04743/1

6.1.2 Noise monitoring was undertaken at the times specified in Table 2, below. Weather conditions were determined both at the start and on completion of the survey. Measurement locations are shown in Appendix 1.

⁶ BS 7445-1: 2003 Description and measurement of environmental noise - Part 1: Guide to quantities and procedures

⁷ IEC 61672-1 (2002) Electroacoustics – Sound level meters Part 1: Specifications

⁸ IEC 61260 (1995) Electroacoustics – Octave-band and fractional-octave-band filters

⁹ IEC 60942 (2003) Electroacoustics – Sound calibrators

Table 2: Dates, times and weather conditions during noise measurements

Measurement Locations	Date/Time	Weather conditions		
		Description	At Start of Survey	On Completion
P1	13/12/20, 04:07 - 07:01	Temperature:	3 °C	4 °C
Cloud Cover Symbol Scale in oktas (eighths) 0 Sky completely clear 1 2 3 4 Sky half cloudy 5 6 7 8 Sky completely cloudy (9) Sky obstructed from view		Precipitation:	Dry	Light
		Cloud cover (oktas – see opposite):	5	8
		Any fog/snow/ice?	No	No
		Any damp roads/wet ground?	Slightly damp roads	Damp roads
		Wind speed:	< 1 m/s	< 1 m/s
		Wind direction:	N/A	
		Any conditions that may cause temp. inversion (e.g. calm nights with no cloud):	No	No

Table 3: Dates, times and weather conditions during noise measurements

Time	Weather conditions
04:00 – 06:05	Overcast, dry, 3°C, still
06:05 – 06:15	Overcast, very light precipitation, 4°C
06:15 – 06:18	Overcast, dry, 4°C, still
06:18 – 07:00	Overcast, precipitation, 4°C

6.1.3 Measurements were taken during the early hours of a Sunday morning, considered to be when noise from the proposed Lidl store could have the greatest impact. BS 4142:2014+A1:2019 states that for sleep purposes, the beginning and start of the night are potentially of greater importance than the middle of the night. Measurements were made under free-field conditions at a height of 1.5 m above the ground.

6.1.4 Precipitation occurred from 06:18 until the end of the survey. Between 06:05-06:15 some minor precipitation occurred (e.g., occasional droplets) . As the data from 06:18 onwards was impacted by rainfall it has been omitted from any subsequent analysis.

- 6.1.5 The measurement position (MP1) was located at the end of Peaceville Road and is marked in Appendix 1.
- 6.1.6 Upon commencement of the survey, noise sources in the area included occasional road traffic noise from the B5093 Moseley Road and the A34/A5079 Kingsway, and plant noise from the retail park (audible at low levels between traffic noise events). Birdsong began from 04:33.
- 6.1.7 The first train pass-by event occurred at 05:30 hrs, and further train pass-by events occurred at 06:11 hrs and 06:30 hrs.
- 6.1.8 At approximately 06:05 hrs a delivery commenced at the retail park. Due to the monitoring location being screened by the railway line it was unclear which unit was being serviced. A loading bay door being opened was audible, followed by the sound of a diesel engine from approximately 06:10-06:15 (it should be noted that engine noise was barely perceptible at the monitoring location). Occasional crashes and bangs were then heard from the retail park throughout the remainder of the survey.
- 6.1.9 Traffic on the local road network gradually increased throughout the duration of the survey, particularly between 06:00-07:00.

6.2 Monitoring Results

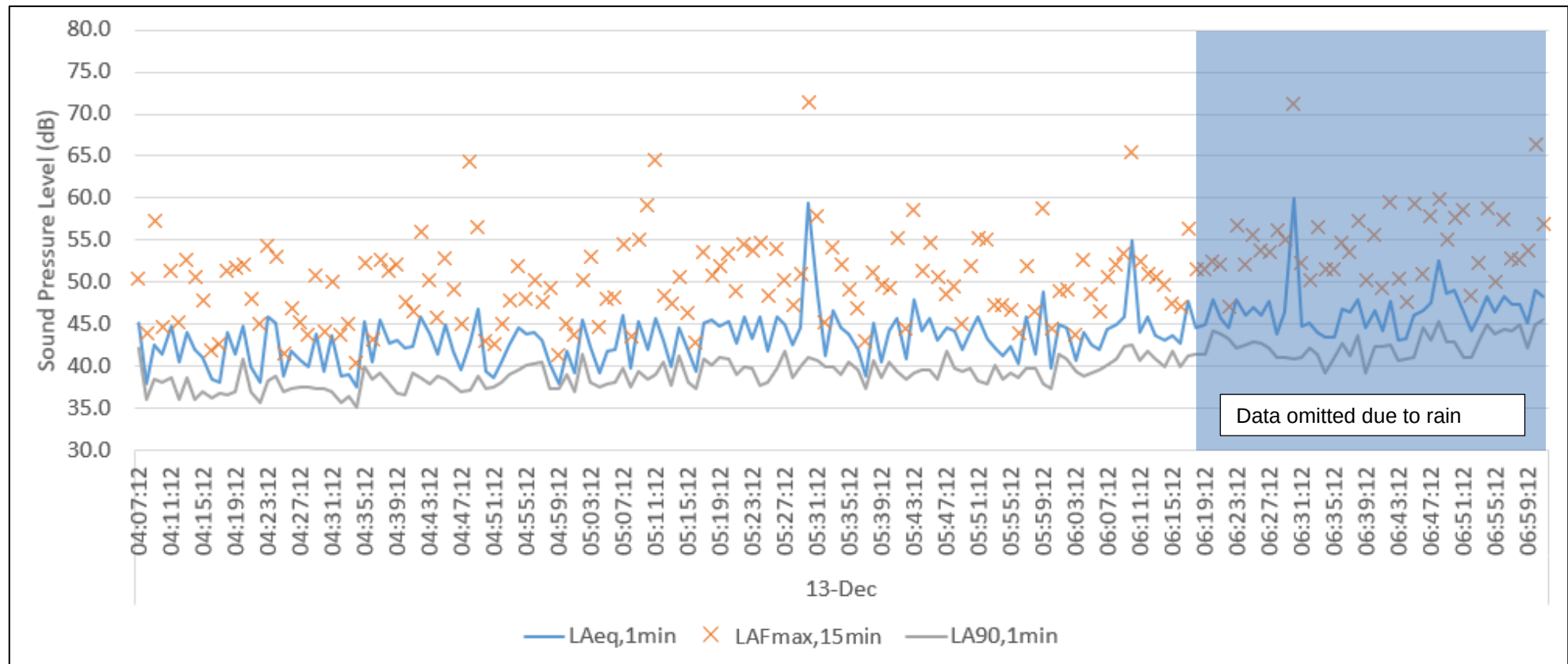
- 6.2.1 A summary of the broadband measurement data is provided in Table 4 below and is shown graphically on Chart 1. All data are sound pressure levels in dB re 20 μ Pa.
- 6.2.2 The results summary shown in Table 4 excludes measurements from 06:18 onwards due to uncertainty in the measurements due to rainfall. However, it should be noted that between 06:18-07:00 Background Sound Levels in the area would increase under normal conditions due to increases in road traffic noise locally.

Table 4: Summary of noise measurements at MP1 from 13/12/20 04:07 – 13/12/20 06:15

Measurement Location	$L_{Aeq,2hour}$ (dB)	$L_{AFmax,1min}$ Range (dB)	Mode $L_{AF90,15min}$ (dB)
MP1	45	40-71	37

- 6.2.3 The 71 dB $L_{AFmax,1min}$ event in the table above was caused by a passing train.
- 6.2.4 The 1 second noise levels have not been presented in this report but are kept on file for future reference.

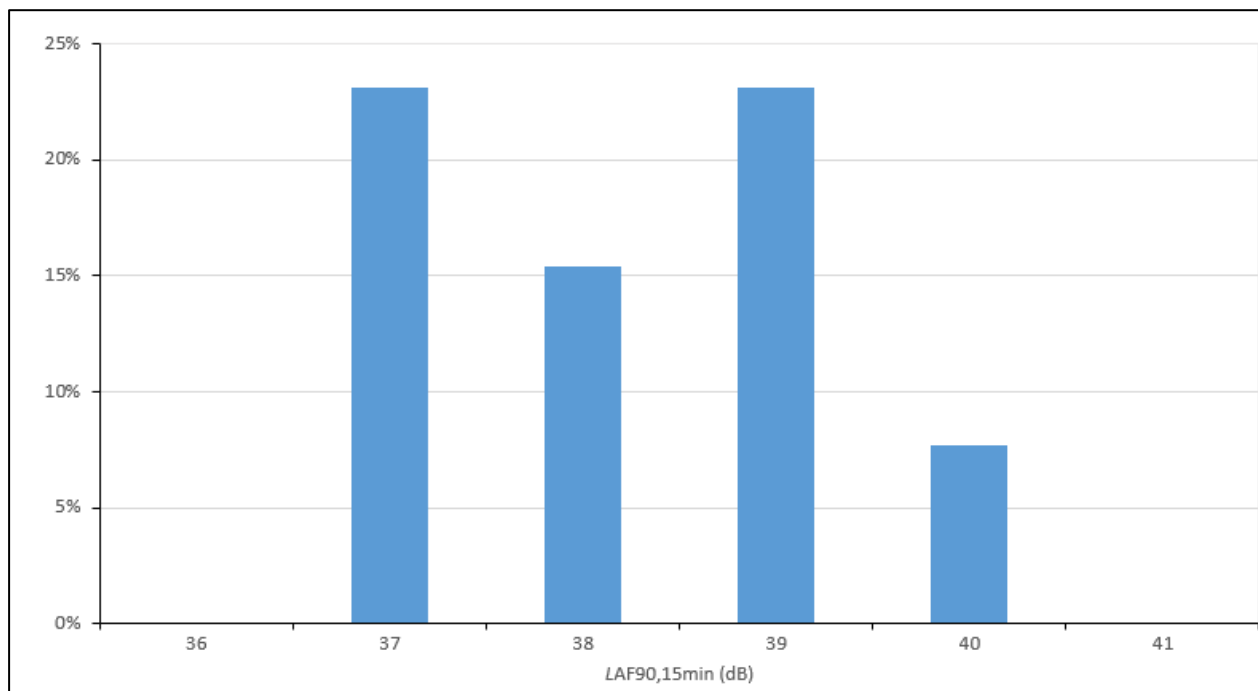
Chart 1: Noise monitoring results at MP1 (13/12/20 04:07 – 07:01)



6.3 Determination of Representative Background Sound Level

- 6.3.1 $L_{AF90,15min}$ data has been analysed in accordance with BS 4142:2014+A1:2019 to determine a representative Background Sound Level during the noise monitoring. As discussed in the previous section of this report, the survey was impacted by rainfall from 06:18 onwards. Survey data included in this analysis is therefore only up until 06:15.

Chart 2: Statistical Analysis of $L_{AF90,15min}$ Background Sound Levels between 13/12/20 04:00 – 13/12/20 06:15



- 6.3.2 Chart 2 above shows that the typical measured Background Sound Level for the duration of the survey was between 37-39 dB $L_{AF90,15min}$. For the purposes of this assessment 37 dB $L_{AF90,15min}$ will be used as the representative Background Sound Level to present a worst-case assessment.
- 6.3.3 However, careful consideration should be given to the fact that the monitoring period represents one of the quietest and most sensitive times of the week. Weekday mornings for example, will have higher Background Sound Levels.
- 6.3.4 The monitoring was also undertaken during Tier 3 restrictions in relation to the Covid-19 pandemic. Under representative conditions road traffic levels are usually low during the early hours of a Sunday morning, and the monitoring period conditions are therefore likely to have been impacted to a lesser degree than other periods during the week. It should also be noted that in this case, the impact of Tier 3 restrictions is likely to result in lower Background Sound Levels rather than higher Background Sound Levels, leading to a more 'worst-case' assessment.

7 Impact of Noise from the Proposed Development

7.1 Noise Modelling

- 7.1.1 Prediction of noise levels at sensitive receptors was carried out using CadnaA software package. The data from measurements taken was used to populate an environmental noise model.
- 7.1.2 The general horizontal plan information of the area surrounding and including the proposed development site was imported from Google Maps. 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 and Digital Surface Model (DSM) survey data obtained through Google Earth. Topography was modelled with Digital Terrain Model (DTM) Lidar Survey data obtained from DEFRA to ensure that the screening effects of the railway line were modelled as accurately as possible.
- 7.1.3 The following parameters were assigned to the model:
- Propagation model: ISO 9613¹⁰
 - Default ground absorption: 0.1 (acoustically reflecting)
 - Two orders of reflection
 - Buildings are reflecting (smooth, non-structured facade)

7.2 Modelling of HGV Delivery Noise

- 7.2.1 The operation of the whole delivery process is undertaken by one person which reduces the requirement for talking and shouting and all goods and waste are moved in sealed containers.
- 7.2.2 The process takes approximately 40 minutes including the entry of the delivery vehicle into the yard, opening the rear container doors, reversing onto the ramp (reverse alarms restricted as necessary within the site noise management plan), unloading the stock, loading waste to be removed and finally leaving the site.
- 7.2.3 The loading bay allows goods to be moved internally within the wagon, directly into the Lidl store. The moving of goods is therefore effectively an internal process.
- 7.2.4 Octave band data for a typical delivery is shown below in Table 5. This data, measured at 2.0m from the mid-point of the wagon when parked (16.5 m articulated vehicle), shows the measured noise level at a Lidl store in Colne, Lancashire during a delivery adjusted to take account of the contributions from residual sound at the monitoring location due to other noise sources not associated with the LIDL store. This data was measured without refrigeration plant operating on the HGV.
- 7.2.5 The refrigeration plant on the HGV is located near the driver's cab. This has therefore been measured separately for the purposes of calibrating the refrigeration plant as a point source within the noise model.

¹⁰ ISO 9613-2: 1996 Acoustics - Attenuation of sound during propagation outdoors – Part 2: General method of calculation

7.2.6 Table 5 below shows a single figure value for the entire measurement and a calibrated value for a 15.0 m line source, 2.0 m above ground level, which represents the delivery wagon in the noise modelling. L_w Sound Power Levels derived from source measurements of the refrigeration plant are also shown in Table 5, and this is modelled as a point source within the model.

7.2.7 It is our understanding that there will be up to two deliveries per day at the proposed store.

7.2.8 It should also be noted that a 2.5 m high barrier screening the loading bay has been recommended as additional mitigation and incorporated within the noise model. Although most nearby residential properties are screened by the mound of earth that the railway line runs along, there is an opening where the railway line runs along a bridge at the end of Peaceville Road. The additional screening reduces noise levels at the most affected residential property by 7 dB.

7.2.9 Delivery noise within the model was calibrated to the measurement data presented in Table 5.

Table 5: Octave Band Noise Data of a Lidl Delivery

Noise Source	Sound Level, dB, at Octave Band Centre Frequency (Hz)								dB(A)
	63 Hz	125 Hz	250 Hz	500 Hz	1.0 kHz	2.0 kHz	4.0 kHz	8.0 kHz	
Measured Noise Levels (dB) at 2 m									
Total Delivery ($L_{eq,T}$)	63.9	64.6	61.3	61.6	61.3	59.9	59.7	58.3	67.2
Calibrated Model Noise Sources (dB) (L_w 15m line source)									
Total Delivery	76.6	77.2	73.9	74.3	74	72.6	72.5	71.5	80.0
Derived L_w Sound Power Level (dB) of Refrigeration Plant									
Refrigeration Plant	80.2	69.2	66.1	74.4	70.9	72.1	71.3	61.2	78.2

7.3 Modelling of Plant Noise

7.3.1 Octave band noise data for the proposed plant was not available. Therefore, to assist in this assessment measured spectra of similar VRF's and Dry Coolers obtained by Miller Goodall at other Lidl sites were adjusted to match the broadband manufacturers data for use in the model resulting in the following data shown in Table 6. Precise fit-outs are determined during the final design stages of the project, but for a store of this type plant compliment would typically contain:

- 2 no. 45.0 kW Variable Refrigerant Flow (VRF) units
- 1 no. 28.0 kW Variable Refrigerant Flow (VRF) unit
- 2 no. 100 kW Dry Coolers
- 2 no. Pumping Stations

Table 6: Noise source data used within CadnaA

Description	Sound Power Level, L_w dB in Octave Band Centre Frequency, Hz								dB(A)
	63	125	250	500	1k	2k	4k	8k	
45.0 kW VRF	84.8	82.8	75.8	74.8	74.8	70.8	66.8	59.8	78.9
28.0 kW VRF	79.8	77.8	70.8	69.8	69.8	65.8	61.8	54.8	73.9
100 kW Dry Cooler	75.3	79.3	74.3	69.2	63.2	56.8	50.1	40.6	71.0
Pumping Station	N/A	65.2	62.7	64.2	63.0	60.8	56.0	52.1	67.6

7.3.2 For this site, the Dry Coolers and Pumping Stations are located by the western store façade, and the VRF units are located by the southern store façade.

7.3.3 Each item of plant was modelled as a separate point source. The VRF and Dry Cooler units, which have fans pointing vertically were modelled with vertical directivity (as opposed to an omni-directional source). The Dry-Cooler's and Pumping Stations were modelled within a rooftop plant area above the HGV loading bay, and the VRF's were modelled at ground level (see Appendix 2). Each item of plant was assumed to be 1.2 m above the ground or roof level at its location (typically the middle of a plant unit).

7.3.4 The plant is in constant operation throughout the day and the night. The Dry-Coolers operate intermittently, cycling on and off for a few minutes at a time according to load requirements.

7.4 Noise Model Results

7.4.1 Full noise model results and grids are shown in Appendix 3.

7.4.2 The Specific Noise Level resulting from plant noise within the model is 27 dB $L_{Aeq,T}$ (constant operation is presumed, so the Specific Noise Level is the same for the daytime and night-time).

7.4.3 The Specific Noise Level resulting from the cumulative contributions of plant and HGV delivery noise was 34 dB $L_{Aeq,1hour}$ for the daytime and 35 dB $L_{Aeq,15min}$.

7.4.4 It should be noted that the noise levels above are rounded to the closest dB level.

7.4.5 The noise modelling results also show that noise levels are considerably higher at the most affected receptor than other nearby receptors. This is due to an opening in the earth bund that the railway runs along (the railway continues over the gap via a bridge). At present the gap is visually screened by greenery, but this does not form acoustic screening. The unscreened area of the railway line is marked in Figure 2.

Figure 2: Screening Provided by Railway Line

7.5 BS 4142:2014+A1:2019 Assessment

- 7.5.1 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.
- 7.5.2 In Section 3.7, 37 dB $L_{AF90,15min}$ was determined to be the representative Background Sound Level between 04:00-06:15 hrs on 13/12/20 (a Sunday morning). When considering the impact on a weekday early morning period, it must be noted that the typical Background Sound Level is likely to be higher than the 37 dB $L_{AF90,15min}$ measured on a Sunday.
- 7.5.3 The noise model predicts that plant will still make a contribution to L_{Aeq} levels at nearby receptors during HGV deliveries. Therefore, an assessment has been undertaken for external plant (which will operate 24/7) and an assessment has been undertaken for the cumulative contributions of a HGV delivery and plant noise.
- 7.5.4 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 7 below:

Table 7: BS 4142:2014+A1:2019 Plant Noise

Assessment Period	Predicted Specific Noise Level (dB)	Acoustic Feature Correction (dB)	Rating Level (dB)	Background Sound Level ($L_{AF90,5min}$, dB)	Excess of Rating Level over Background Sound Level (dB)	Initial Estimate of Impact
Weekend Night-time (23:00-07:00)	27 ($L_{Aeq,15min}$)	+ 3 (Intermittency)	30	37	-7	Low Impact
Daytime (07:00-23:00)	27 ($L_{Aeq,15min}$)	+ 3 (Intermittency)	30	>37	-7 (minimum below)	Low Impact

- 7.5.5 The initial estimate of impact based on the excess of the Rating Level over the Background Sound Level indicates that the impact of plant noise would be low, during what is expected to be one of the most sensitive periods of the week. For most of the week, Background Sound Levels will be higher.
- 7.5.6 It is also noted that plant noise from the existing units already formed part of the Ambient Acoustic Environment and therefore part of the Background Sound Level (due to the plant being audible between traffic pass-by events). This differentiates the situation from one where a new type of noise source is introduced, and is further indication of a likelihood of low impact. We are unaware of any complaints from residents about the existing low level background plant noise around the site. It is also noted that residents are likely to be indoors during the assessment period, where noise levels would be around 15 - 20 dB and therefore effectively inaudible.
- 7.5.7 The above result also meets the Local Authority's criterion of a Rating Level 5 dB below the Background Sound Level at one of the most sensitive times of the week.
- 7.5.8 If, as the detailed design develops, significant changes to the plant schedule or layout occur, noise emissions from fixed plant will need to be reassessed.

Table 8: BS 4142:2014+A1:2019 Cumulative Impact of Plant and HGV Delivery noise

Assessment Period	Predicted Specific Noise Level (dB)	Acoustic Feature Correction (dB)	Rating Level (dB)	Background Sound Level ($L_{AF90,5min}$, dB)	Excess of Rating Level over Background Sound Level (dB)	Initial Estimate of Impact
Weekend Night-time (23:00-07:00)	35 ($L_{Aeq,1hour}$)	+ 3 (Impulsivity)	38	37	+1	Low Impact
Daytime (07:00-23:00)	34 ($L_{Aeq,15min}$)	+ 3 (Impulsivity)	36	>37	0 (minimum below)	Low Impact

- 7.5.9 A 3 dB Character Correction has been applied for impulsivity. A 6 dB Character Correction has not been applied because, as explained in Section 6.3, the HGV backs up directly to the loading bay, allowing the goods to be moved directly into the store from the back of the wagon. Impulsive characteristics caused by the unloading of goods is effectively an internal process and would therefore not be as perceptible at the receptors, as for example, a delivery where the goods exited the HGV via a tail-lift and were rolled externally into the store. The noise from the delivery itself would also mask any intermittent features from the plant, which based on the plant assessment noise levels is highly unlikely to be perceptible at the receptor.
- 7.5.10 Although the above assessment does not meet the Local Authority Criteria of a Rating Level 5 dB below the Background Sound Level, it should be recognised that the delivery process incorporates a number of control and noise management measures (described in Section 7.2), and that the assessment above is based on the Background Sound Level of what is likely to be one of the quietest periods of the week.
- 7.5.11 It is likely that during the daytime, the Local Authority's criteria will be achieved by a significant margin.
- 7.5.12 It should also be noted that delivery activities were observed just after 06:00 hrs during the noise survey. We are not aware of any complaints to date in relation to existing deliveries at the site. We would therefore recommend that delivery hours are initially granted from 05:00-00:00 hrs daily.

8 Mitigation Measures

8.1 Acoustic Barrier

- 8.1.1 As discussed in Section 7.2.8, it is recommended that a noise barrier is erected to provide additional screening to the loading bay area, due to a gap in the mound of earth upon which the railway line runs, which exposes some residential properties along Peaceville Road. The barrier results in a reduction of 7 dB within the noise model.
- 8.1.2 The barrier is to be constructed from continuous, imperforate material with a minimum mass of 12 kg/m^2 and is to extend from the ground to a minimum height of 2.5 m above the level of the site. The barrier must not be within the recessed loading bay area (e.g., the barrier is in addition to the screening provided by the recessed loading bay, and the recessed loading bay does not form part of the 2.5 m of screening required) Close-boarded or overlapped timber panelling would be suitable in this regard; hit-and-miss fencing would not. Alternatively, a proprietary acoustic fence with a minimum weighted sound reduction index of 25 dB R_w would be appropriate.
- 8.1.3 The location of the proposed barrier is indicated in Figure 3, below:

Figure 3: Location of Barrier (marked in green)



- 8.2 It should be noted that the barrier extends further than the 15 m length of the HGV. The gap in the earth mound is directly north east of the loading bay area, and the barrier would become less effective if the length of barrier were to be reduced.
- 8.3 Often, the visual impact of barriers on residents is considered. In the case of the recommended barrier, it would be screened from view entirely from properties along Peaceville Road due to the elevated railway line. The gap in the earth directly to the north east is entirely screened from view with greenery within the Network Rail land, therefore preventing any potential visual impact to the residents.

8.4 Consideration of Other Discipline Requirements

- 8.4.1 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.

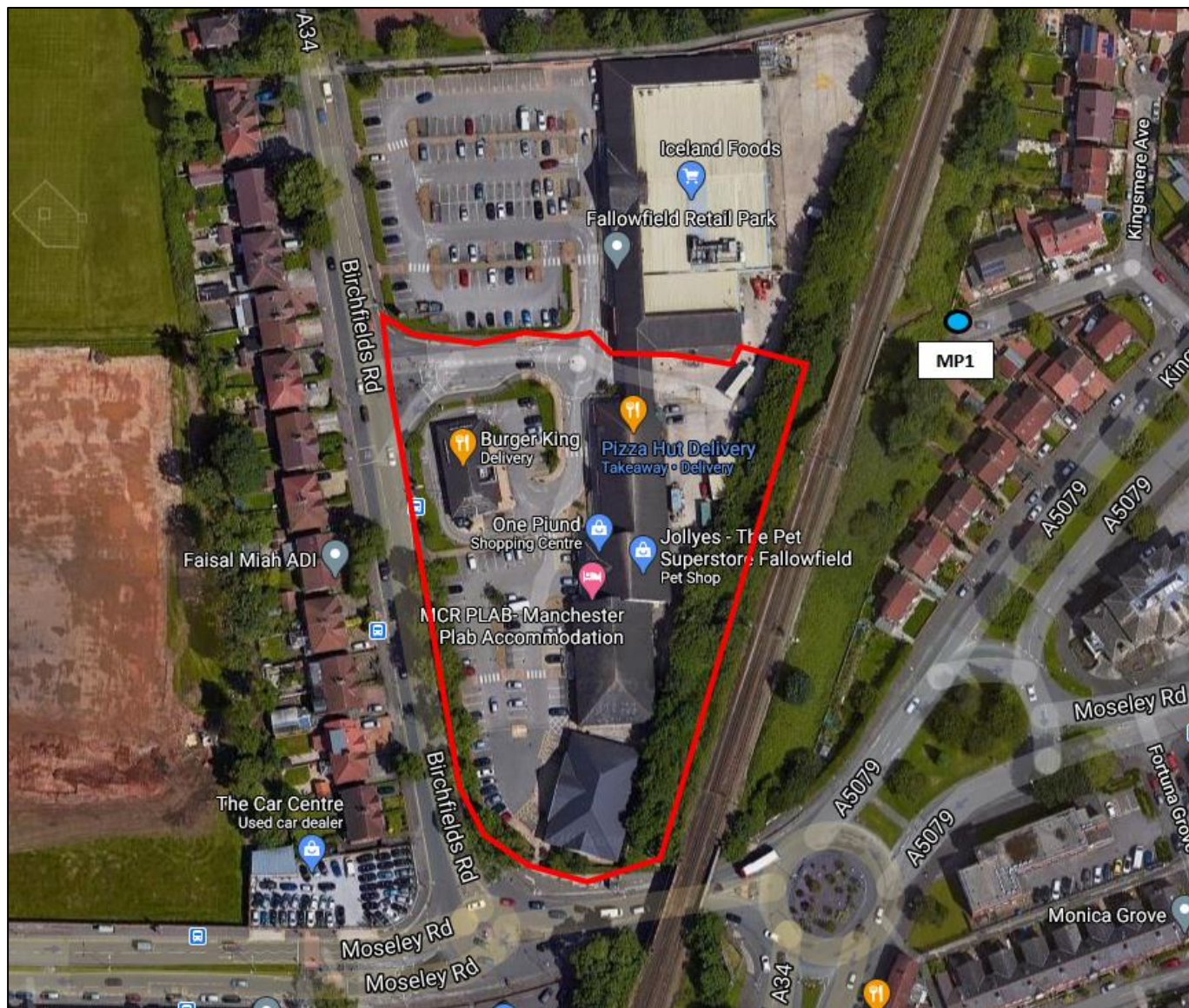
9 Conclusions

- 9.1 A noise assessment was undertaken to predict the potential impact of HGV Deliveries and fixed plant at Fallowfield Retail Park, Manchester M14 6FS. This was prepared to support a full planning application for the development. The development also includes a sub-let unit, and noise impact associated with the unit will need to be addressed at a later date by the future tenant.
- 9.2 Measurements were made at the location of the nearest residential dwellings to the proposed site to identify the pre-development background sound levels. The potential impact of HGV deliveries and fixed plant was predicted within a CadnaA noise model of the site and assessed in accordance with BS 4142:2014+A1:2019.
- 9.3 The assessment concluded that the impact of fixed plant and deliveries would be low when assessed to BS 4142:2014+A1:2019 and recommends that delivery hours are initially granted from 05:00-00:00 hrs daily.

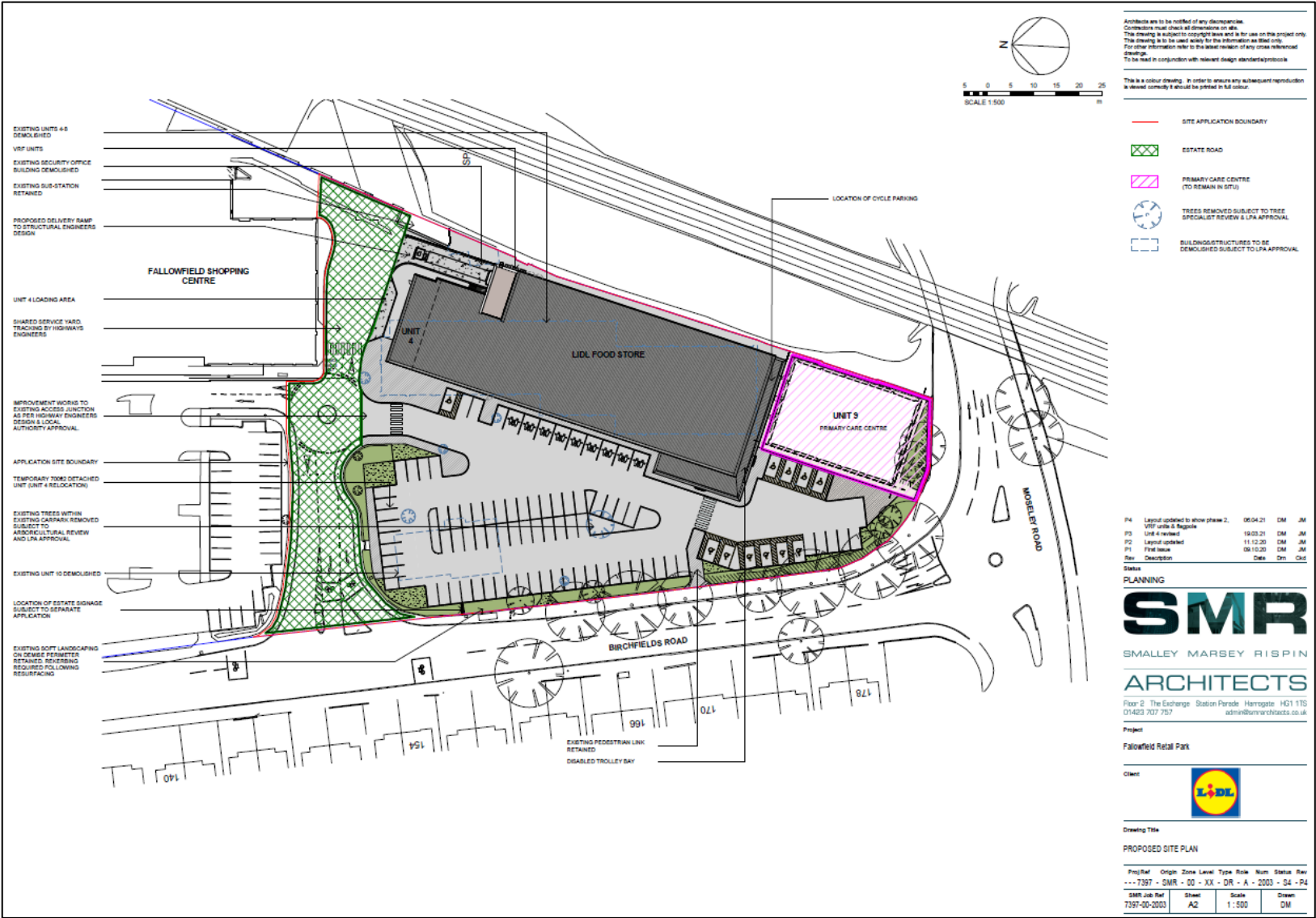
APPENDICES

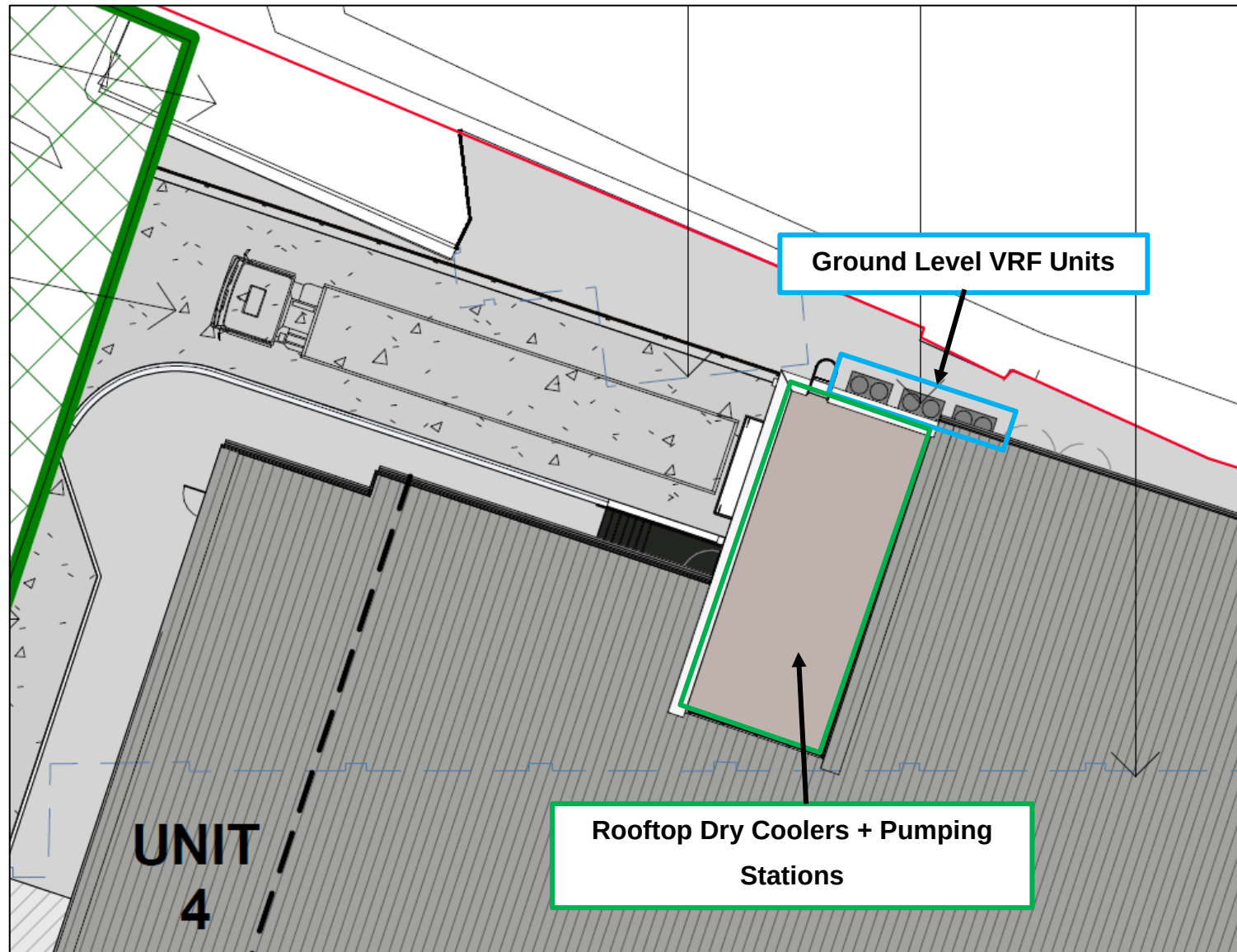
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Appendix 1: Site Location and Monitoring Location

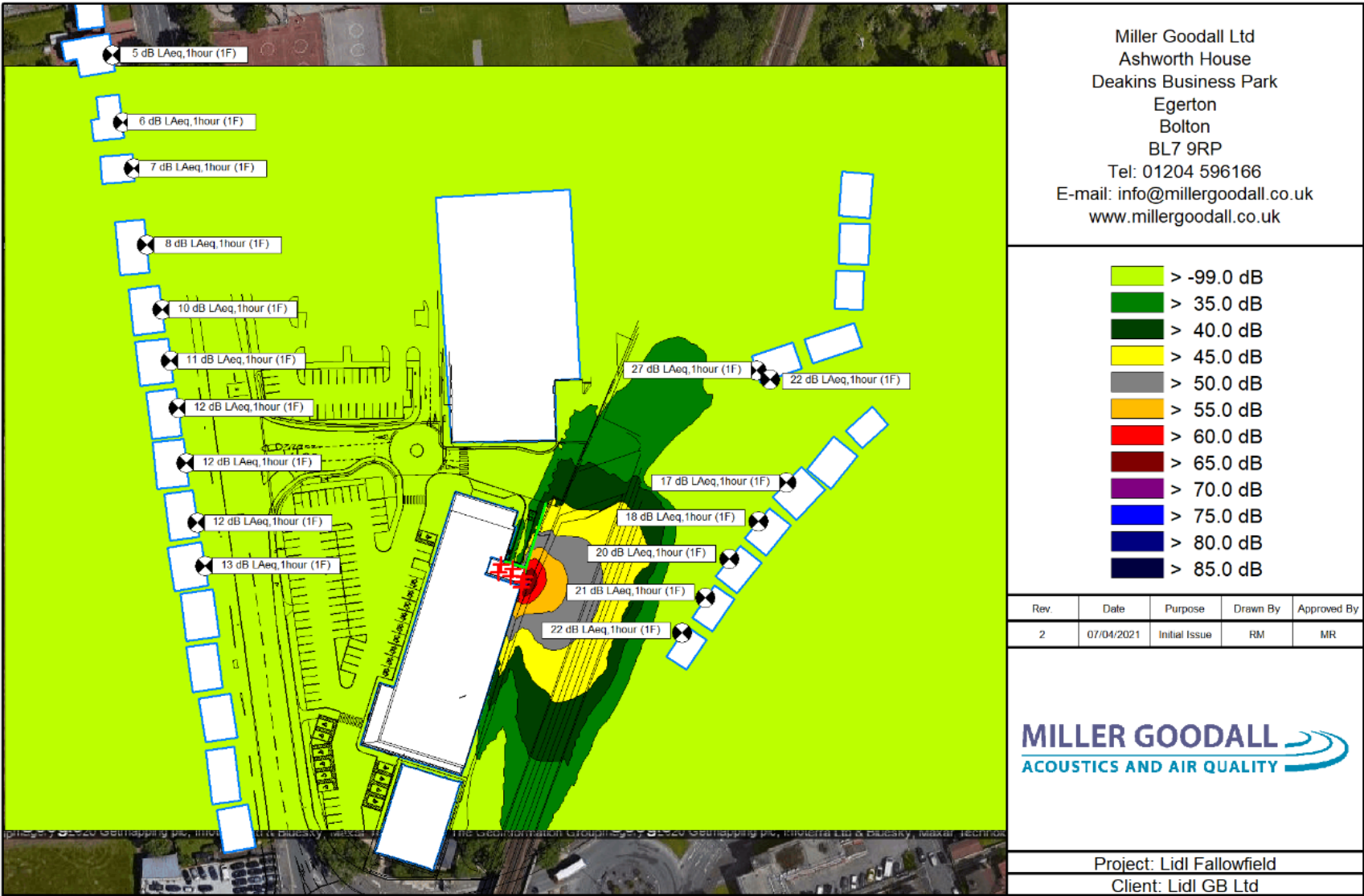


Appendix 2: Proposed Development Plans

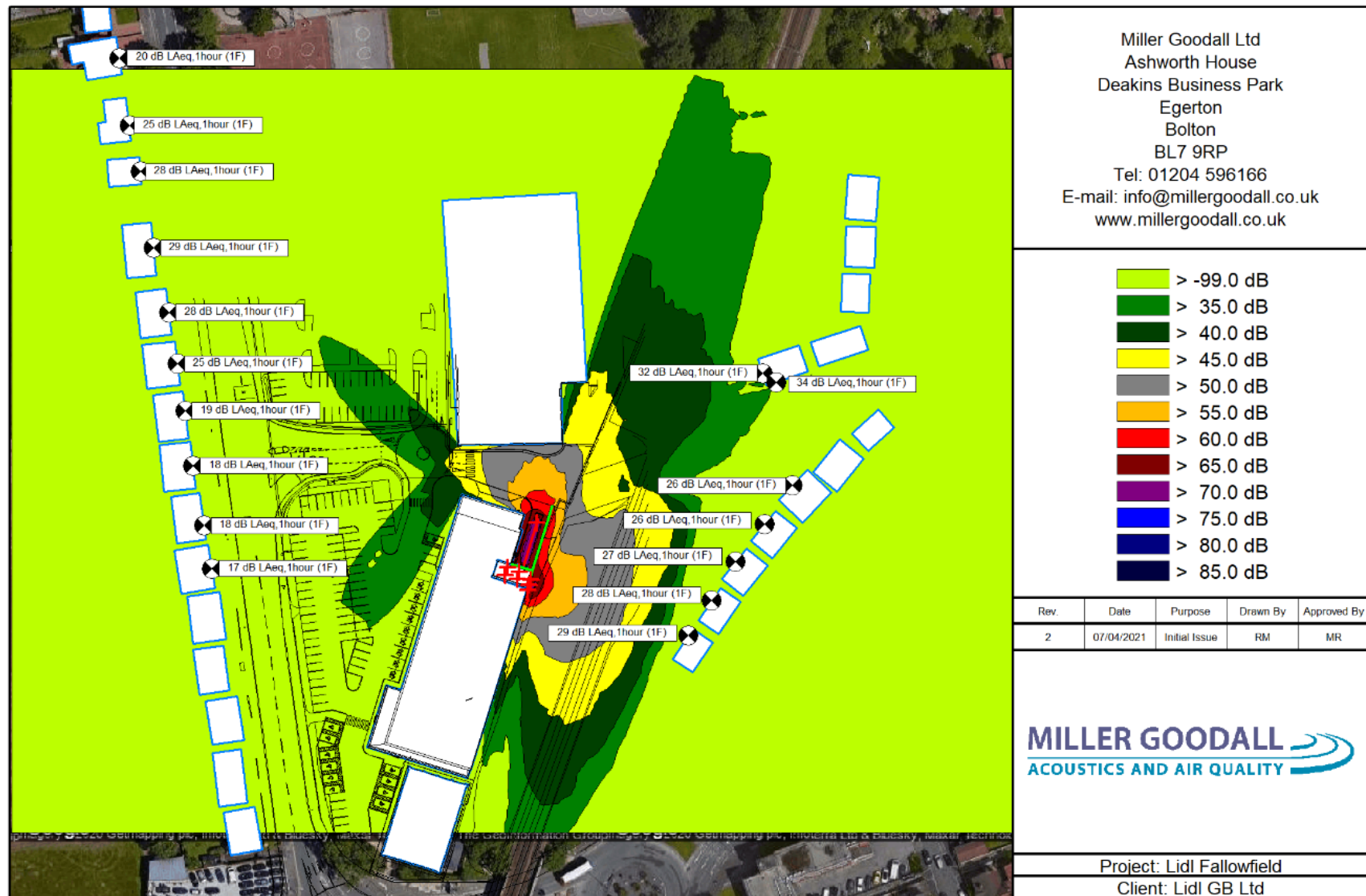




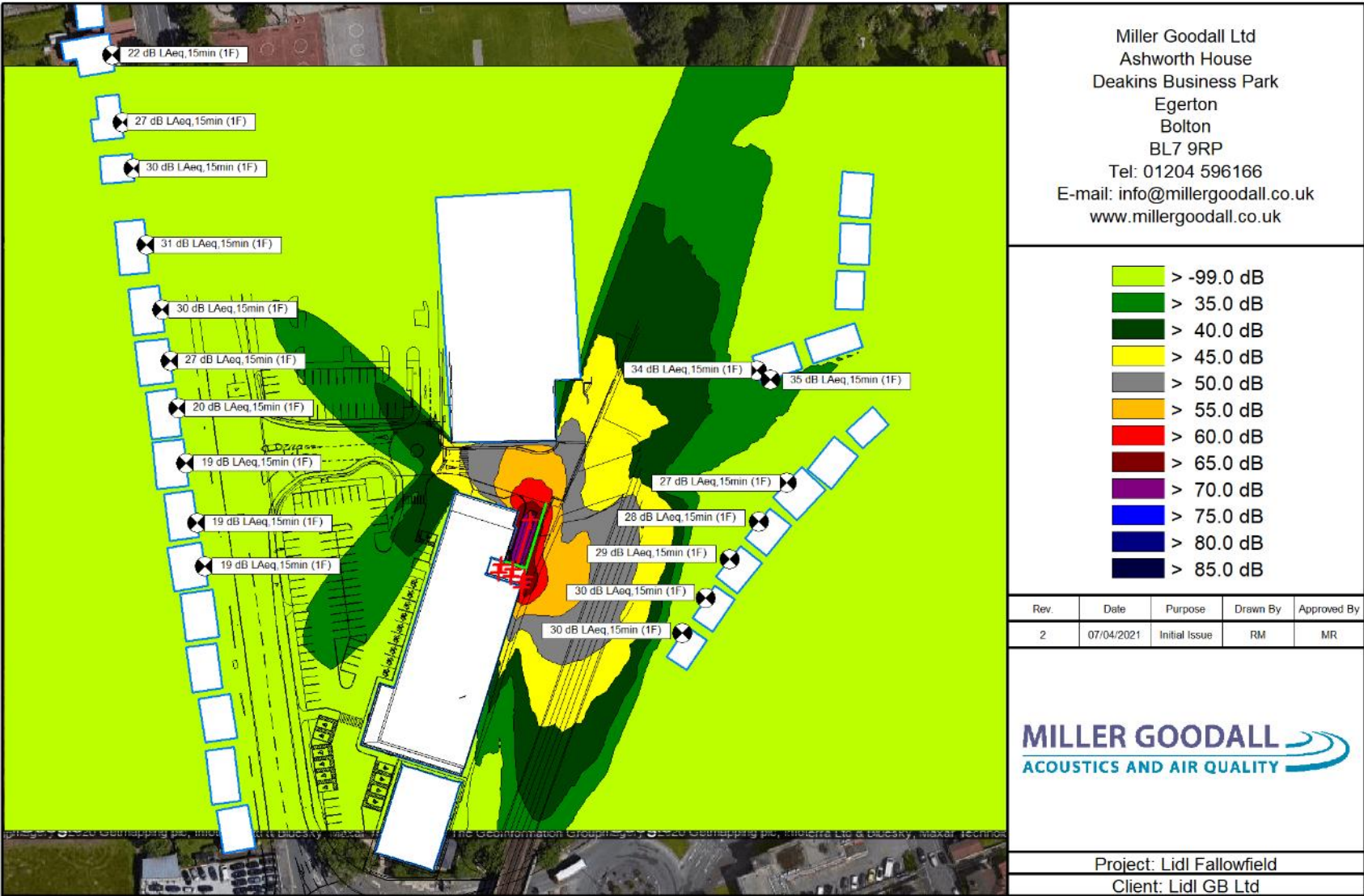
Appendix 3A: Predicted Day and Night Plant Specific Noise Level – 4.0m Grid Height (dB)



Appendix 3B: Predicted Daytime HGV Delivery and Plant Noise Specific Noise Level – 4.0m Grid Height (dB)



Appendix 3C: Predicted Night-time HGV Delivery and Plant Noise Specific Noise Level – 4.0m Grid Height (dB)



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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.

R_w Single number rating used to describe the sound insulation of building elements and is defined in BS EN ISO 10140-2: 2010 (formerly BSEN ISO 140-3:1995). It is derived by measurement under laboratory conditions and does not take into account the effects of flanking transmissions.

$D_{nT,w}$ The weighted standardized level difference is a single figure rating used to describe the sound insulation of a construction separating two rooms, for example a wall or floor, and is defined in BS EN ISO 16283-1:2014 (formerly BSEN ISO 140-4:1998). It is derived by measurement of an in-situ construction and therefore takes into account the effects of flanking transmissions, workmanship etc.

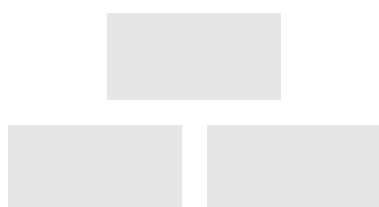
$D_{ne,w}$ The weighted element-normalized level difference is a single figure rating used to describe the sound insulation of small elements within a larger construction and is defined in BS EN ISO 10140-2:2010 (BSEN ISO 140-10:1991). It is most often used to rate the sound insulation performance of ventilator units e.g. trickle vents.

C_{tr} A single-number spectrum adaptation term used to characterise the sound insulation rating with respect to urban traffic. It is defined in ISO 717-1:2013.

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Miller Goodall Letter (19th May 2023)



19th May 2023

Planning Inspectorate
Temple Quay House
2 The Square
Bristol, BS1 6PN

Dear Sir/Madam,

Subject: Appeal for Lidl GB Ltd – Variation of Condition 10 (servicing hours) on Planning Permission Ref. 130189/FO/2021 at Fallowfield Retail Park, Birchfields Rd, Manchester M14 6FS

I am writing as an expert witness on behalf of Lidl Great Britain Limited (Lidl) in respect of the above site to address the potential noise implications for the residents along Birchfields Road. This concern was cited by Manchester City Council (MCC) Planning Department as a reason for refusing application 134931/JO/2022.

Previous noise assessments for the site by Miller Goodall primarily considered noise from HGV delivery activity and external plant installations. Our latest assessment (report 102452-4v2 dated 24 October 2022) evaluated the potential impact from deliveries during the proposed extended servicing hours. We found the impact during the proposed extended hours to be 'low' using BS 4142 assessment methodology.

MCC, while not disputing our findings, expressed "significant concerns" over potential impacts on residential amenity. They suggest that noise and disturbance could arise from vehicle movements (including use of the signalised junction), vibrations, equipment use, and reversing beepers, particularly during warm weather when windows may be open.

However, our latest assessment included service yard activity noises such as equipment use and reversing beepers, and determined the impact on surrounding housing, especially on Birchfields Road, to be minimal due to the distance and the site building's screening effect. Regarding vibrations, we are not aware of any existing complaints from Birchfields Road residents about

Miller Goodall Limited

Ashworth House · Deakins Business Park · Blackburn Road · Egerton · Bolton · BL7 9RP

Tel: 01204 596166 · E-mail: info@millergoodall.co.uk

www.millergoodall.co.uk

Company Registration No. 5201673

groundborne vibration from HGVs. If such an issue arises, the responsibility to repair the road lies with the council, and it should not be a ground for refusing the application.

We concur with the council that the most substantial noise for Birchfields Road residents would likely come from HGV movements. However, as per subclause 1.3 of BS 4142, public road vehicle noise isn't considered an industrial or commercial noise. Given the existing early morning bus services and other HGVs, a single delivery vehicle associated with the site wouldn't significantly alter existing noise levels.

Residents would not be more affected by an HGV servicing the site than by any other road-using HGV. Once an HGV enters the site, moving away from the houses, the resulting noise level significantly decreases, similar to an HGV continuing along the main road.

Miller Goodall believes that HGV deliveries within the proposed extension of hours will not materially increase average noise levels at Birchfields Road residences. Consequently, the need for open or closed windows would be determined by general traffic not associated with the site, including other commercial HGVs, buses, cars and vans, motorbikes, and occasional speeding vehicles.

Regarding the concern about HGVs using the signalised junction, the junction's lights would typically be green during the proposed extended hours, as the retail carpark would not be in general use. Even if idling occurs, it would be brief, and likely quieter than HGVs travelling straight past the junction at 30 mph. Moreover, per BS 4142, it is usually inappropriate to assess the impact of HGVs using public roads as it may overstate the impacts while ignoring the predominant road traffic noise unrelated to the assessment.

In conclusion, we disagree with the council's view that extended servicing hours would negatively impact the amenity level for residents on Birchfields Road. We maintain that the additional servicing hours would not cause unacceptable impacts and thus support the application for extended hours.

Yours faithfully,



Michael Rickard BA(Hons) PG Dip MIOA

Associate Director
Miller Goodall Ltd



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Enterprise Campus, Alconbury Weald, Huntingdon, PE28 4XA. Regulated by RICS.