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McDonald's Restaurants Limited

MCDONALD'S, FAILSWORTH #434

Noise Impact Assessment

Report No. 26-0073-0 R01



♦ PROTECT ♦ ENHANCE ♦ CONNECT

McDonald's Restaurants Limited

McDonald's, Failsworth #434

Noise Impact Assessment

Report No.:
26-0073-0 R01

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0 NON-TECHNICAL SUMMARY

0.1 The McDonald's located at Failsworth (#434) currently has permission to operate from 07:00 – 23:00, seven days a week. The store is investigating the possibility of extending its operational hours to enable trade 05:00 – 00:00, seven days a week.

0.2 A noise impact assessment was completed between 09th – 10th April 2026 to investigate the existing noise climate with and without the normal operation of the store, and to review the viability of the application.

0.3 The McDonald's address is 1169 Oldham Rd, Failsworth, Manchester. M40 2FU. The main contributor of noise in the area was local busy and noisy traffic from Oldham Road. It highly dominated noise levels in the area and masked most other local noise events. There are some residential properties located adjacent to the north side of store's premises, in addition to a few other units across street to the southeast direction from the store.

0.4 An assessment of the potential noise impact due to the extension of operating hours has been undertaken for the four principal noise sources. The significance of each has been assessed with national planning and noise policy regarding the Noise Policy Statement for England 2010, and therefore the National Planning Policy Framework 2012 (rev 2024):

Effect Threshold	*Subjective / Objective Assessment levels in-front of residential façades*			
	People	**Vehicles**	**COD/Store**	**Roof Plant**
Significant observable adverse effect **(SOAEL)**		✓		✓
Lowest observable adverse effect level **(LOAEL)**		↓		↓
No observable adverse effect level **(NOAEL)**	✓	✓	✓	✓

Table 0: Noise Significance Impact Thresholds for extending hours of operation of the drive thru and in store eating services

0.5 It is not considered that people and COD noise would cause any adverse effect on the nearest residents for the proposed extended period (NOAEL); while vehicles and plant noise sources are predicted to cause a significant impact (SOAEL). Thus, some mitigation measures have been advised to minimise impact from vehicles and plant noise and prevent risks of any potential adverse impact; therefore, with these measures the aspiration set out by Paragraph 198 of the NPPF and the Noise Policy Statement for England is satisfied. Outlined mitigation strategy is provided in this report.

0.6 A Premises Noise Management Plan is also proposed and set out in Appendix C. Such a Plan establishes good practice proactively and will reduce the risk of associated noise impact on the quality of amenity to a minimum. The impact on residents can be expected to be reduced overall by allowing its application, and any increased impact from vehicle noise in the area is expected to be marginal and will be balanced against the benefits.

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1 INTRODUCTION

1.1 Sustainable Acoustics Ltd is an independent acoustic consultancy who has been commissioned to carry out a noise impact assessment, as part of the planning application for the proposed extension of hours of McDonald's Failsworth (#434).

1.2 It is understood that the restaurant currently operates between 07:00 – 23:00hrs, seven days a week, and it is currently sought to investigate the viability of applying for an extension to enable trade 05:00 – 00:00 seven days a week.

1.3 An overnight noise survey has been undertaken between 22:00 and 08:00 on the 09th – 10th April 2026. The noise survey established the existing activity around the site during operational hours, as well as the night and early-morning periods when the store is currently closed, to inform an assessment of the likely noise impact during the proposed additional hours.

1.4 The assessment has been completed with regard for national policy on noise, relevant to England (NPSE), which specifies the approach to be taken to achieve the requirements of the National Planning Policy Framework (NPPF).

2 THE AREA & CHARACTER

2.1 McDonald's [#434] is located at 1169 Oldham Rd, Failsworth, Manchester, M40 2FU. Oldham Road has a variety of uses and types of buildings from residential, commercial and public use. The nearest residential properties are located in the residential area located to the rear side of the store on Irvin Street, in addition to a few units to the east side on Oldham Road, as indicated in Figure 1 below.

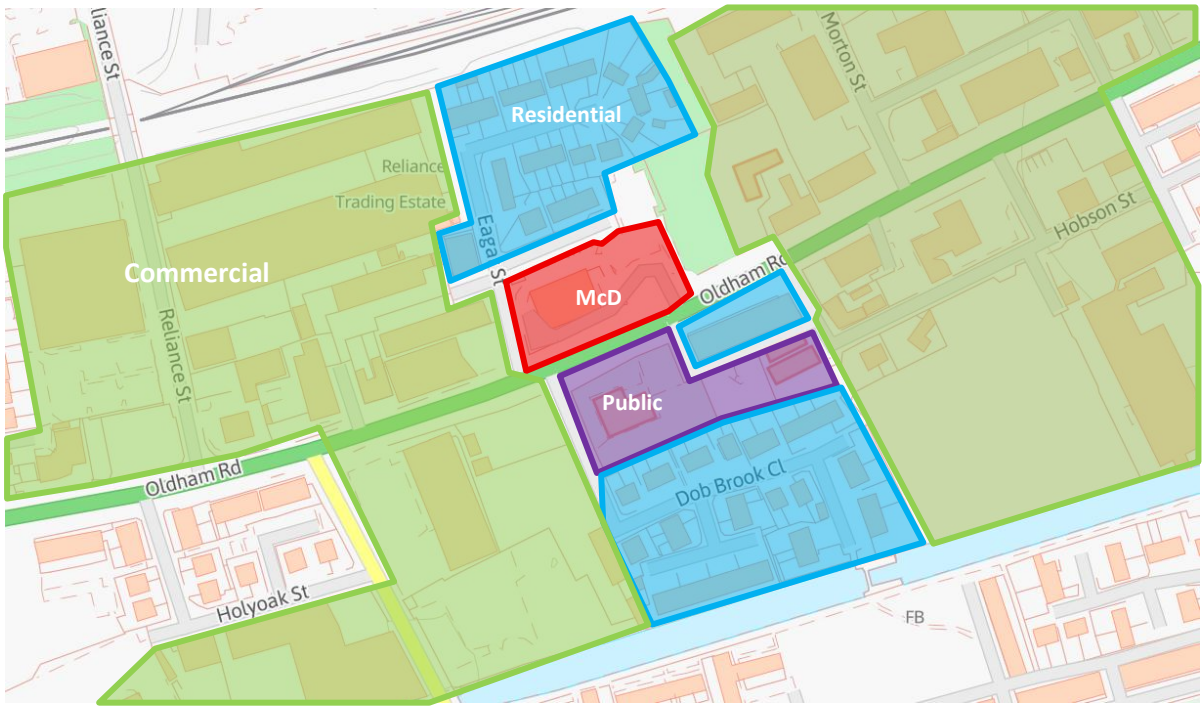


Figure 1: Map of local area with context

2.2 The main vehicle access is located to the east side of the store, on Oldham Road. From there, the lane splits into two different paths, one for the drive-thru and one leading to the car park area, both following a clockwise rotation. The car park of the store has approximately 47 parking spaces located at the northeast quadrant of the land.

2.3 The ordering point is to the west side of the store, from where it would have direct line of sight to the residents Eagar Street to the northwest direction.

2.4 The main contributor of noise in the area is traffic from Oldham Road, in addition to noises from activities and movements related with the multiple commercial properties around.

2.5 Figure 2 shows the store surroundings in more detail, indicating the distances from possible noise sources to the closest properties:

- Plant: **40m** from respective closest noise-sensitive receivers
- COD: **40m** from closest noise-sensitive receiver
- Drive thru & car park: **24m** from closest noise-sensitive receiver
- Parking Space (closest): **8m** from closest noise-sensitive receiver



Figure 2: Map of local area with distances to residential properties

2.6 It is understood that there have been no complaints regarding plant noise or any other noise source from the current operation of the restaurant. It is also understood that the store has had no problem with anti-social behaviour, however, McDonald's takes a proactive approach on this, as set out in Appendixes C and F.

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2.7 **Equipment**: The following equipment was used in the surveys.

Equipment	Type	Serial Number	Calibration	
			Date	Certificate no
Long-term unattended monitor				
Svantek Class 1 Sound and Vibration Analyser	958A	59190	15/05/2024	1508304-1s
Microphone	MK 255	12731	15/05/2024	1508304-1s
Preamplifier	SV 12L	58585	15/05/2024	1508304-1s
Short-term attended noise meter				
Rion Class 1 sound level meter	NA-28	170246	05/08/2025	UCRT25/2135
Preamplifier	NH-23	60254	05/08/2025	UCRT25/2135
Microphone	UC-59	26589	05/08/2025	UCRT25/2135
Rion Calibrator	NC-74	34773049	14/05/2025	1512081-1

Table 1: The equipment used during the survey between 09th – 10th April 2026

2.8 All equipment is within regularly traceable calibration, and the sound level meters were calibrated using field calibrators before and after the survey periods, without any drift observed.

3 NOISE SURVEYS

3.1 The store had scheduled some internal maintenance works at their premises on the 09th of April night. Due to this the store closed at 21:30hrs on that day, which allowed to measured sound levels without the influence of the store's operation during the night hours, until the opening time on the 10th of April morning.

3.2 **Attended survey**: Attended surveys were undertaken at the site between 06:30 and 08:00 on the 10th April 2026 to capture the opening period of the store, as well the 30 minutes immediately prior the store was opened. The attended measurements were carried out at one position as shown in Figure 3 with red numbered placemark; chosen to measure and establish the typical noise levels for activities associated with the McDonald's operation, as well as the ambient noise levels in the area. Observations were also made during the attended measurements, which were at suitable positions to have a view of those arriving and leaving the restaurant. Observations and measurements made during the attended survey are summarised in Appendix A.

3.3 **Unattended survey**: Monitoring was also undertaken at one fixed position, shown in Figure 3 with a blue placemark, placed 3m above street level in a proxy position of the nearest sensitive receivers to capture representative ambient and background noise levels at the residential facades overnight between 09th – 10th April 2026. This position logged noise levels in 1-minute and 15-minute periods over the survey, covering the attended measurements and the intervening hours in the night.

3.4 **Conditions**: The weather conditions were clear, between 3°C and 7°C, and dry for the duration of the survey. During the survey period there was some light breeze and occasional wind gusts below 5 m/s.

3.5 **Locations**: Measurement positions are shown at Figure 3. Attended measurements were taken between 1.2 to 1.5m above the ground and at least 3m from a reflective surface.

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Figure 3: Attended and unattended measurement positions

4 NATIONAL NOISE PLANNING GUIDANCE & ASSESSMENT CRITERIA

4.1 The Assessment criteria used in this report is based on the following local and national policies, and national and international standards:

- Manchester's Local Development Framework & Planning and Noise Technical Guidance
- BS EN ISO 4142:2012 – Methods for rating and assessing industrial and commercial sound
- The National Planning Policy Framework (NPPF) and Noise Policy Statement England (NPSE)

4.2 Full detail of the relevant national policies and standards can be found in Appendix B. The local policy is summarised below.

Local Policy

The Manchester's Local Development Framework as adopted on 11th July 2012 provides the following comments in its Policy C10 for 'Leisure and the Evening Economy':

New development and redevelopment that supports the evening economy, contributes to the vitality of district centres and supports a balanced and socially inclusive evening/night-time economy will be permitted, subject to the following considerations:

1. *Cumulative impact – in areas where there is already a concentration of bars (A4), hot food takeaways (A5) and other night-time uses which are detrimental to the character or vitality and viability of the centre, there will be a presumption against further facilities.*
2. *Residential amenity – the proposed use should not create an unacceptable impact on neighbouring uses in terms of noise, traffic and disturbance.*

3. *Balance - new uses in Manchester centres should support both the day-time and evening/night-time economies whilst not undermining the role of the primary shopping area.*

Later in policy DM1 for 'Development Management' it provides the following comments in relation to noise:

All development should have regard to the following specific issues for which more detailed guidance may be given within a supplementary planning document:

- *Appropriate siting, layout, scale, form, massing, materials and detail.*
- *Impact on the surrounding areas in terms of the design, scale and appearance of the proposed development. Development should have regard to the character of the surrounding area.*
- *Effects on amenity, including privacy, light, noise, vibration, air quality, odours, litter, vermin, birds, road safety and traffic generation. This could also include proposals which would be sensitive to existing environmental conditions, such as noise.*
- *…*

Meanwhile, in the Planning and Noise Technical Guidance document released in October 2022 it is stated the following guidance related to noise:

Typically, any developments involving residential dwellings are the most noise-sensitive, whilst industrial developments such as general industry are one of the least noise-sensitive. However, industrial and commercial uses are amongst the most likely to cause a noise impact. Thus, many developments require noise control or protection measures to mitigate against the effects of noise from outside sources, which include the effects of noise from road or rail, industry or commercial premises. The express inclusion of noise in the National Planning Policy Framework (NPPF) means that it is a material planning consideration for local planning decisions.

3.7 MCC assessment criteria

In the context of government policy, the Council require that developments aim for:

1. A noise level between the No Observed Effect Level (this is the level of noise exposure below which no effect at all on health or quality of life can be detected) and the Lowest Observed Adverse Effect Level (this is the level of noise exposure above which adverse effects on health and quality of life can be detected). Conditions may be attached.

If point 1 cannot be achieved, then:

2. If the assessment results in a level between the Lowest Observed Adverse Effect Level and the Significant Observed Adverse Effect Level (this is the level of noise exposure above which significant adverse effects on health and quality of life occur), mitigation will be necessary to reduce the level and thus conditions will be attached.

If points 1 & 2 cannot be achieved, then:

3. If the assessment results in a Significant Observed Adverse Effect Level after mitigation, the application will be recommended for refusal.

3.7.1.5 Industrial / commercial developments

In the context of government policy, the Council require that developments aim for:

BS 4142 should be used to assess the likely impact of noise from industrial and commercial sources at noise sensitive premises. 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 having a low impact, depending on the context.

The Council consider that new developments should contribute and enhance the area in which they are located and where possible i.e. prevent 'noise creep', 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 level of 5dB (LAeq) below the typical background (LA90) 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 a judgement to be made 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 particular 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 (LAmax) at the façade of noise sensitive premises nearby in accordance with the recommendations of the WHO.

Assessment Criteria

4.3 Based on the policies and guidance we apply the following criteria to this assessment:

Source		**No Observable Adverse Effect Level (NOAEL) criteria**.
People	-	Observations
Vehicles	-	Change in ambient ≤ 3dB; Maximums (≤ 45dB internally)
COD	-	Change in ambient ≤ 3dB
Plant	-	BS4142 (5dB below background level)

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5 SUBJECTIVE OBSERVATIONS

5.1 Ambient Noise / Area Comments (noise not associated with store)

The dominant contributing noise source to the prevailing ambient noise climate and character during surveyed hours was loud and busy traffic from Oldham Road. This was highly dominating the noise levels and masking all other activities and noise sources in the area.

5.2 People

Few pedestrian customers were observed in the area. No significantly disruptive, deliberate, or aggressive antisocial behaviour was observed during the witnessed period.

5.3 Vehicles

Drive-thru was the highest contributor of movements at the store as witnessed accounting for almost 60% of the store's traffic during the witnessed period, while customers arriving by vehicle represented 30% store's traffic as witnessed during the same period. No delivery movements were registered during the morning attended measurement session, but a small allowance for those movements should be considered.

Noises from cars using the store were audible discrete events (accelerating/braking) when arriving and leaving the site as well as continuous idling noise when the drive-thru was. The accelerating noise did not stand out any more against the general soundscape than those vehicles using the local roads.

Delivery vehicles would normally generate noise with similar character and noise levels compared to other customer vehicle movements within the car park.

5.4 COD/Store Noise

During the attended measurement period it was observed that the noise levels from the COD were subjectively observed to be low to moderate range. Customers appeared to have no problem hearing the member of staff through the COD and replied in a normal speech level.

In terms of other noise sources, no other significant activity (such as in-store music or refuse trucks) was registered.

5.5 Plant

Plant noise from McDonald's store was just audible in low levels around the car park with a hum feature.

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6 RESULTS

6.1 Attended survey noise levels

Appendix A summarises the attended measurements noise levels and site observations.

6.2 Customer Count

Predicted customer traffic for the proposed extended operating hours has been received from the store for a busiest scenario expected broken down per hour.

From the attended measurements observations, an approximate distribution has been applied to the customer count received to estimate the customer activity for each type of operation: drive-thru, car park, deliveries and pedestrians. The resulting table would be as follows:

Period	Drive Thru	Car Park	Delivery	Pedestrians	Total
23:00 - 00:00	27	13	3	8	51
05:00 - 06:00	13	6	2	4	25
06:00 - 07:00	22	11	3	6	42

Table 2: Projected customer counts during potential opening hours of store

6.3 Unattended survey

The variation of ambient noise levels (L_{Amax}, L_{Aeq}, L_{A90}) between 21:00 – 08:00 09th – 10th April 2026 at the LT1 position, as indicated in Figure 3, is presented in 15-minute results in Figure 4.

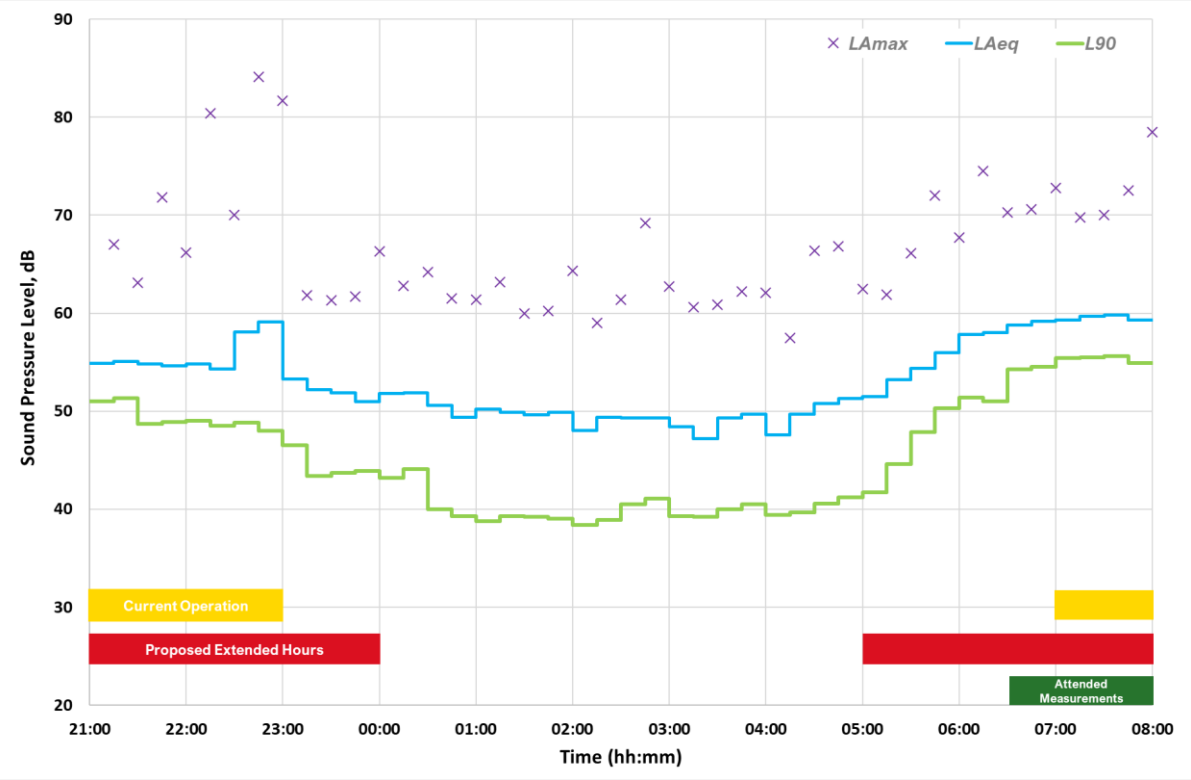


Figure 4: 15-minute time history at unattended position LT1

7 ASSESSMENT

7.1 People / ASB

7.1.1 Subjectively, no significantly disruptive noise from people was observed during the site visit, and only a few pedestrians were seen moving through the car park.

7.1.2 Assessment of people noise is complex:

- The level and duration of the noise alone do not necessarily provide a comprehensive idea of the actual impact likely – even with the context of the residual background. For example, raised voices will be likely to yield more of an impact than a broadband "anonymous" noise of the same levels due to sociological/psychological factors of sound perception.

- It cannot be intrinsically linked to people using the store for its intended purposes and human behaviour is unpredictable – there is no reason that people noise at any store should achieve anything other than No Observable Effect Level.

7.1.3 Notwithstanding, it is still considered of great importance that noise from raised voices, vehicle misuse, or otherwise should be prevented where possible by mitigation through tight management.

7.1.4 It is considered that the best way to deal with people noise, both for existing hours and proposed hours, is via proactively implementing the antisocial behaviour policy protocol as outlined in Appendix F; which could be part of a planning condition to be implemented in full to prevent the noise impact occurring in this extended period.

7.1.5 This protocol will include review of noise being made in these hours by customers, to ensure it is not noticeably worse.

7.2 Vehicles – Effect on Ambient Noise

7.2.1 To assess potential noise from the additional opening hours of McDonald's, the noise from vehicles passing by the closest point of the McDonald's store to the residential properties will be added to the existing ambient noise level to establish the worst-case predicted increase in ambient noise level due to the operation of McDonald's. This study will consider Drive-thru, customers arriving by car, and deliveries.

Note that this is not a BS4142 assessment, but it is considered an effective way to assess the impact that additional vehicle movements may have at nearby residential receptors. This is supported by the approach taken in environmental statements, and guidance by IEMA and the Calculation of Road Traffic Noise (CRTN). BS 4142 is not aimed at accurately assessing impact for this type of noise, even though it now includes noise from vehicles around commercial sites. This is because the standard aims to assess noise from fixed plant and in this case the vehicles are not operating around the site but passing through it as diverted traffic. The difference in ambient noise level created by the number of vehicles is therefore considered a more robust approach to understand the impact of this type of noise.

7.2.2 It is understood the store runs delivery with Uber Eats, Just Eat and Deliveroo platforms. While all these platforms do use motorised scooters, Uber Eats limit these vehicles to engine sizes of 50CC. From previous surveys, scooters were found to have similar maximum noise levels to those of petrol cars. Therefore, calculations were done assuming delivery vehicles that have the same or very similar acoustic properties as customer cars. Other types of vehicles with larger engines used as delivery vehicles were not considered for this part of the assessment.

7.2.3 Noise levels from individual cars passing have been measured at other McDonald's stores and were found to be in the 62 - 66 dB(A) range at a distance of 7m perpendicular to direction of travel.

7.2.4 Noise level at receiver: In order to undertake propagation calculations, those measurements are implemented together with the following assumptions, as summarised in the table below:

Previously Measured, at other sites	
Measured level of vehicle during movement over a few seconds at McDonald's Carpark, dB (L_{Aeq})	66
Distance from vehicle at the instant the L_{Aeq} was measured, m	7
Estimate of Sound Power of moving source, dB (L_{Aw})	91
Calculations for Failsworth #434	
Closest distance to residential window from drive-thru, m	24
Highest incident level of passing vehicle at residential window, dB (L_{Aeq})	55
Approximate total duration of a typical vehicle movement on McD premises (excluding idling), seconds	10

Table 3: Measurements used to approximate noise at window per vehicle – screening omitted

7.2.5 The distance of the car park to the closest receiver is variable throughout its entire length, where the nearest section from where all vehicles, including drive-thru, deliveries and customer arriving by car, is approximately 24m away.

7.2.6 The calculation for change in ambient noise level is given below in Table 4. The levels have been calculated using a logarithmic average for the noise levels over the extended period, by considering each of the 3,600 seconds in the period based on the data from Table 3.

	Lowest Existing 15-min Ambient Noise Level at receiver, dB(A)	Estimated vehicle count (Car Park, Deliveries and Drive-Thru)	Estimated contribution from additional vehicles alone, over the hour, $L_{Aeq, 1hour}$	Estimated Change to Ambient Noise Level from vehicles alone, dB(A)
23:00 - 00:00	*51*	43	*46*	**52.2 (+1.2)**
05:00 - 06:00	*52*	21	*NA*	**52.5 (+0.5)**
06:00 - 07:00	*58*	36	*NA*	**58.2 (+0.2)**

Table 4: Calculation of change in estimated ambient noise with additional customer vehicles.

7.2.7 It is generally considered that the minimum noticeable change in ambient noise level is 3 dB if the noise in question is steady state, anonymous sources.

7.2.8 Based on the worst-case customer counts and using 3 dB as a useful benchmark to assess the predicted change in ambient noise levels against, the change in noise level as shown in Table 4 is

likely to be not perceptible change during the proposed extended operation periods between 23:00-00:00hrs and 05:00-07:00hrs.

7.2.9 Vehicle movement noise is already present in the area in relation with the activity Oldham Road; therefore, noise from additional vehicles driving past the closest residential property would be expected to be of a similar acoustic character.

7.2.10 It is considered that vehicles entering and leaving the site would achieve an **No Observable Adverse Effect Level (NOAEL)**.

7.3 Vehicles – Maximum Noise

7.3.1 Car doors being slammed is often a typical maximum noise event to be considered where hours are extended. There may be other maximum events, but their assessment is considered simultaneous with the following one of the door slams.

7.3.2 Only door slams from customers not using the drive-thru would be expected.

7.3.3 Notwithstanding, guidance from BS 8233:2014 is generally considered to establish aspirational targets for internal ambient noise levels in the case of new housing but the standard no longer provides specific guidance on acceptable maximum noise levels. The guideline value for the onset of sleep disturbance, given in the World Health Organisation (WHO) guidelines, is 45 dB L_{Amax} within bedrooms. ProPG Planning Guidance recommends limiting events exceeding 45 dB L_{Amax} internally to fewer than 10 times per night.

7.3.4 If the attenuation from an open window is assumed to be 13 dB, a corresponding target external noise level would be 58 dB L_{Amax}.

7.3.5 The loudest typical car door slams would be of the order of 91 dB sound power.

7.3.6 The car parking space nearest to a sensitive receptor at an approximate distance of 8m. At this distance, door slams at their worst-case scenario are predicted to be 65dB L_{Amax} externally, (52dB L_{Amax} internally). This prediction exceeds the suggested threshold for maximum noise level events by 7dB.

7.3.7 Due to this, maximum noise levels from door-slamming at the store's car park for the extended hours between 23:00-00:00hrs and 05:00-07:00hrs periods are predicted to have an observable impact (**SOAEL**), and further mitigation is expected.

7.4 COD

7.4.1 During the attended part of the survey, the COD was perceived to be set at a low to moderate level during the attended measurements.

7.4.2 It was observed that customers appeared to have no problem in hearing the member of staff through the COD, and that they replied in a normal voice.

7.4.3 The distance from the COD to the closest receptor is 40m with direct line of sight to the nearest residential property.

7.4.4 Based on noise levels measured close to the COD for the noise setting (~65 dB at ~1.5m), external levels at a worst-case closest distance of 40m would be expected to be of the order of 36 dB $L_{Aeq,T}$ at receiver's window.

7.4.5 Assuming again a 13dB noise reduction for an open window, internal levels within the nearest residence from the COD will be 23 dB, which would be well below the recommended levels mentioned in BS 8233: 2014 for night-time hours, as seen in Appendix B.

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7.4.6 Considering the lowest 15-minute ambient level during the extended period at the nearest sensitive receptor position from the COD area equal to L_{Aeq} 51dB, a contribution to the ambient level of a COD event of 36dB would show no increase to the existing ambient levels, and therefore it is not expected to be noticeable.

7.4.7 Due to these considerations, it is predicted that the COD noise will achieve a **No Observable Adverse Effect Level (NOAEL)**.

7.5 Plant

7.5.1 Subjectively, the extract plant outlet on the rooftop was audible in low levels around the store within the car park area. From the attended measurements some tonality was measured according to the objective simplified method for assessing audibility of tones.

7.5.2 Due to the maintenance works occurring at the store premises, the plant noise wouldn't have influenced the background sound levels in the area from the closure time at 21:30 and until the opening hour the next morning. This appears to be supported by the background sound levels results as shown in the 15-minute time-history levels from Figure 4, with a slight step down observed at 21:30hrs, and the subsequent increment in background levels at 6:30hrs, just half an hour before the opening time.

7.5.3 An enclosure around the roof plant was seen on site during the short, attended measurement of the mechanical ventilation items. Therefore, a 5dB screening attenuation has been considered appropriate for the plant noise predictions and assessment towards the nearby resident's windows.

7.5.4 A BS4142 assessment is included below using the modal L_{A90} value as the representative background level for the proposed extended periods between 23:00-00:00hrs as well as 05:00-07:00hrs.

Results	42m	Relevant BS4142 clause	Commentary
Measured Sound Pressure Level of plant items (at distance of 1m)	62	7.3.1	Sound pressure level measured at 1m from the two loudest items of the plant. Referred to as the "ambient" sound in BS 4142
Residual sound level	-	7.3.3	Sound level measured at same position as ambient sound, when the existing fixed plant item is in lower settings.
Specific sound level	84	7.3.4	Calculated by removing residual noise from the measured plant noise. Given the proximity of the measurement to the plant items, no correction has been considered (allowing for a worst-case scenario).
Calculated Sound Power Level	92		Calculated sound power level from the measurement at 1m, considering a hemispherical propagation from the kitchen extract outlet.
Specific sound level at receiver's window position	**47**		Calculated summed level at the closest residential window (40m away).
Acoustic feature correction	+4	9.2	Tonality correction applied as per objective simplified method for assessing tones.

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Results	42m	Relevant BS4142 clause	Commentary
Rating level	51	9.2	Sound level at 1m from residential, calculated from source measurements with a tonality correction.
Background sound level	44	8.3	Modal 15-minute background sound level between 23:00 - 00:00hrs & 05:00 - 07:00hrs.
Excess of rating over background sound level	**51 - 44 = +7**	11	
BS 4142 Assessment	+7dB	11	
Uncertainty of the assessment	*+/- 3 dB*	*10*	*The measurements were taken under repeatable conditions and therefore the uncertainty of the result will be low. However, the uncertainty has been determined from variability in noise levels measured affected by road traffic noise, which is likely to fluctuate.*

Table 5: BS4142:2014 Table for plant noise assessment

7.5.5 The result of the assessment is a rating level of 51dB for the sensitive receptor position reviewed. The rated plant noise at the closest residential is therefore predicted to be 7dB above the existing typical background level during the proposed extended hours.

7.5.6 From the specific plant noise level of 47dB, considering that the incident interior levels would be 34dB, where 13dB reduction is assumed from an open window. This will be 4dB above the recommended internal noise levels for sleep hours.

7.5.7 With all these considerations, some mitigation measures are expected to be implemented in order to avoid any potential adverse effect from plant noise (**SOAEL**).

8 OUTLINE MITIGATION

8.1 The proposed extension of hours of the restaurant is considered unlikely to generate any additional impact when considering noise from people and COD system, whereas vehicles and plant noises are expected to incorporate mitigation measures to minimise noise impact and prevent risk of any adverse effect on the nearby residential properties.

8.2 **People**: A premises noise management plan (Appendix C) is to be implemented, which embeds taking proactive best practice steps to further reduce the potential for noise impact on the residential properties. This is considered to be advisory to minimise the risk of noise from people, and in case of antisocial behaviour, and could be included as informative to any permission.

8.3 **Vehicles**: Based on the observations and calculations, some mitigation measures are expected to be implemented by the store to minimise impact from door-slam events at the carpark.

To maintain adequate incident maximum noise levels L_{Amax} at the nearest receptors (45 dB internally, 53 dB façade level) a minimum source-receiver distance of 17m is required. To guarantee this, a time restriction to the car park spaces located at the boundary of the car park on the northeast corner should be limited to daytime hours use between 07:00hrs and 23:00hrs, as indicated in the Figure 5 below.



Figure 5: Vehicles maximum noise mitigation

8.4 **COD**: It is predicted that COD noise levels will have no noise impact at the nearest neighbouring property located 40m away, and no further mitigation is required provided that the settings and noise levels are not modified to the current operation.

8.5 **Plant**: Based on the observations and calculations, it is considered appropriate to implement some mitigation strategies and reduce the potential noise impact that the plant noise could generate

towards the nearby residents. A minimum reduction to the plant noise levels of 12dB is considered appropriate.

Since the noise survey, some fixing and maintenance works have been implemented to the roof plant items, which included the replacement of some faulty components of the kitchen extract's engine that were generating high noise levels. As a result of these works, a noise reduction of 11dB has been measured on the 11th of June 2026; and furthermore, the repairs to the mechanical services component also help to reduce the tonality features that the plant units have; therefore, a reduction of 2dB to the character penalty is considered appropriate.

Overall, this would represent a 13dB reduction to the rating level which would achieve non-observable impact (**NOAEL**) from plant noise, and no further mitigation measures are required.

8.6 By implementing these mitigation recommendations any extension to the hours of operation is considered to result in an acceptable level of noise impact, which is considered to implement the aims of the national Noise Policy Statement for England (2010) and the NPPF aims to protect residential quality of life whilst balancing the burden on business.

9 NOISE IMPACT ASSESSMENT SUMMARY

9.1 Based on the assessments above the significance of the impact from noise from each source in turn is summarised below, assuming mitigation has been applied, with regard for the Noise Policy Statement for England 2010, and therefore the NPPF:

	Subjective / Objective Assessment levels in-front of residential façades			
Effect Threshold	**People**	**Vehicles**	**COD/Store**	**Roof Plant**
Significant observable adverse effect **(SOAEL)**		✓		✓
Lowest observable adverse effect level **(LOAEL)**		↓		↓
No observable adverse effect level **(NOAEL)**	✓	✓	✓	✓

Table 6: Noise Significance Impact Thresholds for extending hours of operation

9.2 No observable impact (NOAEL) is acceptable according to Planning National Policy (NPPF) paragraph 198.

9.3 Best practice measures have been recommended to reduce and keep noise impact to a minimum, as required by noise policy, should an extension be granted.

9.4 It is considered that the evidence supports this application on noise grounds, and the premises noise management plan delivers an overall enhancement to the existing quality of life of residents, as encouraged by the national policy.

10 CONCLUSION

10.1 A noise impact assessment has been completed by Sustainable Acoustics Ltd. at 1169 Oldham Road, Failsworth, Manchester M40 2FU, based on the possibility of extending the opening hours of the restaurant and drive thru to operate between 05:00-00:00hrs, 7 days a week.

10.2 The assessment was completed using a combination of attended and unattended measurements between 21:00-08:00hrs of 09th – 10th April 2026.

10.3 The assessment shows that the noise impact in terms of **people** and **COD system** noise sources would be considered to have a **No Observable Adverse Effect Level (NOAEL)**, while **vehicle** and **plant** noises are predicted to have a high risk of adverse effect **(SOAEL)** on the neighbouring residential properties before a mitigation scheme is implemented.

10.4 Mitigation measures have been included to minimise the risk of impact from **vehicle** and **plant** noise sources to the lowest practicable degree, reducing to no observable effect level (**NOAEL**) and ensure an acceptable noise environment for the nearest residents. This demonstrates the implementation of national policy, and would enhance quality of life for residents compared with the existing daytime noise.

10.5 A premises noise management plan (PNMP) at Appendix C is proposed, which if implemented is extended to proactively minimise any potential risk of noise resulting from plant noise or any kind of antisocial behaviour. This is a precautionary measure as no ASB was observed during the survey, and the risk of it considered to be very low. It is not considered necessary to add a planning condition in relation to this, but this is an option where concerns remain.

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APPENDIX A

Acoustic Spot Measurements and Observations

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Time	Duration (mm: ss)	L_{Aeq}	L_{Amax}	L_{A90}	L_{eq} 63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Pos	Remarks	Customer Count
18:42	01:00	84	87	82	73	78	73	70	82	75	70	64	Roof	1m from kitchen extract	--
06:30	15:00	74	87	66	69	66	66	68	71	68	58	48	MP1	Soundscape dominated by busy and loud traffic noise. No McD plant noise audible.	--
06:46	15:00	72	89	63	71	65	64	66	69	65	54	61	MP2	Ambient dominated by busy and loud traffic noise. Low-level McD plant noise with hum audible in background.	DT: 4 CP: 2 Peds: 0 Del: 0
07:02	15:00	71	83	65	70	65	64	66	69	64	53	42	MP2	Ambient dominated by busy and loud traffic noise. Low-level McD plant noise with hum audible in background.	DT: 10 CP: 4 Peds: 4 Del: 0
07:18	00:19	69	72	67	71	73	64	63	66	63	55	52	COD	Drive-thru order, 1m from COD	--
07:20	01:01	65	70	61	63	63	57	58	61	59	48	43	COD	Drive-thru order, 1m from COD	--
07:27	15:00	72	83	65	71	67	66	66	69	65	54	40	MP2	Ambient dominated by busy and loud traffic noise. Low-level McD plant noise with hum audible in background. Short local alarm event.	DT: 7 CP: 3 Peds: 1 Del: 0
07:44	00:22	68	73	66	64	65	64	63	65	61	50	38	COD	Drive-thru order, 1m from COD	--
07:45	15:00	71	82	64	71	67	67	67	69	64	53	43	MP2	Ambient dominated by busy and loud traffic noise. Low-level McD plant noise with hum audible in background.	DT: 6 CP: 4 Peds: 2 Del: 0

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APPENDIX B

Policies and Standards

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National Planning Policy Framework

Current planning policy is based on the National Planning Policy Framework (NPPF), revised in December 2024, which supports a presumption in favour of sustainable development, unless the adverse impacts of that development would outweigh the benefits when assessed against the policies in the Framework, taken as a whole.

The noise implications of development are recognised at paragraph 198, where it is stated that planning policies and decisions should:

- *"mitigate and reduce to a minimum potential adverse impact from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life65"*
- *"Identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason"*

Noise Policy Statement for England

Paragraph 198 of the NPPF also refers to advice on adverse effects of noise given in the Noise Policy Statement for England1 (NPSE). This document sets out a policy vision to:

"Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development".

To achieve this vision the Statement sets the following three aims:

"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *avoid significant adverse impacts on health and quality of life*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life.*

The following descriptive terms are implemented in the NPSE:

No observed effect level (NOEL): this is the level of noise exposure below which no effect at all on health or quality of life can be detected.

Lowest observed adverse effect level (LOAEL): this is the level of noise exposure above which adverse effects on health and quality of life can be detected.

Significant observed adverse effect level (SOAEL): This is the level of noise exposure above which significant adverse effects on health and quality of life occur.

[1] Department for Environment, Food and Rural Affairs, *Noise Policy Statement for England,* London, 2010

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National Planning Policy Guidance on Noise (July 2019)

This guidance is consistent with the policy within NPSE. The newly refreshed guidance says *"Good acoustic design needs to be considered early in the planning process to ensure that the most appropriate and cost-effective solutions are identified from the outset"*.

It also says noise can override other planning concerns, where justified, *"although it is important to look at noise in the context of the wider characteristics of a development proposal"*.

It makes clear that *"As noise is a complex technical issue, it may be appropriate to seek experienced specialist assistance when applying this policy"*.

The guidance provides the following "Noise Exposure Hierarchy Table":

Response	Examples of outcomes	Increasing effect level	Action
NO OBSERVED EFFECT LEVEL			
Not present	No Effect	No Observed Effect	No specific measures required
NO OBSERVED ADVERSE EFFECT LEVEL			
Present and not intrusive	Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life.	No Observed Adverse Effect	No specific measures required
LOWEST OBSERVED ADVERSE EFFECT LEVEL			
Present and intrusive	Noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
SIGNIFICANT OBSERVED ADVERSE EFFECT LEVEL			
Present and disruptive	The noise causes a material change in behaviour, attitude or other physiological response, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Present and very disruptive	Extensive and regular changes in behaviour, attitude or other physiological response and/or an inability to mitigate effect of noise leading to psychological stress, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

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British Standard BS 4142:2014

The British Standard BS 4142:2014, Methods for rating and assessing industrial and commercial sound is an update of the previous edition of the standard and describes methods for rating and assessing sound of an industrial and/or commercial nature, to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident. The sound from the industrial/commercial source is rated by taking into account the sound level of the source, known as the specific sound level, and its characteristics, such as tonal, impulsive or intermittency of the source, and applying an appropriate correction to give the rating level of the sound source. To gain an initial estimate of the potential impacts of the sound source, it is compared to the background noise level, and the level by which the rating level exceeds the background noise level indicates the following potential impacts:

Difference	Assessment
Around 10 dB or more	Likely to be an indication of a significant adverse impact, depending on the context.
Around 5 dB	Likely to be an indication of an adverse impact, depending on the context.
0 dB or less	An indication of the specific sound source having a low impact, depending on the context.

The standard states that "where an initial estimate of the impact needs to be modified due to the context, take all pertinent factors into consideration, including the following:

1) *The absolute level of the sound*
2) *The character and level of the residual sound compared to the character and level of the specific sound*
3) *The sensitivity of the receptor".*

The standard also requires an indication of the uncertainty of the assessment made.

British Standard BS 8233: 2014

The British Standard BS 8233: 2014, *Guidance on Sound insulation and noise reduction for buildings* provides additional guidance on noise levels from sources without specific character in the built environment, based on the recommendations of the World Health Organisation. The criteria desirable levels of steady state, "anonymous" noise in unoccupied spaces within dwellings, from sources such as road traffic, mechanical services and other continuously running plant, are tabulated below:

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,\ 16\ hour}$	-
Dining	Dining room/area	40 dB $L_{Aeq,\ 16\ hour}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,\ 16\ hour}$	30 dB $L_{Aeq,\ 8\ hour}$

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It is noted, however that where development is considered necessary or desirable, despite external noise level above WHO guidelines, the above target levels may be relaxed by up to 5 dB.

The standard also recommends that for traditional external amenity areas, such as gardens, it is desirable that external noise levels do not exceed 50 dB $L_{Aeq,\,T}$, and that 55 dB $L_{Aeq,\,T}$ would be acceptable in noisier environments. However, it is recognised that these values may not be achievable in all areas where development is desirable, and in such locations, development should be designed to achieve the lowest practicable levels.

ProPG

Professional Practice Guidance on Planning & Noise: New Residential Development, published May 2017 by a Working Group of the Institute of Acoustics, Association of Noise Consultants and Chartered Institute of Environmental Health to provide guidance on the approach to the management of noise within the planning system in England. Whilst it is not an official government code of practice, it is endorsed by the appropriate professional bodies and reflects the NPSE, NPPF and Planning Practice Guidance. It is restricted primarily to the consideration of new residential development that will be exposed to transportation noise sources.

ProPG advocates consideration of noise at an early stage and good acoustic design to produce sustainable development. Design target noise levels are based on BS 8233: 2014 with additional guidance on individual noise events at night, how windows and ventilation should be assessed and how the assessment should be considered where target noise levels may be difficult to achieve.

The criteria for the ProPG Stage 1: Initial Site Risk Assessment are reproduced overleaf.

Note also that Appendix A para A.19: "A site should be regarded as high risk where the LAmax, f exceeds or is likely to exceed 80 dB more than 20 times per night."

As an additional note to the final comment at the bottom of Figure 1; NOTE 4 in Figure 2 with ProPG guidance gives the following advice in relation to maximum noise levels: *"In most circumstances in noise-sensitive rooms at night (e.g. bedrooms) good acoustic design can be used so that individual noise events do not normally exceed 45dB $L_{Amax,F}$ more than 10 times a night."*

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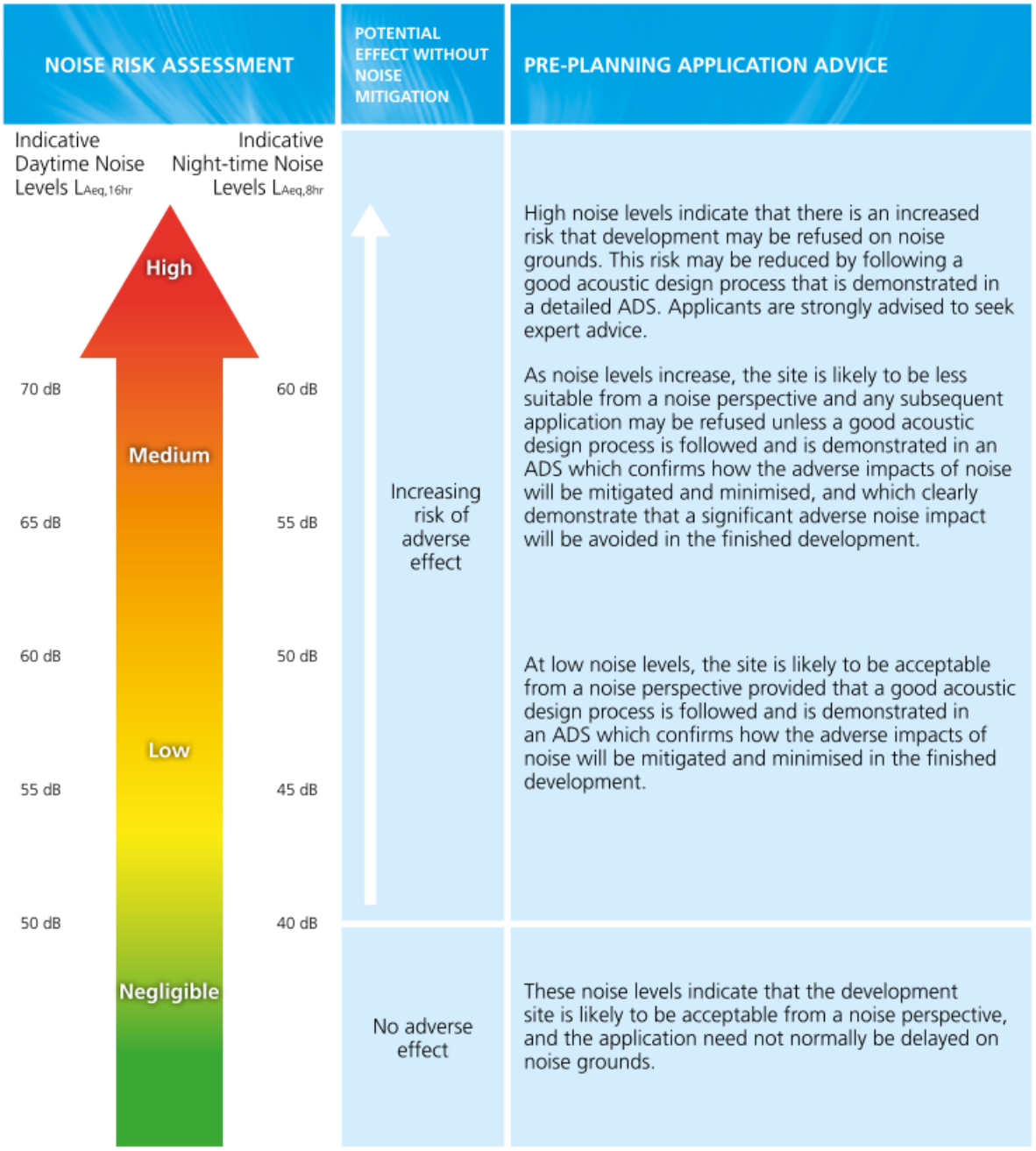


Figure 1 Notes:

a. Indicative noise levels should be assessed without inclusion of the acoustic effect of any scheme specific noise mitigation measures.

b. Indicative noise levels are the combined free-field noise level from all sources of transport noise and may also include industrial/commercial noise where this is present but is "not dominant".

c. $L_{Aeq,16hr}$ is for daytime 0700 – 2300, $L_{Aeq,8hr}$ is for night-time 2300 – 0700.

d. An indication that there may be more than 10 noise events at night (2300 – 0700) with $L_{Amax,F} > 60$ dB means the site should not be regarded as negligible risk.

Figure 1. Stage 1– Initial Site Noise Risk Assessment

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APPENDIX C

Premises Noise Management Plan

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PREMISES NOISE MANAGEMENT PLAN (PNMP): FAILSWORTH #434

The following measures **must be implemented after 11pm and before 7am,** as part of a proactive management effort to minimise the noise impact caused to nearby residents, created by the operation of the premises, and its customers when inside or in the vicinity of the premises.

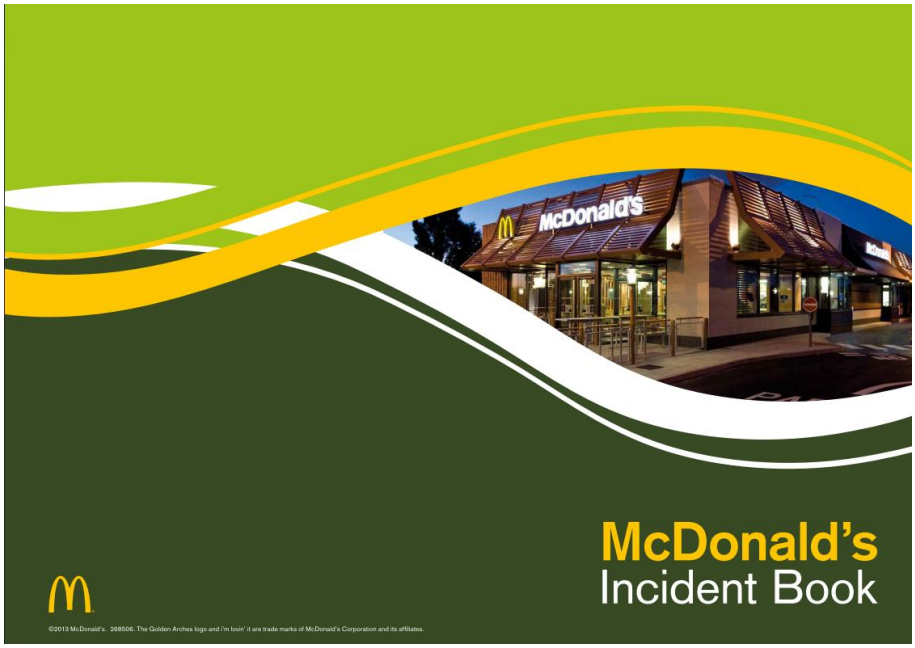
These measures include:

Noise Source	Control measure
1. Minimising Vehicle and antisocial behaviour noise (e.g. loud music)	Staff shall be vigilant for vehicles that arrive and have either loud music playing, or where the car is being driven deliberately to create noise by revving of the engine or other stunts. Observational records should be made of registration plates in the **Incident log** where possible, and CCTV footage used to provide evidence of culprits who regularly cause antisocial behaviour. Where these are substantial examples then these should be supplied to the authorities with a copy of the noise log. Drivers should be encouraged to switch engines off when not in use. Members of the management team, who are properly trained are required to quickly and safely challenge those creating unreasonable noise levels and request them to **adjust their behaviour, to minimise noise and respect their neighbours**. Information on those causing antisocial behaviour (ASB), should it continue, will be recorded as an incident and reported, when required to statutory authorities thereby and minimising and preventing the disturbance caused to neighbours as far as possible. For further information on McDonald's National Policy on ASB see the McDonald's Guidance for Managing Anti-Social Behaviour.
2. People Noise	Signs shall be prominently displayed that ask customers that come into the premises to leave quietly in order to respect our neighbours. At the drive thru, signs should request that customers keep noise to a minimum or may risk not being served. We will work in partnership with the police and other statutory authorities to address any nuisance or crime and disorder that generates noise outside the restaurant within the licence, which could include SIA guarding (Security Industry Authority) on a risk assessment basis to achieve, where it is expected to be necessary to control noise. Customers that are seen to be disregarding the notices and or loitering outside during night-time/early morning hours making noise should be encouraged to come inside if they are eating, rather than be outside, or move on. Where this becomes confrontational an ASB trained Manager will attend and have the power to bar the person. *Gatherings of people in the car park who are not waiting to be served, should be challenged by the Manager, notified that they are on CCTV and recorded in the* ***Incident log.*** *Although rare, where there is evidence of antisocial behaviour, of which significant levels of noise are part, information will be made available to the authorities.* ***A phone number will be made available to residents to contact the store, to report evidence of ASB within the boundary of the premises.***
3. Car park	The use of the car parking spaces adjacent to the neighbouring properties on the northeast boundary of the store (numbers 14-30) will be restricted to not be used by customers between sensitive hours at night (23:00-07:00).

Approved Plan for Store No.: _____, Authorising person: _____, Signature_____

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INCIDENT LOGBOOK EXCERT



Local Police Team Contact Details:
Last updated -

Name/s.....

Telephone Number/s.....

Email/s.....

Work Address.....

Police Licensing Officer Contact Details:
Last updated -

Name/s.....

Telephone Number/s.....

Email/s.....

Work Address.....

Local Authority Licensing Officer Contact Details:
Last updated -

Name/s.....

Telephone Number/s.....

Email/s.....

Work Address.....

Incident Log							
Date		Day of Week		Shift Mgr Name		Shift Mgr Signature	
Security Guard Name		SIA Badge No		Security Guard Name		SIA Badge No	
Incident Details				Security Guard Statement / Additional details of incident witnessed			
Time of Incident (duration):							
Names Mgr(s) / Staff involved:							
Where incident occurred:							
Customer Description (Height, appearance, clothing, shoes):							
Details of incident (What actually happened):							
				StaffSafe Activated (Y/N):		Police Requsted (Y/N):	
				Police: Involvement - If Police were alerted to incident- Details of Officers Attending / Any additional information required to support incident (Note: specifically involving any incidents outside restaurant in car park area)			
				Crime Number (if required) :			
Was the incident covered by CCTV (Y/N):		CCTV Burnt off (Y/N):		CCTV with Police (Y/N):			

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APPENDIX D

Plant noise levels

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Extract system - Variation of output sound levels with extract speeds

The noise level variation for different speeds has been measured at other McDonald's stores. The noise levels measured for the extract duct and the fan are shown below in Tables D1 and D2.

Speed (Hz)	Noise level measured dB(A)	Calculated sound power level (SWL)
25	63 - *64 **	71 - 72
30	67	75
35	70 - 71	78 - 79
40	73 - *75 **	81 - 83
45	76 - 79	84 - 87

Table D1. Noise levels at different speeds for the kitchen extract duct.
** Calculated level based on other measurements for that store.*

Speed (Hz)	Noise level measured dB(A)	Calculated sound power level (SWL)
25	64 - *67 **	72 - 75
30	67 - 69	75 - 77
35	69 - 71	77 - 79
40	*71.5 ** – 73	80 - 81
45	74 – 75	82 - 83

Table D2. Noise levels at different speeds for the kitchen extract fan.
** Calculated level based on other measurements for that store.*

Table D1 shows that the noise levels for the extract duct measured at different stores provide steps of **3 to 4 dB(A) per each 5 Hz setting variation**. Table D2 shows that the noise levels for the extract fan measured at different stores provide steps of typically 2dB(A) per 5Hz speed variation. It is likely that this is partially due to contribution from the extract duct noise. Therefore, the main output difference is from the extract duct rather than from the fan.

It was also possible to calculate the frequency spectrum trend for different speeds as shown in Figure D1 below. Note that for 25Hz and 40 Hz the frequency spectrum was only measured at one store, whereas for the rest of speeds the trend shows the logarithmic average of the different stores.

It is clear that for 30 Hz to 45 Hz settings, there is a trend showing possible tonality around 250 Hz. The spectral shape between 30 Hz, 40 Hz and 45 Hz settings is almost identical other than shifted up for the higher speed settings. However, the measurement for the speed setting of 25 Hz shows a different shape, where the possible tonality has shifted down to the 125 Hz octave band. Not many systems allow the 25 Hz setting, and therefore this data will be revised when there are more opportunities to measure other stores at the speed setting of 25 Hz.

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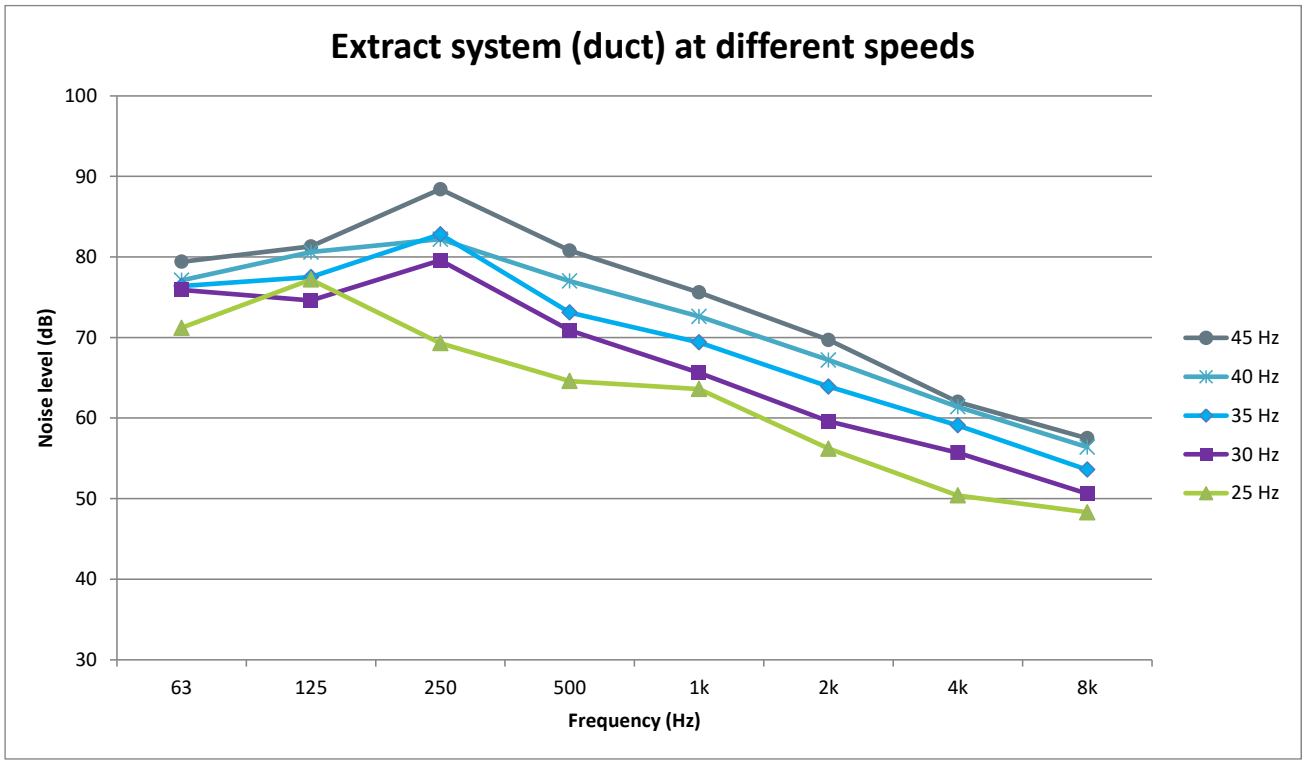


Figure D1. Frequency spectra for different speeds for the kitchen extract (duct).

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APPENDIX E

COD noise levels

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1 Sound Levels of COD

The Communications Operating Device (COD) systems have been measured at a number of stores for different levels, in order to indicate noise levels for different settings, study variability between stores and provide an average noise level per level setting in order to provide guidance to the COD system management based on measured ambient noise levels and distance to nearest residents.

The measured noise levels at three McDonald's stores (North Cheam, Wandsworth Road and Failsworth) are shown below in Figures E1 – E3. All the systems were 3M although the COD was an older version at Wandsworth Road (Figure E5) rather than the latest one that can be found at most stores as it was at North Cheam and Failsworth.

Subjectively there was a noticeable difference between the main 3 levels measured, and when the systems were set at level 8 it was just audible above the ambient noise levels. North Cheam was the quietest and therefore the noise levels measured were less affected by road traffic noise in the area. At Wandsworth Road there was fairly constant traffic at all times, and the roof plant was clearly audible. At Failsworth the measurements for settings 18 and 13 were affected by a van engine on the other lane of the store drive thru service. This is clearly visible in Figure E4.

When taking the average of the levels measured at the three stores, it is possible to determine that the reduction in noise level is between 6-7 dB per 5 levels of the COD system. Figure E6 shows that the average noise level against McDonald's COD system settings as a best fit a linear trend. Therefore, using this data it is possible to determine what settings each store needs to operate at in a given background noise level, to achieve adequate levels which are not excessively audible at the nearest residential property. The overall noise levels for every setting from 6 to 20 have been calculated and shown in Table E1.

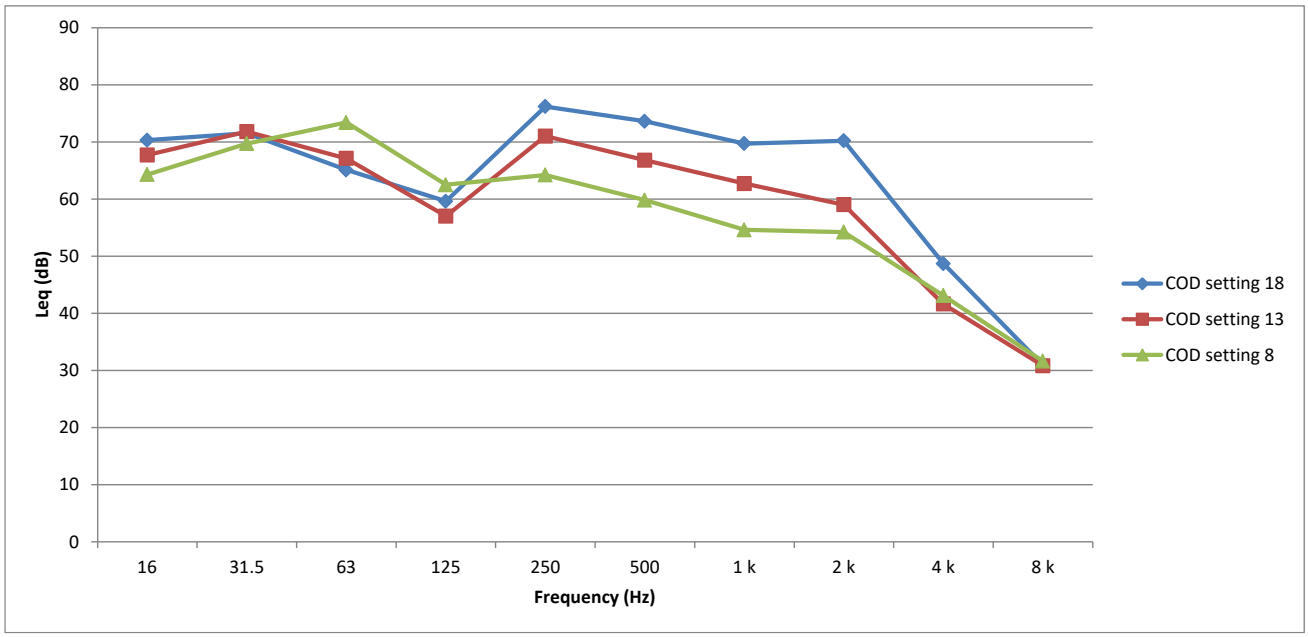


Figure E1. Measurements at 1m from COD - North Cheam

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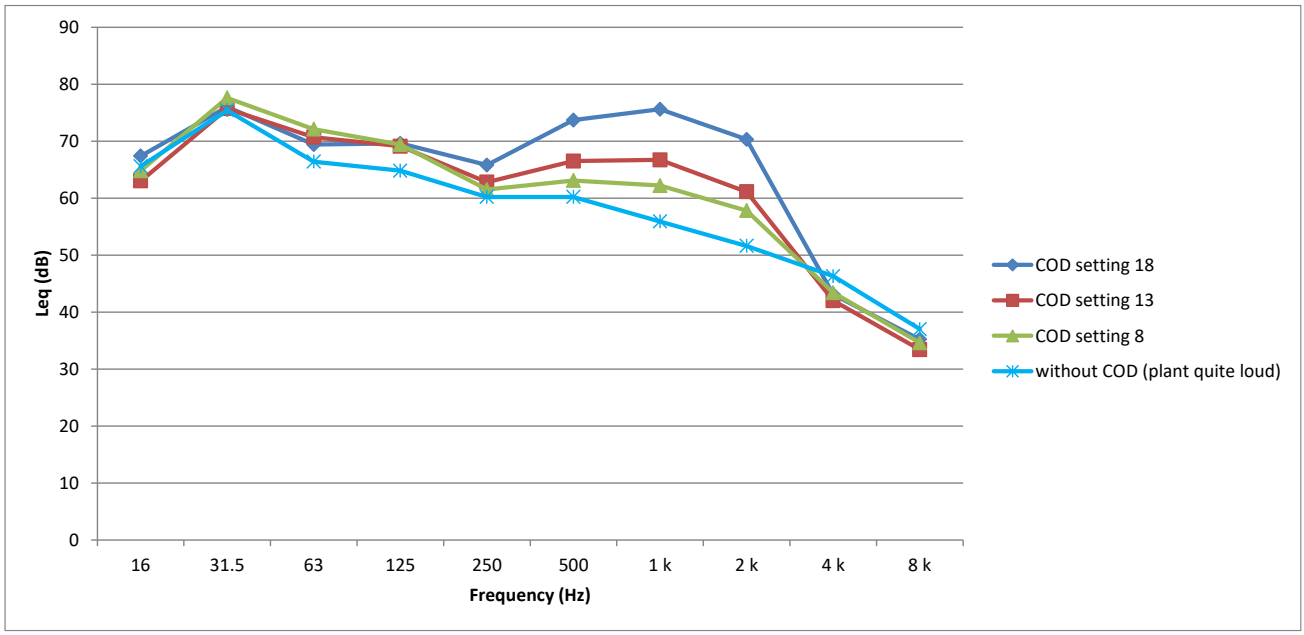


Figure E2. Measurements at 1m from COD - Wandsworth Road

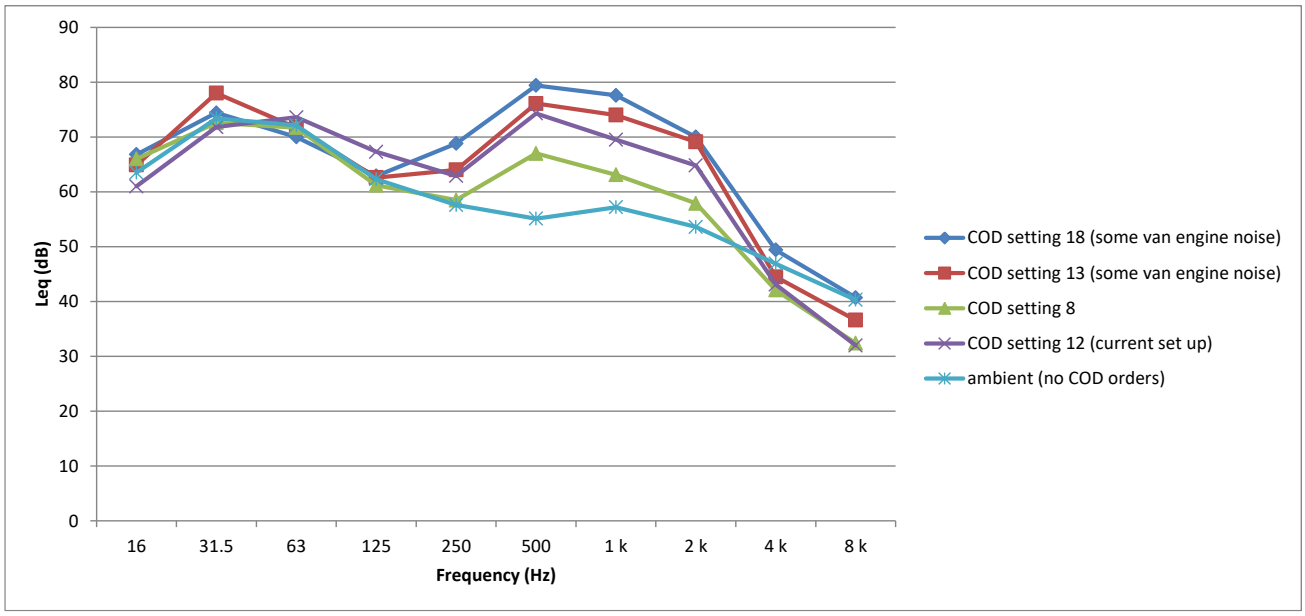


Figure E3. Measurements at 1m from COD - Maidstone

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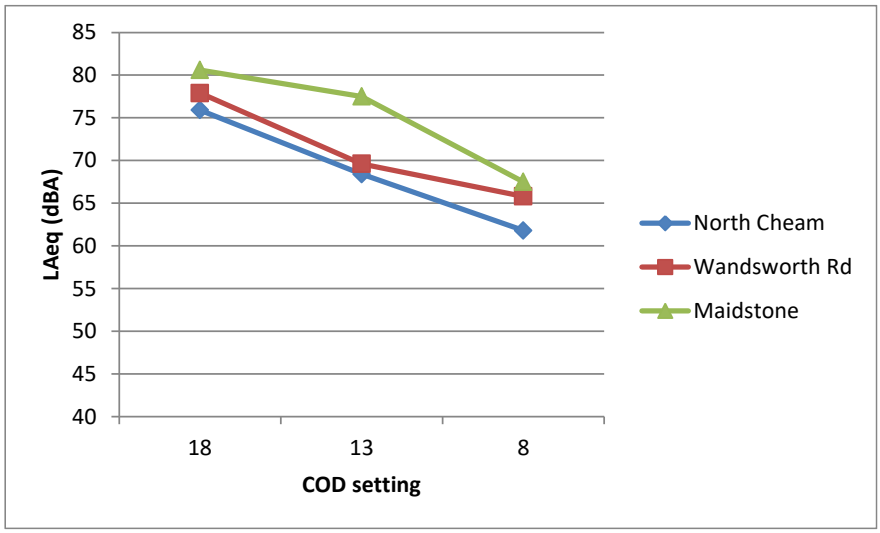


Figure E4. Measurements at 1m from COD – Overalls (dBA) for the 3 stores



Figure E5. Photo of COD system at Wandsworth Road

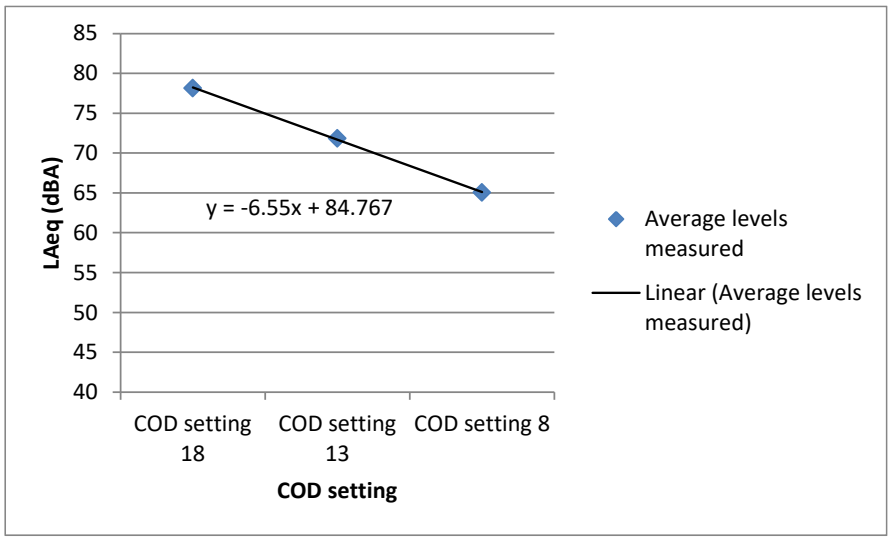


Figure E6. Linear regression fitting average levels from 3 stores

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COD setting	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Noise level at 1m from COD (dBA)	62.4	63.7	**65.0**	66.3	67.6	68.9	70.2	**71.5**	72.8	74.1	75.4	76.7	**78.0**	79.3	80.6

Table E1. Noise levels for COD settings 6 to 20 – measured (bold) and calculated based on difference measured and linear regression.

2 Assessment of required COD Levels against ambient noise

Subjectively, when the COD was set to level 8, it was perceived as not loud enough for Wandsworth Road and Failsworth and slightly more audible at North Cheam. The overall ambient noise levels for Wandsworth Road and Failsworth when the COD was not in use were 61 dBA for both stores. This means that a difference of 4dBA is not enough for the COD to be at a workable level. When the setting was 13, it was clearly audible at all stores and at Failsworth, the COD system was set up to 12, which was also subjectively clearly audible. This means that a difference between the COD level and ambient noise levels of 10dBA is more than enough, and 8dBA a reasonable difference for the COD to be at a workable level. Table E2 shows the noise levels for each COD setting at distances with the residential properties between 10 and 60 meters and what the maximum ambient noise levels can be at the COD for the setting to be at a workable noise level.

COD setting	Noise level at 1m from COD (dBA)	Noise levels from the COD at different distances (m)											Max ambient noise level required (dBA)
		10	15	20	25	30	35	40	45	50	55	60	
20	80.6	61	57	55	53	51	50	49	48	47	46	45	72.6
19	79.3	59	55	53	51	49	48	47	46	45	44	43	71.3
18	78.0	58	54	52	50	48	47	46	45	44	43	42	70.0
17	76.7	57	53	51	49	47	46	45	44	43	42	41	68.7
16	75.4	55	51	49	47	45	44	43	42	41	40	39	67.4
15	74.1	54	50	48	46	44	43	42	41	40	39	38	66.1
14	72.8	53	49	47	45	43	42	41	40	39	38	37	64.8
13	71.5	52	48	46	44	42	41	40	39	38	37	36	63.5
12	70.2	50	46	44	42	40	39	38	37	36	35	34	62.2
11	68.9	49	45	43	41	39	38	37	36	35	34	33	60.9
10	67.6	48	44	42	40	38	37	36	35	34	33	32	59.6
9	66.3	46	42	40	38	36	35	34	33	32	31	30	58.3
8	65.0	45	41	39	37	35	34	33	32	31	30	29	57.0
7	63.7	44	40	38	36	34	33	32	31	30	29	28	55.7
6	62.4	42	38	36	34	32	31	30	29	28	27	26	54.4

Table E2. Calculated COD noise levels at distances between 10 and 60m for COD settings 6-20 and correspondent maximum ambient noise level required for the setting to be workable.

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APPENDIX F

McDonald's Guidance on Anti-Social Behaviour

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McDonald's has launched national Guidance for Managing Anti-Social Behaviour, aimed to reduce the risk of ASB happening at McDonald's premises and to help store managers to know how to best manage Anti-Social Behaviour (ASB) if this happens and to do so safely and effectively.

The Guide defines ASB as *"behaviour likely to cause harassment, alarm or distress to one or more persons"*. The methods and tools described in the Guide have been summarised below:

- All restaurants should have a CCTV system installed that complies with McD minimum standards so it can be used for the purposes of monitoring as well as identification and able to do so in low light.
- Body worn cameras (BWC) are not recommended and at restaurants belonging to McOpCo are not permitted to managers or employees.
- Detecting and preventing ASB:

  Loitering: groups of people hanging around can increase the risk of ASB and therefore if an individual or a group is perceived to be loitering, it is recommended to approach them in a safely and effective way (method described on the Guide) in order to dismiss the groups or individuals.

  Drug misuse: a list of indications is provided so staff can identify possible problems and for the management team to deal with the problem. A list of tactics than can be implemented to prevent the issue is also provided.

  Staff Safe AV: alarm system that helps raise an alert to a monitoring station so an operator can connect to see and hear what is happening. The system consists of a control panel and six activation buttons (3 mobile units, 1 for staff working outside, 1 on the control panel) and is capable of announcements by pressing the control panel activation button, there will be an announcement to tell customers that the premises are externally monitored. The system is also capable of recordings, and these recordings are kept at the Call Centre anytime an audio activation is made. These recordings can be useful as evidence for the Police. An external speaker could be fitted when the restaurant is in a non-residential area, if approved by a Licensing Officer or the Local Authority. This would allow to make announcements from inside the premises to inform individuals or groups outside.
- Use of tools such as classical music, stop free WiFi service and power to charging points inside:

  Playing classical music inside the store, groups of teenagers will tend not to want to stay at the premises and therefore they will leave as soon as they finish eating.

  It is suggested that some individuals or groups might stay longer than necessary at the restaurant to use the free WiFi and charging points. Although it is desirable for customers to enjoy their stay, it is also desirable to deter loitering that could lead to ASB in or around the premises. Therefore, by temporary suspension of the WiFi and charging points facilities, groups are likely to willingly mobilise.
- Partnership with Police and other forces is encouraged and provides a proactive commitment to trying to manage ASB. Radio Links help the Franchisees and Managers build relationships with the Police and other businesses including Shop Watch, Pub Watch and Retail Radio Links initiatives. The restaurant management team should attempt to deal with issues in the restaurant, however, if there is a persistent problem, the option of using guarding policy should be assessed for the required time.
- Reporting and tracking incidents allow issues to be identified and create plan actions to address them. The process of reporting is explained in detail on the Guide for both crime and ASB.

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- As a last resource, it is possible to ban specific people that have caused an issue. This should only be applied when all other resources to stop the problem have not been effective and should always be done with support of an external partner, ideally the local Police.

Note: the use of a mosquito devices was identified as one commercially available way to disperse groups of young people, however, this is not recommended as it introduces another noise source that could cause annoyance to other in the vicinity, especially children or animals with more sensitivity to high frequency.

Two main step guides are also provided in the document:

- **ASB Incident Management: 5 Step Method for Managers**

1) Approach and ask for the behaviour to stop, explain that if the behaviour does not change, they will need to leave the premises.
2) If the behaviour continues, explain that they need to leave the premises. Dialog should be kept at a minimum. If they do not leave, explain that further action will be taken.
3) If they have not left, ask again and explain that the assistance button is going to be used, which would take CCTV footage and pass it to the police, and it could result in a ban from the restaurant and other prosecution from the police. If they still not leaving, Staff Safe takes over and there is no more dialog between the member of staff and the person or group.
4) Staff Safe Operator will contact the police and will stop the dialog with the person or group.
5) It is likely that the person or group leave before the police arrives, however, an overview together with the incident logbook and CCTV footage should be provided to the Police. If an individual results to be banned from the restaurant, it is crucial to enforce it at all times.

- **ASB Incident Management: 7 Point Plan – Post ASB Incidents Actions**

1) All incidents should be recorded in the Incident Log.
2) Shift Manager should take a picture from CCTV footage of the individual and attach it to the Incident Log.
3) Monthly review of the Incident Log at Manager's meeting. Banning letters should be given to the Police.
4) The Police is encouraged to issue the Banning Letter through a home visit.
5) Reasons for banning:
6) Instant Ban: due to aggressive, abusive, threatening behaviour or damage to property.
7) Yellow Card: issued for less significant incidents, three yellow cards would result on a Ban.
8) Monthly review of Incident Log and Banning Letters, preferably with the Police.
9) Advise other McDonald's in the area of banned individuals.

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