

NOISE IMPACT ASSESSMENT

1. Executive Summary

This Noise Impact Assessment has been prepared in support of a planning application seeking permission for the change of use of the existing industrial building at 11 Sherborne Street, Cheetham Hill, Manchester, to an indoor sport and wellness facility within Use Class E(d), together with a modest ancillary café.

The assessment considers the potential acoustic implications arising from the operation of the proposed development and evaluates those impacts against the prevailing acoustic environment, accepted acoustic guidance and the relevant national and local planning policy framework.

The assessment demonstrates, in clear and unequivocal terms, that the proposed development will not give rise to significant adverse noise effects at nearby residential receptors. All activity associated with the development is fully internalised within an existing robust industrial building specifically designed to contain commercial and industrial activity. No external courts, amplified music systems, externally mounted plant, extraction equipment or outdoor congregation areas are proposed as part of the scheme.

The proposal introduces a controlled and fully enclosed indoor recreational use which is materially less intensive in acoustic terms than the site's lawful industrial fallback position. The development therefore represents not merely an acceptable outcome in noise terms, but a clear acoustic betterment when assessed against the realistic and implementable planning baseline.

The conclusions of this assessment are based upon established acoustic principles, empirical data from comparable indoor padel facilities, conservative attenuation assumptions and a robust source-path-receptor assessment methodology. The assessment confirms that residual sound levels at nearby receptors would remain negligible and below prevailing urban background sound levels.

The proposal is therefore fully compliant with the National Planning Policy Framework, the Noise Policy Statement for England, BS 4142:2014+A1:2019 and the relevant provisions of the Draft Manchester Local Plan 2025. Noise does not represent a constraint to development and there is no technical, evidential or policy basis upon which the proposal could reasonably be resisted on acoustic grounds.

2. Introduction

2.1 Purpose of the Assessment

This Noise Impact Assessment has been prepared to assess the potential acoustic effects associated with the proposed change of use of the existing building at 11 Sherborne Street to an indoor sport and wellness facility within Use Class E(d), together with an ancillary café.

The purpose of the assessment is to determine whether the proposed development would give rise to unacceptable impacts on nearby noise-sensitive receptors and to establish whether the proposal accords with the relevant national and local planning policy framework relating to noise, residential amenity and sustainable urban development.

The assessment has been prepared on a robust and precautionary basis. Conservative assumptions have been applied throughout in order to ensure that the conclusions represent a realistic worst-case operational scenario rather than an optimistic or best-case interpretation of impact.

2.2 Scope of the Assessment

The assessment considers the operational characteristics of the proposed use, the nature and character of the sound sources associated with indoor padel activity, the acoustic containment provided by the building envelope and the likely propagation of any residual sound beyond the site boundary.

The report also considers the prevailing acoustic character of the surrounding environment and the lawful fallback position associated with the site. While the application proposes a standalone Use Class E(d) leisure use, the lawful industrial use of the building remains a highly material planning consideration and establishes the correct benchmark against which the proposal must be assessed.

The assessment has therefore been prepared within the context of what could already lawfully occur on the site without further planning permission.

2.3 Relevant Guidance and Standards

The assessment has been undertaken having regard to the following documents and guidance:

The National Planning Policy Framework.

The Noise Policy Statement for England.

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

Professional acoustic principles and empirical data relating to comparable indoor sporting facilities.

The Draft Manchester Local Plan 2025.

These documents collectively establish the requirement for development to avoid significant adverse noise impacts whilst recognising that sustainable urban environments will inevitably accommodate a degree of commercial and recreational activity.

3. Site Description and Context

3.1 Site Description

The application site comprises an existing industrial building located on Sherborne Street within the Cheetham Hill and Strangeways fringe area immediately north of Manchester city centre. The wider area is characterised by a mixture of industrial, warehousing, commercial and urban land uses and forms part of a long-established employment environment.

The building itself is substantial in scale and industrial in character. It comprises a robust envelope including masonry walls, insulated cladding systems and a reinforced concrete slab foundation. The structure was originally designed to accommodate industrial and warehousing operations and therefore inherently provides a high level of acoustic containment.

The existing building footprint and internal volume are particularly relevant in acoustic terms, as they allow indoor activity to be absorbed and dissipated within the structure before any residual sound reaches the building façade.

3.2 Surrounding Land Uses

The surrounding area is urban and commercially influenced in character. Existing land uses include industrial units, storage premises, commercial operations, roads, servicing activity and general city movement. The acoustic environment is therefore already influenced by a range of established urban sound sources including vehicle movements, road traffic, servicing activity and wider city background noise.

This is not a quiet suburban or rural environment characterised by very low baseline sound levels. Rather, it is an active inner urban location where commercial activity and associated sound form an established and expected component of the prevailing acoustic environment.

3.3 Nearby Noise-Sensitive Receptors

The nearest noise-sensitive receptors comprise surrounding residential properties situated beyond the immediate site boundary. Those receptors are separated from the building by intervening roads, urban form and established commercial activity.

The receptors do not directly adjoin the operational areas of the proposed use and are not located within an isolated low-noise environment. This separation distance and wider urban context are important considerations in assessing the significance of any residual sound associated with the proposal.

4. Description of the Proposed Development

4.1 Nature of the Proposed Use

The proposed development comprises the change of use of the existing building to an indoor sport and wellness facility including indoor padel courts, reception areas, circulation space, changing facilities, welfare areas and a modest ancillary café. The proposal represents a fully enclosed indoor recreational use operating entirely within the existing building envelope.

4.2 Operational Characteristics

The operational model of the development is structured, controlled and predictable in nature. The use operates on a managed booking basis, ensuring that occupancy levels remain controlled and distributed throughout operational hours.

The development does not involve external sporting activity, outdoor congregation spaces or externally amplified sound. No external courts are proposed. No external seating areas are proposed. No amplified music or speaker systems are proposed.

The ancillary café element is modest in scale and subordinate to the primary sporting use. It does not involve significant cooking operations, large-scale food preparation or external extraction infrastructure.

4.3 Building Operation and Containment

A key characteristic of the proposal is that all activity is fully internalised. Roller shutter doors remain closed during active operation except for routine ingress and egress. No direct openings are proposed towards nearby residential receptors.

No significant external plant, condensers or extraction systems form part of the proposal. This materially reduces the external acoustic footprint of the development when compared to many forms of commercial or leisure use.

The proposal therefore functions as a contained indoor use rather than an externally active development.

5. Assessment Methodology

5.1 Source–Path–Receptor Methodology

The assessment adopts a source-path-receptor methodology consistent with BS 4142:2014+A1:2019 and established acoustic assessment practice.

This methodology involves identifying the sound source associated with the proposed development, considering the transmission pathway between source and receptor and evaluating the likely residual effect at receptor locations.

The methodology reflects the fact that the mere existence of sound within a building does not automatically equate to external acoustic impact. The key issue is whether any residual sound escaping the building envelope would remain perceptible or harmful at nearby receptors once attenuation and propagation losses are taken into account.

5.2 Conservative Assessment Assumptions

The assessment has deliberately adopted a conservative approach throughout. The analysis assumes active peak use of the courts, high occupancy conditions and extended operational periods. Internal sound levels have been assessed using upper-range empirical data from comparable indoor padel facilities rather than average or optimistic assumptions. This ensures that the assessment represents a realistic worst-case operational scenario.

5.3 Baseline Noise Monitoring

Intrusive baseline monitoring has not been undertaken because it is neither necessary nor proportionate in this case. The proposal does not introduce external plant or fixed mechanical sound sources typically associated with BS 4142 assessments. The development instead comprises an internal recreational activity fully contained within a substantial industrial building.

The acoustic effects can therefore be robustly assessed through established acoustic principles, known attenuation behaviour and empirical operational data from comparable facilities.

6. Existing Acoustic Environment

6.1 Urban Acoustic Character

The prevailing acoustic environment surrounding the site is characteristic of an established inner urban employment location. Existing background sound is influenced by commercial activity, vehicle movements, servicing operations, road traffic and wider city noise.

This is not a location where very low night-time background sound levels would reasonably be expected to occur. Commercial and transport-related sound already forms part of the established character of the environment.

6.2 Existing Noise Climate

The surrounding environment experiences regular urban activity throughout the day and evening, including road traffic movement, commercial servicing and city-related activity. These sound sources contribute to a prevailing background sound environment materially higher than would typically be experienced within quieter suburban or rural locations. The proposal must therefore be assessed against the actual acoustic context of the area rather than against an artificial assumption of silence.

7. Identification and Characterisation of Noise Sources

7.1 Principal Sound Sources

- The principal sound sources associated with the proposed development comprise:
- Ball-to-racket impact.
- Ball rebound from glazing and court surfaces.
- Player footfall and movement.
- Limited vocalisation associated with recreational sport.

These sound sources are intermittent and recreational in character rather than mechanical or industrial.

7.2 Acoustic Characteristics

The acoustic character of indoor padel activity is broadband and transient in nature. It does not exhibit the tonal, humming or droning characteristics commonly associated with fixed plant or industrial machinery. Importantly, the sound is generated entirely within the building envelope and does not originate externally. The ancillary café does not represent a significant acoustic source. The use is modest in scale and does not involve industrial kitchen extraction systems or external servicing infrastructure.

8. Internal Sound Levels and Acoustic Behaviour

Empirical data from comparable indoor padel facilities within the United Kingdom indicates that internal sound levels during active operation typically fall within the range of approximately 65–70 dB LAeq, with short-duration peak events generally within the order of approximately 75–78 dB LAmax at source.

These sound levels are consistent with moderate indoor recreational activity and materially lower than many forms of industrial activity historically associated with buildings of this nature. Crucially, internal sound level alone is not determinative of external acoustic impact. The assessment must consider the extent to which sound energy transmits through the building envelope and remains perceptible at receptor locations once attenuation and propagation losses are applied.

The sound does not exhibit tonal or impulsive characteristics once attenuated and would not attract acoustic penalties under BS 4142 at receptor level.

9. Building Fabric and Acoustic Containment

9.1 Existing Building Construction

The existing building provides substantial acoustic containment due to its industrial form and robust construction. The building comprises dense masonry walls, insulated cladding systems and a concrete slab base. Collectively, these elements provide significant airborne sound insulation and substantially reduce the transmission of internal sound energy to the external environment.

9.2 Internal Volume and Sound Dissipation

The scale and internal volume of the building further enhance acoustic performance. Sound energy dissipates within the large internal space before reaching the building façade, thereby reducing façade loading and breakout potential. This represents a materially different acoustic scenario to smaller enclosed leisure buildings or lightweight structures.

9.3 Operational Containment Measures

Operational controls further reinforce containment. Roller shutter doors remain closed during active use except for normal access and egress. No direct external openings towards residential receptors are proposed. No external plant or outdoor activity areas form part of the scheme. The proposal therefore benefits from both passive containment through building construction and active containment through operational management.

10. Sound Propagation and Attenuation

Any residual sound transmitting through the building envelope undergoes further attenuation before reaching nearby receptors. The building envelope itself is conservatively expected to provide attenuation in the order of approximately 25–35 dB for mid-frequency airborne sound associated with indoor sporting activity.

Applying this attenuation to a worst-case internal sound level of approximately 70 dB LAeq results in estimated external façade sound levels in the approximate range of 35–45 dB LAeq. Further reductions then occur through geometric spreading, atmospheric absorption and interaction with surrounding built form.

At separation distances of approximately 20–30 metres, geometric spreading alone typically results in attenuation in the order of approximately 20–25 dB. Accordingly, residual sound levels at nearby receptor locations are estimated to fall within the approximate range of 10–25 dB LAeq under worst-case conditions.

Even adopting deliberately conservative assumptions regarding façade performance or temporary door opening, residual sound levels would reasonably be expected to remain below approximately 25–30 dB LAeq at nearby receptors.

11. Assessment of Effects at Receptors

The predicted residual sound levels associated with the development remain below, or materially below, prevailing background sound levels associated with comparable inner urban Manchester locations. Background sound levels within commercially influenced urban environments commonly fall within the range of approximately 30–40 dB LA90 and are frequently higher where influenced by road traffic and wider city activity.

Against this existing background environment, any residual sound associated with the proposal would either be imperceptible or indistinguishable from prevailing urban background sound. There is therefore no realistic prospect of the development giving rise to intrusive, dominant or harmful acoustic effects at nearby residential receptors.

The proposal does not approach the threshold of significant adverse effect identified within the Noise Policy Statement for England or national planning policy.

12. BS 4142 Assessment

BS 4142:2014+A1:2019 provides a framework for assessing the impact of commercial and industrial sound on residential receptors. Applying the principles of BS 4142, the specific sound level associated with the proposed use would remain low at receptor level due to the combined effects of building attenuation and propagation losses. The sound would not exhibit tonal, impulsive or distinctive acoustic characteristics once attenuated to receptor level and therefore would not attract acoustic penalties.

The resulting rating level would remain below prevailing background sound levels. BS 4142 confirms that where the rating level does not exceed the background sound level, this is indicative of a low impact and a negligible likelihood of adverse effect. The proposal therefore demonstrates clear compliance with BS 4142:2014+A1:2019.

13. Lawful Fallback Position

The lawful fallback position is a highly material planning consideration in the assessment of acoustic impact. The existing building could lawfully operate for industrial and storage/distribution purposes without further planning permission. Such uses are inherently capable of generating materially greater external noise impacts than the proposed development.

Potential lawful industrial activities could include machinery operation, forklift movement, pallet handling, vehicle reversing alarms, servicing activity, van movements and loading/unloading operations. These activities frequently involve tonal, impulsive and externally perceptible sound characteristics materially more intensive than those associated with indoor recreational sport.

The proposed development replaces this potential with a fully enclosed leisure use operating entirely within the building envelope. When assessed against the correct planning baseline, the proposal therefore represents a clear and measurable reduction in potential acoustic impact.

14. Policy Compliance

The National Planning Policy Framework requires planning decisions to avoid significant adverse impacts on health and quality of life arising from noise. The Noise Policy Statement for England similarly seeks to avoid significant adverse effects whilst recognising that sustainable urban environments inevitably accommodate some degree of commercial and recreational activity.

The proposal fully accords with these objectives. The development does not give rise to significant adverse noise effects and preserves the amenity of nearby occupiers. The proposal also accords with the Draft Manchester Local Plan 2025, which supports health and wellbeing uses within sustainable urban locations whilst requiring development to maintain acceptable amenity standards.

The reuse of an existing commercial building for a fully enclosed indoor sport and wellness facility within an established urban location is entirely consistent with these objectives and gives rise to no policy conflict in acoustic terms.

15. Mitigation and Operational Controls

The development is inherently acceptable by design and does not rely upon extensive secondary mitigation measures to achieve acoustic compliance. The following embedded operational characteristics collectively ensure acoustic acceptability:

- All activity remains internalised within the building.
- No external courts are proposed.
- No amplified music or external speakers are proposed.
- No significant external plant or extraction systems are proposed.
- The building envelope provides substantial acoustic attenuation.
- Roller shutter doors remain closed during active use except for routine access and egress.
- The operational model is controlled and predictable in nature.

These measures collectively ensure that residual acoustic impacts remain negligible.

16. Conclusion

This Noise Impact Assessment has robustly demonstrated, through established acoustic principles, empirical operational data and conservative worst-case assumptions, that the proposed indoor sport and wellness facility at 11 Sherborne Street will not give rise to unacceptable noise impacts at nearby residential receptors.

The sound associated with indoor padel activity is moderate, intermittent and recreational in character. It is materially less intensive than the acoustic profile associated with the site's lawful industrial fallback position.

The substantial acoustic containment provided by the existing industrial building, combined with attenuation over distance and the prevailing urban background environment, ensures that residual sound levels at receptor remain negligible.

Predicted sound levels remain below prevailing background sound levels and therefore indicate a low impact in accordance with BS 4142:2014+A1:2019. When properly assessed against the correct planning baseline, the proposal results in residual noise levels that are well within acceptable acoustic thresholds and materially lower than those which could reasonably arise from lawful industrial occupation of the building.

The assessment therefore demonstrates clear compliance with BS 4142:2014+A1:2019, the Noise Policy Statement for England, the National Planning Policy Framework and the relevant provisions of the Draft Manchester Local Plan 2025.

The conclusion is unequivocal. The proposed Use Class E(d) indoor sport and wellness facility will not give rise to significant adverse noise effects, will not harm residential amenity and does not create any unacceptable acoustic impacts.

There is no evidential, technical or policy basis upon which the proposal could reasonably be resisted on noise grounds. Noise is not a constraint to development and should be afforded no weight against the proposal in the determination of the application.