

JPM ACOUSTICS
SCHOLES CRICKET CLUB
PADEL COURTS

NOISE IMPACT ASSESSMENT

MARCH 2026



DOCUMENT VERSION RECORD

	1	2	3
Author	Luke Smith		
Position	Associate		
Date of Issue	03/03/26		
Comment	Final		

Report Reference	2025248-01
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CONTACT DETAILS

Luke Smith MIOA
Associate

REGISTERED ADDRESS

JPM Acoustics Ltd
97 Hazelhurst Road
Worsley
Manchester
M28 2SW

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1.0. INTRODUCTION

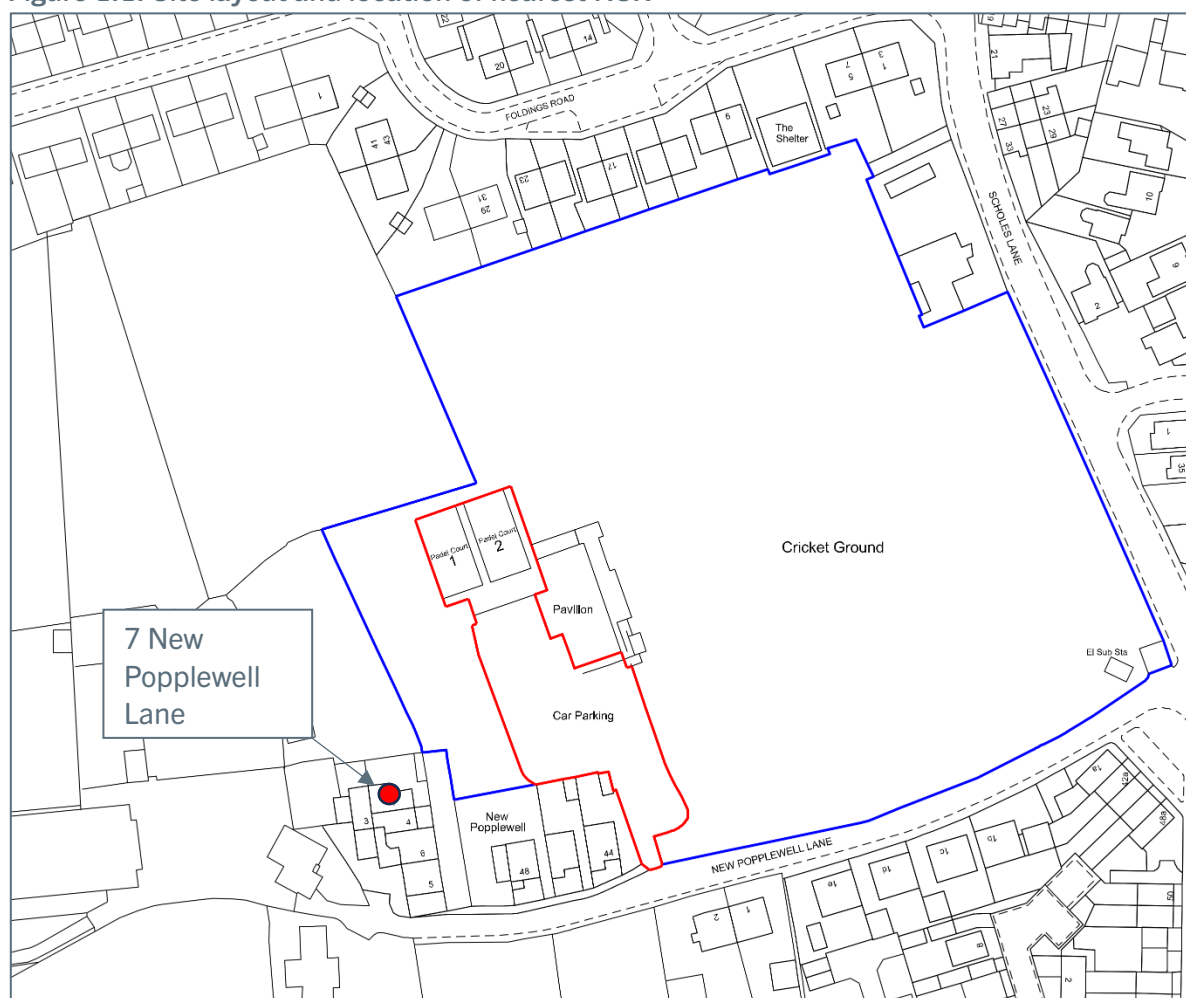
1.1. OVERVIEW

- 1.1.1. JPM Acoustics Ltd has been appointed to undertake a Noise Impact Assessment to support a planning application for the proposed padel courts at Scholes Cricket Club, New Popplewell Lane, Scholes.
- 1.1.2. This report considers the potential noise impacts associated with the use of the padel courts on the nearest noise sensitive receptor (NSR). The assessment has been undertaken with due regard to relevant planning policies, British Standards, and technical guidance documents relating to noise.
- 1.1.3. This report is necessarily technical in nature. Therefore, to assist the reader, a glossary of acoustic terminology is provided in **Appendix A**.

1.2. SITE LOCATION AND PROPOSED DEVELOPMENT

- 1.2.1. The proposed padel courts are located toward the southern end of the Cricket Club premises in proximity to the pavilion.
- 1.2.2. To the north and east of the proposed courts are sports pitches associated with the Club; to the south are residential properties on New Popplewell Lane; and to the west are open fields.
- 1.2.3. The site layout and location are presented in **Figure 1.1**.

Figure 1.1: Site layout and location of nearest NSR



1.2.4. The development includes for 2no. padel courts, and an area of hard standing. It is understood that the padel courts will be available for use between 06:00 and 23:00.

1.3. NOISE SENSITIVE RECEPTOR

1.3.1. The nearest NSR to the padel courts is 7 New Popplewell Lane, with the most affected façade located approximately 37 m to the southwest. Given that this property is the nearest to the courts, it is considered the most exposed to potential noise impacts and it is therefore the focus of this assessment. Note that other properties at a greater distance away from the courts than 7 New Popplewell Lane are likely to be exposed to lower noise levels than those predicted in this assessment.

1.3.2. The location of the nearest NSR is shown in **Figure 1.2**.

2.0. STANDARDS AND GUIDANCE

2.1. ARTIFICIAL GRASS PITCH (AGP) ACOUSTICS – PLANNING IMPLICATIONS (SPORT ENGLAND, 2015)

- 2.1.1. In consideration of the equivalent continuous, or ‘time-averaged’ noise levels generated during sports activity, Sport England’s *Artificial Grass Pitch (AGP) Acoustics – Planning Implications* guidance provides a framework for assessing and managing noise associated with the use of artificial grass pitches. Whilst padel courts are not paved with artificial grass, the guidance is used as a point of reference in the absence of specific noise guidance for padel courts, given the similarities in acoustic character of noise generated during play (shouting and boundary impact noise etc.).
- 2.1.2. The document is intended to inform planning and design decisions for AGPs to help mitigate potential noise impacts on nearby residential and sensitive receptors. It summarises the acoustic characteristics of AGP sports activities, identifies representative noise levels from pitch sidelines and references relevant national and international noise criteria, including the World Health Organization’s external daytime/evening guideline of 50 dB $L_{Aeq,1h}$ at residential façades.

2.2. BS 8233:2014: GUIDANCE ON SOUND INSULATION AND NOISE REDUCTION FOR BUILDINGS (BS 8233)

- 2.2.1. BS 8233 provides guidance for the control of noise in and around buildings. The guidance provided within the document is applicable to the design of new buildings, or refurbished buildings undergoing a change of use, however, noise level criteria which allow for ‘desirable’ habitable conditions, are also relevant to existing, established residential properties.
- 2.2.2. The Standard states that it is desirable that the internal ambient noise levels do not exceed the criteria set out in **Table 2.1**.

Table 2.1: Desirable internal guideline values from BS 8233

Activity	Location	Period	
		07:00 to 23:00 (Daytime)	23:00 to 07:00 (Night-Time)
Resting	Living Room	35 dB $L_{Aeq, 16h}$	-
Dining	Dining Room/Area	40 dB $L_{Aeq, 16h}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq, 16h}$	30 dB $L_{Aeq, 8h}$

2.3. WORLD HEALTH ORGANISATION (WHO) 1999: GUIDELINES FOR COMMUNITY NOISE

- 2.3.1. The World Health Organisation (WHO) guidance: 1999: *Guidelines for community noise* includes guidance for individual maximum noise events during the night-time. This document draws upon guidance from Vallet and Vernay, which states:

“For good sleep, it is believed that indoor sound pressure levels should not exceed approximately 45 dB L_{AFmax} more than 10-15 times per night”

- 2.3.2. This criterion is also referenced in the subsequent WHO publication *Night Noise Guidelines For Europe* (WHO, 2009).

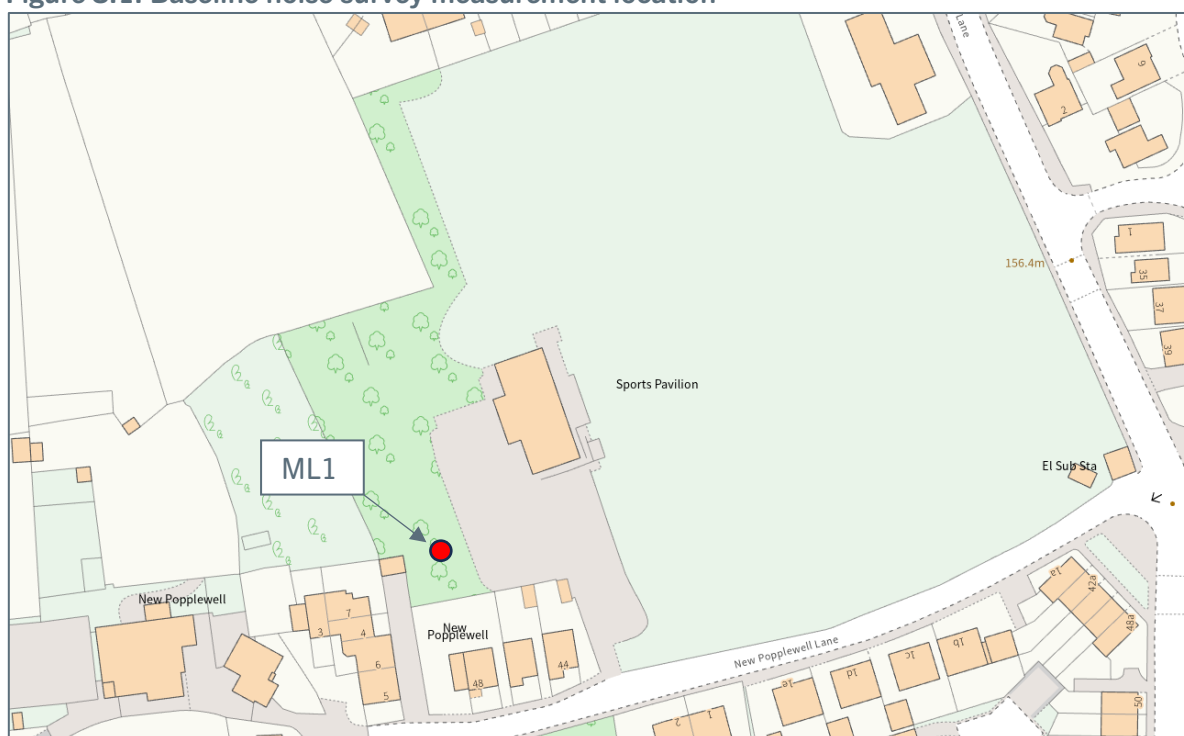
3.0. BASELINE NOISE SURVEY

3.1. OVERVIEW

- 3.1.1. A baseline noise survey has been undertaken to determine the prevailing noise climate at a location considered representative of the nearest NSR. **Figure 3.1** shows the measurement location adopted during the survey.

3.2. MEASUREMENT LOCATION

Figure 3.1: Baseline noise survey measurement location



- 3.2.1. Unattended measurements were undertaken at Measurement Location 1 (ML1) from 15:45 on 24th February 2026 for a 24-hour period. The purpose of the measurements was to establish noise levels at a location representative of the nearest NSR to the padel courts.
- 3.2.2. The microphone at ML1 was installed at a height of 1.5 m above local ground level. The noise climate at ML1 was dominated by distant road traffic during site attendance.

3.3. EQUIPMENT

- 3.3.1. The noise survey was undertaken using the Class 1 specification noise measurement equipment detailed in **Table 3.1**. The measurement equipment was calibrated using a portable calibrator immediately before and after the measurements with no significant drift in calibration observed.

- 3.3.2. The sound level meter, pre-amplifier and microphone were calibrated to traceable standards within 24 months prior to the measurements. The portable calibrator was calibrated within 12 months prior to the measurements.

Table 3.1: Equipment details

Equipment	Make and Model	Serial Number	Calibration due Date
Sound Level Meter	SVAN 971	80342	27/11/2026
Microphone	ACO 7052E	71683	
Preamplifier	SV18	71576	
Calibrator	SVAN 971	80342	27/11/2026

3.4. WEATHER CONDITIONS

- 3.4.1. Weather conditions during the survey were conducive to environmental noise monitoring, it being dry with negligible wind speeds ($<5 \text{ ms}^{-1}$).

3.5. RESULTS

- 3.5.1. A summary of the prevailing equivalent continuous ($L_{Aeq,T}$) and maximum noise ($L_{AFmax,T}$) levels at ML1 during the periods of interest (i.e. during the padel court opening hours) is presented in **Table 3.2**, below, and presented graphically in **Appendix C**.

Table 3.2: Summary of measured sound pressure levels

Period	Duration	Measured Sound Pressure Levels	
		dB $L_{Aeq,T}$	dB $L_{AFmax,T}$
07:00 – 23:00 (Daytime)	16 hours	49 ¹	-
06:00 – 07:00 (Night-time)	1 hour	50	77 ²
¹ - Logarithmic average of the $L_{Aeq,15min}$ values between 15:45 – 23:00 on 24/02/26, and between 07:00 – 15:45 on 25/02/26. ² - Taken to be the highest of the measured levels during the 1hr period.			

4.0. ASSESSMENT

4.1. OVERVIEW

- 4.1.1. The approach taken for the assessment during the daytime period (i.e. 07:00 – 23:00) has been to compare the predicted noise levels from the simultaneous use of the 2 padel courts with the 50 dB L_{Aeq} noise level criterion from the Sport England Guidance. During the 1-hour night-time period (i.e. 06:00 – 07:00) when the courts are intended for use, the predicted noise levels have been compared with the 30 dB L_{Aeq} internal ambient noise level criterion from BS 8233 and 45 dB L_{AFmax} noise level criterion from the WHO Guidelines.

4.2. ACOUSTIC MODEL AND METHODOLOGY

- 4.2.1. In order to predict noise propagation from the proposed development, a 3D acoustic model of the site and surrounding area has been generated using the acoustic modelling software CadnaA®. The model was generated applying the following methodology:
- The model was set to apply the noise prediction methodology set out in ISO 9613-2:2024 Acoustics – Attenuation of sound during propagation outdoors Part 2: Engineering method for the prediction of sound pressure levels outdoors.
 - Dimensions for the solid elements of the court boundaries are taken from the Lawn Tennis Association (LTA) Padel Court Construction Guidance Note (LTA, 2025)
 - The model included the proposed site layout plan.
 - Topographical data for the ground levels across the site and surrounding area was included using LIDAR data of 1 m resolution, publicly available from the Department for Environment Food and Rural Affairs (DEFRA).
 - The model was set to include second order reflected noise. All buildings were set to be acoustically reflective.
 - The heights of existing buildings surrounding the site have been determined using online mapping sources and observations made on-site.
 - The ground cover between the proposed development and the nearest NSR has been approximated by assuming 100% acoustically soft ground for areas of grass ($G=1$) and 100% acoustically reflective ground for areas of hard standing ($G=0$).
 - For the prediction of noise levels during the daytime, receptor points within the model have been set at 1.5 m above local ground level. For the night-time, receptor points have been set at 4 m, to be representative of bedrooms at first floor level.
- 4.2.2. For the assessment of noise levels generated during play, JPM library data measured at an existing padel court premises have been used. The data comprise L_{Aeq} and L_{AFmax} measurements

taken 5 m from the end of the padel court (i.e. behind the court wall) and 5 m from the net line to the side (i.e. facing the court side opening). The L_{Aeq} data are presented in **Table 4.1**.

Table 4.1: Source data used in the acoustic model

Location	Duration	L_{Aeq}
End of Court	15 minutes	53
Centre Line		59

- 4.2.3. The highest L_{AFmax} measured 5 m from the centre line during a match was 79 dB.
- 4.2.4. For each court, the L_{Aeq} noise levels have been modelled as an area source covering the court footprint at a height of 1 m.
- 4.2.5. To account specifically for L_{Aeq} noise transmitted through the end walls, a vertical area source has been modelled over the full height and width of the wall.
- 4.2.6. The L_{AFmax} noise levels have been modelled as a point source at 1 m in height, centrally within each court.
- 4.2.7. In order to calibrate noise in the acoustic model, receptor points have been set within the model which are representative of the height and locations of the measurement locations 5 m from the side and end of padel court. The area and point sources have then been calibrated at the receptor points until the modelled L_{Aeq} and L_{AFmax} noise levels equate to the measured library data (**Table 4.1**).

4.3. RESULTS

- 4.3.1. The predicted free-field $L_{Aeq,1h}$ noise level from the simultaneous use of the 2 proposed padel courts at the facade of the nearest NSR is 37 dB during the day (i.e. when the courts are in use between 07:00-23:00). This results in a noise level which is 13 dB lower than the criterion from the Sport England Guidance.
- 4.3.2. If the courts are in use between 06:00-07:00 (i.e. the night-time period), the predicted free-field $L_{Aeq,1h}$ noise level at the facade of the nearest NSR is 39 dB. Assuming a level difference of 15 dB from outside to inside for a façade containing a partially open window, the noise level within a bedroom at this façade is predicted to be 24 dB, which is 6 dB below the night-time noise criterion from BS 8233.
- 4.3.3. The predicted maximum noise level within a bedroom at the nearest façade, again assuming a 15 dB level difference from outside to inside, is 42 dB. This level falls 3 dB below the maximum noise level criterion within bedrooms at night, from WHO Guidelines. It should be noted that this assessment is based on the highest maximum noise level recorded during play from the library measurement data (i.e. the worst case scenario).

- 4.3.4. Whilst the relevant guidance documents consider noise in terms of absolute criteria, it should also be noted that the predicted noise levels are also well below the prevailing L_{Aeq} and L_{AFmax} noise levels measured during the survey in the absence of the padel courts. Therefore, noise from the courts is likely to have a negligible effect on the existing noise environment at the NSR.
- 4.3.5. In light of these results, it is considered that noise generated by the simultaneous use of the 2 padel courts would not result in a significant noise impact and no additional mitigation measures are proposed.

5.0. CONCLUSION

- 5.1.1. JPM Acoustics Ltd has been appointed to undertake a Noise Impact Assessment to support a planning application for the proposed padel courts at Scholes Cricket Club, New Popplewell Lane, Scholes.
- 5.1.2. This report has considered the potential noise impacts from the use of the padel courts on the nearest noise sensitive receptor (NSR). The assessment has been undertaken with due regard to relevant planning policies, British Standards, and technical guidance documents relating to noise.
- 5.1.3. During the intended daytime hours of operation, noise from the simultaneous use of the 2 padel courts falls 13 dB below the 50 dB noise level criterion from the Sport England Guidance.
- 5.1.4. During the intended 1 hour period of use at night (06:00-07:00), noise from the simultaneous use of the 2 padel courts is predicted to fall 6 dB below the 30 dB internal noise level criterion from BS 8233 and 3 dB below the 45 dB internal maximum noise level criterion from WHO Guidelines.
- 5.1.5. Given the findings of this assessment, it is considered that noise need not be a determining factor in granting planning consent.

APPENDIX A: GLOSSARY

Table A.1: Noise terminology

Terminology	Description
A-weighting, dB(A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' - weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
Decibel, (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s_1 and s_2 is given by $20 \log_{10} (s_1/s_2)$. The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is 20 Pa.
Façade	At a distance of 1m in front of a large sound reflecting object such as a building façade.
Fast Time Weighting (F)	Averaging time constant used in sound level meters and commonly used in the measurement of environmental noise.
Free-Field	Far from the presence of sound reflecting objects (except the ground), usually taken to mean at least 3.5m away.
$L_{10,T}$	A noise level index. The noise level exceeded for 10% of the time over the period, T. L_{10} may be thought of as the "average maximum" noise level. Generally used to describe road traffic noise.
$L_{90,T}$	A noise level index. The noise level exceeded for 90% of the time over the period, T. L_{90} may be thought of as the "average minimum" noise level. Generally used to describe background noise.

$L_{eq,T}$	A noise level index called the equivalent continuous noise level over the time period, T. This is the level of a notional steady sound that would contain the same amount of sound energy as the actual, possibly fluctuating, sound that was recorded.
$L_{max,T}$	A noise level index defined as the maximum noise level during the period, T. L_{max} is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
Noise Level Indices	Noise levels usually fluctuate over time, so it is often necessary to consider an average or statistical noise level. This can be done in several ways, so a number of different noise indices have been defined, according to how the averaging or statistics are carried out.
Sound Power	The sound energy radiated per unit time by a sound source. Measured in watts (W).
Sound Power Level, L_w	Sound power measured on a decibel scale, relative to a reference value of 10^{-12} W.
Sound Pressure	Sound, or sound pressure, is a fluctuation in air pressure over the static ambient pressure. Measured in pascals (Pa).
Sound Pressure Level (Sound Level), L_p	The sound level is the sound pressure on a decibel scale, relative to a reference value of 20×10^{-6} Pascals.

APPENDIX B: BASELINE NOISE SURVEY DATA

Scholes Cricket Club Padel Courts
Measurement Location 1 - Time History Graph
24/02/2026 - 25/02/2026

