



# Acoustic Survey and Assessment for Proposed conversion of building to provide indoor cricket coaching at 50-52 Herbert Brown House, Whiteley Street, Milnsbridge, Huddersfield, HD3 4LT.

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Prepared for:

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## **1. Introduction**

- 1.1. Martin Environmental Solutions has been commissioned to undertake an acoustic survey and assessment to support a planning application for a change of use from warehousing to indoor cricket coaching facility at 50-52 Herbert Brown House, Whiteley Street, Milnsbridge, Huddersfield, HD3 4LT.

### **Site Location and Context**

- 1.2. The development site is situated to the southwest of Whiteley Street and consists of part of a former industrial warehouse building over two floors. The southern part of the building is occupied by a joinery and construction company. To the north is a small industrial estate. On the far side of the busy Whiteley Street is a children's nursery and a row of residential properties. To the rear of the site(southwest) is the parking area to a funeral director, with accommodation above.
- 1.3. An aerial Photograph is enclosed in Figure 1, together with a proposed layout drawing in Figure 2.
- 1.4. The report has been produced to clarify the potential impact on the proposed development and to identify mitigation measures if required to ensure the development is appropriate in terms of noise impact.



## **2. Policy and Guidance**

- 2.1. The impact of noise can be a material consideration in the determination of planning applications. The planning system has the task of guiding development to the most appropriate locations. It is recognised that on occasions it will be difficult to reconcile some land uses, such as housing, hospitals, or schools, with other activities that generate high levels of noise. However, the planning system is tasked to ensure that, wherever practicable, noise-sensitive developments are separated from major sources of noise (such as road, rail and air transport and certain types of industrial development).
- 2.2. The Government's publication of the National Planning Policy Framework (NPPF), updated in December 2023, states that planning policies and decisions should prevent new and existing development from contributing to or being put at unacceptable risk from, of being adversely affected by unacceptable levels of noise pollution.
- 2.3. The Government have also issued the Noise Policy Statement for England (NPSE). The NPSE clarifies the Government's underlying principles and aims in relation to noise and sets a vision to promote good health and a good quality of life through the effective management of noise while having regard to the Government's sustainable development strategy. The NPSE aims to mitigate and minimise adverse impacts on health and quality of life through the effective management and control of noise.
- 2.4. The NPSE introduces the following terms, although no sound levels are given to represent these, many authorities have identified the sound level criteria in line with the World Health Organisation, BS8233:2014 and BS4142: 2014 levels. The terms introduced by the NPSE are:
- NOEL – No Observed Effect Level (<30dB(A) inside <50dB(A) outside, 10dB below background)
- LOAEL – Lowest Observed Adverse Effect Level (30-35dB(A) inside 50-55dB(A) outside, background to +5dB)
- SOAEL – Significant Observed Adverse Effect Level (>35dB(A) inside, >55dB(A) outside, >+10dB above background)
- 2.5. The sound levels within the brackets of the previous paragraph are those determined as appropriate levels to indicate the relevant effect levels represented by the NPSE.



- 2.6. Other commonly used examples of standards utilised by Local Planning authorities for the consideration of noise impacts include comparison of the likely noise levels to be experienced at a development, with levels that have been recommended by the World Health Organisation (WHO) as Guidelines for the prevention of Community Noise Annoyance and within BS8233: 2014.
- 2.7. The WHO recommended noise levels for outdoor amenity areas (gardens) that should not be exceeded are 55dB(A)  $L_{Aeq,16hr}$  in order to avoid 'Serious Community Annoyance' or 50dB(A)  $L_{Aeq,16hr}$  to avoid 'Moderate Community Annoyance' during the day. For indoor levels WHO set 35dB(A)  $L_{Aeq,16hr}$  during the day to prevent Moderate Annoyance and 30 dB(A)  $L_{Aeq,8hr}$  at night to prevent sleep disturbance.
- 2.8. The WHO guidance also recommends that maximum sound levels at night should not regularly exceed 45dB(A) within bedrooms to prevent sleep disturbance. Regularly is considered to be more than 10 times during any 8-hour night-time period.
- 2.9. BS 8233:2014 'Guidance on sound insulation and noise reduction for buildings' also specifies desirable noise levels to be achieved inside dwellings.
- 2.10. BS 8233:2014 'Sound insulation and noise reduction for buildings – Code of Practice' also specifies desirable noise levels to be achieved inside dwellings. BS 8233 presents two levels, the first between the hours of 07:00 – 23:00 and the second between 23:00 -07:00.
- 2.11. The daytime period suggests internal noise levels of 35dB  $L_{Aeq,16hr}$ , for resting in living rooms and bedrooms while for night-time a level of 30dB  $L_{Aeq,8hr}$  is recommended. Criteria for external areas mirrors that within the WHO guidance.
- 2.12. In addition, the 'ProPG Planning & Noise, Professional Practice Guidance on Planning & Noise, New Residential Development' provides a 4-staged approach to undertaking a risk assessment in relation to anticipated sound levels at new residential development and the provision of mitigation measures. The guidance is principally aimed at sites exposed predominantly to noise from transportation sources.

2.13. The first stage consists of an initial noise risk assessment, based on indicative day and night-time *noise* levels. Simply put, the higher the ambient noise in an area the greater the impact. The levels given are shown below although it should be noted that these are in excess of both the WHO and BS 8233: 2014 guidance.

| Noise Risk Category*                                                                            | Potential Effect if Unmitigated                                       | Pre-Planning Application Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>0 – Negligible</b><br>$L_{Aeq,16hr} < 50dB$<br>$L_{Aeq,8hr} < 40dB$                          | May be noticeable but no adverse effect on health and quality of life | In this category the development is likely to be acceptable from a noise perspective, nevertheless a good acoustic design process is encouraged to improve the existing environment and/or safeguard against possible future deterioration and to protect any designated tranquil areas. A noise assessment may be requested to demonstrate no adverse impact from noise. Application need not normally be delayed on noise grounds.                                         |
| <b>1 – Low</b><br>$L_{Aeq,16hr} 50-63dB$<br>$L_{Aeq,8hr} 40-55dB$                               | Adverse effect on health and quality of life                          | In this category the development may be refused unless a good acoustic design process is followed and is demonstrated via a Level 1 Acoustic Design Statement which confirms how the adverse impacts of noise on the new development will be mitigated and minimised and that a significant adverse impact will not arise in the finished development. Planning conditions and other measures to control noise may be required.                                              |
| <b>2 – Medium</b><br>$L_{Aeq,16hr} 63-69dB$<br>$L_{Aeq,8hr} 55-60dB$<br>$L_{AFmax} > 80dB^{**}$ | Significant adverse effect on health and quality of life              | In this category the development is likely to be refused unless good acoustic design process is followed and is demonstrated via a Level 2 Acoustic Design Statement which confirms how the adverse impacts of noise on the new development will be mitigated and minimised, and clearly demonstrates that a significant adverse noise impact will not arise in the finished development. Planning conditions and other measures to control noise will normally be required. |
| <b>3 – High</b><br>$L_{Aeq,16hr} > 69dB$<br>$L_{Aeq,8hr} > 60dB$<br>$L_{AFmax} > 80dB^{**}$     | Unacceptable adverse effect of health and quality of life             | In this category the development is very likely to be refused on noise grounds, even if a good acoustic design process is followed and is demonstrated via a Level 2 Acoustic Design Statement. Applicants are advised to seek expert advice on possible mitigation measures. Advice on the circumstances when the refusal of a new housing on noise grounds should normally be anticipated is included in the ProPG.                                                        |

2.14. Stage 2, consists of a full assessment of the prevailing ambient noise and requires 4 elements to be considered:

- I. Element 1 – Good Acoustic Design
- II. Element 2 – Internal Noise Level Guidelines
- III. Element 3 – External Amenity Area Noise Assessment
- IV. Element 4 – Assessment of Other Relevant Issues

2.15. A good acoustic design is implicit in meeting the requirements of the NPPF and can help to resolve many potential acoustic issues.



2.16. Details of the criteria considered suitable are provided above for both internal and external sound levels. Element 4 includes such issues as local and national policy, likely occupants, wider planning objectives.



### 3. The Assessment

#### The development

- 3.1 The proposed development consists of the change of use of the building from class B2 (light industry) to a cricket coaching facility, Class E(D).
- 3.2 Operating times for the site are restricted to 09:30-22:30, these are considered to be standard daytime hours.

#### Existing Situation.

- 3.3 In order to obtain representative background sound levels for the area on site monitoring was undertaken over the 23<sup>rd</sup>-25<sup>th</sup> July 2024.
- 3.4 Two Cirrus Optimus Green sound level meter were utilised for the monitoring. The first meter was placed over 1m from the first-floor façade of the building overlooking the road to the front. The second was placed at a height of ~1.3m within the rear car parking area of the funeral directors ~1m from the boundary fence.
- 3.5 The meters were field calibrated at the start and end of the monitoring period with no significant variation and full laboratory calibration certificates are available on request.
- 3.6 The weather during the monitoring was dry, sunny and hot with little to no wind <5m/s. Confirmed by reviewing weather data at the time, observations on site and speaking to locals.
- 3.7 The full results are shown in Appendix A, with a summary in the tables below.

#### Front

| Start Time       | End Time         | Duration | L <sub>Aeq</sub> | L <sub>A90</sub> | L <sub>AMax</sub> |
|------------------|------------------|----------|------------------|------------------|-------------------|
| 23/07/2024 15:00 | 23/07/2024 23:00 | 07:59:59 | 68.0             | 50.1             | 96.1              |
| 23/07/2024 23:00 | 24/07/2024 07:00 | 08:00:00 | 62.5             | 32.6             | 89.9              |
| 24/07/2024 07:00 | 24/07/2024 23:00 | 16:00:00 | 69.9             | 53.2             | 96.1              |
| 24/07/2024 23:00 | 25/07/2024 07:00 | 08:00:00 | 62.0             | 35.3             | 90.3              |
| 25/07/2024 07:00 | 25/07/2024 11:38 | 04:38:50 | 69.6             | 56.6             | 97.9              |

#### Rear

| Start Time       | End Time         | Duration | L <sub>Aeq</sub> | L <sub>A90</sub> | L <sub>AMax</sub> |
|------------------|------------------|----------|------------------|------------------|-------------------|
| 23/07/2024 15:00 | 23/07/2024 23:00 | 07:59:59 | 57.8             | 39.3             | 94.0              |
| 23/07/2024 23:00 | 24/07/2024 07:00 | 08:00:00 | 41.9             | 31.3             | 75.4              |
| 24/07/2024 07:00 | 24/07/2024 23:00 | 16:00:00 | 52.5             | 41.6             | 92.4              |
| 24/07/2024 23:00 | 25/07/2024 07:00 | 08:00:00 | 42.0             | 32.4             | 83.6              |
| 25/07/2024 07:00 | 25/07/2024 11:42 | 04:42:51 | 56.4             | 43.9             | 87.5              |





- 3.8 Background sound levels were dominated by passing traffic to the front of the site along with some noise from the adjacent joinery business. To the rear distant traffic, bird song and noise from the adjacent factory.
- 3.9 At the end of the monitoring period a further test of the current building structure was undertaken. A dodecahedron speaker was set up near to one of the rear windows and measurements were taken both internally and externally to understand the current level of attenuation offered by the building. The building fabric consisting of a cavity wall, blockwork inner and stone outer leaf with single glazed windows.
- 3.10 Internal sound levels averaged 98.8dB(A), while external sound levels 66.0dB(A), suggesting a reduction of at least 33.2dB, primarily the single glazed windows will be the weak spot on this façade.

### **Proposed Sound Levels**

- 3.11 No published research has been found regarding the sound levels generated by cricket matches or cricket practice.
- 3.12 Research has identified previous reports detailing sound levels from the use of cricket nets at 78.0dB  $L_{WA}$  for bowlers and 86.7dB  $L_{WA}$  for batsman (Red Acoustics report R1956-REPO1C-JW – Lancashire Cricket facility Farington Leyland).
- 3.13 The proposal includes five cricket pitches, three on the first floor and two on ground. Based on the proposed layout an internal sound level at the external wall can be calculated, plus an additional 6dB for internal reflections. This would result in a first-floor level of 73.4dB(A) and a ground floor level of 69.1dB(A).
- 3.14 Given the above measured reduction for the building façade the external sound levels will be 35.6dB(A) at 1m from the façade, see Appendix B for calculations.
- 3.15 To ensure a robust assessment is undertaken it is assumed that the internal sound levels to be generated at the proposed development will exceed the above calculated levels at 80dB(A). Equivalent to the lower action level within the Control of Noise at Work Regulations. At this level the external sound level at 1m from the building will be 40.8dB(A), with windows closed.
- 3.16 This level is below the background  $L_{A90}$  sound level monitored at both the front and rear of the development site.



- 3.17 With an additional 5m to the corner of the funeral directors building to the rear and 11.5m to the boundary of the properties on the far side of the road to the front the sound levels from the site will be lower still at 26.8db(A) to the rear and 19.6dB(A) to the front.
- 3.18 Given a 15dB attenuation<sup>1</sup> for an open window the sound levels to be experienced by the future occupants are 11.8dB(A) and 4.6dB(A) respectfully. Significantly below both the guideline values identified in section 2 of the report and the prevailing background sound levels.

### **Traffic**

- 3.19 To the front of the site a number of the attendees to the site will be dropped off by car, with some parking on the front apron. Given the high background sound level to the front from passing traffic these car movements will blend into the existing sound environment.
- 3.20 Previous monitoring undertaken by Martin Environmental Solutions has identified the sound level from slow moving vehicles in a carpark at 59dB(A) at a distance of 5m. This would result in sound levels of 49db(A) at the façade of the nearest properties opposite, some 4dB(A) below the prevailing background L<sub>A90</sub> sound level for the area.
- 3.21 The movement of vehicles will not therefore result in any adverse impact on those properties opposite the entrance.

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<sup>1</sup> BS8233: 2014; Guidance on sound insulation and noise reduction for buildings



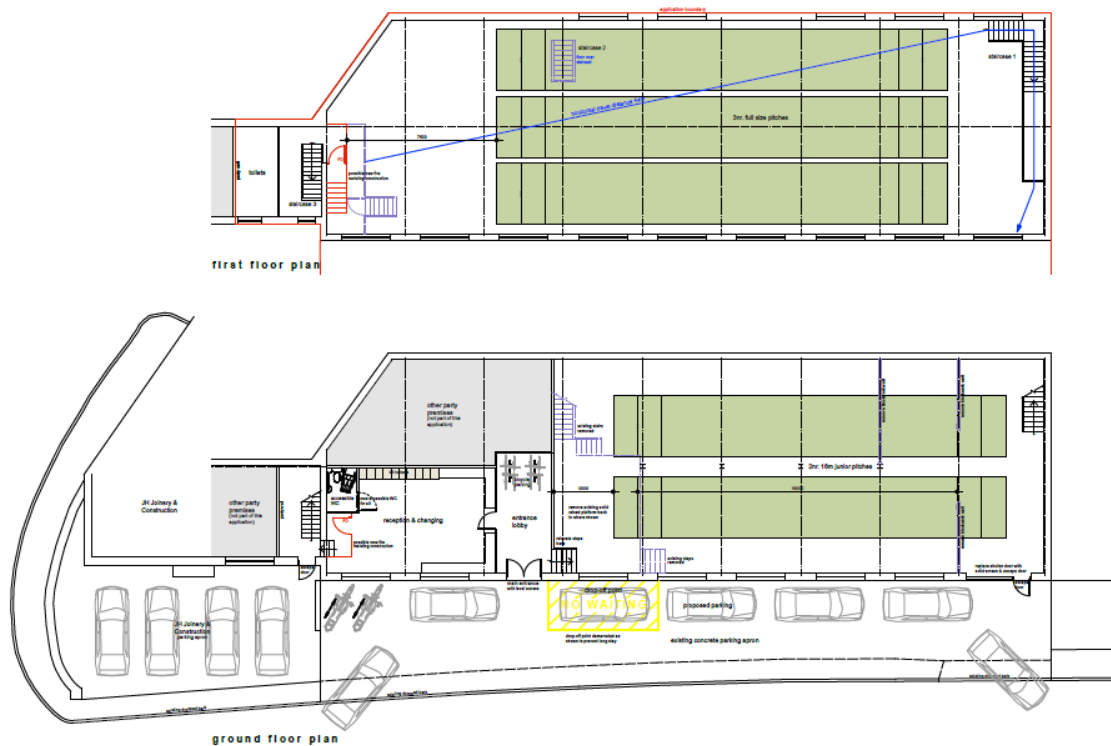
## **4 Conclusion**

- 4.1 Research has identified typical sound levels that will be produced within the proposed development and on-site testing has identified the attenuation level of the building structure.
- 4.2 This has allowed the impact from the development to be calculated and compared to the prevailing background sound level. The activities within the proposed development and those of people arriving and departing will result in sound levels at the nearby residential properties below the current background sound level and below those levels recommended in section 2 of the report
- 4.3 No further mitigation measures are required as part of the development, windows should however remain closed during coaching sessions.
- 4.4 The development will ensure that the internal and external sound levels at nearby receptor locations are acceptable and will result in a No Observe Effect on the future residents in line with the Noise Policy Statement for England.
- 4.5 As such the development will meet the objectives of the National Planning Policy Framework in ensuring that no significant adverse impact is experienced by the future residents. The development is therefore considered to be acceptable in terms of noise.

**Figure 1 – Aerial Photograph**



**Figure 2 – Proposed Layout Plan**





## Appendix A – Full Monitoring Results

Front

| Time             | L <sub>Aeq</sub> (dB) | L <sub>AMax</sub> (dB) | L <sub>A90</sub> (dB) |
|------------------|-----------------------|------------------------|-----------------------|
| 23/07/2024 15:00 | 68.1                  | 83.2                   | 56.2                  |
| 23/07/2024 16:00 | 69.4                  | 86.4                   | 57.9                  |
| 23/07/2024 17:00 | 69.4                  | 87.0                   | 57.5                  |
| 23/07/2024 18:00 | 68.7                  | 84.6                   | 53.9                  |
| 23/07/2024 19:00 | 68.0                  | 88.6                   | 51.5                  |
| 23/07/2024 20:00 | 67.9                  | 96.1                   | 50.3                  |
| 23/07/2024 21:00 | 66.3                  | 93.1                   | 45.4                  |
| 23/07/2024 22:00 | 64.1                  | 81.1                   | 38.3                  |
| 23/07/2024 23:00 | 61.8                  | 83.5                   | 35.1                  |
| 24/07/2024 00:00 | 60.8                  | 80.4                   | 32.8                  |
| 24/07/2024 01:00 | 56.2                  | 77.6                   | 32.0                  |
| 24/07/2024 02:00 | 54.2                  | 80.4                   | 32.3                  |
| 24/07/2024 03:00 | 56.2                  | 82.5                   | 32.0                  |
| 24/07/2024 04:00 | 59.9                  | 79.9                   | 33.6                  |
| 24/07/2024 05:00 | 65.5                  | 80.3                   | 37.6                  |
| 24/07/2024 06:00 | 67.8                  | 89.9                   | 47.4                  |
| 24/07/2024 07:00 | 69.4                  | 94.1                   | 54.7                  |
| 24/07/2024 08:00 | 69.1                  | 85.7                   | 55.2                  |
| 24/07/2024 09:00 | 75.2                  | 87.5                   | 60.6                  |
| 24/07/2024 10:00 | 73.3                  | 95.3                   | 58.0                  |
| 24/07/2024 11:00 | 68.8                  | 85.2                   | 56.3                  |
| 24/07/2024 12:00 | 69.1                  | 89.4                   | 55.9                  |
| 24/07/2024 13:00 | 69.0                  | 83.1                   | 56.2                  |
| 24/07/2024 14:00 | 70.2                  | 96.1                   | 56.8                  |
| 24/07/2024 15:00 | 68.9                  | 84.3                   | 56.2                  |
| 24/07/2024 16:00 | 68.5                  | 88.0                   | 58.2                  |
| 24/07/2024 17:00 | 69.3                  | 87.5                   | 57.5                  |
| 24/07/2024 18:00 | 69.2                  | 85.9                   | 54.7                  |
| 24/07/2024 19:00 | 68.4                  | 89.7                   | 52.5                  |
| 24/07/2024 20:00 | 66.8                  | 84.0                   | 47.7                  |
| 24/07/2024 21:00 | 65.9                  | 86.5                   | 45.7                  |
| 24/07/2024 22:00 | 64.5                  | 85.7                   | 39.5                  |
| 24/07/2024 23:00 | 62.5                  | 90.3                   | 37.3                  |
| 25/07/2024 00:00 | 59.7                  | 81.0                   | 33.7                  |
| 25/07/2024 01:00 | 55.6                  | 82.6                   | 34.1                  |
| 25/07/2024 02:00 | 55.4                  | 78.4                   | 34.7                  |
| 25/07/2024 03:00 | 53.9                  | 76.3                   | 36.1                  |
| 25/07/2024 04:00 | 59.3                  | 79.6                   | 35.6                  |
| 25/07/2024 05:00 | 64.3                  | 80.4                   | 37.7                  |
| 25/07/2024 06:00 | 67.2                  | 82.7                   | 47.3                  |





|                  |      |      |      |
|------------------|------|------|------|
| 25/07/2024 07:00 | 69.7 | 94.1 | 56.0 |
| 25/07/2024 08:00 | 70.2 | 97.9 | 57.3 |
| 25/07/2024 09:00 | 69.7 | 91.9 | 56.3 |
| 25/07/2024 10:00 | 69.0 | 86.6 | 56.5 |
| 25/07/2024 11:00 | 69.4 | 86.3 | 55.7 |



Rear

| Time             | L <sub>Aeq</sub> (dB) | L <sub>AMax</sub> (dB) | L <sub>A90</sub> (dB) |
|------------------|-----------------------|------------------------|-----------------------|
| 23/07/2024 15:00 | 46.3                  | 65.6                   | 42.0                  |
| 23/07/2024 16:00 | 48.4                  | 76.0                   | 42.9                  |
| 23/07/2024 17:00 | 61.8                  | 87.4                   | 42.4                  |
| 23/07/2024 18:00 | 61.7                  | 94.0                   | 41.6                  |
| 23/07/2024 19:00 | 62.3                  | 91.8                   | 41.5                  |
| 23/07/2024 20:00 | 45.2                  | 68.6                   | 39.1                  |
| 23/07/2024 21:00 | 44.0                  | 68.6                   | 37.6                  |
| 23/07/2024 22:00 | 41.5                  | 55.6                   | 35.2                  |
| 23/07/2024 23:00 | 40.2                  | 59.6                   | 32.8                  |
| 24/07/2024 00:00 | 39.1                  | 57.5                   | 33.2                  |
| 24/07/2024 01:00 | 39.2                  | 49.6                   | 37.7                  |
| 24/07/2024 02:00 | 38.5                  | 54.0                   | 31.5                  |
| 24/07/2024 03:00 | 34.8                  | 50.3                   | 28.9                  |
| 24/07/2024 04:00 | 42.2                  | 70.9                   | 31.1                  |
| 24/07/2024 05:00 | 43.6                  | 69.3                   | 33.5                  |
| 24/07/2024 06:00 | 46.7                  | 75.4                   | 38.9                  |
| 24/07/2024 07:00 | 47.1                  | 70.8                   | 41.7                  |
| 24/07/2024 08:00 | 53.0                  | 81.2                   | 42.9                  |
| 24/07/2024 09:00 | 49.8                  | 81.1                   | 42.9                  |
| 24/07/2024 10:00 | 57.2                  | 87.0                   | 42.7                  |
| 24/07/2024 11:00 | 58.7                  | 84.0                   | 43.1                  |
| 24/07/2024 12:00 | 49.9                  | 81.0                   | 43.1                  |
| 24/07/2024 13:00 | 52.4                  | 87.5                   | 44.4                  |
| 24/07/2024 14:00 | 48.6                  | 67.5                   | 44.7                  |
| 24/07/2024 15:00 | 51.2                  | 83.8                   | 44.2                  |
| 24/07/2024 16:00 | 48.3                  | 66.8                   | 44.5                  |
| 24/07/2024 17:00 | 47.5                  | 69.2                   | 43.6                  |
| 24/07/2024 18:00 | 46.9                  | 66.7                   | 42.8                  |
| 24/07/2024 19:00 | 57.0                  | 92.4                   | 40.8                  |
| 24/07/2024 20:00 | 48.5                  | 81.1                   | 39.8                  |
| 24/07/2024 21:00 | 43.7                  | 59.2                   | 39.2                  |
| 24/07/2024 22:00 | 42.9                  | 59.4                   | 38.0                  |
| 24/07/2024 23:00 | 40.5                  | 61.4                   | 36.6                  |
| 25/07/2024 00:00 | 39.5                  | 50.8                   | 34.5                  |
| 25/07/2024 01:00 | 38.6                  | 58.6                   | 34.0                  |
| 25/07/2024 02:00 | 38.2                  | 58.8                   | 34.0                  |
| 25/07/2024 03:00 | 36.2                  | 51.3                   | 32.1                  |
| 25/07/2024 04:00 | 36.5                  | 54.0                   | 29.9                  |
| 25/07/2024 05:00 | 42.4                  | 67.4                   | 31.9                  |
| 25/07/2024 06:00 | 48.3                  | 83.6                   | 38.5                  |
| 25/07/2024 07:00 | 47.1                  | 70.2                   | 42.5                  |





|                  |      |      |      |
|------------------|------|------|------|
| 25/07/2024 08:00 | 50.5 | 80.4 | 43.9 |
| 25/07/2024 09:00 | 61.5 | 87.5 | 44.2 |
| 25/07/2024 10:00 | 48.1 | 73.8 | 44.6 |
| 25/07/2024 11:00 | 57.6 | 81.7 | 44.1 |



## Appendix B – Calculations

Break out

$$SPL_{ext,1m} = SPR_{int} - attenuation (R_w) - 6$$

$$SPL_{ext,1m} = 73.4 - 33.2 - 6$$

$$SPL_{ext,1m} = 34.2$$

At assumed higher 80dB(A) level

$$SPL_{ext,1m} = SPR_{int} - attenuation (R_w) - 6$$

$$SPL_{ext,1m} = 80 - 33.2 - 6$$

$$SPL_{ext,1m} = 40.8$$

Distance

$$Dist\ att = 20\log\left(\frac{r}{R}\right)$$

$$Dist\ att = 20\log\left(\frac{1}{5}\right)$$

$$Dist\ att = -14.0dB$$

Sound level at nearest façade

$$L_p = 40.8 - 14$$

$$L_p = 26.8dB(A)$$

Internally through open window

$$L_p = 26.8 - 15$$

$$L_p = 11.8dB(A)$$



## **Appendix C - Report Author Details**

This report has been produced by Neil Martin, BSc (Hons), PGDip, CEnvH MCIEH, MIOA.

Neil is the principal acoustic consultant at Martin Environmental Solutions Ltd, a consultancy company specialising in Environmental Health disciplines including environmental noise assessment and control. He holds a Bachelor's degree in Environmental Health and Diploma in Acoustics. He is a Chartered Member of the Chartered Institute of Environmental Health and a Full member of the Institute of Acoustics.

Neil has over 20 years' experience working within a Local Authority Environmental Health setting, principally in the Environmental Protection and Public Health areas and has been working as an acoustic consultant since 2011.

Since its formation, Martin Environmental Solutions has advised and assisted many groups including residents, developers and local authorities about the problems of noise and vibration in the environment and the possible solutions. Neil also acts as an expert witness in the area of acoustics.