

Ref: P25-257-M03v1
Project: Approved Care Home at Yew Tree Lane, Northern Moor
Date: 11 September 2025
To: Craig Collishaw, LNC Property Developments Ltd
From: David Thurstan BSc MIOA – Principal Consultant

Subject: Verification of Internal Ambient Noise Levels

1. This memo sets out the details and findings of recent acoustic verification testing carried at the approved care home development at Yew Tree Road, Northern Moor.
2. The development was granted planning permission in February 2025, as per planning reference 141842/JO/2025.

Planning Condition

3. The following condition relates to a scheme of noise mitigation for the development.

“14) Prior to the first occupation of the residential units, a verification report shall be required to validate that the work undertaken throughout the development to acoustically insulate it conforms to the recommendations and requirements in the approved acoustic consultant's report agreed under condition 7 of this planning permission. The report shall also undertake post completion testing to confirm that the internal noise criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the internal noise criteria.”

Noise Criteria

4. The ‘Manchester City Council Planning & Noise Technical Guidance 2022’ document provides guidance for assessing the potential impact on residential developments and recommends the following noise limits or acoustic design criteria:
 - Bedrooms (night-time - 23.00 - 07.00) 30 dB $L_{Aeq,T}$ (individual noise events should not normally exceed 45 dB $L_{Amax,F}$ more than 10 times)
 - Living Rooms or bedrooms (daytime - 07.00 - 23.00) 35 dB $L_{Aeq,T}$
5. These acoustic criteria correspond to guidance set out in British Standard 8233: 2014, ‘Guidance on sound insulation and noise reduction for buildings’ and have been used for the assessment of the verification noise measurements.

Noise Survey

6. An automatic data-logging sound analyser was installed in the bedroom S4.02 overlooking Yew Tree Lane to measure noise levels in consecutive 5-minute periods from approximately 14:45 hours on Monday 8 to 11:00 hours on Tuesday 9 September 2025.

7. The noise measurements were carried out with an NTi XL3 'Class 1' Sound Level Meter (serial no. A3A-01451-F0) located at the centre of the room and at a microphone height of approximately 1.4m above floor level. Calibration checks were carried out both before and after the measurement period with no variance in levels observed. Audio was also recorded during the monitoring period to help identify noise sources contributing to the measured noise levels.
8. The room was empty and unfurnished, although carpeted. It is understood that ventilation for the overheating strategy is provided by an open window, therefore the window in the bedroom was open for the duration of the measurements.
9. Weather conditions during the measurements were dry, mild (8-15°C), cloudy, and calm (<3m/s north-westerly breeze). The weather conditions during the noise survey were suitable for the purposes of determining the noise ingress.
10. A summary of the noise levels measured over the daytime and night-time periods is shown in Table 1, with full results enclosed in the chart. The development is still an active construction site and the bedroom used in this assessment overlooks the main site entrance. Therefore, only the measured noise levels outside of the site construction hours have been considered in this assessment (i.e. 16:00 to 06:30 hours). From review of the audio recordings, there was also some activity within the building in early evening period (between approximately 18:45 and 21:15 hours) and so we have also excluded the noise data from this period.

Table 1: Summary of Measured Noise Levels (dB)

Location	Night-time		Daytime
	L_{AFmax}	$L_{Aeq,8hr}$	$L_{Aeq,16hr}^*$
Bedroom S4.07 (second floor)	31 – 53	30	33

* 16 hour is based on measurements between 16:00 to 23:00 hours following the end of ongoing site works

11. From review of the audio recordings the noise climate was generally distant road traffic, occasional overhead aircraft and other extraneous intermittent sources such as a loud motorbike, ice cream van chimes and emergency services sirens.
12. The noise survey covered a daytime/evening period including a rush hour period. The daytime noise levels were below the internal daytime noise criterion.
13. The 10th highest maximum at night was 44 dB L_{AFmax} , which is just within the night-time peak noise criteria.

Conclusion

14. The results of the noise measurements demonstrate that the installed glazing and ventilation scheme meets the noise criteria required by Condition 14 of the Planning Approval.

Bedroom S4.02

