Samuel House, 5 Fox Valley Way
Stocksbridge, Sheffield, S36 2AA

Our Ref: SHF.1888.002.NO.TL.001
Date: 11th March 2025

Campbell Homes Ltd – Ossett Lane, Dewsbury
Condition 5: Validation of Predicted Noise Levels at Residential Properties

Introduction

Enzygo Limited has been appointed to provide an assessment of noise affecting a new residential development in Ossett Lane, Dewsbury. The development includes 5no. private residential properties with associated parking and external amenity space (private gardens).

The development was granted outline consent in March 2022 under application reference 2021/60/91695/E and a subsequent detailed assessment of noise affecting the development was prepared in March 2023 (report reference: SHF.1888.002.NO.R.002, referred to hereafter as the "2023 report").

The 2023 report proposed glazing and ventilation systems which would be suitable to achieve the required internal ambient noise level criteria from BS 8233:2014 *Guidance on sound insulation and noise reduction for buildings* (BS 8233) and the internal night-time maximum noise level criterion from the World Health Organisation publication *Guidelines for Community Noise* (WHO Guidelines). A planning condition (Planning Condition 5) was subsequently imposed by Kirklees Council (KC), which has been reproduced below, for reference:

> *"Before the development is first brought into use, all works which form part of the sound attenuation scheme as specified in the Noise Impact Assessment authored by Enzygo dated March 2023 Ref SHF.1888.002.NO.R.002:*
>
> *a) shall be completed; and*
>
> *b) written evidence to demonstrate that the specified noise levels have been achieved shall be submitted to and approved in writing by the Local Planning Authority.*
>
> *If it cannot be demonstrated that the noise levels specified in the aforementioned Noise Report have been achieved, then a further scheme shall be submitted for approval of the Local Planning Authority incorporating further measures to achieve those noise levels.*
>
> *All works comprised within those further measures shall be completed and written evidence to demonstrate that the aforementioned noise levels have been achieved shall be submitted to and approved in writing by the Local Planning Authority before the development is first brought into use."*

The purpose of this Note is to demonstrate that the required habitable noise levels have been achieved in accordance with BS8233 and WHO Guidelines, such that Planning Condition 5 may be discharged.

Assessment Criteria

Table 1 presents the applicable noise criteria, in accordance with BS8233 and WHO Guidelines. The criteria are also consistent with those presented in the 2023 report, on which the recommended glazing and ventilation systems were based.

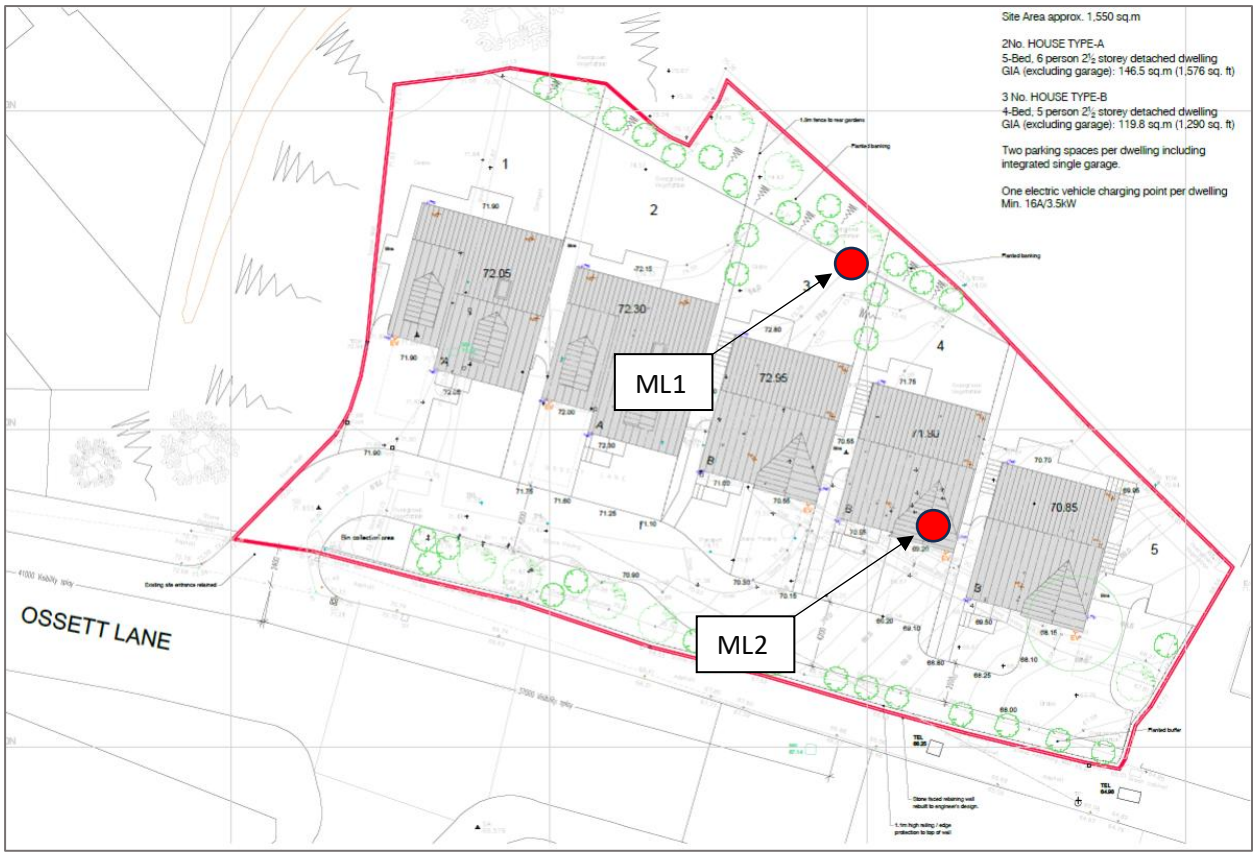
Table 1: Noise Criteria

Location	07:00 to 23:00 Hours	23:00 to 07:00 Hours
Living room	35dB $L_{Aeq,16hr}$	-
Bedroom	35dB $L_{Aeq,16hr}$	30dB $L_{Aeq,8hr}$
Private Gardens	55 dB $L_{Aeq,16hr}$	-

Baseline Survey Information

In order to establish whether the noise criteria are met at the proposed development, a noise survey was undertaken over a 24-hour period on Thursday 13th February 2025. Measurements were undertaken at the locations shown in **Figure 1**.

Figure 1: Noise Measurement Locations



Measurement Location 1 (ML1)

Measurements took place within the garden associated with Plot 3 over a 24 hour period commencing at 12:15. The microphone was installed at a height of 2m above local ground level, attached to the rear garden fence.

Measurement Location 2 (ML2)

Measurements took place within the Plot 4 bedroom overlooking Ossett Lane, over a 24 hour period commencing at 13:00. These measurements were undertaken to obtain representative noise levels within sensitive internal spaces during the daytime and night-time periods. The microphone was installed at a height of 1.5m above floor level, centrally within the room. Throughout the measurement period windows were kept closed with ventilators open.

Whilst these measurements are considered to be representative of noise levels within bedrooms overlooking Ossett Lane, they are also considered suitably representative of (though likely overestimating) noise levels in living rooms at ground floor, on the basis that, in proximity to a road, external noise levels at first floor windows tend to be higher than those at the ground floor. This is as a result of first floor windows typically having a less obstructed view of the highway as a whole, and other miscellaneous local sources of ambient noise.

Weather Conditions

The weather was generally conducive to environmental noise measurement, it being dry with negligible winds during all survey periods (<5 ms^{-1}).

Measuring Equipment

The noise measurement equipment used during the survey is shown in **Table 2** and was set to record the noise levels in terms of the $L_{Aeq,T}$ and L_{AFmax} parameters.

The sound level meters were field calibrated, using the acoustic calibrator, prior to commencement and following completion of the overall survey. No drifts in calibration were noted.

Table 2: Noise Monitoring Equipment

Location	Equipment	Make and Model	Serial Number	Calibration due Date
ML1	Sound Level Meter	01 dB Fusion	11327	06/09/2025
	Microphone	Grass 40CE	259479	
	Pre-amp	01 dB PRE 22	1605201	
ML2	Sound Level Meter	Svantek 971A	113221	21/02/2026
	Microphone	Aco Pacific 7152	80629	
	Preamp	Svantek SV18A	113722	
ML1 and 2	Calibrator	01dB-Stell Cal 21	34675335	27/11/2025

The external calibration documentation for the equipment used is available upon request.

Survey Details and Results

The results of the survey are summarised in **Table 3** and **Table 4** below and are presented graphically in **Appendices A1** and **A2**.

Table 3: Summary of Sound Pressure Levels at ML1

Period	Duration hh:mm	Average $L_{Aeq,T}$, dB
Day	16:00(1)	49
(1) includes periods between 12:15 – 23:00 on 13/02/2025 and between 07:00 – 12:15 on 14/02/2025		

Table 4: Summary of Sound Pressure Levels at ML2

Period	Duration hh:mm	Average $L_{Aeq,T}$, dB	L_{AFmax}, dB(2)
Day	16:00(1)	31	-
Night	08:00	22	42
(1) includes periods between 13:00 – 23:00 on 13/02/2025 and between 07:00 – 13:00 on 14/02/2025 (2) 90th Percentile L_{AFmax} noise levels during measurement period			

Analysis

Noise levels in Private Garden Spaces

The measured daytime ambient noise level presented in **Table 3** is below the 'desirable' recommended guideline limit of 50dB ($L_{Aeq,T}$), as was predicted in the 2023 report.

It is considered, therefore, that noise levels in private gardens spaces of the development are habitable, without the need for further mitigation.

Noise Levels in Sensitive Internal Spaces

The measured daytime and night-time ambient noise levels ($L_{Aeq,T}$) presented in **Table 4** fall 4dB and 8dB below the respective daytime and night-time 'desirable' noise limits prescribed in BS 8233.

The measured night-time maximum noise level ($L_{AFmax,T}$) presented in **Table 4** falls 3dB below the noise limit prescribed in WHO Guidelines.

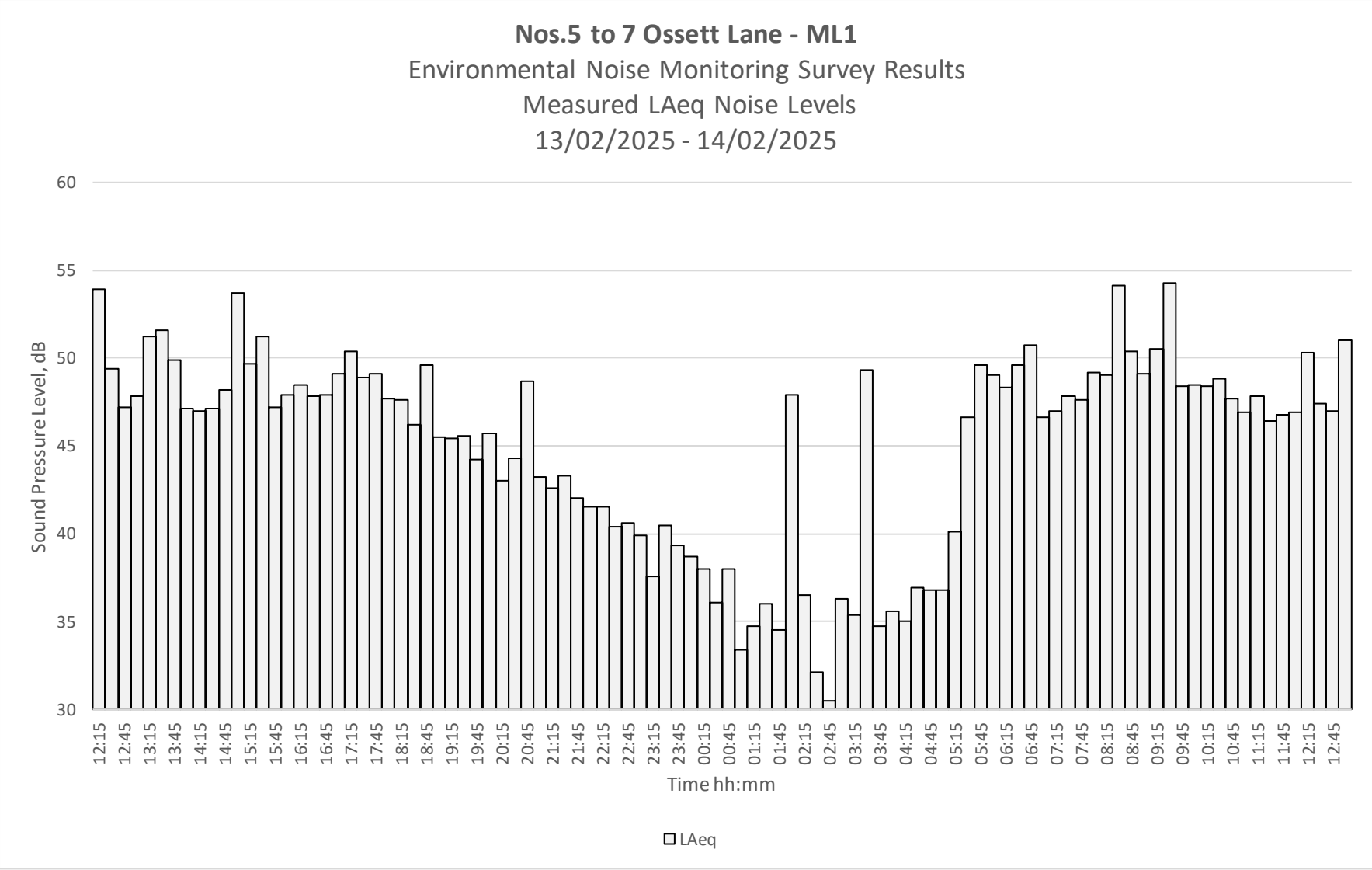
Therefore, noise levels in sensitive internal spaces of properties within the development are likely to be habitable, without the need for further mitigation.

Yours Sincerely,

Darren Lafon-Anthony MSc MIOA FIQ
Director of Acoustics

Samuel House, 5 Fox Valley Way
Stocksbridge, Sheffield, S36 2AA

Appendix A1: Measurement Data at ML1



Appendix A2: Measurement Data at ML2