Memo

From	**Thomas Crabb, Environmental Noise Solutions Limited**
To	**Mr James Gardham, Barnsley Metropolitan Borough Council**
Subject	**Land at Sandygate Lane, Stairfoot**
Date	**7 October 2019**

Dear Sir

Thank you for your response regarding the proposed residential development at land at Sandygate Lane, Stairfoot.

To summarise, ENS report ref: NIA/8529/19/8485/v4/Stairfoot determined design noise rating levels by applying character penalties to scrapyard noise levels (corrected for the residual noise climate of road traffic noise) as measured at MP1 and MP2 (along the south western boundary with the adjacent scrapyard).

The response suggested that, as a robust and repeatable scenario, the character corrections should instead be applied to the uncorrected measured levels, and that Section 5.00 (Sound Attenuation Scheme) of the submitted ENS report should be revised using these slightly higher noise rating levels.

The following paragraphs detail the revised scheme of sound attenuation.

Habitable Rooms fronting towards the Scrapyard

The measured daytime level at MP1 was **61 dB $L_{Aeq\ (1\ hour)}$**. Allowing a +6 dB character penalty, this equates to a design noise level of **67 dB $L_{Aeq\ (1\ hour)}$** for habitable rooms fronting towards the scrapyard. This represents a +3 dB increase in the design levels used in Section 5.00 of the ENS report.

In order to achieve the daytime internal ambient noise levels described in BS 8233, habitable rooms fronting towards the scrapyard should therefore be fitted with glazing rated at least **32 dB R_w+C_{tr}** (a +3 dB enhancement over the glazing specified in Section 5.00 of the ENS report).

This can be achieved with enhanced double glazing comprising 10 mm glass / 6–20 mm air / 6 mm glass. See Appendix 1 for glazing/ventilation markup.

External amenity (gardens)

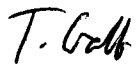
The measured daytime level at MP2 was **55 dB $L_{Aeq\ (1\ hour)}$**. Robustly allowing a +6 dB character penalty, this equates to a noise level of **61 dB $L_{Aeq\ (1\ hour)}$** at the nearest proposed gardens to the scrapyard.

As part of the noise mitigation measures, a 2.2 metre close-boarded acoustic fence (or a combination of bund and fence) is to be installed along the south western boundary of the townhouse gardens to provide further screening to the scrapyard (see Appendix 1 for the location of the fence).

The provision of the acoustic fence (in conjunction with the orientation of the dwellings) will ensure that noise levels within gardens remain at an acceptable level.

I trust the foregoing is sufficient for your needs. Should you have any queries regarding the above, please do not hesitate to contact me.

Yours sincerely



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Appendix 1
Drawings (Scheme of Sound Attenuation)

