

Acoustic Associates Sussex Ltd

Initial Acoustic Issues New Dog Kennels (Change of Use)

Site: Lot 2, Hangleton Lane, Ferring, West Sussex

Client: WADARS

Architect: djb Ltd.

Report by: George Orton BEng(Hons) MIOA

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Acoustic Associates

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1 Introduction

Acoustic Associates have been appointed to undertake an initial acoustic issues report relating to the proposed development at Lot 2, Hangleton Farm Equestrian Centre, Hangleton Lane, Ferring West Sussex BN12 6PP

The acoustic issues document will introduce mitigation measures that may help to reduce noise breakout from the proposed development. The noise mitigation measures specified should also benefit staff and animals at the proposed kennels development. It is understood that this document may supplement a pre application planning enquiry.

2 Planning Policy, Context & Noise Criteria

2.1 Context

It is proposed that WADARS will purchase Lot 2 and operate their charity from that location. The existing site consists of buildings and stables. Some of the stables will be converted to house animals such as dogs and cats. Some of the stables will continue to be used as equestrian stables. The figure below shows the Lot 2 layout:

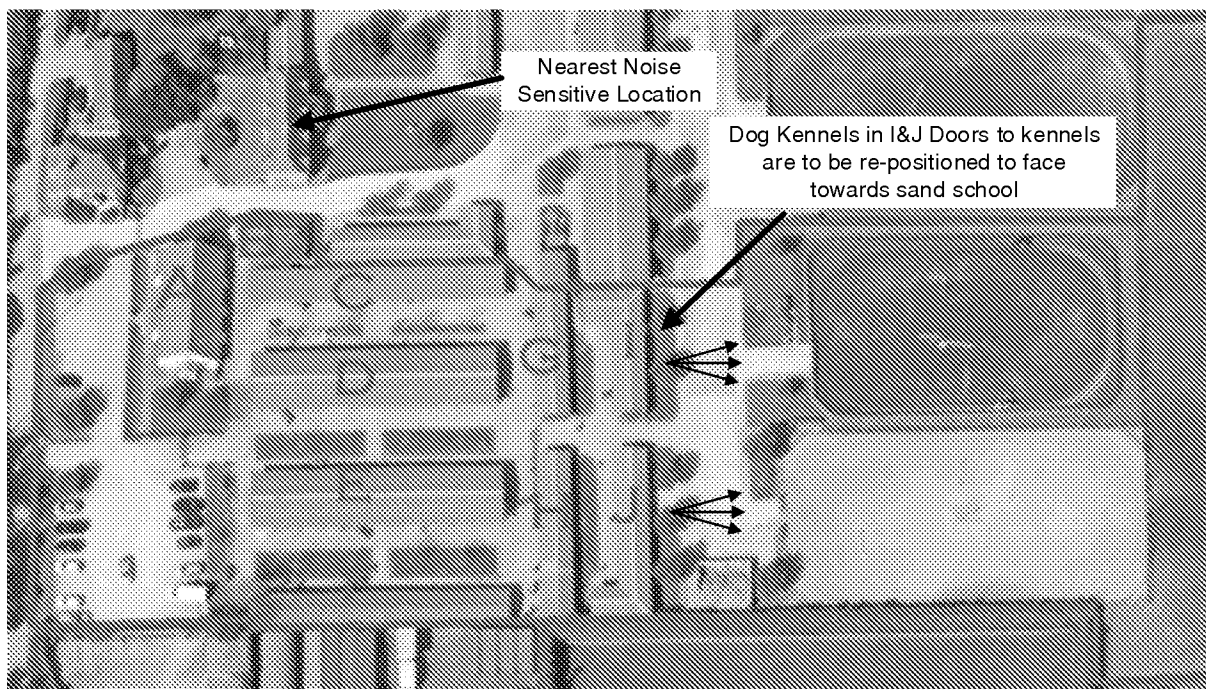


Figure 1: Lot 2 Layout

2.2 National Planning Policy Framework 2012

If the pre application enquiry proves positive a full planning application would be submitted. At this stage it is possible that the Local Authority may require a noise assessment to quantify the level of noise breakout from the proposed development.

Previously, planning policy guidance notes set out the Government's policies on different aspects of planning. Until recently, it was the case that Local Authorities must take their content into account in preparing their development plans. They may be material to decisions on individual planning applications and appeals.

It is understood that the Local Authorities are going to generate their own noise assessment guidelines and noise criteria. At the time of completing this report the guidance document had not been published.

Based upon discussions with the Local Authority it is recommended that in this case the appropriate criteria would be provided by:

- BS8233 (1999) - Sound insulation and noise reduction for buildings
- World Health Organisation (WHO) - Guidelines for Community Noise (1999).

2.3 WHO Internal Noise Criteria

The target internal levels are based on guidelines laid out by the World Health Organisation (WHO) and are as follows:

Room Type	Target Maximum Internal Level - Leq dB (A)
Living rooms	35 (Daytime only)
Bedrooms	30 (Night)

WHO state that the noise level outside a bedroom window should be less than 45dB(A) this assumes that an open window provides 15dB attenuation.

2.4 WHO External Noise Criteria

With regard to outdoor amenity areas WHO states the following:

To protect the majority of people from being seriously annoyed during the daytime, the outdoor sound level from steady, continuous noise should not exceed 55dB(A) on balconies, terraces and in outdoor living areas.

To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound level from steady, continuous noise should not exceed 50dB(A) on balconies, terraces and in outdoor living areas.

2.5 BS8233 Noise Criteria

Table 5 of BS8233 provides the following guideline values:

Criterion	Typical Situation	Design Range LAeq,T dB	
		Good	Reasonable
Reasonable resting/sleeping conditions	Living Rooms	30	40
	Bedrooms	30	35

Table 1: BS8233 Criteria

A footnote to this table states that "for a reasonable standard in bedrooms at night, individual noise events (measured with Fast time weighting) should not normally exceed 45dB LAmax".

3 Proposed Noise Mitigation Measures

The stables that are to house dogs will be modified to reduce noise breakout and to control reverberation. The stable structure will be upgraded to improve sound insulation of elements facing and partially facing nearby noise sensitive properties. Adding additional absorptive treatments will help to reduce the reverberant noise level within the kennels. This will reduce noise breakout levels and will create a better environment for staff and the dogs. The drawing below shows the recommended noise mitigation measures:

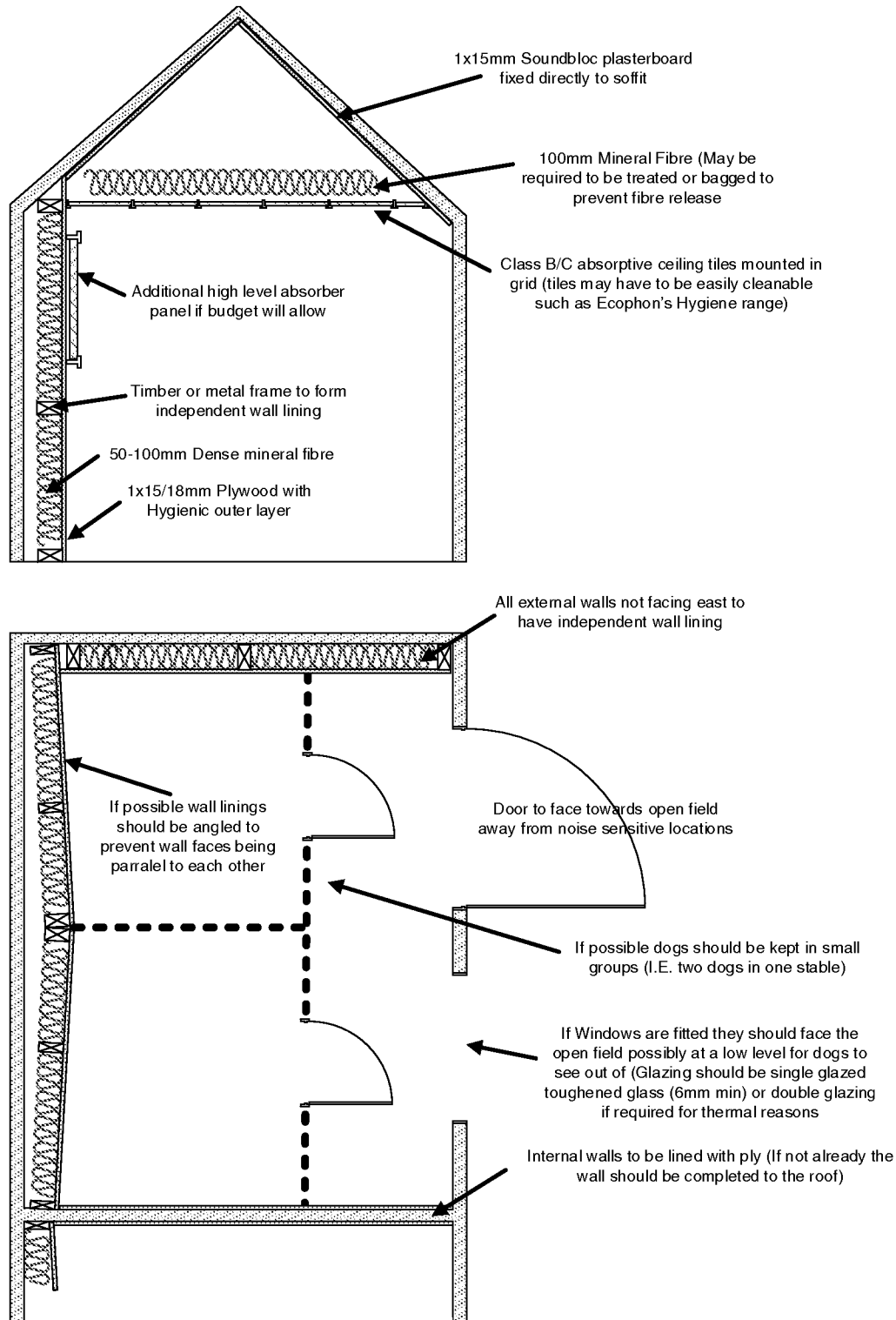


Figure 2: Noise Mitigation Measures

Notes on Above

- Absorptive ceiling and wall panel may have to be cleaned regularly so choice of material would be important. Ecophon's Hygiene Advance would be suitable and is available as a ceiling tile and as a wall mounted panel
- WADARS initial specification state that the individual stables will be converted to house 1 or 2 dogs (previously 1 horse). This approach is recommended as the potential for noise levels building up would be reduced. It is likely that this would also be beneficial to the dogs as they would be housed with another dog in a "cosier" environment rather than in a large hall full of barking dogs.
- It is likely that the top half of the stable door will be open for a large proportion of the time to provide ventilation. For this reason the doors are to be relocated to face away from nearby noise sensitive properties.
- Windows should also face away from the nearby noise sensitive properties.

4 Conclusion

The above mitigation measures will help to reduce noise breakout from dogs in the new kennels. Reducing the reverberant build-up of noise inside kennels will also be beneficial to staff and animals.

It is possible that a noise assessment would be required either as a planning condition or as part of the full planning application. The noise assessment would assess noise breakout levels in terms of noise criteria detailed in the following documents:

- BS8233 (1999) - Sound insulation and noise reduction for buildings
- World Health Organisation (WHO) - Guidelines for Community Noise (1999).