

To whom it may concern,

We have previously applied for a material change of use at 25 Rainforest Drive in Julatten QLD 4871. Our intention is animal keeping within a small boutique style kennel. Since our initial application we have sought expert advice by ASK Consulting Engineers whom provided us with a highly detailed noise impact assessment. This report also specifies where the kennels should be located and what materials they should be constructed from as to minimise effects on the neighbouring properties. The report shows that some changes need to be made from our initial application in order to reach compliant noise levels.

In light of the report, the Mareeba shire council have asked us to write a letter pointing out the changes that will occur. Those changes are as follows:

- A 2m high noise barrier is to be constructed around the kennel outdoor area. Any gates in the barrier are also to meet the acoustic requirements. The extent of the area is approximately 45m long x 10m wide, and is located approximately 5 m from the northern site boundary. The barrier can include variations of +/- 1 metre to allow for step-ins, recesses or other such design features.
- The timber kennels are located on the western side of the outdoor area with doors facing into the outdoor area in an E/ESE direction. The kennels may be fully contained within the outdoor area, or fully excluded from the outdoor area with only their front entrance facade contained within the outdoor area (drawings included in the acoustic report).
- The solid walls of the dog kennels can form part of the noise barrier, as long as the wall is solid from ground level to 2m above ground. If the dog kennels are to be raised off the ground, then the area between the dog kennel floor and ground is to consist of a noise barrier.
- Kennels are to be limited to housing small and medium sized dogs up to 30 kg in weight. This is to reduce the average dog barking noise level.
- In the evening and night dogs will be locked into kennels.
- The kennel construction drawings are included in the acoustic report and construction is as follows:
 - Dimensions: Approximately 3m x 3m floor, with enclosed area approximately 3m x 2m, and the remainder being deck. The deck side is to face into the fenced outdoor area.
 - Walls: weatherboard (timber or fibre cement) cladding, minimum 50mm glasswool insulation, 6mm fibre cement internal sheeting.
 - Floor: 15mm compressed fibre cement sheeting.
 - Roof: metal roof sheeting (e.g. corrugated Colorbond roof), minimum 50mm thick Anticon or glasswool insulation, 6mm fibre cement ceiling.
 - Door: minimum 35mm thick solid core door facing into the dog outdoor area. The door is to include minimal gaps so as to minimise acoustic leakage. If a half/dutch/stable door is proposed, then the join is to be either rebated or include a cover strip to minimise noise leakage.
 - Windows: minimum 5mm thick glass or 10mm thick Perspex. Windows are to remain closed in the evening and night.
 - Ventilation: the ventilation is not to compromise the acoustic performance of the kennel building envelope. Suitable ventilation could consist of (maximum) 300x300 metal ducts with 25mm internal acoustic lining to a 1 metre length. An duct could be added at the lower wall of the kennel, and a second exhaust duct with fan at the roof/ceiling of the kennel. Alternative designs would be possible, but should be approved by an acoustic consultant. The ventilation is to be protected from the dog, and may require a solid cover to prevent air flow in cooler months. Note: the kennel management plan may include air change requirements.
 - Absorption: An area of 2m² of acoustically absorptive product (minimum NRC 0.65) is to be included into the room (e.g. 50mm insulation covered by perforated foil/steel/fibre cement/fabric, proprietary acoustic product (e.g. megasorber, stratocell whisper) or similar). The absorption should be added to upper wall areas or ceiling to avoid damage by dogs.
 - General: The kennel is not to include any other penetrations, gaps or holes that would compromise the acoustic performance of the above building elements. For example, lighting

should be surface mounted and not cut into the ceiling/wall.

- If there are other shelter structures in the dog outdoor area, e.g. communal dog area. Then it is required that the underside of the shelter roof be lined with minimum 50mm thick insulation with a perforated foil facing. The intent of this insulation is to minimise noise reflecting off the roof and over the surrounding noise barrier.

- It is recommended that kennel drawings be signed off by an acoustic consultant prior to construction to confirm acceptability.

. As a result of the upgraded kennel construction, ultrasonic bark control devices and the use of the sound proof room in the main residence are no longer required.

Any further questions please do not hesitate to contact us.

Sincerely,

Alicia Knudsen and Malcolm Wallace