

Opinion from RMG regarding the implications of Rule 4.9.34 in respect of Noise Attenuation at Stonebrook.

Rule 4.9.34

In ODP Area 3 and ODP Area 8 in Rolleston, for any dwelling constructed between 40m and 100m (measured from the nearest painted edge of the carriageway) from State Highway 1:

- *Appropriate noise control must be designed, constructed and maintained to ensure noise levels within the dwelling meet the internal design levels in AS/NZS2107:2000 (or its successor) – 'Recommended design and sound levels and reverberation times for building interiors';*
- *Prior to the construction of any dwelling an acoustic design certificate from a suitable qualified and experienced consultant is to be provided to Council to ensure that the above internal sound levels can be achieved.*

The first point to note is the SDC advice is correct in that Stonebrook is located in **ODP Area 3** and so the rule will apply to all dwellings (note not allotments) that are located between 40-100 metres of the painted edge of the carriageway of State Highway 1.

Similar to **Rule 4.9.33** (which prevents any dwelling being constructed within 40m of the painted edge of the carriage way of SH1 without a resource consent (which CDL now have a global consent in effect already)), **Rule 4.9.34** was introduced by the Council following the plan change for Stonebrook. The intention of the rule is to avoid reverse sensitivity noise effects from the road. Consent was obtained to reduce the setback of dwellings from 40m to 30m, subject to acoustic standards.

Reverse sensitivity effects of SH1 were addressed as part of the original consenting process (pre Rule 4.9.34), and again as part of the aforementioned resource consent to enable dwellings to be located within 40m of the painted edge (post Rule 4.9.34). To mitigate noise effects, CDL proposed the construction of an acoustic fence adjacent to SH1 – which was determined to be sufficient by Marshall Day Acoustics and the Council at the time. Given this mitigation, it is possible that AS/NZS2107:2000 might be achieved for Lot 208 and other allotments affected (see below) however the rule requires this to be confirmed by an acoustic engineer on a case by case basis. In particular, the second part of the rule deals with the requirement to provide an acoustic design certificate.

Looking at the latest approved subdivision plan, this rule has the potential to apply to all allotments within Stages 9 and 10 – again, subject to the final location of the dwelling. Given the depth of the allotments in Stages 9 and 10 (approximately 40m which for two allotments is approximately 80m combined), the location of the road internally within the subdivision (approximately 20m) and a separation distance of the painted edge of SH1 (say approximately 5m?) the rule is unlikely to apply to other stages. In our estimate the following allotments are affected:

- Stage 9 - Lots 178-185
- Stage 10 - Lots 204-213