

Delmore Fast-Track

25/06/2025 – Auckland Council Response

Annexure 13:

Noise and Vibration

Bin Qui

From: Bin Qiu, Senior Specialist, Specialist Unit, Planning & Resource Consents, Auckland Council

Date: 20/05/2025

Documents Reviewed:

- Noise Assessment- Delmore Residential Development, Wainui, Delmore, 11 February 2025, SLR Consulting New Zealand
- Delmore Fast Track Application AEE report, 17 February 2025, Barker & Associates Limited
- Delmore Fast Track Proposed Consent Conditions

List all associated reasons for consent for your topic area:

- Unmitigated construction noise exceeds the AUP permitted construction noise standard (70 dB LAeq 7:30am-6:00pm Mon Sat) at three neighbouring buildings:
 - o 19A Kowhai Road 4 dB exceedance during Stage 1E earthworks only.
 - o 59 Russell Road 14 dB exceedance during Stage 1E earthworks only.
 - o 90 Upper Ōrewa Road 8 dB exceedance during Stage 2F earthworks only.
- With noise barriers in place, a potential marginal exceedance of up to 5 dB is predicted at 59 Russell Road for a duration of less than one week during Stage 1E earthworks only

Overall Summary:

The applicant's noise report has adequately assessed the proposed construction noise and the future operational noise, the noise data and modelling methodology used in SLR report are representative.

It is predicted that the proposed construction works will comply with the AUP permitted noise standards at all adjacent receivers except one neighbour (59 Russell Road), the construction vibration levels are predicted to comply with the AUP permitted construction vibration standards; the operational noise will comply with the AUP noise standards at all neighbours including those in future zoning.

Effective mitigation measures are recommended to reduce and manage the noise, the proposed mitigation measures are

- Use of noise barriers
- Implementing CNVMP incorporating best practices including
 - Identification of surrounding noise and/or vibration sensitive receivers
 - communication to occupants of all immediately neighbouring buildings
 - scheduling of activity to times most suitable for the receivers
 - selecting quiet plant and equipment
 - noise and vibration monitoring
 - noise complaint handling procedure

Based on my experience, these mitigation measures are effective to reduce the noise level and suitable for minimising the noise effect for the neighbours.

The noise exceedance effects

Only one neighbouring house is predicted to receive noise of upto 75 dB LAeq, which may be over the AUP permitted noise standard by 5 dB but does not exceed the noise criterion (75 dB LAeq) recommended by the current New Zealand Standards: NZS 6803:1999 Acoustics – Construction noise.

The noise of 75 dB LAeq may cause slight annoyance as phone conversion voice may need to be slighted raised and TV volume may need to increase. But residential and office activities generally can continue.

Noting the noise exceedance duration being less than a week, the noise effect may be managed by the proposed mitigation measures, such as prior communication, scheduling noisy work at least sensitive time, noise monitoring etc, to a reasonable level.

The operational noise effect is reasonable as it is predicted to comply with the relevant AUP noise standards.

Comments on draft conditions (see Appendix 22).

Condition 15, CNVMP: it is appropriate and acceptable.

Condition 28: the noise limit of 75 dB LAeq for 59 Russell Rd would be more precise in terms of stage of work, the assessment method which should be specified in the condition. Amendment is suggested below.

Condition 29: this condition should set out an upper limit of 5mm/s over which vibration may cause damage to structure. See amendment below.

Proposed changes to the conditions 28 and 29 are in red as follows:

(28) Noise arising from earthworks and construction works on-site shall not exceed the following limits when measured or assessed at any building on any other site that is occupied during the works in accordance with the requirements of NZS6803:1999, where affected party approval has not been obtained.

Address	Activity	
	Earthworks during Stage 1E	All other times
59 Russell Road	75 dB LAeq	Noise limits in Standard E25.6.27
All other properties	Noise limits in Standard E25.6.27	Noise limits in Standard E25.6.27

- (29) If vibration levels from earthworks or construction works exceeding 2mm/s are predicted or measured, in any axis when measured in the corner of the floor of the storey of interest for multistorey buildings, or within 500mm of ground level at the foundation of a single storey building, the consent holder must ensure the vibration will not exceed 5 mm/s and must consult with the relevant occupants to:
- (a) Discuss the nature of the work and the anticipated days and hours when the exceedances are likely to occur;
- (b) Determine whether the exceedances could be timed or managed to reduce the effects on the receiver; and
- (c) Provide in writing, no less than 3 days before to the work begins, details of the location and duration of the works, a phone number for complaints and the name of the site manager.

Recommended Additional Conditions:

Further conditions required:

Construction noise

- (**Construction times**) All construction works shall be restricted to between 7.30am and 6.00pm from Monday to Saturday. There shall be no works on Sundays or public holidays. The restriction on hours of works shall not apply to low noise generating activities, such as site set up or staff meetings, which may occur outside of these hours.

Operational noise

Within one month of the proposed waste water treatment plan (WWTP) or any future
upgrades to the WWTP commencing operation, the consent holder must submit a noise
monitoring report with noise measurement results prepared by a suitably qualified and
experienced noise consultant to the council for review, which confirms that the waste water
treatment plan have been constructed and operated to maintain compliance with the relevant
noise limits of AUP E25.

End of report