

8 July 2026

SLR Ref No.: 860.016828-L02-v2.0 20260708

Attention: Andrew Allsopp-Smith

Myland Partners

SLR Project No.: 860.016828

RE: Delmore Residential Development, Wainui, Delmore NoR6 Road Traffic Noise

SLR has been engaged to provide advice regarding the expected level of road traffic noise from the planned NoR6 roadway at the proposed dwellings associated with the Delmore Residential Development.

This letter provides the expected level of road traffic noise and recommendations for managing the potential effects of noise.

1.0 Noise Modelling and Assessment

Detail for the proposed NoR6 has been taken from the Waka Kotahi New Zealand Transport Agency report titled *Te Tupu Ngātahi Supporting Growth North Assessment of Transport Effects*, dated August 2023 (the SGA report).

The proposed NoR6 comprises a new road connection between Milldale and Grand Drive. The expected traffic flow in the above noted document is 13,200 vehicles per day (combined flow in both directions) for the 2048 year.

Heavy vehicle flow composition values or posted speed limits were not provided in the SGA report, however the road is not expected to be a key route for road freight. As such, a conservative 5% heavy vehicle flow composition value and a posted limited speed limit of 60 km/h was assumed.

The modelling included flat ground and an indicative dwelling located in each lot. The dwellings generally provide acoustic screening for lots set back further from the NoR6 carriageway.

1.1 Designation Condition

The proposed designation conditions for NoR6 include a requirement for the provision of a low noise asphalt surface. Depending on the type of low noise asphalt used, the reduction in traffic noise level can range from -1 dB to -5 dB when compared to a reference asphalt surface.

2.0 Road Traffic Noise Levels

A road traffic noise level of 55 dB LAeq(24hour) incident on the facade of the receiving building is typically accepted as the threshold at which mitigation of noise should be considered.

This is because it is the external level at or below which the generally accepted reasonable internal noise level of 40 dB LAeq(24hour) can be achieved with windows partially open for ventilation.

The predicted 55 dB LAeq(24 hour) road traffic noise contour without additional noise mitigation (beyond a low noise road surface) is shown in **Figure 1**. The predicted noise levels conservatively assume the worst performing type of asphalt road.

Figure 1 Traffic Noise Contour



It can be seen from **Figure 1** that the contour does not extend beyond the first row of houses in most instances.

A map series showing the lot numbers and noise contour are provided in **Appendix A**.

3.0 Recommended Designation Conditions

The following conditions are recommended to manage the effects of noise from road traffic on NoR6. These reflect the conditions commonly adopted and endorsed by Auckland Transport to manage traffic noise effects in similar scenarios.

Condition 1

Any new or altered noise sensitive space with a facade that is within or partially within the Traffic Noise Area *[a figure reflecting the above to be included in the conditions]* must be designed, constructed and maintained so that road traffic noise does not exceed 40 dB LAeq(24hour) in all noise sensitive spaces.

Condition 2

If windows must be closed to achieve the design noise levels in Condition 1, the noise sensitive space(s) must be designed, constructed, and maintained with a mechanical ventilation system that:

- a) For habitable rooms for a residential activity, must achieve the following requirements:
 - I. Provides mechanical ventilation to satisfy clause G4 of the New Zealand Building Code, and



- II. Is adjustable by the occupant to control the ventilation rate in increments up to a high air flow setting the provides at least 6 air changes per hour, and
 - III. Provides relief for equivalent volumes of spill air, and
 - IV. Provides cooling and heating that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C, and
 - V. Does not generate more than 35 dB LAeq(30sec) when measured at 1 metres away from any air diffuser.
- b) For other spaces, is as determined by a suitably qualified and experienced person.

Condition 3

A design report must be submitted by a suitably qualified and experienced person to the Council demonstrating compliance with Condition 1 and Condition 2 prior to the construction or alteration of any building containing an activity sensitive to noise. In the design, road noise is based on current measured or predicted traffic noise levels plus 3 dB, or future predicted noise levels.

We trust this suits your current requirements. Please contact me if you have any queries or comments.

Yours sincerely,



James Boland, MASNZ
Associate Consultant, Acoustics & Vibration



Peter Runcie, MASNZ, MIOA (UK)
Technical Director, Acoustics & Vibration



Appendix A

Lot Number and Noise Contour Map Series



418770

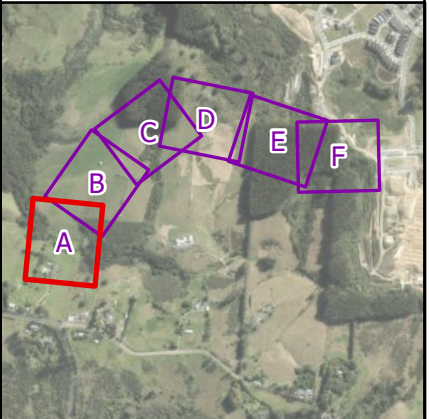
DELMORE RESIDENTIAL DEVELOPMENT

NOISE CONTOUR

FIGURE A1

LEGEND

- Lots
- 2048 55dB LAeq(24hr) Noise Contour

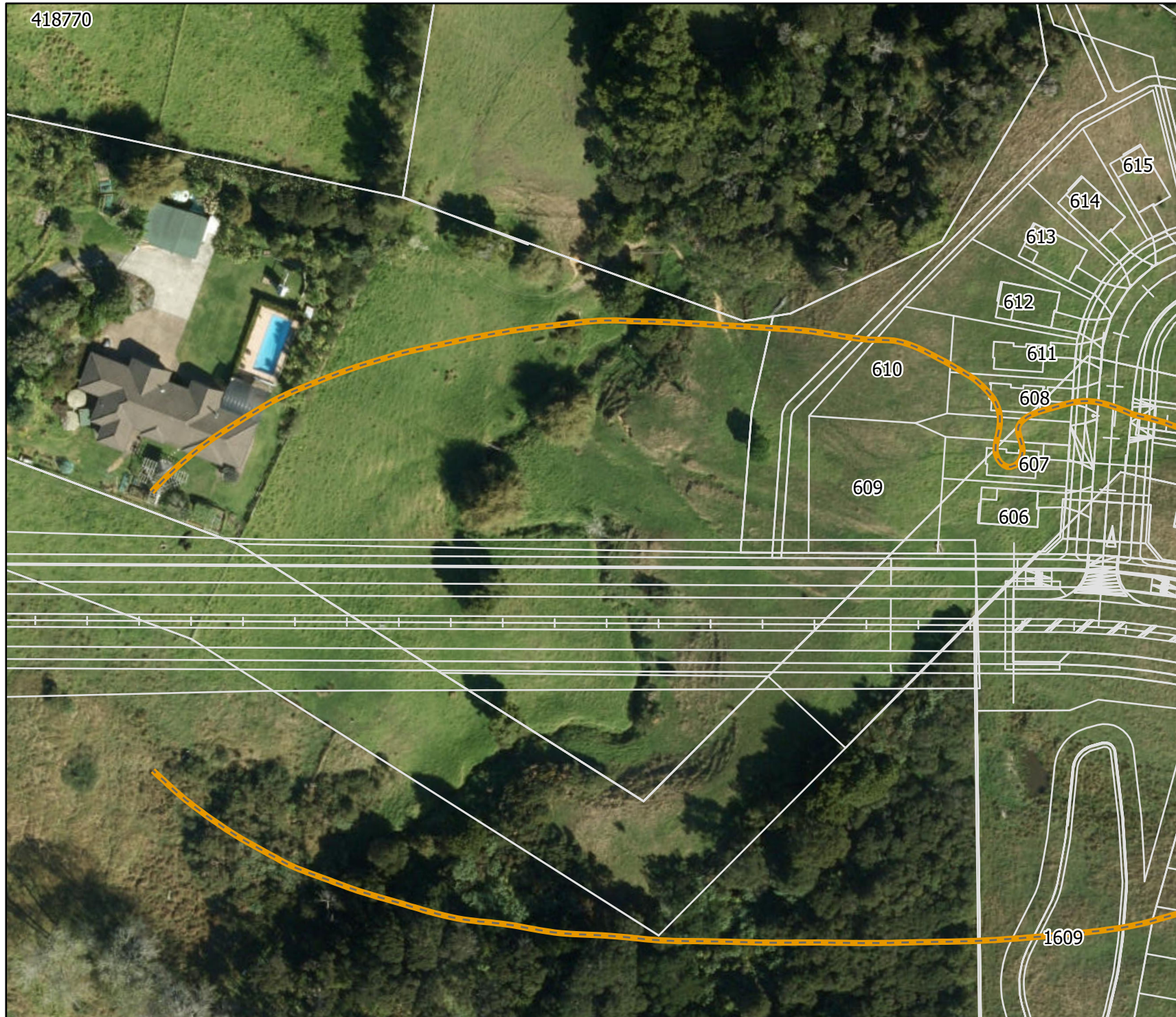


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Drawn by:	DC

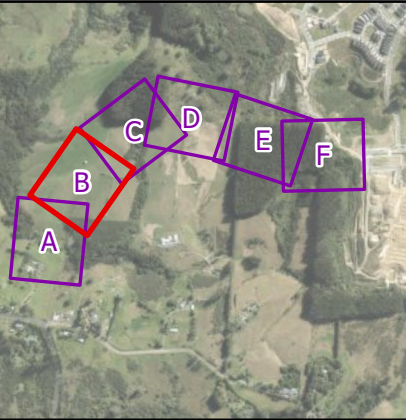


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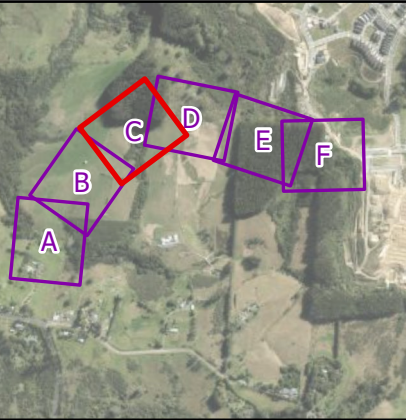


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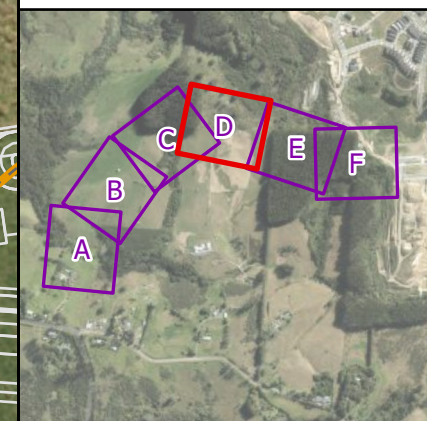
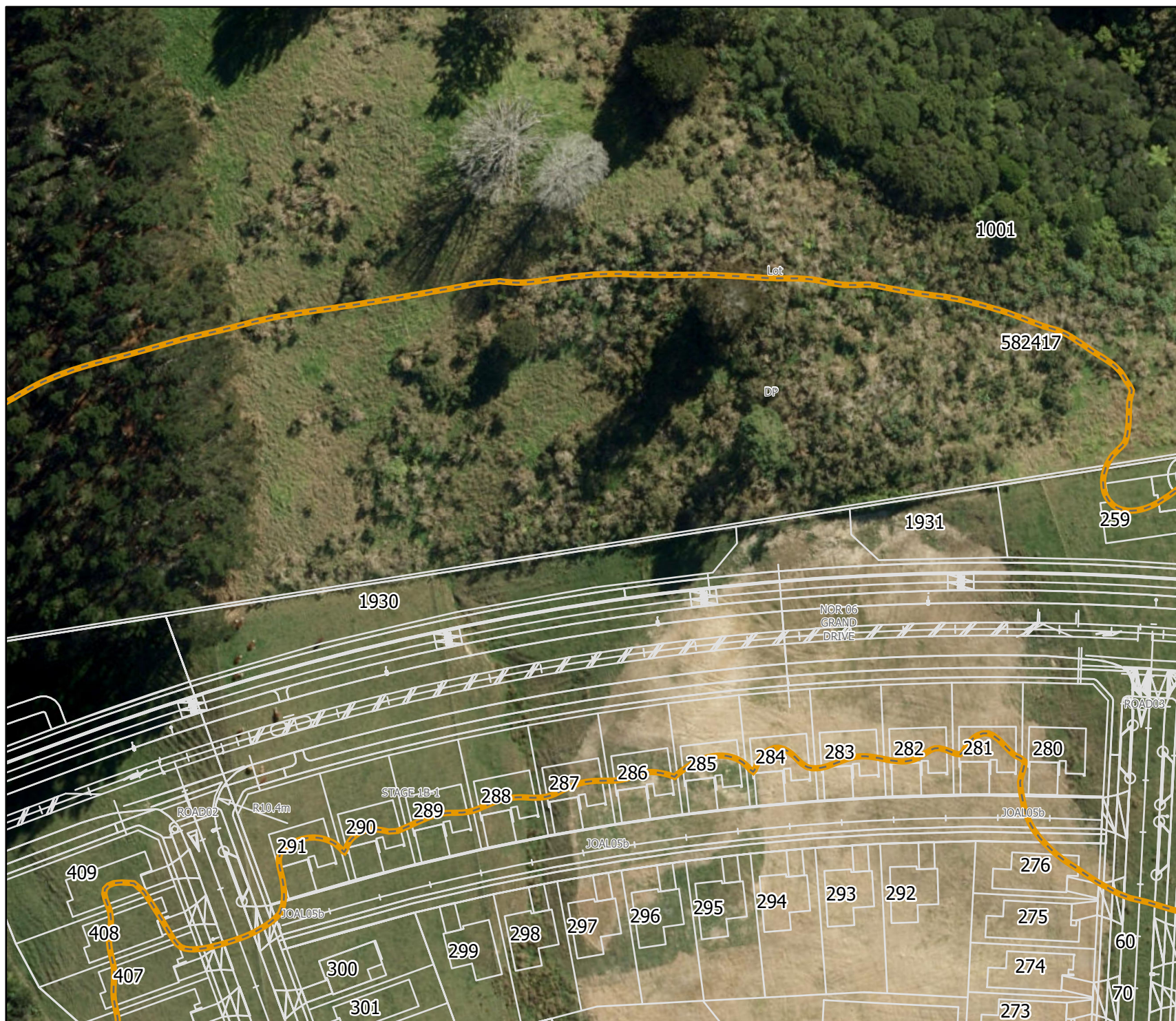
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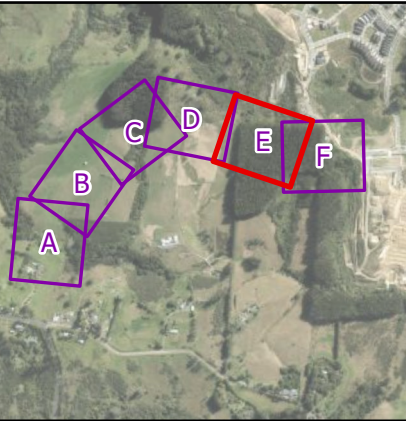


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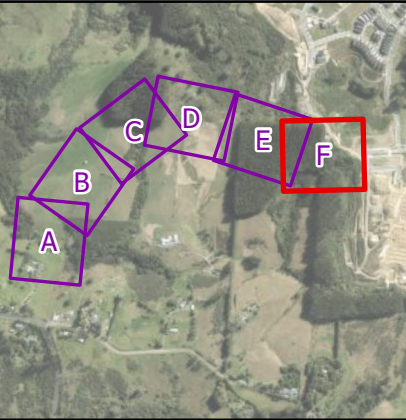


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