

Drury Metropolitan Centre Fast-track

Auckland Council Specialist Memo

Annexure 13:

Noise and Vibration

Bin Qiu

11 August 2025

Noise and Vibration Memo

Prepared by: Bin Qiu, Senior Specialist, Contamination, Air & Noise Team, Auckland Council

Date: 11 August 2025

1. This memo addresses the noise and vibration aspects of the Drury Metropolitan Centre Fast-track proposal.

Qualifications and Relevant Experience

2. I hold the qualification(s) of National Diploma in Applied Health Science at Massey University (formerly Wellington Polytechnic) and have 30 years of experience in Environmental Noise and Acoustics. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications and have appeared as an expert witness before consent authorities on multiple occasions.

Code of Conduct

3. I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Specialist Assessment

4. The construction plant's noise and vibration data used and assessment methodology carried out in Style Group are representable and is consistent with NZS 6803 Acoustics Construction Noise.
5. I confirm that the noise exceedances by 5 to 10 dB over the relevant noise standards of AUP E25 may occur at the adjacent receivers intermittently and for limited durations, their effect can be managed through implementation of a construction noise and vibration management plan as the CNVMP will include the following measures
 - Requiring noise levels don't exceed 80 dB LAeq and vibration level do not exceed 5mm/s PPV at any occupied building.
 - Information of proposed works
 - Procedures to communicate with community and respond to neighbors' concerns
 - Details of noise and vibration mitigation measures, for example, use of noise barriers
 - Procedures for noise and vibration monitoring

6. I note that conditions have been proposed to address the construction noise and vibration effects in the application. The construction noise and vibration effects can be managed to a reasonable level.

Operational Noise

7. While no detailed noise assessment can be carried out at this stage, I agree with Styles Group advice that the proposed activities can comply with the relevant noise standards of AUP E25, given the relatively high noise limits for the Business Metropolitan Centre Zone and Business Mixed Use Zone for the application site and the surrounding environment.

Internal noise levels for noise sensitive spaces in the proposal

8. The proposed building containing noise sensitive spaces will be located further 60m away from the railway line, so the proposal will not require noise insulation as per the Drury Centre Precinct Standards I450.6.9.
9. As the proposal is to design and construct all buildings containing activities sensitive to noise to comply with the requirements of Standards E25.6.10, it is considered the noise effect for the future residential occupants are reasonable. I agree with Styles Group that compliance with E25.6.10 can address the noise effect from the adjacent State Highway.

Comment on Proposed Conditions

10. I have reviewed the following noise related conditions proposed in the application and consider that they are appropriate.
 - Condition 8 CNVMP
 - 43-44 Construction noise limits
 - 45-46 construction vibration limits
 - 47 notifications
 - 81 Acoustic design report (noise emissions)
 - 82 Acoustic design report (noise sensitive spaces)
11. In addition to condition 82, I suggest a condition requiring an acoustic certificate for the design of the building containing an activity sensitive to noise, either at or prior to a building consent application being lodged. The following text is suggested:

At the time a building consent application for any building containing an activity sensitive to noise is lodged with the Council, the consent holder must provide an Acoustic Certificate prepared by a suitably qualified and experienced acoustic specialist to the Council confirming that the noise sensitive spaces are designed to comply with Standards E25.6.9 and E25.6.10 of the Auckland Unitary Plan (Operative in part).