

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name: The Point Mission Bay

Fast-Track application number: FTAA-2511-1133

2.0 Technical Specialist Memo – Noise and Vibration Assessment

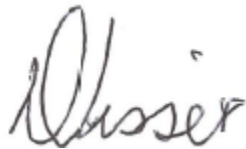
To: Angelika Vaze (Lead Planner) & Warwick Pascoe (PPL)

From: Duffy Visser Specialist: Contamination, Air & Noise. Specialist Input, Planning & Resource Consents

Qualifications & Relevant Experience: I hold the qualification of: Diploma in Public Health and have 29 years of experience in acoustics. I am an affiliated member of the New Zealand Acoustical Society. I have prepared expert evidence and technical assessments for resource consent applications and have appeared as an expert witness before consent authorities on multiple occasions.

Preparation in Accordance with the Code of Conduct: 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.

Signature:



Date: 12 December 2025.

3.0 Executive Summary / Principal Issues

I have assessed the application for construction and operational noise and vibration.

The acoustic report has predicted/calculated that the construction activities can potentially breach the permitted noise and vibration (amenity) limits of the AUP(OP) for short periods of time. The acoustic report has recommended mitigation measures including a construction noise and vibration management plan. These mitigation measures have been recommended as conditions of consent.

With the implementation of the mitigation measures, it is my opinion that the noise and vibration from the construction activities will be managed to a reasonable level at the neighboring noise sensitive receivers.

The noise sources associated with the proposed operation of the retirement village are already present in the existing environment and are common in residential areas. I agree with the acoustic report that the operational noise generated by the proposed activity will not result in any unreasonable effects on the neighboring sites.

4.0 Documents Reviewed

- The following documents have been reviewed in preparing this memorandum:
- Substantive Application for The Point Mission Bay, prepared by Bentley & Co Resource Management Consultants, dated November 2025. (AEE)
- Acoustic Assessment prepared by Styles Group dated 21 October 2025. (acoustic report)
- Draft Construction Noise and Vibration Management Plan prepared by Styles Group, dated 21 October 2025. (draft CNVMP)

5.0 Specialist Assessment

As requested, I have assessed the application for compliance with the construction and operational noise and vibration rules of the Auckland Unitary Plan Operative in Part (AUP) (OP)

The site is surrounded by residential properties and an early childhood education centre (ECE centre) that are by definition, sensitive to noise.

5.1 Construction noise and vibration

5.1.1 Compliance criteria

The proposed construction hours for the use of heavy plant and truck movements are 07:30 to 18:00, Monday to Saturday.

Noise

For the hours of operation, the noise compliance criteria of rule E25.6.27 of the AUP(OP) sets the noise limits at 70 dB LAeq and 85 dB LAm_{ax} outside all residential dwellings and the ECE centre and 70 dB LAeq outside the Ngāti Whātua Ōrākei offices.

Vibration

The AUP(OP) rule E25.6.30. sets the maximum permitted vibration limits for amenity in occupied buildings at 2mm/s and the limit to prevent building damage, the limits set out in German Industrial Standard DIN 4150-3 (1999).

5.1.2 Predicted noise and vibration

The acoustic report has used their existing database to predict/calculate the potential noise and vibration.

Noise

The predicted, worst-case, construction noise levels will overall comply with the permitted noise limits except for the following temporary infringements of the noise levels over short periods at each

receiver over the approximate nine-year construction project other than:

- Noise levels up to 79 dB LAeq and L_{max} ranging from 86 dB to 94 dB at 48, 2/48, and 59 Te Arawa Street, 104, 119, and 119B Rukutai Street, and 86 and 97-99 Aotea Street.
- Noise from concrete breaking will potentially comply with the permitted LAeq limit but exceed the permitted LAm_{ax} limit at 104, 119, and 119B Rukutai Street, and 97-99 Aotea Street by up to 4 dB.

Vibration

All construction activities will comply with 2 mm/s PPV at any neighbouring occupied building, except for the following potential infringement:

During vibratory compaction, vibration levels can reach up to 5mm/s PPV at 59, 104, 119, and 119B Rukutai Street, and 97-99 Aotea Street.

The infringements will be intermittent over a period of 2-3 days for each receiver. The vibration will not exceed a level of 5 mm/s PPV.

5.1.3 Assessment

The effects of the vibration will be mitigated by the proposed consultation.

For most of the duration of the work, noise and vibration levels will be lower and will comply with the permitted construction noise and vibration limits. Noise levels exceeding 70 dB LAeq will occur over a short period for each receiver. Periods of high noise will be intermittent and spread across different stages of the nine-year construction project.

The conditions of consent recommended by the acoustic report are these to be suitable and the best practicable option to manage the effects of construction noise and vibration, and operational noise generated by the proposal.

5.2 Operational noise

5.2.1 Compliance criteria

The operational noise from the activity must comply with Rule E25.6.2 Maximum noise levels in residential zones.

The acoustic report modelled the potential operational noise from the proposal considering the following sources:

- vehicle movements associated with staff, visitors, and service vehicles
- residents and the use of recreation and amenity areas
- noise from external mechanical plants including air conditioning, car parking ventilation, power transformers, and kitchen and refrigeration plant.

Mechanical plants for servicing the buildings and transformers on the site must be designed and operated to ensure that the permitted operational noise limits are complied with.

To avoid plant noise exceeding the noise standards, the acoustic report recommends a standard condition of consent to require the design and installation of all mechanical services to be overseen by a suitably qualified acoustic expert to ensure the noise generated will be at least 10 dB lower than the night-time permitted noise limits (i.e. a limit of 30 dB LAeq at any neighbouring residential property).

5.2.2 Predicted /calculated noise

The acoustic report confirmed that noise emissions from the operation of the proposed retirement village will comply with the relevant permitted noise limits under AUP standards E25.6.2. and E25.6.12(1).

The noise sources associated with the proposed operation of the retirement village are already present in the existing environment and are common in residential areas. I agree with the acoustic report that the operational noise generated by the proposed activity will not result in any unreasonable effects on the neighbouring sites.

5.3 Reasons for consent

Construction noise and vibration are predicted to infringe the permitted limits under standards E25.6.27(1) (construction noise) and E25.6.30(1)(b) (construction vibration amenity).

Table E25.4.1 of the AUP (OP) applies a **Restricted Discretionary** status to activities that do not comply with the permitted activity standards in Chapter E25.

The acoustic report confirms that noise emissions from the operation of the proposed retirement village will comply with the relevant permitted noise limits under AUP standards E25.6.2. and E25.6.12(1). The operational activity is a **Permitted Activity** in terms of noise and vibration.

6.0 Recommendation

I recommend that the measures proposed by the acoustic report and in the draft CNVMP, to minimise the noise or vibration generated by the activity be implemented and adhered to as the best practicable option.

I support the application.

7.0 Proposed Conditions

The acoustic report has recommended mitigation measures. I have adopted these and recommend the measures as conditions of consent.

C1. All construction work involving heavy vehicles and plant will be undertaken between 07:30 and 18:00 on Monday to Saturday.

C2. The final Construction Noise Vibration Management Plan (CNVMP) must be submitted to council for approval at least 10 days prior to the start of the work.

C3. The CNVMP referred to in C2 must be implemented and adhered to for the duration of the works.

C4. Temporary construction noise barriers of at least 2.4m high must be installed on all site boundaries (excluding the boundaries of the Site that adjoin the reserve and where there are vehicle crossings). The barriers must be from solid timber with a surface mass of at least 7 kg/m² (e.g. 12 mm plywood) or proprietary construction noise barriers (e.g. Hushtec Performance Noise Barrier or SFI Echo Barrier).

C5. Noise levels must not exceed 79 dB LAeq at 48, 2/48, and 59 Te Arawa Street, 104, 119, and 119B Rukutai Street, and 86 and 97-99 Aotea Street.

C6. Noise from concrete breaking must not exceed a level of 89 dB L_Amax at 104, 119, and 119B Rukutai Street, and 97-99 Aotea Street.

C7. Vibration levels must not exceed 5 mm/s PPV at the dwellings at 59, 104, 119, and 119B Rukutai Street, and 97-99 Aotea Street for approximately 3 days at each receiver.

C8. All mechanical plant and transformers must be designed and operated to comply with a noise limit of 30 dB LAeq(15 min) within the boundary of any residentially zoned site. Compliance with this design limit must be confirmed by a suitably qualified and experienced person at the detailed design stage of the project. Details of the design and input of an appropriately qualified person must be provided to Auckland Council in writing if requested within 12 months of the mechanical plant being installed.