

#### 24 November 2021

710.30217-L01-v1.0 - Apartment Development (Stage 1 Fast Track Letter).docx

Sanctum Projects Limited 40 George Street Mount Eden Auckland, 1024

Attention: Aaron Ghee

Dear Aaron

Apartment Development 182-184 Kepa Road and 8 Kurhaupo Street Stage 1 of Fast Track Application

#### 1 Introduction

SLR Consulting NZ Ltd (SLR) has been commissioned to undertake an assessment of acoustic effects associated with the proposed apartment development at 182-184 Kepa Road and 8 Kurhaupo Street in Orakei. As part of the resource consent application phase, SLR's role is to evaluate compliance against the Auckland Unitary Plan (AUP) requirements and relevant rules. SLR would identify appropriate additional control measures, if necessary, to result in reasonable noise and vibration effects.

### 2 Experience and Qualifications

The acoustic assessment will be overseen and managed by Peter Runcie. Peter is an acoustic specialist with over 15 years of experience in the field of acoustic consultancy. He has worked on projects in New Zealand, Australia, the UK, Europe and the Middle East across commercial, residential, healthcare and educational sectors, related to environmental impact assessment (EIA), building services and architectural acoustics within the context of large developments through to smaller bespoke projects.

Peter's experience encompasses a wide range of projects from planning applications for single items of plant through to large scale EIAs for mixed use developments; from inception through to construction and completion, commissioning and peer review. He also has extensive experience in building acoustics providing advice to ensure both occupier comfort and compliance with local standards for residential, commercial, educational and leisure developments.

He undertakes technical peer review work for Auckland Council and is an approved Auckland Council Producer Statement author authorised to demonstrate compliance with the Building Code. Peter has also appeared in the Environment Court as an expert witness.

## 3 AUP Requirements

The AUP contains performance requirements and criteria related to acoustics as follows:

- a. Noise and vibration performance criteria related to amenity impacts on neighbouring properties during construction,
- b. Vibration performance criteria related to the avoidance of cosmetic damage to neighbouring properties during construction,
- c. Noise performance criteria related to operational noise impacts on neighbouring properties, and
- d. Noise performance criteria related to provision of suitable internal noise environments to apartments facing the neighbouring business zone (east and west of the site).

# 4 High Level Review

The majority of construction-related noise and vibration generated during the construction phase of the project is anticipated to comply with the AUP controls. However, the noise and vibration amenity controls set out in the AUP may be infringed during short-term periods when such works take place close to immediately neighbouring receivers (during excavation and piling).

The short-term exceedances of the AUP noise limits are common across Auckland for projects of this scale, particularly for locations in close proximity of neighbouring receivers (as is a frequent occurrence in Auckland). Resulting effects associated with these temporarily infringements are typically managed through the adoption of a Construction Noise and Vibration Management Plan (CNVMP). A CNVMP identifies the Best Practicable Option (BPO) mitigation measures to reduce effects to reasonable levels and can include mitigation measures such as screening, plant/methodology limitations, correspondence with neighbours, respite periods, complaint response procedures and noise/vibration monitoring.

No particularly vibration intensive activities are likely to form part of the construction works as piling is expected to be undertaken using a bored piling technique (without vibrating or driving in casings) which does not generate significant levels of vibration. Accordingly, the selection of this method could be considered BPO as the methodology typically generates significantly lower levels of vibration when compared to other piling techniques.

Compliance with the operational noise performance criteria is commonly achieved through considered design of the heating, ventilation and air conditioning (HVAC) plant serving the development. HVAC plant of the type and size expected to be used at the proposed development can be readily controlled through the use of standard mitigation measures (noise reduction screening, in-duct attenuators, careful plant selection and positioning, etc) to meet the AUP criteria.

The building envelope construction shall be designed to meet the AUP requirements for suitable sound insulation to noise sensitive spaces. This is readily dealt with during the developed and detailed design phases through commonly adopted mitigation strategies involving acoustic design input into the building architectural components.

We trust the above serves to supply the information required, should you have any queries please do not hesitate to contact us.

Yours sincerely

PETER RUNCIE Principal

Prepared by: LJ Checked/Authorised by: PR