

13 January 2021

Peter Rogers
Richard Gill School
C/- Stanton Dahl Architects
PO Box 833
Epping NSW 1710

Re: Richard Gill International Music Academy - Compliance with development consent condition E4

Dear Richard,

1 Introduction

This letter has been prepared to address condition E4 of the development consent (SD 10380) in relation to the Richard Gill International Music Academy to be located at Lot 2 DP1118310, 155-157 Maitland Street, Muswellbrook ('the Project').

2 Acoustic requirements

2.1 Consent condition E4

Consent condition E4 relates to the assessment of potential road traffic impacts from the New England Highway bordering the northern boundary of the Project and nominates that the following be satisfied:

Noise assessment

E4. Prior to the commencement of operation, a report must be submitted to the satisfaction of the Certifier and a copy provided to TfNSW, and the Planning Secretary, which demonstrates that the completed development meets the requirements of Clause 87 of the State Environmental Planning Policy (Infrastructure) 2007 and the Department of Planning and Infrastructure's Development Assessment Guideline titled "Development Near Rail Corridors and Busy Roads – Interim Guidelines". The report must include the identification of external and internal noise levels that are representative of the typical maximum levels that may occur at this development and a conclusion as to whether the internal noise levels meet the required dB(A) levels as identified in the "Noise and Vibration Assessment Report" prepared by EMM dated May 2020.

Where it is found that internal noise levels are greater than the required dB(A) level, corrective measures must be identified to ensure that internal noise levels are compliant with the requirements of the Guideline.

2.2 State Environmental Planning Policy (Infrastructure) 2007

The State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) provides guidance on the assessment road and rail noise on sensitive land uses. Clause 87 of the Infrastructure SEPP relates to the assessment of rail noise.

The Department of Planning (DoP) 'Development Near Rail Corridors and Busy Roads – Interim Guidelines' (herein referred to as the 'interim guideline') provides guidance on the assessment of noise impacts from rail corridors. The interim guideline is the document issued by the Secretary for the purposes of assessing road and rail noise and vibration under the Infrastructure SEPP.

Figure 3.1 of the interim guideline provides offset distances from the rail corridor where an acoustic assessment would be required. It is noted that an acoustic assessment would not be required for any sensitive land use outside of 80 m from the rail corridor. It is noted that the nearest rail infrastructure is located approximately 700 m to the north of the site.

As such, rail noise at this distance would not have any impact on the development and as such Clause 87 of the Infrastructure SEPP is satisfied.

2.3 Development Near Rail Corridors and Busy Roads – Interim Guideline 2008

Traffic noise intrusion into the development is to be assessed in accordance with the noise criteria prescribed in Table 3.1 of the interim guideline which nominates a recommended maximum noise level of 40dB $L_{Aeq, 15hour}$. Further, the interim guideline provides the following guidance with regard to naturally ventilated conditions:

If internal noise levels with windows or doors open exceed the criteria by more than 10dBA, the design of the ventilation for these rooms should be such that occupants can leave windows closed, if they so desire, and also to meet the ventilation requirements of the Building Code of Australia

The traffic noise intrusion criteria included in the interim guideline applicable to the development is summarised in Table 2.1.

Table 2.1 Road traffic noise intrusion criteria

Type of occupancy	Assessment criteria, dB $L_{Aeq, 15hour}$
Classrooms	40 (internal – windows closed) 50 (internal – windows open)

3 Road traffic noise assessment

Noise monitoring conducted at the site as part of the development application phase is provided in the report prepared by EMM 2020, *Richard Gill National Music Academy – Noise and vibration impact assessment* prepared for Stanton Dahl Architects.

Noise measurements indicated that road traffic noise levels impacting the main building of the project are in the order of 50 to 51dB $L_{Aeq, 15hour}$ which indicates that:

- the internal noise requirement of 40dB $L_{Aeq, 15hour}$ will be achievable with windows closed using standard building constructions (ie minimum 4mm float glass, no acoustic seals). The existing building construction is typically brick veneer which will provide a greater level of acoustic performance to that provided by standard light weight building constructions; and

- a 10dB reduction across an open façade sufficient for ventilation purposes will result in an internal noise level in the order of 40 to 41dB $L_{Aeq, 15 \text{ hour}}$, satisfying the noise requirement of 50 dB $L_{Aeq, 15 \text{ hour}}$ under naturally ventilated conditions.

Road traffic volumes for the New England Highway were provided in the Seca Solution (2020) 'Proposed Redevelopment, Richard Gill National Music Academy, Muswellbrook, NSW' prepared for Stanton Dahl Architects. It is noted that traffic noise levels recorded at the site were undertaken during periods of reduced volume possibly due to COVID-19 restrictions.

The Seca Solution (2020) report noted a 10-12% reduction in traffic volumes observed in their traffic surveys when compared to those previously conducted in 2018, likely due to the effects of COVID-19. This 10% reduction in traffic would generally result in a 0.4dB reduction in road traffic noise level. Even when factoring in this 0.4dB increase to approximate road traffic noise levels under normal conditions, no additional acoustic treatment would be required to comply with the road traffic noise intrusion objectives.

4 Closure

This letter presents the assessment of potential road and rail noise impacts on the Richard Gill International Music Academy to be located at Lot 2 DP1118310, 155-157 Maitland Street Muswellbrook in accordance with the requirements of condition E4 of the development consent (SD 10380).

With regard to the assessment, we note:

- rail noise would have no impact on the development due to the distance between the site and the rail corridor approximately 700 m to the north. As such Clause 87 of the infrastructure SEPP is satisfied; and
- measured road traffic noise levels at the site when adjusted for decreases in road traffic volume potentially due to COVID-19 indicate compliance with the requirements of the DoP 'Development Near Rail Corridors and Busy Roads – Interim Guidelines'.

As such, the requirements of condition E4 of the development consent are satisfied.

Yours sincerely



James Small

Associate

jsmall@emmconsulting.com.au