

30 January 2019

Gran Associates Pty Ltd  
597 Darling Street  
Rozelle NSW 2039

**Attention: Mr Tony Kemeny**

Dear Tony

## **ADDITIONAL ACOUSTIC INFORMATION**

### **Introduction**

Marshall Day Acoustics (MDA) have been engaged to undertake an acoustic assessment of the proposed school hall to be built on the Kingswood High School property. Our report was submitted along with the Development Application documents, and is identified as Rp 001 r01 20180099, dated 22 November 2018.

Subsequent to the submission of the DA, we are in receipt of a letter from Penrith City Council dated 11 January 2019. Within this letter, Penrith Council has requested clarification on several items within the acoustic report. The response to those requests is provided below.

### **Additional Patron Noise**

Within the acoustic report submitted for DA, there was no assessment of patrons entering or exiting the venue outside of normal school hours and operation. A curfew has been accepted by the client of 10pm, and as such we present below the noise emission from patrons exiting the venue during the evening period of 6pm to 10pm. For this assessment we have assumed that hall would be at capacity and 250 patrons from a crowd of 1000 would leave within a 15 minute period between 9:45pm and 10:00pm.

The assessment assumes that one quarter of the patrons will be talking in a normal conversational manner as they exit the venue, and that the hall will include signage reminding patrons to be quiet as they leave. The assessment is conducted to the boundary of the nearest residential receivers, and includes losses for distance and shielding. While not strictly relevant in regards to compliance, we note that as patrons exit the venue between 9:45pm and 10:00pm, they are likely to be within the dwelling and as such will be exposed to lower noise levels.

The assessment also assumes that the patrons will leave via the doors on the southern façade of the hall and travel south to the carpark and not stop to congregate along the way as per the site plan attached as Appendix A.

**Table 1: Patron noise assessment,  $L_{Aeq}$  dB at various receiver locations**

Receiver	Activity	Predicted Noise Level ( $L_{Aeq}$ )	Project Noise Trigger Level, $L_{Aeq, 15min}$ , dB (Day/Evening)	
			Day	Evening
<b>North</b> 129 Bringelly Rd	Patrons	62	53	46
<b>South</b> 133 Bringelly Rd	Patrons	62	53	46
<b>East</b> 88 Bringelly Rd	Patrons	66	53	46

As shown within the table above, a large crowd entering or exiting the venue will result in the assessment criteria being exceeded at the neighbouring boundaries for short periods of time during the day and evening period. We note however that large crowds such as the those used as the basis for the above assessment are unlikely to be a common occurrence at the school hall and occur over a 15-minute period.

### Comments on Annual Usage

We have been advised by the client that the facility is likely to be used for amplified music events not associated with school use during the evening period on 5-10 occasions. The selection of 5 events per year described within our previous report was given as an indication of what may constitute “occasional” and therefore acceptable to the nearby residential receivers. The actual number of amplified music events in the evening period that would be acceptable from an acoustic perspective is not a measure that is governed by any State Government, EPA or Council criteria.

Rather, the number of events that would be deemed occasional and acceptable is governed by wider community consensus of the impacts of the hall when used for community purposes. As such the number of uses would include consideration of possible and occasional noise impacts arising from the use of the hall including patron entering or exiting the hall.

### Mechanical Plant Noise

The hall will include mechanical ventilation plant comprising outside air fans. While the plant and equipment is not yet fully documented, it will be designed and specified to ensure that the noise from the plant does not exceed the relevant criteria.

Yours faithfully

**MARSHALL DAY ACOUSTICS PTY LTD**



**Justin Hillis**

**Consultant**

## APPENDIX A SITE PLAN



Image from Site Plan/Roof Plan Drawing SD-01