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North Kellyville Public School, Hezlett Road, Kellyville - Operational Noise Management Plan

1 INTRODUCTION

This noise management plan has been prepared for the North Kellyville Public School in order to satisfy condition of consent 23.

2 REQUIREMENTS OF CONDITION 23

Requirements of Condition 23 has been detailed below.

An Operational Noise Management Plan (ONMP) must be prepared prior to the commencement of use of the sports hall and sports courts outside of school use to the approval of the Certifying Authority that includes, but is not limited to:

- a) a description of each type of event, activity and/or use to be undertaken, including a description of any amplification systems;*
- b) identification of noise sensitive receivers, existing and proposed, likely to be adversely affected by activities undertaken;*
- c) details of a noise monitoring program that monitors sound levels from use outside of school use and retains records of the results and details of the monitoring equipment used, including its location and settings;*

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- d) *clearly defined noise management objectives that incorporates all recommended mitigation measures contained in the Construction and Operational Noise Report, prepared by GHD Woodhead, dated August 2017, including the requirement that windows and doors of the sports hall remain closed during major events and the maximum allowable sound levels and limitation level of excessive low frequency (bass) noise;*
- e) *details of a noise complaints handling procedure and actions to be taken at the time of each complaint to monitor and minimise noise impacts. The procedures must include:*
 - i. *the time and date each complaint was received;*
 - ii. *how the complaint was received;*
 - iii. *the contact details of the person lodging the complaint;*
 - iv. *the proposed actions to prevent a reoccurrence of the noise impact;*
- f) *a program for review of the ONMP, including ongoing assessment and improvement of the ONMP. The program must address the effectiveness of:*
 - i. *community consultation (consultation prior to, during (complaints handling and response) and after events and activities described in part a) and consultation as part of the plan review process);*
 - ii. *the use of technology or the setup procedures to mitigate or prevent noise impacts;*
 - iii. *the use of real time mitigation measures to mitigate or prevent noise impacts;*
 - iv. *the use of monitoring programs, the monitoring data records and community consultation information to prevent or mitigate noise impacts; and*
 - v. *the program of review must also provide an Implementation Strategy, that commits to specific management actions, including operational procedures to be implemented along with timeframes. The specific management actions must incorporate best management practice that adequately addresses the identified problems and issues with both non-structural and structural aspects of noise management, such as community consultation, operational hours, equipment setup, use of technology, real time noise mitigation measures, and monitoring program.*

Details must be provided to the approval of the Certifying Authority demonstrating that the ONMP has been prepared in consultation with Council. The ONMP (as revised from time to time) must be implemented by the Applicant for the life of the development.

3 RECOMMENDATIONS OF GHD ACOUSTIC REPORT

The recommendations of the Noise and Vibration Impact Assessment (NVIA) prepared by GHD (reference *GHDDocId/G:\21\26108\6. Kellyville North PS\12 Noise\26108-REB-Kellyville North Acoustic Report.docx*, dated August 2017) are outlined below:

- During operation of the school hall, the windows and doors are to remain closed.
- Events at the school hall should finish prior to 10 pm to negate any sleeping disturbance.
- If noisy events in the school are proposed which have the potential to generate internal noise levels in excess of 90 dB(A) then additional acoustic treatments to the school hall should be considered.

4 SITE DESCRIPTION AND SURROUNDING RECEIVERS

North Kellyville Public School is located at 120 Hezlett Road, Kellyville. The site is bounded by Hezlett Road along the eastern boundary with surrounding residents along the northern, southern and western boundaries.

Outlined below are the nearest noise receivers to the site:

Receiver 1 - Curtis Road residents located to the north of the site.

Receiver 2 - Halloway Boulevard residents located to the west of the site.

Receiver 3 - Gasnier Avenue residents located to the south of the site.

Receiver 4 - Scribbles Kindergarten located to the south of the site.

Receiver 5 - Residential dwelling to the south of the site, adjacent to the Scribbles Kindergarten.

Receiver 6 - Hezlett Street residences located to the east of the site across Hezlett Road.

In addition to above, refer to the figure below outlining the site location and surrounding receivers.



**Figure 1 – Site Location and Surrounding Measurement
Sourced from SixMaps NSW**

5 OBJECTIVES OF OPERATIONAL NOISE MANAGEMENT PLAN

This document has been prepared to ensure all noise management controls outlined in the GHD acoustic report are carried out on a day to day basis as part of the operation of Kellyville Public.

This report will also address management controls that are necessary to avoid excessive noise impacts on nearby development that have not been addressed in the GHD report such Outside of School Hours care (OOSH) and use of the school bell/PA system. The intention of providing additional management controls are to ensure that the operation of the site is undertaken to ensure compliance with the acoustic criteria of the GHD Report.

Noise emission requirements applicable to the site have been adopted from the GHD acoustic report, and are detailed below.

3.3.5 Operational noise criteria

The operational noise criteria for sensitive receivers identified in the vicinity of the school are summarised in Table 3-8.

Table 3-8 Operational noise criteria

Receiver	Time period	Amenity criteria	Intrusive criteria	Sleep disturbance screening test, (external) L_{Amax}	Project specific noise criteria (external), dBA
Residential receiver	Day	55	44	-	44 $L_{Aeq(15\ min)}$
	Evening	45	44	-	44 $L_{Aeq(15\ min)}$
	Night	40	36	46	36 $L_{Aeq(15\ min)}$ 46 L_{Amax}
Scribbles Kindergarten	When in use	45 (internal)	-	-	45 (internal)

Note 1: With consideration to the INP *noise amenity area* classification, the residential receivers surrounding the Project site have been classified as 'suburban'.

Note 2: The INP defines day, evening and night time periods as:

- Day: the period from 7 am to 6 pm Monday to Saturday; or 8 am to 6 pm on Sundays and Public Holidays.
- Evening: the period from 6 pm to 10 pm.
- Night: the remaining period.

6 RECOMMENDATIONS

As part of this Operational Noise Management Plan we proposed to review and address the management and operation of the following items:

- Operation of the School hall.
- Public Address (PA) system and school bell (external components).
- Operation of Out of School Care (OOSC).
- Community use of the site/school hall.
- Special events (Fete, School Disco etc.).

Outlined below are the recommended management controls for Kellyville Public School to ensure compliance with the acoustic objectives above.

6.1 SCHOOL HALL

- Noise levels within the school hall are required to be limited at 90dB(A) at any one time in accordance with the recommendation of the approved GHD report.
 - The following methods of noise monitoring will be acceptable:
 - If the Hall uses a house PA system, the limiter can be included in the System itself.
 - In the event that for special events, a third party may use their own PA system, there can be a noise limiter installed at a power outlet that becomes the dedicated power source for the PA system. Limiters such as these can be sourced from Acoustic Research Laboratories.

For each of these options, the limiters are to be used to set the overall maximum sound pressure level within the space of 95dB(A) $L_{\max(\text{slow})}$, measured near a doorway or window. A limitation of this nature is proposed as:

- Typically, noise limiters serve to limit momentary peak noise events. The noise emission criteria for the site however are a fifteen-minute average ($L_{\text{eq}(15\text{min})}$).
- A limit of even momentary peak noise events to 90dB(A) L_{\max} will be unnecessary to ensure compliance with noise emission goals and will create an unnecessary restriction on the use of the hall for music or similar.
- Alternatively, a green/yellow/red flashing light system can be adopted (also from Acoustic Research Laboratories). The yellow light should signal at 90dB(A) $L_{\max(\text{slow})}$ and the read at 95dB(A) $L_{\max(\text{slow})}$.
- During the operation of the school hall, all windows and doors are required to be closed to ensure compliance with the acoustic objectives of GHD report.
- After hours use of the hall (whether this is community use or for school functions) all events/use must only be between 7:00am-10:00pm.

6.2 PUBLIC ADDRESS (PA) SYSTEM AND SCHOOL BELL

We recommend:

- External mounted speakers are to be installed on the façade of the building only.
- It is recommended that the speaker system be designed to comply with 68dB(A) at 5m distance.
- In the event that additional speaker positions are considered (closer to the site boundaries) a detailed review of the proposed system should be undertaken by a qualified acoustic consultant to ensure compliance with above.
- Non-tonal school bells in accordance with the NSW EPA *NPfl* are not permitted.
- Duration of a bell ring should be no more than 60 seconds.

6.3 OUTSIDE OF SCHOOL HOURS CARE

We recommend:

- Internal activities associated with out of school care should take place inside the school hall, with all windows and doors closed.
- External play should be carried out as close to the school façade to maximise the distance between the source (kids play) and the surrounding residential receivers.

6.4 COMMUNITY CONSULTATION / NOTIFICATION OF SPECIAL EVENTS.

If a noise complaint from the operation of the School occurs during any activity on site, the following process should be implemented.

1. Record book should be kept at the front office.
2. Any record of noise complaint should be kept in this register. Register should detail:
 - a. Date of the complaint.
 - b. Time of day.
 - c. The property effected.
 - d. Contact method.
 - e. Contact details of the person lodging the complaint.
 - f. The source of the noise (children's play, equipment noise, vehicle noise).
3. Based on the information provided in item f above (source of the noise) the following procedure is to be undertaken:
 - a. In the event the source of the noise is an operational compliant (i.e. noise from playgrounds, student noise etc). Immediate action is to be undertaken to relocate the or remove the noise from the area in which the complaint occurred.

- b. In the event the same noise complaint is received multiple times (even mitigation techniques are implemented – i.e. relocation or ceasing the activity) it is recommended that the school seeks the advice from an acoustic consultant.
- c. In the event noise complaints are received which relate to mechanical plant or bells the school should seek advice from an acoustic consultant.

In the event of multiple complaints that cannot immediately be addressed by the school itself, School management is to seek the advice of an acoustic consultant.

In addition, it is recommended that a contact phone number be permanently installed along the main entry into the School, so the above complaints procedure can be carried. Alternatively, a general School email address can be displayed for out of hours contact.

In the event that the School undertakes a special event after typical school hours:

- It is recommended that all surrounding residences (as indicated in section 4) be notified by letter box drop of the upcoming event, date and time, duration and a contact number in the event of complaints.
- In all occasions whether the school is running the event, or the community is utilising the school hall, a contact number should be provided as part of the notification package.
- Notification should be submitted to the surrounding neighbours a minimum of 7 days prior to the event being undertaken.

6.5 ONGOING EVALUATION OF NOISE MANAGEMENT PLAN

A yearly review (12 months) of this noise management plan shall be undertaken to ensure any new management procedures are included and are current with the operations of North Kellyville Public School.

In the event multiple reports of noise complaints are received from a particular activity, it is recommended that an acoustic review is undertaken by a qualified third party.

7 CLOSURE

Provided that the above recommendations are adopted, operational noise from the school will comply with the noise emission limits for the site identified at project approval stage.

Please contact us should you have any further queries.

Yours faithfully,



Acoustic Logic Consultancy Pty Ltd
Matthew Furlong