MOSMAN HS – RESPONSE TO OBJETIONS RECEIVED RELATING ACOUSTIC SSDA REPORT

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PROJECT NUMBER:	200453
PROJECT NAME:	Mosman HS Major Upgrade
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INTRODUCTION

This letter provides JHA's response to the objections received from Public Authorities and surrounding stakeholders with respect to the SSDA Acoustic Report prepared by JHA for the Mosman HS Major Upgrade project[1].

JHA's SSDA Acoustic Report includes noise impact assessments for the proposed Mosman HS Major Upgrade, including establishing relevant criteria, a preliminary construction noise and vibration assessment plus general recommendations and comments with relation to operational and construction noise.

The SSDA Acoustic Report has been prepared in support of the planning application of the project and addresses the requirements outlined in the Secretary's Environmental Assessment Requirements issued for the project.

At the time of preparing the above SSDA Acoustic Report, details on mechanical plant, Public Address systems and construction stages and plant was unknown and therefore only general comments were provided.

DPIE'S COMMENTS AND JHA'S RESPONSE

Objections received by JHA (shown in blue font below) are copy-pasted from the document received by NSW Department of Planning, Industry & Environment (DPIE) dated 9th May 2021.

1. Provide justification for the location of the loggers and explanation as to why the attended and unattended loggers were not consistently placed at the most affected sensitive receiver.

   RESPONSE:

   As noted in Section 3 of the JHA's SSDA Acoustic Report, attended and unattended noise surveys were conducted by WSP for their SSDA Acoustic Report[2]. Results of these noise surveys have been incorporated in JHA's SSDA Acoustic Report.

   WSP is a member of the Association of Australasian Acoustical Consultants (AAAC). As a member firm of the AAAC, WSP is required to follow a strict Code of Professional Conduct or Ethics (http://www.aaac.org.au/Code-of-Conduct) which WSP follows. The noise surveys were undertaken in accordance with relevant standards and guidelines (which are referenced in the WSP's SSDA Acoustic Report and JHA's SSDA Acoustic Report) and the recommendations from these references were used to nominate the noise surveys locations as representative of the typical ambient and background noise levels around the site.

[1] Mosman High School Upgrade – Noise & Vibration Impact Assessment for SSDA (SSD-10465) by JHA Engineers. Ref: 200453-AC-RPT-SSDA [D], dated 30/03/2021.
[2] WSP Mosman High School, Noise And Vibration Impact Assessment for SSDA, Rev 1, August 2020.

As per the new building footprint, noise logger were located close to nearest sensitive receivers and are representative of noise levels in the catchment area of Military Road and Belmont Road (L2) and the residential catchment area to the West (L1). Values obtained on these locations have been used to establish the noise level criteria at the noise sensitive receivers. Attended measurements have been used to obtain octave band values of the ambient and background noise levels and verify the unattended noise levels measured.

2. The EIS states that normal construction works are expected to exceed the limits for highly noise affected receivers within standard hours, however compliance can be achieved through specific noise mitigation measures. The detail of the measures that would mitigate noise levels has not been provided. The Department requests detail on the measures to be implemented to reduce construction noise impacts and ensure compliance with noise guidelines.

RESPONSE:

When the preliminary CNVMP was produced for the Acoustic Report for SSD, this was at the early planning stage, and specific details of the construction methodologies, staging and plant were unknown or not defined. Therefore, it was not possible to accurately assess construction noise impacts to the nearby noise sensitive receivers.

Preliminary quantitative assessment in Section 6.3.1 of the Acoustic Report for SSD, shows that highly noise affected exceedances will occur with noisy construction works / plant due specifically to the use of a circular saw, piling rig, excavator or concrete pump. When this construction equipment is not used, the noise levels at sensitive receivers will not be exceeding the highly noise affected criteria.

Now that the contractor is involved, additional noise data for construction plant that was not complying for highly noise affected criteria previously has been provided by the contractor. JHA has carried out a new assessment of this construction plant, as per the table below.

Item	*Typical Power Noise Level L_{Aeq} (dB ref 1pW)*	*Predicted Noise Level $L_{Aeq,15m}$ at nearest residential receiver*	*Complies with Highly Noise Affected Criteria?*
Circular saw	112	67-75	No
Piling rig	117	72-80	No
10-40t Excavator	114	69-77	No
Concrete pump	108	63-71	Yes

As per the contents of the NSW EPA Draft Construction Noise Guidelines, the following is recommended: *"Where noise is above the highly noise affected management level, all feasible and reasonable mitigation shall be applied as well as engagement with the consent authority or regulator to identify other measures to manage the noise impacts.*

Where appropriate, engagement with the community is encouraged to determine the preferred mitigation approach, such as:

- *Negotiated agreements and/or respite periods to restrict noise activity.*
- *Identification of times when the community is less sensitive to noise, including options for long periods of construction in exchange for restrictions on construction times."*

Therefore, when the aforementioned equipment is used, they shall be carried out continuously and not exceeding a maximum of 3 hours, with a minimum respite period of one hour. These high noise generating activities must be avoided during weekdays early hours of day-time period (7am to 8am) and late hours of day-time period (5pm to 6pm).

Other feasible and reasonable mitigation noise control measures to minimise the construction noise impact to the noise sensitive receivers shall be defined in the CNVMP.

Please refer to the Sections 6.4.2 and 6.4.3 of the Acoustic Report for SSD, in order to meet the noise and vibration recommended mitigation measures and work practices for Construction works as per NSW EPA.

Further to the above, a detailed assessment in the form of a CNVMP shall be provided to ensure that the proposed construction works and the mitigation measures satisfy the noise level criteria.

3. The technical noise assessment (Appendix AD) needs to include further consideration of recommendations and strategies for the mitigation of construction noise. The impacts are anticipated to be significant and measures must be proposed – consultation with the community is not considered sufficient.

RESPONSE:

As per above response for comment number 2.

4. The detail provided on operational noise is lacking, particularly considering the school is an operational site. Please include further detail of the noise impacts upon sensitive receivers anticipated with out of hours use of the site, as well as with public address and school bell systems. This detail should include comparison of the existing operational noise levels to the predicated operational noise levels of the proposed development.

RESPONSE:

For the operational noise levels of the school, for comparison of the existing and the predicted operational noise, it is noted that the School population will increase from 1,100 students to 1,200 students. This additional population represents a 0.4dB increase of the operational noise levels. This difference cannot be discern by any average listener as 1.0dB represents the Just Noticeable Difference (JND).

The noise impact assessment of the use of School facilities during Out of School Hours have been carried out for evening-time period (6pm to 10pm). Any event at the school beyond the Out of School Hours shall be subject to an Out of School Hours Noise Management Plan.

Regarding the Public Address and School Bells, the design of the systems would be carried out as part of the Detailed Design phase so there is no specification or acoustic data available at this stage. It is proposed that all new loudspeakers would be integrated with the existing systems as appropriate and not facing noise sensitive receivers around the School. The new loudspeaker locations will be selected to cover both internal and external areas and it is not anticipated that the addition of these loudspeakers would result in any increase of PA system noise at the residential receivers around School.

Yours sincerely,

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Acoustic Group Manager, MAAS