


MONTHLY NOISE AND VIBRATION REPORT CITY & SOUTHWEST ACOUSTICS ADVISOR

Project:	Chatswood to Sydenham SSI-7400		
For period:	January 2024	Authorisation:	
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Introduction

EMM Consulting Pty Limited (EMM) presents the January 2024 AA Noise and Vibration Report for the Sydney Metro City and Southwest project as required by SSI 15_7400 A27 (g) vi.

A reference table for the acronyms used in this report is provided on the last page.

Acoustics Advisor Activity

- Review and/or endorsement of:
 - CNISD CMR April to September 2023
 - CNISD December Noise Monitoring
 - CSM Construction Environmental Monitoring Report Rev 1
 - MPISD NVMR Rev 0
 - MPISD NVMP July to December 2023
 - PSISD CMR Q3 and Q4 2023.
- Review and/or endorsement of out of hours work applications (OOHWA) and extensions for:
 - MPISD OOHWA 107 South Tower Crane Dismantle Rev 0
 - PSISD OOHWA 62 Footpath and public domain works Rev 2
 - WISD OOHWA 62 Private Lighting Install Rev A.
- Attendance at ongoing meetings with CNISD, VCISD, Barangaroo Station, PSISD, MPISD, and WISD contractors.

Inspections, audits and site visits

The following was completed:

- Barangaroo inspection with ER on 18 January 2024
- CNISD inspection with ER on 24 January 2024
- PSISD OOH inspection with ER on 24 January 2024.

Monitoring status

Real-time noise and vibration monitoring (with real-time access) is ongoing at CNISD, VCISD north and south (noise only), Barangaroo, PSISD (noise only), and MPISD (vibration only).

The WISD contractor is operating real-time noise monitors to assist with site noise management. This is not a requirement of their CNVMP and is optional only. We have access to this data on an as-needs basis only (eg when complaints are received).

The VCISD PC has requested discontinuation of real-time noise monitoring at the north site. This is because the risk of airborne noise levels impacting the community to the extent of needing a RTNM network is diminishing, and the risk of exceeding Condition E38 is low based on recent noise monitoring results and planned future fit-out, testing and commissioning works. This request is currently under review by the AA whilst we await the most recent construction noise and vibration monitoring report. The request for removal of PSISD real-time noise monitoring raised in the December 2023 AA Report has been recommended against by AA as there is a significant scope of OOH works still required for utilities and public domain works.

Noise and vibration complaints

Complaints from CNISD (x2), VCISD (x1) and PSISD (x3) were reported this month.

One of the complaints at CNISD has been classed as avoidable. This complaint was caused by the removal of a scaffold working platform within Site C at 7am on Sunday morning. This complaint has been discussed in detail with the PC, with particular focus on the time of day when the activity occurred being prior to 8am on Sunday (night period). This complaint is still under investigation.

The remaining complaints were classed as unavoidable.

Initiatives, continual improvement and feedback

Monthly attended noise monitoring continues at CNISD which has been conditioned by the AA and ER as part of the 24-hour fit-out and delivery OOHWA approval. The monitoring is undertaken by the PCs acoustic consultant. This has been a useful means of monitoring performance and identifying opportunities for continual improvement.

The AA is looking to prepare a summary of noise measurements of the acoustic tent performance and other site observations for PSISD night and day inspections. The purpose is to provide a lessons learned and options for further improvement. Sydney Metro and Contractors have shown interest in this summary and are looking to potentially include any recommendations in further contractual relationships to model best practice. This work is ongoing and incorporates additional AA observations from December 2023 and January 2024.

At PSISD, earlier ROLs have been secured for some roads during the January school holiday period to support existing OOHWA. Unfortunately, due to PC scheduling and utility and contractor availability, these earlier ROL's were not utilised.

Non-compliances, incidents and events

Nothing to report.

Ongoing and upcoming environmental risks

- At CNISD, the Pacific Highway intersection works at Oxley and Hume Streets have recommenced. The additional package of OOH utilities work at CNISD on the Pacific Highway that were delaying the intersection works are now complete.
- Public domain works at CNISD are progressing and will continue sporadically for the coming months during standard construction hours. Most of these works through January 2024 will be on Clarke Street, Crows Nest.
- At CNISD, small sections of capping beam positioned centrally within the site will be progressively removed once access is established. The largest remaining section is near the Pacific Highway boundary near Hume Street. Remaining sections will be removed using hydraulic hammers mounted to excavators during standard construction hours. Removal of the capping beam section at the Site A north boundary on Oxley Street is complete.

- Utility works continue at PSISD and WISD. Whilst an additional phase of public domain works is anticipated for late February and March. OOHWA is required due to ROL requirements and footpath permits from Council.
- PSISD has implemented multiple utilities work crews (three) at PSS working typically on Bathurst Street (one crew) and Pitt Street (two crews). To date the complaints from the works have largely been generated from Kimpton Margot Hotel and reported by the doorman or night manager with video evidence – a review of the complaints has shown activities are consistent with approvals and review of RTM indicated levels lower than predictions. Considering the extensive work being conducted, the number of complaints would be considered low. Attendance on site on 24 January 2024 including internal measurements within Room 113 of the Kimpton Margot Hotel prior to midnight confirmed internal levels of L_{Aeq} 38dB from vacuum truck and L_{Aeq} 40dB with excavator and hydraulic hammer (L_{Aeq} 45dB with 5dB penalty for hammer). The levels were well below the predicted ranges and vacuum truck operation noise was below the internal design levels of AS 2107-2016 *Acoustics – Recommended design sound levels and reverberation times for building interiors* of L_{Aeq} 35 to 40dB for Hotels in large cities or near busy roads. We observed that there was little to no background noise from building services or HVAC within the room that can often assist in masking intermittent intrusive noise.
- Extensions to OOHWA at WISD are largely a result of limited works being completed under previous approvals following design issues, contractor availability and liaison with utility service providers.
- The ER and AA were working with PC for an extended phase of stormwater and asset protection works at WISD and were looking to provide Alternate Accommodation for an extended period to relevant receivers to minimise the number of nights required to work and the overall disruption to the community. However the design requirements for these works have changed and enabled the OOH components to be significantly scaled down. It is anticipated that Wellington Street works will be completed during daytime hours and the PC is in negotiation for this to also occur on Raglan Street. Worker safety has been a significant driver in terms of preparing and completing these works. This phase of works is still under review and assessment following feedback from the ER and AAs.

Recommendations (incl auditing):

Nothing to report.

Acronyms

AMMs	<i>Additional Mitigation Measures</i>
CMR	<i>Construction Monitoring Report</i>
CTR	<i>Compliance Tracking Report</i>
CNISD	<i>Crows Nest Integrated Station Development</i>
CNVIS	<i>Construction Noise and Vibration Impact Statement</i>
CNVMP	<i>Construction Noise and Vibration Management Plan</i>
CNVMPR	<i>Construction Noise and Vibration Management Program Report</i>
CSM	<i>Central Station Metro</i>
DPE	<i>NSW Department of Planning and Environment</i>
ER	<i>Environmental Representative</i>
ISD	<i>Integrated Station Development</i>
LWW	<i>Line Wide Works</i>
MPISD	<i>Martin Place Integrated Station Development</i>
NCR	<i>Non-Compliance Report</i>
NML	<i>Noise Management Level</i>
NVA	<i>Noise and Vibration Assessment</i>
NVMP	<i>Noise and Vibration Monitoring Plan</i>
NVMR	<i>Noise and Vibration Monitoring Report</i>
NVAMR	<i>Noise and Vibration Annual Monitoring Report</i>
OOH	<i>Out of hours</i>
OOHW	<i>Out of hours work</i>
OOHWA	<i>Out of Hours Work Application</i>
OOHWP	<i>Out of Hours Work Protocol</i>
OSD	<i>Over Station Development</i>
OSOM	<i>Over Size, Over Mass</i>
PCB	<i>Precast Beams</i>
PC	<i>Principal Contractor</i>
PSISD	<i>Gadigal Station (formerly Pitt Street) Integrated Station Development</i>
PSN	<i>Pitt Street North</i>
PSS	<i>Pitt Street South</i>
ROL	<i>Road Occupancy License</i>
RTNM	<i>Real Time Noise Monitor</i>
SSJ	<i>Sydenham Station Junction</i>
SWMC	<i>Southwest Metro Corridor</i>
TSOM	<i>Trains, Systems, Operations and Maintenance</i>
TSS	<i>Traction Substation</i>
VCISD	<i>Victoria Cross Integrated Station Development</i>
WISD	<i>Waterloo Integrated Station Development</i>