

ACOUSTICS ADVISOR MONTHLY REPORT

SYDNEY METRO WEST (SSI 10038 and SSI 19238057¹)

For period:	May 2024	Authorisation:	Dave Anderson, Acoustics Advisor
Prepared by:	Dave Anderson		
Date of issue:	7 June 2024		

Acoustics Advisor		Alternate Acoustics Advisor(s)	
Dave Anderson		Larry Clark, David Hanson and Sav Shimada	
Document review			
Document	Reviewed	Endorsed / approved	
Central Tunnelling Package (CTP), AFJV			
Weekly Noise Reports 12/04/24, 19/04/24, 26/04/24, 3/05/24, 10/05/24, 17/05/24 and 24/05/24	Y	N/A	
12/104 Williams St FDK XP34 GBNV report	Y	N/A	
Western Tunnelling Package (WTP), GLC			
Noise and Vibration Monitoring Report Jul 2023 to Jan 2024	Y	In progress	
DNVIS Westmead to Sydney Olympic Park	Y	27/5/24	
Westmead Utilities Relocation (WUR), Quickway			
OOHW Permit 004 – Jemena gas disconnections	Y	21/05/2024	
Quickway noise monitoring report 27/05/2024	Y	N/A	
Eastern Tunnelling Package (ETP), JCG¹			
<i>CNVMP and Monitoring Program Rev 3</i>	Y	9/5/24	
<i>Pyrmont DNVIS addendum – OOH tunnelling prior to shed completion: stage 1 - Low Noise Impact Works</i>	Y	10/5/24	
<i>Pyrmont DNVIS addendum – OOH deliveries with tower crane: ongoing operation</i>	Y	30/5/24	
<i>Monitoring reports and data</i>	Y	N/A	
<i>Demolition methodology for Skinner Hotel</i>	Y	N/A	

Inspections / site visits		
Date	Location(s)	Details
1 May	Burwood North	Larry Clark OOH inspection during TBM traverse and maintenance. DPHI compliance, Sydney Metro and AFJV environment representatives in attendance.
	No issues identified or actions arising.	
22 May	Burwood North	Larry Clark OOH inspection during harmonic sub operation. Sydney Metro and AFJV environment representatives in attendance.
	No issues identified or actions arising.	
23 May	Sydney Olympic Park, North Strathfield, Burwood North	Larry Clark joined ER inspection.
	No noise or vibration issues identified or actions arising.	
28 May	Hunter Street East	Larry Clark joined ER inspection. Specific community respite hours in place. Discussion on noise blankets on scaffolding.
	Current arrangement of noise blankets on scaffold to continue	
(see next page)		

¹ Sydney Metro West Concept and Stage 1 (SSI 10038), *Sydney Metro West Stage 2: Bays to Sydney CBD (SSI 19238057) shown in italics*

15 May	Pymont East	Dave Anderson witnessed JCG monitoring of OOH tower crane operation, including from rooftop of 1-5 Harwood Street. Grant Rokobauer (DPHI) and Ari Stypel (Sydney Metro) also attended. Tower crane noise levels up to 70dBA when lifting. Noise blankets installed.
	JCG confirmed crane operator reminded (toolbox 17 May) of requirement to minimise crane engine revs where practical.	
15 May	The Bays	Dave Anderson joined Grant Rokobauer (DPHI) to view OOH operation of The Bays site from Mansfield Street, Rozelle.
	No issues or actions identified.	
15 May	Westmead	Dave Anderson joined Grant Rokobauer (DPHI) to view OOH operation of the Westmead site. No Quickway works in progress.
	Compressor noise audible, typically 46 to 48dBA outside residences in Bailey and Hassall Streets.	
21/22 May	Pymont East	Dave Anderson witnessed OOH tower crane operation from surrounding streets. Tower crane noise levels up typically 65dBA when lifting.
	Observations discussed and JCG confirmed: <ul style="list-style-type: none"> • crane needed to operate at high revs for extended periods due to weight of load (demountable buildings), • flashing to demountable buildings needed to be installed OOH to ensure electrical safety, and • workers will continue to be reminded not to use noisy hand tools OOH unless necessary. 	
24 May	Pymont East	Dave Anderson witnessed OOH Low Noise Impact Work from surrounding streets. Generator noise levels typically 52 to 54dBA.
	Observations discussed and JCG confirmed: <ul style="list-style-type: none"> • generator near Pymont Bridge Rd has been demobilised, generator near Union Street will be demobilised once new crib sheds commissioned. • workers will continue to be reminded to limit noise as far as practical when arriving / departing site. 	
27 May	Pymont Sites	Dave Anderson joined ER inspection.
	Rock hammering in progress at Pymont East, piling operation nearing completion at Pymont West.	
	Westmead	David Hanson, WUR OOH inspection
	First night of Jemena disconnection scope under OOHW Permit 004. Concrete sawing, vac truck, Telstra works in vicinity (vac truck in use).	

Meeting		
Date	With	Purpose
1, 15, 29 May	Sydney Metro, GLC, ER	Environment meeting, WTP
6, 13, 20, 27 May	AFJV, Sydney Metro, ER	Environment meeting, CTP
6, 20 May	Sydney Metro, GLC, ATC	Fortnightly works status
7, 14, 21, 28 May	Sydney Metro, JCGJV, ER	Weekly environment meeting, ETP
2, 16, 31 May	Quickway, Metro, ER	Westmead Utilities Scope – Environment meeting
13 May	DPHI, ER	Monthly meeting with DPHI compliance
23 May	DPHI, Sydney Metro, ER	Monthly meeting with DPHI post-approvals
27 May	Sydney Metro, JCGJV, ER	Discussion of AA and ER comments on noise and vibration documents, ETP
29 May	Sydney Metro, JCGJV, ER	Discussion of AA and ER comments on Pymont DNVIS OOH Stage 2 addendum, ETP

Noise and vibration issues, incidents, recommendations

Date	Contract / Location and details
31 May	NCR to be raised by AFJV for proactive AA not being offered to all residences potentially affected by cross passage excavation ground borne noise and vibration, as required by the DNVIS. Note that monitored levels indicate that the 45dBA trigger for Alternate Accommodation may not have been exceeded.
Ongoing	Ground-borne noise and vibration from TBM tunnelling on CTP: monitoring report for Queen Street indicates PPV levels higher than predictions. AFJV investigating.

Examples of good practice in noise and vibration management

Date	Contract / Location and details

Ongoing and upcoming noise and vibration risks

ETP: <ul style="list-style-type: none"> • <i>Initial excavation (without acoustic sheds) at Pyrmont sites, plus OOH work, including deliveries with tower crane, at Pyrmont East</i> • <i>Ongoing structural demolition at Hunter Street sites</i>
CTP: <ul style="list-style-type: none"> • Tunnelling and cross passage ground borne noise and vibration • Tunnelling support at Burwood North, including operation of Water Treatment Plant (outside acoustic shed) and Grout plant (inside acoustic shed), and harmonic sub (outside acoustic shed) during TBM operation.
WTP: <ul style="list-style-type: none"> • Tunnelling ground borne noise and vibration
WUR: <ul style="list-style-type: none"> • Note: WUR scope will conclude soon.

Noise and vibration complaints

25 noise and vibration complaints attributed to Sydney Metro during May:

- 2 from GLC works at Westmead
- 2 from Burwood North
- 12 from Pyrmont
 - 9 about OOH work, mainly related to Pyrmont East
 - 3 about standard hours work, 2 of which related to Pyrmont West
- 3 from Hunter St
- 6 relating to CTP tunnelling activities as TBMs pass through Burwood North and cross passages are excavated beneath homes in Rodd Point and Five Dock

Note: The chart shows noise and vibration (NV) complaints in standard hours and out of hours (OOH) periods. Some complaints relate to both time periods so the total number of NV complaints may be less than the sum of standard and OOH complaints.

