Noise Monitoring Report

Project	Power Enabling Works, 33kV Rozelle	**Report No.**	053	**Date Collected**	18/05/2022	**Time Collected**	21:35-23:00
Data & Report By:	D. Mutkins	**Works**	Conduit proving works			**Purpose of Data Collection**	Ongoing monitoring / model validation

Location of construction activity (see Attachment)

Monitoring locations

1. 12 Waterloo Street
2. 2A Hancock/Belmore Street
3. 684 Darling Street
4. 640 Darling Street
5. 45 Merton Street

Observed construction activity

Blowing conduits with compressed air for proving in preparation for cable pulling

Meteorological conditions			
Wind	Moderate SW		
Temperature (°C)	15	**Cloud Cover:**	Clear
Instrumentation details	Rion NL-42 - Sound Level Meter	**Calibration valid until**	March 2023

Instrumentation and method

Monitoring was performed with sound level meter Rion NL-42 fixed to a tripod at a height of approx. 1.5m above the ground surface. The sound level meter was pre calibrated with a valid certificate until March 2023. A field calibrator was also used prior to taking the first recording and after the monitoring session to ensure device was within required range. Monitoring was conducted over multiple 15-minute periods in five locations. LAeq, LA90 and LAmax parameters were recorded in all cases.

Monitoring locations were selected to represent nearest affected receivers. See attachment monitoring locations and KNOWnoise maps.

Results

Particulars			Actual Recording(s)			KNOWnoise Prediction(s)
Location	**Time**	**Observations**	**LAeq**	**LA90**	**LAmax**	**LAeq**
1	21:35-21:50	Vac truck idling preparing for works on comms pits on Darling Street. Vehicle movements close to monitor car doors slam and engine starts generating LAmax 77dB. Noticeable air traffic overhead during recording ~4 planes. ~LAeq 60dBA	60	50	77	~56
2	21:53-22:08	13t excavator moving road plates to access trench. Vac truck idling and sucking material sporadically. Vehicle movements close to monitor, parking in garage and idling for 3 mins ~4m from monitoring device. Overhead traffic producing the LAmax value of 79dBA. 57dB LAeq	57	49	79	57
3	22:10-22:25	Works continuing on Darling Street, recording heavily dominated by traffic during recording. Buses passing with gas brake release ~78dBA. Loud muffler on Victoria Road LAmax ~ 83dBA	69	59	83	67
4	22:28-22:43	Works sporadic on North of Darling Street for Merton works. 5t movements and squawker from tipper noticeable during recording. ~63-64dBA LAeq with passing motorbike producing LAmax of 81dBA.	64	51	81	62
5	22:44-23:00	Recording taken from western side of Merton Street, little machine movements preparing for vac truck to come to suck material from comms pits, vac truck in operation for ~3mins of recording ~LAeq 57dBA	57	48	71	~55

Result Summary

Conduit proving works using a compressor to blow the conduits clear prior to future pulling of 33kV cable. Vac truck required to suck material post compressor blowing. The use of the vac truck was sporadic during the monitoring events, with little machine movements due to the type of works occurring. Measurements were within 2-3dB of predicted for this activity, with some approximate measurements for locations 1 and 5 as they were not indicated receivers in the modelling, though due diligence monitoring was undertaken to get and indication of noise impacts within the vicinity of the works area

Attachment 1