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Multiplex Australasia
Level 22,
135 King Street
Sydney
NSW 2000

Attention: Anthony Toomeh

Dear Anthony

Sediment Capping Works

1 Introduction

I write regarding the proposed alternative construction methodology for the proposed Sediment Capping works as a way to reduce the extent of noise emission for these works. SLR understand that Multiplex originally proposed a methodology to conduct the Sediment Capping works (main project works) which align with Scenario 1A (main project works) originally assessed as part of the Construction Noise and Vibration Management Plan (CNVMP) (refer SLR report 610.30264.00000-R01-v1.2 dated 10 November 2021).

As part of the alternative methodology, Multiplex have advised the following equipment to be in operation during the proposed works:

- Road trucks
- Excavators
- Generator
- Hand drill (drill rig)
- Pumps

2 Comparison to Concurrent Works

SLR have conducted an assessment of Scenario 1B (main project works) and is shown in Table 4 of the CNVMP. Scenario 1B (main project works) of the CNVMP considered similar construction works to the Sediment Capping works proposed (main project works). See **Table 1** for a comparison between the Sound Power Levels modelled as part of the Scenario 1B (main project works) and sediment capping works (main project works).

Table 1 Construction Stage Sound Power Levels (dBA)

Construction Stage	Equipment	Sound Power Level (dBA)	Combined Scenario Sound Power Level (dBA)
Scenario 1B (main project works)	Sheet Piling (Press in)	97	138
	Concrete Saw	120	
	Trucks	109	
	Hand Drilling	94	
	Electric Saw	112	
	Impact Drill	105	
	Setting Up Impact Piling Rig (Vibratory attachment pitching piles)	120	
	Concrete Trucks	112	
	Mobile Crane	102	
	Concrete Pump	110	
	Concrete Vibrator	110	
	Air Compressor	95	
	Impact Piling Rig (Junttan HHX-300)	138	
	Impact Piling Rig (Junttan HHK-10S)	117	
	Nail Gun	101	
	Rattle Gun	110	
Sediment Capping ONLY (main project works)	Road trucks	104	109
	Excavators	107	
	Generator	90	
	Hand drill (drill rig)	94	
	Pumps	90	
Scenario 1B (main project works) With Sediment capping works	Sheet Piling (Press in)	97	138
	Concrete Saw	120	
	Trucks	109	
	Hand Drilling	94	
	Electric Saw	112	
	Impact Drill	105	
	Setting Up Impact Piling Rig (Vibratory attachment pitching piles)	120	
	Concrete Trucks	112	
	Mobile Crane	102	
	Concrete Pump	110	
	Concrete Vibrator	110	
	Air Compressor	95	
	Impact Piling Rig (Junttan HHX-300)	138	
	Impact Piling Rig (Junttan HHK-10S)	117	
	Nail Gun	101	
	Rattle Gun	110	
	Road trucks	104	
	Excavators	107	
	Generator	90	
	Hand drill (drill rig)	94	
	Pumps	90	

Sediment capping works are expected to be conducted while other works are being conducted onsite (see **Table 1**). As per **Table 1**, sediment capping noise levels are significantly less than the total noise level of the works ongoing simultaneously and therefore are expected to make no material change to the overall construction noise levels predicted. It is noted that works are expected to be conducted in similar areas.

3 Comparison of Methodologies

A comparison between the primary noise generating equipment utilised in a previously proposed basement construction methodology and the currently proposed sediment capping methodology has been outlined in **Table 2**.

Table 2 Comparison of Sediment Capping Methodologies

Construction Stage	Equipment	Sound Power Level (dBA)	Combined Scenario Sound Power Level (dBA)
Previous Basement Construction Methodology	Metal Grinder	114	116
	Rattle Guns	110	
	Welders	97	
	Cranes	100	
Currently Proposed Sediment Capping Methodology	Road trucks	104	109
	Excavators	107	
	Generator	90	
	Hand drill (drill rig)	94	
	Pumps	90	

As shown in the table above, the overall noise level of the currently proposed methodology is less than the previously proposed.

I trust the preceding meets your current requirements. If you have any questions or would like any further information please do not hesitate to contact me on 0427 983 337 or email ktmurphy@slrconsulting.com.

Yours sincerely



KIERAN MURPHY
Senior Project Consultant

Checked/
Authorised by: MI