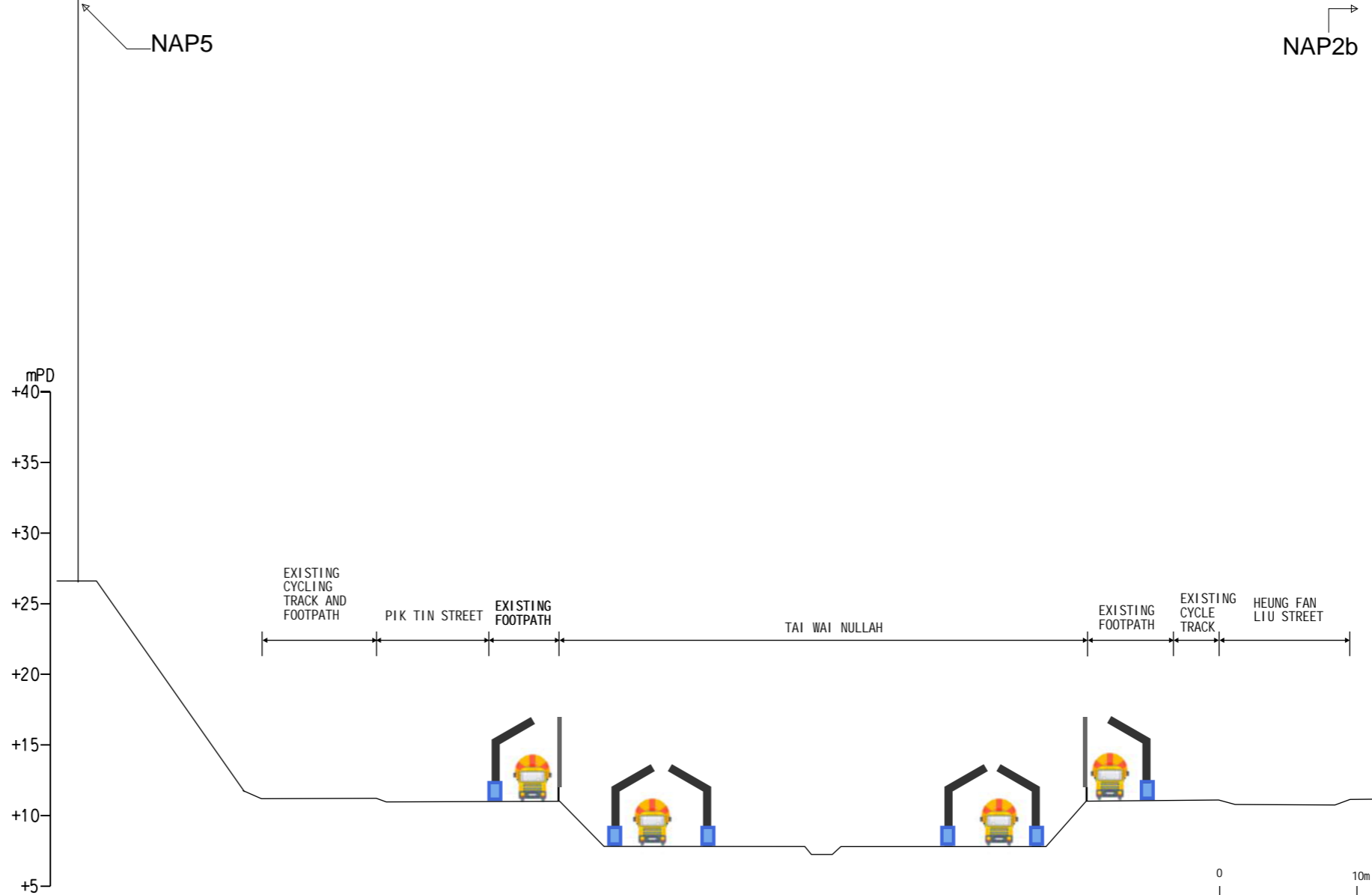
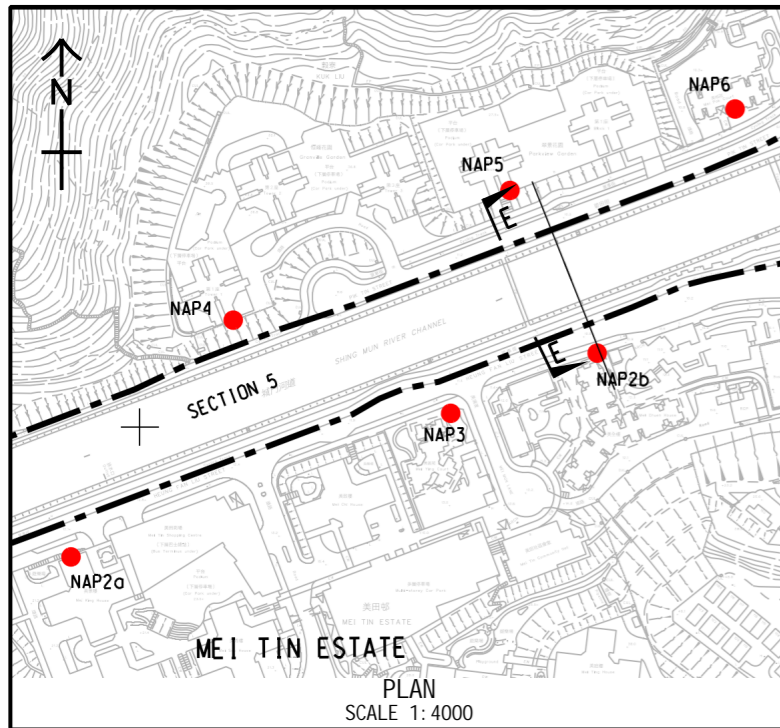


ID	Main Construction Tasks	Work Section (see Appendix 4.2)	Group ID	Construction Works	Sub-Group ^[1]	Sub-Plant ID ^[2]	Plant / Equipment	Ref Code	SWL, dB(A) (PME)	No. of Units	Utilization Rate (%)	Mitigation Measures ^[7]	Barrier Correction, dB(A)	Adjusted SWL, dB(A) (PME)	SWL, dB(A) (Sub-Plant) ^[2]	SWL, dB(A) (Sub-Group) ^[1]	SWL, dB(A) (PME Group)										
A	Channel Bed Modification	1 to 6	A-1	Excavation at the Nullah	a	Excavation	A-1a-1	Air Compressor, air flow < 10m3/min	CNP 001	100	1	50	Movable Noise Barrier	-10	87	94	94	94									
							Breaker HILTI TE 1000-AVR187619	EPD-04329	99	1	50	Movable Noise Barrier	-5	91													
			Road ripper, mini robot mounted				OCUPME-026	97	1	50	Movable Noise Barrier	-5	89														
			Excavator, wheeled/tracked YANMAR VIO12-2A 21016				EPD-08247	87	1	70	Movable Noise Barrier	-5	80														
		A-2	Re-surfacing and greening of the nullah	a	Re-surfacing and greening of the nullah - Backfill	A-2a-1	Roller, vibratory SAKAI HV620 5HV23-11652	EPD-10387	94	1	100	Movable Noise Barrier	-5	89	89	89	89										
				b	Re-surfacing and greening of the nullah - Vegetating	A-2b-1	Crane Maeda CC985S-1 51215	EPD-05602	91	1	100	Movable Noise Barrier	-5	86	86	86											
		6	A-3	Construction of Energy Dissipation Structures at Upstream Section	a	Concreting	A-3a-1	Concrete lorry mixer	CNP 044	109	1	50	Movable Noise Barrier	-10	96	96	96	96									
									Poker, vibratory, hand-held (electric)	CNP 173	94	1	70	Movable Noise Barrier	-10				82								
									Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10				85								
									Saw, circular, wood	CNP 201	108	1	70	Movable Noise Barrier	-10				96								
A-3b-1	Backfill								Roller, vibratory SAKAI HV620 5HV23-11652	EPD-10387	94	1	100	Movable Noise Barrier	-5				89	89	89						
B	Improvement of Existing Walkways and Riparian Public Open Spaces	1 to 5	B-1	Construction of Viewing Deck / Pavillion, Renovation of Existing Footbridges	a	Construction of Viewing Deck / Pavillion, Renovation of Existing Footbridges	B-1a-1	Air Compressor, air flow < 10m3/min	CNP 001	100	1	50	Movable Noise Barrier	-10	87	95	95	95									
							Breaker HILTI TE 1000-AVR187619	EPD-04329	99	1	50	Movable Noise Barrier	-5	91													
							Poker, vibratory, hand-held (electric)	CNP 173	94	1	70	Movable Noise Barrier	-10	82													
							Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85													
		1 to 5	B-2	Construction of Staircases and Access Ramps	a	Excavation and Lateral Support	B-2a-1	Giken Piler and Power-pack	Giken-001	94	1	70	Noise Insulation Fabric	-10	82	88	94	96									
									Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5				80								
									Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10				85								
									Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5				80								
									B-2a-2	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier				-10	85							
									B-2a-3	Ventilation fan	CNP 241	108	1	100	Noise Enclosure				-15	93							
									B-2a-3	Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier				-10	85							
									B-2b-1	Concreting	Concrete lorry mixer	CNP 044	109	1	50				Movable Noise Barrier	-10	96	96	96				
																								Poker, vibratory, hand-held (electric)	CNP 173	94	1
		Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10								85											
		Saw, circular, wood	CNP 201	108	1	70	Movable Noise Barrier	-10								96											
		B-2b-2	Giken Piler and Power-pack	Giken-001	94	1	70	Noise Insulation Fabric								-10	82										
		B-2b-2	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80																	
		B-3a-1	Excavation and Lateral Support	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80	88	94	96													
															Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85					
															Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80					
															Ventilation fan	CNP 241	108	1	100	Noise Enclosure	-15	93					
															B-3a-2	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	85				
		B-3a-3	Ventilation fan	CNP 241	108	1	100	Noise Enclosure	-15	93																	
		B-3b-1	Concreting	Concrete lorry mixer	CNP 044	109	1	50	Movable Noise Barrier	-10	96	96	96														
														Poker, vibratory, hand-held (electric)	CNP 173	94	1	70	Movable Noise Barrier	-10	82						
														Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85						
														Saw, circular, wood	CNP 201	108	1	70	Movable Noise Barrier	-10	96						
														B-3b-2	Concrete crusher, excavator mounted	OCUPME-008	103	1	70		0	101					
		B-3b-2	Excavator / Loader	EPD-08247	87	1	70		0	85																	
		3, 5	Demolition of existing footbridge	a	Demolition	B-4a-1	Concrete crusher, excavator mounted	OCUPME-008	103	1	70		0	101	102	102	102										
C	Construction of Dry Weather Flow Interceptor (DWFI) System / Water pumps and Pipes for Ecological Enhancement Associated Water Retention and Supplement	1	C-1	Connection Works of DWFI System to Existing Sewerage System	a	Excavation and Lateral Support	C-1a-1	Giken Piler and Power-pack	Giken-001	94	1	70	Noise Insulation Fabric	-10	82	88	94	94									
							Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80													
							Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85													
							Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80													
							C-1a-2	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-10	85												
							C-1a-3	Ventilation fan	CNP 241	108	1	100	Noise Enclosure	-15	93												
		C-1a-3	Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85																	
		1 to 6	*Underground Pipes from Section 3 to Section 6 for Ecological Enhancement Associated Water Retention and Supplement will be constructed along the DWFI	C-2	Construction of DWFI Channel along the Nullah, and Mid-stream water pumps and Pipes along the Nullah for Ecological Enhancement Associated Water Supplement	c	Concreting	C-2c-1	Concrete lorry mixer	CNP 044	109	1	50	Movable Noise Barrier	-10	96	96	96	96								
										Poker, vibratory, hand-held (electric)	CNP 173	94	1	70	Movable Noise Barrier	-10				82							
										Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10				85							
										Saw, circular, wood	CNP 201	108	1	70	Movable Noise Barrier	-10				96							
		C-2c-2	Roller, vibratory SAKAI HV620 5HV23-11652	EPD-10387	94	1	100	Movable Noise Barrier	-5	89																	
		3	Construction of Pumping Facilities & Associated E&M works	a	Excavation and Lateral Support	C-3a-1	Giken Piler and Power-pack	Giken-001	94	1	70	Noise Insulation Fabric	-10	82	88	94	96										
																		Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80		
																		Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85		
																		Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80		
C-3a-2	Excavator, wheeled/tracked YANMAR VIO12-2A 21016																	EPD-08247	87	1	70	Movable Noise Barrier	-10	85			
C-3a-3	Ventilation fan																	CNP 241	108	1	100	Noise Enclosure	-15	93			
C-3a-3	Generator, super silenced, 70dB(A) at 7m																	CNP 103	95	1	100	Movable Noise Barrier	-10	85			
C-3b-1	Concreting																	Concrete lorry mixer	CNP 044	109	1	50	Movable Noise Barrier	-10	96	96	96
		Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85																		
		Saw, circular, wood	CNP 201	108	1	70	Movable Noise Barrier	-10	96																		
C-3b-2	Concrete mixer (electric)	CNP 045	96	1	50	Movable Noise Barrier	-5	88																			
D-1a-1	Poker, vibratory, hand-held (electric)	CNP 173	94	1	70	Movable Noise Barrier	-10	82																			
D-1a-2	Generator, super silenced, 70dB(A) at 7m	CNP 103	95	1	100	Movable Noise Barrier	-10	85																			
D-1b-1	Roller, vibratory SAKAI HV620 5HV23-11652	EPD-10387	94	1	100	Movable Noise Barrier	-5	89																			
D-1b-1	Crane Maeda CC985S-1 51215	EPD-05602	91	1	100	Movable Noise Barrier	-5	86																			
D-2c-1	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80																			
D-2c-1	Crane Maeda CC985S-1 51215	EPD-05602	91	1	100	Movable Noise Barrier	-5	86																			
E	Desilting at downstream tidal zone	1	E-1	Desilting at downstream tidal zone	a	Desilting	E-1a-1	Excavator, wheeled/tracked YANMAR VIO12-2A 21016	EPD-08247	87	1	70	Movable Noise Barrier	-5	80	95	95	95									
							Dump truck, 5.5 tonne< gross vehicle weight =< 38	OCUPME-038	105	1	30	Movable Noise Barrier	-5	95													

Remarks:
 [1] Only one Sub-Group in a PME Group will be operating at the same time.
 [2] Only one Sub-Plant in a Sub-Group will be operating at the same time.
 [3] The SWL is referenced with Table 3 of EPD's Technical Memorandum on Noise from Construction Work Other Than Percussive Piling.
 [4] The SWL is referenced to "Sound power levels of other commonly used PME" at EPD website, https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLE.pdf
 [5] The SWL is referenced with QPME system published by EPD.
 [6] The SWL is referenced to AEIAR-127/2008 "EIA Report of Tsim Sha Tsui Station Northern Subway". For the sound pressure level at 7m from equipment, see website link: https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/home2/quieter-construction-equipment/item/27-press-in-method.html
 [7] Noise reduction assumed: 5 dB(A) for moveable PME & 10 dB(A) for static PME with the provision of movable noise barrier; 10 dB(A) for the provision of noise insulating fabric for piling machine; 15 dB(A) for stationary PME with the provision of enclosure.

ISO A1 594mm x 841mm
 Approved:
 Checked:
 Designer:
 Project Management Initials:



SECTION E-E
 DRAWING OF TYPICAL NOISE BARRIER ARRANGEMENT FOR MOBILE POWERED MECHANICAL EQUIPMENT

PROJECT

REVITALISATION OF TAI WAI NULLAH AND FO TAN NULLAH - INVESTIGATION

CLIENT

渠務署
 Drainage Services Department

CONSULTANT

AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE **DIMENSION UNIT**

A3 AS SHOWN METRES

KEY PLAN

PROJECT NO. **AGREEMENT NO.**

60631587 CE 54/2019 (DS)

SHEET TITLE

TYPICAL NOISE BARRIER ARRANGEMENT FOR MOBILE POWER MECHANICAL EQUIPMENT

SHEET NUMBER

APPENDIX 4.6-B

Plot File by: jliw
 2022/10/17
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PROJECT

REVITALISATION OF TAI WAI
NULLAH AND FO TAN NULLAH -
INVESTIGATION

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SCALE **DIMENSION UNIT**

A3 AS SHOWN METRES

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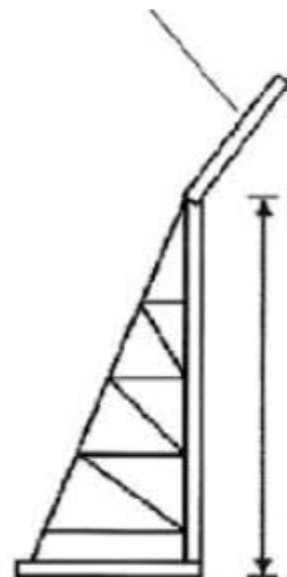
SHEET TITLE

TYPICAL CONFIGURATION OF MOVABLE
NOISE BARRIER AND PORTABLE NOISE
ENCLOSURE FOR POWER MECHANICAL
EQUIPMENT

SHEET NUMBER

APPENDIX 4.6-B

Minimum surface density of 14kg/m²



Height varies to
suit plant size

Typical Configuration of Noise Barrier (~3-5m high)

Minimum surface density of 14kg/m²

Lined with sound absorbent material at
the inner surfaces



Typical Configuration of Portable Noise Enclosure
(~2m high)

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