www.mtr.com.hk



The EIA Ordinance Register Office Environmental Protection Department 27/F, Southorn Centre 130 Hennessy Road Wan Chai, Hong Kong Our ref: SHO/SHD-COR-CEM-ENV-070150

Attn: Mr. Patrick Wong 6 December 2023

**BY HAND** 

Dear Patrick,

Siu Ho Wan Depot Property Development EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works Condition 2.10 - Construction Noise Mitigation Plan (for Phase 1 Works)

Further to your email and comments dated 16 November 2023, we are pleased to submit and deposit herewith four hard copies and one electronic copy of the revised Construction Noise Mitigation Plan (CNMP) the Phase 1 Works of the Project and the response to comment table to the Director of Environmental Protection. This submission has been certified by the ET Leader and verified by the IEC.

Should you have any queries, please feel free to contact our Cyrus Lau at 2688 1585.

Yours sincerely,

Edan Li

Senior Environmental Manager (CW)

Encl.

c.c. IEC - Mr. Adi Lee

EL/CL/AL/RC/ct

# MTR Corporation Limited

# Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

Construction Noise Mitigation Plan

Certified by:	Edan Li Lalm
Position:	Environmental Team Leader
Date:	6 December 2023

# MTR Corporation Limited

# Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

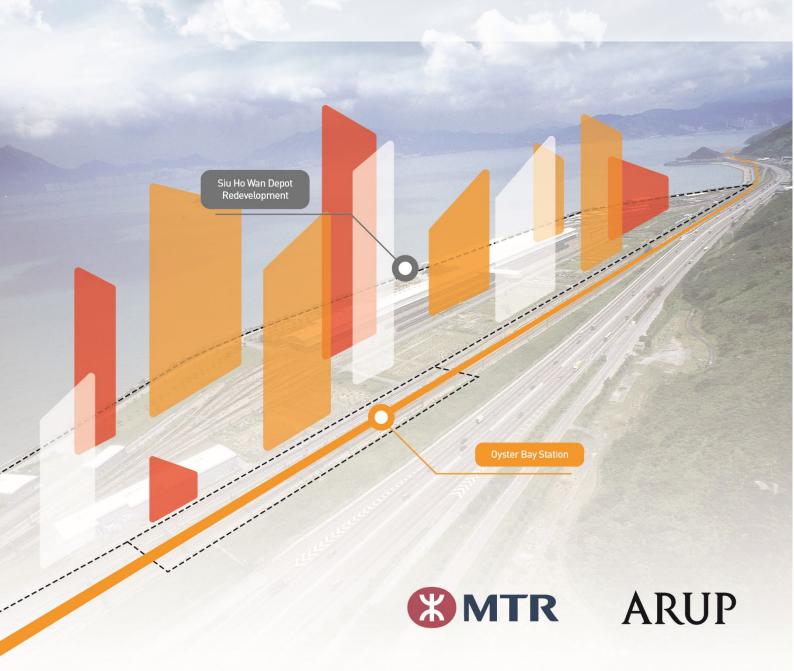
Construction Noise Mitigation Plan

Verified by:Adi Lee
Position: Independent Environmental Checker
Date: 6 December 2023

MTR Corporation Limited
Siu Ho Wan Depot Property Development
Consultancy Agreement No. C1701
Detailed Design Services for
Siu Ho Wan Depot Phase 1 &
Siu Ho Wan Station

Deliverable No. 3.9
Construction Noise Mitigation Plan (CNMP)
Revision H

December 2023



### MTR Corporation Limited

Siu Ho Wan Depot Property Development Consultancy Agreement No. C1701 Detailed Design Services for Siu Ho Wan Depot Phase 1 & Siu Ho Wan Station

Construction Noise Mitigation Plan (CNMP)

C1701-P-SHD-OAP-510-000004

Revision H | December 2023

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 282278

Ove Arup & Partners Hong Kong Ltd Level 5 Festival Walk 80 Tat Chee Avenue Kowloon Tong Kowloon Hong Kong www.arup.com



### **Contents**

			Page
1	Intro	duction	1
	1.1	Background	1
	1.2	EIA Approval Conditions & EP Conditions	1
	1.3	Description of Project	1
	1.4	Objectives of the Report	2
	1.5	Structure of the Report	2
2	Relev	ant Legislation, Standards and Criteria	3
3	Noise	Sensitive Receivers	5
4	Const	ruction Noise Impact Assessment	7
	4.1	Construction Noise Assessment Methodology	7
	4.2	Inventory of Noise Sources	7
	4.3	Construction Noise Assessment Results	8
	4.4	Good Site Practice	9
5	Concl	lusion	10

#### **Tables**

Table 1	Works Programme
Table 2	Noise standards for daytime construction activities
Table 3	ANLs for percussive piling
Table 4	Representative NSR
Table 5	Predicted construction noise level

#### **Appendices**

#### Appendix A

**Construction Programme** 

#### Appendix B

Plant Inventory and SWL

### Appendix C

Construction Noise Calculation

#### Appendix D

Implementation Schedule

#### 1 Introduction

#### 1.1 Background

- 1.1.1 The statutory Environmental Impact Assessments (EIA) for Siu Ho Wan Station and Depot Replanning <sup>1</sup> (hereafter called the Railway EIA) were submitted and approved in Year 2017.
- 1.1.2 The development includes the detailed design for Siu Ho Wan Depot (SHD) Phase 1 (previously known as Stage 1 in Railway EIA) to allow for topside development and provides a new railway station, i.e. the Oyster Bay Station (OYB) which was previously known as Siu Ho Wan Station in the approved EIAs.

#### 1.2 EIA Approval Conditions & EP Conditions

- 1.2.1 The approved Railway EIA had included the following works:
  - SHD replanning works, within the existing SHD boundary including construction of concrete slab and property enabling works over the SHD to provide support for future SHD Topside Development;
  - Construction of the new OYB and modification of the associated trackworks of the existing Airport Express Line (AEL) /Tung Chung Line (TCL); and
  - Construction of other supporting facilities including the western access, the local accesses and sewerage network outside existing SHD boundary.
- 1.2.2 Since the approval of the EIA, an Environmental Permit (EP) (EP-588/2021) has been issued for the Project. Condition 2.10 of the EP requires a Construction Noise Mitigation Plan (CNMP) shall be deposited with a view to formulate the noise mitigation measures including the use of quiet powered mechanical equipment (PME), noise barriers and noise enclosures for mitigating noise impact arising from the construction activities of the Project taking into account the phased population intake of the SHD Topside Development. The CNMP shall include an implementation schedule in table form to clearly list out the mitigation measures to be implemented, and the implementation party, location, timing, and environmental performance required for implementation of the mitigation measures. All mitigation measures recommended and requirements specified in the CNMP shall be fully implemented.

### 1.3 Description of Project

1.3.1 This CNMP covers the Phase 1 of SHD replanning works and construction of OYB only. The corresponding tentative construction programme is detailed in **Table 1**.

Table 1 Works Programme

Construction	Progr	amme					
Works	From	End					
Phase 1 [1]	Year 2023	Year 2030 [2]					

Approved EIA for Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works (AEIAR-214/2017)

Construction	Progr	amme					
Works	From	End					
OYB	Year 2023	Year 2030 [2]					

Note:

- [1] Including part of Phase 3D and Sewage Pumping Station (SPS).
- [2] The assessment and Noise Sensitive Receiver (NSR) will be reviewed subject to the actual programme. Further assessment will be submitted for the Phase 1 development if depot / OYB construction is overlapped with the Phase 1 population intake.
- 1.3.2 Their major construction activities to be carried out are summarised below, while the programmes of each task for each contract are provided in **Appendix A**.
- 1.3.3 For the Phase 1 of SHD replanning works, the major construction activities are:
  - Site Formation, Excavation & Clearance (under 1701 & 1702);
  - Construction of the OYB (under 1701);
  - Construction of Part of SHD Phase 3D as Emergency Vehicular Access (EVA) of Phase 1 depot migration works (under 1701);
  - Substruction and Superstructure Construction of the SHD Phase 1 of depot migration (under 1701); and
  - Construction of SPS (under 1701 as a concurrent project).
- 1.3.4 For the construction of SPS, it will be carried out under the Project under the current design while it has been considered as a concurrent project stated in Railway EIA during the EIA submission.

#### 1.4 Objectives of the Report

1.4.1 This CNMP aims to present the latest implementation of the construction work, recommend the set of noise mitigation measures required, and discharge Condition 2.10 in Environmental Permit (EP) (EP-588/2021).

#### 1.5 Structure of the Report

1.5.1 This CNMP comprises the following sections:

- **Section 1** Presents the background, description of project and the requirement of the CNMP
- Section 2 Identifies the relevant legislation, standards & criteria
- **Section 3** Identifies and reviews Noise Sensitive Receivers (NSRs)
- **Section 4** Identifies and reviews the noise impacts arising from construction
- **Section 5** Conclusion

### 2 Relevant Legislation, Standards and Criteria

- 2.1.1 The relevant legislation and associated guidance applicable to present the construction noise assessment include:
  - Noise Control Ordinance (NCO) (Cap.400);
  - Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM);
  - Technical Memorandum (TM) on Noise from Construction Work other than Percussive Piling (GW-TM);
  - Technical Memorandum on Noise from Construction Work in Designated Areas (DA-TM);
  - Technical Memorandum on Noise from Percussive Piling (PP-TM).
- 2.1.2 The NCO provides the statutory framework for noise control in Hong Kong. Assessment procedures and standards are set out in the respective TM promulgated under NCO.
- 2.1.3 For construction, there is no statutory limit on construction noise during normal hours under the NCO and related TMs. There is statutory control on construction noise between the hours 1900 and 0700 from Monday to Saturday and at any time on general holidays (including Sundays) under the NCO. To ensure a better environment, the EIAO-TM promulgated under the EIAO has imposed more stringent criteria. Daytime general construction works (excluding percussive piling) between the hours 0700 and 1900 on any day not being a Sunday or general holiday, i.e. non-restricted hours, is controlled under the EIAO. The EIAO-TM stipulates criteria of 65 75dB(A) for daytime construction activities, as shown in **Table 2**.

 Table 2
 Noise standards for daytime construction activities

Time Period	Noise Standards[1], [2], Leq (30min) dB(A) 0700 – 1900 hours on any day not being a Sunday or general
All domestic premises including temporary housing accommodation	holiday 75
Hotel and hostels	75
Educational institutions including kindergartens, nurseries and all others where unaided voice communication is required	70 65 (During examination)

#### Notes:

- [1] The above standards apply to uses that rely on opened windows for ventilation.
- [2] The above standards should be viewed as the maximum permissible noise levels assessed at 1m from the external facade.
- 2.1.4 The NCO provides statutory control on general construction works during restricted hours (i.e. 1900 to 0700 hours (of the next day) from Monday to Saturday and at any time on Sundays or public holidays). The use of Powered Mechanical Equipment (PME) for construction works during restricted hours would require a Construction

Noise Permit (CNP). The GW-TM details the procedures adopted by Environmental Protection Department (EPD) for assessing such application. The granting of a CNP is subject to conditions stated in the CNP and it may be revoked at any time for failure to comply with the permit conditions.

- 2.1.5 The Contractor will be required to submit CNP applications to the Noise Control Authority and abide by any conditions stated in the CNP. The quantity of PME during restricted hours (1900 to 0700 hrs) would be adjusted accordingly by the Contractor so as to comply with the conditions in CNP.
- 2.1.6 Maximum noise levels from construction activities during restricted hours at affected Noise Sensitive Receivers (NSRs) are controlled under the TMs and shall not exceed the specified Acceptable Noise Levels (ANLs). These ANLs are stipulated in accordance with the Area Sensitivity Ratings established for the NSRs.
- As defined in the Noise Control (Construction Work Designated Areas) Notice Plan No. EPD/AN/NT-05 and EPD/AN/NT-06, Discovery Bay and Tung Chung areas are within the Designated Area (DA), while Siu Ho Wan is not located within DA. The proposed construction works are located on the existing Siu Ho Wan Depot and they are not located in the DA. Hence, the construction works of SHD are not controlled by the DA-TM.
- 2.1.8 Under the PP-TM, CNPs are also required for percussive piling. This TM specifies the permitted hours and other conditions for percussive piling. The following **Table 3** lists the acceptable noise levels of percussive piling for various types of NSR.

Table 3 ANLs for percussive piling

Time P	Period	ANL, dB(A)
(i)	NSR (or part of NSR) with no windows or other openings	100
(ii)	NSR with central air conditioning system	90
(iii) conditio	NSR with windows or other openings but without central air oning system	85

2.1.9 Depending on the numbers and types of piling machines and the separation from NSRs, percussive piling may be restricted to 12, 5 or 3 hours per day. For NSRs that are particularly sensitive to noise, such as hospitals, medical clinics, educational institutions and courts of law, a further reduction of 10dB(A) shall be applied to the above ANLs.

#### **3** Noise Sensitive Receivers

- 3.1.1 With reference to EIAO-TM and GW-TM, NSRs include domestic premises, hotel, hostel, temporary housing accommodation. hospital, medical clinic, educational institutional, places of worship, library, court of law, performing arts centres, country park and others.
- 3.1.2 In accordance with the Railway EIA Report, the study area is defined as the area within 300 m from the boundary of the works of the Project. As this CNMP report focuses on the Phase 1 replanning work of depot migration only, the remaining Phases for depot migration will be reviewed under separated submission and these separated reports will be submitted at least one month before the commencement of construction of the corresponding phases of the Project.
- 3.1.3 As the construction activities of Phase 1 consisting of Package 1 and 2 of SHD and OYB will be completed in September Year 2030 and the residential tower population intake for Package 1 topside development will be after September Year 2030<sup>2</sup> after the construction of Phase 1, therefore all the construction work for SHD Phase 1 and OYB would be completed prior to the population intake of Package 1 residential towers above and thus no planned NSR would be included in the assessment.
- 3.1.4 Review on the existing NSR has been conducted and there is no existing residential area / school identified within 300m assessment. The nearest residential area or village are located at Pak Mong and Ngau Kwn Long, which are at least 1km away from the Project site. Within the study area, only Lantau North (Extension) Country Park is identified as the existing Representative NSR for the Project.
- 3.1.5 The location of the representative NSR is shown in **Figure 1**, while description of the representative NSR is presented in **Table 4**.

**Table 4** Representative NSR

Lantau North (Extension) Country	Distance from the project site boundary	Noise Criteria, Leq (30 min), dB(A)				
Lantau North (Extension) Country Park	Country Park	220m	N/A <sup>[1]</sup>			

Note:

[1] N/A – Not Applicable. In accordance with Annex 13 of the EIAO-TM, country park is considered to be a NSR. However, the EIAO-TM does not provide a specific noise limits for Country Parks. Provided that the transient nature of visitor using hiking trails in the Country Park, no adverse construction noise impact is anticipated.

<sup>&</sup>lt;sup>2</sup> "Latest progress of Siu Ho Wan Depot Site development project", Press Release. (https://www.info.gov.hk/gia/general/202209/23/P2022092300467.htm?fontSize=1)

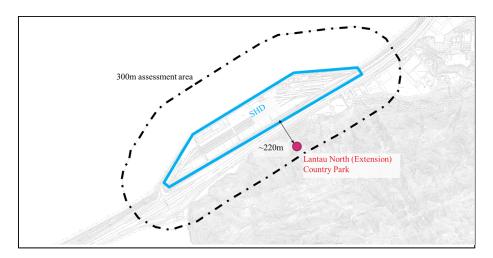


Figure 1 Location of Representative NSRs

### 4 Construction Noise Impact Assessment

#### 4.1 Construction Noise Assessment Methodology

- 4.1.1 The construction noise impact assessment during daytime, on any day not being a Sunday or general holiday has been assessed in accordance with the methodology in paragraphs 5.3 and 5.4 of Annex 13 of the EIAO-TM based on the following procedures:
  - Determine 300m from the site boundary and associated works;
  - Identify and locate representative NSRs that may be affected by the works;
  - Obtain the construction method and work sequence for the construction period;
  - Obtain the construction plant inventory for each corresponding construction work sequence;
  - Determine the SWLs of the plant items according to the information stated in the GW-TM or other recognised sources of reference, where appropriate;
  - Calculate the correction factors based on the distance between the NSRs and the notional noise source positions of the work sites;
  - Apply corrections for façade, distance, barrier attenuation, acoustic reflection where applicable;
  - Predict construction noise levels at the NSRs;
  - Quantify the level of impact at the NSRs, in accordance with GW-TM;
  - Predict the cumulative noise impacts for any concurrent construction works in the vicinity of the proposed work;
  - For any exceedance of noise criteria, all practical mitigation measures such as alternative quieter construction methodology, quiet plant, silencer, enclosure, etc, shall be examined to alleviate the predicted noise impacts as much as practicable; and
  - Consideration of noise mitigation measures will follow Annex 13 of EIAO-TM and EIAO Guidance Note "Preparation of Construction Noise Impact Assessment under the Environmental Impact Assessment Ordinance" [GN 9/2010].

#### 4.2 Inventory of Noise Sources

- 4.2.1 The latest construction information has been collated from the Proponents and presented in the report. The SWL of each PME has made reference to the approved EIAs and GW-TM. Construction programme, workfronts and plant inventory of PME have been revised and reviewed by the engineers as workable and technically feasible. The details of plant inventory of PME have been presented in **Appendix B**.
- 4.2.2 In addition, cumulative impacts from concurrent projects include following construction activities:
  - Construction of Road P1 (Tung Chung Tai Ho Section);
  - Construction of SPS;

- Construction of Tung Chung East sewerage network; and
- Construction works from the SHD Topside Development.
- 4.2.3 As the EIA of Road P1 (Tung Chung Tai Ho Section) is still under preparation by respective project proponent, the information in the approved Railway EIA is still the latest available information in the public domain, and hence, has been adopted for this assessment.
- 4.2.4 For the SPS, it has been considered in the topside development construction noise impact during the EIA stage. As the design update, the SPS construction information has been updated which has reflected in this assessment.
- 4.2.5 For construction of Tung Chung East sewerage network, it is located at the north of the SHD. The construction of Tung Chung East sewerage network is located more than 470m from the NSR. Given such separation distance, significant cumulative environmental impacts are not anticipated.
- 4.2.6 The construction of the foundation and concrete slab for podium decking of Phases 1 to 4 have been included in this assessment. Only superstructure for Phase 1 to 4 will be constructed under construction works from SHD Topside development. The construction of superstructure for Phase 1 to 4 will be conducted after the construction of the podium deck. The maximum concurrent construction noise level from the SHD Topside Development has been considered. The information in the approved Railway EIA is still the latest available information in the public domain, and hence, has been adopted for this assessment.

#### 4.3 Construction Noise Assessment Results

4.3.1 The impact from concurrent projects of the construction noise assessment under the approved Railway EIA which is still the latest available information in the public domain, and hence, has been adopted for this assessment summarised in **Table 5** and **Appendix C**.

Table 5 Predicted construction noise level

		Leq 30min, <b>dB</b> (A)										
NSR Uses		SHD	Concurrent Project [1]	Cumulative	Criteria							
Lantau North (Extension) Country Park	Country Park	53 – 75	59	60 – 75	N/A							

Note:

- [1] Concurrent projects included construction works from the SHD Topside Development, Road P1 (Tung Chung Tai Ho Section) and sewerage network for Tung Chung New Town Extension. Maximum concurrent project construction noise level had been extracted from Appendix 4.7 of Railway EIA.
- 4.3.2 Based on the assessment results, the maximum cumulative construction noise level at the representative NSR was predicted to be 75 dB(A). Given that the transient nature of visitor using hiking trails in the Country Park, no adverse construction noise impact is anticipated. Hence, further noise mitigation measures are considered unnecessary. Nevertheless, good site practices as stipulated in the approved Railway EIA Report, should be adopted to minimise construction noise impact at the representative NSR. Detailed descriptions of these mitigation measures are given in the following sections. The implementation schedule is presented in **Appendix D**.

4.3.3 To ensure the implementation of good site practices, the Tender Document has made reference to this CNMP report and requested the Contractor to fulfil the requirement stated.

#### 4.4 Good Site Practice

- 4.4.1 Good site practice and noise management techniques could considerably reduce the noise impact from construction site activities on nearby NSRs. The following measures should be practised by the Contractor during each phase of construction:
  - only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;
  - machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;
  - plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;
  - silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;
  - the use of quieter construction method (i.e. Silent Piling System) should be considered where possible;
  - Quality Powered Mechanical Equipment (QPME) may also be considered by the Contractor as enhancement to further minimize the construction noise impact where possible;
  - mobile plant should be sited as far away from NSRs as possible and practicable; and
  - material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.

### 5 Conclusion

5.1.1 The construction noise impact arising from the Phase 1 of SHD replanning works has been predicted. No adverse construction noise impact is predicted at the representative NSR (i.e. Lantau North (Extension) Country Park) and thus no specific mitigation measures are required. Good site practice is however to be adopted during the construction period. Separated submissions for other Phases of SHD replanning works will be provided in later stage of works. These separated reports will be submitted at least one month before the commencement of construction of the corresponding phases of the Project.

# Appendix A

Construction Programme

			.i .		2024	.1 .							2	2025	-1 -1		
A 1 (1701)	1	2 3	3 4	5	6 7	<u> 8</u>	9 10	11	12 1	. 2	3	4	5	6 7	<u>'</u> 8 <u>9</u>	10	11
A-1 (1701)	+	+													<del></del>		
ite Clearance & Formation oundation and Excavation	+														<del></del>		
ocket H Pile / Mini-pile	+ + -	+												+	+ + -		
ored Pile	+	+															
ile Cap Construction	+	+															
uperstructure	+ + + -	+															
BWF, Utilities Installation & Cable containment Installation																	
·																	
A-2 (1701, 1702)																	
ite Clearance & Formation																	
oundation and Excavation		1															
ocket H Pile / Mini-pile		1															
ored Pile																	
ile Cap Construction																	
uperstructure																	
BWF, Utilities Installation & Cable containment Installation																	
A-3 (1701, 1702)																	
ite Clearance & Formation																	
oundation and Excavation																	
ored Piling																	
ile Cap Construction																	
uperstructure																	
BWF, Utilities Installation & Cable containment Installation																	
																<u> </u>	
A-4 (1701, 1702)							<b></b>										
ite Clearance & Formation																	
oundation and Excavation																<u> </u>	
ored Pile			1			<u> </u>											
ile Cap Construction				1		1	<b></b>										
uperstructure				1			<b> </b>										
BWF, Utilities Installation & Cable containment Installation			1			1	<del>                                     </del>										
(			1			1										1	
A-5 (1701, 1702)			1													1	
ite Clearance & Formation																	
oundation and Excavation																	
ored Pile																	
ile Cap Construction																	
uperstructure																	
BWF, Utilities Installation & Cable containment Installation																	
A-6 (1701, 1702)																	
ite Clearance & Formation																	
oundation and Excavation																	
ocket H Pile / Mini-pile																	
ored Pile																	
ile Cap Construction																	
uperstructure	+																
BWF, Utilities Installation & Cable containment Installation	+	+												+	+		
D 4 /4704 4703\	+	+												+	+		-
B-1 (1701, 1702)	+	+													+		
ite Clearance & Formation oundation and Excavation	+	+													<del></del>		
oundation and excavation ored Pile	+	+															
ile Cap Construction	+	+															
uperstructure	+	+													+		
BWF, Utilities Installation & Cable containment Installation	+	+													+		+ +
BWY, Othities installation & cable containment installation	+	+													+		
B-2 (1701, 1702)	+					1	<del>                                     </del>						<del>                                     </del>		+		+ +
ite Clearance & Formation	+	+		1		1	<del>                                     </del>								+ + + -		+ +
oundation and Excavation	+ + + -	+				1	† †								<del>                                     </del>		+ +
ocket H Pile / Mini-pile	<del>                                     </del>	+	1				† †										
ored Pile		+				1											
ile Cap Construction		1															
uperstructure																	
BWF, Utilities Installation & Cable containment Installation																	
B-3 (1701, 1702)																	
ite Clearance & Formation																	
oundation and Excavation																	
ocket H Pile / Mini-pile																	
ored Pile																	
ile Cap Construction												_					
uperstructure			1													<u> </u>	<u>                                     </u>
BWF, Utilities Installation & Cable containment Installation			1			1	<b></b>										
				1		1	<b> </b>	1							+		
D-1 (1701, 1702)													<b> </b>				
ite Clearance & Formation	+														+	1	
oundation and Excavation			1			1										1	
ocket H Pile / Mini-pile	+	4		1		1											
187	+		1	1													
ored Pile	+		1			1											
ile Cap Construction	1					1		1								1	
ile Cap Construction uperstructure	+	Ī				1	<b></b>								<del></del>		
ile Cap Construction		4		1	ı	1											
ile Cap Construction uperstructure BWF, Utilities Installation & Cable containment Installation							•	-			_					1	
ile Cap Construction uperstructure .BWF, Utilities Installation & Cable containment Installation D-2 (1701, 1702)																	J
ile Cap Construction uperstructure BWF, Utilities Installation & Cable containment Installation  D-2 (1701, 1702) ite Clearance & Formation																	
ile Cap Construction uperstructure .BWF, Utilities Installation & Cable containment Installation  D-2 (1701, 1702) ite Clearance & Formation oundation and Excavation																	
ile Cap Construction uperstructure BWF, Utilities Installation & Cable containment Installation  D-2 (1701, 1702) ite Clearance & Formation oundation and Excavation ocket H Pile / Mini-pile																	
ile Cap Construction uperstructure  BWF, Utilities Installation & Cable containment Installation  D-2 (1701, 1702) ite Clearance & Formation oundation and Excavation ocket H Pile / Mini-pile ored Pile																	
ile Cap Construction uperstructure BWF, Utilities Installation & Cable containment Installation D-2 (1701, 1702) te Clearance & Formation oundation and Excavation ocket H Pile / Mini-pile																	

					2025												
	1 2	2 3	4	5	6 7	8	9	10 11	12	1 2 3	4	5	6 7	7 8	9	10 11	Π:
1T-1 (1701,1702)																	
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile									ļ								
Pile Cap Construction																	
Superstructure  ABM/F, Utilities Installation & Cable containment Installation																	
ABWF, Utilities Installation & Cable containment Installation										<del>                                     </del>							+
1T-2 (1701,1702)														1			+
Site Clearance & Formation																	1
Foundation and Excavation																	1
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
1T-3 (1701,1702)		1			_									1			
Site Clearance & Formation														1			
Foundation and Excavation														1			+
Socket H Pile / Mini-pile														1			+
Pile Cap Construction						-											_
Superstructure  ABWF, Utilities Installation & Cable containment Installation																	4
ABWE, Officies installation & Cable Contamment installation														1			+
1T-4 (1701,1702)				<del></del>		+								1			+
Site Clearance & Formation																	+
Foundation and Excavation														1			+
Socket H Pile / Mini-pile																	1
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
3D-1 (1701)																	
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation									1					1			+
SPS (1701 - as concurrent Project)																	-
Site Clearance & Formation																	+
Foundation and Excavation																	+
Socket H Pile / Mini-pile																	1
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
Southern Platform (1701)																	
Site Clearance & Formation														1			
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation																	1
Abover, Othicles installation & Cable Containment installation						+						+		+			+
1D (1701)				<del></del>		+						+		+		<del>                                     </del>	+
Site Establishment														1			<b>†</b>
Installation of Pre-bored Sheet Piles Wall																	<b>†</b>
Construction of Manhole with Platform & Cat ladder, and Backfill														1			1
Cheung Tung Road (CTR) (1701)																	
Installation of Pre-bored Sheet Piles Wall																	
Pipe Jacking Shaft																	
Construction of Manhole with Platform & Cat ladder, and Backfill																	
Sham Shui Kok Drive (SSK) (1701)																	
Installation of Pre-bored Sheet Piles Wall																	
Construction of Manhole with Platform & Cat ladder, and Backfill		1							<u></u>		<u>L</u>	1		1	Ī		I

										1							
	1 2	3	4	5	2026 6 7	8	9	10 11	12	2 1 2 3	;	. 5	2027 6 7	7 8	9	10 11	1
1A-1 (1701)													, , , , , , , , , , , , , , , , , , ,				
Site Clearance & Formation																	
Foundation and Excavation Socket H Pile / Mini-pile														+			
Bored Pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation														_			
Abwi, otilities installation & cable containment installation																	
1A-2 (1701, 1702)																	
Site Clearance & Formation														1			
Foundation and Excavation Socket H Pile / Mini-pile														+			
Bored Pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation																	
ABWF, Othities installation & Cable Containment installation																	
1A-3 (1701, 1702)																	
Site Clearance & Formation																	
Foundation and Excavation  Bored Piling														<del> </del>			
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
1A-4 (1701, 1702)	<del>                                     </del>													1			
Site Clearance & Formation																	
Foundation and Excavation																	
Bored Pile Pile Cap Construction										<del>                                     </del>	-	1		1			
Superstructure										<del>                                     </del>				+		+ +	
ABWF, Utilities Installation & Cable containment Installation																	
1A E (1701 1703)																	
1A-5 (1701, 1702) Site Clearance & Formation														1			
Foundation and Excavation														1			
Bored Pile																	
Pile Cap Construction					_												
Superstructure ABWF, Utilities Installation & Cable containment Installation																	
- Carrette Motanation & Capte Containment Motanation																	
1A-6 (1701, 1702)																	
Site Clearance & Formation Foundation and Excavation												_					
Socket H Pile / Mini-pile																	
Bored Pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation																	
Abovi, ounties instandation a capie containment instandation																	
1B-1 (1701, 1702)																	
Site Clearance & Formation Foundation and Excavation																	
Bored Pile																	
Pile Cap Construction																	
Superstructure														_			
ABWF, Utilities Installation & Cable containment Installation																	
1B-2 (1701, 1702)																	
Site Clearance & Formation																	
Foundation and Excavation Socket H Pile / Mini-pile	<del>                                     </del>													1			
Bored Pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation	<del>                                     </del>																
7.5-771 ) Stantes instantation & Cable Containment Installation		<del>                                     </del>															
1B-3 (1701, 1702)																	
Site Clearance & Formation Foundation and Excavation	<del>                                     </del>										1	-					
Socket H Pile / Mini-pile										<del>                                     </del>			<del>                                     </del>	1		+ +	
Bored Pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation																	
	1																
1D-1 (1701, 1702)	<del></del>													1		<del>                                     </del>	
Site Clearance & Formation				Ī		1								1			
								•		<del>                                     </del>	+			_	-		
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure ABWF, Utilities Installation & Cable containment Installation  1D-2 (1701, 1702)																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure ABWF, Utilities Installation & Cable containment Installation  1D-2 (1701, 1702) Site Clearance & Formation																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure ABWF, Utilities Installation & Cable containment Installation  1D-2 (1701, 1702) Site Clearance & Formation Foundation and Excavation																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure ABWF, Utilities Installation & Cable containment Installation  1D-2 (1701, 1702) Site Clearance & Formation																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure ABWF, Utilities Installation & Cable containment Installation  1D-2 (1701, 1702) Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction																	
Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile Pile Cap Construction Superstructure ABWF, Utilities Installation & Cable containment Installation  1D-2 (1701, 1702) Site Clearance & Formation Foundation and Excavation Socket H Pile / Mini-pile Bored Pile																	

	T									T							
	1				2026	-1 -			1 40		<u> </u>	.1 -	2027	.1 .			
	1 2	3	3 4	5	6 7	7 8	9	10 11	. 12	1 2 3	4	1 5	6 7	8	9	10 11	<del>                                     </del>
47.4 (4704.4702)																	<del></del>
1T-1 (1701,1702) Site Clearance & Formation												_					<del></del>
Foundation and Excavation						+				<del>                                     </del>							<del>                                     </del>
Socket H Pile / Mini-pile		1								<del>                                     </del>							
Pile Cap Construction		1								<del>                                     </del>							
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation		_															
Abwir, othices installation & cable containment installation																	
1T-2 (1701,1702)																	
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
1T-3 (1701,1702)						1						1					
Site Clearance & Formation																	
Foundation and Excavation	<u> </u>					L					L_	L					
Socket H Pile / Mini-pile																	
Pile Cap Construction						$\mathbf{L}_{-}$			<u>L</u> _		<u>L</u> _						
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
1T-4 (1701,1702)																	
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
																	<b></b>
3D-1 (1701)																	<b></b>
Site Clearance & Formation																	<b></b>
Foundation and Excavation																	<u> </u>
Socket H Pile / Mini-pile																	<u> </u>
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
505 (4704																	<del></del>
SPS (1701 - as concurrent Project)																	<del></del>
Site Clearance & Formation																	<del></del>
Foundation and Excavation										<del>                                     </del>							<del></del>
Socket H Pile / Mini-pile										<del>                                     </del>		1					<del>                                     </del>
Pile Cap Construction																	
Superstructure  ARWE Utilities Installation & Cable containment Installation																	
ABWF, Utilities Installation & Cable containment Installation	+					1											
Southern Platform (1701)	+ + + + + + + + + + + + + + + + + + + +					1					-	+				<del>                                     </del>	
Site Clearance & Formation	+ + +					+						+				<del>                                     </del>	
Foundation and Excavation	+ + +					+						+				<del>                                     </del>	
Socket H Pile / Mini-pile	+ + -					+						+					
Pile Cap Construction						+				<del>                                     </del>		+					
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
Above, ounties installation & cable containment installation	+ + + + + + + + + + + + + + + + + + + +					+											
1D (1701)	+ + + + + + + + + + + + + + + + + + + +					+				<del>                                     </del>		+				<del>                                     </del>	
Site Establishment	+ + + + + + + + + + + + + + + + + + + +					†				<del>                                     </del>		+				<del>                                     </del>	
Installation of Pre-bored Sheet Piles Wall	+ + + + + + + + + + + + + + + + + + + +											+				<del>                                     </del>	
Construction of Manhole with Platform & Cat ladder, and Backfill	+ + + + + + + + + + + + + + + + + + + +									<del>                                     </del>		+					
55 details. S. Maniele Man Flactorni & cat ladder, and backing	+ + +					†				<del>                                     </del>		+					
Cheung Tung Road (CTR) (1701)	<del>                                     </del>					†				<del>                                     </del>		†				<del>                                     </del>	
Installation of Pre-bored Sheet Piles Wall	<del>                                     </del>									<del>                                     </del>		1				<del>                                     </del>	
Pipe Jacking Shaft	1																
Construction of Manhole with Platform & Cat ladder, and Backfill	1					1											
	1					1						1					
Sham Shui Kok Drive (SSK) (1701)	1					1						1					
Installation of Pre-bored Sheet Piles Wall												†					
Construction of Manhole with Platform & Cat ladder, and Backfill												1					
•				1													

	1 2	3	4 5 6	028	8	9	10 11	12	1 2 3	3 2	5	2029 6 7	7 8	9	10 11	1 1
1A-1 (1701)								12								
Site Clearance & Formation																
Foundation and Excavation Socket H Pile / Mini-pile																+
Bored Pile																
Pile Cap Construction																
Superstructure ABWF, Utilities Installation & Cable containment Installation						_										
Abovi, otheres installation & easie contaminent installation																
1A-2 (1701, 1702)																
Site Clearance & Formation Foundation and Excavation																+
Socket H Pile / Mini-pile																+
Bored Pile																
Pile Cap Construction																<del> </del>
Superstructure ABWF, Utilities Installation & Cable containment Installation																
1A-3 (1701, 1702)																<del> </del>
Site Clearance & Formation Foundation and Excavation																+
Bored Piling																
Pile Cap Construction																
Superstructure ABWF, Utilities Installation & Cable containment Installation																
1A-4 (1701, 1702)																
Site Clearance & Formation Foundation and Excavation				1						-	-		-			<del> </del>
Bored Pile			+							1	1		<del> </del>			+
Pile Cap Construction																
Superstructure ABWF, Utilities Installation & Cable containment Installation																
אסיין, סנווונופי ווויגנמוומנוטוו מ כמטופ נטוונמווווופוונ ווואנמוומנוטוו																
1A-5 (1701, 1702)																
Site Clearance & Formation																
Foundation and Excavation Bored Pile																+
Pile Cap Construction																+
Superstructure																
ABWF, Utilities Installation & Cable containment Installation																_
1A-6 (1701, 1702)																+
Site Clearance & Formation																
Foundation and Excavation																<del> </del>
Socket H Pile / Mini-pile Bored Pile																+
Pile Cap Construction																
Superstructure ABWF, Utilities Installation & Cable containment Installation						_										
ABWF, Othities installation & Cable Containment installation																
1B-1 (1701, 1702)																
Site Clearance & Formation Foundation and Excavation																+
Bored Pile																+
Pile Cap Construction																
Superstructure  ARWE Utilities Installation & Cable containment Installation																_
ABWF, Utilities Installation & Cable containment Installation																-
1B-2 (1701, 1702)																
Site Clearance & Formation Foundation and Excavation											1					+
Socket H Pile / Mini-pile				1						1	1		1			+
Bored Pile																
Pile Cap Construction Superstructure											1					+
ABWF, Utilities Installation & Cable containment Installation																
4B 2 (4704 4702)																
1B-3 (1701, 1702) Site Clearance & Formation											1					+
Foundation and Excavation																
Socket H Pile / Mini-pile																
Bored Pile Pile Cap Construction											1					+
Superstructure										<u> </u>	<u> </u>					<u> </u>
ABWF, Utilities Installation & Cable containment Installation																
1D-1 (1701, 1702)				1						1	1					+
Site Clearance & Formation																
Foundation and Excavation																
Socket H Pile / Mini-pile Bored Pile											1					
Pile Cap Construction			+ + +	+ +						1	1		1		<del>     </del>	+
Superstructure																
ABWF, Utilities Installation & Cable containment Installation																
1D-2 (1701, 1702)			+ +	+					<del>                                     </del>						+ +	+
Site Clearance & Formation																
Foundation and Excavation																
		I	1 1	1		1	Ī	Ī	ı 1 1	1	1	1				<del></del>
Socket H Pile / Mini-pile																
Socket H Pile / Mini-pile Bored Pile																

					2020					Т			2020				
	1 1 2	3	4	5	2028	7 8	9	10 11	12	1 2 3		ıl 5	2029	7 8	g	10	11 1
		. 3	4	3	-	,	, ,	10 11	12		-	, ,	, 0, ,	, , ,	9	10	
1T-1 (1701,1702)			†			1					1			1			
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation																	
ABWY, Othities installation & Cable Containment installation																	
1T-2 (1701,1702)																	
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure ABWF, Utilities Installation & Cable containment Installation																	
ABWF, Othities installation & Cable Containment installation																	
1T-3 (1701,1702)												1		1			
Site Clearance & Formation														1			
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction														1			
Superstructure  ABME Utilities Installation & Cable containment Installation																	
ABWF, Utilities Installation & Cable containment Installation																	
1T-4 (1701,1702)	+ +					+							<del>                                     </del>	1			+
Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
3D-1 (1701)	-									<del>                                     </del>							
Site Clearance & Formation																	+
Foundation and Excavation																	+
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
CDC (1701 as consument Project)																	
SPS (1701 - as concurrent Project) Site Clearance & Formation																	
Foundation and Excavation																	
Socket H Pile / Mini-pile														1			1
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
Southern Platform (1701)	1					1								1			
Site Clearance & Formation	+ +			-		+						1		+			+
Foundation and Excavation	+ +			<del> </del>										+			+
Socket H Pile / Mini-pile																	
Pile Cap Construction																	
Superstructure																	
ABWF, Utilities Installation & Cable containment Installation																	
10 (1701)	+											1	<del>                                     </del>	1		<del>                                     </del>	
1D (1701) Site Establishment	+ +			-		+						1		+			+
Installation of Pre-bored Sheet Piles Wall	+ +			<del> </del>										+			+
Construction of Manhole with Platform & Cat ladder, and Backfill						1								1			
Cheung Tung Road (CTR) (1701)																	
Installation of Pre-bored Sheet Piles Wall																	
Pipe Jacking Shaft														1			
Construction of Manhole with Platform & Cat ladder, and Backfill						1						1		1			
Sham Shui Kok Drive (SSK) (1701)	+ +					1						+		+			
Installation of Pre-bored Sheet Piles Wall	+ +													+			+
Construction of Manhole with Platform & Cat ladder, and Backfill														1			+
·								<u> </u>		<u> </u>			<u> </u>	1	•	1	

	,											
	1	2	3	4	5	20 6	)30 7	8	9	10	11	12
1A-1 (1701)		_										
Site Clearance & Formation Foundation and Excavation												
Socket H Pile / Mini-pile												
Bored Pile Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												<del> </del>
1A-2 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1A-3 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation												
Bored Piling Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1A-4 (1701, 1702)												
Site Clearance & Formation Foundation and Excavation												
Bored Pile												
Pile Cap Construction												
Superstructure ABWF, Utilities Installation & Cable containment Installation												
1A-5 (1701, 1702) Site Clearance & Formation												
Foundation and Excavation												
Bored Pile												
Pile Cap Construction Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1A-6 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile Bored Pile												
Pile Cap Construction												
Superstructure ABWF, Utilities Installation & Cable containment Installation												
1B-1 (1701, 1702) Site Clearance & Formation												
Foundation and Excavation												
Bored Pile Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1B-2 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1B-3 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction Superstructure												_
ABWF, Utilities Installation & Cable containment Installation												
1D-1 (1701, 1702)												
Site Clearance & Formation	<u> </u>											
Foundation and Excavation												
Socket H Pile / Mini-pile Bored Pile												
Pile Cap Construction												
Superstructure ABWF, Utilities Installation & Cable containment Installation												
1D-2 (1701, 1702) Site Clearance & Formation												_ <del></del>
Foundation and Excavation	<u> </u>											
Socket H Pile / Mini-pile												
Bored Pile Pile Cap Construction	-											
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												L

						20	)30					
	1	. 2	3	4	5	6	7	8	9	10	11	12
	1											
1T-1 (1701,1702)	<u> </u>											
Site Clearance & Formation Foundation and Excavation												
Socket H Pile / Mini-pile	+											
Pile Cap Construction												
Superstructure	+											
ABWF, Utilities Installation & Cable containment Installation												
715 VVI, Otheres installation & caste containment installation												
1T-2 (1701,1702)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1T-3 (1701,1702)												<u> </u>
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile	<u> </u>									-		<u> </u>
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1T-4 (1701,1702)	+											-
Site Clearance & Formation												
Foundation and Excavation	+											
Socket H Pile / Mini-pile	+											
Pile Cap Construction	1											
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
·												
3D-1 (1701)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
												<u> </u>
SPS (1701 - as concurrent Project)												<u> </u>
Site Clearance & Formation												1
Foundation and Excavation	+											
Socket H Pile / Mini-pile												<del> </del>
Pile Cap Construction Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
Above, offices installation & capic containment installation												
Southern Platform (1701)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation												
1D (1701)												
Site Establishment												
Installation of Pre-bored Sheet Piles Wall												<u> </u>
Construction of Manhole with Platform & Cat ladder, and Backfill	1											
Chours Turs Bood (CTR) (4704)	1											
Cheung Tung Road (CTR) (1701)	1					<u> </u>						
Installation of Pre-bored Sheet Piles Wall	+											
Pipe Jacking Shaft Construction of Manhole with Platform & Cat ladder, and Backfill	1											
Construction of Mannole With Flationii & Cat lauder, and Backilli	1									-		
Sham Shui Kok Drive (SSK) (1701)	1					<u> </u>	<u> </u>			†		
Installation of Pre-bored Sheet Piles Wall	1						<u> </u>			<u> </u>		
Construction of Manhole with Platform & Cat ladder, and Backfill	†											
	1	1	<u> </u>	1	1	1	1	1	1	1		

# **Appendix B**

Plant Inventory and SWL

Title: SWLs of PMEs

		Unmitigated SWLs	
РМЕ	ID [1]	Description	PME SWL, dB(A)
Air Compressor	CNP003	Air compressor, air flow > 30m <sup>3</sup> /min	104
Bar Bender and Cutter	CNP021	Bar bender and cutter (electric)	90
Breaker, excavator mounted/ Hydraulic breaker	CNP028	Breaker, excavator mounted (hydraulic)	122
Concrete Lorry Mixer	CNP044	Concrete lorry mixer	109
Concrete Mixer	CNP045	Concrete mixer (electric)	96
Concrete Pump	CNP047	Concrete pump, stationary / lorry mounted	109
Mobile Crane	CNP048	Crane, mobile / barge mounted (diesel)	112
Drill Rig, DTH Drilling Machine	CPME#	Drill Rig, rotary type (Diesel)	110
Excavator	CNP081	Excavator / loader, wheeled / tracked	112
Generator	CNP101	Generator, standard	108
Lorry	CNP141	Lorry	112
Lorry, with crane/grab	CPME#	Lorry, 5.5 tonnes < gross vehicle weight ≦38 tonnes	105
Piling, Large Dia Bored, Oscillator	CNP165	Piling, large dia bored, oscillator	115
Power pack	CPME#	Power pack (diesel)	100
Vibratory Poker	CPME#	Poker, vibratory, hand-held (electric)	102
Roller, Vibratory	CNP186	Roller, vibratory	108
Saw, Circular, Wood	CNP201	Saw, circular, wood	108
Water pump	CNP281	Water pump	88
Cutter	CPME#	Cutter, circular, steel (electric)	112
Dump Truck	CPME#	Dump Truck, 5.5 tonnes < gross vehicle weight ≦38 tonnes	105
Silent Piler	PME#	Silent Piler [2]	94

#### Note:

(https://www.epd.gov.hk/epd/misc/construction\_noise/contents/index.php/en/home2/quieter-construction-equipment/item/27-press-in-method.html)

<sup>[1]</sup> The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

<sup>[2]</sup> Extracted from Kwun Tong Line Extension (AEIAR-154/2010), Revised Trunk Road T4 in Sha Tin (AEIAR-231/2022) and Silent Piling by Press-in Method

Title: Plant Inventory

Site Clearance & Formation							
						Unmitigated	
Works Area/ Activity	PME	% Operating Time [1]	Time Correction	Units	PME Reference [3]	Single Unit PME	Total SWL
			dB(A) <sup>[2]</sup>			dB(A)	dB(A)
e Clearance & Formation	Excavator	80	-1	3	CNP081	112	116
	Roller, Vibratory	80	-1	2	CNP186	108	110
	Dump Truck	80	-1	3	CPME#	105	109
	Water pump	80	-1	3	CNP281	88	92
	Breaker, excavator mounted/ Hydraulic breaker	50	-3	1	CNP028	122	119
	Mobile Crane	80	-1	1	CNP048	112	111
						Total SWL	122

<sup>[1]</sup> Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

Foundation and Excavation							
						Unmitigated	
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A) [2]	Units	PME Reference [3]	Single Unit PME dB(A)	Total SWL dB(A)
Foundation and Excavation	Excavator	80	-1	3	CNP081	112	116
	Dump Truck	50	-3	3	CPME#	105	107
	Water pump	80	-1	3	CNP281	88	92
	Breaker, excavator mounted/ Hydraulic breaker	50	-3	1	CNP028	122	119
	Mobile Crane	80	-1	1	CNP048	112	111
				•		Total SWL	121

[1] Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

							Unmitigated	
Works Area/ Activity		РМЕ	% Operating Time [1]	Time Correction dB(A) [2]	Units	PME Reference [3]	Single Unit PME dB(A)	Total SW dB(A)
Socket H Pile / Mini-pile (1A-1 & Southern Platform)	Group A	Mobile Crane (not concurrent with DTH)	80	-1	5	CNP048	112	118
		Generator	70	-2	5	CNP101	108	113
		Air Compressor	80	-1	10	CNP003	104	113
		Concrete Mixer	70	-2	5	CNP045	96 Tatal <b>9</b> 84	101
	Croup P	Drill Rig, DTH Drilling Machine	100	1 0	F	CPME#2	Total SWL 110	<b>120</b> 117
	Group B	Generator	100 70	-2	5 5	CPME#2 CNP101	108	113
		Air Compressor	80	-1	10	CNP003	104	113
		Concrete Mixer	70	-2	5	CNP045	96	101
		Control Winds	, ,			0141 0 10	Total SWL	120
		<u> </u>					Max SWL	120
Socket H Pile / Mini-pile (1A-2 &B 1B-2)	Group A	Mobile Crane (not concurrent with DTH)	80	-1	1	CNP048	112	111
		Generator	70	-2	1	CNP101	108	106
		Air Compressor	80	-1	2	CNP003	104	106
		Concrete Mixer	70	-2	1	CNP045	96 T. 1 1 0 1111	94
	One on D	Daill Die, DTH Daillie e Marshin e	100	1 0		ODME#	Total SWL	113
	Group B	Drill Rig, DTH Drilling Machine	100	0	1	CPME# CNP101	110	110
		Generator Air Compressor	70 80	-2 -1	2	CNP101 CNP003	108 104	106 106
		Concrete Mixer	70	-1	1	CNP003 CNP045	96	94
		COLICIGIC IVIIAGI	1 10	<u> </u>		L OTO INIO	Total SWL	113
							Max SWL	113
Socket H Pile / Mini-pile (1A-6, 1B-3, 1D-1 & 1D-2)	Group A	Mobile Crane (not concurrent with DTH)	80	-1	2	CNP048	112	114
		Generator	70	-2	2	CNP101	108	109
		Air Compressor	80	-1	4	CNP003	104	109
		Concrete Mixer	70	-2	2	CNP045	96	97
							Total SWL	116
	Group B	Drill Rig, DTH Drilling Machine	100	0	2	CPME#	110	113
		Generator	70	-2	2	CNP101	108	109
		Air Compressor	80	-1	4	CNP003	104	109
		Concrete Mixer	70	-2	2	CNP045	96 Tatal CMI	97
							Total SWL Max SWL	116 116
Socket H Pile / Mini-pile (1T-1, 1T-4 & 3D-1)	Group A	Mobile Crane (not concurrent with DTH)	80	-1	3	CNP048	112	116
Socket IT File / Willin-pile (TT-1, TT-4 & 3D-1)	Gloup A	Generator	70	-2	3	CNP101	108	111
		Air Compressor	80	-1	6	CNP003	104	111
		Concrete Mixer	70	-2	3	CNP045	96	99
			•	•		•	Total SWL	118
	Group B	Drill Rig, DTH Drilling Machine	100	0	3	CPME#	110	115
		Generator	70	-2	3	CNP101	108	111
		Air Compressor	80	-1	6	CNP003	104	111
		Concrete Mixer	70	-2	3	CNP045	96 Tatal <b>9</b> 84	99
							Total SWL Max SWL	117 118
Socket H Pile / Mini-pile (1T-2)	Group A	Mobile Crane (not concurrent with DTH)	80	-1	10	CNP048	112	121
Socket III lie / Willin-pile (TT-2)	Oloup A	Generator	70	-2	10	CNP101	108	116
		Air Compressor	80	-1	20	CNP003	104	116
		Concrete Mixer	70	-2	10	CNP045	96	104
			•	•		•	Total SWL	123
	Group B	Drill Rig, DTH Drilling Machine	100	0	10	CPME#	110	120
		Generator	70	-2	10	CNP101	108	116
		Air Compressor	80	-1	20	CNP003	104	116
		Concrete Mixer	70	-2	10	CNP045	96 Tatal <b>9</b> 88	104
							Total SWL Max SWL	123
Socket H Pile / Mini-pile (1T-3)	Group A	Mobile Crane (not concurrent with DTH)	80	-1	4	CNP048	<u>Max SwL</u> 112	<b>123</b> 117
Observed the Australia Australia (11-0)	Oloup A	Generator	70	-1	4	CNP046 CNP101	108	112
		Air Compressor	80	-1	8	CNP003	104	112
		Concrete Mixer	70	-2	4	CNP045	96	100
						<u> </u>	Total SWL	119
	Group B	Drill Rig, DTH Drilling Machine	100	0	4	CPME#	110	116
		Generator	70	-2	4	CNP101	108	112
		Air Compressor	80	-1	8	CNP003	104	112
		Concrete Mixer	70	-2	4	CNP045	96	100
							Total SWL	119
Socket Li Dilo / Mini nilo (SDS)	Group A	Mobile Crane (not consument with DTII)	00	1		CNIDO40	Max SWL	119
Socket H Pile / Mini-pile (SPS)	Group A	Mobile Crane (not concurrent with DTH) Generator	80 70	-1 -2	6	CNP048 CNP101	112 108	119 114
		Generator Air Compressor	80	-2	12	CNP101 CNP003	104	114
		Concrete Mixer	70	-1	6	CNP003 CNP045	96	102
		COHOLOGO IVIIAGI	1 10	<u>          -</u> 2		I OINI OTO	Total SWL	121
	Group B	Drill Rig, DTH Drilling Machine	100	0	6	CPME#	110	118
		Generator	70	-2	6	CNP101	108	114
		Air Compressor	80	-1	12	CNP003	104	114
		Concrete Mixer	70	-2	6	CNP045	96	102
	1						Total SWL	121

[1] Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

							Unmitigated	
Works Area/ Activity		PME	% Operating Time [1]	Time Correction	n Units	PME Reference [3]	Single Unit PME dB(A)	Total SW
Bored Pile (1A-1, 1B-1 & 1B-2)	Group A	Piling, Large Dia Bored, Oscillator	100	0	4	CNP165	115	121
,	i i	Concrete Lorry Mixer	70	-2	4	CNP044	109	113
		Dump Truck	50	-3	4	CPME#	105	108
		Air Compressor	70	-2	4	CNP003	104	108
		Power pack	100	0	4	CPME#	100	106
							Total SWL	122
	Group B	Mobile Crane (not concurrent with oscillator)	70	-2	4	CNP048	112	116
		Concrete Lorry Mixer	70	-2	4	CNP044	109	113
		Dump Truck	50	-3	4	CPME#	105	108
		Air Compressor	70	-2	4	CNP003	104	108
		Power pack	100	0	4	CPME#	100 Total SWL	106
							Max SWL	119 122
Bored Pile (1A-2 & 1A-6)	Group A	Piling, Large Dia Bored, Oscillator	100	0	2	CNP165	115	118
DOIGN IN (TATE OF TATO)	Oloup A	Concrete Lorry Mixer	70	-2	2	CNP165 CNP044	109	110
		Dump Truck	50	-3	2	CPME#	105	105
		Air Compressor	70	-2	2	CNP003	104	105
		Power pack	100	0	2	CPME#	100	103
			,	•			Total SWL	119
	Group B	Mobile Crane (not concurrent with oscillator)	70	-2	2	CNP048	112	113
	· .	Concrete Lorry Mixer	70	-2	2	CNP044	109	110
		Dump Truck	50	-3	2	CPME#	105	105
		Air Compressor	70	-2	2	CNP003	104	105
		Power pack	100	0	2	CPME#	100	103
							Total SWL	116
		15m					Max SWL	119
Bored Pile (1A-3, 1A-4, 1A-5 & 1B-3)	Group A	Piling, Large Dia Bored, Oscillator	100	0	3	CNP165	115	120
		Concrete Lorry Mixer	70	-2	3	CNP044	109	112
		Dump Truck Air Compressor	50 70	-3 -2	3	CPME# CNP003	105 104	107 107
		Power pack	100	0	3	CPME#	100	107
		r ower pack	100			OF WIL#	Total SWL	121
	Group B	Mobile Crane (not concurrent with oscillator)	70	-2	3	CNP048	112	115
		Concrete Lorry Mixer	70	-2	3	CNP044	109	112
		Dump Truck	50	-3	3	CPME#	105	107
		Air Compressor	70	-2	3	CNP003	104	107
		Power pack	100	0	3	CPME#	100	105
							Total SWL	118
D I D (4 D. 4)		Director Bio Book Conflictor	100		1 - 1	ONDIOS	Max SWL	121
Bored Pile (1D-1)	Group A	Piling, Large Dia Bored, Oscillator Concrete Lorry Mixer	100 70	-2	5 5	CNP165 CNP044	115 109	122 114
		Dump Truck	50	-3	5	CPME#	109	109
		Air Compressor	70	-2	5	CNP003	104	109
		Power pack	100	0	5	CPME#	100	107
						•	Total SWL	123
	Group B	Mobile Crane (not concurrent with oscillator)	70	-2	5	CNP048	112	117
		Concrete Lorry Mixer	70	-2	5	CNP044	109	114
		Dump Truck	50	-3	5	CPME#	105	109
		Air Compressor	70	-2	5	CNP003	104	109
		Power pack	100	0	5	CPME#	100	107
							Total SWL	120
Parad Pila (4P. C)	0.000.000	Different access Dia December 1 Constitute	100	1 ^	1 ^ 1	ONDAGE	Max SWL	123
Bored Pile (1D-2)	Group A	Piling, Large Dia Bored, Oscillator	100	0	8	CNP165	115 109	124
		Concrete Lorry Mixer  Dump Truck	70 50	-2 -3	8	CNP044 CPME#	109 105	116 111
		Air Compressor	70	-3	8	CPME# CNP003	104	111
		Power pack	100	-2	8	CPME#	100	109
		1 OWEI PACK	1 100	<u> </u>	1 0	OF WIL#	Total SWL	125
	Group B	Mobile Crane (not concurrent with oscillator)	70	-2	8	CNP048	112	119
	1.000 2	Concrete Lorry Mixer	70	-2	8	CNP044	109	116
		Dump Truck	50	-3	8	CPME#	105	111
		Air Compressor	70	-2	8	CNP003	104	111
		Power pack	100	0	8	CPME#	100	109
			<u> </u>			•	Total SWL	122
							Max SWL	125

<sup>[1]</sup> Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

							Unmitigated	
Works Area/ Activity		PME	% Operating Time <sup>[1]</sup>	Time Correctio	n Units	PME Reference [3]	Single Unit PME dB(A)	Total SW dB(A)
Pile Cap Construction / Substructure (1A-1 to 1A-6)	Group A	Silent Piler	100	0	12	PME#	94	105
no cap concuration, cascinatians (in the interp	G. Gup 7.	Saw, Circular, Wood	70	-2	6	CNP201	108	114
		Lorry, with crane/grab	70	-2	6	CPME#	105	111
		Bar Bender and Cutter	70	-2	6	CNP021	90	96
				•	•	•	Total SWL	116
	Group B	Silent Piler	100	0	12	PME#5	94	105
		Lorry, with crane/grab	70	-2	6	CPME#	105	111
		Vibratory Poker (not work concurrently with circular saw and bar bender)	71	-1	6	CPME#	102	108
		Concrete Pump (not work concurrently with circular saw and bar bender)	72	-1	6	CNP047	109	115
		Concrete Lorry Mixer (not work concurrently with circular saw and bar bender)	80	-1	6	CNP044	109	116
				_			Total SWL	120
	Group C	Silent Piler	100	0	12	PME#5	94	105
		Lorry, with crane/grab	70	-2	6	CPME#	105	111
		Roller, Vibratory (not work concurrently with circular saw, bar bender, concrete lorry mixer, vibratory poker, concrete pump)	80	-1	6	CNP186	108	115
				1	1		Total SWL	116
	Group D	Silent Piler	100	0	12	PME#	94	105
		Lorry, with crane/grab	70	-2	6	CPME#	105	111
		Excavator (not work concurrently with circular saw, bar bender, concrete lorry mixer, vibratory poker, concrete pumproller, roller)	80	-1	6	CNP081	112	119
							Total SWL	120
2" 0 0 1 1 10 1 1 10 1 10 1		Tour year	1 400	1 ^	1 40		Max SWL	120
Pile Cap Construction / Substructure (Other WFs)	Group A	Silent Piler	100	0	16	PME#	94	106
		Saw, Circular, Wood	70	-2	8	CNP201 CPME#	108	115
		Lorry, with crane/grab	70	-2	8		105 90	112 97
		Bar Bender and Cutter	70	-2	8	CNP021	Total SWL	117
	Group B	Silent Piler	100	Ι ο	16	PME#	94	106
	Group B	Lorry, with crane/grab	70	-2	8	CPME#	105	112
		Vibratory Poker (not work concurrently with circular saw and bar bender)	71	-1	8	CPME#	102	110
		Concrete Pump (not work concurrently with circular saw and bar bender)	72	-1	8	CNP047	109	117
		Concrete Lorry Mixer (not work concurrently with circular saw and bar bender)	80	-1	8	CNP044	109	117
		Consider Early Mixer (not work acrocurrently with directial adw and bar bender)	1 00	1 '		3111 044	Total SWL	121
	Group C	Silent Piler	100	0	16	PME#	94	106
	J. Sup S	Lorry, with crane/grab	70	-2	8	CPME#	105	112
		Roller, Vibratory (not work concurrently with circular saw, bar bender, concrete lorry mixer, vibratory poker, concrete pump)	80	<u>-</u> -1	8	CNP186	108	116
		, , , , , , , , , , , , , , , , , , , ,	,	<u> </u>	•	·	Total SWL	118
	Group D	Silent Piler	100	0	16	PME#5	94	106
	· .	Lorry, with crane/grab	70	-2	8	CPME#	105	112
		Excavator (not work concurrently with circular saw, bar bender, concrete lorry mixer, vibratory poker, concrete pumproller, roller)	80	-1	8	CNP081	112	120
			•	•	•	•	Total SWL	121
	I						Max SWL	121

<sup>[1]</sup> Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

Superstructure						
					Unmitigated	
Works Area/ Activity	PME	% Operating Time [1]	Time Correction Units	PME Reference [3]	Single Unit PME dB(A)	Total SWL dB(A)
Superstructure	Bar Bender and Cutter	70	-2 1	CNP021	90	88
	Vibratory Poker	80	-1 2	CPME#	102	104
	Air Compressor	70	-2 2	CNP003	104	105
	Concrete Lorry Mixer	80	-1 1	CNP044	109	108
	Concrete Pump	80	-1 1	CNP047	109	108
	Mobile Crane	80	-1 1	CNP048	112	111
					Total SWL	115

[1] Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

ABWF, Utilities Installation & Cable containment Installation							
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A) [2]	Units	PME Reference [3]	Single Unit PME dB(A)	Total SWL dB(A)
ABWF, Utilities Installation & Cable containment Installation	Excavator	80	-1	3	CNP081	112	116
	Mobile Crane	80	-1	1	CNP048	112	111
	Lorry, with crane/grab	80	-1	3	CPME#	105	109
	Dump Truck	50	-3	3	CPME#	105	107
	Concrete Lorry Mixer	80	-1	1	CNP044	109	108
					_	Total SWL	118

<sup>[1]</sup> Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

Installation of Pre-bored Sheet Piles Wall							
					Unmitigated		
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A) [2]	Units	PME Reference [3]	Single Unit PME dB(A)	Total SWL dB(A)
Installation of Pre-bored Sheet Piles Wall	Piling, Large Dia Bored, Oscillator	100	0	6	CNP165	115	123
	Concrete Lorry Mixer	80	-1	3	CNP044	109	113
	Dump Truck	50	-3	3	CPME#	105	107
	Air Compressor	100	0	3	CNP003	104	109
	Power pack	100	0	3	CPME#	100	105
						Total SWL	124

[1] Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Title: Plant Inventory

Pipe Jacking Shaft							
					Unmitigated		
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A) [2]	Units	PME Reference [3]	Single Unit PME dB(A)	Total SWL dB(A)
Pipe Jacking Shaft	Drill Rig, DTH Drilling Machine	100	0	6	CPME#	110	118
	Mobile Crane	80	-1	3	CNP048	112	116
	Water pump	100	0	3	CNP281	88	93
	Lorry	80	-1	3	CNP141	112	116
	Excavator	80	-1	3	CNP081	112	116
						Total SWL	122

<sup>[1]</sup> Percentage on time within 30 minutes.
[2] Correction: 10 log (% Operating Time / 100%)
[3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

Project: Consultancy Agreement No. C1701 Detailed Design Services for Siu Ho Wan Depot Phase 1 & Siu Ho Wan Station

Title: Plant Inventory

						Unmitigated	
Works Area/ Activity	РМЕ	% Operating Time <sup>[1]</sup>	Time Correction dB(A) [2]	Units	PME Reference [3]	Single Unit PME dB(A)	Total SWL dB(A)
Construction of Manhole with Platform & Cat ladder, and Backfill	Saw, Circular, Wood	80	-1	3	CNP201	108	112
	Bar Bender and Cutter	80	-1	3	CNP021	90	94
	Lorry, with crane/grab	80	-1	3	CPME#	105	109
					1	Total SWL	114
	Concrete Lorry Mixer	80	-1	3	CNP044	109	113
	Lorry, with crane/grab	80	-1	3	CPME#	105	109
						Total SWL	114
	Excavator	80	-1	3	CNP081	112	116
	Lorry, with crane/grab	80	-1	3	CPME#	105	109
					-	Total SWL	117
	Roller, Vibratory	80	-1	3	CNP186	108	112
	Lorry, with crane/grab	80	-1	3	CPME#	105	109
						Total SWL	114
						Max SWL	117

- [1] Percentage on time within 30 minutes.

- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
  [2] Correction: 10 log (% Operating Time / 100%)
  [3] The plant with code "CPME#" are referenced from EPD's guidance "Sound Power Level of Other Commonly Used PME" from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application\_for\_licences/guidance/files/OtherSWLe.pdf

## Appendix C

Construction Noise Calculation

					2024		<del></del>	1		1	1	T	202	25	T	Г	
1	SVA/I	. 2	3 4	5	6 7	8	9 10 11	12	1	2 3	4	5	6	7	8	9	10
1A-1 (1701) Site Cleaning & Formation	SWL		12	122	122							<u> </u>					
Site Clearance & Formation Foundation and Excavation	122 121		12	122	122 121 1	.21											
Socket H Pile / Mini-pile	120			121	121	120	120 120	120									
Bored Pile	122					122	122 122	122	122	122 122					122	122 1	.22
Pile Cap Construction	120							120	120	120 120	120	120	120	120	120		
Superstructure	115									115	115	115	115	115	115	115 1	.15
ABWF, Utilities Installation & Cable containment Installation	118																
1A-2 (1701, 1702)																	
Site Clearance & Formation	122		12		122	24											
Foundation and Excavation Socket H Pile / Mini-pile	121 113			121	121 1	.21		113	112	113 113	112						
Bored Pile	119					119	119 119	119	113 119	119	113						
Pile Cap Construction	120					113	113 113	113	113	113			120	120	120	120 1	.20
Superstructure	115														115		.15
ABWF, Utilities Installation & Cable containment Installation	118																
1A-3 (1701, 1702)																	
Site Clearance & Formation	122		12:	2 122	122												
Foundation and Excavation	121			121	121	.21											
Bored Piling	121						121 121	121	121	121 121	121	121	121	121	121		20
Pile Cap Construction	120	<del>                                     </del>	<del>                                     </del>		<del>                                     </del>		1	1		120	120	120	120	120	145		.20
Superstructure ABWF, Utilities Installation & Cable containment Installation	115	<del>                                     </del>	<del>                                     </del>		+ +	<del>                                      </del>	+ + +	1	-			+	$\vdash$	115	115	115	
ADVVIT, Officies installation & Cable Containment Installation	118	<del>                                     </del>	+		+ +							1					$\overline{}$
1A-4 (1701, 1702)	+ +	<del>                                     </del>	+ +		+ +		+ +					1					$\overline{}$
Site Clearance & Formation	122		12	2 122	122	<del>                                     </del>	1					1					$\overline{}$
Foundation and Excavation	121		12.	121		21						<u> </u>					$\overline{}$
Bored Pile	121					121	121 121	121	121	121 121	121	121	121	121	121	121	
Pile Cap Construction	120													120	120	120	
Superstructure	115																.15
ABWF, Utilities Installation & Cable containment Installation	118																
												ļ					
1A-5 (1701, 1702)		<b> </b>					<del>                                     </del>					1					
Site Clearance & Formation	122		12		122	24	<del>                                     </del>		-			1					
Foundation and Excavation	121			121	121	21	121	124	404	121	101	101	101	101			
Bored Pile	121					121	121 121	121	121	121 121	121	121	121	121	120		
Pile Cap Construction Superstructure	120 115						+ +						120	120	120 115	115 1	.15
ABWF, Utilities Installation & Cable containment Installation	118														113	113 1	13
Abwi, otinics instantation & casic containment instantation	113																
1A-6 (1701, 1702)																	
Site Clearance & Formation	122		12:	2 122	122												
Foundation and Excavation	121			121		.21											
Socket H Pile / Mini-pile	116							116	116	116 116							
Bored Pile	119								119	119							
Pile Cap Construction	120										120	120	120	120			
Superstructure	115												115	115	115	115	
ABWF, Utilities Installation & Cable containment Installation	118																
1B-1 (1701, 1702)																	
Site Clearance & Formation	122						122	122	122								
Foundation and Excavation	121						122	122	121	121 121							
Bored Pile	122									122	122	122	122	122	122	122 1	.22
Pile Cap Construction	121																
Superstructure	115																
ABWF, Utilities Installation & Cable containment Installation	118																
18-2 (1701, 1702)		<b></b>										1					
Site Clearance & Formation	122						122	122	122			1					
Foundation and Excavation	121								121	121 121	115	415	110		4.1.5	110	12
Socket H Pile / Mini-pile	113	<del>                                     </del>			+		+ + + + + + + + + + + + + + + + + + + +			100	113	113	113	113	113		.13
Bored Pile Pile Cap Construction	122	<del>                                     </del>	<del>                                     </del>		+ +	<del>-  </del>	+ + +	1		122	122	122	122	122	122	122 1	.22
Pile Cap Construction Superstructure	121 115	<del>                                     </del>	+		+ +	+	+ +	1	1			+					$\overline{}$
ABWF, Utilities Installation & Cable containment Installation	115	<del>                                     </del>	+ +		+ +		+ +		+			+	+				<del></del>
, o and a standard of a capic containment instanation	110		<del>                                     </del>		+ +	<del>                                     </del>	1		<u> </u>			1					$\overline{}$
IB-3 (1701, 1702)					1		1 1					<u> </u>					$\overline{}$
Site Clearance & Formation	122						122	122	122								
Foundation and Excavation	121								121	121 121							
ocket H Pile / Mini-pile	116											116	116	116	116		
Bored Pile	121								121	121 121	121	121	121	121	121	121 1	.21
Pile Cap Construction	121											<u> </u>				1	.21
Superstructure	115	<b> </b>			<del>                                     </del>		<del>                                     </del>			<b> </b>		1					
ABWF, Utilities Installation & Cable containment Installation	118						<del>                                     </del>					1					
ID 1 (1701 1702)		<del>                                     </del>			<del>                                     </del>		1	1	-			1					
1D-1 (1701, 1702) Site Clearance & Formation	122	<del>                                     </del>	12	122	122	22 122	+		-	<del>                                     </del>		1				<del>                                     </del>	
Foundation and Excavation	122	<del>                                     </del>	12	2 122	122	22 122	121 121	-				+					
ocket H Pile / Mini-pile	121 116	<del>                                     </del>	<del>                                     </del>		+ +	121	121 121	116	116	116 116	116	116	116	116	116		
Bored Pile	123		<del>                                     </del>		+ +	<del>                                     </del>	123	123	123	123 123	123	123	123	123	123		$\overline{}$
Pile Cap Construction	121				<del>                                     </del>					120					121	121 1	.21
uperstructure	115		<del>                                     </del>		1							1					.21
ABWF, Utilities Installation & Cable containment Installation	118																
D-2 (1701, 1702)																	
ite Clearance & Formation	122		123	2 122	122	22 122											
oundation and Excavation	121					121	121 121										
ocket H Pile / Mini-pile	116									116 116	116	116					
Bored Pile	125						125	125	125	125 125	125	125	125				
Pile Cap Construction	121											1	121	121	121		.21
	• · · · · · · · · · · · · · · · · · · ·			1	1	Ī	r I	1		. 1	1	1	•			115 1	.15
Superstructure ABWF, Utilities Installation & Cable containment Installation	115 118															113 1	

					2	024								20	.025			
		1	2 3	4	5 6	5 7	3 0	10	11	12 1	: ا	3	1 5	6	5 7	5	3 0	9
-1 (1701,1702)	<del></del>	<del>-</del>	+ +	<del>'</del>	+	<u> </u>	1				<del>-</del>	†	<del>                                     </del>		†		1	1
	122				+		422	422	122				+		+'		+	
e Clearance & Formation	122						122		122						'			
undation and Excavation	121							121	121 121									
ket H Pile / Mini-pile	118											118	118	118	118			
e Cap Construction	121															1	121	121
·					+										+	+	121	121
erstructure	115				_										<u> </u>		<u> </u>	
NF, Utilities Installation & Cable containment Installation	118																	
															'			
2 (1701,1702)																		
c Clearance & Formation	122						122	122	122						+	<del></del>		
					+		122								<del></del> '	+	+	
ındation and Excavation	121							121	121 121									
ket H Pile / Mini-pile	123											123	123	123	123	4		
Cap Construction	121																121	121
•															+'	<del></del>	121	121
erstructure	115														<u> </u>			
VF, Utilities Installation & Cable containment Installation	118																	
3 (1701,1702)																		
·	122		122	422	100										+	+	+	_
e Clearance & Formation	122		122	122	122													
Indation and Excavation	121					121 121	121	121	121 121						'			
cket H Pile / Mini-pile	119							119	119 119	119	119	119	119	119				
e Cap Construction		+	+	+		+ + + + + + + + + + + + + + + + + + + +	+	113		113					<b>/</b>	$\vdash$	124	124
	121			+	+		+	+ +			<del>                                     </del>	121	121	121	4		121	121
perstructure	115													115	115	115		115
WF, Utilities Installation & Cable containment Installation	118						1											
		<del>   </del>		1			1	†					1		1		1	1
4 (4704 4702)			+ +		+	+ + + + + + + + + + + + + + + + + + + +	+	+			+ + +		+		+	<del> </del>	+	
-4 (1701,1702)															<b></b>			
e Clearance & Formation	122		122	122	122													
undation and Excavation	121				121	121 121	121	<del>                                     </del>					1		1		1	
			+		121	121 121	121		110				1		+	<del></del>	+	
cket H Pile / Mini-pile	118							118	118 118	118	118 118							
e Cap Construction	121												121	121	121	121	121	
perstructure	115						1	<del>                                     </del>									115	115
·			+ + + + + + + + + + + + + + + + + + + +		+	<b>+</b>							+		+	<del></del>	113	113
WF, Utilities Installation & Cable containment Installation	118					<del>                                     </del>		<b> </b>			<del>                                     </del>				<b></b> '	<b></b>	1	
			<u> </u>	L	<u></u>	<u>                                       </u>	<u>L</u> _	<u>                                     </u>			<u>                                       </u>	<u></u>	<u> </u>		<u></u>	<u> </u>	<u> </u>	
-1 (1701)					1										T		1	
	422		100	122	122	<del>                                     </del>	+	+ +			+ + -		+		+	<del>                                     </del>	+	1
e Clearance & Formation	122		122	122	122			<b> </b>			<del>                                     </del>		1		<b></b> '	<b></b>	<b>↓</b>	
undation and Excavation	121			121	121	121 121									'			
cket H Pile / Mini-pile	118					118	118	118	118 118	118	118 118	118	118	118	118	118	118	118
,						110	110	110	110 110	110	110 110	110	110	110	110	110	110	
le Cap Construction	121																	121
perstructure	115														'			
BWF, Utilities Installation & Cable containment Installation	118														'			
															+	<del></del>		
OC 14704 - a consumerat Duniant)															+'	<del></del>		
S (1701 - as concurrent Project)																<b></b>	1	
te Clearance & Formation	122		122	122	122										'			
oundation and Excavation	121			121	121	121 121	121								'			
cket H Pile / Mini-pile	121							121	121 121	121	121 121	121	121	121	121	121	121	
					+			121	121 121	121	121 121	121	121				121	_
e Cap Construction	121													121	121	121		
perstructure	115														!		115	115
BWF, Utilities Installation & Cable containment Installation	118																	
															+	+		
Wi, otheres instandation & cable containment instandation																	+	
						<del> </del>												
															+			
uthern Platform (1701)		122	122 122	122		122									<del>                                     </del>			
uthern Platform (1701) e Clearance & Formation	122 122	122	122 122	122		122	121	121										
uthern Platform (1701) te Clearance & Formation undation and Excavation	122 122 121	122	122 122	122		122 121	121	121										
outhern Platform (1701) te Clearance & Formation oundation and Excavation ocket H Pile / Mini-pile	122 122	122	122 122	122			121		120 120	120	120 120	120	120	120	120	120	120	120
outhern Platform (1701) te Clearance & Formation oundation and Excavation	122 122 121	122	122 122	122			121	120	120 120 121 121	120 121	120 120 121 121	120 121	120	120 121	120 121	120	120 121	120
outhern Platform (1701) te Clearance & Formation oundation and Excavation ocket H Pile / Mini-pile le Cap Construction	122 122 121 120 121	122	122 122	122		121		120										
uthern Platform (1701) Le Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure	122 122 121 120 121 115	122	122 122	122		121		120										
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure	122 122 121 120 121	122	122 122	122		121		120										
outhern Platform (1701) te Clearance & Formation oundation and Excavation ocket H Pile / Mini-pile	122 122 121 120 121 115	122	122 122	122		121		120										
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure BWF, Utilities Installation & Cable containment Installation	122 122 121 120 121 115	122	122 122	122		121		120										
uthern Platform (1701) The Clearance & Formation Undation and Excavation Coket H Pile / Mini-pile The Cap Construction The Perstructure The SWF, Utilities Installation & Cable containment Installation The Political Company of the Cable Containment Installation The Cable Containment Installation	122 122 121 120 121 115 118	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation	122 122 121 120 121 115 118	122	122 122	122		121		120										
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure EWF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation	122 122 121 120 121 115 118	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall	122 122 121 120 121 115 118	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall	122 122 121 120 121 115 118	122	122 122	122		121		120										121
Buthern Platform (1701)  See Clearance & Formation  Soundation and Excavation  Socket H Pile / Mini-pile  See Cap Construction  Sperstructure  SWF, Utilities Installation & Cable containment Installation  See Clearance & Formation  Set Clearance & Formation  Set Clearance & Sheet Piles Wall  Sonstruction of Manhole with Platform & Cat ladder, and Backfill	122 122 121 120 121 115 118	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall enstruction of Manhole with Platform & Cat ladder, and Backfill seung Tung Road (CTR) (1701)	122 122 121 120 121 115 118  122 124 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall enstruction of Manhole with Platform & Cat ladder, and Backfill seung Tung Road (CTR) (1701)	122 122 121 120 121 115 118	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) stallation of Pre-bored Sheet Piles Wall	122 122 121 120 121 115 118 118 122 124 117	122	122 122	122		121		120										121
athern Platform (1701)  c Clearance & Formation  andation and Excavation  cket H Pile / Mini-pile  c Cap Construction  perstructure  WF, Utilities Installation & Cable containment Installation  (1701)  c Clearance & Formation  tallation of Pre-bored Sheet Piles Wall  nstruction of Manhole with Platform & Cat ladder, and Backfill  eung Tung Road (CTR) (1701)  tallation of Pre-bored Sheet Piles Wall  e Jacking Shaft	122 122 121 120 121 115 118  122 124 117	122	122 122	122		121		120										121
athern Platform (1701)  c Clearance & Formation  andation and Excavation  cket H Pile / Mini-pile  c Cap Construction  perstructure  WF, Utilities Installation & Cable containment Installation  (1701)  c Clearance & Formation  tallation of Pre-bored Sheet Piles Wall  nstruction of Manhole with Platform & Cat ladder, and Backfill  eung Tung Road (CTR) (1701)  tallation of Pre-bored Sheet Piles Wall  e Jacking Shaft	122 122 121 120 121 115 118 118 122 124 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation tallation of Pre-bored Sheet Piles Wall enstruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) tallation of Pre-bored Sheet Piles Wall e Jacking Shaft enstruction of Manhole with Platform & Cat ladder, and Backfill	122 122 121 120 121 115 118  122 124 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation tallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  teung Tung Road (CTR) (1701) tallation of Pre-bored Sheet Piles Wall be Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill	122 122 121 120 121 115 118  122 124 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) stallation of Pre-bored Sheet Piles Wall be Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701)	122 122 121 120 121 115 118  122 124 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation ttallation of Pre-bored Sheet Piles Wall nstruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) ttallation of Pre-bored Sheet Piles Wall be Jacking Shaft nstruction of Manhole with Platform & Cat ladder, and Backfill earn Shui Kok Drive (SSK) (1701) ttallation of Pre-bored Sheet Piles Wall	122 122 121 120 121 115 118  122 124 117  124 122 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation ttallation of Pre-bored Sheet Piles Wall nstruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) ttallation of Pre-bored Sheet Piles Wall be Jacking Shaft nstruction of Manhole with Platform & Cat ladder, and Backfill earn Shui Kok Drive (SSK) (1701) ttallation of Pre-bored Sheet Piles Wall	122 122 121 120 121 115 118  122 124 117	122	122 122	122		121		120										121
uthern Platform (1701)  de Clearance & Formation undation and Excavation cket H Pile / Mini-pile de Cap Construction perstructure BWF, Utilities Installation & Cable containment Installation  0 (1701) de Clearance & Formation stallation of Pre-bored Sheet Piles Wall	122 122 121 120 121 115 118  122 124 117  124 122 117	122	122 122	122		121		120										121
uthern Platform (1701) te Clearance & Formation undation and Excavation cket H Pile / Mini-pile te Cap Construction perstructure the WF, Utilities Installation & Cable containment Installation  (1701) te Clearance & Formation stallation of Pre-bored Sheet Piles Wall tenstruction of Manhole with Platform & Cat ladder, and Backfill the Lagrance Shaft tenstruction of Manhole with Platform & Cat ladder, and Backfill the Jacking Shaft tenstruction of Manhole with Platform & Cat ladder, and Backfill the Jacking Shaft tenstruction of Manhole with Platform & Cat ladder, and Backfill tenstruction of Pre-bored Sheet Piles Wall tenstruction of Manhole with Platform & Cat ladder, and Backfill	122 122 121 120 121 115 118  122 124 117  124 122 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  1 (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) stallation of Pre-bored Sheet Piles Wall be Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  edicted Construction Noise, dB(A)	122 122 121 120 121 115 118  122 124 117  124 122 117	122	122 122	122		121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) stallation of Pre-bored Sheet Piles Wall pe Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  edicted Construction Noise, dB(A)	122 122 121 120 121 115 118  122 124 117  124 117		122 122 122 122	73	74	121		120										121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) stallation of Pre-bored Sheet Piles Wall be Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill earn Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill earn Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill edicted Construction Noise, dB(A) is R intau North (Extension) Country Park [1,2]	122 122 121 120 121 115 118  122 124 117  124 122 117  Max				74	121	121	120	121 121	121	121 121	121	121	121	121	121	121	121
athern Platform (1701) e Clearance & Formation andation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation tallation of Pre-bored Sheet Piles Wall enstruction of Manhole with Platform & Cat ladder, and Backfill euing Tung Road (CTR) (1701) tallation of Pre-bored Sheet Piles Wall e Jacking Shaft enstruction of Manhole with Platform & Cat ladder, and Backfill em Shui Kok Drive (SSK) (1701) tallation of Pre-bored Sheet Piles Wall enstruction of Manhole with Platform & Cat ladder, and Backfill em Shui Kok Drive (SSK) (1701) tallation of Pre-bored Sheet Piles Wall enstruction of Manhole with Platform & Cat ladder, and Backfill	122 122 121 120 121 115 118  122 124 117  124 122 117  Max 75 57				74	121	121	120	121 121	121	121 121	121	121	121	121	121	121	121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure BWF, Utilities Installation & Cable containment Installation  0 (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  reung Tung Road (CTR) (1701) stallation of Pre-bored Sheet Piles Wall be Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  am Shui Kok Drive (SSK) (1701) stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill  cedicted Construction Noise, dB(A)  SR  Intau North (Extension) Country Park [1,2]  Imulative Construction Noise, dB(A)  SR	122 122 121 120 121 115 118  122 124 117  124 117  124 117  Max 75 57	57	57 69	73		121 121	73	120 121	121 121 	75	121 121 121 121 121 121 121 121 121 121	74	75	75	74	74	73	121
uthern Platform (1701) e Clearance & Formation undation and Excavation cket H Pile / Mini-pile e Cap Construction perstructure WF, Utilities Installation & Cable containment Installation  (1701) e Clearance & Formation stallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) etallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill eung Tung Road (CTR) (1701) etallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill en Shui Kok Drive (SSK) (1701) etallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill earn Shui Kok Drive (SSK) (1701) etallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill edicted Construction Noise, dB(A)  ER intau North (Extension) Country Park [1,2]	122 122 121 120 121 115 118  122 124 117  124 122 117  Max 75 57	57			74	121	121	120	121 121	121	121 121	121	121	121	121	121	121	121

<sup>[1]</sup> Given that Lantau North (Extension) Country Park is a noise sensitive receiver without any facades (i.e. free-field), no façade correction is included in the calculation. This assumption is consistent to the approved EIA.

[2] Considered the distance correction (i.e. -20 log(D) - 8).

[3] Max. predicted noise level is adopted. Extracted from Appendix 4.7 of the approved EIA Report (Register No.: AEIAR-214/2017)

Property of the content of the con		<u> </u>												T.											
March   Marc		12	1	2	3		5	20	7	8	9	10	11	12	1	2	3	Δ	5	20 6	27	7 8	9	10	11
Company   Comp	1A-1 (1701)	12							,	J		10		12							,			10	
March   Marc	Site Clearance & Formation																								
Market 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																									
Medical Manufactivity of the control																									
Column			120	120	120	120	120																		
Martin Ma	·							115	115	115	115 1:	5 1	15	115	115	115									
## Company of the com	ABWF, Utilities Installation & Cable containment Installation																		118	118	118	118	118	118	118 118
Company   Comp																									
Company   Comp																									
The section of the se																									
Part																									
The column   The																									
Part	,																								
Part	·	115	115	115	115	115	115	115	115	115				110	110	110	110	110	110	110	110	110	110	110	118 118
Definition   Part   P	Above, Othities installation & Cable Containment installation													118	118	118	118	118	118	118	118	118	118	118	118 118
Section 1. The sectio	1A-3 (1701, 1702)																								
Second	Site Clearance & Formation													122	122	122	122	122	122						
Processes																									
Property shows   19		120	120																						
Part	·	120		115	115	115	115	115	115	115	115 1°	5 1	15	115	115	115									
Def constitution	·			110		110				110						110	118	118	118	118	118	118	118	118	118 118
December 19																									
Part																									,
Part			1			1																			,———
Professional Control of the contro						+						-			+	+									,——
Mathematical Association   Mathematical Associ		120	120																						
Column   C	Superstructure			115	115	115	115	115	115	115	115														
Manual streamen	ABWF, Utilities Installation & Cable containment Installation													118	118	118	118	118	118	118	118	118	118	118	118 118
Manual streamen	14 5 (1701 1702)																								
Segregation of the control of the co		1				+ +								122	122	122									,——
Process   Proc																									
Martin   M	Bored Pile		121	121																					
Part	·						120																		
Company	·	115	115	115	115						115			110	110	110	110	110	110	110	110	110	110	110	118 118
Description of the control of the co	Above, Othities installation & Cable Containment installation							110	110	110				110	110	110	110	110	110	110	110	110	110	110	110 110
Process   Proc	1A-6 (1701, 1702)																								
Section (1) From (1)																122	122	122							
Free Pit Class of Control of Cont																									
Procedure   Process   Pr	·																								
Control of the cont																									
Fig.	·		115	115	115	115	115	115	115	115	115 1:	5 1	15	115	115										
For the control of Fernander Services   1	ABWF, Utilities Installation & Cable containment Installation															118	118	118	118	118	118	118	118	118	118 118
Section   Sect	1D 1 (1701 1702)															-									
Face-fried and Learning and Lea															122	122	122			122	122	122			
Section   Sect															122	122	122			122	122	122			
Committed Collect Considerate Explaints   Collect Considerate Explaints   Collect Considerate Explaints   Collect Co		122	122	122			122	122																	
Exercise residence with a continue of without the property of the property o	·		121	121	121								1.5												
Description   Configuration						115	115	115	115	115	115 13	5 1	15	115				110	110	110	110	110	110	110	118 118
See Cleance & Formation —	Abwi , othities installation & cable containment installation														110	110	110	110	110	110	110	110	110	110	110 110
Content Number   Cont	1B-2 (1701, 1702)																								
Social Piles															122	122	122			122	122	122			
Procedure   122   123   121   121   121   123   125		-																							,
Fig.   Construction   11   12   12   12   13		122					122	122	122																,——
Superstructure			121	121	121		122	122	122																
Second	Superstructure					115	115	115	115	115	115 1:														
Set Clearance & Formation	ABWF, Utilities Installation & Cable containment Installation											1	18	118	118	118	118	118	118	118	118	118	118	118	118 118
Set Clearance & Formation	1B-3 (1701 1702)	1												-											,
Foundation and Excisation   Foundation   Foundatio			<del> </del>			+ +								122	122	122				122	122	122			,——
Scote Hile   Min-pile		1_	<u>L</u>						<u> </u>																
File Construction   121	Socket H Pile / Mini-pile																								
Superstructure  115   11			121				121	121							T										,
ABWF, Utilities Installation & Cable containment installation  ID-1 (1701, 1702)  ID-1 (1	·		115			115	115	115	115			5 1	15	115	115	115	115								,———
The contraction   Contractio		115	115	115	115	115	115	115	115	115	115 1		13					118	118	118	118	118	118	118	118 118
Site Clearance & Formation	, , c and c and a case contamination														210	213	110	110	110	110	110	110	110	110	
Foundation and Excavation  Socket H Pile / Mini-pile  Superstructure  115 115 115 115 115 115 115 115 115 11																									
Socket H Pile / Mini-pile    123   123   123   123   124   124   125   125   125   126   126   126   126   126   127   127   127   127   128   1										122	122 12	2					122	122	122						
Bored Pile File Cap Construction 121 125 128 128 129 129 121 121 121 121 121 121 121 121						1																			,——
Pile Cap Construction   121	·	1	123	123		+ +						+				+									,——
Superstructure  115 115 115 115 115 115 115 115 115 11		121				121	121																		
1D-2 (1701, 1702)  Site Clearance & Formation  Foundation and Excavation  Socket H Pile / Mini-pile  Bored Pile  Flic Cap Construction  121  125  125  126  127  127  128  129  120  121  121  122  122  122  122	Superstructure		115	115	115			115	115					115											
Site Clearance & Formation	ABWF, Utilities Installation & Cable containment Installation									118	118 1	3 1	18	118	118	118	118	118	118	118	118	118	118	118	118 118
Site Clearance & Formation       1	1D-2 (1701-1702)					1																			,——
Foundation and Excavation  Socket H Pile / Mini-pile  Bored Pile  Pile Cap Construction  115 115 115 115 115 115 115 115 115 11		1	1			+						1:	22	122	122	-	122	122	122						,——
Socket H Pile / Mini-pile         125         125         125         125         125         121 <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.</td> <td></td> <td>144</td> <td>144</td> <td></td> <td>ıLL</td> <td>IZZ</td> <td>144</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>, —</td>						+						1.		144	144		ıLL	IZZ	144						, —
Bored Pile         125         125         125         125         121	Socket H Pile / Mini-pile																								
Superstructure 115 115 115 115 115 115 115 115 115 11	Bored Pile		125	125																					
	·										415		4.5		T										,
110 110 110 110 110 110 110 110 110 110				115											110	119	110	110	110	110	110	110	110	110	118 118
	ADVIT, Offities installation & Cable Containment Installation	118	116		110	110	110	116	116	110	110 1.		10	110	110	110	110	110	110	110	116	110	110	110	110 118

							20	026											2	027					
	12	2	1 2	2 3	3 4	. 5	6	7	8	9	10	11	. 12	2 1	2	3	4	5	5 6	5	7	8 9	<u>) 10</u>	11	
1T-1 (1701,1702)																				-					
Site Clearance & Formation					<u> </u>									1			122	122	122	_	1		+	<del>                                     </del>	1
Foundation and Excavation Socket H Pile / Mini-pile				1	+																		+	+	<del>                                     </del>
Pile Cap Construction					+																		+	+	
Superstructure	115	115	115		+				115	115	115	115	115	115	115								+	+	<u> </u>
ABWF, Utilities Installation & Cable containment Installation	113	113	113						113	113	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
1T-2 (1701,1702)				1																-				-	
Site Clearance & Formation															122	122	122						+	<del>                                     </del>	
Foundation and Excavation				1																			<del>                                     </del>		
Socket H Pile / Mini-pile																									
Pile Cap Construction																									
Superstructure	115	115	115	115	115	115	115	115	115	115	115	115	115	115											
ABWF, Utilities Installation & Cable containment Installation											118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
1T-3 (1701,1702)																				1			+		
Site Clearance & Formation										122	122	122													
Foundation and Excavation																									
Socket H Pile / Mini-pile																									
Pile Cap Construction																									
Superstructure						115	115	115	115	115	115														
ABWF, Utilities Installation & Cable containment Installation										118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
1T-4 (1701,1702)																							+	+	
Site Clearance & Formation					1									122	122	122				1	1		<del>                                     </del>		
Foundation and Excavation																							<del></del>		
Socket H Pile / Mini-pile																									
Pile Cap Construction																									
Superstructure		115	115	115	115	115	115	115	115	115	115	115													
ABWF, Utilities Installation & Cable containment Installation										118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
																									<b></b>
3D-1 (1701)																								$\perp$	
Site Clearance & Formation																			122	122	122		+	<del>                                     </del>	<del></del>
Foundation and Excavation Socket H Pile / Mini-pile	110	110	110	110	110	110														1			+	<del>                                     </del>	+
Pile Cap Construction	118 121	118 121	118 121	118 121	118 121	118 121	121	121	121	121	121	121	121	121									+	+	<del></del>
Superstructure	121	121	121	121	121	121	121	121	121	121	121	115	115	115	115	115	115	115	115	115	115	115	115	115	115
ABWF, Utilities Installation & Cable containment Installation												113	113	113	113	113	113	113	118	118	118	118	118	118	118
SPS (1701 - as concurrent Project)																							<del></del>		
Site Clearance & Formation																									<del></del>
Foundation and Excavation					<u> </u>																		+	<del>                                     </del>	<del>                                     </del>
Socket H Pile / Mini-pile Pile Cap Construction	121	121	121	121				121	121	121													+	<del>                                     </del>	+
Superstructure	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
ABWF, Utilities Installation & Cable containment Installation	113	113	113	113	113	113	113	113	113	113	113	113	113	118	118	118	118	118	118	118	118	118	118	118	118
Southern Platform (1701)																									<b></b>
Site Clearance & Formation																									
Foundation and Excavation																								<del>  </del>	<del> </del>
Socket H Pile / Mini-pile	121	121	121	_																			+	<del>                                     </del>	<del></del>
Pile Cap Construction Superstructure	121 115	121 115	121 115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
ABWF, Utilities Installation & Cable containment Installation	113	113	113	113	113	113	113	113	113	113	113	113	118	118	118	118	118	118	118	118	113	118	118	118	118
1D (1701)																									
Site Clearance & Formation																									
Installation of Pre-bored Sheet Piles Wall						124	124	124	124	124	124														
Construction of Manhole with Platform & Cat ladder, and Backfill																							117	117	117
Choung Tung Bood (CTD) (1701)																				1			+	<del>                                     </del>	+
Cheung Tung Road (CTR) (1701) Installation of Pre-bored Sheet Piles Wall					-	124	124	124	124	124	124												+	+	<del></del>
Pipe Jacking Shaft						124	124	124	124	124	124						122	122	122	122	122	122	122	122	-
Construction of Manhole with Platform & Cat ladder, and Backfill																	122	122	122	122	122	122	117	117	117
,																									
Sham Shui Kok Drive (SSK) (1701)																									<b></b>
Installation of Pre-bored Sheet Piles Wall						124	124	124	124	124	124												<del></del>		<del></del>
Construction of Manhole with Platform & Cat ladder, and Backfill																							+	+	<del>                                     </del>
	· · · · · · · · · · · · · · · · · · ·	<u>I</u>			<u> </u>			1	1	l	1	l	<u> </u>		1	1				<u> </u>					
Predicted Construction Noise, dB(A) NSR	<u> </u>			T	1	Τ	T	ı	1	ı	1	ı		1	ı	ı	1	ı	1	<u> </u>	1	<u> </u>			
Lantau North (Extension) Country Park [1,2]	73	74	74	71	71	75	74	74	75	75	75	72	73	74	74	74	74	74	74	74	74	72	73	73	71
		<u>, , , , , , , , , , , , , , , , , , , </u>			1 '-	, , ,	1 /7		,,,	, , ,	, , ,	,,,	, , ,	1 , 7		<u>, , , , , , , , , , , , , , , , , , , </u>	, ,	ı , <del>, ,</del>	1 , 7	1 '7	,,,	, 2		. ,,	
Cumulative Construction Noise, dB(A)							_																		
NSR																									
Concurrent Project [3]	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lantau North (Extension) Country Park [1,2]	74	74	74	71	71	75	74	74	75	75	75	72	73	74	74	74	74	74	74	74	74	72	73	73	71
nio-rai																									

Note:

[1] Given that Lantau North (Extension) Country Park is a noise sensitive receiver without any facades (i.e.e. free field)) noof against contraction is included in the contraction. This is a sumperior is consistent to the approved ELAA.

[2] Considered the distance correction (i.e. -20 log(D) - 8).

[3] Max. predicted noise level is adopted. Extracted from Appendix 4.7 of the approved EIA Report (Register Nov.: AREARR 22/14/2017)

STATE OF THE COLUMN STATE		_																						
March   Marc		1	2	2	1	l -	20	)28	,  0	1 0	10	11	12	1	ا ما	ءا	4	г	20	)29	, 0	1 0	10	11 1
THE PROPERTY OF THE PROPERTY O	1A-1 (1701)	1	2	3	4	5	6	7	8	9	10	11	12	1	. 2	3	4	5	6	7	8	9	10	11 1
Section 1	Site Clearance & Formation																							
Section 1.	Foundation and Excavation																							
Secretary 1																								
See 1. The section of		+ +																						
Mathematical Content of the Content of Con	·	1																						
Part	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
Part																								
Separate Sep	• • •																							
See the section of th		+ +																						
Section 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1																						
March   Marc	Bored Pile																							
See the section of th	Pile Cap Construction																							
Septiment of the septim	Superstructure	110	110	110	110	440	440	440	110	440	110	110	110	110	110	110	440	440	440	110	440	440	110	110
Segregative segretaries and se	ABWF, Othities installation & Cable Containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
Segregative segretaries and se	1A-3 (1701, 1702)																							
The section of the se	Site Clearance & Formation																							
The control of the co	Foundation and Excavation																							
Seminantian Componential Compon	·																							
Secretary of the secret	·	+ +																						
Secretary Secret	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
The property of the property																								
Part	1A-4 (1701, 1702)																							
Section of the sectio	Site Clearance & Formation									-			1							1				
The content of the co										-			-							-				
Procession   Pro	Pile Cap Construction																							
Selection 1988 1989 1999 1999 1999 1999 1999 199	Superstructure												<u> </u>							<u> </u>				
Signarian submittee submit	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
Signarian submittee submit	10.5 (1701, 1702)																							
Marie Properties   Marie Prope																								
See the section of th																								
Mary Control   Mary	Bored Pile																							
MAZIONAL PROPERTY OF THE COLUMN PROPERTY OF T	Pile Cap Construction																							
A PROPER OF MATERIAL PROPERTY OF A PROPERTY	Superstructure																							
The content of the co	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
The content of the co	1A-6 (1701, 1702)																							
Secretary Marger  Market Marger  Market Marger  Market Marger  Market Market  Mar	Site Clearance & Formation																							
The state of the s	Foundation and Excavation																							
New Controllars   1	Socket H Pile / Mini-pile																							
September 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Bored Pile																							
Security of the standard S cale companied and scale S cale S cal		+ +																						
A PARTICIPATION NO. 1	,	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
See Transparency Services Agreement Reports of the Control of March Contro																								
Segregation of the segregation o	1B-1 (1701, 1702)																							
The contribution of the co																								
Production of the control of the con		+ +																						
Separational property of the p	Pile Cap Construction	1																						
The Comment Formation   1	Superstructure																							
Size Conservation	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
Size Conservation	4D 2 (4704 4702)																							
From the foundation of Excended Performance of the Control of Excended Performance of the Control of Excended Performance of Control of C		+ +																						
Social Tells / Minisple	Foundation and Excavation																							
Pile Configuration    1	Socket H Pile / Mini-pile																							
Superstututure   18   18   18   18   18   18   18   18	Bored Pile																							
ASMY, Usiting Installation & Cable containment installation  118 118 118 118 118 118 118 118 118 1	Pile Cap Construction			-						1	1		<u> </u>								-			
In Silipin, 1707]  In Silipin, 1	·	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
Size Clearance & Formation    1	, canada managa a casa santan managan	3.0																						110
Foundation and Excavation  Screet Piler  File Cap Construction  Superstructure  ADMY. Utilises installation & Cable containment Installation  118 118 118 118 118 118 118 118 118 11	1B-3 (1701, 1702)																							
Societ High Minipile	Site Clearance & Formation																							
Bered Pile Pile Cap Construction		1								1	1		1							1				
Pile Cap Construction	Bored Pile	+								+			+											
Superstructure	Pile Cap Construction																							
10-1 (1701, 1702)   10-1	Superstructure																							
Site Clearance & Formation	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118
Site Clearance & Formation	1D-1 (1701 1702)										1		1											
Foundation and Excavation  Socket H Pile / Mini-pile  Socket H Pile / Mini-		+								1	1		1	1						1				
Socket H Pile / Mini-pile Socket H Pile / Mi	Foundation and Excavation	+ +									1		<u> </u>											
Pile Cap Construction  Superstructure  Buy Fullities Installation & Cable containment Installation  118 118 118 118 118 118 118 118 118 1	Socket H Pile / Mini-pile																							
Superstructure  ABWF, Utilities Installation & Cable containment Installation  118 118 118 118 118 118 118 118 118 1	Bored Pile																							
ABWF, Utilities Installation & Cable containment Installation & 118 118 118 118 118 118 118 118 118 1	Pile Cap Construction										-		-											
10-2 (1701, 1702) Site Clearance & Formation Foundation and Excavation Foundation and Excavation Formation	·	119	118	119	119	119	119	119	119	119	110	110	110	119	119	119	119	119	119	119	119	119	119	118 119
Site Clearance & Formation  Foundation and Excavation  Socket H Pile / Mini-pile  Bored Pile  Pile Cap Construction  Superstructure	7.577, Sundes installation & Cable Containment installation	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110 118
Site Clearance & Formation  Foundation and Excavation  Socket H Pile / Mini-pile  Bored Pile  Pile Cap Construction  Superstructure	1D-2 (1701, 1702)								<u></u>	<u></u>	<u>L</u>	<u></u>	<u>L</u>	<u>L</u>						<u></u>	<u> </u>			
Socket H Pile / Mini-pile         50	Site Clearance & Formation																							
Bored Pile Pile Cap Construction Superstructure	Foundation and Excavation																							
Pile Cap Construction Superstructure  Superstructure		1								-	-		-							-				
Superstructure Superstructure		+								-	-									-				<del>                                     </del>
	Superstructure	+ +		+							<del> </del>													
	ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118 118

			1			20	)28	ı					1		T		2029					
4 (4704 4702)		1 2	2 3	4	5	6	7	8	9	10	11	12	1 2	3	4	5	6	7	8	9	10	:
1 (1701,1702)																						
e Clearance & Formation																						
undation and Excavation																						
cket H Pile / Mini-pile																						
e Cap Construction																						
perstructure	110	110	110	110	110	110	110	110	110	110	110	110 110	110	110 11	10 11	0	110	110	110	110	110	110
WF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
2 (1701,1702)					+																	
e Clearance & Formation																						
indation and Excavation																					-	
ket H Pile / Mini-pile																						
Cap Construction																						
erstructure	110	110	110	110	110	110	110	110	110	110	110	110 110	110	440	10 11	0	110	110	110	440	110	110
/F, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
(4704,4700)																						
(1701,1702)																						
Clearance & Formation																						
ndation and Excavation																						
et H Pile / Mini-pile																						
Cap Construction																						
erstructure																						
/F, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
(1701,1702)					1								1									
Clearance & Formation					1					+												
ndation and Excavation	<del>                                     </del>				+			<del> </del>	+	+		+	+			+		-			-	
ret H Pile / Mini-pile					1							+	+	<del>                                     </del>		-+						
•			1	1	1	1	1		+			<del></del>	+	<del>                                     </del>								
Cap Construction					1					1			+									
erstructure											4.17	162			10	2	4.15	112				
NF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
					1																	
1 (1701)																						
Clearance & Formation																						
ndation and Excavation																						
ket H Pile / Mini-pile																						
Cap Construction																						
perstructure	115	115	115	115	115	115																
WF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
,																						
S (1701 - as concurrent Project)																						
e Clearance & Formation																						
undation and Excavation																						
cket H Pile / Mini-pile									1													
· ·																						
e Cap Construction	445	115	115	445																		
perstructure	115	115	115	115												_						
WF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
uthern Platform (1701)																						
e Clearance & Formation																						
undation and Excavation																						
cket H Pile / Mini-pile																						
e Cap Construction																						
perstructure	115	115	115	115					<u> </u>			<u> </u>	1									
WF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118	118	118	118 118	118	118 11	18 11	.8	118	118	118	118	118	118
,	110											110										
(1701)					1								+									
e Clearance & Formation					+		+	<del> </del>	+			+	+									
tallation of Pre-bored Sheet Piles Wall					1				+	+		+	+	<del>                                     </del>								
	447	117		-	1				<del>                                     </del>	+				<del>                                     </del>								
nstruction of Manhole with Platform & Cat ladder, and Backfill	117	117		-	1	1	1		1			<del></del>	+									
Tura Bood (CTR) (4704)					1				1	1												
eung Tung Road (CTR) (1701)					1																	
		1			1																	
tallation of Pre-bored Sheet Piles Wall					1																	
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft		117																				
allation of Pre-bored Sheet Piles Wall e Jacking Shaft	117	1																				
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft nstruction of Manhole with Platform & Cat ladder, and Backfill	117			I	1															-	T	
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft nstruction of Manhole with Platform & Cat ladder, and Backfill	117												Ι									
rallation of Pre-bored Sheet Piles Wall e Jacking Shaft nstruction of Manhole with Platform & Cat ladder, and Backfill m Shui Kok Drive (SSK) (1701)	117									+						ı			l			
rallation of Pre-bored Sheet Piles Wall re Jacking Shaft restruction of Manhole with Platform & Cat ladder, and Backfill restruction of Manhole with Platform & Cat ladder, and Backfill restruction of Manhole with Platform & Cat ladder, and Backfill restruction of Manhole with Platform & Cat ladder, and Backfill restruction of Manhole with Platform & Cat ladder, and Backfill restruction of Pre-bored Sheet Piles Wall	117	117	117	117	117											-+						
tallation of Pre-bored Sheet Piles Wall	117	117	117	117	117																	
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft enstruction of Manhole with Platform & Cat ladder, and Backfill em Shui Kok Drive (SSK) (1701) tallation of Pre-bored Sheet Piles Wall	117	117	117	117	117																	
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft Instruction of Manhole with Platform & Cat ladder, and Backfill Is am Shui Kok Drive (SSK) (1701) Italiation of Pre-bored Sheet Piles Wall Instruction of Manhole with Platform & Cat ladder, and Backfill	117	117	117	117	117																	
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft Instruction of Manhole with Platform & Cat ladder, and Backfill Image: Backing Shui Kok Drive (SSK) (1701) Italiation of Pre-bored Sheet Piles Wall Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction Moise, dB(A)	117	117	117	117	117																	
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft Instruction of Manhole with Platform & Cat ladder, and Backfill Image: Backing Shui Kok Drive (SSK) (1701) Italiation of Pre-bored Sheet Piles Wall Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction Noise, dB(A) R						70	70	70	70	70	70	70 70	70	70 7	0 7		70	70	70	70	70	70
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft Instruction of Manhole with Platform & Cat ladder, and Backfill Image: Backing Shui Kok Drive (SSK) (1701) Italiation of Pre-bored Sheet Piles Wall Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction Moise, dB(A)	71	71	70	70	70	70	70	70	70	70	70	70 70	70	70 70	0 70	0	70	70	70	70	70	70
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft Instruction of Manhole with Platform & Cat ladder, and Backfill Image: Brain Shui Kok Drive (SSK) (1701) Italiation of Pre-bored Sheet Piles Wall Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction Noise, dB(A) R Intau North (Extension) Country Park [1,2]						70	70	70	70	70	70	70 70	70	70 70	0 70	0	70	70	70	70	70	70
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft instruction of Manhole with Platform & Cat ladder, and Backfill im Shui Kok Drive (SSK) (1701) tallation of Pre-bored Sheet Piles Wall instruction of Manhole with Platform & Cat ladder, and Backfill edicted Construction Noise, dB(A) R intau North (Extension) Country Park [1,2] imulative Construction Noise, dB(A)						70	70	70	70	70	70	70 70	70	70 7	0 70	0	70	70	70	70	70	70
tallation of Pre-bored Sheet Piles Wall e Jacking Shaft Instruction of Manhole with Platform & Cat ladder, and Backfill Imm Shui Kok Drive (SSK) (1701) Italiation of Pre-bored Sheet Piles Wall Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction of Manhole with Platform & Cat ladder, and Backfill Instruction Noise, dB(A) R						70	70	70	70	70	70	70 70	70		0 70			70	70	70	70	70

[1] Given that Lantau North (Extension) Country Park is a noise sensitive receiver without any facadless ((i.e. ffeee ffield)), mo ffeçable correction issimulated inthe calculation. This assumption is consistent to the approved HIM.

[2] Considered the distance correction (i.e. -20 log(D) - 8).

[3] Max. predicted noise level is adopted. Extracted from Appendix 4.7 of the approved EIA Reportt((Register Nto::AELAR -22114/120117))

	1	1 2		1 4			30		1 0	10	1 44	1 42
1A-1 (1701)	1	2	3	4	5	6	7	8	9	10	11	12
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile Bored Pile												
Pile Cap Construction												
Superstructure	112	110	110	110	110	110	110	110	110			
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1A-2 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction												
Superstructure ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
Abwir, othities installation & cable containment installation	110	110	110	110	110	110	110	110	110			
1A-3 (1701, 1702)												
Site Clearance & Formation Foundation and Excavation												
Bored Piling												
Pile Cap Construction												
Superstructure  ARWE Utilities Installation & Cable containment Installation	118	118	110	118	118	110	118	110	110			
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1A-4 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation  Bored Pile	+	1										1
Pile Cap Construction												
Superstructure	110	110	110	110	110	440	110	110	110			
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			1
1A-5 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation  Bored Pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1A-6 (1701, 1702)												
Site Clearance & Formation												
Foundation and Excavation Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction												
Superstructure ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
Abwi , othities installation & cable containment installation	110	110	110	110	110	110	110	110	110			
1B-1 (1701, 1702)												
Site Clearance & Formation Foundation and Excavation												
Bored Pile												
Pile Cap Construction												
Superstructure ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
Abwi , Othities installation & Cable Containment installation	110	110	110	110	110	110	110	110	110			
1B-2 (1701, 1702)												
Site Clearance & Formation Foundation and Excavation												
Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1B-3 (1701, 1702) Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Bored Pile												
Pile Cap Construction Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
4D 4 /4704 4702)												
1D-1 (1701, 1702) Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Bored Pile Pile Cap Construction	1	1										1
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1D-2 (1701, 1702)	1	<del> </del>										<del> </del>
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile Bored Pile	1	<del> </del>										<del> </del>
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
		1	<u> </u>	<u>I</u>	<u> </u>	Ī	<u> </u>	<u> </u>	į.	<u>I</u>	<u>I</u>	ı

						20	30					
	1	2	3	4	5	6	7	8	9	10	11	12
1T-1 (1701,1702)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure	110	110	110	110	440	110	440	440	110			-
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1T-2 (1701,1702)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
7.5VII) Stilltes installation a casic containment installation	110	110	110	110	110	110	110	110	110			
1T-3 (1701,1702)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile	1		1									
Pile Cap Construction	1		1									
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
1T-4 (1701,1702)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
3D-1 (1701)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure												
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
SPS (1701 - as concurrent Project)												
Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile												
Pile Cap Construction												
Superstructure	440	110	110	110	110	110	110	110	110			
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
Southern Platform (1701)			1			<u> </u>		<u> </u>				
Southern Platform (1701) Site Clearance & Formation												
Foundation and Excavation												
Socket H Pile / Mini-pile						<u> </u>		<u> </u>				
Pile Cap Construction												
Superstructure	<u> </u>											
ABWF, Utilities Installation & Cable containment Installation	118	118	118	118	118	118	118	118	118			
7.5VVI) offices installation a casic containment installation	110	110	110	110	110	110	110	110	110			
1D (1701)												
Site Clearance & Formation												
Installation of Pre-bored Sheet Piles Wall												
Construction of Manhole with Platform & Cat ladder, and Backfill												
,												
Cheung Tung Road (CTR) (1701)												
Installation of Pre-bored Sheet Piles Wall												
Pipe Jacking Shaft												
Construction of Manhole with Platform & Cat ladder, and Backfill	<u>L</u>		L_			<u> </u>		<u> </u>	<u> </u>			
Sham Shui Kok Drive (SSK) (1701)												
Installation of Pre-bored Sheet Piles Wall												
Construction of Manhole with Platform & Cat ladder, and Backfill												
Predicted Construction Noise, dB(A)			1	1	1	ı		T	ı	1		
NSR			Ī	Ī	Ī	Ī		Ī	Ī	I		1

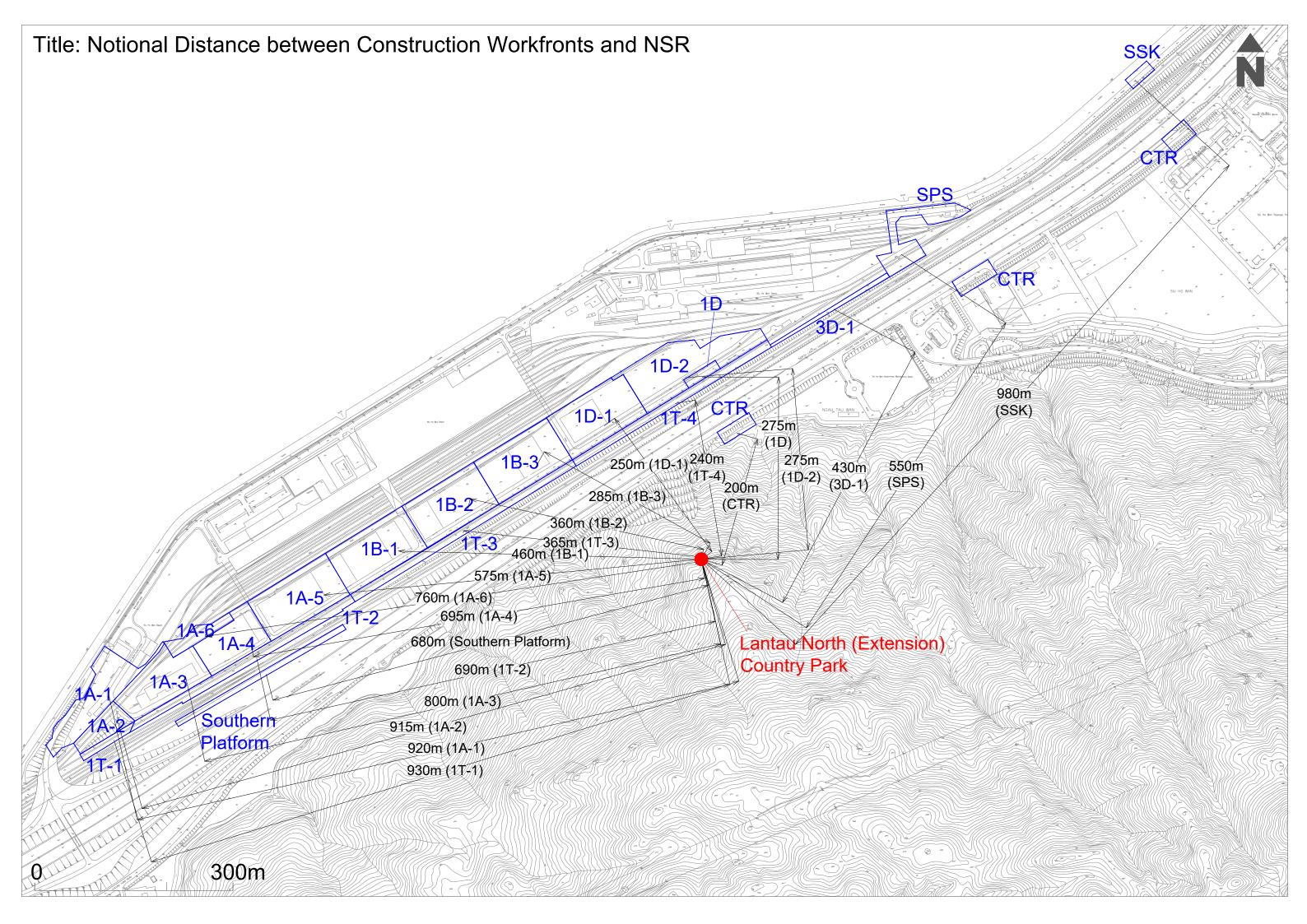
Predicted	Construction	Noise,	dB(A)
NOD			

Fredicted Constituction Noise, db(A)												
NSR												
Lantau North (Extension) Country Park [1,2]	70	70	70	70	70	70	70	70	70	-	_	-

Cumulative Construction Noise, dB(A)												
NSR												
Concurrent Project [3]	59	59	59	59	59	59	59	59	59	-	-	-
Lantau North (Extension) Country Park [1,2]	70	70	70	70	70	70	70	70	70	-	-	-
Note:											•	

[1] Given that Lantau North (Extension) Country Park is a noise sensitive receiver without any facades (i.e. free field), no façade correction is included in the calculation. This assumption is consistent to the approved EIIA. [2] Considered the distance correction (i.e. -20 log(D) - 8).

[3] Max. predicted noise level is adopted. Extracted from Appendix 4.7 of the approved EIA Report (保姆試管 NS:: 在原本 214/2017)



## **Appendix D**

Implementation Schedule

Project: Consultancy Agreement No. C1701 Detailed Design Services for Siu Ho Wan Depot Phase 1 & Siu Ho Wan Station Title: Implementation Schedule for Noise Impact during Construction Phase

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Party	Location	Timing	Requirement
S4.5.16	Implement the following good site practices as far as practicable:  • only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;  • machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;  • plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;  • silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;  • the use of quieter construction method (i.e. Silent Piling System) should be considered where possible;  • Quality Powered Mechanical Equipment (QPME) may also be considered by the Contractor as enhancement to further minimize the construction noise impact where possible;  • mobile plant should be sited as far away from NSRs as possible and practicable; and  • material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.	To minimise impacts to surrounding habitats	Contractor	All works area	Construction phase	TM-EIAO