





## Contract No. 13/WSD/16

## Mainlaying in Tseung Kwan O

# Monthly EM&A Report No. 52 (Period from 1 to 30 November 2022)

December 2022 (Rev. 2)

	Prepared by:	<b>Reviewed and Certified by:</b>	
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Date:	14 December 2022	14 December 2022	



Water Supplies Department New Works Branch Construction Division 11 Tai Yip Lane Kowloon Bay Kowloon Hong Kong

Your reference:

Date:

Our reference: HKWSD201/50/108459

15 December 2022

Attention: Mr Y M Chan

BY POST

Dear Sirs

Quotation No.: WQ/17/A071 Independent Environmental Checker for Water Supplies Department – Proposed Desalination Plant in TKO Area 137 for Contract No. 13/WSD/16 Verification of Monthly EM&A Report No.52

We refer to emails of 8, 12 and 14 December 2022 attaching Monthly EM&A Report No.52 for the captioned project prepared by the ET.

We have no further comment and hereby verify the captioned report in accordance with Clause 3.5 of the Environmental Permit no. EP-503/2015/A.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned or our Mr Louis Kwan 2618 2831.

Yours faithfully ANEWR CONSULTING LIMITED

James Choi Independent Environmental Checker

CPSJ/KSYL/lsmt







## **Revision History**

Rev.	DESCRIPTION OF MODIFICATION	DATE
0	1 <sup>st</sup> Submission	8/12/2022
1	Updated Waste Flow Table	12/12/2022
2	Revised according to IEC's comment	14/12/2022



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### **EXECUTIVE SUMMARY**

#### **Introduction**

- A1. Penta-Ocean Concentric Joint Venture (POCJV) is contracted to carry out the Mainlaying in Tseung Kwan O under Contract No. 13/WSD/16 (hereinafter known as "the Project").
- A2. In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.
- A3. This is the 52<sup>nd</sup> Monthly EM&A Report, prepared by ASCL, for the Project summarizing the monitoring results and audit findings of the EM&A programme at and around Tseung Kwan 0 (TKO) during the reporting period from 1 November to 30 November 2022.
- A4. The EM&A programme for this contract has covered environmental monitoring on construction noise level at selected NSRs and Contractor's environmental performance auditing in the aspects of construction dust, construction noise, water quality, waste management, landscape and visual and ecology.

#### Summary of Main Works Undertaken & Key Mitigation Measures Implemented

Location	Construction activities carried in the reporting month
Wan Po Road and TKO Area 137	Open trench method
Wall FO Road and TRO Alea 137	Water main installation inside sleeve pipe
TKO Promenade (Stage 1	Open trench method
Landfill) & Po Yap Road	Water main installation inside sleeve pipe
Roundabout	Trenchless Method (sleeve pipe)
	Open trench method
HK Velodrome	Water main installation inside sleeve pipe
	Trenchless Method (sleeve pipe)
Po Lam Road South / Ling Hong	Open trench method
Road	Water main installation inside sleeve pipe
Tsui Lam Road / Abandoned	Open trench method
Road	Pile cap construction

A5. Key works carried out in this reporting period for the Project included the followings:

- A6. The major environmental impacts brought by the above construction works include:
  - Construction dust and noise generation from mainlaying of pipes, and excavation;
  - Waste generation from the construction activities; and
  - Impact on water quality from construction activities
- A7. The key environmental mitigation measures implemented for the Project in this reporting period associated with the above construction works include:
  - Reduction of construction dust generation from mainlaying of pipes, and excavation;
  - Reduction of noise from equipment and machinery on-site;
  - Sorting and storage of general refuse and construction waste; and
  - Treatment of wastewater through water treatment facilities before discharge



#### Summary of Exceedance & Investigation & Follow-up

- A8. Noise monitoring was scheduled in the reporting month for NSR4 Creative Secondary School on 2, 8, 14 and 25 November 2022 as construction works were conducted within 300m to the noise sensitive receiver. No Action or Limit Level exceedance was recorded during the reporting period.
- A9. Landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations and within the consultation zones for 546 times. All the measured results were presented in **Appendix J** and were within the Action and Limit Levels.

#### **Complaint Handling and Prosecution**

A10. No environmental complaint, notifications of summons and prosecution was received in the reporting month.

#### **Reporting Change**

A11. There were no changes reported that may affect the on-going EM&A programme.

#### Summary of Upcoming Key Issues and Key Mitigation Measures

A12. Key works in the next reporting month for the Project will include the followings:

Location	Construction activities to be carried out in next reporting month		
Wan Po Road and TKO Area 137	<ul><li> Open trench method</li><li> Water main installation inside sleeve pipe</li></ul>		
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	<ul> <li>Open trench method</li> <li>Water main installation inside sleeve pipe</li> <li>Trenchless Method (sleeve pipe)</li> </ul>		
HK Velodrome	<ul> <li>Open trench method</li> <li>Water main installation inside sleeve pipe</li> <li>Trenchless Method (sleeve pipe)</li> </ul>		
Po Lam Road South / Ling Hong Road	<ul><li> Open trench method</li><li> Water main installation inside sleeve pipe</li></ul>		
Tsui Lam Road / Abandoned Road	<ul><li> Open trench method</li><li> Pile cap construction</li></ul>		

A13. The major environmental impacts brought by the above construction works will include:

- Construction dust and noise generation of mainlaying of pipes, and excavation works;
- Waste generation from construction activities; and
- Impact on water quality from construction activities.
- A14. The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:
  - Reduction of construction dust generation of mainlaying of pipes, and excavation works by regular water spraying and covering of dusty materials with screenings;
  - Reduction of noise from equipment and machinery on-site;
  - Sorting and storage of general refuse and construction waste; and
  - Treatment of wastewater through water treatment facilities before discharge.



#### 1. **BASIC PROJECT INFORMATION**

#### 1.1 Background

The proposed Desalination Plant at Tseung Kwan O (DPTKO) will produce potable water with an initial capacity of 135 million liters per day (MLD), expandable to an ultimate capacity of 270 MLD in the future to provide a secure and alternative freshwater resource complying with the World Health Organization (WHO) standards. The plant will adopt the Seawater Reverse Osmosis (SWRO) technology, which dominates the market due to its reliability and progressive reduction in cost as the technology advances.

Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection granted the Variation of Environmental Permit (No. EP-503/2015/A) to Water Supplies Department (WSD) for the Project on 26 January 2018.

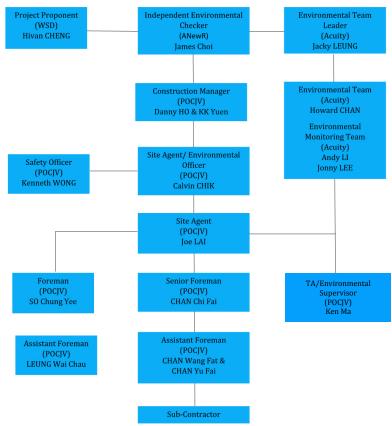
The scope of the Contract may be considered in brief, to consist of the laying of about 10 km long 1200 mm diameter freshwater mains and the associated works along the alignment of the Project as shown with the overall view in Appendix B.

#### 1.2 **The Reporting Scope**

This is the 52<sup>nd</sup> Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 November to 30 November 2022.

#### 1.3 **Project Organization**

The Project Organization structure for Construction Phase is presented in **Figure 1.1**.



#### **Figure 1.1 Project Organization Chart**



Contact details of the key personnel are presented in **Table 1.1** below:

Party	Position	Name	Telephone no.
Penta-Ocean - Concentric Joint Venture	Environmental Officer	Calvin Chik	9863 5630
Acuity Sustainability Consulting Limited	F F F F F F F F F F F F F F F F F F F		2698 6833
ANewR Consulting Limited Independent Environmental Checker		James Choi	2618 2831

#### Table 1.1 Contact details of the key personnel

#### 1.4 Summary of Construction Works

Details of the major construction works undertaken in this reporting period are shown in **Table 1.2** and the construction works locations are shown in **Appendix B**. The construction programme is presented in **Appendix A**.

Table 1.0	Commence and a fille a		Mardea Hadartalaan	desertes a the a Day	Manth
Table 1.2	Summary of the	construction v	Works Undertaken	auring the Re	porting Month

Location	Construction activities carried out in the reporting month	
Wan Po Road and TKO Area 137	Open trench method	
	Water main installation inside sleeve pipe	
TKO Promenade (Stage 1	Open trench method	
Landfill) & Po Yap Road	Water main installation inside sleeve pipe	
Roundabout	Trenchless Method (sleeve pipe)	
	Open trench method	
HK Velodrome	Water main installation inside sleeve pipe	
	Trenchless Method (sleeve pipe)	
Po Lam Road South / Ling Hong	Open trench method	
Road	Water main installation inside sleeve pipe	
Tsui Lam Road / Abandoned	Open trench method	
Road	Pile cap construction	

A summary of the valid permits, licences, and or notifications on environmental protection for this Project is presented in **Table 1.3**.

Deferrer es No	Valid Period		Derrorali		
Reference No.	From	То	Remark		
Variation of Environmental Permit					
EP no.: EP-503/2015/A			N/A		
Notification of Construct	Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation				
423775			N/A		
Chemical Waste Producer Registration					
5213-839-P3287-01			N/A		



Reference No.	Valid Period		Remark		
Reference No.	From	То	Remark		
Billing Account for Disposal of Construction Waste					
A/C no.: 7029491	A/C no.: 7029491		N/A		
Water Discharge Licence	Water Discharge Licence				
WT00032336-2018	10 Dec 2018 31 Dec 2023		N/A		
Construction Noise Permit					
GW-RE1145-22	21 Oct 2022	20 Jan 2023	Wan Po Road near Chun Wang ST.		
GW-RE1268-22	17 Nov 2022	31 Jan 2023	Construction site near junction of Wan Po Road and Pung Loi Road		

The status for all environmental aspects is presented **Table 1.4**.

#### Table 1.4 Summary of Status for Key Environmental Aspects under the EM&A Manual

Parameters	Status			
	Noise			
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under VEP Condition 3.4.			
Impact Monitoring	On-going			
	Waste Management			
Mitigation Measures in Waste Management Plan	On-going			
Landfill Gas				
Impact Monitoring	On-going			
	Environmental Audit			
Site Inspection	On-going			

Other than the EM&A works by ET, regular environmental management meetings were conducted in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the EM&A Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix C**.



## 2. NOISE MONITORING

#### 2.1 Monitoring Requirements

To ensure no adverse noise impact, noise monitoring is recommended to be carried out within 300m radius from the nearby noise sensitive receivers (NSRs), during construction phase. The NSRs selected as monitoring station are (i) NSR4 – Creative Secondary School, (ii) NSR24 – PLK Laws Foundation College, and (iii) NSR31 – School of Continuing and Professional Studies – CUHK respectively.

Referring to EM&A Manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

Impact monitoring for noise impact was conducted in the reporting month for NSR4 – Creative Secondary School on 2, 8, 14 and 25 November 2022 as construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**.

#### 2.2 Noise Monitoring Parameters, Time, Frequency

Impact noise monitoring was conducted weekly in the reporting period between 0700-1900 on normal weekdays. Construction works will follow the requirements as stipulated in the valid CNPs if works have to be conducted in the restricted hours.

Construction noise level was measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{Aeq}$ ).  $L_{eq 30min}$  was used as the monitoring parameter for the time period between 0700 and 1900 on normal weekdays. **Table 2.1** summarizes the monitoring parameters, frequency, and duration of the impact noise monitoring. The monitoring schedule is provided in **Appendix D**.

Time	Frequency	Duration	Parameters
Daytime: 0700-1900	Once per week	Continuously in L <sub>eq 5min</sub> /L <sub>eq 30min</sub> (average of 6 consecutive L <sub>eq 5min</sub> )	L <sub>eq</sub> , L <sub>10</sub> & L <sub>90</sub>

 Table 2.1 Noise Monitoring Parameters, Time, Frequency and Duration

#### 2.3 Noise Monitoring Locations

The monitoring locations should normally be made at a point 1m from the exterior of the NSRs building façade and be at a position 1.2m above the ground. A correction of +3dB(A) should be made to the free-field measurements.

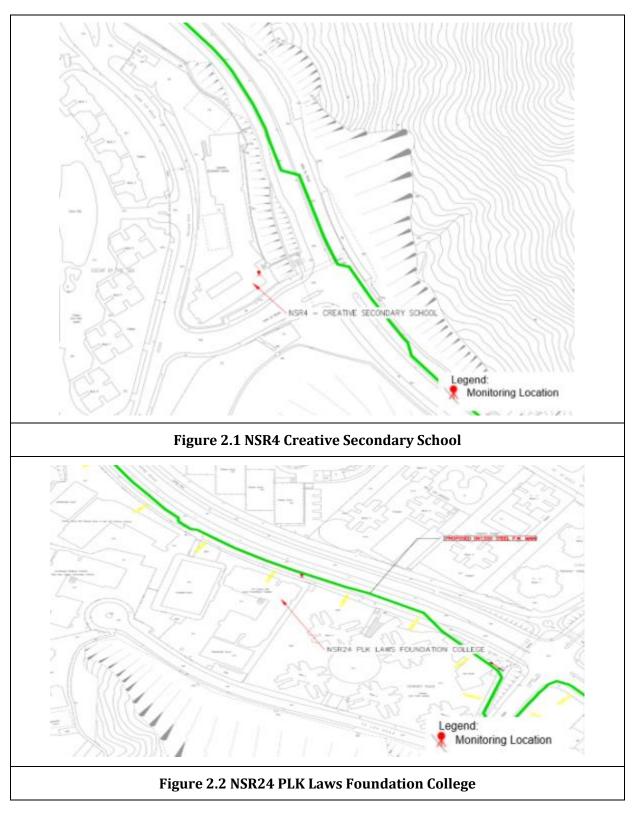
According to the environmental findings detailed in the EIA report and Baseline Monitoring Report, the designated locations for the construction noise monitoring are listed in **Table 2.2** below.

NSR ID	Noise Sensitive Receivers	Monitoring Location	Position
NSR 4	Creative Secondary School	Roof Floor	1 m from facade
NSR 24	PLK Laws Foundation College	Pedestrian Road on Ground Floor	Free-field
NSR 31	School of Continuing and Professional Studies - CUHK	Roof Floor	1 m from facade

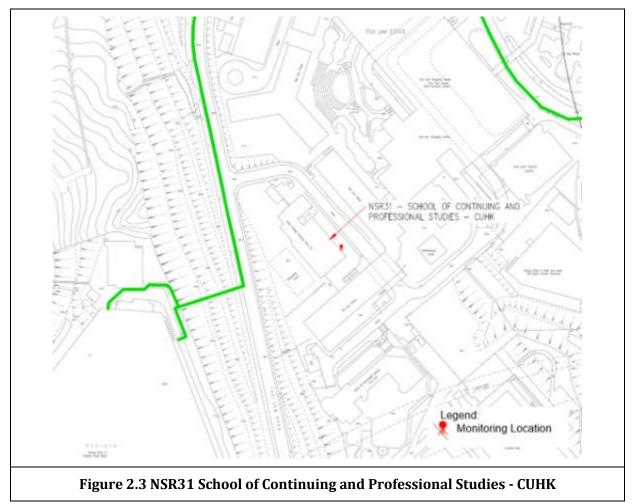
Table 2.2 Noise Monitoring Location



Three noise monitoring locations for impact monitoring at the nearby sensitive receivers are shown in **Figure 2.1-2.3**.







#### 2.4 Impact Monitoring Methodology

Integrated sound level meters were used for the noise monitoring. The meters were in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications. Immediately prior to and following each noise measurement the accuracy of the sound level meters was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level before and after the noise measurements agree to within 1.0 dB(A).

Calibration certificates of the instruments used are presented in **Appendix E**. Noise measurements were not made in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed was checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Equipment	Brand and Model	Serial Number	Date of Calibration	Expiry Date
Sound Level Meter	Svantek 971	96062	27/06/2022	26/06/2023
Sound Level Meter Calibrator	RION NC-75	34524163	09/05/2022	08/05/2023
Pocket Wind Meter Anemometer	Kestrel 1000 Wind Meter	Nil	Nil	Nil

Table 2.3	<b>Impact Noise Monitoring Equipment</b>



#### 2.5 Action and Limit Levels

The Action/Limit Levels are in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities – Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 are presented in **Table 2.4**.

#### Table 2.4Action and Limit Levels for Noise

Time Period	Action Level	Limit Level (dB(A))		
0700-1900 on normal weekdays	When one documented complaint is received from any one of the noise sensitive receivers			
Notes: (a) Limits specified in the GW-TM and IND-TM for construction and operation noise, respectively.				

If exceedances are found during noise monitoring, the actions in accordance with the Event and Action Plan will be carried out according to **Appendix F**.

#### 2.6 Monitoring Results and Observations

Referring to EM&A Manual Section 4.1.2, impact monitoring for noise impact was scheduled weekly in the reporting month for NSR4 – Creative Secondary School on 2, 8, 14 and 25 November 2022. Detailed monitoring results are presented in **Appendix G**.

No construction works were conducted within 300m radius of NSR24 and NSR31. Thus, no construction noise monitoring works was carried at these two locations in the reporting month.

No action or limit level exceedance was recorded for construction noise monitoring during the reporting period.



## **3.** WASTE MANAGEMENT

The waste generated from this Project includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes, and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as these materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 3.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix H**.

#### Table 3.1 Quantities of waste generated from the Project

	Quantity					
			Non-inert C&D Materials			
Reporting period	Inert C&D Materials (in '000m³)	Chemical Waste	Waste Others, e.g., General	Rec	ycled materia	ıls
		(in '000kg)	Landfill	Paper/cardboard (in '000kg)	Plastics (in '000kg)	Metals (in '000kg)
Nov 2022	1.503	0.000	0.008	0.057	0.000	0.000



#### 4. LANDFILL GAS MONITORING

#### 4.1 Monitoring Requirement

In accordance with Section 11 of the EM&A Manual, monitoring of landfill gas is required for construction works within the 250m Consultation Zone. Part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone; and part of the 1,200 mm diameter fresh water mains along Wan Po Road falls within the SENT Landfill and SENT Landfill Extension Consultation Zones, TKO Stage II/III Restored Landfill and TKO Stage I Restored Landfill Consultation Zones.

#### 4.2 Monitoring Location

Monitoring of oxygen, methane, carbon dioxide and barometric pressure was performed for excavations at 1m depth or more within the Consultation Zone.

During construction of works within the consultation zones, excavations of 1m depth or more was monitored:

- At the ground surface before excavation commences;
- Immediately before any worker enters the excavation;
- At the beginning of each working day for the entire period when the excavation remains open; and
- Periodically through the working day whilst workers are in the excavation.

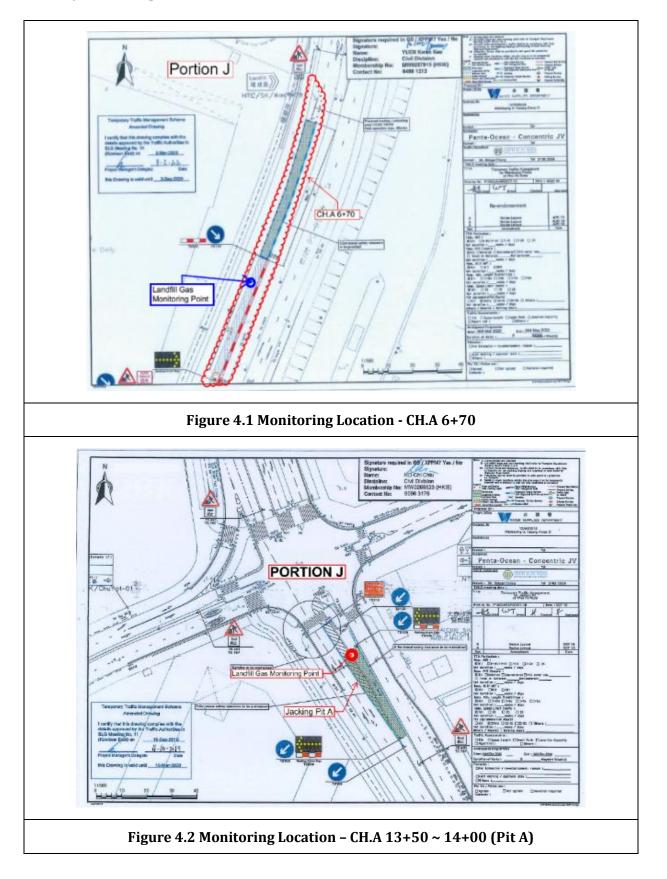
For excavations between 300mm and 1m deep, measurements should be carried out:

- Directly after the excavation has been completed; and
- Periodically whilst the excavation remains open.

The area required to be monitored for landfill gas in the reporting period are shown in **Figure 4.1** to **Figure 4.9**.

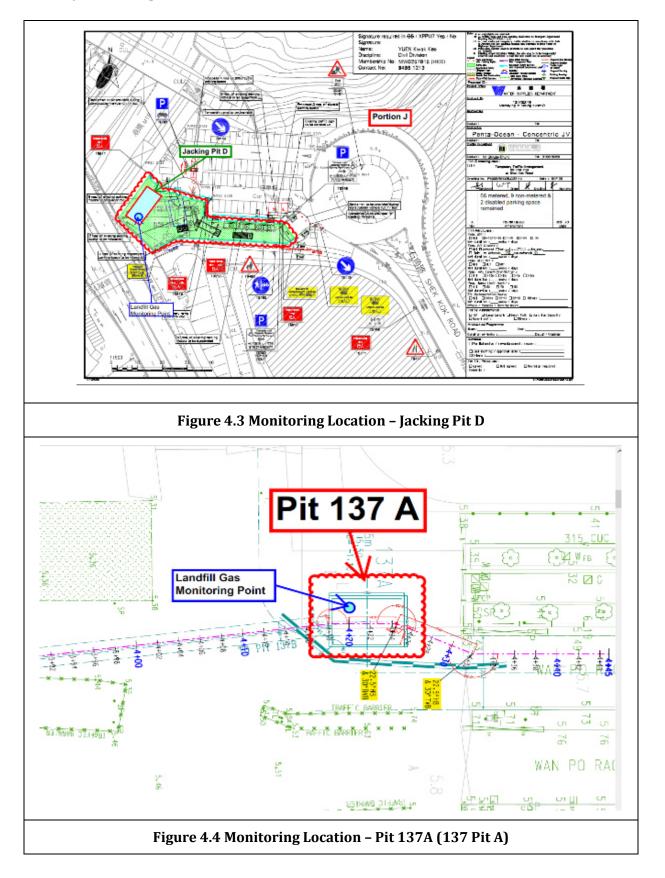
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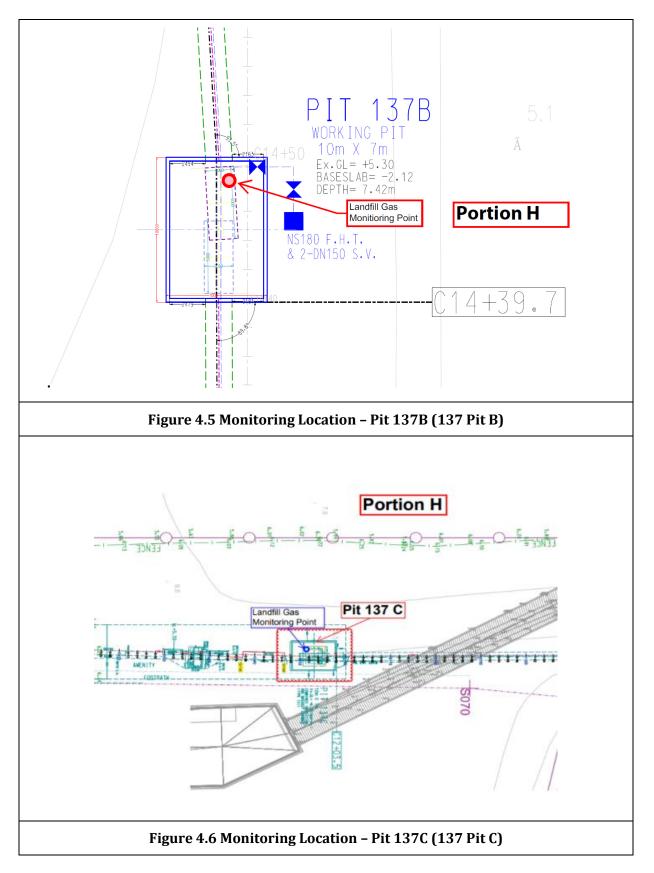


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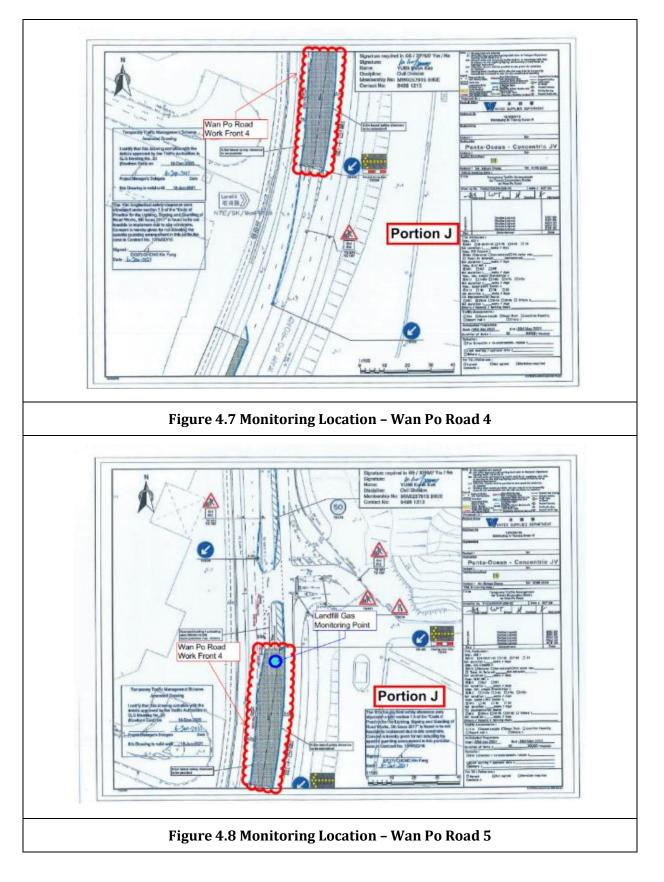




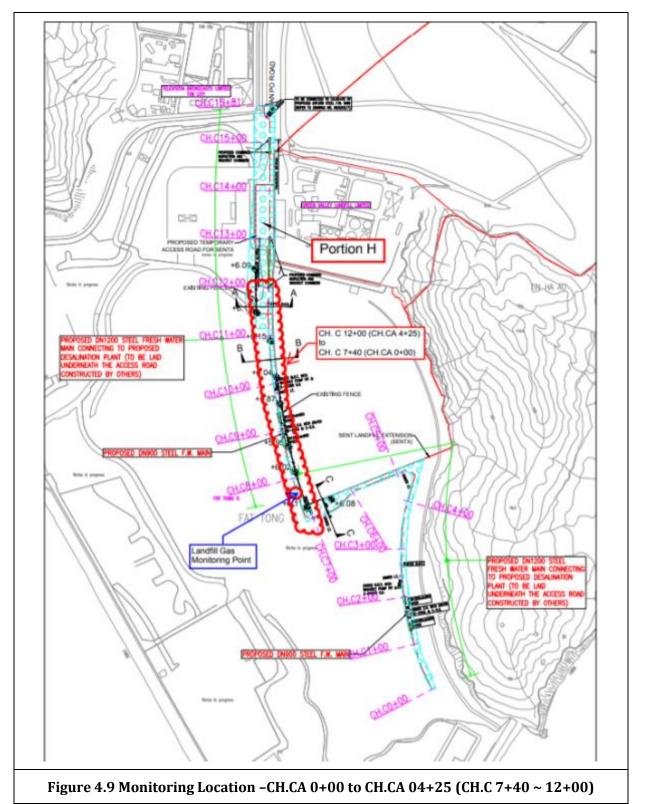














#### 4.3 Monitoring Parameters

Landfill Gas monitoring was carried out to identify any migration between the landfill and the Project and to ensure the safety of the construction, operation and maintenance personnel working on-site, visitors and any other person within the Project area.

The following parameters were monitored:

- Methane.
- Oxygen.
- Carbon Dioxide.
- Barometric Pressure.

#### 4.4 Action and Limit Level

Action and Limit Level are provided in **Table 4.1**.

#### Table 4.1 Action and Limit Level for Landfill Gas Monitoring Equipment

Parameters	Action Level	Limit Level
Oxygen (O <sub>2</sub> )	<19% 02	<19% O <sub>2</sub>
Methane (CH <sub>4</sub> )	>10% LEL	>20% LEL
Carbon Dioxide (CO <sub>2</sub> )	>0.5% CO <sub>2</sub>	>1.5% CO <sub>2</sub>

#### 4.5 Monitoring Equipment

Landfill Gas monitoring was carried out using intrinsically safe, portable multi-gas monitoring instruments. The gas monitoring equipment is:

- Complying with the Landfill Gas Hazard Assessment Guidance Note as intrinsically safe;
- Capable of continuous barometric pressure and gas pressure measurements;
- Normally operated in diffusion mode unless required for spot sampling, when it should be capable of operating by means of an aspirator or pump;
- Having low battery, fault and over range indication incorporated;
- Capable of storing monitoring data, and shall be capable of being down-loaded directly;
- Measure in the following ranges:

methane	0-100% Lower Explosion Limit (LEL) and 0-100% v/v;
oxygen	0-25% v/v;
carbon dioxide	0-5% v/v; and
barometric pressure	mBar (absolute)

alarm (both audibly and visually) in the event that the concentrations of the following are exceeded:

methane	>10% LEL;
oxygen	<19% by volume; and
carbon dioxide	>0.5% by volume
barometric pressure	mBar (absolute)

Monitoring Equipment used in the reporting period are summarised in **Table 4.2**. The Landfill Gas monitoring equipment calibration certificate is presented in **Appendix I**.



Equipment	Brand and Model	<b>Calibration Expiry Date</b>
Doutoble Cae Detector	PGM-2500 QRAE III	27 July 2023
Portable Gas Detector	XT-XWHM-Y-OR	2 September 2023
CO2 Analyzer	TEC 120711	14 November 2022
	TES, 1307H	16 November 2023

#### Table 4.2Landfill Gas Monitoring Equipment

#### 4.6 Monitoring Results

In the reporting period, construction works within the consultation zones, excavations of 1m depth or more was monitored. Landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations for 546 times. All the measured results were presented in **Appendix J** and were within the Action and Limit Levels.

Parameters	Level	Action
Oxygen (O <sub>2</sub> )	Action Level < $19\% O_2$	Ventilate trench/void to restore O <sub>2</sub> to > 19%
Oxygen (02)		Stop works
	Limit Level < $19\% O_2$	Evacuate personnel/prohibit entry
		Increase ventilation to restore $O_2$ to > 19%
		Post "No Smoking" signs
	Action Level >10% LEL	Prohibit hot works
Methane (CH <sub>4</sub> )		Increase ventilation to restore $CH_4$ to <10% LEL
		Stop works
	Limit Level >20% LEL	Evacuate personnel/prohibit entry
		Increase ventilation to restore CH <sub>4</sub> to<10% LEL
Carbon Dioxide	Action Level $>0.5\%$ CO <sub>2</sub>	Ventilate to restore $CO_2$ to < 0.5%
$(CO_2)$		Stop works
(002)	Limit Level > $1.5\%$ CO <sub>2</sub>	Evacuate personnel / prohibit entry
		Increase ventilation to restore CO <sub>2</sub> to <0.5%

#### Table 4.3Action and Limit Levels and Event and Action Plan for LFG Hazard

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# 5. SUMMARY OF EXCEEDANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

The Environmental Complaint Handling Procedure is shown in below **Figure 5.1**:

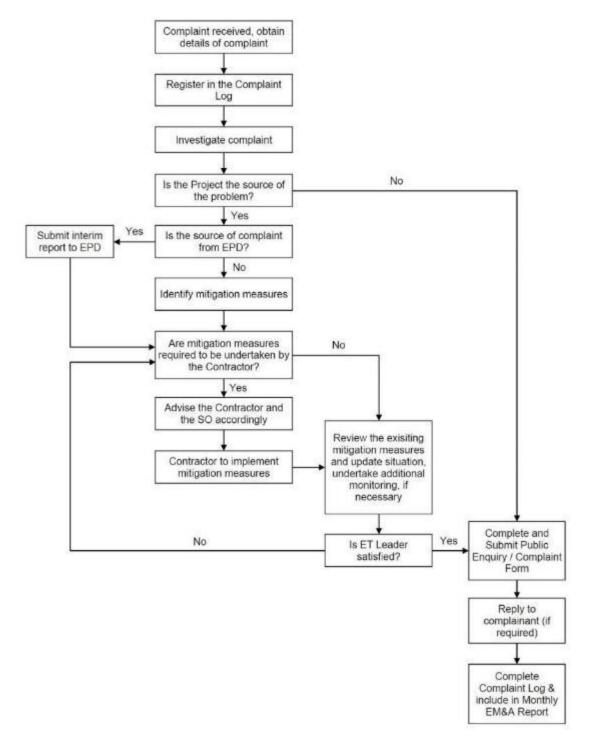


Figure 5.1 Environmental Complaint Handling Procedure



Impact monitoring for noise impact was scheduled in the reporting month for NSR4 – Creative Secondary School on 2, 8, 14 and 25 November 2022 as construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**.

Landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations and within the consultation zones for 546 times. All the measured results were presented in **Appendix J** and were within the Action and Limit Levels.

No Action and Limit Level exceedance was recorded during the reporting period.

No environmental complaint, notification of summons and prosecution was received in the reporting period.

Statistics on complaints and regulatory compliance are summarized in Appendix K.



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#### 6. **EM&A SITE INSPECTION**

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, site inspections were carried out on 4, 8, 16, 22 and 30 November 2022 at the site portions list in **Table 6.1** below. One joint site inspection with IEC was carried out on 30 November 2022.

#### **Table 6.1 Site Inspection Record**

Date	Inspected Site Portion	Time
4 November 2022	Portion J	14:00 - 15:00
8 November 2022	Portion J	09:30 - 10:30
16 November 2022	Portion J	10:00 - 11:00
22 November 2022	Portion J	09:30 - 10:30
30 November 2022	Portion J	09:30 - 10:30

Minor deficiencies were observed during weekly site inspections. Key observations during the site inspections are summarized in **Table 6.2**.

#### **Environmental Observations Follow-up Status** Date 4 November N/A N/A 2022 8 November 1.Drip tray shall be provided for chemical 1. Chemical was removed. 2022 storage (PLR B2) 1.Chemical shall be stored with drip tray 1. Chemical was removed. (Area 137 Pit C) 2. Stockpile of dusty materials 2.Stockpile of dusty materials should be was covered properly. 16 November covered with impervious sheeting. (Area 3. No water was pumped from 2022 A) trench. 3.Polluted water should be treated before discharge. (Area 137 Pit A) 1.Gully / manhole should be covered and 1. Gully was sheltered with sheltered proper. (Pit 4) geotextile. 2.Chemical container should be stored with 2. Chemical was removed. drip tray. (Pit 4) 3. The generator was removed. 22 November 4. Housekeeping 3.Drip tray should be provided for generator 2022 to avoid oil leakage. (Pit 5) improvised. 5. No water was pumped from 4. Housekeeping should be improved on site. 5.Rainwater shall be discharged via silt trench. removal facilities. (Pit 4) 1.Chemical container should be stored with 1. Chemical containers were drip tray. (Pit 1A) removed. 2.Gully should be covered and surrounded 2. Gully was sheltered with 30 November by sandbags to prevent sand/ muddy geotextile. 3. The chemical container was runoff discharge into gully. (WF4) 2022 3.0il leakage was observed, contractor was removed. required to replace the chemical container immediately. (Wan O Road)

#### Table 6.2 Site Observations



According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents should be implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix C**.

Site inspection proforma of the reporting period is provided in **Appendix L**.



## 7. FUTURE KEY ISSUES

Key works that will be anticipated in the next reporting period for the Project are shown in **Table 7.1**.

Location	Construction activities to be carried out in next reporting month
Wan Po Road and TKO	Open trench method
Area 137	Water main installation inside sleeve pipe
TKO Promenade (Stage 1	Open trench method
Landfill) & Po Yap Road	Water main installation inside sleeve pipe
Roundabout	Trenchless Method (sleeve pipe)
	Open trench method
HK Velodrome	Water main installation inside sleeve pipe
	Trenchless Method (sleeve pipe)
Po Lam Road South / Ling	Open trench method
Hong Road	Water main installation inside sleeve pipe
Tsui Lam Road /	Open trench method
Abandoned Road	Pile cap construction

The major environmental impacts brought by the above construction works will include:

- Construction dust and noise generation of mainlaying of pipes, TBM break through, and excavation works;
- Waste generation from construction activities; and
- Impact on water quality from construction activities.

The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:

- Dust suppression by regular wetting and water spraying for excavation works, mainlaying of pipes and TBM break through works;
- Reduction of noise from equipment and machinery on-site;
- Sorting and storage of general refuse and construction waste; and
- Treatment of wastewater with water treatment facilities before discharge.

The proactive environmental protection proforma for the next reporting month is listed in **Appendix M**.

Referring to EM&A Manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

The tentative impact monitoring schedule for the next reporting month is attached in **Appendix N**.



### 8. CONCLUSION AND RECOMMENDATIONS

This is the 52<sup>nd</sup> monthly Environmental Monitoring and Audit (EM&A) Report presenting the EM&A works undertaken during the period from 1 November to 30 November 2022 in accordance with the EM&A Manual and the requirement under EP-503/2015/A.

Impact monitoring for noise impact was scheduled in the reporting month for NSR4 – Creative Secondary School on 2, 8, 14 and 25 November 2022 as construction works were conducted within 300m to the noise sensitive received. No action and limit level exceedance for construction noise monitoring was recorded in the reporting period.

Landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations and within the consultation zones for 546 times. All the measured results were presented in **Appendix J** and were within the Action and Limit Levels.

No exceedance of the action and limit level for landfill gas monitoring was recorded during the reporting period.

Weekly environmental site inspections were conducted during the reporting month. Observations and Recommendation were made during site inspection, Contractor was reminded that sedimentation facilities shall be provided on site to remove silt particles from runoff before discharge and to meet the requirements of the TM standard under the WPCO.

According to the environmental site inspections performed in the reporting month, the contractor is reminded to pay attention on maintaining site tidiness, water treatment facilities, and proper materials storage.

No environmental complaint, notification of summons and prosecution was received in the reporting month.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

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# **Construction Programme**

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South Waterfront Promen Water Mains Near Pung Lo Water Mains near Pung Lo Trenchless Work from Po N Pit P) Trenchless Work from Po N Water Mains from KMB Do Water Mains from KMB Do Isolo - CH.ADN1200 MS Pip Irilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTN Sterilization and Water Sam	avation, Pipe Laying and Reinstatement at TKO Landfill Stage 1 and TKO				HK Working Da			91%	Thu 23/8/18	NA		-											_
Water Mains near Pung Lo Trenchless Work from Po Y Pit P) Trenchless Work from Po Y Water Mains from KMB Do 1800 - CH.ADN1200 MS Pip Irilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTY Sterilization and Water Sam	front Promenade								Wed 17/6/20														_
Trenchless Work from Po N Pit P) Water Mains from KMB Do Water Mains from KMB Do rilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTN Sterilization and Water Sam	Near Pung Loi Road (CH.FD0+00 - CH.A3+51)		Wed 17/6/20								-				Gamera				-				
Pit P) Trenchless Work from Po N Water Mains from KMB Do ROO - CH.ADN1200 MS Pip Prilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTN Sterilization and Water Sam	near Pung Loi Road and Po Yap Road (CH.FE0+00 - CH.A3+58)		Thu 20/8/20				765		Thu 20/8/20						•								
Trenchless Work from Po N Water Mains from KMB Do 1800 - CH.ADN1200 MS Pip erilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTV Sterilization and Water Sa	ork from Po Yap Road Roundabout to KMB Depot (Pit K to Pit L) (Pit O t	o 822 days	Fri 28/2/20	Mon 5/12/22	HK Working Da	ау	765	55%	Fri 28/2/20	NA													
1800 - CH.ADN1200 MS Pip Irilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTV Sterilization and Water Sam	ork from Po Yap Road Roundabout (Hong Kong Velodrome)	1251 days	Tue 2/4/19	Mon 26/6/23	HK Working Da	ау	765	80%	Tue 2/4/19	NA													
erilization and Water Samp Static Pressure Test Pipeline Cleaning and CCTV Sterilization and Water Sam	from KMB Depot to TKO Fresh Water Preliminary Service Reservoir	1649 days	Tue 7/11/17	Mon 5/6/23	HK Working Da	ау		80%	Tue 7/11/17	NA	<b>Q</b>												
Static Pressure Test Pipeline Cleaning and CCT Sterilization and Water Sa	N1200 MS Pipe Static Pressure Test, Pipeline Cleaning, CCTV Inspection,	1232 days	Wed 24/3/21	Tue 6/8/24	Calendar Day			13%	Wed 24/3/21	NA						-							
Sterilization and Water Sa		1112 days	Wed 24/3/21	Mon 8/4/24	Calendar Day			18%	Wed 24/3/21	NA											•		
	ning and CCTV Inspection	1153 days	Wed 12/5/21	Sun 7/7/24	Calendar Day			10%	Wed 12/5/21	NA													_
	and Water Sampling	30 days	Mon 8/7/24	Tue 6/8/24	Calendar Day			0%	NA	NA											44		_
250 HDPE Pipe Static Pres	pe Static Pressure, Pipeline Cleaning, CCTV Inspection, Sterilization and	60 days		Mon 20/2/23	Calendar Day			0%	NA	NA													_
ater Sampling		563 days	Tue 21/2/23		Calendar Day			0%	NA	NA													
											0												
ater Supply to Tseung Kwa 7 (Portion J)	o Tseung Kwan O Desalination Plant at Fill Bank of Tseung Kwan O Area	445 days	Tue 7/11/17	Sat 11/5/19	HK Working Da	17		99%	Tue 7/11/17	WA													
gramme No. 15	Task Summary	Inactiv	e Milestone	Dur	ation-only	Start-only	E Exte	ternal Milesto	ne 🚸	Critical S	Split												-

							Project: Mainlaying in Tse	ung Kwan O												
Т	'ask Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	% Complete	Actual Start	Actual Finish	2019 2018 2019 2019 2019 2019	2020 22   Q3   Q4   Q1	Q2   Q3   Q4	2021 Q1   Q2   Q3	Q4 Q1 Q2	Q3 Q4 2	023 Q1   Q2   Q3	2024 2024 Q4 Q1 Q2	Q3 Q4 Q	25 21   Q2
1	Key Dates	2495 days	Tue 7/11/17	Thu 5/9/24	Calendar Day			0%	Tue 7/11/17	NA	•									
	Planned Completion	0 days	Thu 5/9/24	Thu 5/9/24	Calendar Day	12FF		0%	NA	NA									<ul><li>5/9</li></ul>	
-	Mainlaying In Tseung Kwan O	2495 days	Tue 7/11/17	Thu 5/9/24	Calendar Day		10FF	77%	Tue 7/11/17	NA										
	Mainlaying From Boundary of Tseung Kwan O Area 137 to TKO Fresh Water Service Reservoir (Portion I)	1866 days	Tue 7/11/17	Mon 26/2/24	HK Working Da	ay		74%	Tue 7/11/17	NA										
	Trenchless Work at Wan Po Road From Pit A to Pit F	1866 days	Tue 7/11/17	Mon 26/2/24	HK Working Da	ау		56%	Tue 7/11/17	NA										
	Trenchless Works (Pit A to Pit D)	1354 days	Fri 2/8/19	Mon 26/2/24	HK Working Da	ау	763	51%	Fri 2/8/19	NA		•								
	New Routing From Pit A to Pit D)	553 days	Thu 14/4/22	Mon 26/2/24	HK Working Da	ау		0%	Thu 14/4/22	NA										
	XP Application for WPR, SKR and Open Trench at Shek Kok Road	60 days	Tue 19/4/22	Thu 30/6/22	HK Working Da	y 274	278,279,286	0%	NA	NA										
	Trial Pit Excavation at Pit SKR	10 days	Sat 2/7/22	Wed 13/7/22	HK Working Da	y 275	288,285,284	0%	NA	NA										
	Pipe Laying (OC) from Pit SKR to Pit D (1st 200m)	200 days	Thu 14/7/22	Tue 14/3/23	HK Working Da	y 279	288	0%	NA	NA										
	Construction of Pit SKR	90 days	Wed 15/3/23	Thu 6/7/23	HK Working Da	y 279,284	290	0%	NA	NA										
	Headshield Tunneling fom Pit SKR to Pit WPR (64m)	107 days	Fri 7/7/23	Sat 11/11/23	HK Working Da	y 288	292	0%	NA	NA										
	MS Pipe Laying in Segment from Pit SKR to Pit WPR	30 days	Sun 12/11/23	Mon 11/12/23	Calendar Day	290	295,296	0%	NA	NA										
	Pipe Connection Works and construction of Inspoection Chamber at Pit WPR	60 days	Tue 12/12/23	Mon 26/2/24	HK Working Da	ay 292,283		0%	NA	NA										
	Pipe Connection Works and construction of Washout Chamber at Pit SKR	60 days	Tue 12/12/23	Mon 26/2/24	HK Working Da	ay 292		0%	NA	NA										
and the second	DN800 - CH.ADN1200 MS Pipe Static Pressure Test, Pipeline Cleaning, CCTV Inspection, Sterilization and Water Sampling	1232 days	Wed 24/3/21	Tue 6/8/24	Calendar Day			13%	Wed 24/3/21	NA										
	Static Pressure Test	1112 days	Wed 24/3/21	Mon 8/4/24	Calendar Day			18%	Wed 24/3/21	NA				-						
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at Wan Po Road (CH.A12+50) to DN900 Valve Chamber at TKO Landfill Stage I Area A (CH.FB1+66) (Approx. 1.4km)	42 days	Tue 27/2/24	Mon 8/4/24	Calendar Day	224,251,306	774	0%	NA	NA										
1	Pipeline Cleaning and CCTV Inspection	1153 days	Wed 12/5/21	Sun 7/7/24	Calendar Day			10%	Wed 12/5/21	NA				-						
	DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chambe at Wan Po Road (CH.A12+50) to DN900 Valve Chamber at TKO Landfill Stage I Area A	r 90 days	Tue 9/4/24	Sun 7/7/24	Calendar Day	763	782	0%	NA	NA										
	Sterilization and Water Sampling	30 days	Mon 8/7/24	Tue 6/8/24	Calendar Day			0%	NA	NA									44	
	DN1200 MS Pipe - Portion I & Portion H (Total Water = 9700 cu.m)	30 days	Mon 8/7/24	Tue 6/8/24	Calendar Day	772,773,774,775,777,778	8,7 787	0%	NA	NA										
	Handover Portion I and Portion H to WSD Region	563 days	Tue 21/2/23	Thu 5/9/24	Calendar Day			0%	NA	NA							-			
1	DN1200 MS Pipe - Portion I & Portion H (Area 137)	30 days	Wed 7/8/24	Thu 5/9/24	Calendar Day	782		0%	NA	NA										

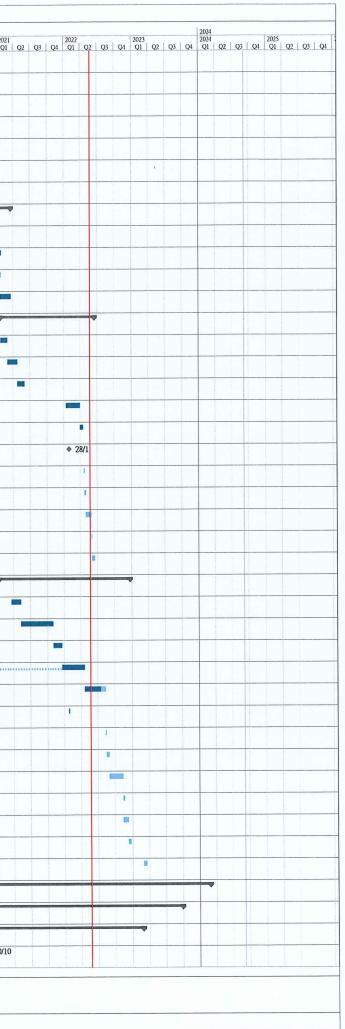
Working Programme No. 15	Task		Summary	<u> </u>	Inactive Milestone		Duration-only		Start-only	E	External Milestone	0	Critical Split	
Data Date : 24 May 2022	Split		Project Summary	[]	Inactive Summary	1	Manual Summary Rollup		Finish-only	3	Deadline	+	Progress	
Data Date : 24 May 2022	Milestone	•	Inactive Task		Manual Task		Manual Summary	<b></b>	External Tasks	iniziali (17.3 jest	Critical		Manual Progress	The second

ask N	Vame	Duration	Start	Finish	Task Calendar	Predecessors	Successors	% Complete	Actual Start	Actual Finish			2019 2019					1000		00000	20	024		
								Compiete			Q4 Q1	Q2   Q3   Q4	2019 Q1 Q2 0	2020 Q3 Q4 Q1	)   Q2   Q3   Q	2021 Q4 Q1 0	Q2   Q3   Q	2022 24 Q1 0	22   Q3   Q	4 Q1 Q2	Q3 Q4 (	)24 Q1   Q2   Q3	Q4 Q1	Q2
y I	Dates	2495 days	Tue 7/11/17	Thu 5/9/24	Calendar Day			0%	Tue 7/11/17	NA	-													
Cc	ontract Date	0 days	Tue 7/11/17	Tue 7/11/17	Calendar Day	and the second second	67,59,60FS+27	100%	Tue 7/11/17	Tue 7/11/17	<b>•</b> 7/11													
				Thu 10/11/17	Calendar Day		days,61,62,58 4,5FS+730 days,6FS+1279													_				
St	tarting Date	0 days	Thu 16/11/17	Thu 16/11/17	Calendar Day		4,5F5+730 days,6F5+1279 days																	
Ac	ccess Date of Portion A, B, C, D, E, F, G and J	0 days	Thu 16/11/17	Thu 16/11/17	Calendar Day	3	90,63,71,73,75,78,79	100%	Thu 16/11/17	Thu 16/11/17	♦ 16/11													
Ac	ccess Date of Portion H	0 days	Sat 16/11/19	Sat 16/11/19	Calendar Day	3FS+730 days	110	100%	Sat 16/11/19	Sat 16/11/19				16/11	l.									
		0 days	Tue 18/5/21	Tue 18/5/21	Calendar Day	3FS+1279 days	7	100%	Tue 18/5/21	Tue 18/5/21							18/5		-					
Co	ompletion Date (Contract)	0 days	100 10/5/21	146 10/5/21													A 10/5							
EC	OT for CE No. 23 Inclement Weather - In June 2018	0 days	Tue 18/5/21	Tue 18/5/21	HK Working Da	у б	8	100%	Tue 18/5/21	Tue 18/5/21							18/5							
EC	OT for CE No. 01	246 days	Wed 19/5/21	Wed 19/1/22	Calendar Day	7	9FF	0%	NA	NA								<ul><li>19/1</li></ul>						-
D	evised Completion Date	0 days	Wed 19/1/22	Wed 19/1/22	Calendar Day	8FF	11FS+365 days	0%	NA	NA						-		19/1						
10	evised completion date							00/			-					-		-		_		•	5/9	-
Pl	lanned Completion	0 days	Thu 5/9/24	Thu 5/9/24	Calendar Day	12FF		0%	NA	NA													515	
D	efect Date	0 days	Thu 19/1/23	Thu 19/1/23	Calendar Day	9FS+365 days		0%	NA	NA										19/1				
ai	inlaying In Tseung Kwan O	2495 days	Tue 7/11/17	Thu 5/9/24	Calendar Day	A CONTRACTOR OF THE	10FF	77%	Tue 7/11/17	NA	Q					an tainet Australia			-	-			1	
		1216 days	Tue 12/6/19	Tue 18/1/22	Calendar Day			100%	Tue 12/6/18	Tue 18/1/22						-				_				-
	ssued Compensation Events (General)	1316 days										A 101		-				-						-
1	Issue CE No. 03 - Upgrading of bandwidth of Internet Services for Site Accommodation	0 days	Tue 12/6/18	Tue 12/6/18	Calendar Day		68	100%	Tue 12/6/18	Tue 12/6/18		12/6						-						
	Issue CE No. 01 - Change in Pressure Rating of Watermain, Valves and Fittings from PN1	6 0 days	Thu 12/7/18	Thu 12/7/18	Calendar Day		68	100%	Thu 12/7/18	Thu 12/7/18		12/7												
	to PN25 Issue CE No. 08 - Change in Number of Fixed IP Address for Broadband Connection for	0 davs	Tue 4/12/18	Tue 4/12/18	Calendar Day			100%	Tue 4/12/18	Tue 4/12/18			4/12											
	Site Accommodation								Thu 28/2/19				28/2							_		_		-
	Issue CE No. 10 - Contractor Design of The Realignment	0 days	Thu 28/2/19	Thu 28/2/19	Calendar Day			100%	110 28/2/19	1110 20/2/19					-									
	Issue CE No. 13 - Excavation of Inspection Pits for the Realignments	0 days	Wed 15/5/19	Wed 15/5/19	Calendar Day			100%	Wed 15/5/19	Wed 15/5/19			15	/5										
	Issue CE No. 26 - Change in Cathodic Protection System for Mild Steel Pipes	0 days	Fri 16/8/19	Fri 16/8/19	Calendar Day		85	100%	Fri 16/8/19	Fri 16/8/19				16/8			-							
		0 days	Tue 31/12/19	Tue 31/12/19	Calendar Day			100%	Tue 31/12/19	Tue 31/12/19			-	<b>•</b> 31	/12									-
	Issue CE No. 35 - Feasibility Study on the Alternative Alignment by Trenchless Method in the Wan Po Road J/O Lohas Park Road	i o uays	Tue 51/12/15	102 51/12/15	Calcindar Day														-					
	Issue CE No. 56 - Excavation of Inspection Pits for the Alternative Alignment (Batch No.	0 days	Fri 22/5/20	Fri 22/5/20	Calendar Day			100%	Fri 22/5/20	Fri 22/5/20					<ul><li>22/5</li></ul>	_								
	2) Issue CE No. 64 - Tree Survey at Tsui Lam (Location A and Location B)	0 days	Tue 9/6/20	Tue 9/6/20	Calendar Day			100%	Tue 9/6/20	Tue 9/6/20					9/6									
	Issue CE No. 74 - Reinstatement of existing carriageway along Wan Po Road using	0 days	Thu 13/8/20	Thu 13/8/20	Calendar Day			100%	Thu 13/8/20	Thu 13/8/20				1	13/	/8		-						-
	PMSMA10							40000	5 : 24 /2/20							/9								
	Issue CE No. 66 - Excavation of Inspection Pits for the Alternative Alignment (Batch No. 3)	0 days	Fri 21/8/20	Fri 21/8/20	Calendar Day			100%	Fri 21/8/20	Fri 21/8/20														
	Issue CE No. 72 - Temporary Reinstatement of Deteriorated Grasscrete Road by	0 days	Mon 31/8/20	Mon 31/8/20	Calendar Day			100%	Mon 31/8/20	Mon 31/8/20					\$ 31	1/8								
	Bituminous Pavement along TKO South Waterfront Promenade Issue CE No. 73 - Reinstatement of existing Geotextile in Area of Stage 1 Landfill	0 days	Wed 9/9/20	Wed 9/9/20	Calendar Day			100%	Wed 9/9/20	Wed 9/9/20					<b>\$</b> 9,	//9								
	between Chainage FC12+20 and Chainage FC13+26	0 days	Tue 22/9/20	Tue 22/9/20	Calendar Day			100%	Tue 22/9/20	Tue 22/9/20					• 2	22/9				_				
	Issue CE No. 81 - Additional Noise Monitoring for the Realignment Works	0 days																						-
	Issue CE No. 78 - Excavation of Inspection Pits for Additional Connection Point to The	0 days	Wed 23/9/20	Wed 23/9/20	Calendar Day			100%	Wed 23/9/20	Wed 23/9/20					• 2	23/9								
	Existing Water Supply system Issue CE No. 82 - Suspension of Site Works due to Coronavirus Disease	0 days	Wed 21/10/20	Wed 21/10/20	) Calendar Day			100%	Wed 21/10/20	Wed 21/10/2	0				•	21/10								
	Issue CE No. 85 - Affected Trees across the Natural Stream Course at Tsui Lam (Location	0 days	Wed 28/10/20	Wed 28/10/20	) Calendar Day			100%	Wed 28/10/20	Wed 28/10/2	0				•	28/10				_				-
	A)															23/11				_				-
	Issue CE No. 90 - Temporary Relocation of Bicycle Parking spaces near HK Velodrome	0 days	Mon 23/11/20	Mon 23/11/20	) Calendar Day			100%	Mon 23/11/20	Mon 23/11/2	0													
	Issue CE No. 83 - Inspection pits for the Realignment in Wan Po Road and Lohas Park	0 days	Sat 19/12/20	Sat 19/12/20	Calendar Day			100%	Sat 19/12/20	Sat 19/12/20						<ul><li>19/12</li></ul>								
	Road Issue CE No. CE - Site Clearance of Affected Trees and Plants for Mainlaying works nea	r O days	Fri 18/12/20	Fri 18/12/20	Calendar Day			100%	Fri 18/12/20	Fri 18/12/20						18/12								
	Po Hong Road and Ling Hong Road							100%	Wed 20/1/21	Wed 20/1/21						20/								-
	Issue CE No. 99 - Excavation of Inspection pit near Mau Wu Tsai Village at Po Lam Road South		Wed 20/1/21	weu 20/1/21	Calendar Day									1										
	Issue CE No. 101 - Uncharted Irrigation Pipe in TKO South Promenade Waterfront's Cyc	le 0 days	Fri 29/1/21	Fri 29/1/21	Calendar Day			100%	Fri 29/1/21	Fri 29/1/21						29/	1							
	Track at CH.FC6+64 Issue CE No. 103 - Renewal of Excavation Permit	0 days	Wed 10/2/21	Wed 10/2/21	Calendar Day			100%	Wed 10/2/21	Wed 10/2/21						10	12							
	Issue CE No. 105 - Suspension of Works in Wan Po Road 1st Works Site due to Shortage	0 dave	Tue 23/2/21	Tue 23/2/21	Calendar Day			100%	Tue 23/2/21	Tue 23/2/21						2	3/2						1111 1111	+
	of Backfilling Material Caused by COVID-19																							
	Issue CE No. 104 - Works in Tsui Lam Section (Batch No.2) were Suspended due to Disruption to Supply of Construction Material Caused b COVID-19	0 days	Fri 26/2/21	Fri 26/2/21	Calendar Day			100%	Fri 26/2/21	Fri 26/2/21						<b>*</b> 2	012							
	Issue CE No. 106 - Works in Tsui Lam Section (Batch No.3) were Suspended due to	0 days	Fri 26/2/21	Fri 26/2/21	Calendar Day			100%	Fri 26/2/21	Fri 26/2/21						2	6/2							
	Disruption to Supply of Construction Material Caused b COVID-19 Issue CE No. 108 - Works in Tsui Lam Section (Batch No.3) were Suspended due to	0 days	Fri 26/2/21	Fri 26/2/21	Calendar Day			100%	Fri 26/2/21	Fri 26/2/21						2	6/2							+
	Disruption to Supply of Construction Material Caused b COVID-19															• 1	8/3	_		_				_
	Issue CE No. 107 - Affected Trees near Mau Wu Tsai Village between CH.HA0+00 and C HA0+70	h. O days	Mon 8/3/21	Mon 8/3/21	Calendar Day			100%	Mon 8/3/21	Mon 8/3/21														
	Issue CE No. 110 - Inaccessible to Works Area Ch.HA2+10 due to Deteriorated Concret	e O days	Thu 8/4/21	Thu 8/4/21	Calendar Day			100%	Thu 8/4/21	Thu 8/4/21						٠	8/4							
_	Access																			l	1		A.L.	
p F	Programme No. 15		tive Milestone		aration-only	Start-only		atemal Milesto	ne 🔮	Critical :														
	e : 24 May 2022 Split Project Summary	Inact	tive Summary	M	anual Summary Rollup 🔳	Finish-only	J D	eadline	*	Progress		a second second second												

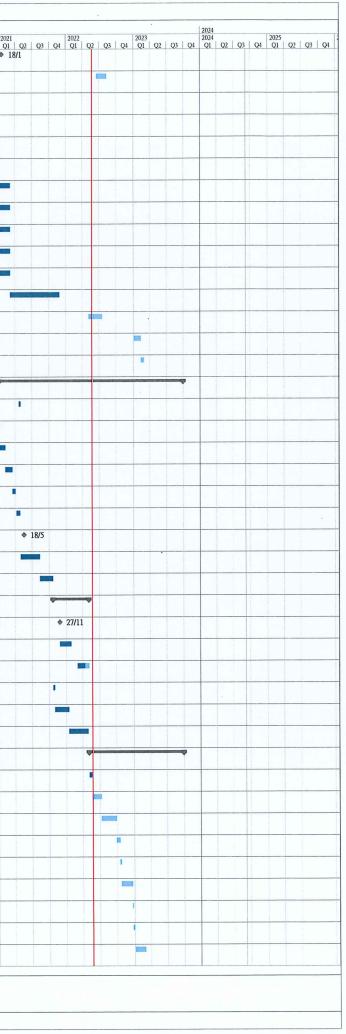
th Nama	Duration Start	Finish	Task Calendar	Predecessors	Successors	50	Actual Start	Actual Finish		
k Name	Sumon Stat	1 MISH	and continue			Complete			2019         2024           Q1         Q2         Q3         Q4         Q1	2025
Issue CE No. 112 - Works Delayed in Portion H due to COVID-19	0 days Wed 2	14/4/21 Wed 14/4	/21 Calendar Day			100%	Wed 14/4/21	Wed 14/4/21		
						100%	5-: 20/4/21	5-: 20/4/21	♦ 30/4	
Issue CE No. 113 - Special Cleaning of Workfronts from CH.A0+00 to CH.A13+70 at Wan Po Road	0 days Fri 30,	/4/21 Fri 30/4/2	1 Calendar Day			100%	Fri 30/4/21	Fri 30/4/21		
Issue CE No. 116 - Special Mosquito and Biting Midges Prevention Measures from	0 days Mon 2	24/5/21 Mon 24/5	21 Calendar Day			100%	Mon 24/5/21	Mon 24/5/21	◆ 24/5	
CH.FB0+00 to Ch.FB5+34 and Ch.FC0+0 0to FC13+26 along TKO South Waterfront Issue CE No. 119 - Professional Indemnity Insurance for the Conforming Designs unde CE	0 days Mon 3	31/5/21 Mon 31/5	/21 Calendar Day			100%	Mon 31/5/21	Mon 31/5/21	/21	
No.55, 62 and 77			(21 Colordan Day			100%	Mon 31/5/21	Mon 21/5/21	/21 ♦ 31/5	
Issue CE No. 120 - Left-in Sheet Pile for Manual Excavation in Po Lam Road at CH.HA6+5	Sudays work	31/5/21 Mon 31/5	21 Calendar Day			100%	101011 31/ 3/ 21	141011 31/ 3/ 21		
Issue CE No. 127 - Manual Excavation under Unexpectedly long and contonuous extent	0 days Tue 1	2/10/21 Tue 12/10	/21 Calendar Day			100%	Tue 12/10/21	Tue 12/10/21	◆ 12/10	
of UU obstruction in Wan Po Road at CH. A0+88 Issue CE No. 129 - Special Cleaning of Workfronts from CH.HA0+00 to CH.A13+70 at Wa	n O days Tue 2	6/10/21 Tue 26/10	/21 Calendar Day			100%	Tue 26/10/21	Tue 26/10/21	¢ 26/10	
po Road in Sep 2021 Issue CE No. 100 - Additional Mainlaying Works at Ling Hong Road and HK Velodrome	0 days Tue 1	4/12/21 Tue 14/12	/21 Calendar Day			100%	Tue 14/12/21	Tue 14/12/21	/21 * 14/12	
Issue CE No. 131 - Additional Traffic Court and Analysis for TTA Application	0 days Fri 24	/12/21 Fri 24/12/	21 Calendar Day			100%	Fri 24/12/21	Fri 24/12/21		
Issue CE No. 138 - Additional Inspection Pits for Realignment of DN800 Water Main in	0 days Fri 24	/12/21 Fri 24/12/	21 Calendar Day			100%	Fri 24/12/21	Fri 24/12/21	◆ 24/12	
TKOFWPSR Issue CE No. 141 - Provision of Suitable land Transport for Site Supervision in Tseung	0 days Wed	29/12/21 Wed 29/1	2/21 Calendar Day			100%	Wed 29/12/21	Wed 29/12/2	2/21	
Kwan O Area 137 (Dec 2021 - Sept 2022)		/12/21 5-: 21/12	21 Calendar Day			100%	Fri 31/12/21	Gri 31/12/21	◆ 31/12	
Issue CE No. 136 - Additional Resurfacing Works at Wan Po Road Near TKO Area 137	0 days Fri 31	/12/21 Fri 31/12/	21 Calendar Day			100%	FII 51/12/21	FII 31/12/21		
Issue CE No. 57 - Realignment of Water Main by Trenchless Method in SENTX Portion in	0 days Tue 1	8/1/22 Tue 18/1/	22 Calendar Day		125FF	100%	Tue 18/1/22	Tue 18/1/22	* 18/1	
TKO Area 137 Preliminaries	1636 days Tue 7	/11/17 Sat 30/4/	22 Calendar Day			100%	Tue 7/11/17	Sat 30/4/22	22	
	322 days Tue 7	/11/17 Mon 24/9	/18 Calendar Day			100%	Tue 7/11/17	Mon 24/9/18		
Submission and Permit Application										
Submission of Safety Plan	35 days Tue 7	/11/17 Mon 11/1	2/17 Calendar Day	2		100%	Tue 7/11/17	Mon 11/12/1		
Submission of Site Management Plan and Trip Ticket	45 days Tue 7	7/11/17 Thu 21/13	/17 Calendar Day	2		100%	Tue 7/11/17	Thu 21/12/17	/17	
Submission of Key People	14 days Mon	4/12/17 Sun 17/1	/17 Calendar Day	2FS+27 days		100%	Mon 4/12/17	Sun 17/12/17	/17	
Submission of Subcontractor Management Plan	30 days Tue 7	7/11/17 Wed 6/12	/17 Calendar Day	2		100%	Tue 7/11/17	Wed 6/12/17		
Submission of First Programme	7 days Tue 7	/11/17 Mon 13/1	1/17 Calendar Day	2		100%	Tue 7/11/17	Mon 13/11/1	1/17	
Submission of Pipe Material (PN16)	54 days Thu 1	/2/18 Tue 27/3	18 Calendar Day	/ 4	64	100%	Thu 1/2/18	Tue 27/3/18	18	
	127 Jana Wed	70/7/10 Cat 11/0/	18 Calendar Dav	, 67	92SS+7 days	100%	Wed 28/3/18	Sat 11/8/18	8	
Approval of Pipe material submission (PN16)	137 days Wed	28/3/18 Sat 11/8/	18 Calendar Da	03	5255+7 uays	10078				
Appointment of Environmental Team	10 days Wed	9/5/18 Fri 18/5/	.8 Calendar Day	/ 81	66	100%	Wed 9/5/18	Fri 18/5/18	8	
Environmental Baseline Monitoring	17 days Tue 2	29/5/18 Thu 14/6	'18 Calendar Da	65		100%	Tue 29/5/18	Thu 14/6/18	18	
Submission of Environmental Management Plan	45 days Tue 7	7/11/17 Thu 21/1	2/17 Calendar Da	/ 2		100%	Tue 7/11/17	Thu 21/12/17	/17	
					96		Thu 12/7/18			
Submission & Approval of CE01 Pipe Material PN25	75 days Thu 1	12/7/18 Mon 24/9	V18 Calendar Da	7 14,15	90					
Subcontracting	1122 days Thu	16/11/17 Fri 11/12	20 Calendar Da	Y		100%	Thu 16/11/17	Fri 11/12/20	20	
Submission and Approval	122 days Thu	16/11/17 Sat 17/3,	18 Calendar Da	Y		100%	Thu 16/11/17	Sat 17/3/18		
Submission of sub-contractor selection procedure	24 days Thu	16/11/17 Sat 9/12/	17 Calendar Da	ν Δ	72	100%	Thu 16/11/17	Sat 9/12/17		
Submission of sub-contractor selection procedure										_
Approval of sub-contractor selection procedure	42 days Sun	10/12/17 Sat 20/1/	18 Calendar Da	y 71	87,82,83FS+10 days,86	100%	Sun 10/12/17	Sat 20/1/18	18	
Submission of Sub-contractor Condition	14 days Sun 3	21/1/18 Sat 3/2/1	8. Calendar Da	y 4	74	100%	Sun 21/1/18	Sat 3/2/18	3	
Approval of Sub-contractor Condition	42 days Sun	4/2/18 Sat 17/3,	18 Calendar Da	y 73	87,82,83FS+10 days,86	100%	Sun 4/2/18	Sat 17/3/18	18	
		16/11/17	1/18 Calaadaa Da		76	100%	Thu 16/11/17	Mon 20/1/19		
Submission of Supplier Selection Procedure	75 days Thu	16/11/17 Mon 29/	I/18 Calendar Da	y 4	76	100%	110 10/11/1/	141011 2.5/ 1/ 10		
Approval of Supplier Selection Procedure	42 days Tue	30/1/18 Mon 12/	3/18 Calendar Da	y 75	92	100%	Tue 30/1/18	Mon 12/3/18	/18	
Subcontractor Selection and Subcontracting	1115 days Thu	23/11/17 Fri 11/12	/20 Calendar Da	У		100%	Thu 23/11/17	Fri 11/12/20	/20	
Traffic Consultant for Investigation Works	30 days Thu	23/11/17 Fri 22/12	/17 Calendar Da	y 4		100%	Thu 23/11/17	Fri 22/12/17	17	
					250					
Consultancy: Landscape for Investigation works	30 days Fri 5	/1/18 Sat 3/2/2	8 Calendar Da	у 4	250	100%	Fri 5/1/18	Sat 3/2/18		
Consultancy: Traffic consultant	55 days Wed	21/2/18 Mon 16/	4/18 Calendar Da	У		100%	Wed 21/2/18	Mon 16/4/18	/18	
Environmental Team	9 days Mor	16/4/18 Tue 24/4	/18 Calendar Da	у	65	100%	Mon 16/4/18	Tue 24/4/18	/18	
				74.72	89FS+13 days	100%	Thu 22/3/18	Mon 4/6/19	18	
Temporary site office, hoarding & project sign board	75 days Thu	22/3/18 Mon 4/6			OFFETE UBYS	100%				
Consultancy: Independent Checking Engineer	12 days Mor	n 14/5/18 Fri 25/5/	18 Calendar Da	y 72FS+10 days,74FS+10 days		100%	Mon 14/5/18	Fri 25/5/18	.8.	
Survey Services	23 days Wee	1 26/9/18 Thu 18/2	0/18 Calendar Da			100%	Wed 26/9/18	Thu 18/10/1	0/18	
Task Summary	Inactive Milestor	le h	Duration-only	Start-only		External Milesto	one 👳		tical Split	
gg Programme No. 15 ate : 24 May 2022 Split Project Summary Milestone ♦ Instrive Task	Inactive Summar Manual Task	y I	Manual Summary Rollup Manual Summary	Finish-only External Task		Deadline Critical	+	Progress Manual	gress and Progress	

4	ne	Duration	Start	Finish	Task Calendar	Predecessors	Successors	% Actual Start	Actual Finish	2019			2024	
								Complete		2019 2018 2019 2020 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q	2021 24 Q1 Q2 Q3 Q4 Q1 C	2 Q3 Q4 Q1 Q2 Q	2024 2024 Q3   Q4   Q1   Q2   Q3	Q4 Q1
-	Sacrificial Anode Cathodic Protection (SACP)	82 days	Thu 30/5/19	Mon 19/8/19	Calendar Day	19	99	100% Thu 30/5/19	Mon 19/8/19	and and				
	Landscaping Works	42 days	Thu 6/9/18	Wed 17/10/18	Calendar Day	72,74		100% Thu 6/9/18	Wed 17/10/18					
	Miscellaneous	1000 days	Sun 18/3/18	Fri 11/12/20	Calendar Day	74,72		100% Sun 18/3/18	Fri 11/12/20					
		220 days	Tue 2/1/18	Thu 9/8/18	Calendar Day			100% Tue 2/1/18	Thu 9/8/18					
51						02FC+12 dave			Thu 9/8/18					
	Setting up PM's and Contractor Accommodation	90 days	Sat 12/5/18	Thu 9/8/18		82FS+13 days		100% Sat 12/5/18						
	Initial Survey of the Site	60 days	Tue 2/1/18	Fri 2/3/18	Calendar Day	4		100% Tue 2/1/18	Fri 2/3/18					
P	rocurement of Major Material	1485 days	Sat 7/4/18	Sat 30/4/22	Calendar Day			100% Sat 7/4/18	Sat 30/4/22					
	Preparation of Purchase Order	7 days	Sat 7/4/18	Fri 13/4/18	Calendar Day	64SS+7 days,76	93	100% Sat 7/4/18	Fri 13/4/18					
	1st Batch of Material Delivery	65 days	Sat 14/4/18	Sun 17/6/18	Calendar Day	92	94	100% Sat 14/4/18	Sun 17/6/18				u	
	1st Batch of Material Delivery on site	0 days	Fri 29/6/18	Fri 29/6/18	Calendar Day	93	95	100% Fri 29/6/18	Fri 29/6/18	29/6				
	Material Delivery by Batches	1401 days	Sat 30/6/18	Sat 30/4/22	Calendar Day	94		100% Sat 30/6/18	Sat 30/4/22					
			Tue 25/9/18	Mon 1/10/18			97	100% Tue 25/9/18	Mon 1/10/18					
	Preparation of CE01 Purchase Order	7 days												
	1st Batch of CE01 Material Delivery	90 days	Tue 2/10/18	Sun 30/12/18			98	100% Tue 2/10/18						
	1st Batch of CE01 Material Delivery on site	1 day	Tue 22/1/19	Tue 22/1/19	Calendar Day	97		100% Tue 22/1/19	Tue 22/1/19					
	SCAP Material Submission and Approval	261 days	Tue 20/8/19	Wed 6/5/20	Calendar Day	85	100	100% Tue 20/8/19	Wed 6/5/20					
	SCAP Purchase Order & Material Delivery	115 days	Mon 22/6/20	Wed 14/10/20	Calendar Day	99		100% Mon 22/6/20	Wed 14/10/20					
2	inlaying in Tseung Kwan O Area 137 (Portion H)	1260 days	Tue 11/12/18	Wed 15/3/23	HK Working D	ау		92% Tue 11/12/18	NA	<b>V</b>				
	Early Possession of Portion H	0 days	Mon 29/7/19	Mon 29/7/19	Calendar Day			100% Mon 29/7/19	Mon 29/7/19	♦ 29/7				
			Tue 22/1/19	Tue 22/1/19	Calendar Day		104	100% Tue 22/1/19	Tue 22/1/19	♦ 22/1				
1	ssue Date of CE No. 07 -Water Supply to No. TKO Desalination Plant at Portion H NS250 HDPE Pipe)	0 days					104							
1	Material Procurement and Delivery in Batches	330 days	Tue 11/12/18	Tue 5/11/19	Calendar Day	103		100% Tue 11/12/18						
1	Open Cut Excavation, Pipe Laying and Reinstatement at TKO Area 137	597 days	Sat 10/8/19	Sat 14/8/21	HK Working D	ay	761	100% Sat 10/8/19	Sat 14/8/21					
	DN1200 MS PIPE + NS250 HDPE PIPE - Open Cut	341 days	Sat 10/8/19	Wed 30/9/20	HK Working D	ау		100% Sat 10/8/19	Wed 30/9/20	÷				
	CH.CT1+51 - CH.265 DN1200 MS Pipe OC	82 days	Thu 16/4/20	Fri 24/7/20	None			100% Thu 16/4/20	Fri 24/7/20					
	CH.CT0+51 - CH.1+51 DN1200 MS Pipe OC	44 days	Mon 10/2/20	Tue 31/3/20	HK Working D	ау		100% Mon 10/2/20	Tue 31/3/20					
	CH.CT0+00 - CH.0+51 DN1200 MS Pipe OC	74 days	Thu 2/1/20	Tue 31/3/20	HK Working D	ау		100% Thu 2/1/20	Tue 31/3/20					
		192 days	Sat 10/8/19	Tue 31/3/20	HK Working D	av 5		100% Sat 10/8/19	Tue 31/3/20					
	CH.CA0+00 - CH.4+00 DN1200 MS Pipe OC							100% Tue 28/7/20	Wed 30/9/20					
	CH.KT2+80 - CH.3+60 NS250 HDPE Pipe OC with additional Tees and fire Hydrant	56 days	Tue 28/7/20	Wed 30/9/20										
	CH.KT2+23 - CH.2+80 NS250 HDPE Pipe OC	29 days	Sat 20/6/20	Sat 25/7/20	HK Working D	ау		100% Sat 20/6/20	Sat 25/7/20					
	CH.KT1+51 - CH.2+23 NS250 HDPE Pipe OC	31 days	Sat 16/5/20	Sat 20/6/20	HK Working D	ау		100% Sat 16/5/20	Sat 20/6/20					
	CH.KT0+51 - CH.1+51 NS250 HDPE Pipe OC	19 days	Tue 10/3/20	Tue 31/3/20	HK Working D	ау		100% Tue 10/3/20	Tue 31/3/20					
	CH.KT0+00 - CH.0+51 NS250 HDPE Pipe OC	50 days	Sun 2/2/20	Tue 31/3/20	HK Working D	ау		100% Sun 2/2/20	Tue 31/3/20					
	CH.KA0+00 - CH.4+00 NS250 HDPE Pipe OC	143 days	Thu 10/10/19	Tue 31/3/20	HK Working D	ау		100% Thu 10/10/19	Tue 31/3/20					
	Construction of Chambers	385 days	Wed 29/4/20	Sat 14/8/21	HK Working D	Day		100% Wed 29/4/20	Sat 14/8/21					
		60 days	Tue 5/5/20	Wed 15/7/20				100% Tue 5/5/20	Wed 15/7/20					
	Combined DAV & IT Chamber for DN1200 MS pipe at CH.CT2+47													
	Combined Washout Pump Pit for DN1200 MS pipe and NS250 HDPE pipe at CH.CT2+43	71 days	Wed 3/6/20	Wed 26/8/20				100% Wed 3/6/20						
	DN900 Valve Chamber with by-pass pipes at CH.CA4+24	385 days	Wed 29/4/20	Sat 14/8/21	HK Working D	lay		100% Wed 29/4/20						
	Trenchless Works (DN1200 MS PIPE + NS250 HDPE PIPE) at TKO Area 137	1162 days	Tue 22/1/19	Thu 22/12/22	HK Working	Day	784,762	83% Tue 22/1/19	NA					
	Issue CE No. 07 - Water Supply to Tseung Kwan O Desalination Plant at Portion 'H'	0 days	Tue 22/1/19	Tue 22/1/19	Calendar Day			100% Tue 22/1/19	Tue 22/1/19	♦ 22/1				
	Issue CE No. 17 - Realignment of Water Main by Trenchless Method in TKO Area 137	7 O days	Wed 1/1/20	Wed 1/1/20	Calendar Day			100% Wed 1/1/20	Wed 1/1/20	◆ 1/1				
	Issue CE No. 118 - Non-destructive Void detection survey in Tseung Kwan O Area 13		Tue 18/5/21	Tue 18/5/21	Calendar Day			100% Tue 18/5/21	Tue 18/5/21		18/5			
	between 137 Pit A and 137 Pit B						129	100% Tue 18/1/22			◆ 18/1			
	Issue CE No. 57 - Realignment of Water Main by Trenchless Method in SENTX Portion in TKO Area 137		Tue 18/1/22				123							
	Tendering & Approval	21 days	Mon 6/1/20	Sun 26/1/20	Calendar Day			100% Mon 6/1/20	Sun 26/1/20					

m .	1	Duration	Start	Finish	Task Calendar	Predecessors	Successors	%	Actual Start	Actual Finish							
Task	ame	DarauOli	Stat	A HILON	Tron Calendar		04000000	Complete	Contra Dinte	and a most	2018	02 03	2019 2019 04 01	)	2020 3 Q4 Q1		03 04
	WSD instructed to retender	0 days	Fri 3/4/20	Fri 3/4/20	Calendar Day		128	100%	Fri 3/4/20	Fri 3/4/20	XI VI	<u> 46   Q3</u>		<u> 44</u> Q3		<ul><li>♦ 3/4</li></ul>	<u>e 1 Vi</u>
-	Retendering, Review & Approval	43 days	Mon 18/5/20	Mon 29/6/20	Calendar Day	127	129	100%	Mon 18/5/20	Mon 29/6/20			-				
-	Issue LOA	1 day	Thu 3/9/20	Thu 3/9/20	Calendar Day	128,125	135	100%	Thu 3/9/20	Thu 3/9/20							1
	Trial Pit Excavation for Trenchless Works at TKO Area 137	156 days	Mon 2/9/19	Wed 11/3/20	HK Working Da	Y		100%	Mon 2/9/19	Wed 11/3/20				4		,	
	Pit 137A	35 days	Mon 2/9/19	Tue 15/10/19	HK Working Day	1		100%	Mon 2/9/19	Tue 15/10/19							
	Pit 137B	57 days	Mon 28/10/19	Sat 4/1/20	HK Working Day	1		100%	Mon 28/10/19	Sat 4/1/20							
-	Pit 137C	14 days	Tue 25/2/20	Wed 11/3/20	HK Working Day	1		100%	Tue 25/2/20	Wed 11/3/20						1	
100	Construction of jacking / Receiving Pits	106 days	Mon 9/11/20	Thu 18/3/21	HK Working Da	Y		100%	Mon 9/11/20	Thu 18/3/21							<b>P</b>
	Mobilization and Setup & Preliminary Works	3 days	Mon 9/11/20	Wed 11/11/20	Calendar Day	129	136,137,138	100%	Mon 9/11/20	Wed 11/11/20							I
_	Receiving Pit 137A (Renopipe)	58 days	Mon 16/11/20	Mon 25/1/21	HK Working Day	/ 135	141FF-30 days	100%	Mon 16/11/20	Mon 25/1/21	-						
-		59 days	Thu 12/11/20	Fri 22/1/21	HK Working Day	/ 135	140	100%	Thu 12/11/20	Fri 22/1/21							
_		49 days	Mon 18/1/21	Thu 18/3/21	HK Working Day	/ 135	152	100%	Mon 18/1/21	Thu 18/3/21							
		410 days	Fri 22/1/21	Wed 15/6/22	HK Working Da		170	79%	Fri 22/1/21	NA	-						
	ion i personali i con i con a con	29 days	Fri 22/1/21	Sat 27/2/21	HK Working Da	, 137	141	100%	Fri 22/1/21	Sat 27/2/21			1				
		42 days	Mon 1/3/21	Thu 22/4/21		y 140,136FF-30 days	142	100%	Mon 1/3/21	Thu 22/4/21							
	(CH.CC0+10 to CH.CC.1+24) in Soil mixed with rubbish (114m; 3m/day)			Mon 31/5/21	HK Working Da		143	100%	Fri 23/4/21	Mon 31/5/21							
		31 days	Fri 23/4/21				145	100%	Wed 12/1/22								
		62 days	Wed 12/1/22	Mon 28/3/22	HK Working Da										_	-	
-		14 days	Tue 29/3/22	Thu 14/4/22	HK Working Da		146	100%	Tue 29/3/22	Thu 14/4/22							
	NS250 HDPE Pipe Laying inside jacking pipe (114m) (8m per day)	0 days	Fri 28/1/22	Fri 28/1/22	HK Working Da		144	100%	Fri 28/1/22	Fri 28/1/22							
	Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	Tue 19/4/22	Thu 21/4/22	HK Working Da	y 144	147	0%	NA	NA							
	Grouting Works (20 meter/day)	6 days	Fri 22/4/22	Thu 28/4/22	HK Working Da	y 146	148	0%	NA	NA							
	Pipe Laying (HB, BVB, Short Pipe), Thrust Block & backfilling inside Pit 137A	24 days	Fri 29/4/22	Sat 28/5/22	HK Working Da	y 147	149	0%	NA	NA		-					
	Remove ELS and Extract Sheetpile at Pit 137A	2 days	Mon 30/5/22	Tue 31/5/22	HK Working Da	y 148	150	0%	NA	NA							
	Pipe Laying (DN1200 MS Pipe & NS250 HDPE Pipe) From Pit 137A to CH.CC1+38 & KC1+38	12 days	Wed 1/6/22	Wed 15/6/22	HK Working Da	y 149		0%	NA	NA							
	TBM Pipe Jacking From Pit 137B to Pit 137C	578 days	Tue 12/1/21	Thu 22/12/22	HK Working Da	ıγ		74%	Tue 12/1/21	NA							
	Revised Establishment at Pit 137B	39 days	Fri 19/3/21	Sat 8/5/21	HK Working Da	y 138	153	100%	Fri 19/3/21	Sat 8/5/21							
	O WPR920 Steel Sleeve Pipe for both DN1200 & NS250 (Pit 137C - Pit 137B) (CH.CB0+00 to CH.CB.2+46) in Soil mixed rubbish (246m; 1.5m/day) include 49 days	144 days	Sun 9/5/21	Sat 30/10/21	HK Working Da	y 152	154	100%	Sun 9/5/21	Sat 30/10/21							
	(CH.CB0+00 to CH.CB.2+46) in Soir mixed rubbish (246m; 1.5m/day) include 49 days Grouting, Remove setup at Pit 137C and Pit 137B	41 days	Mon 1/11/21	Fri 17/12/21	HK Working Da	y 153	155,143	100%	Mon 1/11/21	Fri 17/12/21							
5	Setup for Pipe Laying inside jacking Pit 137B to Pit 137C	95 days	Tue 12/1/21	Tue 19/4/22	HK Working Da	y 154	157	100%	Tue 12/1/21	Tue 19/4/22				*			
-	DN1200 MS Pipe Laying inside jacking pipe (246m) (3 days per 8m)	93 days	Wed 20/4/22	Wed 10/8/22	HK Working Da	y 157	158	75%	Wed 20/4/22	NA							
7	NS250 HDPE Pipe Laying inside jacking pipe (246m) (8m per day)	4 days	Sat 22/1/22	Thu 27/1/22	HK Working Da	y 155	156	100%	Sat 22/1/22	Thu 27/1/22							
8	Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	Thu 11/8/22	Sat 13/8/22	HK Working Da	y 156	159	0%	NA	NA							
)	Grouting Works (20 meter/day)	13 days	Mon 15/8/22	Mon 29/8/22	HK Working Da	y 158	160	0%	NA	NA							_
)	Construction of Combined Inspection and Washout Chamber (Type III) at Pit 137C	60 days	Tue 30/8/22	Thu 10/11/22	HK Working Da	y 159	162,161	0%	NA	NA							
	Pipe Connection Inside Pit 137C	6 days	Fri 11/11/22	Thu 17/11/22	HK Working Da	y 160		0%	NA	NA							
2	Pipe Laying (HB, BVB, Short Pipe), Thrust Block & backfilling inside Pit 137C	24 days	Fri 11/11/22	Thu 8/12/22	HK Working Da	ay 160	163	0%	NA	NA							
3	Remove ELS and Remove ELS and Extract Sheetpile at Pit 137C	12 days	Fri 9/12/22	Thu 22/12/22	HK Working Da	ay 162		0%	NA	NA							
4	Final Connection of NS250 HDPE Pipe to Existing at Wan Po Road	14 days	Tue 28/2/23	Wed 15/3/23	HK Working Da	ay 788		0%	NA	NA							
5	Mainlaying From Boundary of Tseung Kwan O Area 137 to TKO Fresh Water Service	1866 days	Tue 7/11/17	Mon 26/2/24				74%	Tue 7/11/17	NA	-						_
6	Reservoir (Portion I)	1506 days	Thu 30/8/18	Thu 28/9/23	HK Working D			81%	Thu 30/8/18								
	Open Cut Excavation, Pipe Laying and Reinstatement at Wan Po Road						762	88%	Mon 10/9/18								
7	Open Cut CH.A0+00 to CH.A3+62 (Pit 1)	1321 days	Mon 10/9/18		HK Working D	ay	102										\$
68	Issue CE No. 76 - Unchartered Drain Pipe in Wan Po Road between CH.A1+12 and CH.A1+14	U days	Fri 30/10/20	Fri 30/10/20	Calendar Day			100%	Fri 30/10/20	FI1 30/ 10/ 20							·



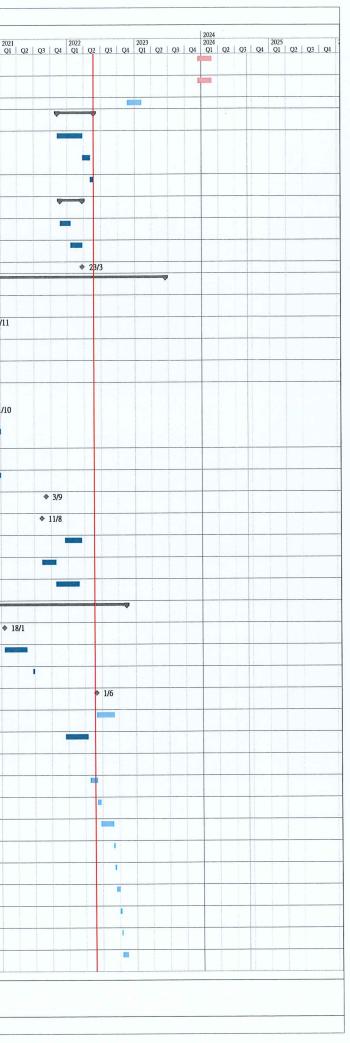
			C	P* 1 1	Tel Celester D 1			A shart Co	A atual Ft. 1.1									
Task N	ame	Duration	Start	Finish	Task Calendar Predecessors	Successors	% Complete	Actual Start	Actual Finish	201	8		2019			2020		202
9		0 days	Mon 18/1/21	Mon 18/1/21	Calendar Day		100%	Mon 18/1/21		Q4 Q1	Q2	Q3 Q4		Q2 Q3			2 Q3 Q	
	Issue CE No. 96 - Diversion of Uncharged Irrigation pipe at CH.A2+34 at Wan Po Road	0 days																
0	CH.A0+00 - CH.A0+14 OC	45 days	Thu 16/6/22	Mon 8/8/22	HK Working Day 139		0%	NA	NA									
1	CH.A0+14 - CH.A0+50 OC	156 days	Thu 23/5/19	Tue 26/11/19	HK Working Day		100%	Thu 23/5/19	Tue 26/11/19									
2	CH.A0+50 - CH.A1+50 OC	42 days	Mon 10/9/18	Wed 31/10/18	HK Working Day		100%	Mon 10/9/18	Wed 31/10/18									
13	CH.A1+50 - CH.A1+60 OC	53 days	Thu 1/11/18	Fri 4/1/19	HK Working Day		100%	Thu 1/11/18	Fri 4/1/19									
14	CH.A1+60 - CH.A2+14 OC	107 days	Sat 5/1/19	Mon 20/5/19	HK Working Day		100%	Sat 5/1/19	Mon 20/5/19	-							-	-
75	CH.A2+14 - CH.A2+30 OC	150 days	Tue 1/9/20	Thu 4/3/21	HK Working Day		100%	Tue 1/9/20	Thu 4/3/21				-			-		
76		105 days	Tue 27/10/20	Thu 4/3/21	HK Working Day		100%	Tue 27/10/20	1	_								-
	CH.A2+30 - CH.A2+46 OC					470												
77	CH.A2+46 - CH.A2+70 OC	93 days	Tue 10/11/20	Thu 4/3/21	HK Working Day	178	100%	Tue 10/11/20	Thu 4/3/21									
78	CH.A2+70 - CH.A2+86 OC	74 days	Wed 2/12/20	Thu 4/3/21	HK Working Day 177		100%	Wed 2/12/20	Thu 4/3/21									
79	CH.A2+86 - CH.A2+94 OC	48 days	Tue 5/1/21	Thu 4/3/21	HK Working Day	180	100%	Tue 5/1/21	Thu 4/3/21									
80	CH.A2+94 - CH.A3+34.5 OC (Excluding Road reinstatement	218 days	Fri 5/3/21	Fri 26/11/21	HK Working Day 179	195	100%	Fri 5/3/21	Fri 26/11/21									
81	CH.A3+34.5 - CH.A3+60 OC with DN150 DAV	60 days	Wed 4/5/22	Fri 15/7/22	HK Working Day 197	182	0%	NA	NA									+
82	CH.A3+60 and connecting to Pit 1	30 days	Tue 3/1/23	Thu 9/2/23	HK Working Day 209,181	211,183	0%	NA	NA		+-+							-
83		14 days	Fri 10/2/23	Sat 25/2/23	HK Working Day 182		0%	NA	NA					-				
	Road reinstatement CH.A2+94 - CH.3+60																	-
84	Trenchless Works (Pit 1 to Pit 2)	811 days	Mon 4/1/21	Thu 28/9/23	HK Working Day	762	61%	Mon 4/1/21										Ť
85	Ground Investigation & Drilling Bored Hole at Receiving Pit 1	9 days	Tue 20/4/21	Thu 29/4/21	HK Working Day	192	100%	Tue 20/4/21	Thu 29/4/21									
86	Setting out the inspection Pit for Jacking Pit 2	1 day	Mon 4/1/21	Mon 4/1/21	HK Working Day	187	100%	Mon 4/1/21	Mon 4/1/21									1
87	Mobilization and Excavation of Inspection Pit at Pit 2	28 days	Tue 5/1/21	Fri 5/2/21	HK Working Day 186	188	100%	Tue 5/1/21	Fri 5/2/21									=
88	Review alternative location for Pit 2 by WSD	29 days	Sat 6/2/21	Mon 15/3/21	HK Working Day 187	189	100%	Sat 6/2/21	Mon 15/3/21									1
.89	Mobilization and excavation of Inspection Pit 2 after relocation	15 days	Tue 16/3/21	Thu 1/4/21	HK Working Day 188	190	100%	Tue 16/3/21	Thu 1/4/21									
90	Mobilization; Ground Investigation & Drilling Bored Hole at Receiving Pit 2	17 days	Wed 7/4/21	Mon 26/4/21	HK Working Day 189	192	100%	Wed 7/4/21	Mon 26/4/21					-			_	-
									Tue 18/5/21						_			_
91	Issue EWN no. 405	0 days	Tue 18/5/21	Tue 18/5/21	HK Working Day		100%	Tue 18/5/21									_	_
192	Subletting and Re-Design for Pit 1 & Pit 2 (Changing from conventional sheet pilin method to pipe pilling method	g 84 days	Fri 30/4/21	Tue 10/8/21	HK Working Day 185,190	193	100%	Fri 30/4/21	Tue 10/8/21									
193	Tendering, Subletting and Award for Constructing Pit 1 & Pit 2 (Pipe Pilling Metho	d) 57 days	Wed 11/8/21	Tue 19/10/21	HK Working Day 192	198,196	100%	Wed 11/8/21	Tue 19/10/21									
194	Construction of Jacking / Receiving Pits	157 days	Wed 20/10/2	1 Tue 3/5/22	HK Working Day		94%	Wed 20/10/21	NA	x								
195	Renopipe Release the working area for Luen Hing at Pit 1	0 days	Sat 27/11/21	Sat 27/11/21	HK Working Day 180	196	100%	Sat 27/11/21	Sat 27/11/21		-							1
196	Set up and Driving Pipe Piles and Grouting for Pit 1	50 days	Sat 27/11/21	Thu 27/1/22	HK Working Day 195,193	197	100%	Sat 27/11/21	Thu 27/1/22									-
197	Excavation and ELS installation for Pit 1	48 days	Thu 3/3/22	Tue 3/5/22	HK Working Day 196	208,181	70%	Thu 3/3/22	NA									+
198	Renopipe Release the working area for Luen Hing TTA Implement at Pit 2	9 days		1 Fri 29/10/21	HK Working Day 193	199	100%	Wed 20/10/21	Fri 29/10/21				-					-
														_				
199	Mobilization, Establishment, Driving Pipe Piles and Grouting for Pit 2	63 days	Sat 30/10/21	Fri 14/1/22	HK Working Day 198	200	100%	Sat 30/10/21										
200	Excavation and ELS installation for Pit 2	82 days	Sat 15/1/22	Thu 28/4/22	HK Working Day 199	203	100%	Sat 15/1/22	Thu 28/4/22									
201	TMB Pipe Jacking Pit 1- Pit 2	420 days	Wed 4/5/22	Thu 28/9/23	HK Working Day		4%	Wed 4/5/22	NA									
202	Additional GI Works beside Pit 2	12 days	Wed 4/5/22	Wed 18/5/22	HK Working Day	203	100%	Wed 4/5/22	Wed 18/5/22									
203	Mobilization & setup at Pit 2	40 days	Thu 19/5/22	Wed 6/7/22	HK Working Day 200,202	204	0%	NA	NA								-	
204	TBM Jacking Sleeve Pipe (L=138m, 2m/day)	69 days	Thu 7/7/22	Mon 26/9/22	HK Working Day 203	205	0%	NA	NA						-			+
205	Grouting and Remove Setup including Thrust Wall	14 days	Tue 27/9/22	Fri 14/10/22	HK Working Day 204	206	0%	NA	NA		-					_		
206		6 days	Sat 15/10/22	Fri 21/10/22	HK Working Day 205	207	0%	NA	NA		-		-		-			_
	Setup Guard Rail																	_
207	Pipe Laying inside Sleeve Pipe (8m pipe, 3 days per Joint)	51 days	Sat 22/10/22	Tue 20/12/22	HK Working Day 206	208	0%	NA	NA									
208	Formwork & Setup for Grouting the Gap between Pipe and Sleeve	3 days	Wed 21/12/2	2 Fri 23/12/22	HK Working Day 207,197	209	0%	NA	NA									
209	Grouting Works (30m/day)	5 days	Sat 24/12/22	Sat 31/12/22	HK Working Day 208	210,182	0%	NA	NA									
210	Construction of Combined Inspection and Washout Chamber Type I at Pit 2	45 days	Tue 3/1/23	Mon 27/2/23	HK Working Day 209	217,218,220	0%	NA	NA									
																	- I	
	Programme No. 15 Task Summary Project Summary		tive Milestone		ration-only Start-only Start-only Finish-onl		ternal Mileste adline	one 🐡 🦊	Critical Spli Progress	1								
	:: 24 May 2022 Split Milestone Inactive Task		nual Task		nual Summary External T	· · · · · · · · · · · · · · · · · · ·	itical		Manual Pro	TPSS								



		Duration	Start	Finish	Task Calendar	Predecessors	Successors	c.	Actual Start	Actual Finish													
		Duration	Start	Finish	Task Calendar	110000055015	Successors	Complete	rictual Start	Pressal I HIISH	2018	2	19 19	2020		2021		2022		2023	20	024 024	202
	Backfill, Remove ELS and Road Reinstatement at Pit 1	30 days	Fri 10/2/23	Thu 16/3/23	HK Working Day	182		0%	NA	NA	Q4 Q1 Q2	Q3 Q4 (	1 Q2 Q3	Q4 Q1 (	22   Q3   Q	Q1 Q	Q3 Q4	Q1 Q2	Q3 Q4		<u>vs</u> vi (	21   Q2   Q3	Q4   Q1
					HK Working Day	217		0%	NA	NA								_					
	Toreport and a second se						767								-	-							
	n Cut CH.A5+29.5 (Pit 2) to CH.A7+12						102						1/2										
	ue CE No. 06 - Unforeseen Underground Condition during Trench Excavation for ainlaying at Wan Po Road between CH.A6+90 and CH.A7+10	0 days	Fri 1/2/19	Fri 1/2/19	Calendar Day			100%	Fri 1/2/19	Fri 1/2/19			1/2										
Iss		0 days	Mon 20/1/20	Mon 20/1/20	Calendar Day			100%	Mon 20/1/20	Mon 20/1/20				<ul><li>20/1</li></ul>									
Iss	ue CE No. 25 - Unforeseen Underground Conditions during Trench Excavation at	0 days	Mon 29/6/20	Mon 29/6/20	Calendar Day			100%	Mon 29/6/20	Mon 29/6/20					29/6								
	an Po Road between CH.A6+68 and CH.A6+88 I.A5+16 and Connecting to Pit 2	30 days	Fri 21/7/23	Thu 24/8/23	HK Working Day	210,218	212	0%	NA	NA													
Cł	I.A5+16 - CH.A5+27 OC with DN900 Valve Chamber	115 days	Tue 28/2/23	Thu 20/7/23	HK Working Day	219,210	217	0%	NA	NA											-		
					HK Working Day	221	218,220	100%	Mon 28/12/20	) Fri 26/11/21										-			
Co	onstruction of Tee Branch and Monitoting Chamber at CH.A5+35	m m																					
Cł	1.A6+20 - CH.A6+54 OC	Image     Image																					
CI	H.A6+54 - CH.A6+70 OC + Handshield	witching w																					
CI	H.A6+70 - CH.A7+12 OC																						
pe	n Cut CH.A7+12 to CH.A13+79.5	1323 days	Wed 19/9/18	Thu 9/3/23	HK Working Da	/																	
				Mon 27/5/19	Calendar Dav			100%	Mon 27/5/19	Mon 27/5/19	<b>1</b>		♦ 27/5										
W	/an Po Road between CH/A12+89 and Ch.A13+04												♠ 10/					-					
	sue CE No. 20 - Traffic Count and Preliminary Traffic Analysis in Po Lam Road and sui Lam Road	0 days	Wed 19/6/19																				
	sue CE No. 19 - Change in Design of Gate Valve Chamber at Wan Po Road near H.A12+40	0 days	Thu 22/8/19	Thu 22/8/19	Calendar Day			100%	Thu 22/8/19	Thu 22/8/19			*	22/8									
ls	sue CE No. 84 - Realignment of Water main in Wan Po Road Between CH.A7+35 -	0 days	Tue 22/6/21	Tue 22/6/21	Calendar Day		231	100%	Tue 22/6/21	Tue 22/6/21							22/6				-		
ls	H.ACH,A8+30 sue CE No. 109 - Manual Excavation under Unexpectedly Long and Continuous	0 days	Mon 22/3/21	Mon 22/3/21	Calendar Day			100%	Mon 22/3/21	Mon 22/3/21						2.	13						
	xtend of UU obstruction in Wan Po Road at CH.A11+80 sue CE No. 127 - Manual Excavation under Unexpectedly long and contonuous	0 days	Tue 12/10/21	Tue 12/10/21	Calendar Day			100%	Tue 12/10/21	Tue 12/10/21	1						12/	/10					
e	xtent of UU obstruction in Wan Po Road at CH. A0+88	99 davs	Tue 22/6/21	Tue 19/10/21	HK Working Da	/ 228	232	100%	Tue 22/6/21	Tue 19/10/21	1										-		
								100%	Wed 20/10/2	1 Mon 21/2/22			_										
S	ubmission and approval of Method Statement of Hand snield for CE NO. 84																						
C	H.A7+12 - CH.A7+30 OC	111 days	Fri 26/2/21	Wed 14/7/21	HK Working Da	/ 223	234																
C	H.A7+30 - CH.A7+34 OC	41 days	Thu 15/7/21	Tue 31/8/21	HK Working Da	y 233	235	100%	Thu 15/7/21	Tue 31/8/21							-					X	
C	H.A7+34 - CH.A7+50 OC	80 days	Mon 18/10/21	Fri 21/1/22	HK Working Da	y 234	236,239	100%	Mon 18/10/2	1 Fri 21/1/22													
c	H.A7+50 - CH.A7+58 OC	36 days	Tue 7/12/21	Thu 20/1/22	HK Working Da	y 235	240,237	100%	Tue 7/12/21	Thu 20/1/22							k.	•			-		
C	H.A7+58 - CH.A7+82 OC	43 days	Fri 21/1/22	Tue 15/3/22	HK Working Da	y 236	240,238	100%	Fri 21/1/22	Tue 15/3/22													
	H.A7+82 - CH.A8+23 Trenchless (Mobilization, Setup and Handshield)	85 days	Tue 19/4/22	Sat 30/7/22	HK Working Da	y 237,239	240	35%	Tue 19/4/22	NA						-			-			_	
							238 240	100%	Fri 21/1/22	Mon 25/4/22	,				-								
	H.A8+23 - CH.A8+63 OC						230,240																
(	CH.A8+63 - CH.A9+37 OC	100 days	Mon 1/8/22	Mon 28/11/2	2 HK Working Da	y 236,238,237,239																	
(	CH.A9+37 - CH.A10+18 OC	81 days	Thu 3/3/22	Mon 13/6/22	HK Working Da	Ŷ		60%	Thu 3/3/22	NA													
(	CH.A10+18 - CH.A11+51 OC	340 days	Tue 5/1/21	Mon 28/2/22	HK Working Da	У		90%	Tue 5/1/21	NA													
	TH.A11+51 - CH.A12+12 OC with DN600 IT & DN300 Washout Chamber at	263 days	Tue 1/9/20	Fri 23/7/21	HK Working Da	y 244		100%	Tue 1/9/20	Fri 23/7/21						- Mars							
	CH.A12+00 CH.A12+12 - CH.A12+50 OC With DN900 Valve Chamber	451 days	Sat 23/2/19	Mon 31/8/20	HK Working Da	y 245,246	243	100%	Sat 23/2/19	Mon 31/8/20	D		-										
	CH.A12+50 - CH.A12+95 OC	125 days	Wed 19/9/18	Thu 21/2/19	HK Working Da	У	244	100%	Wed 19/9/18	Thu 21/2/19						-							
																							(
	CH.A12+95 - CH.A13+13 OC						277																
1	CH.A13+13 - CH.A13+40 OC + DN150 DAV	60 days																					
1	CH.A13+40 -CH.A 13+80 OC from Open Cut Trench to Jacking Pit A	60 days	Fri 14/10/22	Thu 22/12/22	HK Working Da	y 280	247,293	0%	NA	NA													
end	hless Work at Wan Po Road From Pit A to Pit F	1866 days	Tue 7/11/17	Mon 26/2/24	HK Working D	ау		56%	Tue 7/11/17	NA	<b>~</b>												
Tri	al Pit Excavation for Pit 1 to Pit 20	462 days	Tue 20/2/18	Tue 10/9/19	HK Working Da	y 79		100%	Tue 20/2/18	Tue 10/9/19													
Tre	enchless Works (Pit A to Pit D)	1354 days	Fri 2/8/19	Mon 26/2/24	HK Working D	ау	763	51%	Fri 2/8/19	NA													
	Issue CE No. 27 - Underground Utilities Detection Survey for Working Pit D (CH.	0 days	Fri 2/8/19	Fri 2/8/19	Calendar Dav			100%	Fri 2/8/19	Fri 2/8/19			*	2/8									
	A22+75)																						
_	Task Summary	Inactiv	e Milestone	D	uration-only	Start-only	C	External Milestor	ne 👳	Critical	Split	•••••											

		Duri	Pte -t	Einist	Task Calandan In	Project: Mainlaying in Tse	0.	Actual Start	Actual Finish												
		Duration	Start	Finish	Task Calendar Pred	ecessors Successors	Complete	Actual Start	Actual PhilSh	2018		2019	2020		2021	2022		2023	2024 2024		202
	or CE No. 24 Temperate Diversion of Linebasted Hades-seved Hulbing	0 days	Thu 8/8/19	Thu 8/8/19	Calendar Day		100%	Thu 8/8/19	Thu 8/8/19	Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q3	3 Q4 Q1 8/8	Q2 Q3 Q4	Q1 Q2 Q3	Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q	Q4 Q1 C	<u>12 Q3 Q4</u>	Q1
	ue CE No. 21 - Temporary Diversion of Uncharted Underground Utilities near an O Road at CH. A16+00 (Pit B)	U days																			_
Iss	ue CE No. 29 - Tree Transplant Works near CHA13+70	0 days	Thu 17/10/19	Thu 17/10/19	Calendar Day		100%	Thu 17/10/19	Thu 17/10/19				<ul><li>17/10</li></ul>								
lss	ue CE No. 32 - Additional grouting Treatment works at Pit B in Wan Po Road nea	ar O days	Mon 31/8/20	Mon 31/8/20	Calendar Day		100%	Mon 31/8/20	Mon 31/8/20					31/8							
Wa	an O Road ue CE No. 118 - Non-destructive Void Detection Survey in TKO Area 137 betwee		Tue 18/5/21	Tue 18/5/21	Calendar Day		100%	Tue 18/5/21	Tue 18/5/21						18/5						-
	TPit A and 137Pit B	en o days													A 7	2017					_
Iss	ue CE No. 123 - Void Detection Survey in Wan Po Road between Pit A to Pit C	0 days	Fri 30/7/21	Fri 30/7/21	Calendar Day		100%	Fri 30/7/21	Fri 30/7/21						<b>*</b> 3	0/7					
Exp	pected CE No. 52 - Relocation of Working pits for Trenchless Works in Wan Po	0 days	Thu 31/3/22	Thu 31/3/22	Calendar Day	259	0%	NA	NA							4	31/3				
	ad (Pit B to Pit D) pected CE No. 58 - Relocation of Working pits for Trenchless Works in Wan Po	0 days	Thu 31/3/22	Thu 31/3/22	Calendar Day 258		0%	NA	NA							•	31/3				1
Ro	ad (Pit A to Pit B)								a												-
Co	nstruction of Jacking / Receiving Pit A, B & C	737 days	Mon 12/8/19	Sun 6/2/22	HK Working Day		100%	Mon 12/8/19	Sun 6/2/22							· ·					
	Removal of Existing Planter for Jacking Pit A	6 days	Mon 15/6/20	Sat 20/6/20	HK Working Day	262	100%	Mon 15/6/20	Sat 20/6/20					-							
	Jacking Pit A with additional ground grouting works	462 days	Fri 17/7/20	Sun 6/2/22	HK Working Day 261		100%	Fri 17/7/20	Sun 6/2/22												T
																					-
	Jacking / Receiving Pit B with additional ground grouting works	664 days	Mon 12/8/19	Fri 5/11/21	HK Working Day	299	100%	Mon 12/8/19	Fri 5/11/21												
	Receiving Pit C with additional ground grouting works	295 days	Fri 29/11/19	Thu 26/11/20	HK Working Day		100%	Fri 29/11/19	Thu 26/11/20				C. C								
Ca	nstruction of Jacking pit D	372 days	Wed 12/8/20	Thu 11/11/21	HK Working Day		100%	Wed 12/8/20	Thu 11/11/21					-							1
																					-
	TTA submission and Approval, Suspension of Parking Meters and TTA Implement for Jacking Pit D	ent 112 days	Wed 12/8/20	Tue 1/12/20	Calendar Day	267	100%	Wed 12/8/20	Tue 1/12/20												
	Inspection Pits & GI Works for Jacking Pit D	27 days	Wed 2/12/20	Tue 5/1/21	HK Working Day 266	317,268	100%	Wed 2/12/20	Tue 5/1/21												
	Design Submission with ICE Certificate for Jacking Pit D	26 days	Fri 15/1/21	Wed 17/2/21	HK Working Day 26	269,270	100%	Fri 15/1/21	Wed 17/2/21												1
													-								-
	Approval of Design of Jacking Pit D	8 days	Thu 18/2/21	Fri 26/2/21	HK Working Day 26	271	100%	Thu 18/2/21	Fri 26/2/21												
	Approval Existing Sub-contractor to carry out Construction of Jacking Pit D	0 days	Fri 26/3/21	Fri 26/3/21	HK Working Day 26	271	100%	Fri 26/3/21	Fri 26/3/21						26/3						
	Mobilization and Pipe Pile Wall Construction for Jacking Pit D	78 days	Thu 1/4/21	Fri 9/7/21	HK Working Day 27	,269 272	100%	Thu 1/4/21	Fri 9/7/21												
							10000	5 . 40/7/24	Th. 44/44/24												+
	Construction of Jacking Pit D at Car Park	104 days	Sat 10/7/21	Thu 11/11/21	HK Working Day 27	. 303	100%	Sat 10/7/21	Thu 11/11/21												
N	ew Routing From Pit A to Pit D)	553 days	Thu 14/4/22	Mon 26/2/24	HK Working Day		0%	Thu 14/4/22	NA								Ça				
	Verbal Instructed to Change Pit A to Pit D by Trenchless Method to Open Cut	1 day	Thu 14/4/22	Thu 14/4/22	HK Working Day	275	100%	Thu 14/4/22	Thu 14/4/22								1				-
	Method & Handshield					270 270 200	001														+
	XP Application for WPR, SKR and Open Trench at Shek Kok Road	60 days	Tue 19/4/22	Thu 30/6/22	HK Working Day 27	278,279,286	0%	NA	NA												
	Trial Pit Excavation at Pit A1	3 days	Sat 14/5/22	Tue 17/5/22	HK Working Day		100%	Sat 14/5/22	Tue 17/5/22												
	Remove Central Divider between Wan O Road amd Shek Kok Road	81 days	Mon 16/5/22	Fri 19/8/22	HK Working Day		0%	Mon 16/5/22	NA												T
							001														+
	Trial Pit Excavation at Pit WPR	10 days	Sat 2/7/22	Wed 13/7/22	HK Working Day 27	5 287	0%	NA	NA												
	Trial Pit Excavation at Pit SKR	10 days	Sat 2/7/22	Wed 13/7/22	HK Working Day 27	288,285,284	0%	NA	NA												
	Pipe Laying (OC) from Pit A1 towward KLN (124m)	124 days	Tue 17/5/22	Thu 13/10/22	HK Working Day	281,248	0%	Tue 17/5/22	NA												
		<b>CD</b> 1	5-14/10/22	Thu 22/12/22	UK Wasking Day 29	282	0%	NA	NA												-
	Pipe Laying (OC) from WPR (N/B)(the 1st Lane to the 3rd lane) (30m)	60 days	Fri 14/10/22	Thu 22/12/22	HK Working Day 28	202	078	NA	NA .												
	Pipe Laying (OC) crossing WPR Junction with Wan O Road to Central Divider	90 days	Fri 23/12/22	Tue 18/4/23	HK Working Day 28	L	0%	NA	NA												
	(73m) Pipe Laying (OC) along Central Divider to Pit WPR (340m)	340 days	Fri 20/5/22	Wed 12/7/23	HK Working Day	295,287	0%	Fri 20/5/22	NA												
					HK Working Day 27	288	0%	NA	NA												-
	Pipe Laying (OC) from Pit SKR to Pit D (1st 200m)	200 days	Thu 14/7/22	Tue 14/3/23	The WORKING Day 27		076	10													_
	Pipe Laying (OC) from Pit SKR to Pit D (Remaining 110m)	110 days	Thu 14/7/22	Tue 22/11/22	HK Working Day 27	297	0%	NA	NA												
	Construction of Pit A1	90 days	Sat 2/7/22	Tue 18/10/22	HK Working Day 27	5 289	0%	NA	NA												T
							0%	NA	NA												
	Construction of Pit WPR	90 days	Thu 13/7/23	Sat 28/10/23	HK Working Day 27	0,203	0%	ne -													
	Construction of Pit SKR	90 days	Wed 15/3/23	Thu 6/7/23	HK Working Day 27	9,284 290	0%	NA	NA												
	Headshield Tunneling fom Pit A to Pit A1 (102m)	170 days	Wed 19/10/2	2 Wed 17/5/23	HK Working Day 28	6 291	0%	NA	NA												
							0%	NA	NA												-
	Headshield Tunneling fom Pit SKR to Pit WPR (64m)	107 days	Fri 7/7/23	Sat 11/11/23	The reorking Day 28																-
	MS Pipe Laying in Segment from Pit A to Pit A1	40 days	Thu 18/5/23	Mon 26/6/23	Calendar Day 28	9 293,294	0%	NA	NA									-			
	MS Pipe Laying in Segment from Pit SKR to Pit WPR	30 days	Sun 12/11/23	3 Mon 11/12/2	3 Calendar Day 29	0 295,296	0%	NA	NA												
							0%	NA	NA												+
	Pipe Connection works & Construction Special Combined Insepction and Washout Chamber at Pit A	60 days	Tue 27/6/23	Tue 5/9/23	HK Working Day 29	1,270															
	Pipe Connection works at Pit A1	12 days	Tue 27/6/23	Tue 11/7/23	HK Working Day 29	1	0%	NA	NA												
								- k			l contraction de la c	1		. <u>.</u>							
mn	ne No. 15 Task Summary		tive Milestone		function-only	Start-only C Finish-only	External Milesto Deadline	ne 💿	Critical S Progress												
	2022 Split Project Summary	I Inaci	tive Summary	N	Ianual Summary Rollup	1 man-omy	1.caumic		FIORICSS	-											

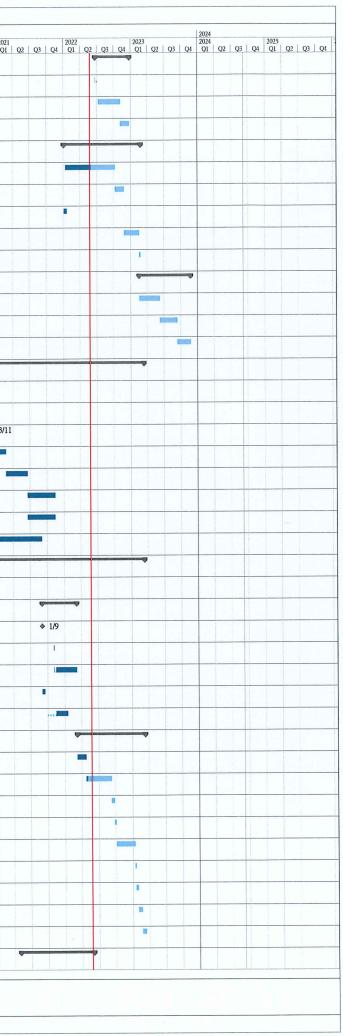
Task N		Duration	Start	Finish	Task Calendar Predecessors	Successors		Actual Start								
Task Is	ame						Complete			201		20	19	3 01	2020	2   Q3   Q4   2
5	Pipe Connection Works and construction of Inspoection Chamber at Pit WPR	60 days	Tue 12/12/23	Mon 26/2/24	HK Working Day 292,283		0%	NA	NA		<u>  Q2   Q5</u>	Q1 Q	1 Q2 Q	<u>, vi</u>	Q1 Q2	Q1
6	Pipe Connection Works and construction of Washout Chamber at Pit SKR	60 days	Tue 12/12/23	Mon 26/2/24	HK Working Day 292		0%	NA	NA							-
17	· Pipe Connection Works and construction of Washout Chamber at Pit D	60 days	Wed 23/11/22	Tue 7/2/23	HK Working Day 285		0%	NA	NA			-				
8	TBM Pipe Jacking (Pit B to Pit C)	157 days	Mon 8/11/21	Mon 23/5/22	HK Working Day		100%	Mon 8/11/21	Mon 23/5/22							
9	Establishment at Pit B with additional ground treatment for stopping water	112 days	Mon 8/11/21	Thu 24/3/22	HK Working Day 263	300	100%	Mon 8/11/21	Thu 24/3/22							
	ingress Jacking DN1600 Precast Concrete Sleeve Pipe From Pit B to Pit C (L=326m;	30 days	Thu 24/3/22	Wed 4/5/22	HK Working Day 299	301	100%	Thu 24/3/22	Wed 4/5/22							
	2.5m/day) Extracting TBM and remove TBM from Pit B	15 days	Thu 5/5/22	Mon 23/5/22	HK Working Day 300		100%	Thu 5/5/22	Mon 23/5/22							
2	TBM Pipe Jacking (Pit D to Pit C)	98 days	Mon 22/11/21	Wed 23/3/22	HK Working Day		100%	Mon 22/11/21	Wed 23/3/22							
3		47 days	Mon 22/11/21		HK Working Day 272	304	100%	Mon 22/11/21	Tue 18/1/22							
	Establishment at Pit D					504										
4	DN1920 Steel Jacked Pipe (Pit D - Pit C) (CH.A19+26 to CH.A22+80) in Soil (370m 2.5m/day)	; 51 days	Wed 19/1/22	Tue 22/3/22	HK Working Day 303		100%	Wed 19/1/22								
15 16	Pipe Jacking stopped on 23/3/2022 Form Pit D Crossing Wan Po Road and Lohas Park Road to TKO Landfill Stage I (Area	0 days 2046 days	Wed 23/3/22 Tue 7/11/17	Wed 23/3/22 Wed 14/6/23	HK Working Day Calendar Day	763	100% 55%	Wed 23/3/22 Tue 7/11/17			Intelligitation in a station	_		_		
17	A)	0 days	Fri 27/9/19	Fri 27/9/19	Calendar Day	309	100%	Fri 27/9/19	Fri 27/9/19					<ul><li>27/9</li></ul>	<del>,</del>	
	across MT Tunnel						100%		Tue 3/11/20				_			
18	Issue CE No. 80 - Site Clearance for Crossing Lohas Road Junction (Option 5)	0 days	Tue 3/11/20	Tue 3/11/20	Calendar Day											
09	Tender & Subletting	71 days	Fri 27/9/19	Fri 6/12/19	Calendar Day 307		100%	Fri 27/9/19	Fri 6/12/19							
10	Mobilization and Establishment of GI equipment	7 days	Mon 17/2/20	Mon 24/2/20	HK Working Day	311	100%	Mon 17/2/20	Mon 24/2/20						1	
11	Ground Investigation GI No. 3	33 days	Tue 25/2/20	Thu 2/4/20	HK Working Day 310		100%	Tue 25/2/20	Thu 2/4/20						-	
12	Issue CE No. 77 - Design of Water Main Structure and Modification Works to the	0 days	Wed 21/10/20	Wed 21/10/20	Calendar Day	313,314,315	100%	Wed 21/10/20	Wed 21/10/20							21/
13	Affected Geotechnical Features in Wan Po Road and Lohas Park Road Quotation Submission and Acceptant for CE No. 77	72 days	Wed 21/10/20	Thu 31/12/20	Calendar Day 312		100%	Wed 21/10/20	Thu 31/12/20							
14	CE No. 77 - Submission of Geotechnical Assessment Repot	42 days	Wed 21/10/20	Tue 1/12/20	Calendar Day 312		100%	Wed 21/10/20	Tue 1/12/20							
15	CE No. 77 - Design Submission	72 days	Wed 21/10/20	Thu 31/12/20	Calendar Day 312	316,317	100%	Wed 21/10/20	Thu 31/12/20	-		1		-		
			Fri 3/9/21	Fri 3/9/21	Calendar Day 315		100%	Fri 3/9/21	Fri 3/9/21							
516	CE No. 77 - Approval of Design Submission	0 days				210										
317	Issue CE No. 67 - Realignment of Water Main near Wan Po Road and Lohas Park Road	0 days	Wed 11/8/21	Wed 11/8/21	Calendar Day 267,315	319	100%	Wed 11/8/21							-	
818	Obtain MTR's approval on the alignment and construction method about MTR's tunnels	91 days	Mon 13/12/21	Mon 14/3/22	Calendar Day 320FF	348,347	100%	Mon 13/12/21	Mon 14/3/22	-						
19	Tender Process and Tender Award for CE No. 67	77 days	Wed 11/8/21	Tue 26/10/21	Calendar Day 317	320,363	100%	Wed 11/8/21	Tue 26/10/21							
320	TTA approval and Implement for CE No. 67	125 days	Wed 27/10/21	Mon 28/2/22	Calendar Day 319	348,318FF,347	100%	Wed 27/10/21	Mon 28/2/22							
. 21	Handshield Crossing Wan Po Road (CH.FA0+15 to CH.FA0+50)	1484 days	Tue 7/11/17	Thu 10/11/22	HK Working Day		48%	Tue 7/11/17	NA	-						
322	Issue CE No. 98 - Tree Felling at Lohas Park Road	0 days	Mon 18/1/21	Mon 18/1/21	Calendar Day	323	100%	Mon 18/1/21	Mon 18/1/21							
323	TPRP Submission and Approval for Tree at Slope Feature 12SW-A/FR102	121 days	Mon 18/1/21	Tue 18/5/21	Calendar Day 322	324	100%	Mon 18/1/21	Tue 18/5/21							
324	Tree Felling and Tree Works at Slope Feature 12SW-A/FR102	7 days	Mon 21/6/21	Mon 28/6/21	HK Working Day 323		100%	Mon 21/6/21	Mon 28/6/21	+			_			
325	Approval TTA for Loading and Unloading at R27	0 days	Wed 1/6/22	Wed 1/6/22	HK Working Day	326	0%	NA	NA							
							0%	NA	NA	-				E		
326	Strengthen Works at Feature 12SW-A/R27	80 days	Wed 1/6/22	Sat 3/9/22	HK Working Day 325											
327	Strengthen Works at Feature 12SW-A/R28	98 days	Tue 14/12/21	Thu 14/4/22	HK Working Day	329	100%	Tue 14/12/21								
328	Concrete coring and breaking opening on Retaining Wall (R27)	1 day	Tue 7/11/17	Tue 7/11/17	None	335	0%	NA	NA							
329	Concrete coring and breaking opening on Retaining Wall (R28)	30 days	Wed 27/4/22	Thu 2/6/22	HK Working Day 327	330	3%	Wed 27/4/22	NA							
330	Handshield Establishment	14 days	Sat 4/6/22	Mon 20/6/22	HK Working Day 329	331	0%	NA	NA							
331	Mild Steel Sleeve Pipe in Soil Mix (35m; 0.6m/day)	58 days	Tue 21/6/22	Sat 27/8/22	HK Working Day 330	332	0%	NA	NA							
332	Remove establishment	6 days	Mon 29/8/22	Sat 3/9/22	HK Working Day 331	333	0%	NA	NA							
333		6 days	Mon 5/9/22	Sat 10/9/22	HK Working Day 332	334	0%	NA	NA							
	Setup for Pipe Laying inside jacking					335	0%	NA	NA							
334	DN900 MS Pipe Laying inside jacking pipe (35m) (say 3 days per 8m)	15 days	Tue 13/9/22	Thu 29/9/22	HK Working Day 333											
335	Formwork & Setup for Grouting the gap between pipe and Sleeve	6 days	Fri 30/9/22	Sat 8/10/22	HK Working Day 334,328	336	0%	NA	NA							
336	Grouting Works (30 meter/day)	4 days	Mon 10/10/2	2 Thu 13/10/22	HK Working Day 335	337	0%	NA	NA							
337	Pipe laying Works From Pit D to CH.FA0+15	24 days	Fri 14/10/22	Thu 10/11/22	HK Working Day 336	339	0%	NA	NA							
			Miles		eties cale	E s	External Mileste	one 🐡	Critical Spl							
Marking	Programme No. 15 Task Summary Project Summary		ve Milestone ve Summary		ration-only Start-only Start-only		External Milesto Deadline	one 👳	Critical Spl Progress							



	Duration	Start	Finish	Task Calendar Predecessors	Project: Mainlaying in Ta Successors	%	Actual Start	Actual Finish		1							10034	
	Durauon	otat	1 milli	11000000010	ouccostla	Complete			2018 Q4 Q1 Q2 Q3	2019 2019	202		2021	03 01 01	$\frac{2}{102}$	2023	03 04 01	02 03 04
ertical Pipes, Exposed Pipes & Burned Pipes above MTR Tunnels (CH.FA0+50 to	173 days	Fri 11/11/22	Wed 14/6/23	HK Working Day		0%	NA	NA	Q4 Q1 Q2 Q3	Q4 Q1 Q2	Q3 Q4 Q		24 QI Q2	<u>Q3</u> Q4 Q1	<u> </u>		<u>Q3</u> Q4 Q1	Q2 Q3 Q4
H.FA0+85)	30 days	Fri 11/11/22	Thu 15/12/22	HK Working Day 337	340	0%	NA	NA										
Vertical pipes with Concrete Surround					341	0%	NA	NA										
Exposed pipes with concrete surround	30 days	Fri 16/12/22	Thu 26/1/23	HK Working Day 339	541													
Open cut pipe laying with concrete surround	30 days	Wed 10/5/23	Wed 14/6/23	HK Working Day 359,340		0%	NA	NA										
and Shield Pipe Jacking crossing Lohas Park Road	289 days	Thu 19/5/22	Tue 9/5/23	HK Working Day		0%	Thu 19/5/22	NA										
MTR's Consent for Construction of Pit E	0 days	Thu 19/5/22	Thu 19/5/22	HK Working Day	347	100%	Thu 19/5/22	Thu 19/5/22							19/5			
MTR's Consent for Construction of Pit F	0 days	Wed 1/6/22	Wed 1/6/22	HK Working Day	348	99%	Wed 1/6/22	NA							♦ 1/6			
MTR's Consent for Construction of Pit G	0 days	Mon 6/6/22	Mon 6/6/22	HK Working Day	349	99%	Mon 6/6/22	NA							♦ 6/6			
Loading & Unloading TTA for Pit G	0 days	Mon 13/6/22	Mon 13/6/22	HK Working Day	349	99%	Mon 13/6/22	NA						-	13/6			
Construction of Receiving Pit E	45 days	Mon 23/5/22	Fri 15/7/22	HK Working Day 318,320,343		0%	Mon 23/5/22	NA										
	45 days	Wed 1/6/22	Mon 25/7/22	HK Working Day 320,318,344	350	0%	NA	NA										
Construction of Jacking Pit F						0%	NA	NA							1			
Construction of Receiving Pit G	45 days	Mon 13/6/22		HK Working Day 345,346														
Establishment at Pit F	14 days	Tue 26/7/22	Wed 10/8/22	HK Working Day 348	351	0%	NA	NA										
Mild Steel Sleeve Pipe (Pit F - Pit E) in Soil Mix (40m; 0.4m/day)	100 days	Thu 11/8/22	Thu 8/12/22	HK Working Day 350	352	0%	NA	NA										
Mild Steel Sleeve Pipe (Pit F - Pit G) in Soil Mix (20m; 0.4m/day)	50 days	Fri 9/12/22	Sat 11/2/23	HK Working Day 351	353	0%	NA	NA										
Remove setup Including Thrust Wall at Pit F	6 days	Mon 13/2/23	Sat 18/2/23	HK Working Day 352	354	0%	NA	NA					a-			1		
Setup for Pipe Laying inside jacking Pit F	6 days	Mon 20/2/23	Sat 25/2/23	HK Working Day 353	355	0%	NA	NA								1		
DN900 MS Pipe Laying from Pit F to Pit E (40m) (say 3 days per 4m)	30 days	Mon 27/2/23	Sat 1/4/23	HK Working Day 354	356	0%	NA	NA										
Modify Setup for Pipe Laying inside jacking Pit F	6 days	Mon 3/4/23	Thu 13/4/23	HK Working Day 355	357	0%	NA	NA								1		
	15 days	Fri 14/4/23	Tue 2/5/23	HK Working Day 356	358	0%	NA	NA										
DN900 MS Pipe Laying from Pit F to Pit G (20m) (say 3 days per 4m)							NA	NA										
Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	Wed 3/5/23	Fri 5/5/23	HK Working Day 357	359	0%										1		
Grouting Works (30 meter/day)	3 days	Sat 6/5/23	Tue 9/5/23	HK Working Day 358	341,361	0%	NA	NA										
ertical Pipes, Exposed Pipes & Burned Pipes above MTR Tunnels (CH.FA1+50 to H.FA2+17)	1657 days	Tue 7/11/17	Wed 14/6/23	HK Working Day		59%	Tue 7/11/17	NA										
Vertical pipes with Concrete Surround	30 days	Wed 10/5/23	Wed 14/6/23	HK Working Day 359		0%	NA	NA										
Exposed pipes with concrete surround	60 days	Tue 15/2/22	Fri 29/4/22	HK Working Day 366		0%	NA	NA										
Site Clearance at Storage Yard	3 days	Mon 1/11/21	Wed 3/11/21	HK Working Day 319	366	100%	Mon 1/11/21	Wed 3/11/21						I.				
Plate Load Tests for Tower P2	34 days	Tue 9/11/21	Fri 17/12/21	HK Working Day		100%	Tue 9/11/21	Fri 17/12/21										
Construction footing of Tower P2 at CH.FA1+76	72 days	Sat 18/12/21	Fri 18/3/22	HK Working Day		100%	Sat 18/12/21	Fri 18/3/22										
Open cut pipe laying with concrete surround (CH.FA1+76 to CH.FA2+04)	82 days	Thu 4/11/21		HK Working Day 363	362	100%	Thu 4/11/21	Mon 14/2/22										
				7 HK Working Day		0%	NA	NA										
Open cut pipe laying from CH.FA2+04 to CH.F80+03 & Connect to DN900SV Chamber	42 days	Tue 7/11/17														1		
Cut Excavation, Pipe Laying and Reinstatement at TKO Landfill Stage 1 and TKO Waterfront Promenade				HK Working Day			Thu 23/8/18											
ue CE No. 05 - Feasibility Studey Realignment of pipline at Tseung Kwan O Stage Idfill	I O days	Thu 23/8/18	Thu 23/8/18	Calendar Day		100%	Thu 23/8/18	Thu 23/8/18	•	23/8								
ue CE No. 36 - Realignment of Watermain along the Bituminous Road adjacent to nas Park Road	0 days	Fri 22/5/20	Fri 22/5/20	Calendar Day		100%	Fri 22/5/20	Fri 22/5/20				<ul><li>22/5</li></ul>						
nas Park Koad ue CE No. 34 - Realignment of Watermain along TKO Stage I Landfill	0 days	Tue 5/11/19	Tue 5/11/19	Calendar Day		100%	Tue 5/11/19	Tue 5/11/19			<ul><li>5/1</li></ul>							
O Landfill Stage I Area A (CH.FB0+00 to CH.FB5+34)	712 days	Fri 15/5/20	Fri 7/10/22	HK Working Day	764	85%	Fri 15/5/20	NA				<b>~</b>						
CH.FB0+00 DN300 Washout Chamber	60 days	Tue 7/12/21	Mon 21/2/22	HK Working Day 374	and the second secon	0%	NA	NA										
CH.FB0+00 - CH.FB 1+66 OC with DN900 Valve Chamber with DN150 by-pass	372 days	Sat 5/9/20	Mon 6/12/21	HK Working Day	373	100%	Sat 5/9/20	Mon 6/12/21										
	379 days		Sat 21/8/21			100%	Fri 15/5/20	Sat 21/8/21										
CH.FB1+66 - CH.FB 5+39 OC					201		Mon 12/4/21											
CH.FB5+34 - CH.FC 0+00 OC	101 days			HK Working Day 394	381													
CH.FB 5+34 DN300 DN600 IT Chamber	30 days	Tue 21/6/22	Tue 26/7/22	HK Working Day 411	378	0%	NA	NA										
CH.FB 5+34 DN300 Washout Chamber	60 days	Wed 27/7/22	2 Fri 7/10/22	HK Working Day 377		0%	NA	NA										
O South Waterfront Promenade (CH.FC0+00 - CH.FC 4+87)	443 days	Wed 26/2/20	D Tue 24/8/21	HK Working Day		100%	Wed 26/2/20	Tue 24/8/21				Q						
	ayaan di baalaan ahaan ah				_		-		-12	1								
Task Summary	Inac	tive Milestone	E	Juration-only Start	t-only C	External Milest	one 👳	Critical S Progress	plit									

Name	, · · · · · · · · · · · · · · · · · · ·	Duration	Start	Finish	Task Calendar	Predecessors	Successors	%	Actual Start	Actual Finish		2010		2024	
ame								Complete			2018	2019 2019 3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q	2022 01 02 03 04 01 02	2024 2024 Q3   Q4   Q1   Q2   Q3   Q4	2025 Q4 Q1 Q
	CH.FC 0+00 - CH.FC 0+29 OC	38 days	Mon 12/7/21	Tue 24/8/21	HK Working Da	y 381		100%	Mon 12/7/21	Tue 24/8/21	Q4 Q1 Q2			x x x x x x x x x x x x x x x x x x x	toon to a thin a too to
	CH.FC 0+29 - CH.FC 0+65 OC	56 days	Sat 19/6/21	Tue 24/8/21	HK Working Da	y 382,376	380	100%	Sat 19/6/21	Tue 24/8/21					
			Wed 26/2/20	Mon 6/4/20	HK Working Da		383,381	100%	Wed 26/2/20	Mon 6/4/20					
	CH.FC 0+65 - CH.FC 0+95 OC	34 days													
	CH.FC 0+95 - CH.FC 1+27 OC	30 days	Mon 6/4/20	Fri 15/5/20	HK Working Da	y 382	384	100%	Mon 6/4/20	Fri 15/5/20					
	CH.FC 1+27 - CH.FC 1+59 OC	31 days	Fri 15/5/20	Fri 19/6/20	HK Working Da	y 383	385	100%	Fri 15/5/20	Fri 19/6/20					
	CH.FC 1+59 - CH.FC 1+91 OC	21 days	Fri 19/6/20	Wed 15/7/20	HK Working Da	y 384	386	100%	Fri 19/6/20	Wed 15/7/20					
	CH.FC 1+91 - CH.FC 2+23 OC	29 days	Wed 15/7/20	Mon 17/8/20	HK Working Da	y 385	387	100%	Wed 15/7/20	Mon 17/8/20					
		25 days	Mon 17/8/20	Mon 14/9/20	HK Working Da	v 386	388	100%	Mon 17/8/20	Mon 14/9/20					
	CH.FC 2+55 - CH.FC 2+87 OC	38 days	Mon 14/9/20	Fri 30/10/20	HK Working Da	y 387	389	100%	Mon 14/9/20						
	CH.FC 2+87 - CH.FC 3+19 OC	24 days	Fri 30/10/20	Thu 26/11/20	HK Working Da	y 388	390	100%	Fri 30/10/20	Thu 26/11/20					
	CH.FC 3+19 - CH.FC 3+51 OC	20 days	Thu 26/11/20	Fri 18/12/20	HK Working Da	y 389	391	100%	Thu 26/11/20	Fri 18/12/20					
	CH.FC 3+51 - CH.FC 3+83 OC	30 days	Fri 18/12/20	Mon 25/1/21	HK Working Da	y 390	392	100%	Fri 18/12/20	Mon 25/1/21		•			
		24 days	Mon 25/1/21	Wed 24/2/21	HK Working Da	y 391	393	100%	Mon 25/1/21	Wed 24/2/21					
							394		Wed 24/2/21						
		17 days		Mon 15/3/21											
	CH.FC 4+47 - CH.FC 4+89 C	21 days	Mon 15/3/21	Mon 12/4/21	HK Working Da	y 393	376	100%	Mon 15/3/21	Mon 12/4/21					
т	TKO South Waterfront Promenade (CH.FC4+87 - CH.FC 8+71)	458 days	Tue 24/3/20	Sat 9/10/21	HK Working Da	ау		100%	Tue 24/3/20	Sat 9/10/21					
	CH.FC 4+89 - CH.FC 5+19 OC with DN600 IT	72 days	Tue 24/3/20	Mon 22/6/20	HK Working Da	ıγ	397	100%	Tue 24/3/20	Mon 22/6/20					
	CH.FC 5+19 - CH.FC 5+51 OC	29 days	Mon 22/6/20	Mon 27/7/20	HK Working Da	y 396	398	100%	Mon 22/6/20	Mon 27/7/20					
		32 days	Mon 27/7/20	Tue 1/9/20	HK Working Da	v 397	399	100%	Mon 27/7/20	Tue 1/9/20					
							400		Tue 1/9/20	Mon 5/10/20					
	CH.FC 5+83 - CH.FC 6+15 OC	28 days	Tue 1/9/20	Mon 5/10/20											
	CH.FC 6+15 - CH.FC 6+47 OC	27 days	Mon 5/10/20	Thu 5/11/20	HK Working Da	iy 399	401	100%	Mon 5/10/20	Thu 5/11/20					
	CH.FC 6+47 - CH.FC 6+79 OC	25 days	Thu 5/11/20	Thu 3/12/20	HK Working Da	ay 400	402	100%	Thu 5/11/20	Thu 3/12/20					
	CH.FC 6+79 - CH.FC 7+11 OC	29 days	Thu 3/12/20	Fri 8/1/21	HK Working Da	ay 401	403	100%	Thu 3/12/20	Fri 8/1/21					
	CH.FC 7+11 - CH.FC 7+43 OC	19 days	Fri 8/1/21	Fri 29/1/21	HK Working Da	ay 402	404	100%	Fri 8/1/21	Fri 29/1/21					
	CH.FC 7+43 - CH.FC 7+75 OC	25 days	Sat 30/1/21	Wed 3/3/21	HK Working Da	av 403	405	100%	Sat 30/1/21	Wed 3/3/21					
							406		Wed 3/3/21						
	CH.FC 7+75 - CH.FC 8+07 OC	22 days	Wed 3/3/21	Sat 27/3/21	HK Working Da										
	CH.FC 8+07 - CH.FC 8+39 OC	40 days	Sat 27/3/21	Tue 18/5/21	HK Working Da	ay 405	407	100%	Sat 27/3/21	Tue 18/5/21					
	CH.FC 8+39 - CH.FC 8+43 OC	116 days	Mon 24/5/21	Sat 9/10/21	HK Working Da	ay 406		100%	Mon 24/5/21	Sat 9/10/21					
	CH.FC 8+43 - CH.FC 8+59 OC	39 days	Tue 24/8/21	Sat 9/10/21	HK Working D	ау	411	100%	Tue 24/8/21	Sat 9/10/21					
	TKO Landfill Stage I Area B (CH.FC 8+59 - CH.FC 13+26)	677 days	Tue 14/4/20	Tue 26/7/22	HK Working D	ау		89%	Tue 14/4/20	NA					
		30 days	Tue 21/6/22	Tue 26/7/22	HK Working D	av 411		0%	NA	NA					
	Construct DN150 DAV Chamber at CH.FC 9+83						400 277 410		Fri 15/10/21						
	CH.FC 8+59 - CH.FC 9+83 OC	200 days	Fri 15/10/21		2 HK Working D		423,377,410	80%							
	CH.FC 9+83 - CH.FC 13+26 OC with Monitoring Chamber	402 days	Tue 14/4/20	Thu 19/8/21	HK Working D	ау	411	100%	Tue 14/4/20	Thu 19/8/21					
W	Nater Mains Near Pung Loi Road (CH.FD0+00 - CH.A3+51)	1020 days	s Wed 17/6/20	Thu 23/11/2	3 HK Working D	ау		60%	Wed 17/6/20	NA					
	Issue CE No. 65 - Landscaping Survey near Po Yap and Pung Loi Road	0 days	Wed 17/6/20	Wed 17/6/20	0 Calendar Day			100%	Wed 17/6/20	Wed 17/6/20		<ul><li>17/6</li></ul>			
	Issue CE No. 87 - Affected Trees near Pung Loi Road, Po Yap Road and Wan Po Road	0 days	Tue 22/12/20	Tue 22/12/20	0 Calendar Day		416	100%	Tue 22/12/20	Tue 22/12/20		◆ 22/12			
		304 days			1 Calendar Day	415.614	417	100%	Tue 22/12/20	Thu 21/10/21					
	TPRP Submission and Approval								Fri 22/10/21						
	Site Possession and Tree Removal Works	21 days	Fri 22/10/21		1 Calendar Day	410	427								
	Issue CE No. 60 - Realignment of Water Main near Pung Loi Road	0 days	Thu 27/5/21	Thu 27/5/21	Calendar Day		419,421	100%	Thu 27/5/21	Thu 27/5/21		* 27/5			
	Tender Process and Tender Award for CE No. 60	169 days	Thu 27/5/21	Thu 11/11/2	1 Calendar Day	418	420	100%	Thu 27/5/21	Thu 11/11/21					
	Design & Method Statement Submission and Approval ; Preparation Works for CE No	o. 90 days	Sun 7/11/21	Fri 4/2/22	Calendar Day	419	424	100%	Sun 7/11/21	Fri 4/2/22					
	60 TTA preparation, SLG meetings and obtain RA	188 days	Thu 27/5/21	Tue 30/11/2	1 Calendar Day	418	427,429	100%	Thu 27/5/21	Tue 30/11/21					
	· · · · · · · · · · · · · · · · · · ·	,-													
	rearma No. 15 Task Summary		tive Milestone		Duration-only	Star		External Milest		Critical S	plit				
ושטי	gramme No. 15 Split Project Summary Project Summary	] Inac	tive Summary	1 1	Manual Summary Rollup	Fini	sh-only 🛄	Deadline	+	Progress					

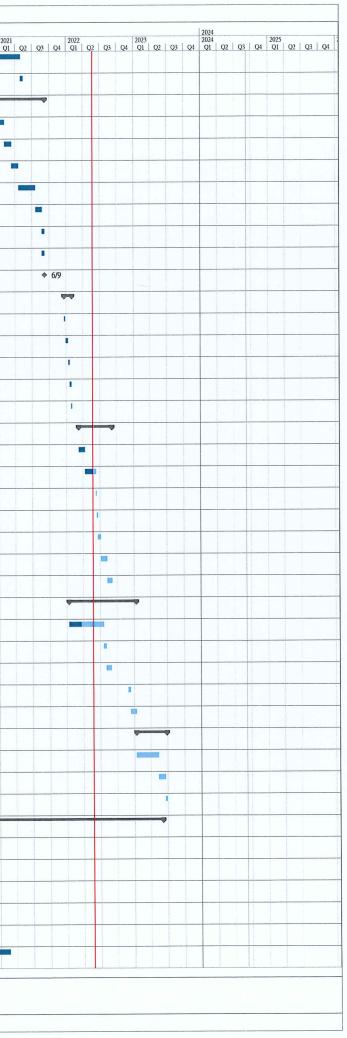
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ask N	ane	Duration	Start	Finish	Task Calendar Predecessors	Successors	Complete	Actual Start	Actual Finish	2018	2		2019 2019		2020	
		100 1	20/5/22	F.: 22/42/22	III Marking Day		0%	NA	NA	Q4 Q1	Q2   (	Q3 Q4	Q1 Q2	Q3 (	24 Q1	Q2 C
	Open Trench Crossing Pung Loi Avenue	156 days	Mon 20/6/22	Fri 23/12/22	HK Working Day		076	NA	NA							
	Obtain Access from EPD (TKO Landfill Stage I Area B)	14 days	Mon 20/6/22	Thu 7/7/22	HK Working Day 411	424	0%	NA	NA							
	CH,FD0+00 - CH.FD0+65 OC	100 days	Fri 8/7/22	Fri 4/11/22	HK Working Day 420,423	425	0%	NA	NA							
		42 dava	Sat 5 /11 /22	Fri 23/12/22	HK Working Day 424		0%	NA	NA							
	Construction DN900 SV Chamber at CH.FD0+25	42 days	Sat 5/11/22	FII 23/12/22	HK Working Day 424		078									
	Exposed Pipe From CH.FDD0+65 to FDSKR+00	337 days	Mon 3/1/22	Wed 22/2/23	HK Working Day		36%	Mon 3/1/22	NA							
	Excavation In Slope Toe; Construction of Flooding Protecxtion Wall with	216 days	Wed 12/1/22	Thu 6/10/22	HK Working Day 421,417	428	50%	Wed 12/1/22	NA							
	U-Channel, Length = 135m, @12m @18days	42 days	Fri 7/10/22	Thu 24/11/22	HK Working Day 427	430	0%	NA	NA	-						
	Exposed Pipe, Length = 173m, with concrete saddle Supports															
	3 nos. Trial Pit Exacavtion under existing Flyover	14 days	Mon 3/1/22	Tue 18/1/22	HK Working Day 421		100%	Mon 3/1/22	Tue 18/1/22							
	DN1200 Pipe Laying on Concrete Support with Concrete Hunching	65 days	Fri 25/11/22	Wed 15/2/23	HK Working Day 428	431,433	0%	NA	NA							
	Apply top coating of aliphatic polyurethane on site	6 days	Thu 16/2/23	Wed 22/2/23	HK Working Day 430	435	0%	NA	NA							
							01/	810	010			_			_	-
	Open Trench Connecting Trenchless and Exposed Pipe	230 days	Thu 16/2/23	Thu 23/11/23	HK Working Day		0%	NA	NA							
	CH.FSKR+00 to CH.FD3+15 OC	90 days	Thu 16/2/23	Wed 7/6/23	HK Working Day 430	435,434	0%	NA	NA							
	CH.FDD3+15 to CH.FDD3+51 OC with DN900 Valve Chamber and By-pass Pipe and	80 days	Thu 8/6/23	Mon 11/9/23	HK Working Day 433	435,764,765	0%	NA	NA			-				
	Connection to Pit WPR1	CO davia	Tue 12/0/22	Thu 23/11/23	HK Working Day 433,434,431		0%	NA	NA			_				
	Make Good Slope Toe and Landscape Work	60 days	Tue 12/9/23	Thu 23/11/25			078	NO.	114							
	Water Mains near Pung Loi Road and Po Yap Road (CH.FE0+00 - CH.A3+58)	758 days	Thu 20/8/20	Sat 11/3/23	HK Working Day	765	78%	Thu 20/8/20	NA							
	Trial Pit at Working Pit WPR1	36 days	Thu 20/8/20	Wed 30/9/20	HK Working Day		100%	Thu 20/8/20	Wed 30/9/20							
	T : Lot I We lite - Dir C1A	12 days	Sun 1/11/20	Sat 14/11/20	HK Working Day		100%	Sun 1/11/20	Sat 14/11/20	-						
	Trial Pit at Working Pit G1A														_	
	Issue CE No. 59 - Realignment of Water Main near Pung Loi Road and Po Yap Round Roundabout	0 days	Fri 13/11/20	Fri 13/11/20	Calendar Day	440,444	100%	Fri 13/11/20	Fri 13/11/20							
	Tender Process and Tender Award for CE No. 59	99 days	Fri 13/11/20	Fri 19/2/21	Calendar Day 439	441	100%	Fri 13/11/20	Fri 19/2/21							
	Design & Method Statement Submission and Approval ; Preparation Works for Pit J1.	A 93 days	Sat 20/2/21	Wed 16/6/21	HK Working Day 440	465,442,443	100%	Sat 20/2/21	Wed 16/6/21					4		
					-								-			
	Design & Method Statement Submission and Approval ; Preparation Works for Pit G1A	125 days	Thu 17/6/21	Sat 13/11/21	HK Working Day 441	452	100%	Thu 17/6/21	Sat 13/11/21							
	Design & Method Statement Submission and Approval ; Preparation Works for Pit	125 days	Thu 17/6/21	Sat 13/11/21	HK Working Day 441	450	100%	Thu 17/6/21	Sat 13/11/21							
	WPR1 TTA preparation, SLG meetings and obtain RA	293 days	Fri 13/11/20	Wed 1/9/21	Calendar Day 439	448	100%	Fri 13/11/20	Wed 1/9/21					-		
							509/	r-: 0/10/20	NA			_				
	Trenchless Crossing MTR Tunnels (Pit WPR1 to Pit G1A)	717 days	Fri 9/10/20	Sat 11/3/23	HK Working Day		50%	Fri 9/10/20	NA							
	Inspection Pit at Location of Pit G1A	19 days	Fri 9/10/20	Sun 1/11/20	HK Working Day		100%	Fri 9/10/20	Sun 1/11/20							
	Construction of Jacking Pit / Receiving Pit (TBM)	151 days	Wed 1/9/21	Sat 5/3/22	HK Working Day		100%	Wed 1/9/21	Sat 5/3/22							
	Obtain consent for vehicular access construction for WPR1	0 days	Wed 1/9/21	Wed 1/9/21	HK Working Day 444		100%	Wed 1/9/21	Wed 1/9/21							
	Obtain consent for venicular access construction for WFR1	U days														
	Tree Truning at WPR1	2 days	Wed 3/11/21	Thu 4/11/21	HK Working Day	450	100%	Wed 3/11/21	Thu 4/11/21							
	Jacking Pit WPR1 (Near Pung Loi Road)	91.2 days	Fri 5/11/21	Sat 5/3/22	HK Working Day 449,443	454	100%	Fri 5/11/21	Sat 5/3/22					4		
	Planter Removal and Access Formation to pit G1A	13 days	Wed 1/9/21	Wed 15/9/21	HK Working Day	452	100%	Wed 1/9/21	Wed 15/9/21			_				-
											_					
	Receiving Pit G1A (Near Po Yap Road)	91 days	Mon 27/9/21	Sat 15/1/22	HK Working Day 451,442	470,454	100%	Mon 27/9/21	Sat 15/1/22							
	TBM Pipe Jacking (WPR1 to J1A)	301 days	Mon 7/3/22	Sat 11/3/23	HK Working Day		14%	Mon 7/3/22	NA							
	TBM Establishment at Pit WPR1	38 days	Mon 7/3/22	Sat 23/4/22	HK Working Day 450,452	455	100%	Mon 7/3/22	Sat 23/4/22							
			Sun 24/4/22	Tue 6/0/22	HK Working Day 454	456	5%	Sun 24/4/22	NA							
	Jacking DN1600 Precast Concrete Sleeve Pipe (224m; 2.0m/day)	112 days	Sun 24/4/22	Tue 6/9/22		450	578	Juli 24/4/22								
	Remove setup including Thrust Wall at Pit WPR1	14 days	Wed 7/9/22	Fri 23/9/22	HK Working Day 455	457	0%	NA	NA							
	Setup for Pipe Laying inside Jacking Pit WPR1	6 days	Sat 24/9/22	Fri 30/9/22	HK Working Day 456	458	0%	NA	NA							
		84 days	Mon 3/10/22	Thu 12/1/23	HK Working Day 457	459	0%	NA	NA							
	DN1200 MS Pipe Laying inside Jacking Pipe (224m) (3 days per 8m)															
	Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	Fri 13/1/23	Mon 16/1/23	HK Working Day 458	460	0%	NA	NA							
	Grouting Works (30m per day)	8 days	Tue 17/1/23	Sat 28/1/23	HK Working Day 459	461	0%	NA	NA							
	Pipe Connection inside Working Pit WPR1	18 days	Mon 30/1/23	Sat 18/2/23	HK Working Day 460	462	0%	NA	NA							
	Remove ELS including extracting sheet piles at Pit WPR1; Reinstatement	18 days	Mon 20/2/23	8 Sat 11/3/23	HK Working Day 461		0%	NA	NA							
	Trenchless Works (Pit G1A or Pit J1A)	320 days	Mon 3/5/21	Tue 31/5/22	HK Working Day		97%	Mon 3/5/21	NA							
ing l	Programme No. 15		tive Milestone		uration-only Start-only		External Miles		Critical Sp	·lit						
	Project Summary	Inac	tive Summary	N	Ianual Summary Rollup Finish-or	ly 🗍	Deadline	+	Progress							



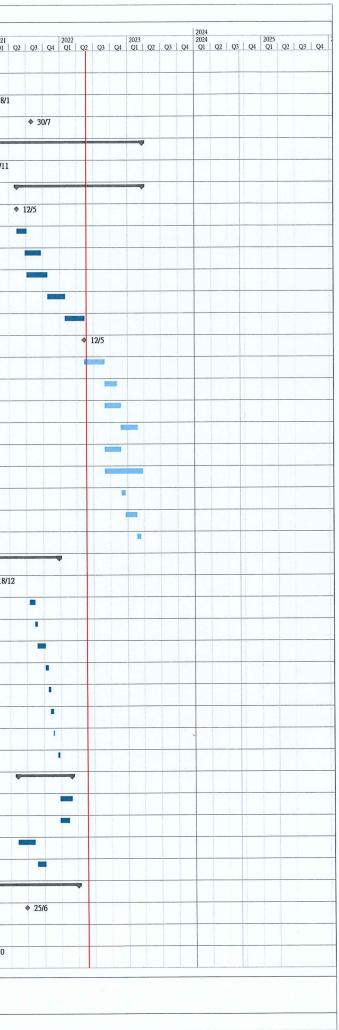
2	Duration	Start	Finish	Task Calendar Predecessors	Successors	% Complete	Actual Start	Actual Finish	2018 4 Q1 Q2 Q3 C	2019 2019	2020	2021	2022		2023	2024	2025
Construction of Jacking Pit J1A (Hand Shield)	32 days	Mon 3/5/21	Wed 9/6/21	HK Working Day	BALL TRACK	100%	Mon 3/5/21	Wed 9/6/21	4 Q1 Q2 Q3 C	<u>24 Q1 Q2 Q3 (</u>	24 Q1 Q2 Q3	Q4 Q1 Q2	Q3 Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q3 Q	Q1 Q2 Q3 0	<u>Q4 Q1</u>
Construction of Jacking Pit J1A	32 days	Mon 3/5/21	Wed 9/6/21	HK Working Day 441	467	100%	Mon 3/5/21	Wed 9/6/21	_								
Handshield Pipe Jacking (Pit G1A to Pit J1A)	288 days	Thu 10/6/21	Tue 31/5/22	HK Working Day		96%	Thu 10/6/21	NA									
	16 days	Thu 10/6/21	Tue 29/6/21	HK Working Day 465	468	100%	Thu 10/6/21	Tue 29/6/21									
Establishment at Pit J1A	101 days	Wed 30/6/21	Fri 29/10/21	HK Working Day 467	469		Wed 30/6/21										-
Hand shield pipe jacking (I.D. 1600 segment pipe), 0.65m/day		Sat 30/10/21	Fri 5/11/21	HK Working Day 468	470		Sat 30/10/21						1				
Remove Setup at Pit J1A	6 days				471		Tue 8/3/22	Wed 23/3/22									
Setup for Pipe Laying inside jacking Pit J1A	14 days	Tue 8/3/22	Wed 23/3/22				Thu 24/3/22										
DN1200 MS Pipe Laying inside jacking pipe (~70m) (3 days per 4m)	42 days	Thu 24/3/22	Wed 18/5/22		472												_
Formwork & Setup for Grouting the gap between pipe and Sleeve	8 days	Thu 19/5/22	Fri 27/5/22	HK Working Day 471	473		Thu 19/5/22										
Grouting Works (30 meter/day)	3 days	Sat 28/5/22	Tue 31/5/22	HK Working Day 472	475		NA	NA									
Open Trench between Pit K and J1A	138 days	Tue 26/4/22	Tue 11/10/22	HK Working Day		7%	Tue 26/4/22	NA									
Pipe Laying From Pit K to Pit J1A (OC) (48m)	62 days	Tue 26/4/22	Sat 13/8/22	HK Working Day 473	476	13%	Tue 26/4/22	NA									
Construction of Thrust Block from Pit K to Pit J1A	15 days	Mon 15/8/22	Wed 31/8/22	HK Working Day 475	477	0%	NA	NA									
Backfill Trench and Remove ELS	18 days	Thu 1/9/22	Thu 22/9/22	HK Working Day 476	478	0%	NA	NA									
Reinstatement of Plant and Shrubs in Roundabout	14 days	Fri 23/9/22	Tue 11/10/22	HK Working Day 477		0%	NA	NA									
renchless Work from Po Yap Road Roundabout to KMB Depot (Pit K to Pit L) (Pit O to	o 822 days	Fri 28/2/20	Mon 5/12/22	HK Working Day	765	55%	Fri 28/2/20	NA			-		•				
t P) Issue CE No. 50 - Realignment of Watermain at the Junction of Wan Po Road and Pc	o O days	Thu 11/6/20	Thu 11/6/20	Calendar Day		100%	Thu 11/6/20	Thu 11/6/20			11	/6					
Yap Road and the Junction of Po Hong Road and Po Shun Road. Construction of Jacking Pit K & Pit P	263 days	Fri 28/2/20	Fri 15/1/21	HK Working Day		100%	Fri 28/2/20	Fri 15/1/21									
Inspection Pit Excavation at Pit K	16 days	Fri 28/2/20	Tue 17/3/20	HK Working Day		100%	Fri 28/2/20	Tue 17/3/20									
Inspection Pit Excavation at Pit P	3 days	Mon 29/6/20	Thu 2/7/20	HK Working Day		100%	Mon 29/6/20	Thu 2/7/20									
Forming temporary Vehicle Access for Pit P	10 days	Thu 16/7/20	Mon 27/7/20	HK Working Day	486	100%	Thu 16/7/20	Mon 27/7/20									
	15 days	Sat 14/11/20		HK Working Day	489	100%	Sat 14/11/20	Tue 1/12/20									
Jacking Pit K		Mon 3/8/20	Fri 15/1/21	HK Working Day 484				Fri 15/1/21									
Jacking Pit P + additional Grouting	137 days		Tue 18/5/21				Fri 11/12/20					ųų					
Hand Shield Jacking (Pit K to Pit L)	125 days	Fri 11/12/20					Fri 11/12/20					♦ 11/12					
MTR'S Consent Obtained	0 days	Fri 11/12/20	Fri 11/12/20		100		Mon 14/12/20										_
Establishment at Pit K	59 days		) Fri 26/2/21	HK Working Day 485,531	490												
Segment @400mm Sleeve Pipe (Pit L to Pit K)(~ 56m) in Soil (0.8m/day)	59 days	Mon 1/3/21			491		Mon 1/3/21										
Remove setup at Pit K	4 days	Thu 13/5/21	Tue 18/5/21	HK Working Day 490	499		Thu 13/5/21					•					
TBM Pipe Jacking (Pit O to Pit P)	169 days	Wed 19/1/22	Tue 16/8/22	HK Working Day			Wed 19/1/22										
WSD accepted to change Sub-Contractor from Wellcon to VTEC	0 days	Wed 16/2/22	Wed 16/2/22	HK Working Day 555		100%	Wed 16/2/22	Wed 16/2/22						16/2			
TBM Establishment at Pit O	79 days	Wed 19/1/22	Thu 28/4/22	HK Working Day	495	100%	Wed 19/1/22	Thu 28/4/22									
Jacking DN1600 Precast Concrete Sleeve Pipe (200m; 3.0m/day)	67 days	Fri 29/4/22	Wed 20/7/22	2 HK Working Day 494	496	8%	Fri 29/4/22	NA									
Grouting around sleeve pipes	9 days	Thu 21/7/22	Sat 30/7/22	HK Working Day 495	508,497	0%	NA	NA									
Remove Pit setup at Pit P	14 days	Mon 1/8/22	Tue 16/8/22	HK Working Day 496	508	0%	NA	NA									
DN1200 Pipelaying (Pit K to Pit L)	116 days	Tue 14/12/21	Wed 11/5/2	2 HK Working Day		22%	Tue 14/12/21	NA					-				
Setup for Pipe Laying inside jacking Pit K	6 days	Tue 14/12/21	Fri 7/1/22	HK Working Day 491,545	500	100%	Tue 14/12/21	Fri 7/1/22									
DN1200 MS Pipe Laying inside jacking pipe (53m) (3 days per 4m) (Only Internal	15 days	Sat 8/1/22	Tue 25/1/22	HK Working Day 499	501	100%	Sat 8/1/22	Tue 25/1/22									
Coating) Formwork & Setup for Grouting the gap between pipe and Sleeve	2 days	Wed 26/1/22	Sat 29/1/22	HK Working Day 500	502	100%	Wed 26/1/22	Sat 29/1/22					1				
Grouting Works (30 meter/day)	4 days	Wed 9/2/22			503,505	100%	Wed 9/2/22	Sat 12/2/22					1				
	9 days	Thu 10/2/22		HK Working Day 502	504	10%	Thu 10/2/22	NA									
Pipe Connection at Pit L	24 days		Sat 19/3/22			0%	NA	NA									
Remove ELS at Pit L					506	0%	NA	NA									
Remove ELS at Pit K	24 days	WON 14/2/22	Sat 12/3/22	The morning bay 502	500	570											
ogramme No. 15 Task Summary		tive Milestone			rt-only E	External Milesto		Critical Spli									
24 May 2022 Split Project Summary Milestone Inactive Task		tive Summary 👘		Manual Summary Rollup Fir Manual Summary Ex	ish-only 🔹 ternal Tasks	Deadline	+	Progress Manual Pro	TEN								

		<b>D</b>	C	P: 11	Tel Celester Det	0	I'seung Kwan O	Actual Care	Actual Eint-L													
am	2	Duration	Start	Finish	Task Calendar Predecessors	Successors	% Complete	Actual Start	Actual Finish	2018	2019		2020		2021	2022		2023		2024	202	25
	Construction of DN900 Valve Chamber and DN150 By-pass Pipe & Valves Near Pit K	45 days	Mon 14/3/22	Wed 11/5/22	HK Working Day 505	515	0%	NA	NA	Q4 Q1 Q2 Q3	Q4 Q1	Q2 Q3	Q4 Q1 Q	2 Q3 Q4	Q1 Q2 Q	03 Q4 Q1	Q2 Q3 Q4	4 Q1 (	Q2 Q3 Q4	Q1 Q2 Q	3 Q4 Q1	1 Q2
			Wed 17/8/22	Mon 5/12/22	HK Working Day		0%	NA	NA								Şenad	•				
		6 days	Wed 17/8/22	Tue 23/8/22	HK Working Day 496,497	509	0%	NA	NA								1	_				
					HK Working Day 508	510	0%	NA	NA													
	Coating)					511	0%	NA	NA													-
	Formwork & Setup for Grouting the gap between pipe and Sleeve				HK Working Day 509																	-
	Grouting Works (30 meter/day)	6 days	Mon 21/11/22		HK Working Day 510	577,512,610	0%	NA	NA													
	Pipe Connection at Pit O	6 days	Mon 28/11/22	Sat 3/12/22	HK Working Day 511	513	0%	NA	NA													
	Remove ELS at Pit O	1 day	Mon 5/12/22	Mon 5/12/22	HK Working Day 512		0%	NA	NA									1				
	Reinstatement of Po Yap Road Roundabout	66 days	Thu 12/5/22	Fri 29/7/22	HK Working Day		0%	NA	NA								<b>6</b> -0					
	Reinstatement Works	60 days	Thu 12/5/22	Fri 22/7/22	HK Working Day 506	516	0%	NA	NA													
	Handover Inspection with LCSD	6 days	Sat 23/7/22	Fri 29/7/22	HK Working Day 515		0%	NA	NA								I					
Tr	enchless Work from Po Yap Road Roundabout (Hong Kong Velodrome)	1251 days	Tue 2/4/19	Mon 26/6/23	HK Working Day	765	80%	Tue 2/4/19	NA													
	Issue CE No. 14 - Manhole inspection of existing drain/Outfall near Hong Kong	0 days	Tue 2/4/19	Tue 2/4/19	Calendar Day	521,522	100%	Tue 2/4/19	Tue 2/4/19		4	> 2/4										
	Velodrome and TKO stage 1 Landfill and CCTV survey of existing Drain at Cycle Track Issue CE No. 28 - Realignment of Water Mains along Po Yap Road and Po Hong Road	0 days	Mon 13/1/20	Mon 13/1/20	Calendar Day	521,522	100%	Mon 13/1/20	Mon 13/1/20				<ul><li>13/1</li></ul>									
	Issue CE No. 28A - Affected Trees along Cycle Track next to Hong Kong Velodrome and	d O days	Tue 30/6/20	Tue 30/6/20	Calendar Day		100%	Tue 30/6/20	Tue 30/6/20					<ul><li>30/6</li></ul>								
	Tseung Kwan O Sport Ground Tender and Subletting for CE No. 28	99 days	Mon 18/11/19	Mon 24/2/20	Calendar Day 519,518		100%	Mon 18/11/19	9 Mon 24/2/20													
	TTA preparation, SLG meetings, obtain RA and TPRP Approval for Temporary	128 days	Mon 13/1/20	Tue 19/5/20	Calendar Day 519,518	523	100%	Mon 13/1/20	Tue 19/5/20					1								
	Vehicular Access at HK Velodrome	14 days	Wed 20/5/20	Tue 2/6/20	Calendar Day 522	524	100%	Wed 20/5/20	Tue 2/6/20													_
	Coordination with LCSD and Notification to District Councilors		Mon 1/6/20	Mon 8/6/20	HK Working Day 523	525		Mon 1/6/20	Mon 8/6/20					1								
	Form Temporary Vehicle Access at TKO Sport Ground	5 days				526		Tue 9/6/20	Fri 19/6/20					1								-
	Tree Transplanting Working & Tree Removal Works at TKO Sport Ground (CE No. 28)		Tue 9/6/20	Fri 19/6/20	HK Working Day 524																	
	Tree Pruning Working for driving Sheetpile at Pit M, Pit N & Pit O	3 days	Sat 20/6/20	Tue 23/6/20	HK Working Day 525	527		Sat 20/6/20	Tue 23/6/20													_
	Mobilization of Sheet-piles and Driving Machines	7 days	Wed 24/6/20	Fri 3/7/20	HK Working Day 526	534,532		Wed 24/6/20							1							
	Works suspended by closure of vehicular access at Velodrome	8 days	Mon 10/5/21	Mon 17/5/21	Calendar Day				Mon 17/5/21											_		
	Trenchless Works (Pit L to Pit O)	882 days	Sat 4/7/20	Mon 26/6/23	HK Working Day		77%	Sat 4/7/20	NA													_
	Construction of Jacking Pit & Receiving Pit	175 days	Sat 4/7/20	Sat 30/1/21	HK Working Day		100%	Sat 4/7/20	Sat 30/1/21													1
	Receiving Pit L	81 days	Sat 24/10/20	Sat 30/1/21	HK Working Day 532	489	100%	Sat 24/10/20	Sat 30/1/21													
	Jacking Pit M	89 days	Sat 11/7/20	Sat 24/10/20	HK Working Day 527	531,547	100%	Sat 11/7/20	Sat 24/10/20													
	Receiving Pit N	66 days	Thu 30/7/20	Fri 16/10/20	HK Working Day		100%	Thu 30/7/20	Fri 16/10/20		-							and the second se				
	Jacking / Receiving Pit O + additional Grouting	124 days	Sat 4/7/20	Sat 28/11/20	HK Working Day 527	551	100%	Sat 4/7/20	Sat 28/11/20													
	TBM Pipe Jacking (Pit M to Pit L)	273 days	Thu 13/5/21	Mon 11/4/22	HK Working Day		100%	Thu 13/5/21	Mon 11/4/22						-		'					
	Re-establishment at Pit M for changing jacking direction	64 days	Thu 13/5/21	Thu 29/7/21	HK Working Day 549	537	100%	Thu 13/5/21	Thu 29/7/21													
	DN1600 Precast Concrete Sleeve Pipe (Pit M - Pit L) approx. 10m	12 days	Fri 30/7/21	Thu 12/8/21	HK Working Day 536	538,539	100%	Fri 30/7/21	Thu 12/8/21						1							
	TBM suspended, review for Rescue pit construction	5 days	Fri 13/8/21	Wed 18/8/21	HK Working Day 537	540	100%	Fri 13/8/21	Wed 18/8/21							1						
	Review and study the alternative construction method (Open Cut in normal	26 days	Fri 13/8/21	Sun 12/9/21	HK Working Day 537	544	100%	Fri 13/8/21	Sun 12/9/21													
	condition) Rescue Pit Construction & Retrieval of TBM	39 days	Thu 19/8/21	Tue 5/10/21	HK Working Day 538	541	100%	Thu 19/8/21	Tue 5/10/21													-
	Set up working platform and lifting grantry at Rescue Pit for Handshield; Formin			Sat 6/11/21	HK Working Day 540	542			1 Sat 6/11/21												+	
	Entrance	22 days	Mon 8/11/21		HK Working Day 541	543			Thu 2/12/21													
	Hand dig tunnel between Pit M and Rescue Pit		Fri 3/12/21		HK Working Day 542	560			Sat 18/12/21							-				-		
	Remove setup & removal of Thrust wall	14 days			na sa	545			Mon 6/9/21							6/9						
	WSD accepted Alternative Scheme from Pit O to Pit L	0 days	Mon 6/9/21	Mon 6/9/21	HK Working Day 539																	
	Water mains by Open Cut Method (West Portion - 143m)	171 days	Mon 13/9/21	12 K	HK Working Day 544	560,499			. Mon 11/4/22													
	TBM Pipe Jacking (Pit M to Pit N)	159 days	Mon 26/10/2	0 Wed 12/5/21	HK Working Day				20 Wed 12/5/21					-								
	Establishment at Pit M	29 days	Mon 26/10/20	D Sat 28/11/20	HK Working Day 532	548	100%	Mon 26/10/2	0 Sat 28/11/20													

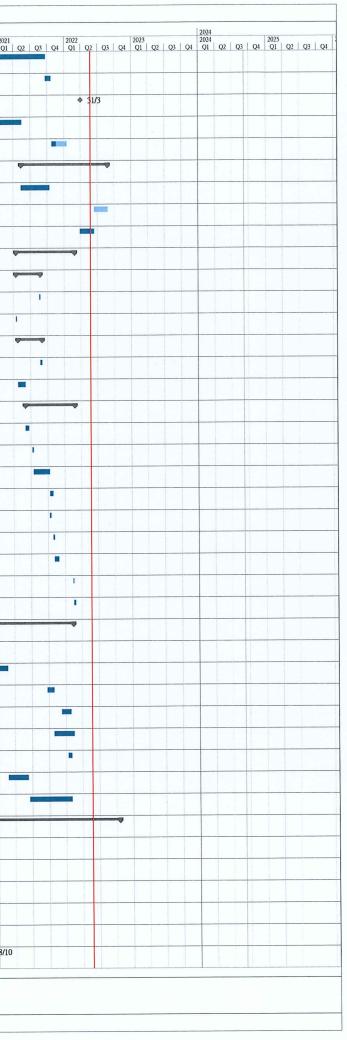
Fact M		Duration	Start	Finish	Task Calendar Predecessors	Successors	%	Actual Start	Actual Finish					
Fask Narr	ame	Duration	Juar	- Milleri	I Internet		Complete		-	2018		2019 2019	2020	
	DN1600 Precast Concrete Sleeve Pipe (Pit M - Pit N) (CH.GA1+86 to CH.GA3+20	) 119 days	Mon 30/11/20	Wed 28/4/21	HK Working Day 547	549	100%	Mon 30/11/20		24 Q1 Q2	Q3 Q4	Q1 Q2 C	<u>3 Q4 Q1</u>	1 Q2 Q3
	in Soil (134m; 3.5m/day)		Thu 29/4/21	Wed 12/5/21	HK Working Day 548	536	100%	Thu 29/4/21	Wed 12/5/21					
	Grouting around sleeve pipe	11 days	Thu 29/4/21	weu 12/5/21		550								
	TBM Pipe Jacking (Pit O to Pit N)	226 days	Mon 30/11/20	Mon 6/9/21	HK Working Day		100%	Mon 30/11/20	Mon 6/9/21					
	Establishment at Pit O	51 days	Mon 30/11/20	Sat 30/1/21	HK Working Day 534	552	100%	Mon 30/11/20	Sat 30/1/21					
	DN1600 Precast Concrete Sleeve Pipe (Pit O - Pit N) Suspended due to water	31 days	Mon 1/2/21	Thu 11/3/21	HK Working Day 551	553	100%	Mon 1/2/21	Thu 11/3/21					
	ingress and obstruction at 8m away from Pit O Retraction of Sleeve pipe	28 days	Fri 12/3/21	Sat 17/4/21	HK Working Day 552	554	100%	Fri 12/3/21	Sat 17/4/21					
	Retraction of Sleeve pipe													
	Rescue Pit for TBM	74 days	Mon 19/4/21	Sat 17/7/21	HK Working Day 553	555	100%	Mon 19/4/21	Sat 1////21					
	Remove TBM from Rescue Pit; Detail Inspection ad Trial operation on ground	30 days	Mon 19/7/21	Sat 21/8/21	HK Working Day 554	556,557,493	100%	Mon 19/7/21	Sat 21/8/21					
	Dismantle and remove set up at Pit O	12 days	Mon 23/8/21	Sat 4/9/21	HK Working Day 555		100%	Mon 23/8/21	Sat 4/9/21					
	Review and study the alternative construction method (Open Cut in wet	12 days	Mon 23/8/21	Sat 4/9/21	HK Working Day 555	558	100%	Mon 23/8/21	Sat 4/9/21					
	condition)						100%		L					
	WSD accepted Alternative Scheme from Pit O to Pit L	0 days	Mon 6/9/21	Mon 6/9/21	HK Working Day 557	574	100%	Mon 6/9/21	WON 6/9/21					
	DN1200 Pipelaying in side Hang Dig Tunnel (Pit M to Pit L)	33 days	Mon 20/12/21	Sat 29/1/22	HK Working Day		100%	Mon 20/12/21	Sat 29/1/22					
	setup for pipe laying inside hand dig tunnel	5 days	Mon 20/12/21	Fri 24/12/21	HK Working Day 543,545	561	100%	Mon 20/12/21	Fri 24/12/21					
	DN1200 MS Pipe Laying inside Hand dig tunnel	10 days	Tue 28/12/21	Sat 8/1/22	HK Working Day 560	562	100%	Tue 28/12/21	Sat 8/1/22					
								Wed 12/1/22						
	Formwork & Setup for Grouting the gap between pipe and Sleeve	5 days	Wed 12/1/22	Mon 17/1/22	HK Working Day 561	563	100%		1					
	Grouting Works (30 meter/day)	8 days	Wed 19/1/22	Thu 27/1/22	HK Working Day 562	564	100%	Wed 19/1/22	Thu 27/1/22					
	Remove Pit setup	2 days	Fri 28/1/22	Sat 29/1/22	HK Working Day 563	570,566,580	100%	Fri 28/1/22	Sat 29/1/22					
	DN1200 Pipelaying in Sleeve pipe (Pit M to Pit N)	147 days	Tue 8/3/22	Sat 3/9/22	HK Working Day	NAME OF GROOM	42%	Tue 8/3/22	NA					
						567	100%	Tue 8/3/22	Sat 9/4/22					_
	Setup for Pipe Laying inside jacking Pit N	28 days	Tue 8/3/22	Sat 9/4/22	HK Working Day 564	567	100%		1			-		
	DN1200 MS Pipe Laying inside jacking pipe (134m) (3 days per 8m)(Only Intern	al 45 days	Mon 11/4/22	Wed 8/6/22	HK Working Day 566	568	75%	Mon 11/4/22	NA					
	Coating) Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	Thu 9/6/22	Sat 11/6/22	HK Working Day 567	569	0%	NA	NA					
	Grouting Works (30 meter/day)	5 days	Mon 13/6/22	Fri 17/6/22	HK Working Day 568	570,575	0%	NA	NA			_		
	Pipe Connection Inside Pit M	12 days	Sat 18/6/22	Sat 2/7/22	HK Working Day 569,564	571	0%	NA	NA					
	Construction of IT Chamber at Pit M	30 days	Mon 4/7/22	Sat 6/8/22	HK Working Day 570	572	0%	NA	NA					
	Remove ELS including extracting sheet piles at Pit M & Pit N	24 days	Mon 8/8/22	Sat 3/9/22	HK Working Day 571	580	0%	NA	NA					
	DN1200 Pipelaying (Pit O to Pit N)	296 days	Wed 12/1/22	Wed 11/1/23	HK Working Day		24%	Wed 12/1/22	NA					
						575	36%	Wed 12/1/22	NA					
	Water mains by Open Cut Method (West Portion - 177m)	150 days	Wed 12/1/22	Mon 18/7/22	HK Working Day 558	575	30%	wed 12/1/22	NA					
	Pipe Connection Inside Pit N	12 days	Tue 19/7/22	Mon 1/8/22	HK Working Day 569,574	576	0%	NA	NA					
	Remove ELS including extracting sheet piles at Pit N	24 days	Tue 2/8/22	Mon 29/8/22	HK Working Day 575	580	0%	NA	NA					
	Pipe Connection in side Pit O	12 days	Mon 28/11/22	Sat 10/12/22	HK Working Day 511	578	0%	NA	NA					
	Remove ELS including extracting sheet piles at Pit O	24 days	Mon 12/12/22	Wed 11/1/23	HK Working Day 577	580	0%	NA	NA					
	Reinstallation of Cycle track Pavement and Planter	132 days	Thu 12/1/23	Mon 26/6/23	HK Working Day		0%	NA	NA					
	Reinstalment Works	96 days	Thu 12/1/23	Fri 12/5/23	HK Working Day 576,578,572,564	581	0%	NA	NA					
-	Compensation Tree Planting	30 days	Sat 13/5/23	Sat 17/6/23	HK Working Day 580	582	0%	NA	NA					
							0%	NA	NA					
	Handover Inspection with LCSD and HyD	6 days	Mon 19/6/23	Mon 26/6/23	HK Working Day 581		0%	NA	NA					
	Water Mains from KMB Depot to TKO Fresh Water Preliminary Service Reservoir	1649 days	Tue 7/11/17	Mon 5/6/23	HK Working Day		80%	Tue 7/11/17	NA	0				
	Issue CE No. 04 - Feasibility Study of Realignment of Pipeline between Po Hung Roa	ad O days	Thu 23/8/18	Thu 23/8/18	Calendar Day		100%	Thu 23/8/18	Thu 23/8/18		23/8			
	and TKO Freshwater PSR Issue CE No. 51 - Realignment of Water Main in Tsui Lam Section	0 days	Mon 3/8/20	Mon 3/8/20	Calendar Day	590,587,736,588,589	100%	Mon 3/8/20	Mon 3/8/20					•
														4
	Issue WSD Letter Ref.: (4) in WSD/M/7503/13/WSD/16/M15/300/51 for additional works to CE No. 51	0 days	Thu 3/9/20	Thu 3/9/20	Calendar Day		100%	Thu 3/9/20	Thu 3/9/20					
1	Tendering Process, Tender Award for CE No. 51 (Batch No, 1)	82 days	Mon 3/8/20	Fri 23/10/20	Calendar Day 585		100%	Mon 3/8/20	Fri 23/10/20					
-	Tendering Process, Tender Award for CE No. 51 (Batch No. 2)	102 days	Mon 3/8/20	Thu 12/11/20	Calendar Day 585		100%	Mon 3/8/20	Thu 12/11/20					
_		200 days	Mon 3/8/20	Thu 18/2/21	Calendar Day 585	735,737	100%	Mon 3/8/20	Thu 18/2/21				-	
	Tendering Process, Tender Award for CE No. 51 (Batch No. 3))	200 days	1011 37 67 20	110/2/21	calcinum buy 505		10070							
	Task Summary	Inacti	ve Milestone	D	uration-only Start-only	E E	ternal Milesto	one 👳	Critical Spli	t i				
	rogramme No. 15 Task Summary : 24 May 2022 Split Project Summary	1 Inacti	ve Summary	М	anual Summary Rollup Finish-only	<b>]</b> D	eadline		Progress					
	Milestone Inactive Task	Manu	al Task 📃	M	anual Summary External Tasks	s C	ritical	Second Second	Manual Pro	gréss -		_		



		Duri	Chert	Einich	Task Calandar D-1	Sussansor	C.	Actual Start	Actual Finish						-		
k Nan	18	Duration	Start	Finish	Task Calendar Predecessors	Successors	Complete	Actual Start	-	2018	3		2019		2	020	1
	TTA preparation, SLG meetings, obtain RA and implement Advanced Works	100 days	Mon 3/8/20	Tue 10/11/20	Calendar Day 585		100%	Mon 3/8/20	Tue 10/11/20	Q4 Q1	Q2	Q3 Q4	Q1	Q2 Q	23 Q4 9	21 Q2	Q3
		1 day	Mon 21/12/20	Mon 21/12/20	HK Working Day		100%	Mon 21/12/20	Mon 21/12/20								
									Fri 8/1/21	_					_		
	Issue EWN No 269 - Unexpected High Rockhead Level Encountered at Working Pit R	0 days	Fri 8/1/21	Fri 8/1/21	HK Working Day		100%										
	Receiving of Drawing No. SK40134-517 for Changing Construction Method and Alignment from Pit P to Pit T	0 days	Fri 30/7/21	Fri 30/7/21	HK Working Day		100%	Fri 30/7/21	Fri 30/7/21								
		688 days	Tue 24/11/20	Wed 22/3/23	HK Working Day	765	54%	Tue 24/11/20	NA								
	Issue EWN No. 241 for Tree Issue for Changing Trenchless (Pit S to Pit T) to Open	0 days	Tue 24/11/20	Tue 24/11/20	HK Working Day	626	100%	Tue 24/11/20	Tue 24/11/20								
	Cut at Control Site (CS-108)	554 days	Wed 12/5/21	Wed 22/3/23	HK Working Day		39%	Wed 12/5/21	NA						_		
		0 days	Wed 12/5/21	Wed 12/5/21	HK Working Day	598	100%	Wed 12/5/21	Wed 12/5/21						-		
															-		
	Mobilization and Carry out Horizontal grouting	43 days	Wed 12/5/21	Sat 3/7/21	HK Working Day 597	600	100%	Wed 12/5/21	Sat 3/7/21								
	Receiving Pit Y	74 days	Fri 25/6/21	Mon 20/9/21	HK Working Day		100%	Fri 25/6/21	Mon 20/9/21								
	Establishment and Set up for pipe jacking at Pit P	93 days	Mon 5/7/21	Sat 23/10/21	HK Working Day 598	601	100%	Mon 5/7/21	Sat 23/10/21								
	Jacking DN1600 Precast Concrete Sleeve Pipe	79 days	Mon 25/10/21	Thu 27/1/22	HK Working Day 600		100%	Mon 25/10/21	Thu 27/1/22								
	Stop Works due to incident at KMB deport	106 days	Thu 27/1/22	Thu 12/5/22	Calendar Day	603FF	100%	Thu 27/1/22	Thu 12/5/22							_	
						604	100%		Thu 12/5/22								-
	WSD obtained approval from TD, KMD and HyD	0 days	Thu 12/5/22	Thu 12/5/22													
	Constuction of Rescure Pit at KMB Depot and Remove TBM	90 days	Fri 13/5/22	Sat 27/8/22	HK Working Day 603	606,608,609,605	1%	Fri 13/5/22	NA								
	Pipe Laying from Pit P to Rescure Pit at KMB Depot	54 days	Mon 29/8/22	Wed 2/11/22	HK Working Day 604	610	0%	NA	NA								
	Open Cut at KMB Depot Stage 1	72 days	Mon 29/8/22	Wed 23/11/22	HK Working Day 604	607	0%	NA	NA								
	Open Cut at KMB Depot Stage 2	72 days	Thu 24/11/22	Wed 22/2/23	HK Working Day 606		0%	NA	NA	-					-		
	Open Cut outside at KMB Depot along Po Hong Road Green Area	72 days	Mon 29/8/22	Wed 23/11/22	HK Working Day 604		0%	NA	NA				-			_	
								NA	NA			_	_		_		-
	Open Cut Across Po Hong Road (Lane by Lane, 42 W.D. per lanes; 4 Stage)	168 days	Mon 29/8/22	Wed 22/3/23	HK Working Day 604		0%										
	Pipe Connection inside Working Pit P	18 days	Mon 28/11/22	Sat 17/12/22	HK Working Day 605,511	611	0%	NA	NA								
	Construction of Combined chamber at Pit P	48 days	Mon 19/12/22	Sat 18/2/23	HK Working Day 610	612	0%	NA	NA								
	Remove ELS including extracting sheet piles at Pit P; Reinstatement	18 days	Mon 20/2/23	Sat 11/3/23	HK Working Day 611		0%	NA	NA								
-	Hand Shield Pipe Jacking from Pit R to Pit Y	300 days	Fri 18/12/20	Wed 22/12/21	HK Working Day		100%	Fri 18/12/20	Wed								-
	Issue CE No. 94 - Site Clearance of Affected Trees and Plants for Mainlaying	0 days	Fri 18/12/20	Fri 18/12/20	Calendar Day	416	100%	Fri 18/12/20	22/12/21 Fri 18/12/20						_		-
	works near Po Hong Road and Ling Hong Road	25 days	Fri 16/7/21	Fri 13/8/21	HK Working Day	616	100%	Fri 16/7/21	Fri 13/8/21			_	-				-
	Jacking / Receiving Pit R										_	_			_		
	Establishment at Pit R	10 days	Sat 14/8/21	Wed 25/8/21	HK Working Day 615	617	100%	Sat 14/8/21	Wed 25/8/21								
	Mild Steel Sleeve Pipe in Mix of Soil (26m)(0.8m/day)	35 days	Thu 26/8/21	Thu 7/10/21	HK Working Day 616	618	100%	Thu 26/8/21	Thu 7/10/21								
	Remove Setup at Pit R	13 days	Fri 8/10/21	Sat 23/10/21	HK Working Day 617	619	100%	Fri 8/10/21	Sat 23/10/21								
	Setup for Pipe Laying inside Jacking Pit R	12 days	Mon 25/10/21	Sat 6/11/21	HK Working Day 618	620	100%	Mon 25/10/21	Sat 6/11/21						_		1
	DN1200 MS Pipe Laying inside Jacking Pipe (3 days per 4m)(Only Internal	13 days	Fri 5/11/21	Fri 19/11/21	HK Working Day 619	621	100%	Fri 5/11/21	Fri 19/11/21				_		_	_	-
	Coating)		Sat 20/11/21	Mon 22/11/21	HK Working Day 620	622	100%	Sat 20/11/21	Mon 22/11/21				_			-	+-
	Formwork & Setup for Grouting the gap between pipe and Sleeve	2 days									_						_
	Grouting Works	9 days	Mon 13/12/21	L Wed 22/12/21	HK Working Day 621	624	100%	Mon 13/12/21	Wed 22/12/21								
	Open Cut Excavation from Pit R to Mau Wu Tsai Abandon Road	239 days	Mon 10/5/21	Fri 25/2/22	HK Working Day	767	100%	Mon 10/5/21	Fri 25/2/22								
	Open Cut, CH.HA0+28 - CH.HA0+48 with DAV Chamber (Connecting to Pit R)	49 days	Fri 24/12/21	Fri 25/2/22	HK Working Day 622,627	625	100%	Fri 24/12/21	Fri 25/2/22								
	Construction of DN900 Valve Chamber with by-pass at CH.HA0+44	36 days	Fri 24/12/21	Thu 10/2/22	HK Working Day 624		100%	Fri 24/12/21	Thu 10/2/22								
	Open Cut, CH.HA0+48 - CH.HA 1+20 OC with DN600 IT Chamber (Connecting	75 days	Mon 10/5/21	Sun 8/8/21	HK Working Day 635,595	627	100%	Mon 10/5/21	Sun 8/8/21		-						-
	Original CH.HA0+80)		Mon 23/8/21		HK Working Day 626	624	100%	Mon 23/8/21									-
	Construction of Wash Out Chamber & Reserved Tee at CH.HA0+49	36 days										_					-
	Open Trench Pipe laying at Abandoned Road	451 days	Tue 22/9/20	Thu 31/3/22	HK Working Day	767	91%	Tue 22/9/20									
	Issue CE No. 121 - Non-explosive agent in Abandoned Road Near Mau Wu Tsai	0 days	Fri 25/6/21	Fri 25/6/21	HK Working Day		100%	Fri 25/6/21	Fri 25/6/21								
	Village Issue CE No. 70 - Landscaping Survey near Mau Wu Tsai Village	0 days	Tue 22/9/20	Tue 22/9/20	HK Working Day		100%	Tue 22/9/20	Tue 22/9/20								
	Issue CE No. 86 - Tree Affected in Mainlaying Works near Mau Wu Tsai Village	0 days	Mon 12/10/2	0 Mon 12/10/20	) HK Working Day	632	100%	Mon 12/10/20	) Mon 12/10/20								
			1														
ng Pr	ogramme No. 15 Task Summary Point Summary		tive Milestone		ration-only Start-on		External Milesto		Critical Spl	t							
15 11	24 May 2022 Split Project Summary	] Inact	tive Summary	M	anual Summary Rollup Finish-	only 🗍	Deadline	+	Progress								

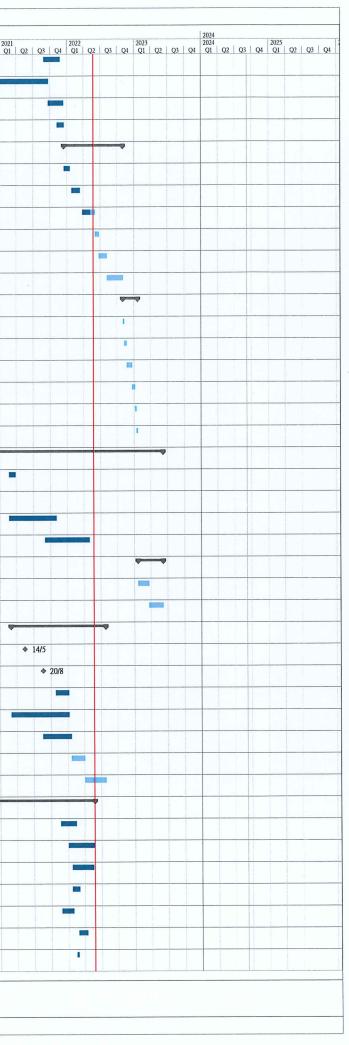


m. 1 M	m 3	Duration	Start	Finish	Task Calendar Predecessors	Successors	%	Actual Start	Actual Finish			Lar				
Task Na	Sm	Duraten	Shar	1 11201			Complete			2018		2019 2019	02 07	2020 Q4 Q1		03 04
_	Tree survey, TPRP Submission and Receiving TPRP approval	295 days	Tue 22/9/20	Mon 20/9/21	HK Working Day 631	661,633	100%	Tue 22/9/20	Mon 20/9/21	Q4 Q1	Q2 Q5		<u> </u>			
_	Mobilization and Tree Removal	23 days	Tue 21/9/21	Wed 20/10/21	HK Working Day 632	663,636	100%	Tue 21/9/21	Wed 20/10/21							
	Issue CE No. XXX - Change Trenchless (Pit U - Pit V) to Open Cut and Revised the	0 days	Thu 31/3/22	Thu 31/3/22	HK Working Day		0%	NA	NA							
	Alignment	141 days	Thu 19/11/20	Fri 14/5/21	HK Working Day	626	100%	Thu 19/11/20	Fri 14/5/21							
	Open Cut, CH.HA0+80 - CH.HA3+17					020		Tue 26/10/21							_	
	Open Cut, CH.HA3+17 - CH.HA3+79	66 days	Tue 26/10/21	Thu 13/1/22	HK Working Day 633		30%		hat a second							
	Open Trench Pipe Laying at Po Lam Road South (Mau Wu Tsai Village)	382 days	Wed 12/5/21	Tue 23/8/22	HK Working Day		74%	Wed 12/5/21								
-	Open Cut, CH.HA3+79 - CH.HA4+68 with SACP	127 days	Wed 12/5/21	Tue 12/10/21	HK Working Day	639	100%	Wed 12/5/21	Tue 12/10/21							
-	Open Cut, CH.HA4+68 - CH.HA5+21	60 days	Tue 14/6/22	Tue 23/8/22	HK Working Day 638,640		0%	NA	NA							
-	Open Cut, CH.HA5+21 - CH.HA5+55 (Pit W)	60 days	Mon 28/3/22	Mon 13/6/22	HK Working Day	639	95%	Mon 28/3/22	NA							
125.5	Trenchless Work at Po Lam Road South	259 days	Wed 14/4/21	Thu 24/2/22	HK Working Day	STORE STATE	100%	Wed 14/4/21	Thu 24/2/22							
	Inspection Pit Excavation	108 days	Wed 14/4/21	Sat 21/8/21	HK Working Day		100%	Wed 14/4/21	Sat 21/8/21							
		4 days	Wed 18/8/21	Sat 21/8/21	HK Working Day	646	100%	Wed 18/8/21	Sat 21/8/21							
3	Inspection Pit Excavation at Pit W					647		Wed 14/4/21							_	
	Inspection Pit Excavation at Pit X	3 days	Wed 14/4/21	Fri 16/4/21	HK Working Day	047										
	Construction of Jacking / Receiving Pits	107 days	Sat 24/4/21	Tue 31/8/21	HK Working Day	1913年1月1日第	100%	Sat 24/4/21	Tue 31/8/21	-						
5	Receiving Pit W	8 days	Mon 23/8/21	Tue 31/8/21	HK Working Day 643		100%	Mon 23/8/21	Tue 31/8/21							
7	Jacking Pit X	31 days	Sat 24/4/21	Tue 1/6/21	HK Working Day 644	649	100%	Sat 24/4/21	Tue 1/6/21							
8	Hand Shield Pipe Jacking from Pit W to Pit X (~85m)	219 days	Wed 2/6/21	Thu 24/2/22	HK Working Day		100%	Wed 2/6/21	Thu 24/2/22							
9	Establishment at Pit X	15 days	Wed 2/6/21	Sat 19/6/21	HK Working Day 647	650	100%	Wed 2/6/21	Sat 19/6/21							
	Form Entrance Opening at pit X	5 days	Thu 8/7/21	Tue 13/7/21	HK Working Day 649	651	100%	Thu 8/7/21	Tue 13/7/21							
		73 days	Wed 14/7/21	Fri 8/10/21	HK Working Day 650	652,653	100%	Wed 14/7/21	Fri 8/10/21							
	Mild Steel Sleeve Pipe in Mix of Soil (46m) (0.6m / day)					654			Wed 27/10/21							
	Rearrangement Wailing and Form Exit Opening at Pit W	14 days	Mon 11/10/21													_
	Remove Setup it Pi X	5 days	Sat 9/10/21	Fri 15/10/21	HK Working Day 651	654	100%	Sat 9/10/21	Fri 15/10/21							
	Setup for Pipe Laying inside Jacking Pit X	6 days	Thu 28/10/21	Wed 3/11/21	HK Working Day 653,652	655	100%	Thu 28/10/21	Wed 3/11/21							
	DN900 MS Pipe Laying inside Jacking Pipe (3 days per 4m)(Only Internal)	19 days	Thu 4/11/21	Thu 25/11/21	HK Working Day 654	656	100%	Thu 4/11/21	Thu 25/11/21							
	Formwork & Setup for Grouting the gap between pipe and Sleeve	2 days	Sat 12/2/22	Mon 14/2/22	HK Working Day 655	657	100%	Sat 12/2/22	Mon 14/2/22							
7	Grouting Works (30m per day)	9 days	Tue 15/2/22	Thu 24/2/22	HK Working Day 656		100%	Tue 15/2/22	Thu 24/2/22							
8	Open Trench Pipe Laying at Po Lam Road (West Bound)	465 days	Mon 20/7/20	Fri 11/2/22	HK Working Day	767,768	100%	Mon 20/7/20	Fri 11/2/22							·
		0 days	Mon 20/7/20	Mon 20/7/20	HK Working Day	660	100%	Mon 20/7/20	Mon 20/7/20							20/7
9	Issue CE No. 68 - TIA for TTA at Po Lam Road				HK Working Day 659	665		Mon 20/7/20								
D	Traffic Survey and Revise TIA, revised TTA Drawings, Obtain RA	177 days	Mon 20/7/20												_	_
	Mobilization and Tree Removal	29 days	Tue 21/9/21	Wed 27/10/21	HK Working Day 632	663,664,662	100%	Tue 21/9/21	Wed 27/10/21							
2	Construction of DAV Chamber at Pit X	41 days	Tue 7/12/21	Wed 26/1/22	HK Working Day 661		100%	Tue 7/12/21	Wed 26/1/22							
53	Open Cut, fromt Pit X, CH.HA6+00 - CH.HA6+54	86 days	Thu 28/10/21	Fri 11/2/22	HK Working Day 661,665,633		100%	Thu 28/10/21	Fri 11/2/22							
4	Construction of DN900 Valve Chamber and By Pass Pipes	17 days	Tue 11/1/22	Sat 29/1/22	HK Working Day 661		100%	Tue 11/1/22	Sat 29/1/22							
5	Open Cut, CH.HA6+54 to CH.HA7+24 (Portion SKR) with SACP	85 days	Mon 22/2/21	Mon 7/6/21	HK Working Day 660	666,663	100%	Mon 22/2/21	Mon 7/6/21							
56	Open Cut, CH.HA7+24 - CH.HA7+61/CH.HB0+00 Excavation in Rock	189 days	Wed 16/6/21	Sat 29/1/22	HK Working Day 665		100%	Wed 16/6/21	Sat 29/1/22							_
57	Water Main Structure and Associated Pipe Support across the Natural Stream	730 days	Tue 5/5/20	Tue 18/10/22	HK Working Day	768	93%	Tue 5/5/20	NA					_		
	Course (Location A) (CH.HB0+00 ~ CH.HB0+ CE )			Tue 16/6/20	HK Working Day	669		Tue 5/5/20	Tue 16/6/20					_	-	
8	Design Submission (CE No. 55) for Water Main Structure and Associated Pipe Support across the Natural Stream Course	37 days	Tue 5/5/20											_		
9	WSD & GEO Review and Approve	121 days	Wed 17/6/20	Thu 15/10/20	Calendar Day 668	672	100%	Wed 17/6/20								
D	Tendering Process, Tender Award for CE No. 51 (Location A Mini-pile Works)	113 days	Wed 26/8/20	Wed 16/12/2	D Calendar Day		100%	Wed 26/8/20	Wed 16/12/20	)						
1	Issue CE No. 55 - Design of the Water Mains Structure and Associated Pipe Supp	ort 0 days	Tue 5/5/20	Tue 5/5/20	Calendar Day		100%	Tue 5/5/20	Tue 5/5/20						5/	/5
2	across the Natural Stream Course for Alternative Alignment in Tsui Lam Tender and Subletting (Mini-Pile)	62 days	Fri 16/10/20	Wed 16/12/2	D Calendar Day 669		100%	Fri 16/10/20	Wed 16/12/20	D						-
73	Issue CE No. 85 - Affected Trees across the Natural Stream Course at Tsui Lam (Location A)	0 days	Wed 28/10/2	0 Wed 28/10/2	0 Calendar Day		100%	Wed 28/10/2	0 Wed 28/10/2	)						*
orking P	cogramme No. 15 Task Summary		tive Milestone		aration-only Start-only	· · · · · · · · · · · · · · · · · · ·	External Milesto		Critical S	plit						
JEKING P	rogramme No. 15 : 24 May 2022 Split Project Summary	) Inac	tive Summary	M	anual Summary Rollup Finish-or anual Summary External	nly 🔳	Deadline	+	Progress Manual F							



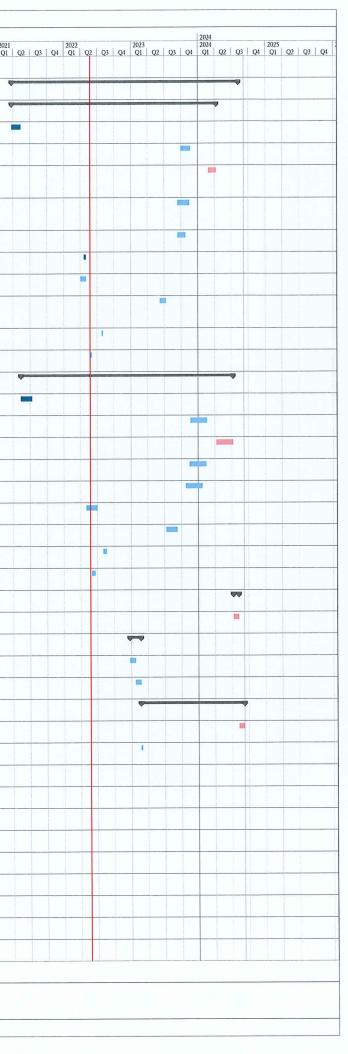
Name		Duration	Start	Finish	Task Calendar	Predecessors	Project: Mainlaying in Tseu Successors	% Complete	Actual Start	Actual Finish		2019					2024		2025
											Q4 Q1 Q2 Q3 Q	2019 2019 24 Q1 Q2 Q3 Q4 Q1	0 202 1 Q2 Q3 Q4 Q1	1 1 Q2 Q3 Q4	2022 Q1 Q2 Q3	Q4 Q1 Q2	Q3 Q4 Q1 Q2	Q3 Q4	2025 Q1 Q2
Tr	ree survey, TPRP Submission and Receiving TPRP approval (HyD)	227 days	Mon 31/8/20	Tue 8/6/21	HK Working Day		676	100%	Mon 31/8/20	Tue 8/6/21									
Ea	ast Portion - Foundation Works (PC-C1, PC-T1 & PC-P1)	283 days	Wed 9/6/21	Tue 24/5/22	HK Working Day			99%	Wed 9/6/21	NA				Q					
	Mobilization and Tree Removal	24 days	Wed 9/6/21	Thu 8/7/21	HK Working Day	674	677	100%	Wed 9/6/21	Thu 8/7/21				-					
	Erect Temporary Timber Platform for Piling Works	7 days	Fri 9/7/21	Fri 16/7/21	HK Working Day	676	678	100%	Fri 9/7/21	Fri 16/7/21									
	Pre-drilling works (PD6, PD7 & PD8) & confirmation of rock head and depth of	25 days	Sat 17/7/21	Sat 14/8/21	HK Working Day	677	679,686	100%	Sat 17/7/21	Sat 14/8/21									
	mini-pile Mobilization and Driving Dia. 323mm steel Casting (14 nos)	39 days	Mon 16/8/21	Thu 30/9/21	HK Working Day	678	680	100%	Mon 16/8/21	Thu 30/9/21									
	Cleaning, Insert T50 reinforcement and Grouting	18 days	Mon 11/10/21	Mon 1/11/21	HK Working Day	679	681,684	100%	Mon 11/10/21	Mon 1/11/21									
		15 days	Tue 1/3/22	Thu 17/3/22	HK Working Day		683,682	100%	Tue 1/3/22	Thu 17/3/22									
	Setup and Loading Test of Mini-Pile (T-1)				HK Working Day		,	100%		Sat 26/3/22					1				
	Setup and Loading Test of Mini-Pile (C1-2)	8 days	Fri 18/3/22	Sat 26/3/22			684												
	Construction Pile Caps (P1) with Pier 1	50 days	Fri 18/3/22	Sat 21/5/22	HK Working Day		684			Sat 21/5/22									
	Remove Timber platform for Piling Works	2 days	Mon 23/5/22	Tue 24/5/22	HK Working Day	683,680	694	0%	Mon 23/5/22	NA									
۷	Vest Portion - Foundation Works (PC-P2, PC-P3 & PC-C2)	241 days	Tue 5/10/21	Fri 29/7/22	HK Working Day			98%	Tue 5/10/21	NA									
	Mobilization and Tree Removal	3 days	Tue 5/10/21	Thu 7/10/21	HK Working Day	678	687	100%	Tue 5/10/21	Thu 7/10/21									
	Erect Temporary Timber Platform for Piling Works	5 days	Thu 28/10/21	Tue 2/11/21	HK Working Day	686	688	100%	Thu 28/10/21	Tue 2/11/21				1					
	Pre-drilling works (P WPR, PSKR, PD3, PD4 & PD5) & confirmation of rock head	16 days	Fri 26/11/21	Tue 14/12/21	HK Working Day	687,703,707	689	100%	Fri 26/11/21	Tue 14/12/21									
	and depth of mini-pile Driving Dia. 323mm steel Casting (26 nos)	58 days	Wed 15/12/21	Sat 26/2/22	HK Working Day	688	690	100%	Wed 15/12/21	Sat 26/2/22									
	Cleaning, Insert T50 reinforcement and Grouting	50 days	Sat 26/2/22	Fri 29/4/22	HK Working Day	689	692,691	100%	Sat 26/2/22	Fri 29/4/22									
	Construction Pile Caps with Pier 2	36 days	Mon 21/3/22	Wed 27/7/22	HK Working Day	690	692	95%	Mon 21/3/22	NA									
	Remove Timber platform for Piling Works	2 days	Thu 28/7/22	Fri 29/7/22	HK Working Day	690.691	694	0%	NA	NA					1				
		66 days	Sat 30/7/22	Tue 18/10/22				0%	NA	NA					-				
F	ipelaying on Mini-pile Foundation						695	0%	NA	NA									
	Temporary Working Platform for Pipe Installation	6 days	Sat 30/7/22	Fri 5/8/22	HK Working Day														
	Cut Temporary casting and Bend the T50 to designated position	12 days	Sat 6/8/22	Fri 19/8/22	HK Working Day		696	0%	NA	NA									
	Pipe Installation / Welding / Testing / Painting	24 days	Sat 20/8/22	Sat 17/9/22	HK Working Day	695	697,701	0%	NA	NA		-							
	Concrete Hunching	12 days	Mon 19/9/22	Mon 3/10/22	HK Working Day	/ 696	698	0%	NA	NA									
	Apply top coating of aliphatic polyurethane on site	6 days	Wed 5/10/22	Tue 11/10/22	HK Working Day	( 697	699	0%	NA	NA						I			
	Remove Temporary Working Platform	6 days	Wed 12/10/22	2 Tue 18/10/22	HK Working Day	( 698	702	0%	NA	NA						1			
Ор	en Trench Pipe Laying at Po Lam Road (East Bound)	551 days	Thu 8/4/21	Tue 14/2/23	HK Working Day	y	768	60%	Thu 8/4/21	NA									-
	Open Cut, CH.HC0+00 - CH.HC0+08; Connecting to CH.HB	60 days	Mon 19/9/22	Tue 29/11/22	HK Working Day	696,706	702	0%	NA	NA									
	Open Cut, CH.HC0+08 - CH.HC0+12	60 days	Wed 30/11/2	2 Tue 14/2/23	HK Working Day	y 699,701		0%	NA	NA									
	Open Cut, CH.HC0+12 - CH.HC0+97 with SACP	104 days	Wed 16/6/21	Tue 19/10/21	HK Working Day	1	704,688	100%	Wed 16/6/21	Tue 19/10/21									
	Open Cut, CH.HCO+97 - CH.HC1+56(Portion B4) with SACP	62 days	Wed 24/11/2	1 Thu 10/2/22	HK Working Day	y 703,707	705	99%	Wed 24/11/21	NA									
	Open Cut, CH.HC1+56 - CH.HC2+04	60 days	Fri 11/2/22	Tue 26/4/22	HK Working Day		706	0%	NA	NA									
		60 days	Wed 27/4/22		HK Working Day		701	0%	NA	NA									
	Open Cut, CH.HC2+04 - CH.HC2+70 with SACP						704,688			Tue 23/11/21									
	Open Cut, CH.HC2+70 - CH.HC3+22 with SACP	58 days	Tue 14/9/21																
	Open Cut, CH.HC3+22 - CH.HC3+70 /CH.HD0+00	131 days	Thu 8/4/21	Sat 11/9/21	HK Working Day		707	100%		Sat 11/9/21									
W Rc	/ater Main Structure and Associated Pipe Support from Po Lam Road to Tsui Lam ad (Location B)(CH.HD0+00 ~ CH.H WPR+01)	n 771 days	Tue 16/6/20	Thu 19/1/23	HK Working Da	Ŷ	768		Tue 16/6/20										
	Issue CE No. 62 - Design of Pipe Support in Tsui Lam (Location B)	0 days	Tue 16/6/20	Tue 16/6/20	Calendar Day		711	100%	Tue 16/6/20	Tue 16/6/20			16/6						
	Design Submission (CE No. 62) for Water Main Structure and Associated at Tsui L	am 356 days	Wed 17/6/20	Fri 27/8/21	HK Working Da	y 710	712	100%	Wed 17/6/20	Fri 27/8/21									
	WSD & GEO Approval	0 days	Tue 21/9/21	Tue 21/9/21	Calendar Day	711	716	100%	Tue 21/9/21	Tue 21/9/21				<b>*</b> 2	1/9				
	TTA Drawing approval for Tsui Lam Road	0 days	Thu 30/9/21	Thu 30/9/21	HK Working Da	У	719	100%	Thu 30/9/21	Thu 30/9/21				• 3	0/9				
	LCSD's Consent	0 days	Tue 5/10/21	Tue 5/10/21	HK Working Da	у	715FS+18 days	100%	Tue 5/10/21	Tue 5/10/21				* :	5/10				
	Approval of Excavation Permit for Tsui Lam Road	0 days	Mon 1/11/21	Mon 1/11/21	HK Working Da	y 714FS+18 days		100%	Mon 1/11/21	Mon 1/11/21	L			*	1/11				
				E							Split								

LinePartPa										A abral Come	A otral That I							
	Task Nar	ne	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Complete	Actual Start	Actual Pinish	2018		2019		20	20	
besines:       pice matrix		Tender and sublett Mini-pile works at Location B to current Sub-contractor	73 days	Fri 27/8/21	Mon 22/11/21	HK Working Day	/ 712	721	100%	Fri 27/8/21	Mon 22/11/21	Q4 Q1 Q2	Q3 Q4	Q1 Q	<u>12 Q3</u>	<u>Q4</u> Q	1 Q2	Q3
DatabaseOne of the strateOne of the			322 davs	Fri 21/8/20	Mon 20/9/21	HK Working Day	1	718	100%	Fri 21/8/20	Mon 20/9/21				_			
Back Markener       Back Markener<											Sat 11/12/21							
Jorder Marken Marken     Jarken     Jarken Marken     Jarken     Jarken													_				_	
Intractional price       3.4.0       3.4.00       3.		Obtain RA for TTA implement	38 days					721										
No. d) getter outwarder o		Mini-pile Foundation Works	258 days	Wed 15/12/21	Mon 31/10/22	HK Working Day	Y		39%	Wed 15/12/21	NA							
National order (0, 57, 700 more from (1 more)       9, 600, 700       640, 600, 700, 700, 700, 700, 700, 700, 70		Erect Temporary Timber Platform for Piling Works	25 days	Wed 15/12/21	Sat 15/1/22	HK Working Day	719,716	722	100%	Wed 15/12/21	Sat 15/1/22							
International controlInternational contr<		Pre-drilling works & confirmation of rock head and depth of mini-pile	36 days	Wed 26/1/22	Fri 11/3/22	HK Working Day	721	723	100%	Wed 26/1/22	Fri 11/3/22							
Instrumental impart of the second of t		Mobilization and Driving Dia. 273mm steel Casting (18 nos)	51 days	Sat 26/3/22	Tue 31/5/22	HK Working Day	722	724	61%	Sat 26/3/22	NA							
Translation       Normality       Normality <td></td> <td>Cleaning, Insert T50 reinforcement and Grouting</td> <td>18 days</td> <td>Wed 1/6/22</td> <td>Wed 22/6/22</td> <td>HK Working Day</td> <td>723</td> <td>725</td> <td>0%</td> <td>NA</td> <td>NA</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		Cleaning, Insert T50 reinforcement and Grouting	18 days	Wed 1/6/22	Wed 22/6/22	HK Working Day	723	725	0%	NA	NA							
Cathering Proprior     Profer     <		Setup and Loading Test of Mini-Pile	36 days	Thu 23/6/22	Thu 4/8/22	HK Working Day	y 724	726	0%	NA	NA				_			
Approve						HK Working Day	/ 725	728	0%	NA	NA							
Impute Working Hederator (probability)       Equity       Number Working Heddrator (probability)       Equity								720					_					
Automation       10.40       0.70.10       0.70.10       0.70.10       0.70 <td< td=""><td></td><td>Pipelaying on Mini-pile Foundation</td><td>66 days</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		Pipelaying on Mini-pile Foundation	66 days															
new matrixes       nes       nes       nes <t< td=""><td></td><td>Temporary Working Platform for Pipe Installation</td><td>6 days</td><td>Tue 1/11/22</td><td>Mon 7/11/22</td><td>HK Working Day</td><td>y 726</td><td>729</td><td>0%</td><td>NA</td><td>NA</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		Temporary Working Platform for Pipe Installation	6 days	Tue 1/11/22	Mon 7/11/22	HK Working Day	y 726	729	0%	NA	NA							
Document       10400       10000000       10000000       10000000		Cut Temporary casting and Bend the T50 to designated position	12 days	Tue 8/11/22	Mon 21/11/22	HK Working Day	y 728	730	0%	NA	NA							
Apply for generalized adjustic pelopendamon site       6400       64000       7000000000000000000000000000000000000		Pipe Installation / Welding / Testing / Painting (~115m)	24 days	Tue 22/11/22	Mon 19/12/22	HK Working Day	y 737,729	731	0%	NA	NA							
Imply provides       Normal       Norma		Concrete Hunching	12 days	Tue 20/12/22	Thu 5/1/23	HK Working Day	y 730	732	0%	NA	NA							
International basics         International basics         International basics         Part Part All Section 2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		Apply top coating of aliphatic polyurethane on site	6 days	Fri 6/1/23	Thu 12/1/23	HK Working Day	y 731	733	0%	NA	NA							-
Term Fail Lare field in XO / Redward F3R (Cit Lib Algo Or Cit Lib Algo		Remove Temporary Working Platform	6 days	Fri 13/1/23	Thu 19/1/23	HK Working Day	y 732	740	0%	NA	NA						_	1
Number of the state of the						HK Working Da	v	768	81%	Tue 7/11/17	NA	<b>~</b>						-
The perpansion of the series of the serie		(CH.HF0+00 CH.HF3+11)												-			_	
Material procurement (Distance Marcine)       264 op       111/2/22       So 31/021       Gender Dy       So 31/021		Batch No 3 - Temporary Works Design and Preliminary Works	30 days														_	1
Matter production production of productin production of production of production of		TTA preparation, SLG meetings, obtain RA	150 days	Mon 3/8/20	Wed 30/12/20	Calendar Day	585		100%	Mon 3/8/20	Wed 30/12/20							
Mater Mater Mater Mater Mater       Mater       Mater Mater Mater       Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater Mater       Mater		Material procurement (DN800 MS PIPE) (360m)	255 days	Fri 19/2/21	Sun 31/10/21	Calendar Day	589	730,751,755,753	100%	Fri 19/2/21	Sun 31/10/21							
International of the structure		Material procurement (Butterfly Valves)	244 days	Mon 30/8/21	Sat 30/4/22	Calendar Day			100%	Mon 30/8/21	Sat 30/4/22							
Dependent action throate function to devide to devide       6 devide       6 devide to	¥.,	Water Mains CH.HE0+00 - CH.HE0+27)	108 days	Fri 20/1/23	Mon 5/6/23	HK Working Da	iγ		0%	NA	NA							
Open Cut actual main team (call reduction of Construction of Co	32	Open Cut across Tsui Lam Road (CH.HE0+00 to 0+06)	48 days	Fri 20/1/23	Mon 20/3/23	HK Working Day	y 733	741	0%	NA	NA							
Water Mains CH, HED-27 - CH, HE 2-11       61 days       Mon 1/9/21       Mon 2/9/12       FM Working Day       769       769       769       Non 1/9/21       Non 1/9		Open Cut across Tsui Lam Road (CH.HE0+06 to 0+20)	60 days	Tue 21/3/23	Mon 5/6/23	HK Working Day	у 740		0%	NA	NA							
International balances belocks balances balances belocks balances balances balances balances balances balances balances balances balances bala			414 days	Mon 1/3/21	Mon 25/7/22	HK Working Da	IV	769	75%	Mon 1/3/21	NA						_	-
Reservoir Re											Fri 14/5/21							_
TKOFWSR Open Cut, CH.HE0+27 (Excavation in Rock)       59 days       Mon 25/0/21       tue 4/1/22       HK Working Day       1000       Mon 25/0/21       tue 4/1/22       HK Working Day         Open Cut, CH.HE0+27 (CH.HE1+98](Excavation in Rock)       25 days       Mon 1/2/21       Tu 6/1/22       HK Working Day       748       Mon 1/2/21       Tu 6/1/22       I and 1/2         Open Cut, CH.HE0+27 (CH.HE1+98](Excavation in Rock)       25 days       Mon 1/2/21       Tu 18/1/22       HK Working Day       748       Mon 1/2/21       Tu 18/1/22       I and 1/2		Reservoir				_												
Open Cut, CH, HE0+27 - CH, HE1+38 [Excavation in Rock)       254 abs       Mon 1/3/21       Tu 6/1/22       HK Working Day       748       Mon 1/3/21       Tu 8/1/22       I abs 1/2			0 days	Fri 20/8/21	Fri 20/8/21	HK Working Da	Ŷ		100%									
Construction of Combined EMF and MBV Chamber at CH.HE1+90       128 days       Non 16/8/21       Tue 18/1/22       HK Working Day       748       100%       Mon 16/8/21       Tue 18/1/22       Image: Construction of Combined EMF and MBV Chamber at CH.HE1+90       128 days       Mon 16/8/21       Tue 18/1/22       HK Working Day 747       749       0%       NA       NA       128 days       Image: Construction of flowmeter klosks and GL cable ducts for Combined EMF and MBV Days       Sat 2/1/22       HK Working Day 748       0%       NA       NA       128 days       Image: Construction of flowmeter klosks and GL cable ducts for Combined EMF and MBV Days       Sat 2/1/21       Water Mains CH.HE1+90       NA       NA       128 days       Image: Construction of flowmeter klosks and GL cable ducts for Combined EMF and MBV Days       Sat 2/1/21       Water Mains CH.HE1+90       NA       NA       128 days       Image: Construction of flowmeter klosks and GL cable ducts for Combined EMF and MBV Days       Sat 2/1/21       Water Xing Day 747       NA       NA       128 days       Image: Construction of Combined EMF and MBV Chamber at CH.HE1+30       Image: Construction of Combined EMF and MBV Chamber at CH.HE1+30       Sat 22/1/21       Water Xing Day 737       Image: Construction of Combined EMF and MBV Chamber at CH.HE1+30       Sat 22/1/22       Image: Construction of Combined EMF and MBV Chamber at CH.HE1+30       Sat 22/1/22       Image: Construction of Combined EMF and MBV Chamber at CH.HE1+30       Sat 32/1/22		Open Cut, CH.HE0+20 -CH.HE0+27 (Excavation in Rock)	59 days	Mon 25/10/22	L Tue 4/1/22	HK Working Da	Y		100%	Mon 25/10/21	Tue 4/1/22							a
Open Cut CH 1498 & connecting to the existing DN800 F.W. Main at CH.HE2+1       60 days       Wed 19/1/2       Fi 1/4/22       HK Working Day 747       749       0%       NA       NA       Image: Construction of now meet klosks and Gl cable ducts for Combined EMF and MBV 0 varses       Sat 2/4/22       Mon 25/7/22       HK Working Day 748       749       0%       NA       NA       Image: Construction of now meet klosks and Gl cable ducts for Combined EMF and MBV 0 varses       Sat 2/4/22       Mon 25/7/22       HK Working Day 748       749       0%       NA       NA       Image: Construction of now meet klosks and Gl cable ducts for Combined EMF and MBV 0 varses       Sat 2/4/22       Mon 25/7/22       HK Working Day 748       760       0%       NA       NA       Image: Construction of Now meet klosks and Gl cable ducts for Combined EMF and MBV 0 varses       Sat 2/1/22       HK Working Day 747       770       82%       Tu 6/1/14       Na       Image: Construction of Construction of Combined EMF and MBV 0 varses       Sat 2/1/22       HK Working Day 737       100%       Sat 2/1/22       Sat 2/1/22       HK Working Day 737       100%       Sat 2/1/22       Image: Construction of Combined EMF and MBV Chamber at CH.HF1+30       Sat 22/1/22       Yed 2/3/22       HK Working Day 737       100%       Sat 2/1/22       Wed 3/22		Open Cut, CH.HE0+27 -CH.HE1+98(Excavation in Rock)	254 days	Mon 1/3/21	Thu 6/1/22	HK Working Da	у		100%	Mon 1/3/21	Thu 6/1/22							
Construction of flowmeter klosks and Gl cable ducts for Combined EMF and W Sat 2/4/22 Mon 25/7/22 HK Working Day 748 0% NA <t< td=""><td></td><td>Construction of Combined EMF and MBV Chamber at CH.HE1+90</td><td>128 days</td><td>Mon 16/8/21</td><td>Tue 18/1/22</td><td>HK Working Da</td><td>y</td><td>748</td><td>100%</td><td>Mon 16/8/21</td><td>Tue 18/1/22</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		Construction of Combined EMF and MBV Chamber at CH.HE1+90	128 days	Mon 16/8/21	Tue 18/1/22	HK Working Da	y	748	100%	Mon 16/8/21	Tue 18/1/22							
Chamber at CH.HE1+90   Water Mains CH.HE0+00 - CH.HE3+10 (Inlet A)   134 days   Tre 7/11/7   Water Mains CH.HE0+00 - CH.HE3+10 (Inlet A)   0pen Cut CH.HE0+100 - CH.HE3+10 (Inlet A)   67 days   Sat 20/11/21		Open Cut CH.1+98 & connecting to the existing DN800 F.W. Main at CH.HE2+13	L 60 days	Wed 19/1/22	Fri 1/4/22	HK Working Da	iy 747	749	0%	NA	NA							
Water Mains CH.HF0+00 - CH.HF3+10 (Inlet A)       1343 days       Tue 7/11/17       Tue 24/5/22       HK Working Day       770       82%       Tue 7/11/17       NA         Open Cut CH.HF0+00 - CH.HF0+19       67 days       Sat 20/11/21       Sat 12/2/22       HK Working Day 737       100%       Sat 20/11/21       Sat 12/2/22       Image: Construction of Combined EMF and MBV Chamber at CH.HF1+30       114 days       Fri 31/12/21       Tue 24/5/22       HK Working Day 737       100%       Sat 22/1/22       Tue 7/11/17       Tue 24/5/22       Image: Construction of Combined EMF and MBV Chamber at CH.HF1+30       90 days       Sat 22/1/22       Tue 17/5/22       HK Working Day 737       100%       Sat 22/1/22       Tue 17/5/22       Tue 17/5		Construction of flowmeter kiosks and GI cable ducts for Combined EMF and ME	3V 90 days	Sat 2/4/22	Mon 25/7/22	HK Working Da	iy 748		0%	NA	NA						-	
Open Cut CH.HF0+00 - CH.HF0+19       67 days       Sat 20/11/21       Sat 12/2/2       HK Working Day 737       100%       Sat 20/11/21       Sat 12/2/2       I I I I I I I I I I I I I I I I I I I			1343 days	5 Tue 7/11/17	Tue 24/5/22	HK Working Da	ау	770	82%	Tue 7/11/17	NA	<b>~</b>					-	-
Open Cut CH.HF0+30       114 days       Fri 31/12/21       Tue 24/5/22       HK Working Day       100%       Fri 31/12/21       Tue 24/5/22       Iue 17/5/22       Iue 17/5/22 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>100%</td> <td>Sat 20/11/21</td> <td>Sat 12/2/22</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td>									100%	Sat 20/11/21	Sat 12/2/22					-		-
Construction of Combined EMF and MBV Chamber at CH.HF1+30       90 days       Sat 22/1/22       Tue 17/5/22       HK Working Day 737       100%       Sat 22/1/22       Tue 17/5/22       Ued 2/3/22       Wed 2/3/22																		
Open Cut CH.HF1+30 - CH.HF1+36       31 days       Sat 22/1/22       Wed 2/3/22       HK Working Day       100%       Sat 22/1/22       Wed 2/3/22       Wed 1/3/22       Wed 2/3/22		Open Cut CH.HF0+19 - CH.HF1+30	114 days															
Exposed Pipe CH.HF1+36 - CH.HF2+85       53 days       Thu 25/11/21       Fri 28/1/22       HK Working Day 737       757       100%       Thu 25/11/21       Fri 28/1/22       Image: Chi and the side wall of TKOFWSR       Image: Chi and the side wall of TKOFWSR <th< td=""><td></td><td>Construction of Combined EMF and MBV Chamber at CH.HF1+30</td><td>90 days</td><td>Sat 22/1/22</td><td>Tue 17/5/22</td><td>HK Working Da</td><td>ay 737</td><td></td><td>100%</td><td>Sat 22/1/22</td><td>Tue 17/5/22</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>		Construction of Combined EMF and MBV Chamber at CH.HF1+30	90 days	Sat 22/1/22	Tue 17/5/22	HK Working Da	ay 737		100%	Sat 22/1/22	Tue 17/5/22							
Exposed Pipe to the side wall of TKOFWSR       41 days       Thu 24/2/22       Wed 13/4/22       HK Working Day 757       100%       Thu 24/2/22       Wed 13/4/22		Open Cut CH.HF1+30 - CH.HF1+36	31 days	Sat 22/1/22	Wed 2/3/22	HK Working Da	ау		100%	Sat 22/1/22	Wed 2/3/22							
		Exposed Pipe CH.HF1+36 - CH.HF2+85	53 days	Thu 25/11/21	Fri 28/1/22	HK Working Da	ay 737	757	100%	Thu 25/11/21	Fri 28/1/22							
		Exposed Pipe to the side wall of TKOFWSR	41 days	Thu 24/2/22	Wed 13/4/22	HK Working Da	ay 757		100%	Thu 24/2/22	Wed 13/4/22							
	-	Form Opening and Cast-in short pipe at TKOFWSR	9 days	Mon 14/2/22	Wed 23/2/22	HK Working Da	ay 755	756	100%	Mon 14/2/22	Wed 23/2/22							+
	_	ogramme No. 15 Task Summary Project Summary		tive Milestone		aration-only 🛛 📑 anual Summary Rollup 📩		t-only C sh-only J	External Milesto Deadline	ne 🔹	Critical Sp Progress	lit						



Task	Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	%	Actual Start	Actual Finish		1	2019			
								Complete			2018 Q4 Q1 Q2		2019	03   01	2020	n   0:
	Construction of flowmeter kiosks and GI cable ducts for Combined EMF and	90 days	Tue 7/11/17	Mon 26/2/18	HK Working Day	y		0%	NA	NA	Q4 Q1 Q2	05 04		Q3 Q4	QI Q2	2 Q3
_	MBV Chamber at CH.HF1+30	1000	W	Tue 6/0/24	Colordar Day			13%	Wed 24/3/21	NIA						
	DN800 - CH.ADN1200 MS Pipe Static Pressure Test, Pipeline Cleaning, CCTV Inspection, iterilization and Water Sampling	1232 days	Wed 24/3/21	Tue 6/8/24	Calendar Day			1370	wed 24/5/21	IVA						
1		1112 days	Wed 24/3/21	Mon 8/4/24	Calendar Day			18%	Wed 24/3/21	NA						
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at CH.CA4+24 to	49 days	Wed 24/3/21	Tue 11/5/21	Calendar Day	105	772	100%	Wed 24/3/21	Tue 11/5/21						
	CH.CT.2+65 (Approx. 0.7km)		r-: 20/0/22	Cat 19/11/22	Calandar Day	121 167 194 212 224	773	0%	NA	NA						
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at CH.CA4+24 to DN900 Valve Chamber at Wan Po Road (CH.A12+50) (Approx. 1.7km)	SI days	Fri 29/9/23	Sat 18/11/23	Calendar Day	121,167,184,213,224	113	078	NA .	NA						
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at Wan Po Road (CH.A12+50) to DN900 Valve Chamber at TKO Landfill Stage I Area A (CH.FB1+66)	42 days	Tue 27/2/24	Mon 8/4/24	Calendar Day	224,251,306	774	0%	NA	NA						
	(Approx. 1.4km)															_
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at TKO Landfill Stage I Area A (CH.FB1+66) to DN900 Valve Chamber at CH.FD3+43 (approx. 2.1km)	63 days	Tue 12/9/23	Mon 13/11/23	Calendar Day	372,434	775	0%	NA	NA						
			T 12/0/22	M 22/10/22	Calaadaa Daw	426 470 517 504 424	776	0%	NA	NA						_
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at CH.FD 3+43 to DN900 Valve Chamber at Mau Wu Tsai (CH.HA0+44) (approx. 1.4km)	42 days	Tue 12/9/23	WON 23/10/23	Calendar Day	436,479,517,594,434	//6	0%	NA	NA						
		11 days	Tue 19/4/22	Fri 29/4/22	Calendar Day			100%	Tue 19/4/22	Fri 29/4/22						
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at Mau Wu Tsai	30 days	Fri 1/4/22	Sat 30/4/22	Calendar Day	628,623,658	777	0%	NA	NA						
	(CH.HA0+44) to DN900 Valve at Mau Wu Tsai (CH.HA6+45) (approx. 0.7km)	33 days	Tue 6/6/23	Sat 8/7/23	Calendar Day	658,667,700,709,734	778	0%	NA	NA						-
	DN1200 MS Pipe - Static Pressure Test From DN900 Valve at Mau Wu Tsai (CH.HA6+45) to DN800 EMF & BV Chamber at TKO F.W.S.R.(CH.HE1+90) &	55 uays	100 070725	34 0/1/25	Calendar Day	050,007,700,705,754	//0	070	06							
	(CH.HF1+30) (Approx. 1.1km) DN800 MS Pipe - Static Pressure Test From DN800 EMF & BV Chamber at TKO	6 days	Tue 26/7/22	Sun 31/7/22	Calendar Day	742	779	0%	NA	NA						-
	F.W.S.R.(CH.HE1+90) to CH.HE2+11 (approx. 20m)															
	DN800 MS Pipe - Static Pressure Test From DN800 EMF & BV Chamber at TKO F.W.S.R.(CH.HF1+30) to CH.HF3+10 (Approc. 80m)	6 days	Wed 25/5/22	Mon 30/5/22	Calendar Day	750	780	0%	NA	NA						
	Pipeline Cleaning and CCTV Inspection	1153 days	Wed 12/5/21	Sun 7/7/24	Calendar Day			10%	Wed 12/5/21	NA						
	DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber	60 days	Wed 12/5/21	Sat 10/7/21	Calendar Day	761	782	100%	Wed 12/5/21	Sat 10/7/21						
	at CH.CA4+24 to CH.CT.2+65															-
	DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber at CH.CA4+24 to DN900 Valve Chamber at Wan Po Road (CH.A12+50)	90 days	Sun 19/11/23	Fri 16/2/24	Calendar Day	762	782	0%	NA	NA						
	DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber	90 days	Tue 9/4/24	Sun 7/7/24	Calendar Day	763	782	0%	NA	NA						
	at Wan Po Road (CH.A12+50) to DN900 Valve Chamber at TKO Landfill Stage I Area A DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber	90 days	Tue 14/11/23	Sun 11/2/24	Calendar Day	764	782	0%	NA	NA						-
	at TKO Landfill Stage I Area A (CH.FB1+66) to DN900 Valve Chamber at CH.FD3+43					765	702	0%		NIA		-				
	DN1200 MS Pipe - Pipeline Cleaning and CCTV From DN900 Valve Chamber at CH.FD 3+43 to DN900 Valve Chamber at Mau Wu Tsai (CH.HA0+44)	90 days	Tue 24/10/23	Sun 21/1/24	Calendar Day	765	782	0%	NA	NA					-	
	DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From From DN900 Valve	60 days	Sun 1/5/22	Wed 29/6/22	Calendar Day	767	782	0%	NA	NA						
	Chamber at Mau Wu Tsai (CH.HA0+44) to DN900 Valve at Mau Wu Tsai (CH.HA6+45) DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve at Mau	60 days	Sun 9/7/23	Wed 6/9/23	Calendar Day	768	782	0%	NA	NA						
	Wu Tsai (CH.HA6+45) to DN800 EMF & BV Chamber at TKO F.W.S.R.(CH.HE1+90) &	10.1	Mar 1/0/22	Thu 10/0/22	Calandas Dav	760	782	0%	NA	NA				_		-
	DN800 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN800 EMF & BV Chamber at TKO F.W.S.R.(CH.HE1+90) to CH.HE2+11	18 days	Mon 1/8/22	Thu 18/8/22	Calendar Day	769	782	078	NA	11/5						
	DN800 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN800 EMF & BV	18 days	Tue 31/5/22	Fri 17/6/22	Calendar Day	770	782	0%	NA	NA						
	Chamber at TKO F.W.S.R.(CH.HF1+30) to CH.HF3+10 Sterilization and Water Sampling	30 days	Mon 8/7/24	Tue 6/8/24	Calendar Day			0%	NA	NA						
		30 days	Mon 8/7/24	Tue 6/8/24	Calendar Day	772,773,774,775,777,7	78 7 787	0%	NA	NA						-
	DN1200 MS Pipe - Portion I & Portion H (Total Water = 9700 cu.m)	30 days	1011 8/7/24	102 0/ 0/ 24		112,113,114,113,111,1	16,7 167	078	na -	0.00 A						
	NS250 HDPE Pipe Static Pressure, Pipeline Cleaning, CCTV Inspection, Sterilization and	60 days	Fri 23/12/22	Mon 20/2/23	Calendar Day			0%	NA	NA						
1	Water Sampling NS250 HDPE Pipe - Static Pressure Test - Portion H (Area 137)	30 days	Fri 23/12/22	Sat 21/1/23	Calendar Day	121	785	0%	NA	NA						
	NS250 HDPE Pipe - Pipeline Cleaning and CCTV Inspection, Sterilization and Water	30 days	Sun 22/1/23	Mon 20/2/23	Calendar Day	784	788	0%	NA	NA						-
	Sampling - Portion H (Area 137)								22.2017					_		_
	Handover Portion I and Portion H to WSD Region	563 days	Tue 21/2/23	Thu 5/9/24	Calendar Day			0%	NA	NA						
	DN1200 MS Pipe - Portion I & Portion H (Area 137)	30 days	Wed 7/8/24	Thu 5/9/24	Calendar Day	782		0%	NA	NA			-			
	NS250 HDPE Pipe - Portion H (Area 137)	7 days	Tue 21/2/23	Mon 27/2/23	Calendar Day	785	164	0%	NA	NA						
	the state of the second st				and the second				Tue 7/11/17				gamme			-
	Water Supply to Tseung Kwan O Desalination Plant at Fill Bank of Tseung Kwan O Area 137 (Portion J)	445 days	Tue 7/11/17	Sat 11/5/19	HK Working Da	ау		99%	Tue //11/1/	IVA	Ť		Ť			
	Issue of CE No. 02	0 days	Fri 16/11/18	Fri 16/11/18	HK Working Da	ау	791	100%	Fri 16/11/18	Fri 16/11/18		•	16/11			
	Procurement of Major Material	48 days	Sat 17/11/18	Thu 3/1/19	Calendar Day	790	792	100%	Sat 17/11/18	Thu 3/1/19						
									Fri 4/1/19							_
	Installation of NS250 HDPE Pipe from A to B in accordance with the Drawing No. 13/WSD/16/SK13 to SK15 and W20203/4A	89 days	Fri 4/1/19	Thu 25/4/19	HK Working Da	ау /91	793	100%	211 4/ 1/ 19	Thu 25/4/19						
	Sterilization and Flushing NS250 HDPE Pipe (From T0+00 to T23+64)	4 days	Wed 24/4/19	Sun 28/4/19	HK Working Da	ау 792	794	100%	Wed 24/4/19	Sun 28/4/19			I			
	Take Water Sampling	1 day	Mon 29/4/19	Mon 29/4/19	HK Working Da	ay 793	795	100%	Mon 29/4/19	Mon 29/4/19			1			
			Sat 11/5/10	Sat 11/5/19	HK Working D	av 794	796FF	100%	Sat 11/5/19	Sat 11/5/19						-
	Backfill at T23+64 after completion of Water Sampling Test	1 day	Sat 11/5/19		HK Working Da		73011									
	Handover Portion J to WSD Region	0 days	Sat 11/5/19	Sat 11/5/19	HK Working Da	ay 795FF		100%	Sat 11/5/19	Sat 11/5/19			1	1/5		
		1 day	Tue 7/11/17	Tue 7/11/17	None			0%	NA	NA						
																_
-	Task Summary		ive Milestone	Du	ration-only	Start-only	E	External Mileston	ie 🔿	Critical S	plit					

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## Overview of Mainlaying in Tseung Kwan O



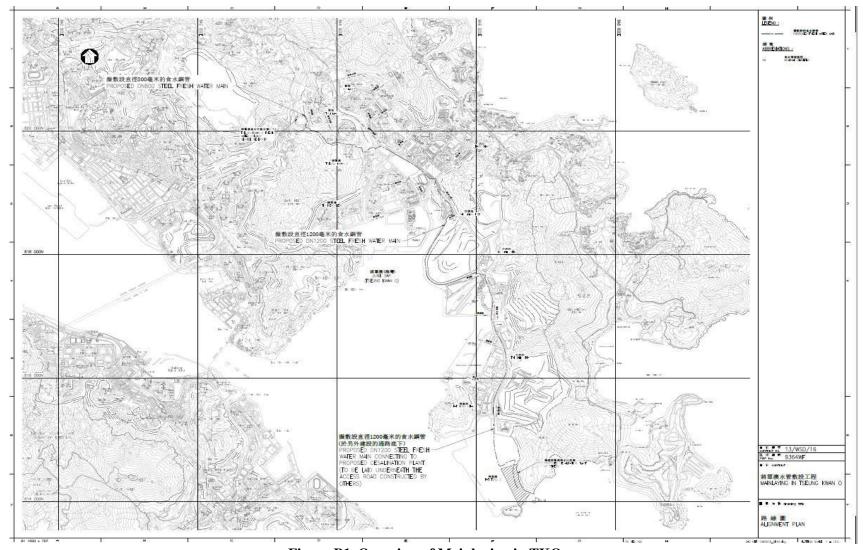


Figure B1. Overview of Mainlaying in TKO



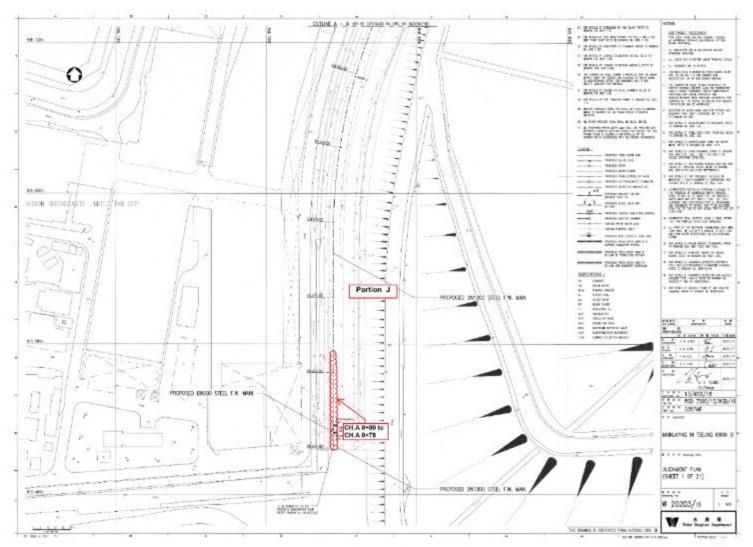


Figure B1. Location Plan for Portion J - CH.A 0+00 to CH.A 0+78



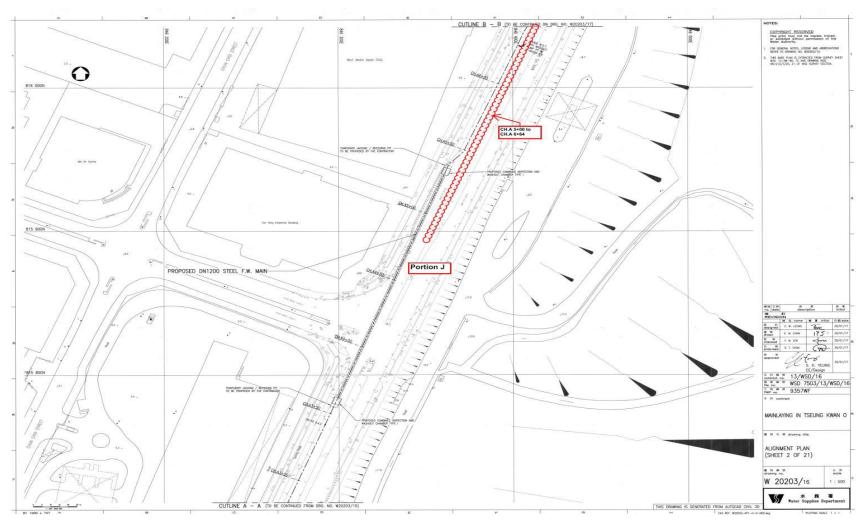


Figure B2. Location Plan for Portion J - CH.A 5+00 to CH.A 6+64



Member of the Aurecon Group

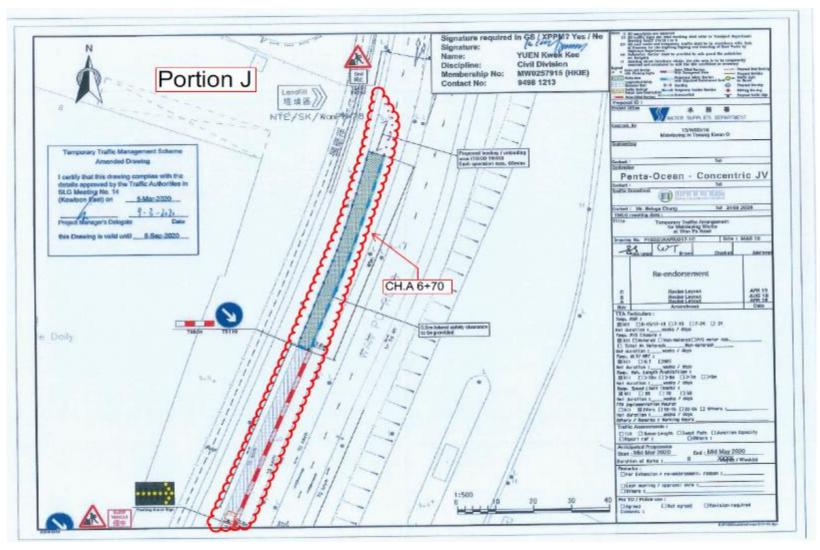


Figure B3 Location Plan for Portion J - CH.A 6+70



Member of the Aurecon Group

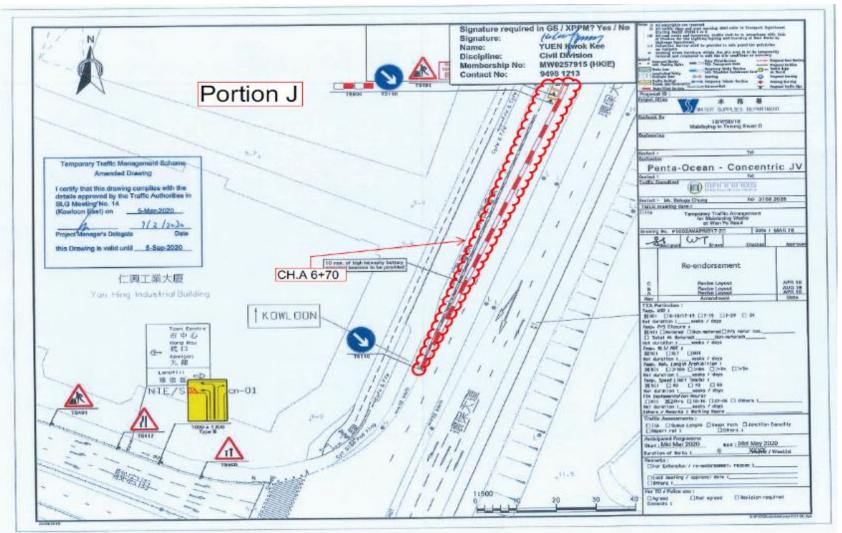
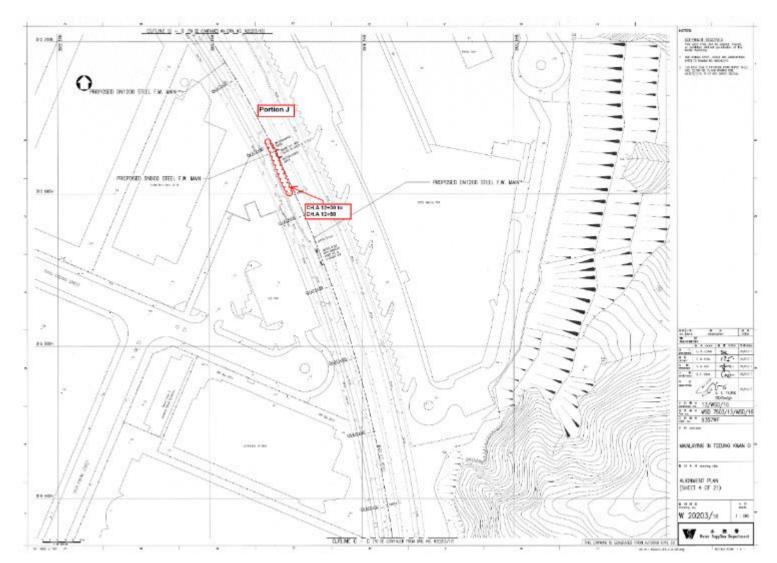


Figure B4. Location Plan for Portion J - CH.A 6+70









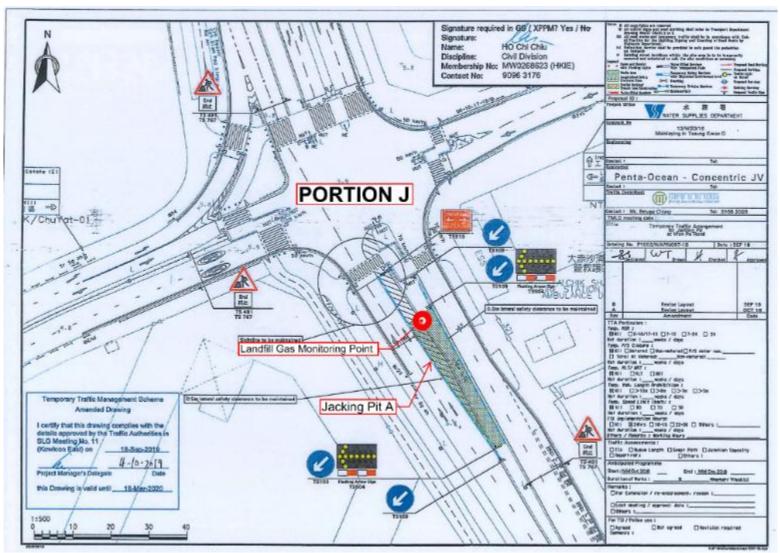


Figure B6. Location Plan for Portion J – CH. A13+50 to CH.A 14+00 (Pit A)



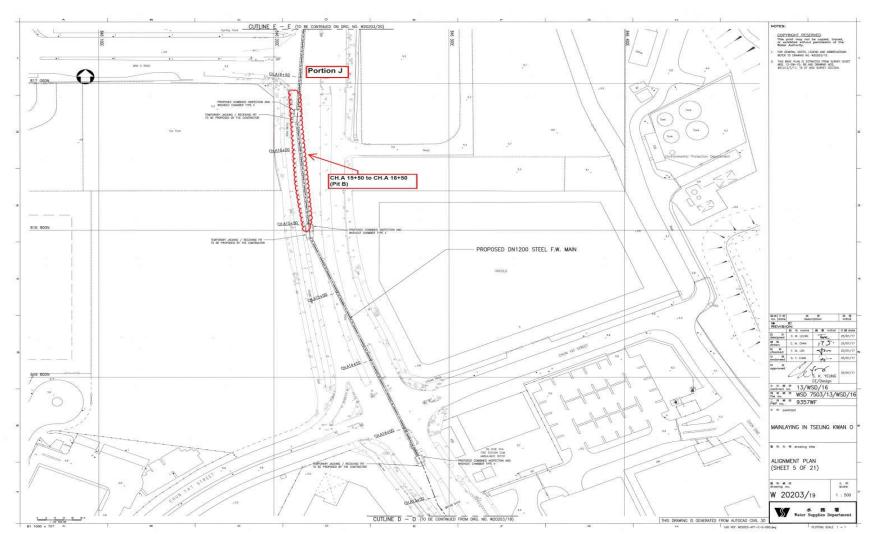


Figure B7 Location Plan for Portion J – CH. A15+50 to CH.A 16+50 (Pit B)



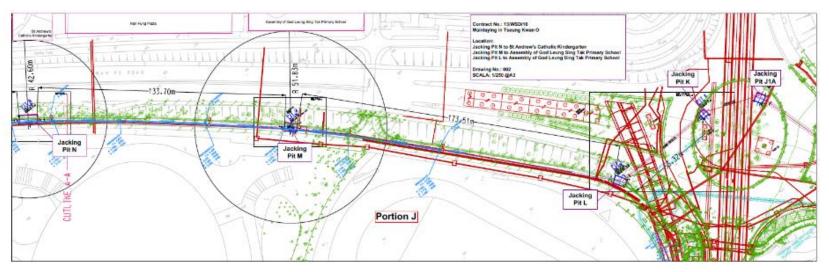


Figure B8a. Location Plan for Portion J – Pit L-M-N, K, J1A

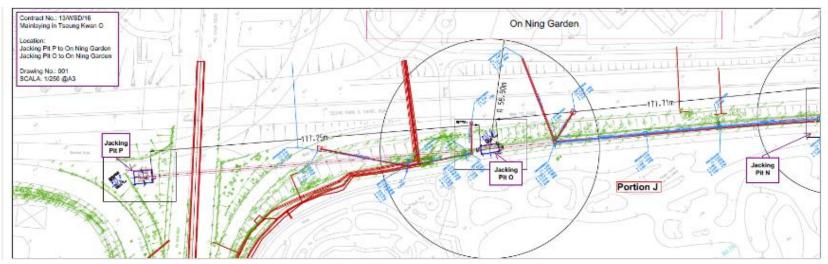


Figure B8b. Location Plan for Portion J – Pit N-O-P



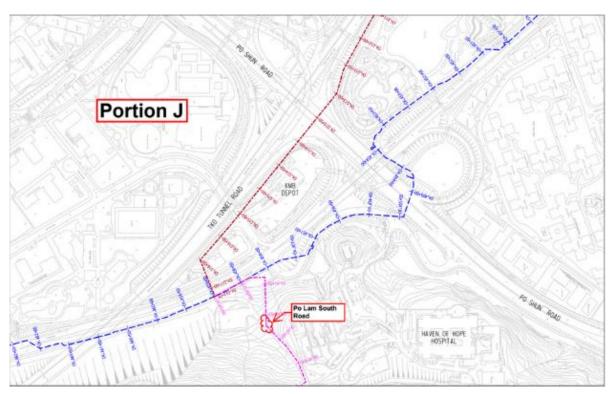


Figure B9a. Location Plan for Mau Wu Tsai 1

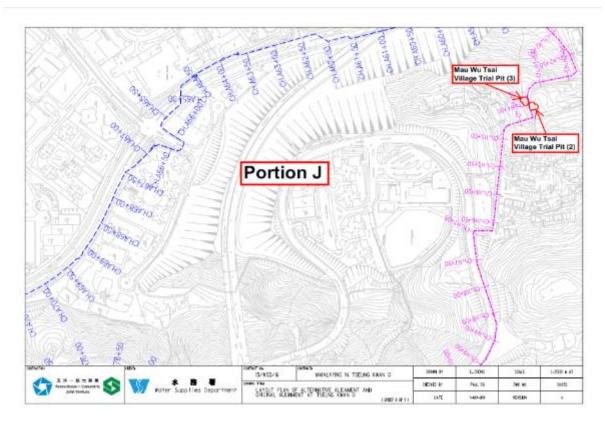


Figure B9b. Location Plan for Mau Wu Tsai 2 & 3



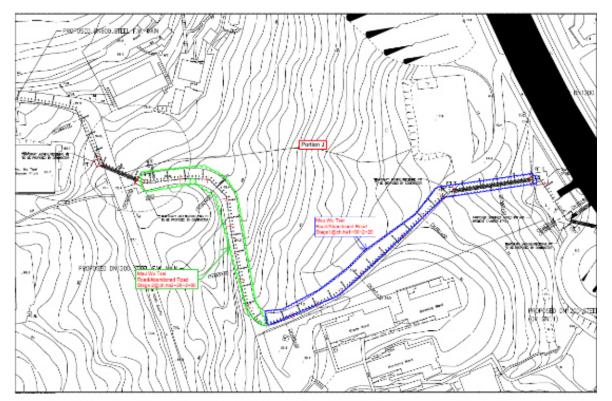


Figure B9c. Abandoned Mau Wu Tsai Road

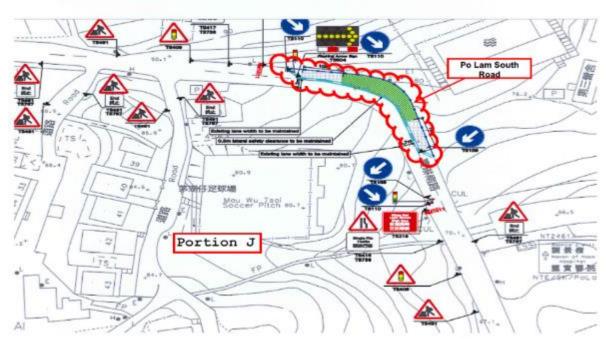


Figure B10. Monitoring Location – Po Lam South Road



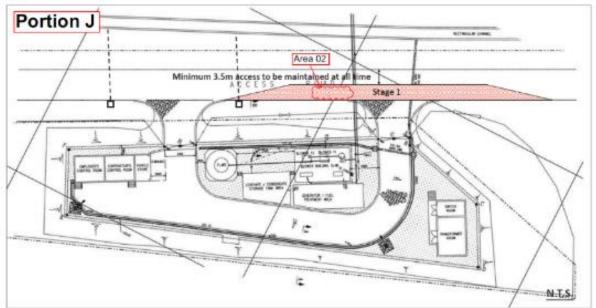


Figure B11. Monitoring Location – Area A02

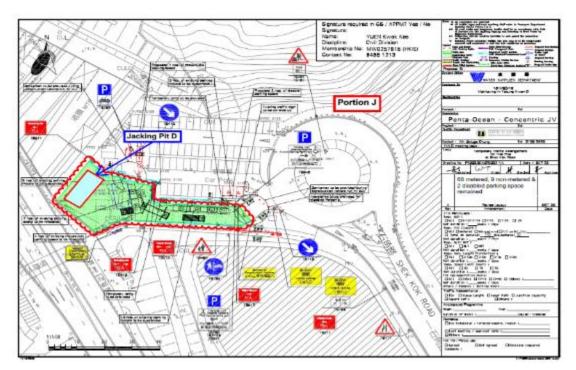


Figure B12. Location Plan for Jacking Pit D



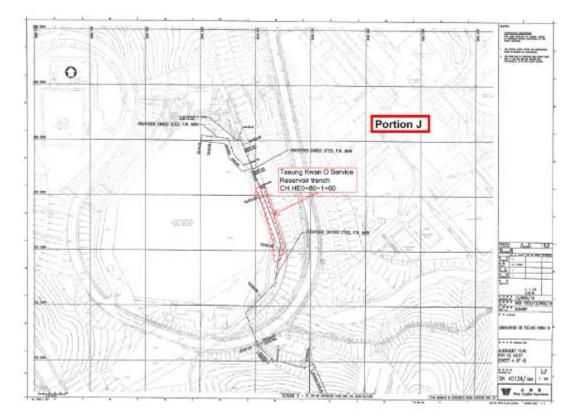


Figure B13. Location Plan for CH.HE0+80-1+60

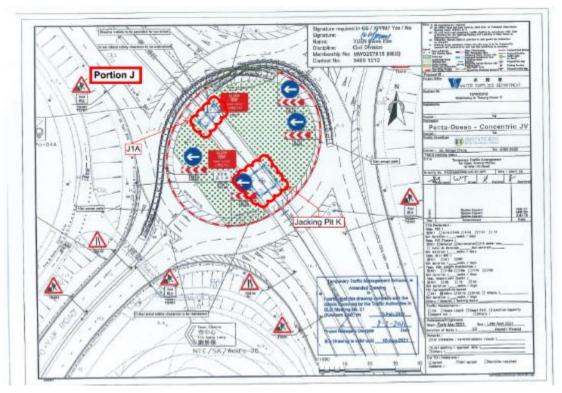


Figure B14. Location Plan for Pit K



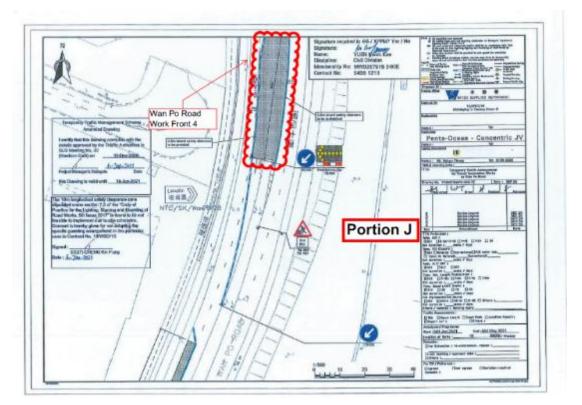


Figure B15. Location Plan for Wan Po Road 4

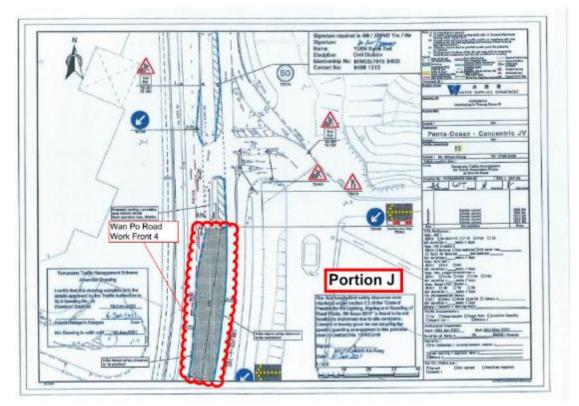


Figure B16. Location Plan for Wan Po Road 4





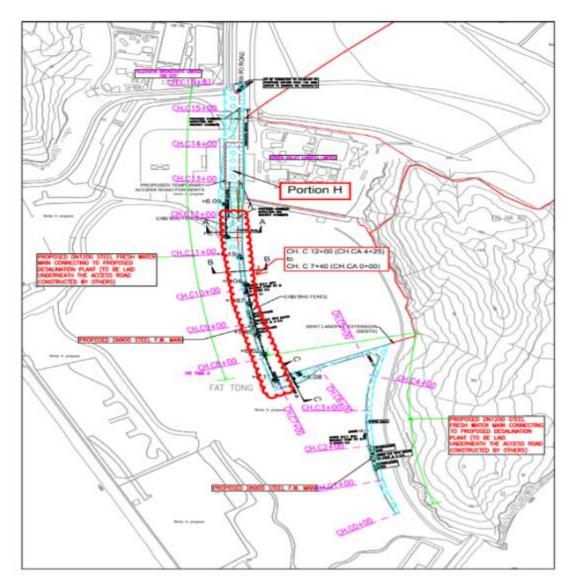


Figure B17. Location Plan for Portion H– CH.C 7+40~CH.C 12+00 (CH.CA 0+00 ~ CH.CA4+25)

Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report





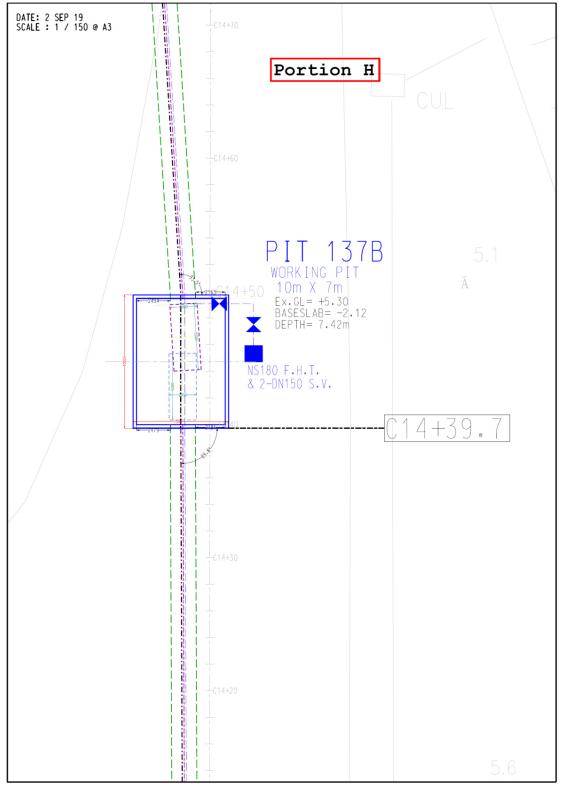


Figure B18. Location Plan for Portion H– Pit 137B



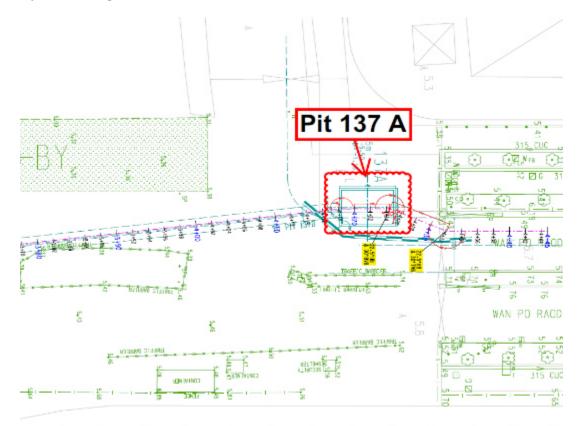


Figure B19. Location Plan for Portion H– Pit 137A

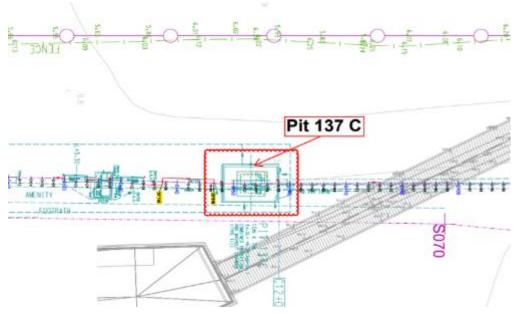


Figure B20 Location Plan for Portion H– Pit 137C



## Appendix C

## Summary of Implementation Status of Environmental Mitigation



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage		Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	С	0	status	Guidelines
Air Quality	•			1	1			
S4.8.1	Impervious dust screen or sheeting will be provided to enclose scaffolding from the ground floor level of building for construction of superstructure of the new buildings.	Land site/ During Construction	Contractor(s)		~		N/A	Air Pollution Control (Construction Dust)
\$4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		~		N/A	
\$4.8.1	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ During Construction	Contractor(s)		•		Implemented after observation	
\$4.8.1	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ During Construction	Contractor(s)		~		Implemented	
S4.8.1	Dropping heights for excavated materials should be controlled to a practical height to minimize the fugitive dust arising from unloading.	Land site/ During Construction	Contractor(s)		~		Implemented	
\$4.8.1	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards and should be dampened or covered before transport.	Land site/ During Construction	Contractor(s)		•		Implemented	
S4.8.1	Wheel washing device should be provided at the exits of the work sites. Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty material from its body and wheels as far as practicable.	Land site/ During Construction	Contractor(s)		~		Implemented	
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		~		N/A	
S4.8.1	Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.	Land site/ During construction	Contractor(s)	•	~		Implemented	



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	status	Guidelines
S4.8.1	Haul roads will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all times.	Land site/ During construction	Contractor(s)		~		Implemented	
S4.8.1	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site/ During construction	Contractor(s)		~		Implemented	Air Pollution Control (Construction Dust)
S4.8.1	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site/ During construction	Contractor(s)		•		Implemented	
S4.8.1	All exposed areas will be kept wet always to minimize dust emission.	Land site/ During construction	Contractor(s)		~		Implemented	
S4.8.1	Ultra-low-Sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% Sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ During construction/ During Operation	Contractor(s)		•	•	Implemented	Environment, Transport and Works Bureau Technical Circular (ETWB- TC(W)) No 19/2005 on Environmental Management on Construction Sites
S4.8.1	The engine of the construction equipment during idling will be switched off.	Land site/ During construction	Contractor(s)		1		Implemented	-
S4.8.1	Concrete batching plant will be required on site. control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented. The control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented.	Land site/ During construction	Contractor(s)		•		N/A	Guidance Note on a Best
S4.8.1	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ During construction	Contractor(s)		~		Implemented	-



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage		Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	С	0	status	Guidelines
S4.10	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the construction phase, environmental site audits on weekly basis is recommended throughout the construction period.	Land site/ During construction	Contractor(s)/ (ET & IEC)		~		Implemented	-

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Impl	ementa Stage	tion	Implementation	Relevant Legislation & Guidelines
	Mitigation Measures	main concerns to address	Agent	D	C	0	status	Guidelines
Noise			-					
S5.7	Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase.	All area/ During construction	Contractor(s)				Implemented	Reduction of Noise from
\$5.7	Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase.	Noise control/ During construction	Contractor(s)		•		N/A	1
\$5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		~		Implemented	
\$5.7	Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum.	Noise control/During construction	Contractor(s)		~		Implemented	
\$5.7	Plants known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Noise control/During construction	Contractor(s)		-		Implemented	
\$5.7	Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	Noise control/ During construction	Contractor(s)		-		N/A	
S5.7	Use of Quite Powered Mechanical Equipment (QPME).	Noise control/ During construction	Contractor(s)		~		Implemented	
85.7	Movable noise barriers of 3m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m <sup>-2</sup> and have no openings or gaps.	Noise control/ During construction	Contractor(s)		•		N/A	
\$5.7	The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Noise control/ During construction	Contractor(s)		~		N/A	
S5.7	Construction activities (e.g. excavation/shoring, reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.	Noise control/ During construction	Contractor(s)		•		Implemented	



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	-	ementa Stage	tion	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	С	0	status	Guidelines
\$5.7	PMEs will not be used at the works areas near educational institutions with residual impact (i.e. the "influence area" within a radius of 40m) during school hours in order to reduce impact to the educational institutions.	Noise control / During construction	Contractor(s)		•		Implemented	-
\$5.7	Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators. Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m <sup>-2</sup> may be used for screening the noise from operation of the saw/groover, concrete.	Noise control/ Pre- construction/ During construction	Contractor(s)	•	•		N/A	-
S5.9	Saw cutting pavement, breaking up of pavement, excavation /shoring, pipe laying, backfilling, reinstatement (concrete) and pipe jacking shall be scheduled outside the examination period.	Noise control/ Pre- construction/ During construction	Contractor(s)	~	<b>√</b>		Implemented	-
\$5.9	In view the duration of noise exceedance at Creative Secondary School, PLK Laws Foundation College, TKO Kei Tak Primary School and School of Continuing and Professional Studies-CUHK is limited to 8 weeks, the construction work in the influence areas near the four schools shall be scheduled during long school holidays (e.g. summer holiday, Easter holiday or Christmas holiday, etc.) as far as practicable. Scheduling the construction work for the four schools.	Noise control/ Pre- construction/ During construction	Contractor(s)	•	•		Implemented	-
S5.10	A noise monitoring programme shall be implemented for the construction phase.	During construction phase	ET		1		Implemented	-
S5.10	The effectiveness of on-site control measures could also be evaluated through the regular site audits.	All facilities/ During construction	Contractor(s)/ ET & IEC		~		Implemented	-

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Imp	ementa Stage	tion	Implementation status	Relevant Legislation & Guidelines
		main concerns to address	Agent	D	С	0	status	Guidennes
Water Qual				1				
S6.9	Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Land site & drainage/ During construction	Contractor(s)				Implemented after observation	ProPECC PN 1/94 TM Standard under the WPCO
S6.9	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land site & drainage/ During construction	Contractor(s)		•		Implemented	-
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		~		Implemented	-
S6.9	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94.	Land site & drainage/ During construction	Contractor(s)		-		Implemented	ProPECC PN 1/94
\$6.9	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land site & drainage/ During construction	Contractor(s)		•		N/A	-
S6.9	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows.	Land site & drainage/ During construction	Contractor(s)		•		N/A	-
\$6.9	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ During construction	Contractor(s)		•		N/A	-

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	-	Implementation Stage D C O		Implementation status	Relevant Legislation & Guidelines
S6.9	Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment.	Land site & drainage/ During construction	Contractor(s)		~		Implemented	-
S6.9 and S6.12	The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer.	Sterilization of water mains prior to commissioning	Contractor(s)		•	•	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
\$6.9	The cleaning and flushing water should also be treated and desilted to the relevant discharge requirement stipulated in TM-DSS before discharging.	Sterilization of water mains prior to commissioning	Contractor(s)		•	•	N/A	
S6.9	Site drainage should be well maintained, and good construction practices should be observed to ensure that oil, fuels, solvents and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.	Land site & drainage/ During construction/ During operation	Contractor(s)		~	~	Implemented after observation	-
S6.12	Regular site inspections will be carried out in order to confirm that regulatory requirements are being met and that contractors are implementing the standard site practice and mitigation measures as proposed to reduce potential impacts to water quality.	During construction	Contractor(s)/ ET & IEC		~		Implemented after observation	-

Note: D – Design stage C – Construction O – Operation



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
Waste Man				•				
\$8.5	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site.	Contract mobilization/ During construction	Contractor(s)		~		Implemented	-
S8.5	Training of site personnel in proper waste management and chemical handling procedures. Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	Contract mobilization/ During construction	Contractor(s)		•		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		•	<b>√</b>	Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	All area/ During construction	Contractor(s)		•		Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A waste management plan (WMP) as stated in the "ETWB $TC(W)$ No. 19/2005, Environmental Management on Construction Sites" for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.	All area/ During construction	Contractor(s)		-		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre at Tsing Yi.	All area/ During construction	Contractor(s)		•		N/A.	Chapters 2 & 3 Code of Practice on the Packaging, Labelling & Storage of Chemical Wastes published under the Waste Disposal Ordinance (Cap 354), Section 35

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
S8.5	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Land site/ During construction	Contractor(s)		~		Implemented	Waste Disposal Ordinance (Cap 354)
88.5	A recording system for the amount of wastes generated/ recycled and disposal sites. The trip- ticket system will be included as one of the contractual requirements and implemented by the contractor(s).	Land site/ During construction	Contractor(s)		•		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
\$8.5	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal.	Land site/ During construction/ During operation	Contractor(s)		~		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Encourage collection of aluminium cans and wastepaper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce.	Land site/ During construction	Contractor(s)		•		Implemented	ETWB TCW No. 33/2002, Management of Construction and Demolition Material Including Rock
S8.5	Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.	Land site/ During construction	Contractor(s)		1		N/A	-
S8.5	Use of reusable non-timber formwork to reduce the amount of C&D materials.	All areas/ During construction	Contractor(s)		•		N/A	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
\$8.5	Prior to disposal of construction waste, wood, steel and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill.	All areas/ During construction	Contractor(s)		•		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Proper storage and site practices to reduce the potential for damage or contamination of construction materials.	All areas/ During construction	Contractor(s)		~		Implemented after observation	-
S8.5	Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	All areas/ During construction	Contractor(s)		~		Implemented	-
\$8.5	The management of dredged/ excavated sediment management requirement from ETWB TC(W) No. 34/2002 will be incorporated in the Specification of the Contract Documents.	Marine works/ During construction	WSD/ Contractor(s)		•		Implemented	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation & Guidelines
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
\$8.5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilisation/ During construction	Contractor(s)		-		Implemented	Cap 354N Waste Disposal (Charges for Disposal of Construction Waste) Regulation
\$8.5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/ landfills, and to control fly-tipping.	Contract mobilisation/ During construction	Contractor(s)		*		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	The project proponent will also conduct regular inspection of the waste management measures implemented on site as described in the Waste Management Plan.	All area/ During construction	Contractor(s)/ ET & IEC		-		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
\$8.5	A recording system (similar to summary table as shown in Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005) for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established during the construction phase.	All area/ During construction	Contractor(s)		•		Implemented	Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005
\$8.5	Inert C&D materials (public fill) will be reused within the Project as far as practicable.	All area/ During construction	Contractor(s)		~		Implemented	-
S8.5	Public fill and construction waste shall be segregated and stored in different containers or skips to facilitate reuse or recycling of materials and their proper disposal.	All area/ During construction	Contractor(s)		~		Implemented	-
\$8.5	Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	All area/ During construction	Contractor(s)		•		Implemented	-
\$8.5	To reduce the potential dust and water quality impacts of site formation works, C&D materials will be wetted as quickly as possible to the extent practice after filling.	All area/ During construction	Contractor(s)		-		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R); WPCO (Cap 358)
\$8.5	Open stockpiles of excavated/ fill materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Land site/ During Construction, particularly dry season	Contractor(s)		~		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R)



EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage	ation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Agent	D	C	0	Status	Guidelines
S8.5	Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	•	Implemented after observation	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging,
S8.5	Chemical waste container shall have a capacity of less than 450 L unless the specifications have been approved by the EPD.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	~	Implemented	Handling and Storage of Chemical Wastes
S8.5	A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	~	Implemented	
\$8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/ WSD		1	1	Implemented	
S8.5	Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	•	Implemented	
\$8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	~	Implemented	
\$8.5	Storage areas for chemical waste shall be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).	All area/ During construction/ During operation	Contractor(s)/ WSD		•	•	Implemented	
S8.5	Storage areas for chemical waste shall be arranged so that incompatible materials are appropriately separated.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	~	Implemented	
S8.5	General refuse will be stored in enclosed bins or compaction units separately from construction and chemical wastes.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	-	Implemented after reminder	
S8.5	Adequate number of waste containers will be provided to avoid over-spillage of waste.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	•	Implemented	DEVB TC(W) No. 8/2010 Enhanced Specification for Site Cleanliness and Tidiness.



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage		Implementation Status	Relevant Legislation & Guidelines
Kelerence	Mitigation Measures	main concerns to address	Agent	D	С	0	Status	
S8.5	A reputable waste collector will be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	•	Implemented	-
\$8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminium can, waste paper, glass bottles and plastic bottles) from the Site. Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	•	Implemented	-
\$8.5	To avoid any odour and litter impact, accurate number of portable toilets will be provided for workers on-site.	All area/ During construction	Contractor(s)		~		Implemented	-
\$8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		~		Implemented	Air Pollution Control Ordinance (Cap 311)
\$8.7	To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be implemented throughout the construction phase.	All facilities/ During construction	ET/ IEC		•		Implemented	-

Note: D – Design stage C – Construction O – Operation

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report



EIA Reference	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	Imp	lementa Stage		Implementation	Relevant Legislation & Guidelines
Kelerence	Mitigation Measures	main concerns to address	Agent	D	С	0	Status	Guidennes
Ecology								
S9.7	Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas.	All area/ During construction	Contractor(s)		•		Implemented	-
S9.7	Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas.	All area/ During construction	Contractor(s)/ Environmental Team (ET)		•		Implemented	-
S9.7	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	All area/ During construction	Contractor(s)		~		Implemented	-
\$9.7	Reinstate temporarily affected areas, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area.	All area/ During construction	Contractor(s)		~		N/A	-

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Imj	plement Stage		Implementation Status	Relevant Legislation & Guidelines
Reference	initigation incubil es	main concerns to address	ngene	D	С	0	Status	Gunucinics
Landscape	e & Visual							
S11.10 & 11.11	The construction area and area allowed for temporary structures, such as the contractor's office, will be minimized to a practical minimum. (MM1)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	~	•	~	Implemented	-
S11.10 & 11.11	At the detailed design stage, the design team will seek to minimize the landscape footprint of the Project and above ground facilities, while satisfying all other requirements. (MM2)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>√</b>	~	~	Implemented	-
\$11.10 & 11.11	Design principles will be adopted to take into account the surrounding area, particularly Clear Water Bay Country Park behind and the nearby waterfront, with due consideration given to: - roadside planting; - aesthetic treatment of all structures; - vertical greening; - screen planting along application site; and - landscape enhancement with amenity planting where practical including planting along the edge (site boundary) fence with native shrubs where feasible to reduce their visual impact and blend them into the surrounding landscape.(MM3)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	~	~	~	Implemented	-
\$11.10 & 11.11	All trees within the Project Site or the potential slope mitigation works area will be carefully protected during construction according to DEVB TCW No. 10/2013 – Tree Preservation (MM4)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	•	*	Implemented after observation	ETWB TCW No. 3/2006 - Tree Preservation.
\$11.10 & 11.11	No tree within the Country Park will be felled. Trees within the Site unavoidably affected by the works will be transplanted where necessary and practical. For trees that need to be felled, compensatory planting will be provided to the satisfaction of relevant Government departments. A compensatory tree planting proposal including locations of tree compensation will be submitted to seek relevant government department's approval, in accordance with DEVB TC(W) No. 10/2013. (MM5)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	•	•	N/A	DEVB TC(W) No. 10/2013

Note: D – Design stage C – Construction O – Operation



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Im	plement Stage		Implementation Status	Relevant Legislation & Guidelines
		main concerns to address	rigent	D	С	0	Status	
Landfill G			ſ	1 4	<u> </u>	<u> </u>	T	
S12.7	During all works, safety procedures should be implemented to minimise the risks of fires and explosions, asphyxiation of workers and toxicity effects resulting from contact with contaminated soil and groundwater.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	•	~	Implemented	-
\$12.7	During trenching and excavation as well as creation of confined spaces at near to or below ground level, precautions should be clearly laid down and rigidly Gas detection equipment and appropriate breathing apparatus should be available and used when entering confined spaces or trenches deeper than 1 metre.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	•	•	Implemented	
S12.7	The Contractor should make the workers are aware of potential hazards of working in confined spaces (any chamber, manhole or culvert which is large enough to permit access to personnel). Such work in confined spaces is controlled by the Factories and Industrial Undertakings (Confined Spaces) Regulations of the Factories and Industrial Undertakings Ordinance. Following the Safety Guide to Working in Confined Spaces ensures compliance with the above regulations.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	*	•	Implemented	
S12.7	Safety officers, specifically trained with regard to landfill gas and leachate related hazards and the appropriate actions to take in adverse circumstances, should be present on the site throughout the works, in particular, when works are undertaken below grade.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	•	•	Implemented	
S12.7	All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid physical contact with it.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	•	•	Implemented	
\$12.7	Monitoring for landfill gas should be undertaken in all excavations, manholes, chambers (particularly during pipe jacking) and any confined spaces through the use of an intrinsically safe portable instrument, appropriately calibrated and capable of measuring the concentrations	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	•	~	Implemented	

#### Contract No. 13/WSD/16 Mainlaying in Tseung Kwan O Monthly EM&A Report



	of methane. carbon dioxide and oxygen.						
S12.7	Monitoring frequency and areas to be monitored should be specified prior to commencement of groundwork, either by the Safety Officer, or by an appropriately qualified person. All measurements should be recorded and documented.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	•	•	Implemented
S12.7	Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>v</b>	<b>√</b>	~	Implemented
S12.7	Prior to the commencement of the site works, the drilling contractor should devise a 'method-of- working' statement covering all normal and emergency procedures (including but not limited to number of operatives, experience and special skills of operatives, normal method of operations, emergency procedures, supervisors' responsibilities, storage and use of safety equipment, safety procedures and signs, barriers and guarding). The site supervisor and all operatives must be familiar with this statement.	All area/ During construction/ During operation	Contractor(s)	~	•	•	Implemented
S12.7	Where below ground service entries are necessary to the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II), the entry point should be sealed to prevent gas entry. In addition, any below grade cable trenches entering the Incoming Switchgear Room and 132 kV Substation can become the pathway for landfill gas and hence grilled metal covers should be used.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	•	•	N/A
\$12.7	It is recommended regular landfill gas monitoring should be carried out at the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II). The monitoring frequency will be monthly for the first year of operation. If the monitoring results show no sign of landfill gas migration, reduce the monitoring frequency to once every six months.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	•	•	N/A
S12.7	The manholes and utility pits within the Project Site and along the fresh water mains. Each manhole/ utility pit should be monitored with two measurements (at mid depth and base). Each measurement should be monitored for a minimum of 10 minutes. A steady reading and peak reading should be recorded at each manhole/ utility pit	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>·</b>	1	•	Implemented



S12.7 All construction, operation and maintenance personnel working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards and the designs and procedural means by which these		and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.						
	S12.7	working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards	During construction/ During operation	Contractor(s)	~	~	~	Implemented

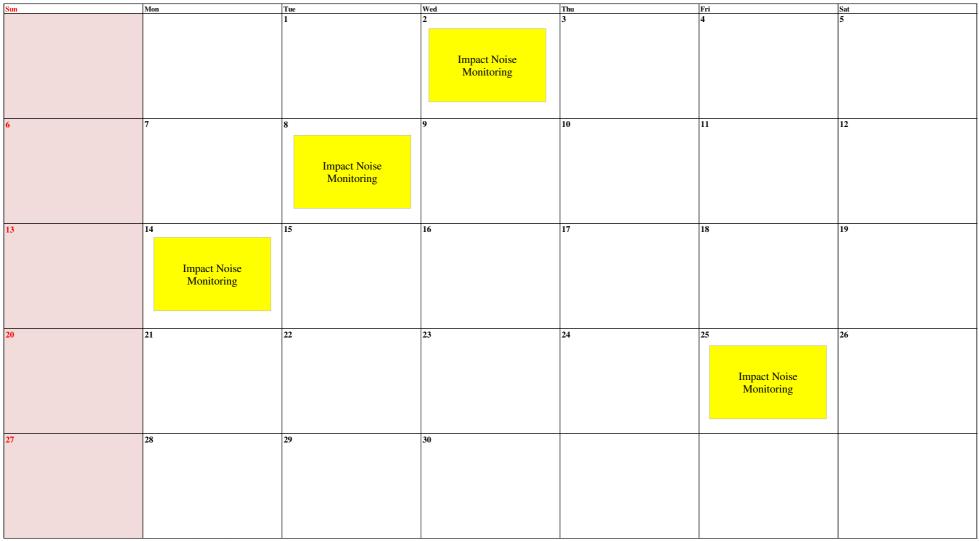


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# Impact Monitoring Schedule of the Reporting Month

### Contract No. 13/WSD/16 Mainlaying in Tseung Kwon O Environmental Monitoring Schedule (November 2022)



The schedule may be changed due to unforeseen circumstances (adverse weather, etc.)



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# Noise Monitoring Equipment Calibration Certificate

# **Certificate of Calibration**

#### for

Description:	Sound Level Meter
Manufacturer:	SVANTEK
Type No.:	971 (Serial No.: 96062)
Microphone:	ACO 7052 E (Serial No.: 79778)
Preamplifier:	SVANTEK SV 18 (Serial No.:97276)

#### Submitted by:

Customer:	Acuity Sustainability Consulting Limited
Address:	Unit E, 12/F., Ford Glory Plaza,
	Nos. 37-39 Wing Hong Street,
	Cheung Sha Wan, Kowloon, Hong Kong

#### Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5 Hz to 4k Hz)□ Outside

#### the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 21 June 2022

Date of calibration: 27 June 2022

Date of NEXT calibration: 26 June 2023

Calibrated by: Calibration Technician

Date of issue: 27 June 2022

Certificate No.: APJ22-029-CC002

0 Certified by:

Mr. Tang Cheuk Hang Quality Manager



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F	Room 422, Leader Industrial Centre, 57-59 Au Pui Wan Street	Fo Tan, Shatin, N.T., Hong Kong
	Tel: (852) 2668 3423	Fax:(852)26686946
	Homepage: http://www.aa-lab.com	E-mail: inquiry@aa-lab.com

#### Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

#### 1. Calibration Conditions:

Air Temperature:	24.2 °C
Air Pressure:	1004 <b>hPa</b>
<b>Relative Humidity:</b>	60.8 %

#### 2. Calibration Equipment:

	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV200041	HOKLAS

#### 3. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setti	ing of U	nit-under-te	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
25-124.5	dBA	SPL	Fast	94	1000	94.0	±0.4

Linearity

Setti	ing of Un	it-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				94		94.0	Ref
25-124.5	dBA	SPL	Fast	104	1000	104.0	±0.3
				114		114.0	±0.3

Time Weighting

Setti	ing of Un	it-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
25-124.5	A D A	dBA SPL	Fast	94	1000	94.0	Ref
	uва		Slow	94		94.0	±0.3

Certificate No.: APJ22-029-CC002



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Frequency Response

Linear Response

Sett	ing of Unit	t-under-t	est (UUT)	Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	94.3	±2.0
					63	94.2	±1.5
		dB SPL	Fast	94	125	94.1	±1.5
25-124.5	dD				250	94.1	±1.4
25-124.5	UD				500	94.0	±1.4
					1000	94.0	Ref
					2000	93.7	±1.6
					4000	93.1	±1.6

A-weighting

Sett	ing of Uı	nit-under-t	est (UUT)	Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	54.9	-39.4 ±2.0
					63	68.0	-26.2±1.5
			Fast	94	125	78.0	-16.1±1.5
25-124.5	dDA	dBA SPL			250	85.4	-8.6±1.4
23-124.3	UDA				500	90.8	$-3.2 \pm 1.4$
					1000	94.0	Ref
				2000	94.9	$+1.2 \pm 1.6$	
		-			4000	94.2	$+1.0 \pm 1.6$

C-weighting

Setti	ing of Uni	t-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. Weighting		Time Weighting Level, dB		Frequency, Hz	dB	Specification, dB	
					31.5	91.3	-3.0 ±2.0	
				94	63	93.4	-0.8±1.5	
					125	93.9	-0.2±1.5	
25-124.5	dBC	SPL	Fast		250	94.1	$-0.0 \pm 1.4$	
25-124.5	ubc	51 L	rasi		500	94.1	-0.0±1.4	
					1000	94.0	Ref	
					2000	93.6	-0.2 ±1.6	
					4000	92.4	-0.8±1.6	

Certificate No.: APJ22-029-CC002



Page 3 of 4

# (A+A)\*L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

#### 4. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.15
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	$\pm$ 0.05
	1000 Hz	± 0.05
	2000 Hz	$\pm$ 0.05
	4000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)\*L shall not be liable for any loss or damage resulting from the use of the equipment.



Page 4 of 4

Certificate No.: APJ22-029-CC002

Certificate No. D224269E



## CALIBRATION CERTIFICATE

Product	:	SOUND CALIBRATOR
Туре	:	NC-75
Serial number	:	34524163
Manufacturer	:	RION CO., LTD.
Calibration quantities	:	Sound pressure level (with reference standard microphone)
Calibration method	:	Measured by specified secondary standard microphone
		according to JCSS calibration procedure specified by RION.
Ambient conditions	:	Temperature 23.4 °C, Relative humidity 48 %,
		Static pressure 100.9 kPa
Calibration date	:	09/05/2022 (DD/MM/YYYY)
Calibration location	:	3·20·41 Higashimotomachi, Kokubunji, Tokyo 185·8533, Japan
		RION CO., LTD. Calibration Room

We hereby certify that the results of this calibration were as follows.

Issue date : 12/05/2022 (DD/MM/YYYY)

Junichi Kawamura Manager Quality Assurance Section, Quality Assurance Department, Environmental Instrument Division, RION CO., LTD. 3·20·41 Higashimotomachi, Kokubunji, Tokyo 185·8533, Japan

This certificate is based on article 144 of the Measurement Law and indicates the result of calibration in accordance with measurement standards traceable to Primary Measurement Standards (National Standards) which realizes the physical units of measurement according to the International System of Units (SI).

The accreditation symbol is attestation of which the result of calibration is traceable to Primary Measurement Standards (National Standards).

The certificate shall not be reproduced except in full, without the written approval of the issuing laboratory. The calibration laboratory who issued this calibration certificate conforms to ISO/IEC 17025:2017.

This calibration certificate was issued by the calibration laboratory accredited by IAJapan who is a signatory to the Mutual Recognition Arrangement (MRA) of International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Accreditation Cooperation (APAC). This (These) calibration result(s) may be accepted internationally through ILAC/APAC MRA.



Certificate No. D224269E

### CALIBRATION RESULT

1. Sound pressure level (with reference standard microphone)

Measured	Expanded
value	uncertainty *1
93.98 dB	0.09 dB
Specified secondary s	tandard microphone:
Type :4	160

Serial number ÷ 2973341

Reference Sound pressure :  $2 \times 10^{.5}$  Pa

\*1 Defines an interval estimated to have a level of confidence of approximately 95 %. Coverage factor k=2

Calibration result is the calibration value in ambient conditions during calibration.

### BE OUT OF JCSS CALIBRATION

1. Frequency

Measured value	Measurement uncertainty (k=2)				
1000.0 Hz	$3.9  imes 10^{\cdot 4}$ Hz				

Working measurement standard universal counter: Type : 53132A Serial number : MY40005574 (JCSS Calibration Certificate No. 21081499079575510)

#### 2. Total distortion

Measured
value
0.3 %

Working measurement standard distortion meter: Type : VA-2230A Serial number : 11076061 (A2LA Calibration Certificate No. 1501-03080)

- closing -







### Certificate of Conformity

This instrument was produced under rigorous factory production control and documented standard procedures. It was individually inspected and leak tested and the functioning of the display, backlight, buttons and firmware was verified. The accuracy of each of its primary measurements was individually calibrated and/or validated against standards traceable to the National Institute of Standards and Technology ("NIST") or other calibrated standards in accordance with the documented standard test methods detailed below. This instrument is warrantied to perform in compliance with the published specifications for the specific measurements and features of its model number including specified typical drift since its date of manufacture. *(See Kestrel Limited Warranty for full warranty terms.)* 

# Standards Used in Testing Wind Speed:

The Kestrel Weather & Environmental Meter impeller installed in this unit was individually tested in a subsonic wind tunnel operating at approximately 300 fpm (1.5 m/s) and 1200 fpm (6.1 m/s) monitored by a Gill Instruments Model 1350 ultrasonic time-offlight anemometer. The Gill 1350 is calibrated regularly and is traceable to NIST with a maximum combined uncertainty of  $\pm 1.04\%$  within the airspeed range 711.4 to 3930 fpm (3.61 to 19.96 m/s), and  $\pm 1.66\%$ within the airspeed range 170 to 711.4 fpm (0.86 to 3.61 m/s).

#### **Temperature:**

Temperature response is verified in comparison with an Ametek DTI-050 Digital Temperature Indicator and STS Reference Sensor. The DTI-050 is calibrated annually and is traceable to NIST with a maximum relative expanded uncertainty of  $\pm 0.04$ C.

#### **Relative Humidity:**

Relative humidity is verified in comparison with an Edgetech HT120 Humidity Transmitter. The HT120 is calibrated annually and is traceable to NIST with a maximum relative expanded uncertainty of  $\pm 1.0\%$ RH.

#### **Barometric Pressure:**

Pressure response is verified against a Vaisala PTB210A Digital Barometer. The Vaisala Barometer is calibrated annually and is traceable to NIST with a maximum relative expanded uncertainty of  $\pm$  0.3hPa.

Approved By:

Michael Naughton Chief Product Officer, Nielsen-Kellerman

### Product Specifications for Kestrel Weather Meters, Model Numbers 1000-3500

			SENSORS	
SENSOR	ACCURACY (+/-)	RESOLUTION	SPECIFICATION RANGE	NOTES
Wind Speed  Air Speed	Larger of 3% of reading, least significant digit or 20 ft/min	0.1 m/s 1 ft/min 0.1 km/h 0.1 mph 0.1 knots 1 B	0.6 to 40.0 m/s 118 to 7,874 f/min 2.2 to 144.0 km/h 1.3 to 89.5 mph 1.2 to 77.8 knots 0 to 12 B	1 inch 25 mm diameter impeller with precision axle and low-friction Zytel® bearings. Startup speed stated as lower limit, readings may be taken down to 0.4 m/s  79 ft min 1.5 km/h  .9 mph  .8 kt after impeller startup. Off-axis accuracy -1% @ 5* off axis; -2% @ 10°; -3% @ 15°. Calibration drift < 1% after 100 hours use at 16 MPH  7 m/s. Replacement impeller (NK PN-0801) field installs without tools (US Patent 5,783,753). Wind speed calibration and testing should be done with triangle on impeller located at the top front face of the Kestrel. Measuring wind speeds above 60 m/s / 134.2 mph can damage the impeller.
Ambient Temperature	0.9 °F 0.5 °C	0.1 °F 0.1 °C	-20.0 to 158.0 °F -29.0 to 70.0 °C	Airflow of 2.2 mph 1 m/s or greater provides fastest response and reduction of insolation effect. For greatest accuracy, avoid direct sunlight on the temperature sensor and prolonged sunlight exposure to the unit in low airflow conditions. Calibration drift is negligible for the life of the product. For further details, see Display & Battery Operational Temperature Limits.
Relative Humidity	3%RH	0.1 %RH	5 to 95% 25°C non-condensing	To achieve stated accuracy, unit must be permitted to equilibrate to external temperature when exposed to large, rapid temperature changes and be kept out of direct sunlight. Calibration drift is typically less than ±0.25% per year.
Pressure	1.5 hPa mbar 0.044 inHg 0.022 PSI	0.1 hPaļmbar 0.01 inHg 0.01 PSI	25°C/77°F 750-1100 hPa mbar 22.15-32.48 inHg 10.88-15.95 PSI	Monolithic silicon piezo-resistive pressure sensor with second-order temperature correction. Between 1100–1600 mbar, unit will operate with reduced accuracy. Sensor may not operate above 1600 mbar and can be damaged above 6,000 mbar or below 10 mbar. Calibration drift is negligible for the life of the product.

CALCULATED MEASUREMENTS											
MEASUREMENT	ACCURACY (+/-)	RESOLUTION	SENSORS EMPLOYED								
Altitude	typical: 23.6 ft/7.2 m from 750 to 1100 mBar max: 48.2 ft/14.7 m from 300 to 750 mBar	1 ft 1 m	Pressure, User Input (Reference Pressure)								
Barometric Pressure	0.07 inHg 2.4 hPa∣mbar 0.03 PSI	0.01 inHg 0.1 hPalmbar 0.01 PSI	Pressure, User Input (Reference Altitude)								
Delta T	3.2 °F 1.8 °C	0.1 °F 0.1 °C	Temperature, Relative Humidity, Pressure								
Dew Point	3.4 °F 1.9 °C 15-95% RH. Refer to Range for Temperature Sensor	0.1 °F 0.1 °C	Temperature, Relative Humidity								
Heat Index	7.1°F 4.0°C	0.1 °F 0.1 °C	Temperature, Relative Humidity								
Wet Bulb Temperature - Psychrometric	3.2 °F 1.8 °C	0.1 °F 0.1 °C	Temperature, Relative Humidity, Pressure								
Wind Chill	1.6 °F 0.9 °C	0.1 °F 0.1 °C	Wind Speed, Temperature								

ADDITIONAL PROD	UCT INFO
Display	Reflective LCD
Backlight	Standard or dim red (NV models only) backlight. Manual activation with auto-off.
Response Time & Display Update	Display updates every 1 second. After exposure to large environmental changes, all sensors require an equilibration period to reach stated accuracy. Measurements employing RH may require longer periods particularly after prolonged exposure to very high or very low humidity.
Auto Shutdown	After 45 minutes with no key presses.
Clock	Real Time Hour:Minute Display
Certifications	CE certified, RoHS and WEEE compliant. Individually tested to NIST-traceable standards.
Origin	Designed and manufactured in the USA from US and imported components. Complies with Regional Value Content and Tariff Code Transformation requirements for NAFTA Preference Criterion B.
Bluetooth <sup>®</sup> Data Connect	Wireless range up to 100ft. Employs Kestrel Link protocol for data transmission with Kestrel Link Ballistics App. (iOS/Android)
Battery	Requires one CR2032 battery, included. Up to 300 hours of use, reduced by backlight or Bluetooth use.
Shock Resistance	MIL-STD-810g, Transit Shock, Method 516.7 Procedure IV; unit only; impact may damage replaceable impeller.
Sealing	Waterproof (IP67 and NEMA-6)
Display & Battery Operational Temperature Limits	14° F to 131° F  -10 °C to 55 °C Measurements may be taken beyond the limits of the operational temperature range of the display and batteries by maintaining the unit within the operational range and then exposing it to the more extreme environment for the minimum time necessary to take reading.
Storage Temperature	-22.0 °F to 140.0 °F   -30.0 °C to 60.0 °C.
Size & Weight	4.8 x 1.9 x 1.1 in   12.2 x 4.8 x 2.8 cm, 3.6 oz   102 g (Including slip-on cover).

\*Note: Accuracy calculated as uncertainty of the measurement derived from statistical analysis considering the combined effects from primary sensor specifications, circuit conversions, and all other sources of error using a coverage factor of k=2, or two standard deviations (2<sup>S</sup>)

\*\*Note: For Kestrel 1000, 2000, 2500, 3000, 3500 series these specifications are valid for units with a serial number higher than 2262687. If your product has a lower serial number, please reference the K4000 specifications 329011.



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# Event / Action Plan for Noise Exceedance



#### Event and Action Plan for Construction Noise Monitoring

Event	Action									
	ET		IEC				Contractor			
Action Level	2. 3.	Carry out investigation to identify the source and cause of the complaint/ exceedance(s) Notify IEC, ER, and Contractor and report the results of investigation to the Contractor, ER and the IEC Discuss with the Contractor and IEC for remedial measures required If the complaint is related to the Project, conduct additional monitoring for checking mitigation effectiveness and report the findings and results to the IEC, ER and the Contractor	1. 2. 3.	Review the analyzed results submitted by the ET Review the proposed remedial measures by the Contractor and advise the ER accordingly Supervise the implementation of remedial measures	1. 2. 3.	Confirm receipt of Notification of Exceedance in writing Require Contractor to propose remedial measures for the analysed noise problem Ensure remedial measures are properly implemented	1.	if required, to the IEC and ER		
imit Level		<ol> <li>Notify IEC, ER, EPD and Contractor</li> <li>Identify the source(s) of impact by reviewing all the relevant monitoring data and the corresponding construction activities. Exceedances should also be confirmed by immediate verification in the field as far as practical.</li> <li>Repeat measurement to confirm findings</li> <li>Increase monitoring frequency</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented</li> <li>inform IEC, ER and EPD the cause &amp; actions taken for the exceedances</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD ER informed of the results</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	g ed. t	<ol> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions</li> <li>Review Contractor's remedial actions to assure their effectiveness and advise the ER &amp;ET accordingly</li> <li>Supervise the implementation of the remedial measures</li> </ol>	2. 3. 4. 5.	Confirm receipt of notification of exceedance in writing Notify Contractor Require Contractor to propose remedial measures for the analyzed noise problem Ensure remedial measures are properly implemented If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted	2. 3. 4.	Take immediate action to avoid further exceedance Identify practicable measures to minimize the noise impact. Submit proposals for remedial actions to ER within three working days of notification Implement the agreed proposals Resubmit proposal if problem still not under control Stop the relevant portion of works as determined by the ER until the exceedance is abated		



# Appendix G

# Noise Monitoring Data



#### Table G 1Summary of Noise Monitoring Result

Date			L <sub>eq-5min</sub> , dB(A)						Leg-30min,	L10-30mins,	L90-30mins	Limit	
	Time	Weather	Reading (1)	Reading (2)	Reading (3)	Reading (4)	Reading (5)	Reading (6)	dB(A)	dB(A)	dB(A)	Level, dB(A)*	Noise Meter
02/11/2022	11:36 - 12:06	Cloudy	65.6	66.7	65.8	65.9	66.3	66.9	66.2	72.1	64.1	70.0	Svantek 971
08/11/2022	11:40 - 12:10	Cloudy	68.6	69.1	67.5	67.0	67.6	67.4	67.9	71.3	61.2	70.0	Svantek 971
14/11/2022	10:11 - 10:41	Cloudy	67.3	69.8	69.5	69.4	69.1	69.7	69.2	72.3	60.8	70.0	Svantek 971
25/11/2022	11:38 - 12:08	Cloudy	68.1	69.1	67.4	70.4	69.6	67.7	68.9	72.0	62.4	70.0	Svantek 971

Remarks:

\*No examinations were scheduled for NSR4 Creative Secondary School in the reporting month.



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# Waste Flow Table



#### **Appendix H – Waste Flow Table**

	A	ctual Quantitie	es of Inert C&D	Materials Ger	Actual Quantities of Non-C&D Wastes Generated Monthly						
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Project	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard packaging	Plastics	Chemical Waste	Other, e.g., general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in'000kg)	(in'000kg)	(in'000kg)	(in'000kg)	(in '000m <sup>3</sup> )
Jan 2022	2.342	0.145			2.014	0.328		0.065			0.006
Feb 2022	2.184	0.240			1.855	0.329		0.058			0.001
Mar 2022	1.284	0.028	0.096		1.188	0.860		0.054			0.002
Apr 2022	0.840	0.012	0.188		0.652	0.751		0.055			0.003
May 2022	1.008	0.036	0.528		0.480	0.737		0.057			0.000
Jun 2022	1.710	0.200	0.398		1.312	0.639		0.056			0.007
Sub-total	9.368	0.661	1.210		7.501	3.644		0.345			0.019
Jul 2022	1.750	0.116	0.617		1.133	0.064		0.055			0.006
Aug 2022	1.660	0.032	0.808		0.852	1.774		0.054			0.002
Sep 2022	1.886	0.020	0.592		1.294	0.847		0.056			0.004
Oct 2022	1.993	0.058	0.341		1.652	0.240		0.053			0.004
Nov 2022	1.503	0.089	0.233		1.270	0.820		0.057			0.008
Dec 2022											
Total	18.160	0.976	3.801		13.702	7.389		0.620			0.043

Notes:

1) Total quantity Generated only refers to the actual Quantitates of inert C&D materials generated monthly excluding those that will be recycled (Hard rock & large broken concrete, reused in contract and reused in another contract). Imported fill will not be included in total quantity generated as those C&D materials are not generated from this project.

2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.



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# Landfill Gas Monitoring Equipment Calibration Certificate



香港新界葵涌葵昌路58-70號永祥工業大廈10樓B室

Unit B, 10/F., Wing Cheung Industrial Building, 58-70 Kwai Cheong Road, Kwai Chung, New Territories, HK Tel: (852) 2751 7770 Fax: (852) 2756 2051 E-mail: rotter@rotter.com.hk

#### **Calibration Report - Gas Detector**

PGM-2500 (QRAE III) --- LEL/O2/CO/H2S

#### **UNIT INFORMATION :**

Customer:	Penta Ocean Construction Co Ltd	Serial # :	M02A001708	Model :	QRAE III
		Firmware :	V2.12	Sensor :	LEL/O2/CO/H2S
		Cal date :	28-Jul-2022	Inspected:	Teddy
				]	

#### **SENSOR DATA :**

<u>LEL sensor (ME)</u>	<u>O2 sensor</u>	CO sensor (Tox1)	H2S sensor (Tox2)
28-Jul-2022	28-Jul-2022	28-Jul-2022	28-Jul-2022
50%	18.00%	50 ppm	10.0 ppm
10.00%	19.50%	35 ppm	10 ppm
20.00%	23.50%	200 ppm	20 ppm
		35 ppm	10 ppm
		100 ppm	15 ppm
Yes	Measure	Average	
Methane	LEL measurement Gas	Methane	
LEL_custom_gas	LEL Custom Factor	1.0	
Mix: (18% O2, 50ppm	CO, 10ppm H2S, 50% LE	L CH4, BAL N2)	Gas lot #WO350201-3
	50% 10.00% 20.00%    Low Yes Methane LEL_custom_gas	50%         18.00%           10.00%         19.50%           20.00%         23.50%	50%         18.00%         50 ppm           10.00%         19.50%         35 ppm           20.00%         23.50%         200 ppm             35 ppm             100 ppm             100 ppm             100 ppm           Measure         Manual         Average           Methane         LEL measurement Gas         Methane

Replaced Parts:

Notes: The unit was calibrated and checked under good working condition

\*\*Next calibration due on or before 27 July 2023

Serviced by\_



### PROMAT (HK) LTD

寶時(香港)有限公司

901 New Trend Centre, 704 Prince Edward Road East, San Po Kong, Kowloon, HK Tel.: 2661 2392 Fax.: 2661 2086 email : service@promat.hk http://www.promat.hk



Your Solution To Testing Instrument

### VERIFICATION CERTIFICATE OF CO2 Analyzer

Report No.	:	21012
Date	:	15/11/2021
Client	:	Penta Ocean Concentric JV

#### EQUIPMENT TO BE VERIFIED

Equipment Name	:	CO2 Analyzer
Supplier	:	TES
Model No.	:	1307H
Serial No.	:	200901259
Date of Verification	:	15/11/2021
Due Verification	:	14/11/2022

#### VERIFICATION DEVICES USED

Reference Equipment	: CO2 in N2	CO2 in N2
Supplier	: NorLab	NorLab
Model No.	: H1013500PN	H1013.3VN
Lot #	: 0-353-780	1-006-21
Expiry date	: 23/12/2023	10/1/2024
Accuracy	: Within +/-2%	Within +/-2%

#### **ENVIRONMENTAL CONDITION**

Ambient Temp	:	25.2 °C
Relative Humidity	:	53%

#### **Verification Result**

Test Number	Concentration (Mole%)	Results
Test 1	500ppm	510ppm
Test 2	0.50%	0.52%

#### Remarks

1 The Gas reference used in this verification has traceable accuracy to Manufacturer Standard

2 The above equipment was operated by the competent person

3 Promat is Registered ISO9001:2015 Quality Management System in Sales, Repair and Calibration Services

Certification
Verification by
No This
Mr. Eric Lee / Product Manager

### PROMAT (HK) LTD

寶時(香港)有限公司

901 New Trend Centre, 704 Prince Edward Road East, San Po Kong, Kowloon, HK Tel.: 2661 2392 Fax.: 2661 2086 email : sales@promat.hk http://www.promat.hk/



### VERIFICATION CERTIFICATE OF CO2 Analyzer

Report No.	: 22040
Date	: 17/11/2022
Client	: Penta Ocean Concentric JV

#### EQUIPMENT TO BE VERIFIED

	CO2 Analyzer
	TES
	1307H
	200901259
	17/11/2022
•	16/11/2023

#### **VERIFICATION DEVICES USED**

Reference Equipment	: CO2 in N2	CO2 in N2
Supplier	: NorLab	NorLab
Model No.	: H1013500PN	H1013.3VN
Lot #	: 0-353-790	1-006-27
Expiry date	: 12/2/2024	10/3/2025
Accuracy	: Within +/-2%	Within +/-2%

#### **ENVIRONMENTAL CONDITION**

Ambient Temp	:	25°C
Relative Humidity	:	57%

#### Verification Result

Test Number	Concentration (Mole%)	Results 505ppm 0.52%		
Test 1	500ppm			
Test 2	0.50%			

#### Remarks

1 The Gas reference used in this verification has traceable accuracy to Manufacturer Standard

2 The above equipment was operated by the competent person

3 Promat is Registered ISO9001:2015 Quality Management System in Sales, Repair and Calibration Services

#### Certification

Verification by

Ms. Ning Lee / Service Coordinator

Checked by

Mr. Hei Kong / Technical Engineer

	Calil	oration Ce	ertif	icate					
Cert. Ref. No.: BW/XT/3RD/17974			Date:	2022 09 0	2				
Customer: Renopipe Construction Company Limited			Purchase Order No.: SME-C-20-21-6/2020-76554						
九龍觀塘海濱道133號萬兆豐中心6樓K2室									
/ いる町の11/4/泉2133辺に内7に豆、Tバレい1安八と王				Date         2020         07         07         INVOICE         NO:         AP					
			Email: damonhuang@renopipe.com.hk						
Attn: Damon Huang	3193	Fax: 3998 3225 Mc				bile Phone			
User Details:			L				L		
Gas Detector Model: XT-XWI Calibration Record:	HM-Y-OR Seri	al No.: MA220-012	2709	Pump	<b>S/N:</b> 420373	}			
Inpectio	Inpection before calibration			Visual inspection		Functional Test			
Basic Unit - Case, Clip & Display etc.				OK		OK			
Battery and charge etc.				OK		OK			
Motorized Pump				OK		ОК			
Other items									
Type of Sensor				Expiry Da	ite				
Oxygen Sensor									
CO & H2S Sensor									
Combustible(LEL) Sensor									
Type of calibration	Type of calibration Date of calibration			CO (ppm)	O2 (%)		LEL (%)		
3rd Calibration	2022 09 02	25		100	18		50		
Result of Calibration		ОК		ОК	ОК		OK		
Calibration Cost: (As per attached invoice) F.O.C									
Calibration remarks: Oxygen sensor replaced by new one Warranty : Oxygen Sensor 1 years warranty									
Next calibration date of this instrument will be : 2023 09 02									
IMPORTANT NOTES TO BW GAS DETECTOR USERS USERS MUST READ THE OPERATOR'S MANUAL THOROUGHLY BEFORE OPERATING THIS EQUIPMENT AND FOLLOW THEIR OWN SAFETY SUPERVISOR'S INSTRUCTION TO WORK.									
All gas detection instrumen as accurate as the test gas us I.S.T. Standards.									
Calibrated By:	Sara Tse	Service	e Hotli	ne: 2592 2120	Ms. Tse -	Service	e Dept.		
Asia Pacific Industrial Safety Equipment Unit B, 1/F., Hing Yip Centre, 31 Hing Yip Street, Kwun Tong, Kowloon, Hong Kong Tel:2592 2100 Fax: 3165 8960									



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## Landfill Gas Monitoring Data

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Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

					Monitoring	; wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area 137 Pit A	1/11/2022	0830	Rain/ Fine	0	0	0	20.9	24/1009	8.4
	м	1330	Rain/ Fine	0	0	0	20.9	26/1010	8.4
	Ч	1700	Rain/ Fine	0	0	0	20.9	251 (010	8.4
Area 137 Pit B	м	0830	Rain/ Fine	0	0	0	20.9	251 (00P	8.6
	S	1330	Rain/ Fine	0	0	0	20.9	201 1009	8.6
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ 10/0	8.6
Area 137 Pit C	M	0830	Rain/ Fine	0	0	0	20.9	24/ 100	10
	ч	1330	Rain/ Fine	0	0	0	20.9	201 [01]	10
	ν	1700	Rain/ Fine	0	0	0	20.9	25/ (01)	10
		Name & Designati	ion			<u>Signature</u>			<u>Date</u>

Field Operator:

Jock Lee (Competent Person [CO-310218])

**Signature** 

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1/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring – Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	2/11/2020	0830	Rain/ Fine	0	0	0	20.9	24/ (00P	8.4		
	i,	1330	Rain/ Fine	0	0	0	20.9	27/1009	8.4		
	Ч	1700	Rain/ Fine	0	0	0	20.9	25/10/0	8.4		
Area 137 Pit B	5	0830	Rain/ Fine	0	0	0	20.9	24/ [011	8.6		
	ч	1330	Bain/ Fine	0	0	0	20.9	2/ 1010	8.6		
	1	1700	Rain/ Fine	0	0	0	20.9	25/ [010	8.6		
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	N41 100P	10		
	5	1330	Rain/ Fine	0	0	0	20.9	271 (010	10		
	6	1700	Rain/ Fine	0	0	0	20.9	25/ 1010	10		

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218]) <u>Signature</u>

<u>Date</u> >/11/222

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	3/11/2022	0830	Rain/ Fine	0	0	0	20.9	241 (009	8.4	
	Ч	1330	Rain/ Fine	0	0	0	20.9	27/ 10/0	8.4	
	ч	1700	Rain/ Fine	0	0	0	20.9	241 [10	8.4	
Area 137 Pit B	Ч	0830	Rain/ Fine	0	0	0	20.9	24/ /010	8.6	
	ч	1330	Rain/ Fine	0	0	0	20.9	261 /211	8.6	
	4	1700	Rain/ Fine	0	0	0	20.9	251 1011	8.6	
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	23/ 10/0	10	
	4	1330	Rain/ Fine	0	0	0	20.9	271 /009	10	
	Ч	1700	Rain/ Fine	0	0	0	20.9	24/ 4009	10	
		Name & Designati	ion	•		Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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3/11/2022.

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	4/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	8.4		
	~	1330	Rain/ Fine	0	0	0	20.9	261 [010	8.4		
	Ч	1700	Rain/ Fine	0	0	0	20.9	25/ [010	8.4		
Area 137 Pit B	ч	0830	Rain/ Fine	0	0	0	20.9	24/ 610	8.6		
	6	1330	Rain/ Fine	0	0	0	20.9	27/ 1009	8.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	351 [009	8.6		
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	231 (01)	10		
	5	1330	Rain/ Fine	0	0	0	20.9	271 1010	10		
	5	1700	Rain/ Fine	0	0	0	20.9	251 (010	10		

Field Operator:

Name & Designation

Signature

Jock Lee (Competent Person [CO-310218])

<u>Date</u> 4/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	5/11 2022	0830	Rain/ Fine	0	0	0	20.9	23/1010	8.4		
	~	1330	Rain/ Fine	0	0	0	20.9	26/1010	8.4		
	54	1700	Rain/ Fine	0	0	0	20.9	251/011	8.4		
Area 137 Pit B	4	0830	Rain/ Fine	0	0	0	20.9	23/1009	8.6		
	5	1330	Rain/ Fine	0	0	0	20.9	271 1001	8.6		
	4	1700	Rain/ Fine	0	0	0	20.9	25/10/0	8.6		
Area 137 Pit C	4	0830	Rain/ Fine	0	0	0	20.9	XX / [ol]	10		
	5	1330	Rain/ Fine	0	0	0	20.9	26/ 100	10		
	Si	1700	Rain/ Fine	0	0	0	20.9	25/ [0]0	10		
		Name & Designati	ion			Signature		( ·	<u>Date</u>		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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<u>Date</u> J/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	7/11/2022	0830	Rain/ Fine	0	0	0	20.9	24/009	8.4	
- L		1330	Rain/ Fine	0	0	0	20.9	25/ 10/1	8.4	
	5	1700	Rain/ Fine	0	0	0	20.9	25/ 1010	8.4	
Area 137 Pit B	4	0830	Rain/ Fine	0	0	0	20.9	23/ [0]0	8.6	
	4	1330	Rain/ Fine	0	0	0	20.9	26/ (010	8.6	
	2	1700	Rain/ Fine	0	0	0	20.9	25/ [01]	8.6	
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	Nel (001	10	
	5	1330	Rain/ Fine	0	0	0	20.9	25/ 1009	10	
	5	1700	Rain/ Fine	0	0	0	20.9	25/ (010	10	
		Name & Designat	ion			Signature	Date			

Field Operator:

Jock Lee (Competent Person [CO-310218])

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Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	8/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 011	8.4		
	U U	1330	Rain/ Fine	0	0	0	20.9	26/ [01]	8.4		
	ч	1700	Rain/ Fine	0	0	0	20.9	25/00	8.4		
Area 137 Pit B	ч	0830	Rain/ Fine	0	0	0	20.9	24 / (00)	8.6		
	S	1330	Rain/ Fine	0	0	0	20.9	20 / 1009	8.6		
	4	1700	Rain/ Fine	0	0	0	20.9	24/ 100	8.6		
Area 137 Pit C	4	0830	Rain/ Fine	0	0	0	20.9	V3 / [0]]	10		
	4	1330	Rain/ Fine	0	0	0	20.9	26/ 10/0	10		
	4	1700	Rain/ Fine	0	0	0	20.9	25/ [0]0	10		
		Name & Designati	ion			Signature		L	<u>Date</u>		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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<u>Date</u> 8/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring – Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

_				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	9/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 1 1009	8.4		
		1330	Rain/ Fine	0	0	0	20.9	2/9/1009	8.4		
	7	1700	Rain/ Fine	0	0	0	20.9	25/1010	8.4		
Area 137 Pit B	4	0830	Rain/ Fine	0	0	0	20.9	23/ (01)	8.6		
	S	1330	Rain/ Fine	0	0	0	20.9	26/1011	8.6		
	9	1700	Rain/ Fine	0	0	0	20.9	75/ 10/0	8.6		
Area 137 Pit C	4	0830	Rain/ Fine	0	0	0	20.9	24/109	10		
	ч	1330	Rain/ Fine	0	0	0	20.9	26/ 1009	10		
	5	1700	Rain/ Fine	0	0	0	20.9	25 / (0).	10		
		Name & Designati	ion			Signature			<u>Date</u>		

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218])

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Date 8/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring – Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

					Monitoring	g wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area 137 Pit A	10/11/2022	0830	Rain/ Fine	0	0	0	20.9	-31 100P	8.4
1		1330	Rain/ Fine	0	0	0	20.9	20/ 100	8.4
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ 10/0	8.4
Area 137 Pit B	ч	0830	Bain/ Fine	0	0	0	20.9	24/ (01)	8.6
	~	1330	Rain/ Fine	0	0	0	20.9	201 (01)	8.6
	V	1700	Rain/ Fine	0	0	0	20.9	25/ 1009	8.6
Area 137 Pit C	v	0830	Rain/ Fine	0	0	0	20.9	24/ 100	10
	м	1330	Rain/ Fine	0	0	0	20.9	201 10/0	10
	×	1700	Rain/ Fine	0	0	0	20.9	24/ 10/0	10
		Name & Designat	ion			Signature			<u>Date</u>

Field Operator:

Jock Lee (Competent Person [CO-310218])

Signature

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10/11/2022.

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	11/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1009	8.4		
	N.	1330	Rain/ Fine	0	0	0	20.9	26/1009	8.4		
	1	1700	Bain/ Fine	0	0	0	20.9	25/ 10/0	8.4		
Area 137 Pit B	C)	0830	Rain/ Fine	0	0	0	20.9	23 / 1011	8.6		
	ч	1330	Rain/ Fine	0	0	0	20.9	26/ (01)	8.6		
	5	1700	Rain/ Fine	0	0	0	20.9	24/ 1010	8.6		
Area 137 Pit C	C)	0830	Rain/ Fine	0	0	0	20.9	24/1009	10		
	Ś	1330	Rain/ Fine	0	0	0	20.9	26/ 1009	10		
	U.	1700	Rain/ Fine	0	0	0	20.9	25/ 10/0	10		
		Name & Designati	on			Signature			<u>Date</u>		

Field Operator:

Name & Designation Jock Lee (Competent Person [CO-310218])

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11/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

de la companya de la			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	12/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 10.9	8.4	
	Ne	1330	Rain/ Fine	0	0	0	20.9	26/1009	8.4	
	6	1700	Rain/ Fine	0	0	0	20.9	75 / 1010	8.4	
Area 137 Pit B	y v	0830	Rain/ Fine	0	0	0	20.9	23/1009	8.6	
	CI .	1330	Rain/ Fine	0	0	0	20.9	201 (000	8.6	
	4	1700	Rain/ Fine	0	0	0	20.9	24/ [0]0	8.6	
Area 137 Pit C	6	0830	Rain/ Fine	0	0	0	20.9	24/ 1011	10	
	ý	1330	Rain/ Fine	0	0	0	20.9	26/ 1010	10	
	4	1700	Rain/ Fine	0	0	0	20.9	25/ [0]0	10	
		Name & Designati	on			Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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12/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring – Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)			
Area 137 Pit A	14/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 010	8.4			
		1330	Rain/ Fine	0	0	0	20.9	26/100	8.4			
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ 1011	8.4			
Area 137 Pit B	ч	0830	Rain/ Fine	0	0	0	20.9	23 / 1009	8.6			
	5	1330	Rain/ Fine	0	0	0	20.9	24/ 6009	8.6			
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ 1010	8.6			
Area 137 Pit C	N	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	10			
	ч	1330	Rain/ Fine	0	0	0	20.9	24/ 101/	10			
	ч	1700	Rain/ Fine	0	0	0	20.9	24/ 1011	10			

Field Operator:

Name & Designation Jock Lee (Competent Person [CO-310218]) <u>Signature</u>

<u>Date</u> (4/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	15/11/2022	0830	Rain/ Fine	0	0	0	20.9	22/10/0	8.4	
	4	1330	Rain/ Fine	0	0	0	20.9	25 / 1010	8.4	
		1700	Rain/ Fine	0	0	0	20.9	24/ [01]	8.4	
Area 137 Pit B	4	0830	Rain/ Fine	0	0	0	20.9	23 / 1009	8.6	
	ч	1330	Rain/ Fine	0	0	0	20.9	26/ [009	8.6	
	4	1700	Rain/ Fine	0	0	0	20.9	24/ 6010	8.6	
Area 137 Pit C	2	0830	Rain/ Fine	0	0	0	20.9	231 600	10	
	5	1330	Rain/ Fine	0	0	0	20.9	24/ 10/0	10	
		1700	Rain/ Fine	0	0	0	20.9	231/001	10	
	6	Name & Designat	ion			Signature			Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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15/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	16/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/ 1009	8.4	
	y	1330	Rain/ Fine	0	0	0	20.9	25/ 1009	8.4	
	۲	1700	Rain/ Fine	0	0	0	20.9	24/ [0]0	8.4	
Area 137 Pit B	ч	0830	Rain/ Fine	0	0	0	20.9	22/ [21]	8.6	
	. V	1330	Rain/ Fine	0	0	0	20.9	25/ 611	8.6	
	4	1700	Rain/ Fine	0	0	0	20.9	24/ 6029	8.6	
Area 137 Pit C	4	0830	Rain/ Fine	0	0	0	20.9	23/ 1009	10	
	5	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	10	
	ч	1700	Rain/ Fine	0	0	0	20.9	72/ [010	10	
		Name & Designati	ion			Signature			Date	

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218])

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16/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	17/11/2022	0830	Rain/ Fine	0	0	0	20.9	231 (009	8.4		
	N	1330	Rain/ Fine	0	0	0	20.9	25/ [009	8.4		
	S	1700	Rain/ Fine	0	0	0	20.9	24/1011	8.4		
Area 137 Pit B	L.	0830	Rain/ Fine	0	0	0	20.9	23/ [010	8.6		
	ч	1330	Rain/ Fine	0	0	0	20.9	1010	8.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ 1009	8.6		
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	23/ (010	10		
	ч	1330	Rain/ Fine	0	0	0	20.9	25/ (00)	10		
	S	1700	Rain/ Fine	0	0	0	20.9	23/ [009	10		
	л л	Name & Designati	on			Signature		,	Date		

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218])

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17/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	18/11/2022	0830	Bain/ Fine	0	0	0	20.9	22/1010	8.4		
	NI	1330	Bain/ Fine	0	0	0	20.9	24/(009	8.4		
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ [00]	8.4		
Area 137 Pit B	ч	0830	Rain/ Fine	0	0	0	20.9	22/ 10/1	8.6		
	ч	1330	Bain/ Fine	0	0	0	20.9	25/ 6010	8.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	241 (010	8.6		
Area 137 Pit C	3	0830	Rain/ Fine	0	0	0	20.9	23/ [01]	10		
	ч	1330	Rain/ Fine	0	0	0	20.9	25/ 100	10		
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ [010	10		
		Name & Designat	ion			Signature	a second second second		Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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Date 18/11/2012

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	19/11/2022	0830	Rain/ Fine	0	0	0	20.9	22/1009	8.4	
	Li I	1330	Rain/ Fine	0	0	0	20.9	25 / 1009	8.4	
	ч	1700	Rain/ Fine	0	0	0	20.9	23/1010	8.4	
Area 137 Pit B	51	0830	Rain/ Fine	0	0	0	20.9	v2 / 1011	8.6	
	ч	1330	Rain/ Fine	0	0	0	20.9	25/ 1011	8.6	
	ч	1700	Rain/ Fine	0	0	0	20.9	73/100	8.6	
Area 137 Pit C	4	0830	Rain/ Fine	0	0	0	20.9	×3 / (01)	10	
	ч	1330	Rain/ Fine	0	0	0	20.9	75/ 10/0	10	
	N	1700	Rain/ Fine	0	0	0	20.9	22/ 10/0	10	
		Name & Designati	on	-		Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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19/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	2/11/2022	0830	Rain/ Fine	0	0	0	20.9	22/1010	8.4		
	~	1330	Rain/ Fine	0	0	0	20.9	25/ (010	8.4		
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ [01]	8.4		
Area 137 Pit B	50	0830	Rain/ Fine	0	0	0	20.9	23/1008	8.6		
	U N	1330	Rain/ Fine	0	0	0	20.9	24/ 1009	8.6		
	ų	1700	Rain/ Fine	0	0	0	20.9	23/ 1010	8.6		
Area 137 Pit C	<u>6</u>	0830	Rain/ Fine	0	0	0	20.9	23/ 104	10		
	4	1330	Rain/ Fine	0	0	0	20.9	261 1010	10		
		1700	Rain/ Fine	0	0	0	20.9	24/ (010	10		
		Name & Designati	on			Signature			<u>Date</u>		

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218])

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21/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)			
Area 137 Pit A	22/11/2022	0830	Rain/ Fine	0	0	0	20.9	22/1009	8.4			
	, i	1330	Rain/ Fine	0	0	0	20.9	25/ 1009	8.4			
	4	1700	Rain/ Fine	0	0	0	20.9	23 / 1010	8.4			
Area 137 Pit B	9	0830	Rain/ Fine	0	0	0	20.9	22/ 10[0	8.6			
	Ч	1330	Rain/ Fine	0	0	0	20.9	23/ [010	8.6			
	ч	1700	Rain/ Fine	0	0	0	20.9	22/ 010	8.6			
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	22/ 10/0	10			
	и	1330	Rain/ Fine	0	0	0	20.9	24/ [01]	10			
	Ń	1700	Rain/ Fine	0	0	0	20.9	10) / 20	10			
L		Name & Designati	ion			Signature			Date			
Field Operator:						d	2	-2/11/2022				

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring – Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022
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				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	23/11/2022	0830	Bain/ Fine	0	0	0	20.9	22 / (009	8.4		
	V.	1330	Rain/ Fine	0	0	0	20.9	24/ [0]0	8.4		
	M	1700	Rain/ Fine	0	0	0	20.9	23/ 1010	8.4		
Area 137 Pit B	U1	0830	Rain/ Fine	0	0	0	20.9	22/ 011	8.6		
	1	1330	Rain/ Fine	0	0	0	20.9	24/ 10/0	8.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	22/ 1010	8.6		
Area 137 Pit C	м	0830	Rain/ Fine	0	0	0	20.9	22/ (009	10		
	2	1330	Rain/ Fine	0	0	0	20.9	24/ [009	10		
	И	1700	Rain/ Fine	0	0	0	20.9	27/ [01]	10		
		Name & Designati	on			Signature			Date		

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218])

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23/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	2505/11/2022	0830	Rain/ Fine	0	0	0	20.9	22 / (009	8.4	
	li	1330	Rain/ Fine	0	0	0	20.9	24/1000	8.4	
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ 10/0	8.4	
Area 137 Pit B	Y	0830	Rain/ Fine	0	0	0	20.9	23/100	8.6	
	ч	1330	Rain/ Fine	0	0	0	20.9	Ng / (010	8.6	
	4	1700	Rain/ Fine	0	0	0	20.9	231 (00	8.6	
Area 137 Pit C	U.	0830	Rain/ Fine	0	0	0	20.9	22/ [00]	10	
	ч	1330	Rain/ Fine	0	0	0	20.9	741 (00P	10	
	4	1700	Rain/ Fine	0	0	0	20.9	22/ (0/0	10	
	L	Name & Designati	on	•		Signature			Date	

Field Operator:

Name & Designation Jock Lee (Competent Person [CO-310218]) Signature

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24/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring – Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	25/11/2022	0830	Bain/ Fine	0	0	0	20.9	22/1010	8.4	
	Nr.	1330	Bain/ Fine	0	0	0	20.9	25/1010	8.4	
	٤/	1700	Rain/ Fine	0	0	0	20.9	23/ (011	8.4	
Area 137 Pit B	Ly.	0830	Rain/ Fine	0	0	0	20.9	23/ 1010	8.6	
	4	1330	Rain/ Fine	0	0	0	20.9	25/1009	8.6	
	4	1700	Rain/ Fine	0	0	0	20.9	22/ 1009	8.6	
Area 137 Pit C	Ч	0830	Rain/ Fine	0	0	0	20.9	22/ coli	10	
	Lr.	1330	Rain/ Fine	0	0	0	20.9	25/ 10/0	10	
	~/	1700	Rain/ Fine	0	0	0	20.9	23/1010	10	
		Name & Designati	on			<u>Signature</u>			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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VS/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	26/11/2022	0830	Rain/ Fine	0	0	0	20.9	22 / 1009	8.4		
	Ч	1330	Bain/ Fine	0	0	0	20.9	23/1009	8.4		
	4	1700	Rain/ Fine	0	0	0	20.9	21 / 1010	8.4		
Area 137 Pit B	1.	0830	Rain/ Fine	0	0	0	20.9	22 / 1011	8.6		
	r.(	1330	Rain/ Fine	0	0	0	20.9	23/1011	8.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	22/ 1010	8.6		
Area 137 Pit C	ч	0830	Rain/ Fine	0	0	0	20.9	22/ (009	10		
	U U	1330	Rain/ Fine	0	0	0	20.9	24/ (00)	10		
	Ч	1700	Rain/ Fine	0	0	0	20.9	22/1010	10		
		Name & Designati	on			Signature			<u>Date</u>		

Field Operator:

Jock Lee (Competent Person [CO-310218])

Signature

8

Date No/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area 137 Pit A	28/11/2022	0830	Rain/ Fine	0	0	0	20.9	22/1009	8.4	
	~1	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	8.4	
er e del	4	1700	Rain/ Fine	0	0	0	20.9	23/ [010	8.4	
Area 137 Pit B	11	0830	Rain/ Fine	0	0	0	20.9	23/ (010	8.6	
	-1	1330	Bain/ Fine	0	0	0	20.9	25/ 1011	8.6	
	5	1700	Rain/ Fine	0	0	0	20.9	23/ 1011	8.6	
Area 137 Pit C	M	0830	Rain/ Fine	0	0	0	20.9	221 1009	10	
	6	1330	Rain/ Fine	0	0	0	20.9	24/ 1010	10	
	ч	1700	Bain/ Fine	0	0	0	20.9	23/ [010	10 Data	

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218]) <u>Signature</u>

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<u>Date</u> 28/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)			
Area 137 Pit A	29/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/[01]	8.4			
	4	1330	Rain/ Fine	0	0	0	20.9	25/1010	8.4			
	4	1700	Rain/ Fine	0	0	0	20.9	23/ 1010	8.4			
Area 137 Pit B	Ч	0830	Rain/ Fine	0	0	0	20.9	72/ 1009	8.6			
	Ч	1330	Rain/ Fine	0	0	0	20.9	24/ 1009	8.6			
	Cr.	1700	Rain/ Fine	0	0	0	20.9	22/ 1010	8.6			
Area 137 Pit C	ų.	0830	Rain/ Fine	0	0	0	20.9	22/ 1011	10			
	LT	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	10			
	N	1700	Rain/ Fine	0	0	0	20.9	22/ 10/0	10			
		Name & Designati	on		Signature			Date				

Field Operator:

Jock Lee (Competent Person [CO-310218])

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29/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Area 137 Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area 137 Pit A	30/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/(0(0	8.4		
	U U	1330	Rain/ Fine	0	0	0	20.9	25/100	8.4		
	ч	1700	Rain/ Fine	0	0	0	20.9	22/ (01)	8.4		
Area 137 Pit B	~1	0830	Rain/ Fine	0	0	0	20.9	22/(0/0	8.6		
	ч	1330	Rain/ Fine	0	0	0	20.9	24/ [009	8.6		
	C1	1700	Rain/ Fine	0	0	0	20.9	22/ 1009	8.6		
Area 137 Pit C	4	0830	Rain/ Fine	0	0	0	20.9	23/ 1011	10		
	ч	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	10		
	~	1700	Rain/ Fine	0	0	0	20.9	23/ (0)0	10		
	1	Name & Designati	ion		Signature			Date			

Field Operator:

Name & Designation Jock Lee (Competent Person [CO-310218])

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Jo/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	1/11/2022	0830	Rain/ Fine	0	0	0	20.9	231 (009	3.7	
		1330	Rain/ Fine	0	0	0	20.9	25 1 (010	3.7	
	ч	1700	Rain/ Fine	0	0	0	20.9	24/ (010	3.7	
WPRTTA 5	N	0830	Rain/ Fine	0	0	0	20.9	27/1000	3.6	
	S	1330	Rain/ Fine	0	0	0	20.9	201 (01)	3.6	
	s v	1700	Rain/ Fine	. 0	0	0	20.9	24/ (01)	3.6	
- F			/							
L		Name & Designati	on		Signature				<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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1/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
WPRTTA 4	2/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/ (011	3.7		
	C.	1330	Rain/ Fine	0	0	0	20.9	261 (010	3.7		
	CI.	1700	Rain/ Fine	0	0	0	20.9	241 [010	3.7		
WPRTTA 5	Nr.	0830	Rain/ Fine	0	0	0	20.9	23/ 1008	3.6		
	ч	1330	Rain/ Fine	0	0	0	20.9	261 1010	3.6		
	6	1700	Rain/ Fine	0	0	0	20.9	25/ 10/0	3.6		
	L	Name & Designat	ion	1	Signature				Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

2/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
WPRTTA 4	3/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1009	3.7		
	N	1330	Rain/ Fine	0	0	0	20.9	27/100	3.7		
	~	1700	Rain/ Fine	0	0	0	20.9	25/ (0)	3.7		
WPRTTA 5	М	0830	Rain/ Fine	0	0	0	20.9	23/ [0[]	3.6		
		1330	Rain/ Fine	0	0	0	20.9	27/ 10/0	3.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	24/ 60/0	3.6		
		Name & Designati	ion	1	Signature				Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

Signature

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3/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

- 191			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	4/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	3.7	
	1	1330	Rain/ Fine	0	0	0	20.9	26/1010	3.7	
	ч	1700	Rain/ Fine	0	0	0	20.9	24/ 1011	3.7	
WPRTTA 5	U.	0830	Rain/ Fine	0	0	0	20.9	23/ 1009	3.6	
	и	1330	Rain/ Fine	0	0	0	20.9	271 (010	3.6	
	h	1700	Rain/ Fine	0	0	0	20.9	24/ 1010	3.6	
		Name & Designati	lon		Signature				Date	

Field Operator:

Name & Designation Jock Lee (Competent Person [CO-310218])

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4/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

Monitoring wells/ Surface Gas Emission								
Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
5/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/10/0	3.7
Y.	1330	Rain/ Fine	0	0	0	20.9	201 (000	3.7
М	1700	Rain/ Fine	0	0	0	20.9	23/ [01]	3.7
ч	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	3.6
۲	1330	Rain/ Fine	0	0	0	20.9		3.6
N	1700	Rain/ Fine	0	0	0	20.9	24/ 1009	3.6
							1	
	Name & Designati	ion		Signature				Date
	measurement	measurement     Sampling time       5/11/2000     0830       '1     1330       '1     1700       '1     1330       '1     1330       '1     1700       '1     1700       '1     1700	Sampling timeWeather conditionS/11/20000830Rain/Fine11330Rain/Fine11700Rain/Fine11330Rain/Fine11330Rain/Fine11330Rain/Fine11330Rain/Fine11300Rain/Fine11700Rain/Fine11700Rain/Fine1Name & Designation	measurementSampling time conditionWeather conditionBalance gas (%)S/II/20000830Rain/ Fine011330Rain/ Fine011700Rain/ Fine010830Rain/ Fine011330Rain/ Fine011330Rain/ Fine011330Rain/ Fine011700Rain/ Fine011700Rain/ Fine0	Date of measurementSampling timeWeather conditionBalance gas (%)Flammable gas (methane %)\$/11/10000830Rain/ Fine0011330Rain/ Fine0011700Rain/ Fine0011330Rain/ Fine0011330Rain/ Fine0011330Rain/ Fine0011330Rain/ Fine0011700Rain/ Fine00117001700170017001170017001700170011700 <t< td=""><td>Date of measurementSampling timeWeather conditionBalance gas (%)Flammable gas (methane %)Carbon dioxide(%)5/11/2000830Rain/ Fine00011330Rain/ Fine00011700Rain/ Fine00011330Rain/ Fine00011330Rain/ Fine00011330Rain/ Fine00011330Rain/ Fine00011330Rain/ Fine00011330Rain/ Fine0001130Rain/ Fine0001130Rain/ Fine0001130Rain/ Fine0001130Rain/ Fine0001130Rain/ Fine0001130Rain/ Fine0001130Rain/ Fine000111</br></td><td>Date of measurementSampling timeWeather conditionBalance gas (%)Flammable gas (methane %)Carbon dioxide(%)Oxygen (%)5/11/2000830Rain/Fine00020.911330Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911330Rain/Fine00020.911330Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.9111<!--</td--><td>Date of measurement         Sampling time         Weather condition         Balance gas (%)         Flammable gas (methane %)         Carbon dioxide(%)         Oxygen (%)         Temp (oC) / Pressure (mbar)           1/1/2000         0830         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         0</td></td></t<>	Date of 	Date of measurementSampling timeWeather conditionBalance gas (%)Flammable gas (methane %)Carbon dioxide(%)Oxygen (%)5/11/2000830Rain/Fine00020.911330Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911330Rain/Fine00020.911330Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.911700Rain/Fine00020.9111 </td <td>Date of measurement         Sampling time         Weather condition         Balance gas (%)         Flammable gas (methane %)         Carbon dioxide(%)         Oxygen (%)         Temp (oC) / Pressure (mbar)           1/1/2000         0830         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         0</td>	Date of measurement         Sampling time         Weather condition         Balance gas (%)         Flammable gas (methane %)         Carbon dioxide(%)         Oxygen (%)         Temp (oC) / Pressure (mbar)           1/1/2000         0830         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1330         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         20.9         1/2 / [0] (o           1         1700         Rain/ Fine         0         0         0         0

Field Operator:

Jock Lee (Competent Person [CO-310218])

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J/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	7/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/100	3.7	
	Y	1330	Rain/ Fine	0	0	0	20.9	26/1010	3.7	
	۲	1700	Bain/ Fine	0	0	0	20.9	24/011	3.7	
WPRTTA 5	4	0830	Rain/ Fine	0	0	0	20.9	23/1010	3.6	
	ч	1330	Rain/ Fine	0	0	0	20.9	27/106	3.6	
	ч	1700	Rain/ Fine	0	0	0	20.9	Nº 1 100P	3.6	
L		Name & Designati	on	•	Signature Date			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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7/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
WPRTTA 4	8/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	3.7
	4	1330	Rain/ Fine	0	0	0	20.9	26/00	3.7
	5	1700	Rain/ Fine	0	0	0	20.9	24/ (011	3.7
WPRTTA 5	•1	0830	Rain/ Fine	0	0	0	20.9	23/ 6009	3.6
	~	1330	Rain/ Fine	0	0	0	20.9	271 1010	3.6
	4	1700	Rain/ Fine	0	0	0	20.9	25/ 1010	3.6
	l	Name & Designati	ion	1		Signature			<u>Date</u>

Field Operator:

Jock Lee (Competent Person [CO-310218])

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8/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
WPRTTA 4	9/11/2022	0830	Rain/ Fine	0	0	0	20.9	24/1010	3.7
	~	1330	Rain/ Fine	0	0	0	20.9	271 [010	3.7
	4	1700	Rain/ Fine	0	0	0	20.9	24/ [009	3.7
WPRTTA 5	v	0830	Rain/ Fine	0	0	0	20.9	23/ 1009	3.6
	ч	1330	Rain/ Fine	0	0	0	20.9	27/ 1009	3.6
	ν	1700	Rain/ Fine	0	0	0	20.9	24/ 1010	3.6
		Name & Designat	ion			Signature			Date

Field Operator:

Jock Lee (Competent Person [CO-310218])

Signature

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Date 9/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
WPRTTA 4	10/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/10/0	3.7		
	×1	1330	Rain/ Fine	0	0	0	20.9	26/1010	3.7		
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ [009	3.7		
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	23/1001	3.6		
	м	1330	Rain/ Fine	0	0	0	20.9	261 (001	3.6		
		1700	Rain/ Fine	0	0	0	20.9	24/ [01]	3.6		
								3			
		Name & Designat	ion			<u>Signature</u>			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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10/11/2022.

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring – Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date measure		Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	u u	2022	0830	Rain/ Fine	0	0	0	20.9	23/100	3.7	
	Nr.	(	1330	Rain/ Fine	0	0	0	20.9	27/ (00	3.7	
	U	Ų	1700	Rain/ Fine	0	0	0	20.9	25/ 1009	3.7	
WPRTTA 5	1	i i	0830	Rain/ Fine	0	0	0	20.9	23/(010	3.6	
			1330	Rain/ Fine	0	0	0	20.9	261 (011	3.6	
	x.	r	1700	Rain/ Fine	0	0	0	20.9	24/ [011	3.6	
			Name & Designati	ion			Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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11/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

		Sampling time	Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	12/11/2022	0830	Rain/ Fine	0	0	0	20.9	29/ (010	3.7	
	Nr.	1330	Rain/ Fine	0	0	0	20.9	27/ [010	3.7	
	м	1700	Bain/ Fine	0	0	0	20.9	24/ (011	3.7	
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	22/ (009	3.6	
	5	1330	Bain/ Fine	0	0	0	20.9	271 (009	3.6	
	А	1700	Rain/ Fine	0	0	0	20.9	24/ 1010	3.6	
	01							1		
		Name & Designati	ion			Signature			Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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12/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	14/11/2022	0830	Rain/ Fine	0	0	0	20.9	24/10/0	3.7	
	V	1330	Rain/ Fine	0	0	0	20.9	27/1010	3.7	
	4	1700	Rain/ Fine	0	0	0	20.9	251 (00)	3.7	
WPRTTA 5	ų	0830	Rain/ Fine	0	0	0	20.9	23/1009	3.6	
	C1	1330	Rain/ Fine	0	0	0	20.9	27/1008	3.6	
	4	1700	Rain/ Fine	0	0	0	20.9	24/1010	3.6	
	I	Name & Designati	on	1	Signature				Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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14/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission								
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
WPRTTA 4	15/11/2022	0830	Rain/ Fine	0	0	0	20.9	73/1010	3.7		
		1330	Rain/ Fine	0	0	0	20.9	20100	3.7		
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ (009	3.7		
WPRTTA 5	~1	0830	Bain/ Fine	0	0	0	20.9	23/1008	3.6		
	Ч	1330	Rain/ Fine	0	0	0	20.9	27/1009	3.6		
	4	1700	Rain/ Fine	0	0	0	20.9	25/ 50/0	3.6		
		Name & Designat	ion		Signature				<u>Date</u>		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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15/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	16/11/2022	0830	Rain/ Fine	0	0	0	20.9	23. 110(1	3.7	
	V	1330	Rain/ Fine	0	0	0	20.9	261(010	3.7	
	u	1700	Rain/ Fine	0	0	0	20.9	25/1010	3.7	
WPRTTA 5	ы	0830	Rain/ Fine	0	0	0	20.9	23 /10/0	3.6	
	м	1330	Rain/ Fine	0	0	0	20.9	27 / 1009	3.6	
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ [00]	3.6	
		Name & Designati	ion	1		Signature			Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

16/11/2022 .

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated			
XT-XWHM-Y-OR	2/9/2022			

					Monitoring	g wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
WPRTTA 4	17/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 1 (009	3.7
	~1	1330	Rain/ Fine	0	0	0	20.9	27/ (009	3.7
	ч	1700	Rain/ Fine	0	0	0	20.9	NS / (010	3.7
WPRTTA 5	~(	0830	Rain/ Fine	0	0	0	20.9	23/ 100	3.6
	ч	1330	Rain/ Fine	0	0	0	20.9	26/1010	3.6
	ч	1700	Rain/ Fine	0	0	0	20.9	25/1011	3.6
		Name & Designat	ion			<u>Signature</u>			<u>Date</u>

Field Operator:

Jock Lee (Competent Person [CO-310218])

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17/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
WPRTTA 4	18/11/2022	0830	Rain/ Fine	0	0	0	20.9	24 1 (010	3.7		
	1	1330	Rain/ Fine	0	0	0	20.9	27 / [0[0	3.7		
	ч	1700	Rain/ Fine	0	0	0	20.9	24/1011	3.7		
WPRTTA 5	.(	0830	Rain/ Fine	0	0	0	20.9	23/ 1010	3.6		
	L.	1330	Rain/ Fine	0	0	0	20.9	201 (009	3.6		
	ч	1700	Rain/ Fine	0	0	0	20.9	~4/100P	3.6		
		4						1			
		Name & Designati	ion			<u>Signature</u>			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

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<u>Date</u> 18/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring -Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

					Monitoring	g wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
WPRTTA 4	19/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 100P	3.7
	N1	1330	Rain/ Fine	0	0	0	20.9	26/1007	3.7
	м	1700	Rain/ Fine	0	0	0	20.9	25/ (01)	3.7
WPRTTA 5	SI .	0830	Rain/ Fine	0	0	0	20.9	23/1010	3.6
	4	1330	Rain/ Fine	0	0	0	20.9	27,11010	3.6
	5	1700	Rain/ Fine	0	0	0	20.9	NS/ [011	3.6
		Name & Designat	lion		<u>Signature</u>			Date	
Field Operator: Jock Lee (Competent Person [CO-310218])						r			19/1/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
WPRTTA 4	21/11/2022	0830	Rain/ Fine	0	0	0	20.9	24 / (0/0	3.7		
	~	1330	Rain/ Fine	0	0	0	20.9	26/1010	3.7		
	C C	1700	Rain/ Fine	0	0	0	20.9	24/1009	3.7		
WPRTTA 5	3	0830	Rain/ Fine	0	0	0	20.9	24/1009	3.6		
	د.	1330	Rain/ Fine	0	0	0	20.9	27 / 1010	3.6		
	4	1700	Rain/ Fine	0	0	0	20.9	24/ 1010	3.6		
			,								
									Data		
		Name & Designati	ion		Signature				<u>Date</u>		

Field Operator:

Jock Lee (Competent Person [CO-310218])

N/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

					Monitoring	wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
WPRTTA 4	72/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 1/010	3.7
		1330	Rain/ Fine	0	0	0	20.9	20 / 1010	3.7
	C(	1700	Rain/ Fine	0	0	0	20.9	25 / 1009	3.7
WPRTTA 5	V(	0830	Rain/ Fine	0	0	0	20.9	23 / (009	3.6
	ч	1330	Rain/ Fine	0	0	0	20.9	27/100	3.6
	ч	1700	Rain/ Fine	0	0	0	20.9	25/ (010	3.6
0		Name & Designati	on			<u>Signature</u>	l		Date

Field Operator:

Jock Lee (Competent Person [CO-310218])

Date W/1/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	23/11/2022	0830	Rain/ Fine	0	0	0	20.9	27 / 1009	3.7	
	N	1330	Rain/ Fine	0	0	0	20.9	201 [009	3.7	
	-1	1700	Rain/ Fine	0	0	0	20.9	25/10/0	3.7	
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	23 / (010	3.6	
	S	1330	Rain/ Fine	0	0	0	20.9	27/ 10/0	3.6	
	S	1700	Rain/ Fine	0	0	0	20.9	24/ 1011	3.6	
		Name & Designat	ion	1		Signature			Date	

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218]) Signature

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23/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	ple location Date of measurement		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	24/11/2	0830	Rain/ Fine	0	0	0	20.9	23 / (0[0	3.7	
	y l	1330	Rain/ Fine	0	0	0	20.9	26/ (010	3.7	
	Si .	1700	Rain/ Fine	0	0	0	20.9	25/ [01]	3.7	
WPRTTA 5	14	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	3.6	
		1330	Rain/ Fine	0	0	0	20.9	271 [00]	3.6	
	<u>.</u>	1700	Rain/ Fine	0	0	0	20.9	24/ (00)	3.6	
								· · · · · · · · · · · · · · · · · · ·		
		Name & Designat	ion	1	<u>Signature</u>				Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

2201/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	75/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/(009	3.7	
	v	1330	Rain/ Fine	0	0	0	20.9	261 1010	3.7	
	e l	1700	Rain/ Fine	0	0	0	20.9	25/100	3.7	
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	23/ (0/0	3.6	
	C1	1330	Bain/ Fine	0	0	0	20.9	27/ [01]	3.6	
	N	1700	Rain/ Fine	0	0	0	20.9	25/ (01)	3.6	
		Name & Designati	ion			Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

X

<u>Date</u> 5/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	-10/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / (010)	3.7	
	Y	1330	Rain/ Fine	0	0	0	20.9	26 / (009	3.7	
	-1	1700	Rain/ Fine	0	0	0	20.9	241 1010	3.7	
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	23 1 (009	3.6	
	4	1330	Rain/ Fine	0	0	0	20.9	201 [0]0	3.6	
	4	1700	Rain/ Fine	0	0	0	20.9	~5 / [0]0	3.6	
									i i	
		Name & Designat	ion			Signature			Date	

Field Operator:

<u>Name & Designation</u> Jock Lee (Competent Person [CO-310218]) Signatur

10/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	58/11/2022	0830	Rain/ Fine	0	0	0	20.9	24/10/0	3.7	
	Y Y	1330	Rain/ Fine	0	0	0	20.9	27/ Tolo	3.7	
	NI.	1700	Rain/ Fine	0	0	0	20.9	24/1011	3.7	
WPRTTA 5		0830	Rain/ Fine	0	0	0	20.9	24/ [009	3.6	
		1330	Rain/ Fine	0	0	0	20.9	261 (009	3.6	
	5	1700	Rain/ Fine	0	0	0	20.9	24/ 1010	3.6	
								t		
		Name & Designati	on		<u>Signature</u> <u>D</u>			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

Signature

Date B/11/222

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	28/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	3.7	
		1330	Rain/ Fine	0	0	0	20.9	27/1008	3.7	
	~	1700	Rain/ Fine	0	0	0	20.9	25/1010	3.7	
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	23/100	3.6	
	5	1330	Rain/ Fine	0	0	0	20.9	27/1011	3.6	
	4	1700	Rain/ Fine	0	0	0	20.9	24/ 1011	3.6	
		Name & Designat	ion			Signature			Date	
Field Operator:		Jock Lee (Compet	ent Person [CO-3	10218])		$\mathcal{F}$			29/11/2022	

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Wan Po Road Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Dates calibrated
2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
WPRTTA 4	30/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1010	3.7	
		1330	Rain/ Fine	0	0	0	20.9	26/ (010	3.7	
	4	1700	Rain/ Fine	0	0	0	20.9	25/ (008	3.7	
WPRTTA 5	ч	0830	Rain/ Fine	0	0	0	20.9	23/ (009	3.6	
	~1	1330	Rain/ Fine	0	0	0	20.9	261 (000	3.6	
	2	1700	Rain/ Fine	0	0	0	20.9	23/ [0[0	3.6	
			-							
L		Name & Designat	ion			Signature			Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

Date Solulvozz

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated					
XT-XWHM-Y-OR	2/9/2022					

			Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area A	1/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	5.5
	U U	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	5.5
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ 1009	5.5
									λ.
		Name & Designati	ion			Signature			Date

Field Operator:

Name & Designation Jock Lee (Competent Person [CO-310218]) Signatur

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1/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	ערטר ווןע	0830	Rain/ Fine	0	0	0	20.9	3/ 100	5.5	
	X	1330	Rain/ Fine	0	0	0	20.9	25/1009	5.5	
	2	1700	Rain/ Fine	0	0	0	20.9	22/1009	5.5	
								1		
		Name & Designat	on			<u>Signature</u>			Date	
Field Operator:		Jock Lee (Compet	ent Person [CO-31	10218])		У			2/11/2022	

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated			
XT-XWHM-Y-OR	2/9/2022			

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	3/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	5.5	
	1	1330	Rain/ Fine	0	0	0	20.9	25/1009	5.5	
	N(	1700	Bain/ Fine	0	0	0	20.9	22/ [0/0	5.5	
		Name & Designati	on			<u>Signature</u>			Date	
Field Operator:		Jock Lee (Compete		10218])		Ъ		3	/11/2052	

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	4/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1011	5.5	
	1	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	5.5	
	~ 1	1700	Rain/ Fine	0	0	0	20.9	22/10/0.	5.5	
		Name & Designati	on			Signature			Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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4/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	5/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	5.5	
	- N	1330	Rain/ Fine	0	0	0	20.9	25/ 6009	5.5	
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ 1009	5.5	
51511-		Name & Designati	ion			Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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5/11/2022.

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	7/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1010	5.5	
	. t	1330	Rain/ Fine	0	0	0	20.9	25/ 1010	5.5	
	51	1700	Rain/ Fine	0	0	0	20.9	22/ [01]	5.5	
		Name & Designati	on		<u>Signature</u>				Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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7/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	8/11/2022	0830	Rain/ Fine	0	0	0	20.9	>3 / 10/1	5.5	
		1330	Rain/ Fine	0	0	0	20.9	26/ 1010	5.5	
	ч	1700	Rain/ Fine	0	0	0	20.9	231 1010	5.5	
					N					
L		Name & Designati	ion			<u>Signature</u>			<u>Date</u>	
Field Operator:		Jock Lee (Compete	ent Person [CO-32	L0218])		8			8/11/2020	

8/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	9/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	5.5	
	~	1330	Rain/ Fine	0	0	0	20.9	25/1009	5.5	
	5	1700	Rain/ Fine	0	0	0	20.9	22/1010	5.5	
									(+ ) 	
	1	Name & Designat	ion			Signature			<u>Date</u>	
Field Operator:		lock Lee (Comnet	ent Person (CO-31	0218])		1-			9/11/2022	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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1/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area A	10/11/2022	0830	Rain/Fine	0	0	0	20.9	22/1010	5.5		
	NI	1330	Rain/ Fine	0	0	0	20.9	25/1009	5.5		
	Ч	1700	Rain/ Fine	0	0	0	20.9	23/ 10/0	5.5		
								· ·			
		Name & Designati	ion			<u>Signature</u>			<u>Date</u>		
		La la la se d'Gamma at		10210])							

Field Operator:

Jock Lee (Competent Person [CO-310218])

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10/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

				Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	11/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	5.5	
	N N	1330	Rain/ Fine	0	0	0	20.9	26/1010	5.5	
	Ч	1700	Rain/ Fine	0	0	0	20.9	25/1011	5.5	
						-				
						1				
		Name & Designati	on		Signature				Date	
Field Operator:		Jock Lee (Compete	ent Person [CO-31	10218])		8		t	1/11/2022	

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

				Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	12/11/2022	0830	Rain/ Fine	0	0	0	20.9	22 / 1010	5.5	
	ч	1330	Rain/ Fine	0	0	0	20.9	25/1010	5.5	
	м	1700	Rain/ Fine	0	0	0	20.9	23/1009	5.5	
		Name & Designati	ion			<u>Signature</u>			<u>Date</u>	
Field Operator:		Jock Lee (Compet	ent Person [CO-3]	10218])		б		l	2/11/2022	

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	14/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/ 1009	5.5	
	11	1330	Rain/ Fine	0	0	0	20.9	25/ (009	5.5	
	CI.	1700	Rain/ Fine	0	0	0	20.9	22/ 10/0	5.5	
		Name & Designati	ion			<u>Signature</u>			Date	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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(4/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

addi-tur"			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	15/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1009	5.5	
	V	1330	Rain/ Fine	0	0	0	20.9	25/1010	5.5	
	U1	1700	Rain/ Fine	0	0	0	20.9	22/(000	5.5	
	1	Name & Designat	ion			<u>Signature</u>			<u>Date</u>	
		lask Las (Compat	ant Darson [CO 2	10210])		$\sim$			1-1 11	

Field Operator:

Jock Lee (Competent Person [CO-310218])

15/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

		~		Monitoring wells/ Surface Gas Emission						
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	16/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1010	5.5	
	y y	1330	Rain/ Fine	0	0	0	20.9	25/1011	5.5	
	51	1700	Rain/ Fine	0	0	0	20.9	22/ 1011	5.5	
	×.									
		Name & Designati	ion			Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

1/0/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

					Monitoring	; wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area A	17/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	5.5
		1330	Rain/ Fine	0	0	0	20.9	201 (010	5.5
	4	1700	Rain/ Fine	0	0	0	20.9	24/ 1011	5.5
		Name & Designat	ion			<u>Signature</u>			Date
Field Operator:		Jock Lee (Compet	ent Person [CO-33	10218])		8			17/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

					Monitoring	wells/ Surface Ga	s Emission		
Sample location	ample location Date of measurement		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area A	18/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1010	5.5
	N N	1330	Rain/ Fine	0	0	0	20.9	251 (010	5.5
	4	1700	Rain/ Fine	0	0	0	20.9	23/1010	5.5
L		Name & Designati	ion			Signature			Date

Field Operator:

Jock Lee (Competent Person [CO-310218])

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18/11/2022

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

19/11/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area A	19/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 100	5.5		
	7	1330	Rain/ Fine	0	0	0	20.9	25/1009	5.5		
	4	1700	Rain/ Fine	0	0	0	20.9	22/ (010	5.5		
		Name & Designati	ion			<u>Signature</u>			<u>Date</u>		

Field Operator:

Jock Lee (Competent Person [CO-310218])

2

Laboratory Staff:

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area A	21/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1009	5.5		
	Ч	1330	Rain/ Fine	0	0	0	20.9	26/1009	5.5		
	~1	1700	Rain/ Fine	0	0	0	20.9	24/1010	5.5		
		Name & Designati	ion			Signature			Date		
Field Operator:		Jock Lee (Compete	ent Person [CO-31	LO218])		8		2	-1/11/2022		

21/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

						Monitoring	g wells/ Surface Ga	s Emission		
Sample location	ple location Date of measurement		Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area A	22/11	2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	5.5
	14	l	1330	Rain/ Fine	0	0	0	20.9	25 / [009	5.5
	1700		Rain/ Fine	0	0	0	20.9	23 / 1010	5.5	
			Name & Designat	ion			<u>Signature</u>			<u>Date</u>
Field Operator:			Jock Lee (Compet	ent Person [CO-3:	10218])		8		2	25/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area A	23 11 2022	0830	Rain/ Fine	0	0	0	20.9	22 / (01)	5.5		
	Y	1330	Rain/ Fine	0	0	0	20.9	29/010	5.5		
	7	1700	Rain/ Fine	0	0	0	20.9	23/1010	5.5		
	•	Name & Designat	ion			Signature			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

8

23/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

13/WSD/16 - Mainlaying in Tseung Kwan O Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	24/11/2022	0830	Rain/ Fine	0	0	0	20.9	22 /1010	5.5	
	"	1330	Bain/ Fine	0	0	0	20.9	24/00	5.5	
	1	1700	Rain/ Fine	0	0	0	20.9	23/ (009	5.5	
								l.		
		Name & Designati	on			<u>Signature</u>			Date	
Field Operator:		Jock Lee (Compete	ent Person [CO-32	10218])		V		×	4/11/2022	

24/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

	Date of measurement			Monitoring wells/ Surface Gas Emission							
Sample location n		Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area A	25/11/2022	0830	Rain/ Fine	0	0	0	20.9	23 / 1010	5.5		
	NT .	1330	Rain/ Fine	0	0	0	20.9	25/10/0	5.5		
	5	1700	Rain/ Fine	0	0	0	20.9	221(01)	5.5		
		Name & Designati	on			<u>Signature</u>			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

25/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

			Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	No 11 2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	5.5	
	4	1330	Rain/ Fine	0	0	0	20.9	20/1009	5.5	
	ч	1700	Rain/ Fine	0	0	0	20.9	23/ 10/0	5.5	
	4		V							
		Name & Designati	ion		4	Signature			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

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8/11/2022

Laboratory Staff:

Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

	Date of measurement	Sampling time		Monitoring wells/ Surface Gas Emission						
Sample location			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)	
Area A	28/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/ [010	5.5	
	U U	1330	Rain/ Fine	0	0	0	20.9	261 (010	5.5	
	પ	1700	Rain/ Fine	0	0	0	20.9	z3/ (001	5.5	
		Name & Designati	ion			<u>Signature</u>			<u>Date</u>	

Field Operator:

Jock Lee (Competent Person [CO-310218])

28/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated
XT-XWHM-Y-OR	2/9/2022

				Monitoring wells/ Surface Gas Emission							
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)		
Area A	SA (1) 2022	0830	Rain/ Fine	0	0	0	20.9	23/010	5.5		
	4	1330	Rain/ Fine	0	0	0	20.9	25/1010	5.5		
	ч	1700	Rain/ Fine	0	0	0	20.9	23/1000	5.5		
				14 A.							
		Name & Designati	ion			Signature			Date		

Field Operator:

Jock Lee (Competent Person [CO-310218])

<u>Signature</u>

29/11/2022

Laboratory Staff:

Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O Date of measurement:

Sampling equipment used:	Dates calibrated				
XT-XWHM-Y-OR	2/9/2022				

30/11/2022

					Monitoring	; wells/ Surface Ga	s Emission		
Sample location	Date of measurement	Sampling time	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide(%)	Oxygen (%)	Temp (oC) / Pressure (mbar)	Remark Depth (m)
Area A	50/11/2022	0830	Rain/ Fine	0	0	0	20.9	23/1009	5.5
	4	1330	Bain/ Fine	0	0	0	20.9	25/ 10/0	5.5
	~1	1700	Rain/ Fine	0	0	0	20.9	24/ 50/0	5.5
		Name & Designati	ion			<u>Signature</u>			<u>Date</u>

Field Operator:

Jock Lee (Competent Person [CO-310218])

2

Laboratory Staff:

13/WSD/16-Mainlaying in Tseung Kwan Name of site: Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement		Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	1/11/22	8:20	rain	0	0	0	20.9	28/999	9	
		11:25		0	0	0	20.9	29/999	9	
		3:13		0	0	0	20.9	28/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



1/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

8/7/2022
7/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	3/11/22	8:20	rain	0	0	0	20.9	28/999	9	
		11:25		0	0	0	20.9	29/999	9	
		3: 13		0	0	0	20.9	28/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



3/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

	Date of measurement	Sampling time			Monitoring wells / Surface Gas Emission					
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	4/11/22	8:20	rain	0	0	0	20.9	28/999	9	
		11:25		0	0	0	20.9	29/999	9	
		3:13		0	0	0	20.9	28/999	9	
									Q	

Name & Designation

Signature

Date

4/11/22

Field Operator:

Cheung Hoi Kit



Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	5/11/22	8:20	sunny	0	0	0	20.9	28/999	9
		11:25		0	0	0	20.9	29/999	9
		3:13		0	0	0	20.9	28/999	9
							2		

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



5/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling ent time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	7/11/22	8:20	sunny	0	0	0	20.9	24/999	9	
		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	25/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



7/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

brated	Dates ca	npling equipment used:
2	28/7/202	PGM-2500 (QRAE III)
22	17/11/20	1307H
-		

Sample location	Date of measurement	Sampling time			Monitoring w	vells / Surface (	Gas Emission		
				Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)
Pit A	8/11/22	8:20	sunny	0	0	0	20.9	24/999	9
		11:25		0	0	0	20.9	27/999	9
		3:13		0	0	0	20.9	25/999	9

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



8/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time			Monitoring w	vells / Surface (	Gas Emission		
				condition (%) gas	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	9/11/22	8:20	sunny	0	0	0	20.9	24/999	9
		11:25		0	0	0	20.9	27/999	9
		3:13		0	0	0	20.9	25/999	9

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit

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9/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Dates calibrated
28/7/2022
17/11/2022

Sample location	Date of measurement			Sampling time	Monitoring wells / Surface Gas Emission						
				condition (%) g	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark		
Pit A	10/11/22	8:20	rain	0	0	0	20.9	24/999	9		
		11:25		0	0	0	20.9	27/999	9		
		3:13		0	0	0	20.9	25/999	9		

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



10/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement		Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	11/11/22	8:20	rain	0	0	0	20.9	24/999	9	
		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	25/999	9	
							1. A. 1. C. 1			

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



11/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location		Date of measurement	Sampling time			Monitoring w	vells / Surface (	Gas Emission		
				Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	12/11/22	8:20	sunny	0	0	0	20.9	24/999	9	
		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	25/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



12/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement		Sampling time			Monitoring w	vells / Surface (	Gas Emission		
					Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)
Pit A	14/11/22	8:20	sunny	0	0	0	20.9	22/999	9	
		11:25		0	0	0	20.9	25/999	9	
		3:13		0	0	0	20.9	23/999	9	
									_	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



14/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	15/11/22	8:20	rain	0	0	0	20.9	22/999	9	
		11:25		0	0	0	20.9	25/999	9	
		3:13		0	0	0	20.9	23/999	9	
									-	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



15/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Dates calibrated
28/7/2022
17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	16/11/22	8:20	sunny	0	0	0	20.9	22/999	9	
		11:25		0	0	0	20.9	25/999	9	
		3:13		0	0	0	20.9	23/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



16/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Dates calibrated
28/7/2022
17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	17/11/22	8:20	sunny	0	0	0	20.9	22/999	9	
		11:25		0	0	0	20.9	25/999	9	
		3:13		0	0	0	20.9	23/999	9	
				-						
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Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



17/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

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22
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Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	18/11/22	8:20	sunny	0	0	0	20.9	22/999	9	
		11:25		0	0	0	20.9	25/999	9	
		3:13		0	0	0	20.9	23/999	9	
					<i>A</i>					

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



18/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
125	19/11/22	8:20	sunny	0	0	0	20.9	22/999	9	
		11:25		0	0	0	20.9	25/999	9	
		3:13		0	0	0	20.9	23/999	9	
	•									

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit

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19/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

28/7/2022
17/11/2022
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Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	21/11/22	8:20	rain	0	0	0	20.9	23/999	9	
		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	24/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



21/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

13

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
D'LA	22/11/22	0.20	rain	0	0	0	20.9	23/999	9	
Pit A	22/11/22	8:20 11:25	Idili	0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	24/999	9	
					· · · · · · · · · · · · · · · · · · ·					
						· · · · · · · · · · · · · · · · · · ·				
			· · · · · · · · · · · · · · · · · · ·							

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit

YNO

22/11/22

Laboratory Staff:

Checked by:

13/WSD/16-Mainlaying in Tseung Kwan Name of site: Date of measurement:

1= 10 0 0 0
3/7/2022
7/11/2022

Sample location	Date of measurement	Sampling time			Monitoring w	wells / Surface Gas Emission			
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	23/11/22	8:20	sunny	0	0	0	20.9	23/999	9
		11:25		0	0	0	20.9	27/999	9
		3:13		0	0	0	20.9	24/999	9

Field Operator:

Name & Designation

Signature

Date

Cheung Hoi Kit



23/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	24/11/22	8:20	sunny	0	0	0	20.9	23/999	9
		11:25		0	0	0	20.9	27/999	9
		3:13		0	0	0	20.9	24/999	9

Name & Designation

Signature

Date

24/11/22

Field Operator:

Cheung Hoi Kit



Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

13

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	25/11/22	8:20	sunny	0	0	0	20.9	23/999	9	
		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	24/999	9	

Name & Designation

<u>Signature</u>

Date

Field Operator:

Cheung Hoi Kit



25/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	26/11/22	8:20	sunny	0	0	0	20.9	23/999	9	
		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	24/999	9	

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit



26/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

1	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark	
Pit A	28/11/22	8:20	sunny	0	0	0	20.9	23/999	9	
11070		11:25		0	0	0	20.9	27/999	9	
		3:13		0	0	0	20.9	24/999	9	
×.					· · · · · · · · · · · · · · · · · · ·					

Name & Designation

Signature

Date

28/11/22

Field Operator:

Cheung Hoi Kit



Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022
-	

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	29/11/22	8:20	sunny	0	0	0	20.9	23/999	9
11070	23/11/22	11:25	Sumy	0	0	0	20.9	27/999	9
		3:13		0	0	0	20.9	24/999	9

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit

Y do

29/11/22

Laboratory Staff:

Checked by:

Name of site: 13/WSD/16-Mainlaying in Tseung Kwan Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28/7/2022
1307H	17/11/2022

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon dioxide (%)	Oxygen (%)	Temp (°C)	Remark
Pit A	30/11/22	8:20	sunny	0	0	0	20.9	23/999	9
		11:25		0	0	0	20.9	27/999	9
		3:13		0	0	0	20.9	24/999	9
						×			
					· · · · · · · · · · · · · · · · · · ·				

Name & Designation

Signature

Date

Field Operator:

Cheung Hoi Kit

Yro

30/11/22

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT



# Appendix K

# Complaint Log and Regulatory Compliance Proforma

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#### Table K-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics				
Reporting remou	Frequency	Cumulative	<b>Complaint Nature</b>		
1 – 30 November 2022	0	3	N/A		

#### Table K-2 Statistical Summary of Environmental Summons

Poporting Doriod	Environmental Summons Statistics				
Reporting Period	Frequency	Cumulative	Details		
1 – 30 November 2022	0	0	N/A		

#### Table K-3 Statistical Summary of Environmental Prosecution

Poporting Doriod	<b>Environmental Prosecution Statistics</b>				
Reporting Period	Frequency	Cumulative	Details		
1 – 30 November 2022	0	0	N/A		

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aurecon



# Site Inspection Proforma

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Г Т



## Contract No.: 13/WSD/16 Mainlaying in Tseung Kwan O

#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: $\frac{4}{14}$			Inspected by:		Kon Ma	WSD: IEC:	
Weather							
Condition	Sunny	, Fine	Overcast	Drizzle	Rain	Storm	Hazy
Temperature	26 C		Humidity	High	Moderate	Low	
Wind	Calm	Light	Breeze	Strong			

0.00       General         0.01       Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?         0.02       Is ET Leader's log-book kept readily available for inspections?	_RO3
1.00 Construction Dust	
1.01       Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?	
1.02       Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?	-
1.03 Are fumes or smoke emitting plants or construction activities shielded by a screen?	
1.04       Are wheel-washing facilities with high-pressure water jets provided at all site exits?	
1.05 Is wheel-washing provided to all vehicles leaving the site?	
1.06 Are road section near the site exit free from dusty material?	Roz
1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?       Image: Comparison of the site paved or sprayed with water to minimize dust	
1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?	
1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?       Image: Covers provided to all dump trucks carrying dusty materials when entering and leaving the site?	
1.10       Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?       Image: Comparison of the tree surface wet?	
1.11 Is exposed earth properly treated within six months after the last construction activity on site?       Image: Construction activity on the last constructine activity on the last construction activit	
1.12 Does the operation of plants on site free form dark smoke emission?	
1.13       Are vehicles travelling at speed not exceeding 15km/hr within the site?         .	
1.14       Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	

Page 1 of 6





	Contract No.: 13/WSD/16 Mainlaying in T	seung Kw	van O		
		N/A	Yes	No	Photo/Remarks
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	$\checkmark$			
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas				
	accessible by the public?				
1.17	Is open burning prohibited?		$\checkmark$		
2.00	Construction Noise (Airborne)				
10000	Are quiet plants adopted on site?				
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive				
	noise?		V		
2.03	Are plants throttled down or turned off when not in use?		$\square$		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from				
	NSRs?	Ц/			
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	V			
2.06	Are silencers, mufflers and enclosures provided to plants?		<u> </u>		
		V			
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				
2.08	Are purposely-built site hoarding construction with appropriate materials provided along				
	the site boundary?	1			
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to	1.7			
	nearby sensitive receivers?	$\vee$			
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	V			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12	Are all construction noise permit(s) applied for percussive piling work?				
2.13	Are construction noise permit(s) applied for general construction works during restricted				
2.110	hours?		$\vee$		
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?		Ń		
3.00	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?		$\bigvee$		
3.02	Is effluent discharged according to the effluent discharge license?		1		× - 3
3.03	Is wastewater discharge from site properly treated prior to discharge?				Rol
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	$\overline{\mathbf{A}}$			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
	remove sand/silt particles from runoff?				
3.06	Is surface runoff diverted to sedimentation facilities?				
		1			





	Contract No.: 13/WSD/16 Mainlaying in 7	<b>Iseung Ky</b>	van O		
		N/A	Yes	No	Photo/Remarks
3.07	Is the drainage system properly maintained?				
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?				
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?	$\square$			
3.10	Are temporary access roads protected by crushed gravel?	$\Box$			
3.11	Are exposed slope surface properly protected?	Z			
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?				
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?				
3.14	Is runoff from wheel-washing facilities avoided?	Ń			
3.15	ls oil leakage or spillage prevented?				
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?	$\overline{\mathbf{V}}$			
3.17	Are the oil interceptors/ grease traps properly maintained?	$\overline{\checkmark}$			
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?				
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from the sensitive watercourse and stormwater drains?				
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work force?				
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?		Ń		
3.23	Is concrete washing water properly collected and treated prior to discharge?		1 V		
	Waste Management Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?		$\square$		
4.02	Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?		$\checkmark$		
	Is chemical waste separated from other waste and collected by a licensed chemical waste collector?	$\square$			
4.04	Are trip tickets for chemical waste disposal available for inspection?	$\square$			
4.05	Is chemical waste reused and recycled on site as far as practicable?	$\Box$			





	Contract No.: 13/WSD/16 Mainlaying in T	seung Kv	van O		
		N/A	Yes	No	Photo/Remarks
4.06	Are all containers for chemical waste properly labelled?		$\checkmark$		
4.07	Is drip tray provided for chemical storage?		$\checkmark$		
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	Are incompatible chemical wastes stored in different areas?	$\checkmark$			
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	s an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the				
	largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?		1		
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?		V		
4.13	Are sufficient general refuse disposal/collection points provided on site?		Ń		-
4.14	Is general refuse disposed of properly and regularly?				
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				-
4.17	Are C&D wastes sorted on site?		$\checkmark$		
4.18	Are C&D waste disposed of properly?		$\checkmark$		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?	V			
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?				
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		$\checkmark$		
5.00	Landscape and Visual	T/T			
5.01	Are Is site hoarding provided?	V			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		Ń		
5.03	Is construction light oriented away from the sensitive receivers?				
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?	Ń			

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	Contract No.: 13/WSD/16 Mainlaying in T	seung Kv	van O		
		N/A	Yes	No	Photo/Remarks
5.05	Are damages to trees outside site boundary due construction works avoided?		1		
5.06	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?				
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		$\checkmark$		
5.08	Are surgery works carried out for damaged trees?	$\square$			
<b>6.00</b> 6.01	Ecology Is site runoff properly treated to prevent any silly runoff?		$\checkmark$		
6.02	Are silt trap installed and well-maintained?				
6.03	Are stockpiles properly covered to avoid generating silty runoff?	Ń			
6.04	Are construction works restricted to works area which are clearly defined?	$\checkmark$			
7.00	Overall		Th		
7.01	Is the EM&A properly implemented in general?		J		

#### Page 5 of 6





# Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: Reminder: Rol: Contractor was reminded to that the poiluted water shall be treated before discharge. (Town B) Roz: Contractor was reminded to clear the mud on had road. (Pit D) Roz: Contract was reminded to display the EP at site entrace at Town B. Signatures: ET Contractor's WSD's IEC's Representative Representative Representative Representative FAV 0000 (Name: (Name: Howard Chan) (Name: Ma Ka Kin ) (Name: ) A1/CC7)

Contract No.: 13/WSD/16 Mainlaying in Tseung Kwan O

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#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 8/1	1 /2022		Inspected by:		word Chan	WSD: <u>/</u> IEC:	C Íse
Inspection Time: 09	30 - 102	30		Contractor: <u></u>	n pa	IEC:	
Weather		/				i debilikiri	1
Condition	Sunny	Fine	Overcast	Drizzle	Rain	Storm	Hazy
Temperature	26 C		Humidity	High	Moderate	Low	
Wind	Calm	Light	Breeze	Strong			

		N/A	Yes	No	Photo/Remarks
	General				
0.01	Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?		$\bigvee$		
0.02					
	Is ET Leader's log-book kept readily available for inspections?		$\bigvee$		
1.00	Construction Dust				·····
1.01	Are dusty materials, such as excavated materials, building debris and construction				
	materials, and exposed earth surface properly covered to prevent dust emission?				
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty				
1.03	construction works for dust suppression?				
1.05	Are fumes or smoke emitting plants or construction activities shielded by a screen?	$\square$			
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?				
1.05	Is wheel-washing provided to all vehicles leaving the site?				
1.06	Are road section near the site exit free from dusty material?				Roz
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust	5/1			
	emission during vehicle movement?	V			
	Are water spraying provided immediately prior to any loading or transfer of dusty materials?	$\checkmark$			
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and				
	leaving the site?				
	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of	-/	$\square$		
	boulders, poles, pillars sprayed with water to maintain the entire surface wet? Is exposed earth properly treated within six months after the last construction activity on				
	site?	V			
1.12	Does the operation of plants on site free form dark smoke emission?		$\checkmark$		
1.13	Are vehicles travelling at speed not exceeding 15km/hr within the site?	١Ź			
	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	$\square$			
[					Page <b>1</b> of <b>6</b>





		N/A	Yes	No	Photo/Remarks
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered	$\Box$			
	areas?	$\checkmark$			
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas	5/1			
	accessible by the public?				
1.17	Is open burning prohibited?				
2.00	Construction Noise (Airborne)				
2.01	Are quiet plants adopted on site?		$\vee$		
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?		$\checkmark$		
2.03	Are plants throttled down or turned off when not in use?		$\checkmark$		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	V			
2.06	Are silencers, mufflers and enclosures provided to plants?	$\checkmark$			
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				
2.08	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?				
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?	$\overline{\mathbf{X}}$			
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	$\overline{\mathbf{V}}$			
	Are valid noise emission label(s) affixed to all air compressors operating on site?	$\overline{\mathbf{V}}$			
	Are all construction noise permit(s) applied for percussive piling work?	V			
	Are construction noise permit(s) applied for general construction works during restricted hours?		$\checkmark$		
	Are valid construction noise permit(s) displayed at all vehicular exits?		$\checkmark$		
3.00	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site? Is effluent discharged according to the effluent discharge license?				
3.02					
	Is wastewater discharge from site properly treated prior to discharge?		$\bigvee$		Ro's
	Are perimeter channels provided to intercept storm runoff from outside the site?	$\checkmark$			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?				
3.06	Is surface runoff diverted to sedimentation facilities?				





	Contract 10. 10 WSD/10 Maintaying in	Iscung IXW			
		N/A	Yes	No	Photo/Remarks
3.07	Is the drainage system properly maintained?				
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?	$\Box$			
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?				
3.10	Are temporary access roads protected by crushed gravel?	$\square$			
3.11	Are exposed slope surface properly protected?				0
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?	Ń			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?		$\checkmark$		
3.14	Is runoff from wheel-washing facilities avoided?				
3.15	Is oil leakage or spillage prevented?		$\bigvee$		
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?	$\checkmark$			
3.17	Are the oil interceptors/ grease traps properly maintained?	Ń			
	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?	$\checkmark$			
	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?		V		
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from the sensitive watercourse and stormwater drains?		V		
	Are sufficient chemical toilets provided on site to handle sewage from construction work force?		$\checkmark$		
	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?		$\checkmark$		
	s concrete washing water properly collected and treated prior to discharge?	$\checkmark$			
4.01	Waste Management is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?		$\checkmark$		
	s a recording system implemented to record the amount of wastes generated, recycled and lisposed of?		$\checkmark$		
	s chemical waste separated from other waste and collected by a licensed chemical waste collector?	$\checkmark$			
4.04	Are trip tickets for chemical waste disposal available for inspection?				
4.05 1	s chemical waste reused and recycled on site as far as practicable?				

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	Contract No.: 15/WSD/16 Mainlaying in 1	seung Kw			
		N/A	Yes	No	Photo/Remarks
4.06	Are all containers for chemical waste properly labelled?		$\overline{\mathcal{A}}$		
4.07	Is drip tray provided for chemical storage?				Ool
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	Are incompatible chemical wastes stored in different areas?				
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		$\checkmark$		
	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?		$\checkmark$		
	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?		$\checkmark$		
4.13	Are sufficient general refuse disposal/collection points provided on site?		$\square$		
4.14	Is general refuse disposed of properly and regularly?		$\checkmark$		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?	$\checkmark$			
116	Are individual collectors for aluminum cans, plastic bottles and packaging material and office				
	paper provided to encourage waste segregation?				
4.17	Are C&D wastes sorted on site?		$\checkmark$		
4.18	Are C&D waste disposed of properly?		$\checkmark$		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?	$\overline{\mathbf{V}}$			
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?		$\checkmark$		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		$\checkmark$		
5.00	Landscape and Visual				<u> </u>
5.01	Are Is site hoarding provided?	$\checkmark$			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		$\checkmark$		
5.03	Is construction light oriented away from the sensitive receivers?	$\checkmark$			
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?				





		N/A	Yes	No	Photo/Remarks
5.05	Are damages to trees outside site boundary due construction works avoided?				
	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?	$\Box$			
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		$\checkmark$		
5.08	Are surgery works carried out for damaged trees?	$\square$			
6.00	Ecology				
6.01	Is site runoff properly treated to prevent any silly runoff?		$\vee$		
	Are silt trap installed and well-maintained?	$\Box$			
6.03	Are stockpiles properly covered to avoid generating silty runoff?				
6.04	Are construction works restricted to works area which are clearly defined?				
7.00	Overall				
7.01	Is the EM&A properly implemented in general?				





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: PLR Observation: Ool: Drip tray shall be provided for chemical storage. (Intertion B2) Reminder: ROI: Contractor was reminded to display the NRMM Label on the excavator at tocation B. ROZ: Contractor was reminded to clear the mud on predestrian. (1PLR (1000000 B2) RO32 Contractor was reminded that was wastewater shall be proper treated and review the efficiency of the sedimentation tank (Location B) Signatures: WSD's IEC's ET Contractor's Representative Representative Representative Representative ) (Name: The UA, CHUL) (Name: ) (Name: Howood Chan) (Name: Ken Ma





# WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspectio	n Date: 16/11/2622 Inspected by: ET: 401ward Chan Contractor: 12- K. 0 Way	WSD/	k.F.J	sang	
Inspectio	on Time: / D 2 0 0 - / L 2 0 0				
Weathe	r			_	
Conditi		Stor	0.	Hazy	
Tempe		: Lov	v		93.
Wind	Calm Light Breeze Strong				
		N/A	Yes	No	Photo/Remarks
0.00	General				
0.01	Is the current Environmental Permit displayed conspicuously at all vehicle site		$\checkmark$		
	entrances/exits for public's information at any time?				
0.02	Is ET Leader's log-book kept readily available for inspections?		$\checkmark$		
1.00	Construction Dust		A	5350-000-01-01-01-01-01-01-01-01-01-01-01-0	
1.01	Are dusty materials, such as excavated materials, building debris and construction		$\square$		()B)
	materials, and exposed earth surface properly covered to prevent dust emission?				
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty		$\square$		
	construction works for dust suppression?				
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?	$\checkmark$			
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	$\checkmark$			
1.05	Is wheel-washing provided to all vehicles leaving the site?	$\checkmark$			
1.06	Are road section near the site exit free from dusty material?		$\checkmark$		
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust				
	emission during vehicle movement?				
1.08	Are water spraying provided immediately prior to any loading or transfer of dusty	$\overline{\mathbf{N}}$	$\Box$		
	materials?				
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and		$\checkmark$		
1.10	leaving the site? Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of		_		
1.10	boulders, poles, pillars sprayed with water to maintain the entire surface wet?				
1.11	Is exposed earth properly treated within six months after the last construction activity on				
	site?		$\mathbf{v}$		-
1.12	Does the operation of plants on site free form dark smoke emission?				-
1.13	Are vehicles travelling at speed not exceeding 15km/hr within the site?		$\checkmark$		
1.14	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	$\Box$			





	Contract No.: 15/ WSD/10 Mainlaying in 1	seung Kv			
		N/A	Yes	No	Photo/Remarks
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	V			
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	$\checkmark$			
1.17	Is open burning prohibited?		$\checkmark$		
2.00	Construction Noise (Airborne)				
2.01	Are quiet plants adopted on site?		$\checkmark$		
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?		$\checkmark$		2
2.03	Are plants throttled down or turned off when not in use?		$\square$		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?	$\square$			
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	$\overline{\mathbf{v}}$			
2.06	Are silencers, mufflers and enclosures provided to plants?	1			
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				
2.08	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?	$\Box$			
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	$\bigvee$			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	$\overline{\mathbf{V}}$			
	Are all construction noise permit(s) applied for percussive piling work?	$\mathbf{V}$			
	Are construction noise permit(s) applied for general construction works during restricted hours?		$\square$		
	Are valid construction noise permit(s) displayed at all vehicular exits?		$\checkmark$		
3.00	Water Quality				
	Is effluent discharge license obtained for wastewater discharge from site? Is effluent discharged according to the effluent discharge license?				
					_003
	Is wastewater discharge from site properly treated prior to discharge?				003
	Are perimeter channels provided to intercept storm runoff from outside the site?	$\checkmark$			
	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?		$\checkmark$		
	Is surface runoff diverted to sedimentation facilities?				





	Contract No.: 13/WSD/16 Mainlaying in Tseung Kwan O										
		N/A	Yes	No	Photo/Remarks						
3.07	Is the drainage system properly maintained?	$\checkmark$									
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy										
	seasons?	$\checkmark$			-						
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil										
	erosion?	$\checkmark$									
3.10	Are temporary access roads protected by crushed gravel?										
3.11	Are exposed slope surface properly protected?	$\checkmark$			u						
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled	7									
	in short sections after excavation?	$\backslash$									
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric				0						
	during construction?				002						
3.14	Is runoff from wheel-washing facilities avoided?	$\checkmark$									
3.15	Is oil leakage or spillage prevented?										
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?										
			<u>r/</u>								
3.17	Are the oil interceptors/ grease traps properly maintained?										
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid										
	them entering the streams?				·						
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within		$\Box$								
	bunds of capacity equal to 110% of the storage capacity of the largest tank?		ЦД I								
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from the										
	sensitive watercourse and stormwater drains?										
	Are sufficient chemical toilets provided on site to handle sewage from construction work force?		$\checkmark$								
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the										
	licensed contractors?		V								
3.23	Is concrete washing water properly collected and treated prior to discharge?										
4.00	Waste Management										
4.01	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at										
	public filling facilities and landfills?										
4.02	Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?										
4.03	Is chemical waste separated from other waste and collected by a licensed chemical waste										
	collector?										
4.04	Are trip tickets for chemical waste disposal available for inspection?	$\overline{\mathbf{V}}$									
4.05	Is chemical waste reused and recycled on site as far as practicable?										
4.05		$\checkmark$									





		N/A	Yes	No	Photo/Remarks
4.06	Are all containers for chemical waste properly labelled?		$\checkmark$		
4.07	Is drip tray provided for chemical storage?				001.R03
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	Are incompatible chemical wastes stored in different areas?				_
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		$\checkmark$		
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the				
	largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?		$\checkmark$		
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?				
4.13	Are sufficient general refuse disposal/collection points provided on site?				
	Is general refuse disposed of properly and regularly?		$\checkmark$		Rol
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?	$\checkmark$			
	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?		$\overline{\mathbf{A}}$		
	Are C&D wastes sorted on site?				
4.18	Are C&D waste disposed of properly?		$\checkmark$		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		$\checkmark$		
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?		$\checkmark$		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?				
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?	$\checkmark$			
	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?	$\checkmark$			
5.03	Is construction light oriented away from the sensitive receivers?				
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?	$\checkmark$			





		N/A	Yes	No	Photo/Remarks
5.05	Are damages to trees outside site boundary due construction works avoided?		$\checkmark$		
	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?				
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?		$\square$		
5.08	Are surgery works carried out for damaged trees?	$\square$			
	Ecology Is site runoff properly treated to prevent any silly runoff?		Ń		
6.02	Are silt trap installed and well-maintained?				
6.03	Are stockpiles properly covered to avoid generating silty runoff?				002
6.04	Are construction works restricted to works area which are clearly defined?		$\square$		
	Overall Is the EM&A properly implemented in general?		$\checkmark$		





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: Observation: Observation. Ool: Chemical shall be stared with drip tray. (Area 137 P.it.C) Ool: Stockpile of disty materials should be covered with impervious sheeting. (Area A) Ool: Polluted water shalld be treaded before discharge. (Area 137 P.t.A.) 201: Housekep shall be imposed on site (Area 137 & Area A). 2022 NRMM Label shall be displayed on the excavator. (Area 137 Rit c) 2032 Drip tray shall be provided for generator while operation. (Aren 137 P.E.C) Signatures: EΤ Contractor's WSD's IEC's Representative Representative Representative Representative (Name: What (Name: (Namestoward Chan) (Name: ) kan)





#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date:	2/11/20	22	Inspected by:	ET:	loward Chan	WSD: <u>Mr</u> . IEC:	K.C. Tee	
Inspection Time:	19-30-10	-30		Contractor: 1	r. Ken Ma	IEC:		
Weather		1						
Condition	Sunny	Fine	Overcast	Drizzle	Rain	Storm	Hazy	
Temperature	24 c		Humidity	High	Moderate	Low		
Wind	Calm	Light	Breeze	Strong				

		N/A	Yes	No	Photo/Remarks
<b>0.00</b> 0.01	General Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?		F/		
0.02	Is ET Leader's log-book kept readily available for inspections?		$\checkmark$		
1.00	Construction Dust				
1.01	Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?		$\checkmark$		
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?				
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?				
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	$\checkmark$			
1.05	Is wheel-washing provided to all vehicles leaving the site?	$\checkmark$			
1.06	Are road section near the site exit free from dusty material?		$\checkmark$		
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?	$\square$			
1.08	Are water spraying provided immediately prior to any loading or transfer of dusty materials?				
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?		$\checkmark$		
1.10	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?	$\checkmark$			
1.11	Is exposed earth properly treated within six months after the last construction activity on site?		$\checkmark$		
1.12	Does the operation of plants on site free form dark smoke emission?				
1.13	Are vehicles travelling at speed not exceeding 15km/hr within the site?				
1.14	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?				





		N/A	Yes	No	Photo/Remarks
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered	<b></b>		_	
1.15	areas?				-
	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas				
	accessible by the public?	$\backslash$			
1.17	Is open burning prohibited?		$\mathbf{\nabla}$		
2.00	Construction Noise (Airborne)				
2.01	Are quiet plants adopted on site?		$\mathbf{v}$		
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?		$\checkmark$		
2.03	Are plants throttled down or turned off when not in use?				
			$\backslash$		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
		$\checkmark$			
2.06	Are silencers, mufflers and enclosures provided to plants?	V			
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		$\checkmark$		
2.08	Are purposely-built site hoarding construction with appropriate materials provided along				
	the site boundary?				
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to				
	nearby sensitive receivers?				<b></b>
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	$\square$			
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	$\checkmark$			
2.12	Are all construction noise permit(s) applied for percussive piling work?	$\checkmark$			
2.13	Are construction noise permit(s) applied for general construction works during restricted		1/		
	hours?				
	Are valid construction noise permit(s) displayed at all vehicular exits?		$\checkmark$		
	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?				·
3.02	Is effluent discharged according to the effluent discharge license?				
3.03	Is wastewater discharge from site properly treated prior to discharge?				Oot
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	$\checkmark$			terre litter
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to				
	remove sand/silt particles from runoff?				Vag
3.06	Is surface runoff diverted to sedimentation facilities?	$\checkmark$			





	Contract No.: 13/WSD/16 Mainlaying in T	seung Kw	van O		
		N/A	Yes	No	Photo/Remarks
3.07	Is the drainage system properly maintained?				Oo l
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?	V			
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?	$\checkmark$			
3.10	Are temporary access roads protected by crushed gravel?	V			
3.11	Are exposed slope surface properly protected?	$\square$			<i>y</i>
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?	V			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?				
3.14	Is runoff from wheel-washing facilities avoided?	$\square$			-
3.15	Is oil leakage or spillage prevented?				003
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?		$\checkmark$		
3.17	Are the oil interceptors/ grease traps properly maintained?	V			
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?		E		
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				() <del></del>
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from the sensitive watercourse and stormwater drains?		$\checkmark$		
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work force?		$\checkmark$		
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?				
3.23	Is concrete washing water properly collected and treated prior to discharge?				
a second second	Waste Management Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?		$\checkmark$		-
4.02	Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?				
4.03	Is chemical waste separated from other waste and collected by a licensed chemical waste collector?	$\overline{\checkmark}$			
4.04	Are trip tickets for chemical waste disposal available for inspection?	$\square$			
4.05	Is chemical waste reused and recycled on site as far as practicable?				





Contract No.: 13/WSD/16 M	lainlaying in 7	Tseung Kwan O
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		N/A	Yes	No	Photo/Remarks
4.06	Are all containers for chemical waste properly labelled?				
4.07	Is drip tray provided for chemical storage?				002
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?		$\checkmark$		
4.09	Are incompatible chemical wastes stored in different areas?	$\square$			
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		Ń		
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?		$\checkmark$		
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?	$\checkmark$			
4.13	Are sufficient general refuse disposal/collection points provided on site?		$\square$		
4.14	Is general refuse disposed of properly and regularly?		x/		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				(
4.17	Are C&D wastes sorted on site?				
4.18	Are C&D waste disposed of properly?		$\square$		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		$\square$		
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?		$\checkmark$		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		$\bigtriangledown$		
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?				
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?	X			Rol
5.03	Is construction light oriented away from the sensitive receivers?				
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?	$\checkmark$			
-					des the second se





		N/A	Yes	No	Photo/Remarks
5.05	Are damages to trees outside site boundary due construction works avoided?		$\checkmark$		Rol
5.06	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?	$\checkmark$			
	Are the retained and transplanted tree(s) properly protected and in good conditions?				-
5.08	Are surgery works carried out for damaged trees?	$\checkmark$			
<b>6.00</b> 6.01	Ecology Is site runoff properly treated to prevent any silly runoff?		$\square$		
	Are silt trap installed and well-maintained?				
6.03	Are stockpiles properly covered to avoid generating silty runoff?		$\checkmark$		
6.04	Are construction works restricted to works area which are clearly defined?		$\checkmark$		
7.00	Overall				
7.01	Is the EM&A properly implemented in general?				





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: Observation 2 Ool: Gully, man have should be covered and shelted proper. (Pit4) 0022 Chemical & antainer shall be stored with drip tray (1+4) Oo32 Drip tray charled be provide for generator to avoid oil leakage (Pits) 0042 House keeping shall be improved on site. 005: Rainwater shall be discharged via silk reremoveal facilities Reminder ROF- Construction materials should not be placed in the planter area. (B+4) Signatures: Contractor's WSD's IEC's FT Representative Representative Representative Representative (Name: ) (Name loug Chr.) (Name: Ken Ma ) (Name: TSE KA CHUN)





#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 3		2)	Inspected by:	ET:	oward Chan	WSD: Mor.	Alex Wan
Inspection Time:	09230 - 10	1230		Contractor: 1/1/	- Ken Th	IEC: <u>/~/r</u>	Louis Kivan
Weather							
Condition	Sunny	Fine	Overcast	Drizzle	Rain	Storm	Hazy
Temperature	DZ C		Humidity	High	Moderate	Low	
Wind	Calm	Light	Breeze	Strong			

		N/A	Yes	No	Photo/Remarks
<b>0.00</b> 0.01	General Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?		$\square$		
0.02	Is ET Leader's log-book kept readily available for inspections?		$\checkmark$		
1.00	Construction Dust				
1.01	Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?		$\checkmark$		
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?				
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?	$\checkmark$			
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?				
1.05	Is wheel-washing provided to all vehicles leaving the site?	$\checkmark$			
	Are road section near the site exit free from dusty material?		$\checkmark$		
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?	$\checkmark$			
1.08	Are water spraying provided immediately prior to any loading or transfer of dusty materials?	$\checkmark$			
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?		$\checkmark$		
1.10	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?	$\checkmark$			
1.11	Is exposed earth properly treated within six months after the last construction activity on site?		$\checkmark$		
	Does the operation of plants on site free form dark smoke emission?		$\square$		
	Are vehicles travelling at speed not exceeding 15km/hr within the site?		$\square$		
1.14	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?	$\overline{\mathbf{A}}$			





		N/A	Yes	No	Photo/Remarks
	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	Y			
	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	$\overline{\mathbf{A}}$			
	Is open burning prohibited?		$\checkmark$		
	Construction Noise (Airborne) Are quiet plants adopted on site?				
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?		t/		
2.03	Are plants throttled down or turned off when not in use?		$\checkmark$		
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
2.06	Are silencers, mufflers and enclosures provided to plants?				
	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		$\square$		
2.08	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?				
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?				
	Are valid noise emission label(s) affixed to all air compressors operating on site?				
	Are all construction noise permit(s) applied for percussive piling work?				
	Are construction noise permit(s) applied for general construction works during restricted hours?				
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?				
<b>3.00</b> 3.01	Water Quality Is effluent discharge license obtained for wastewater discharge from site?		$\sqrt{1}$	$\square$	
3.02	Is effluent discharged according to the effluent discharge license?				
3.03	Is wastewater discharge from site properly treated prior to discharge?				
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	$\square$			
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?		$\checkmark$		ROS
3.06	Is surface runoff diverted to sedimentation facilities?				





	Contract 10. 15/ WSD/10 Maintaying in	The second second	Contraction of the local division of the loc		
		N/A	Yes	No	Photo/Remarks
3.07	Is the drainage system properly maintained?				002
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?				
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?				
3.10	Are temporary access roads protected by crushed gravel?				
3.11	Are exposed slope surface properly protected?				4
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?	$\square$			
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?	$\checkmark$			
	Is runoff from wheel-washing facilities avoided?				-
3.15	Is oil leakage or spillage prevented?				003
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?		$\square$		
3.17	Are the oil interceptors/ grease traps properly maintained?	$\square$			
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?		$\square$		
	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
	Are tanks, containers, storage area bunded and the locations locked as far as possible from the sensitive watercourse and stormwater drains?		$\checkmark$		
	Are sufficient chemical toilets provided on site to handle sewage from construction work force?		Ń		
	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?		$\checkmark$		
	Is concrete washing water properly collected and treated prior to discharge?				
4.01	Waste Management is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?		$\square$		
	is a recording system implemented to record the amount of wastes generated, recycled and disposed of?		$\checkmark$		
	s chemical waste separated from other waste and collected by a licensed chemical waste collector?	$\checkmark$			
4.04	Are trip tickets for chemical waste disposal available for inspection?	$\square$			
4.05	s chemical waste reused and recycled on site as far as practicable?	$\checkmark$			





	Contract No.: 13/WSD/16 Mainlaying in 1	seung Aw			
		N/A	Yes	No	Photo/Remarks
4.06	Are all containers for chemical waste properly labelled?		$\square$		
4.07	Is drip tray provided for chemical storage?				Op l
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?		$\square$		
4.09	Are incompatible chemical wastes stored in different areas?	$\Box$			
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		$\checkmark$		
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the				
	largest container or of 20% by volume of the chemical waste stored in that area, whichever is				
	the greatest, provide?				;
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump				
	pits, and oil interceptors?				
4.13	Are sufficient general refuse disposal/collection points provided on site?		$\checkmark$		_
4.14	Is general refuse disposed of properly and regularly?		$\checkmark$		
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation				
	of waste?				
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?		$\square$		
4.17	Are C&D wastes sorted on site?		$\checkmark$		
4.18	Are C&D waste disposed of properly?		$\square$		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?		$\checkmark$		
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?		$\checkmark$		
4.22	Is a dumping license obtained to deliver public fill to public filling areas?		$\checkmark$		
5.00	Landscape and Visual				
5.01	Are Is site hoarding provided?	$\vee$			
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
5.03	Is construction light oriented away from the sensitive receivers?				
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?				





		N/A	Yes	No	Photo/Remarks
5.05	Are damages to trees outside site boundary due construction works avoided?		$\checkmark$		
5.06	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?				
	Are the retained and transplanted tree(s) properly protected and in good conditions?		$\checkmark$		
5.08	Are surgery works carried out for damaged trees?	$\Box$			
6.00	Ecology				
6.01	Is site runoff properly treated to prevent any silly runoff?		1/		
	Are silt trap installed and well-maintained?	$\square$			
6.03	Are stockpiles properly covered to avoid generating silty runoff?				
6.04	Are construction works restricted to works area which are clearly defined?				
7.00	Overall		-		
7.01	Is the EM&A properly implemented in general?		$\bigvee$		





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: Obser Vacion 2 Ool = Chemical container should be stored with drip tray. (P.t. IA) 002: Gully should be control covered and surranded by sond bags to prevent scrol (muddy ninoff dischage into gully (WF4). 003: Oil leakage was observed, contractor was required to replace the chemical container immediately. (Won O Road) Reminder: Roll Centractor was reminded to clear the stognant water on site ROJ: House Keep shall be imporved at WI= 4.53. ROBE Contractor was reminded to provide sedimentation tank at WF4 to treat the polluted water before dischage. Signatures: WSD's IEC's ET Contractor's Representative Representative Representative Representative (Name: Ken Ma) (Name: Alex Kun WAN (Naine mis Kulan (Name: Haward Chan)



# Appendix M

# Proactive Environmental Protection Proforma

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#### **Proactive Environmental Protection for the Next Reporting Month**

Reporting Period	Activity	Major Environmental Impact	Environmental Mitigation Measure
1 – 31 December 2022	<ul> <li>Excavation of trench</li> <li>Mainlaying of pipe</li> <li>Backfilling of the trench</li> <li>Work fronts for open trench</li> <li>Work fronts for pipe jacking</li> </ul>	<ul> <li>Construction dust</li> <li>Noise generation;</li> <li>Construction waste</li> <li>Impact of water quality</li> </ul>	<ul> <li>Dust suppression by regular wetting and water spraying</li> <li>Reduction of noise from equipment and machinery on-site</li> <li>Sorting and storage of general refuse and construction waste</li> <li>Chemical shall be stored properly with drip tray.</li> <li>Treatment of water with water treatment facilities before discharge.</li> <li>Rainwater pumped from trench should be discharged via waster water treatment facilities.</li> <li>Retained tree shall be carefully protected and tree protect zone should be established.</li> </ul>

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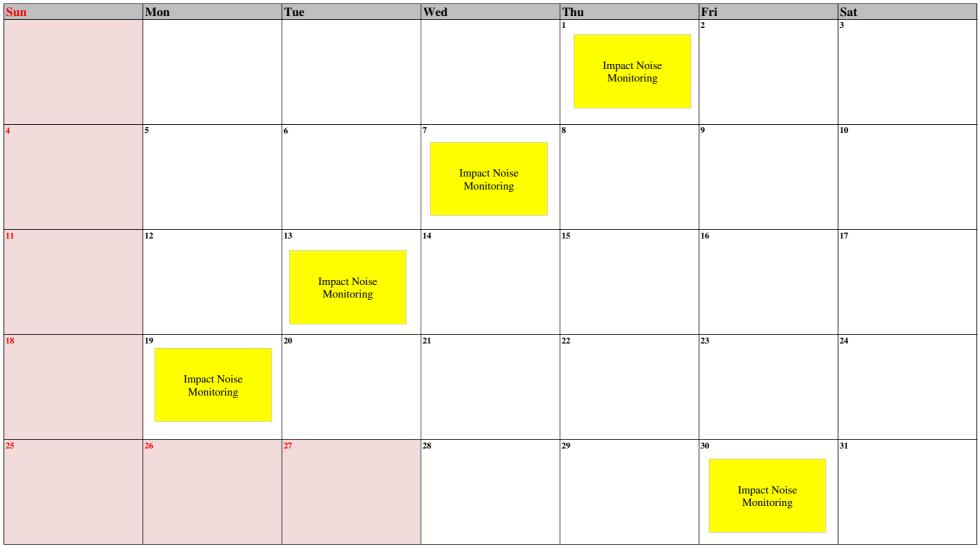
aurecon



# Impact Monitoring Schedule of Next Reporting Month

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# Contract No. 13/WSD/16 Mainlaying in Tseung Kwon O Tentative Environmental Monitoring Schedule (December 2022)



The schedule may be changed due to unforeseen circumstances (adverse weather, etc.)