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Water Supplies Department

Contract No. 13/WSD/16

Mainlaying in Tseung Kwan O

Monthly EM&A Report No. 67
(Period from 1 February to 29 February 2024)

February 2024
(Rev. 1)

	Prepared by:	Reviewed and Certified by:
Name	Alex Leung	Jacky Leung
Position	Environmental Team Member	Environmental Team Leader
Signature		
Date:	20 March 2024	20 March 2024

Acuity Sustainability Consulting Limited
Flat/RM E, 12/F, Ford Glory Plaza,
Nos. 37-39 Wing Hong Street, Kowloon, Hong Kong
tel +852 2698 6833
fax +852 2698 9383 | e-mail admin@acuityhk.com
http www.acuityhk.com | www.aurecongroup.com

ANEWR

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

Your reference:

Our reference: HKWSD201/50/109580

Date: 21 March 2024

Attention: Mr Henry Chan

BY POST

Dear Sirs

Quotation Ref. 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. 67

We refer to emails of 15 and 20 March 2024 attaching Monthly EM&A Report No. 67 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

ANewR Consulting Limited
Unit 1813, 1815-16, 18/F, Tower A, Regent Centre
63 Wo Yi Hop Road, Kwai Chung, Hong Kong
Tel: (852) 2618 2831 Fax: (852) 3007 8648
Email: info@anewr.com
Web: www.anewr.com

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Revision History

Rev.	DESCRIPTION OF MODIFICATION	DATE
0	1st Submission	15/03/2024
1	2nd Submission	20/03/2024

CONTENT

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 67th 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 O (TKO) during the reporting period from 1 February to 29 February 2024.

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

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

Location	Construction activities carried in the reporting month
Wan Po Road and TKO Area 137	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
HK Velodrome	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Po Lam Road South / Ling Hong Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Tsui Lam Road / Abandoned Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail

A6. The major environmental impacts brought by the above construction works include:

- Construction dust and noise generation from road reinstatement and chambers construction;
- 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 road reinstatement and chambers construction;
- 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 3, 9, 16, 22 and 28 February 2024 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. Water quality monitoring was carried out during the disinfection procedure. According to Water Supply Department, the discharge of dechlorinated effluent arranged on 13 – 19 December 2023 and TRC monitoring at the sampling locations (outlet of the Service Reservoir) was carried out during the discharge. The TRC for the discharge are recorded less than 0.1mg/L and all results are below the action level.

A10. According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. The landfill gas monitoring was ceased from February 2024.

Complaint Handling and Prosecution

A11. No environmental complaint was received in the reporting month. No notifications of summons and prosecution was received in the reporting month.

Reporting Change

A12. There were no changes reported that may affect the on-going EM&A programme.

Summary of Upcoming Key Issues and Key Mitigation Measures

A13. 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	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
HK Velodrome	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Po Lam Road South / Ling Hong Road	• Road surface reinstatement including surface drain and related utilities

Location	Construction activities to be carried out in next reporting month
	• Chamber construction, installation of accessories such as cat ladder and handrail
Tsui Lam Road / Abandoned Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail

A14. The major environmental impacts brought by the above construction works will include:

- Construction dust and noise generation of road reinstatement and chambers construction;
- Waste generation from construction activities; and
- Impact on water quality from construction activities.

A15. 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 road reinstatement and chambers construction 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

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 67th Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 February to 29 February 2024.

1.3 Project Organization

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

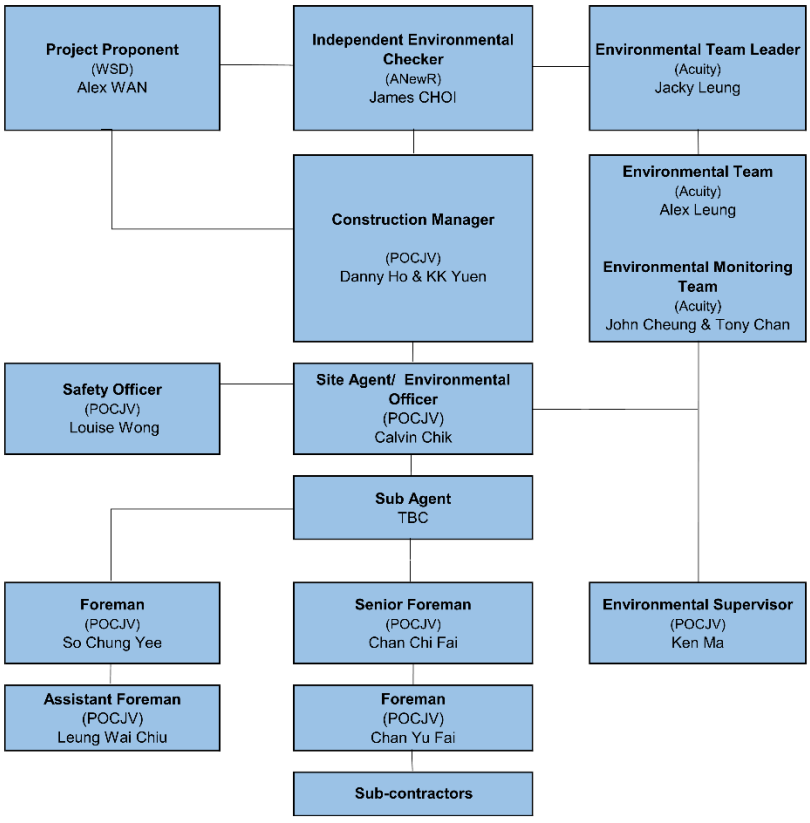


Figure 1.1 Project Organization Chart

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

Table 1.1 Contact details of the key personnel

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

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 1.2 Summary of the Construction Works Undertaken during the Reporting Month

Location	Construction activities carried out in the reporting month
Wan Po Road and TKO Area 137	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
HK Velodrome	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Po Lam Road South / Ling Hong Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Tsui Lam Road / Abandoned Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail

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

Table 1.3 Summary of the Status of Environmental Licence, Notification and Permit

Reference No.	Valid Period		Status	Remark
	From	To		
Variation of Environmental Permit				
EP no.: EP-503/2015/A	--	--	Valid	N/A
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation				
423775	--	--	Valid	N/A
Chemical Waste Producer Registration				
5213-839-P3287-01	--	--	Valid	N/A
Billing Account for Disposal of Construction Waste				
A/C no.: 7029491	--	--	Valid	N/A
Water Discharge Licence				
WT0002035-2023	16 Feb 2024	31 Dec 2028	Valid	N/A

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
Water	
Impact monitoring of disinfection procedure*	Completed
Waste Management	
Mitigation Measures in Waste Management Plan	On-going
Landfill Gas	
Impact Monitoring	Ceased from February 2024
Environmental Audit	
Site Inspection	On-going

*Monitoring detail would be presented in next reporting month.

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 3, 9, 16, 22 and 28 February 2024 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**.

Table 2.1 Noise Monitoring Parameters, Time, Frequency and Duration

Time	Frequency	Duration	Parameters
Daytime: 0700-1900	Once per week	Continuously in $L_{eq\ 5min}$/$L_{eq\ 30min}$ (average of 6 consecutive $L_{eq\ 5min}$)	L_{eq}, L_{10} & L_{90}

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.

Table 2.2 Noise Monitoring Location

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

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

Figure 2.1 NSR4 Creative Secondary School

Figure 2.2 NSR24 PLK Laws Foundation College

Figure 2.3 NSR31 School of Continuing and Professional Studies - CUHK

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.

3.1. Table 2.3 Impact Noise Monitoring Equipment

Equipment	Brand and Model	Serial Number	Date of Calibration	Expiry Date
Sound Level Meter	SVANTEK 971	77731	21 Mar 2023	20 Mar 2024
Sound Level Meter Calibrator	RION NC-75	35124527	27 Oct 2023	26 Oct 2024
Pocket Wind Meter Anemometer	Kestrel 1000 Wind Meter	Nil	Nil	Nil

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 2.4 Action 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	• 70 dB(A) for school and • 65 dB(A) during examination period
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 3, 9, 16, 22 and 28 February 2024. 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. WATER QUALITY

3.1. Disinfection

Pursuant to Section 5.1.6(b) of the EM&A Manual under Environmental Permit No. EP-503/2014/A and Further Environmental Permit No. FEP-01/503/2015/A of the Desalination Plant at Tseung Kwan O ("the Project"), water quality monitoring is required during disinfection procedure. The following Section provides details of the water quality monitoring to be undertaken by the POCJV.

3.2. Water Quality Parameter

The parameters that have been selected for measurement in situ and in the laboratory are those that were either determined in the EIA to be those with the most potential to be affected by the construction works or are a standard check on water quality conditions. Parameters to be measured in the impact monitoring are listed in **Table 3.1**.

Table 3.1 Parameters measured in the Impact Marine Water Quality Monitoring

Parameters	Unit	Abbreviation
In-situ measurements		
Total Residual Chlorine NOTE1	mg/L	TRC

3.3. Monitoring Equipment

Total Residual Chlorine -Total residual chlorine (TRC) shall be measured in-situ using approved test kit.

3.4. Sampling Protocols

All in situ monitoring instruments were checked, calibrated, and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at monthly intervals throughout the stages of the water quality monitoring. Responses of sensors and electrodes were checked with certified standard solutions before each use.

On-site calibration of field equipment was following the "Guide to On-Site Test Methods for the Analysis of Waters", BS 1427: 2009. Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was made available so that monitoring can proceed uninterrupted even when equipment is under maintenance, calibration etc.

Parameters for laboratory measurements, standard methods and detection limits are presented in **Table 3.2**.

Table 3.2 Laboratory measurements, standard methods, and corresponding detection limits of marine water quality monitoring

Parameters	Standard Methods	Detection Limit	Reporting Limit	Precision
Total residual chlorine	Approved Test-Kit	-	-	±25%

3.5. Monitoring Location

The Impact water quality monitoring locations are in accordance with the EM&A Manual and detailed in **Table 3.3** below. A schedule for water quality monitoring was prepared by the ET and submitted to IEC and EPD prior to the commencement of the monitoring.

Effluent from desalination plant shall be collected at a suitable location after all treatment process before discharge. The sampling location should be agreed with WSD and EPD, and should fulfil the following requirements:

- Effluent collected at the sampling location is representative to the effluent discharged at the outfall diffuser.
- Sampling works at the sampling location would not interfere with the desalination plant operation.
- Sampling works at the sampling location would not induce safety hazard (e.g. staff sampling effluent drops into the culvert)

According to the approved Flushing and Disinfection Procedure and Supplementary of the Disinfection Procedure for Mainlaying works of Desalination Plant at Tseung Kwan O, the sampling point of the dechlorinated effluent was shown in **Table 3.3** and **Figure 3.2** below.

Table 3.3 Location of Impact Water Quality Monitoring Stations

System/Loop	Discharge location	Sampling Location
Mobile Treatment Plant	Communal Storm Water Drain leading to inland waters	The outlet of the Service Reservoir will be the Sampling Point (S.P.).

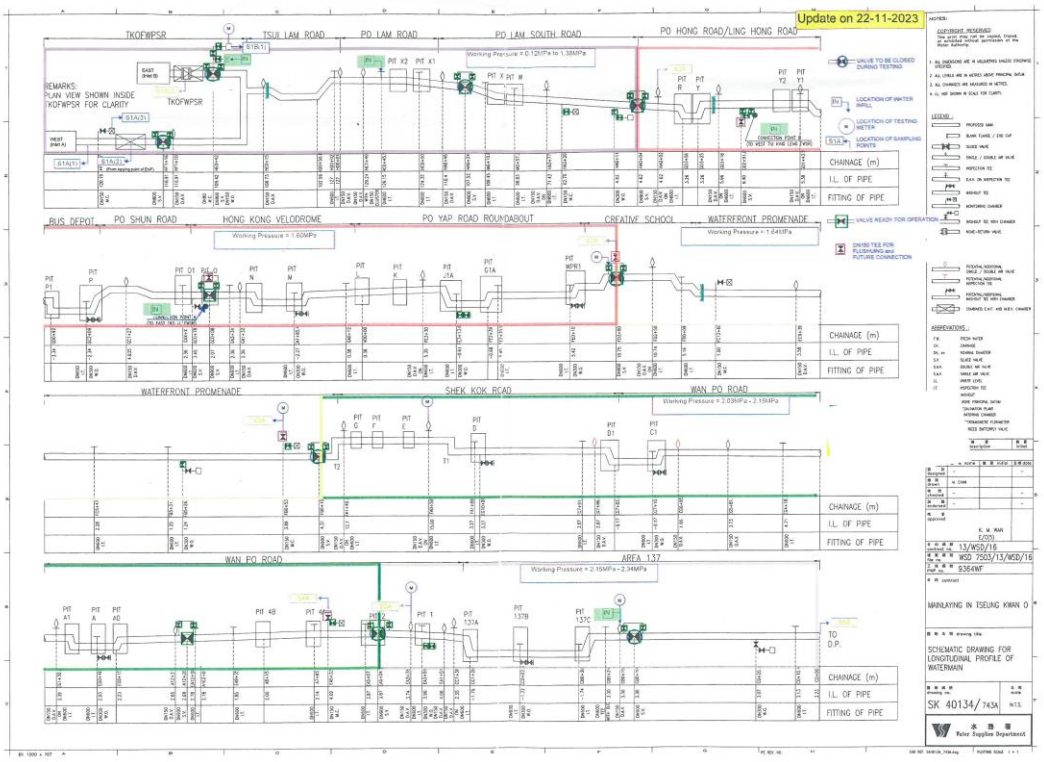


Figure 3.2 Impact water quality monitoring point for dechlorinated effluent (Contact tank/PWT)

3.6. Action and Limit Levels

The Action and Limit Levels have been set based on the derivation criteria specified in the EM&A Manual. The Action/Limit Levels have been derived and are presented in **Table 3.4**.

For the TRC, the discharge should be suspended if the TRC level of the dechlorinated effluent exceeds the 0.1 mg/L. Chlorinated water should be fully neutralized before discharge. Discharge of the water will be done once it is ensured that the chlorine has been neutralized and it is below the discharge limit.

Table 3.6 Derived Action and Limit Levels for Water Quality

Parameters	Action	Limit
Construction Phase Impact Monitoring		
Total residual chlorine in mg/L	0.1 mg/L	0.1 mg/L

i. Monitoring of Total Residual Chlorine will be conducted when cleaning and sterilization of the new freshwater main is carried out.

3.7. Monitoring Result and Observation

According to Water Supply Department, the discharge of dechlorinated effluent arranged on 13 – 19 December 2023 and TRC monitoring at the sampling locations (outlet of the Service Reservoir) was carried out during the discharge. The TRC for the discharge are recorded less than 0.1mg/L and all results are below the action level.

4. 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

Reporting period	Quantity					
	Inert C&D Materials (in '000m^3)	Chemical Waste (in '000kg)	Non-inert C&D Materials			
			Others, e.g., General Refuse disposed at Landfill (in '000m^3)	Recycled materials		
				Paper/cardboard (in '000kg)	Plastics (in '000kg)	Metals (in '000kg)
Feb 2024	0.135	0.000	0.002	0.042	0.000	0.000

5. LANDFILL GAS MONITORING

5.1. 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.

5.2. 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**.

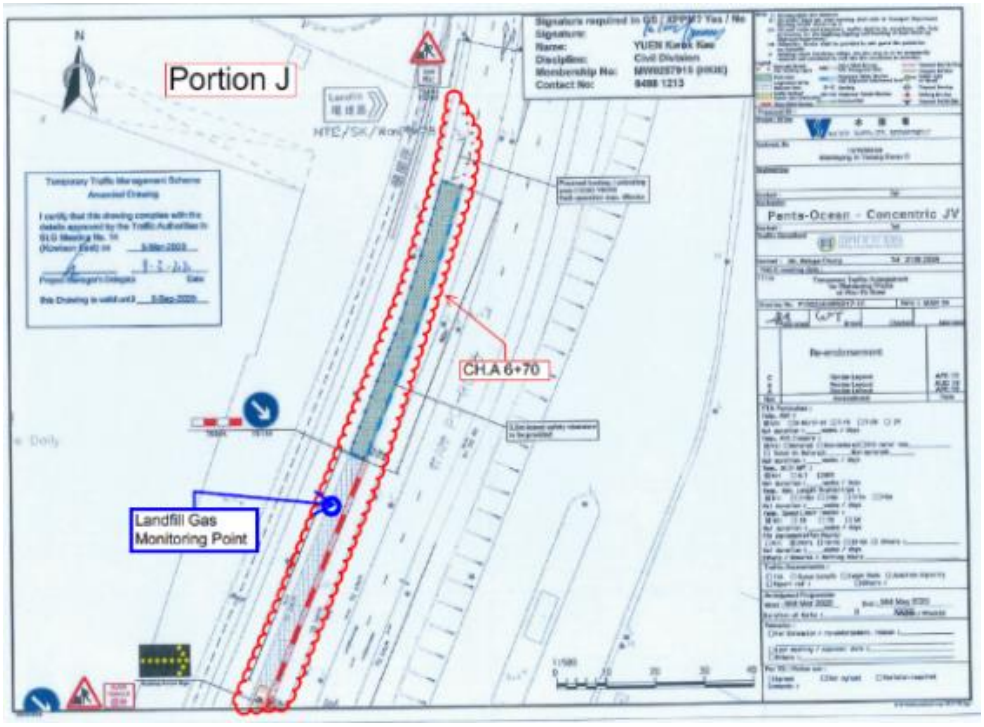


Figure 4.1 Monitoring Location - CH.A 6+70

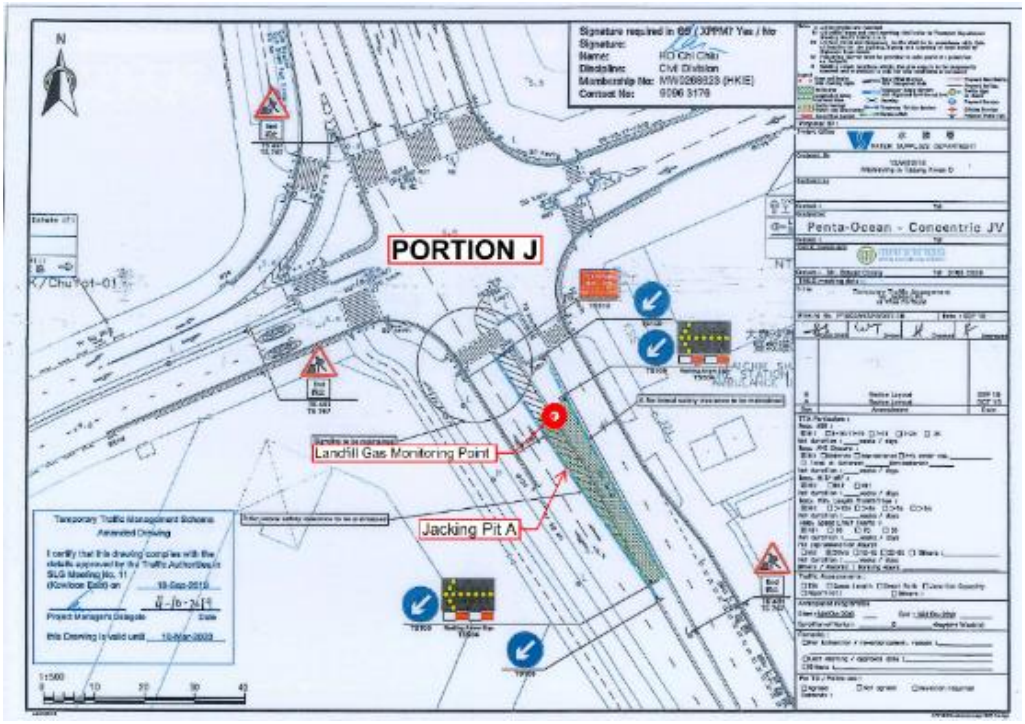


Figure 4.2 Monitoring Location – CH.A 13+50 ~ 14+00 (Pit A)

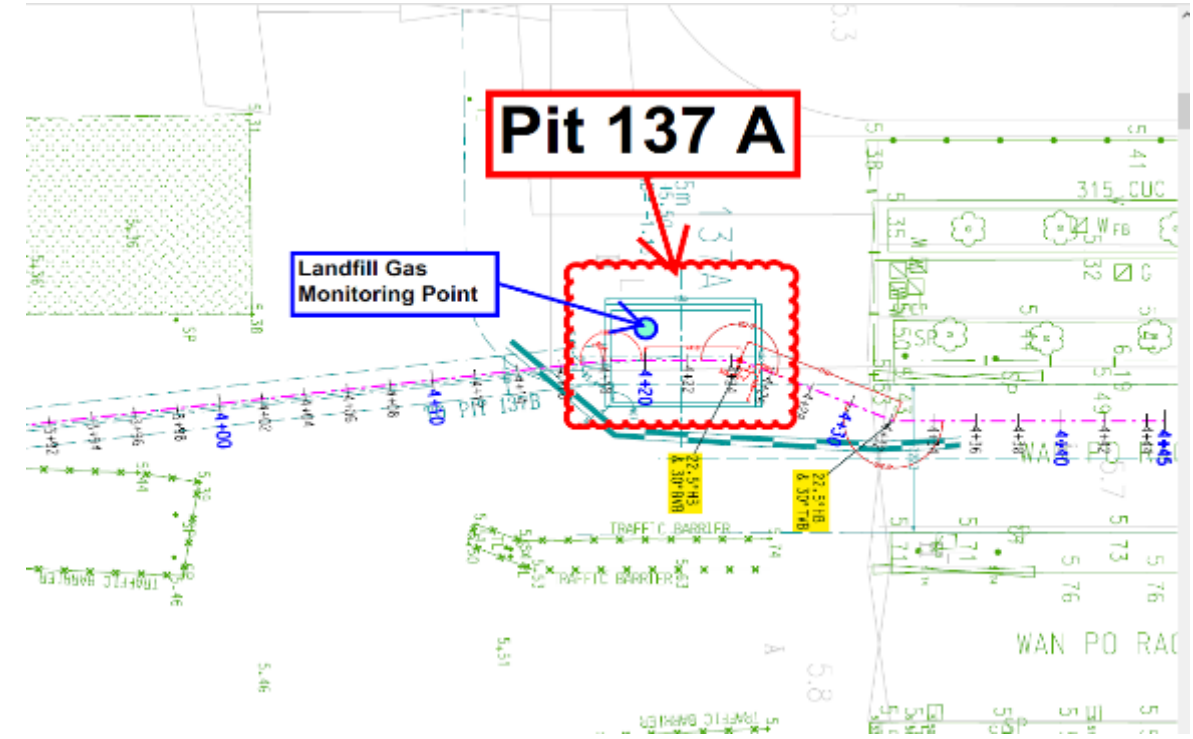


Figure 4.4 Monitoring Location – Pit 137A (137 Pit A)

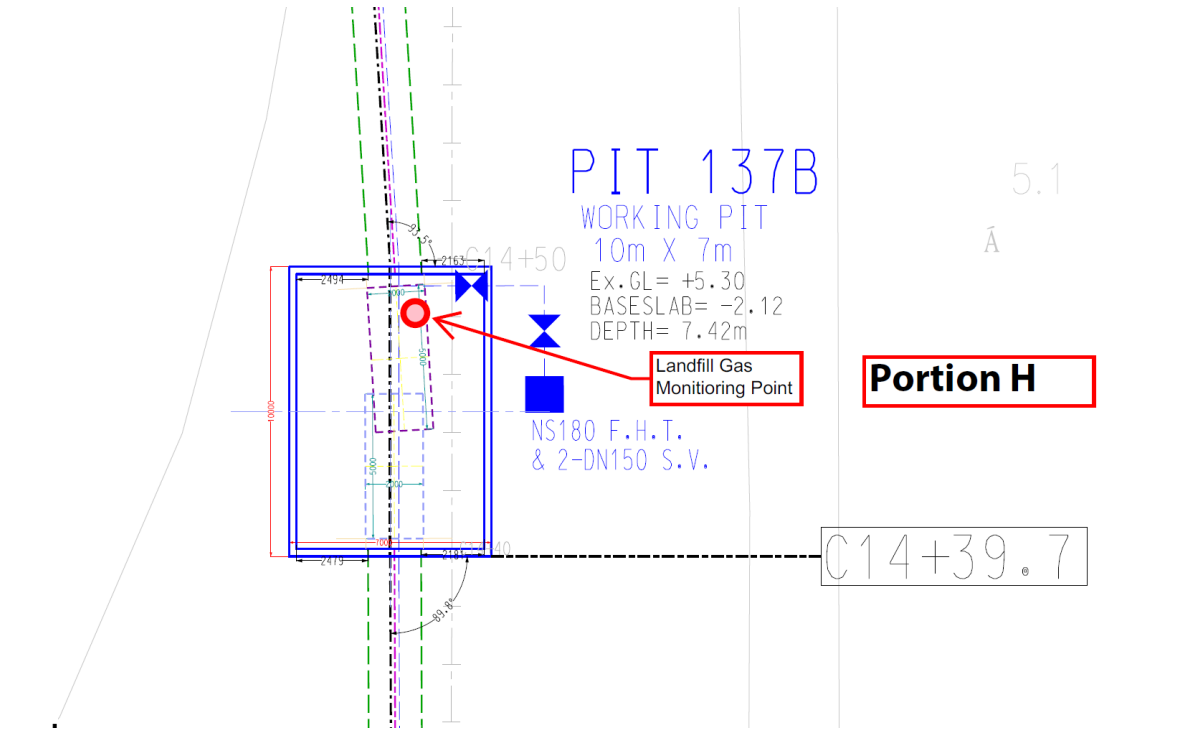


Figure 4.5 Monitoring Location – Pit 137B (137 Pit B)

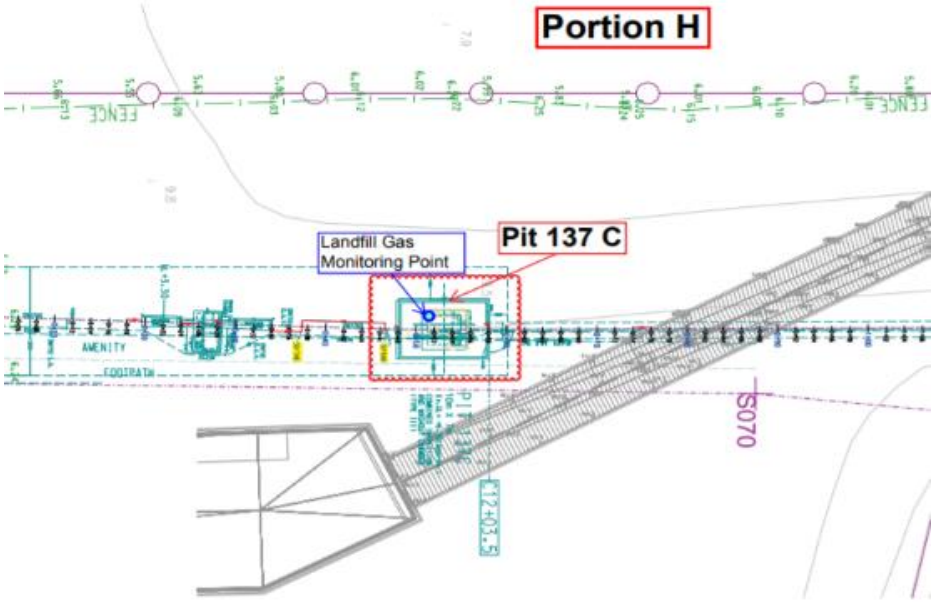


Figure 4.6 Monitoring Location – Pit 137C (137 Pit C)

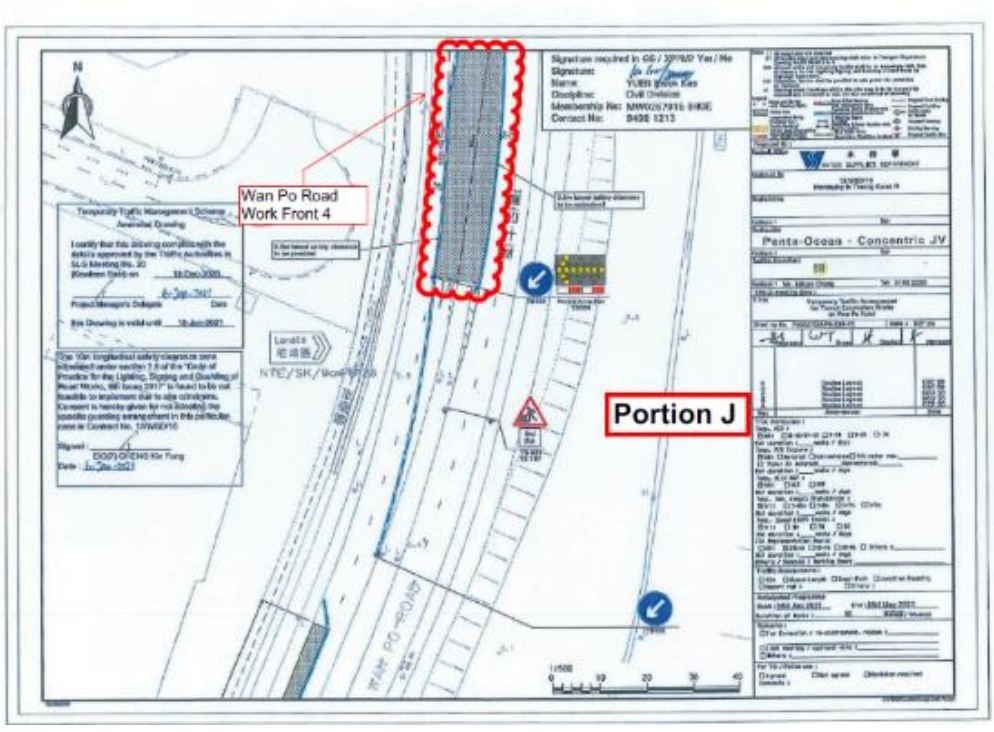


Figure 4.7 Monitoring Location – Wan Po Road 4

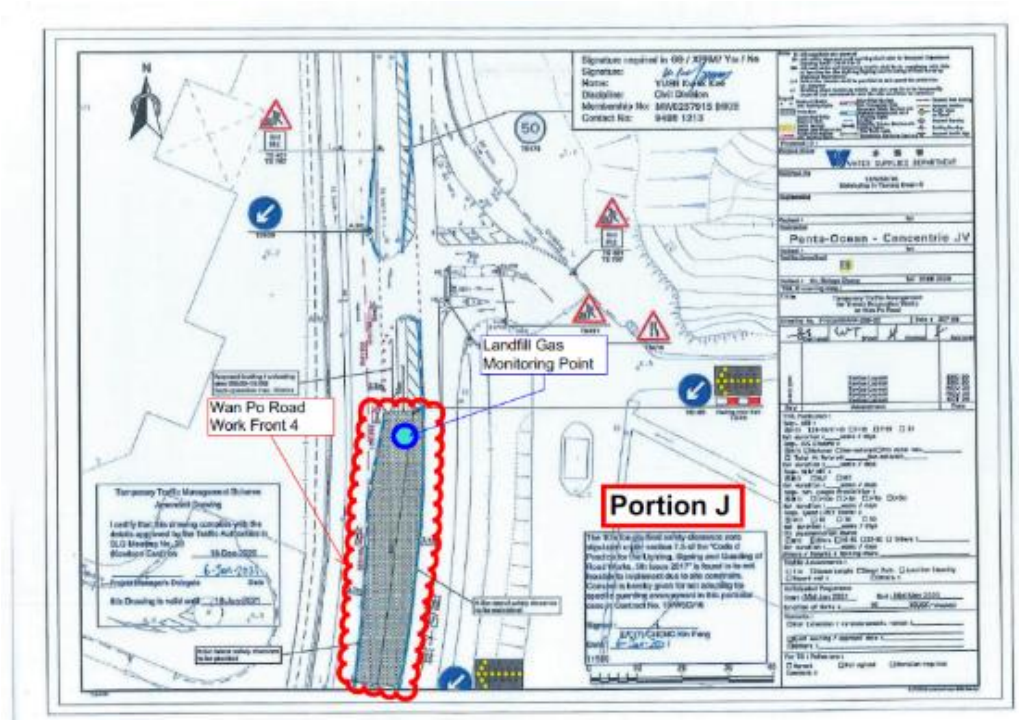


Figure 4.8 Monitoring Location – Wan Po Road 5

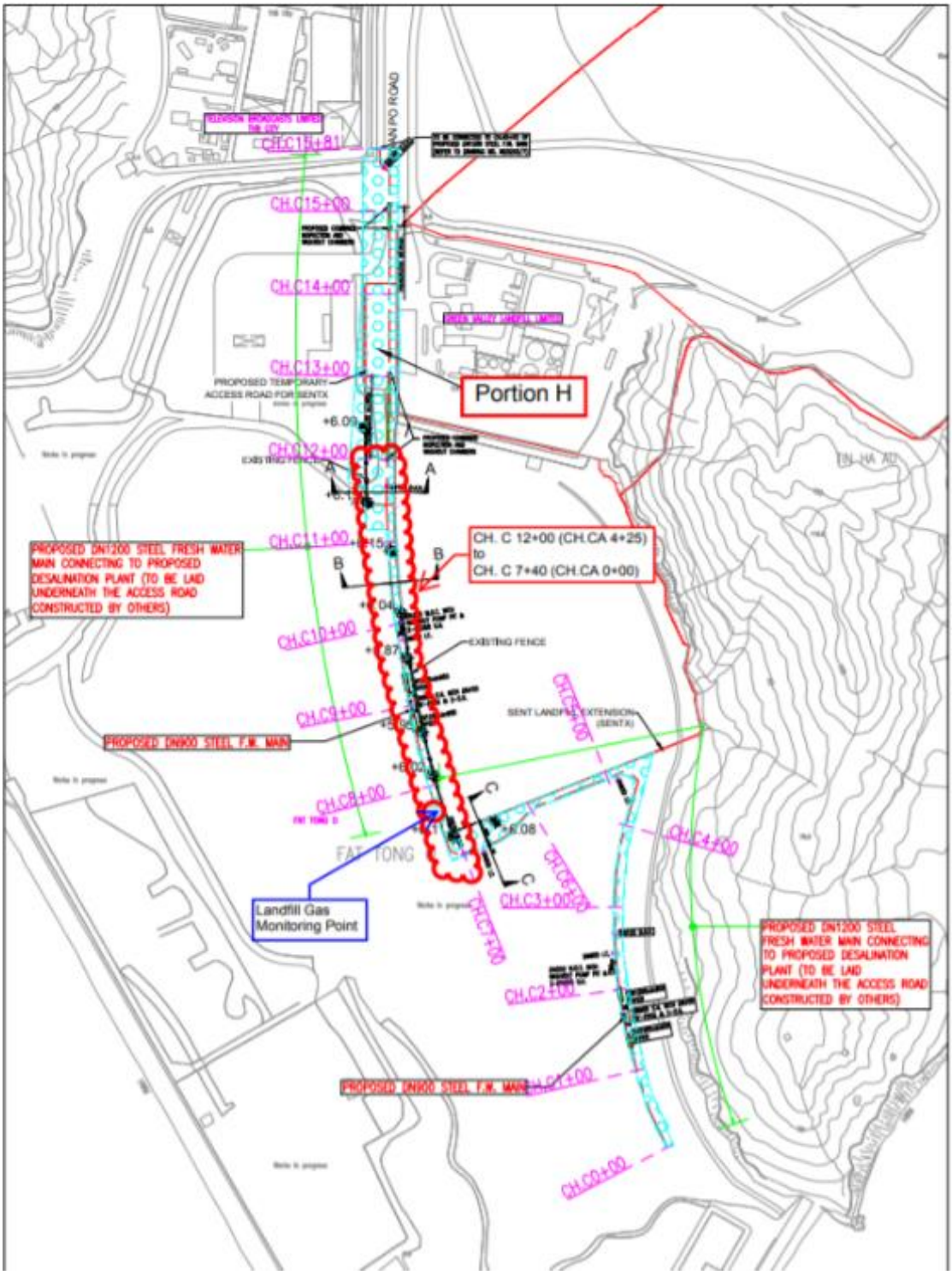


Figure 4.9 Monitoring Location –CH.CA 0+00 to CH.CA 04+25 (CH.C 7+40 ~ 12+00)

5.3. 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.

5.4. 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_2)	<19% O_2	<19% O_2
Methane (CH_4)	>10% LEL	>20% LEL
Carbon Dioxide (CO_2)	>0.5% CO_2	>1.5% CO_2

5.5. 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 5.2**. The Landfill Gas monitoring equipment calibration certificate is presented in **Appendix I**.

Table 5.2 Landfill Gas Monitoring Equipment

Equipment	Brand and Model	Calibration Expiry Date
Portable Gas Detector	--	--
CO2 Analyzer	--	--

5.6. Monitoring Results

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. No landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations. The landfill gas monitoring was ceased from February 2024.

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

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

6. SUMMARY OF EXCEEDANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

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

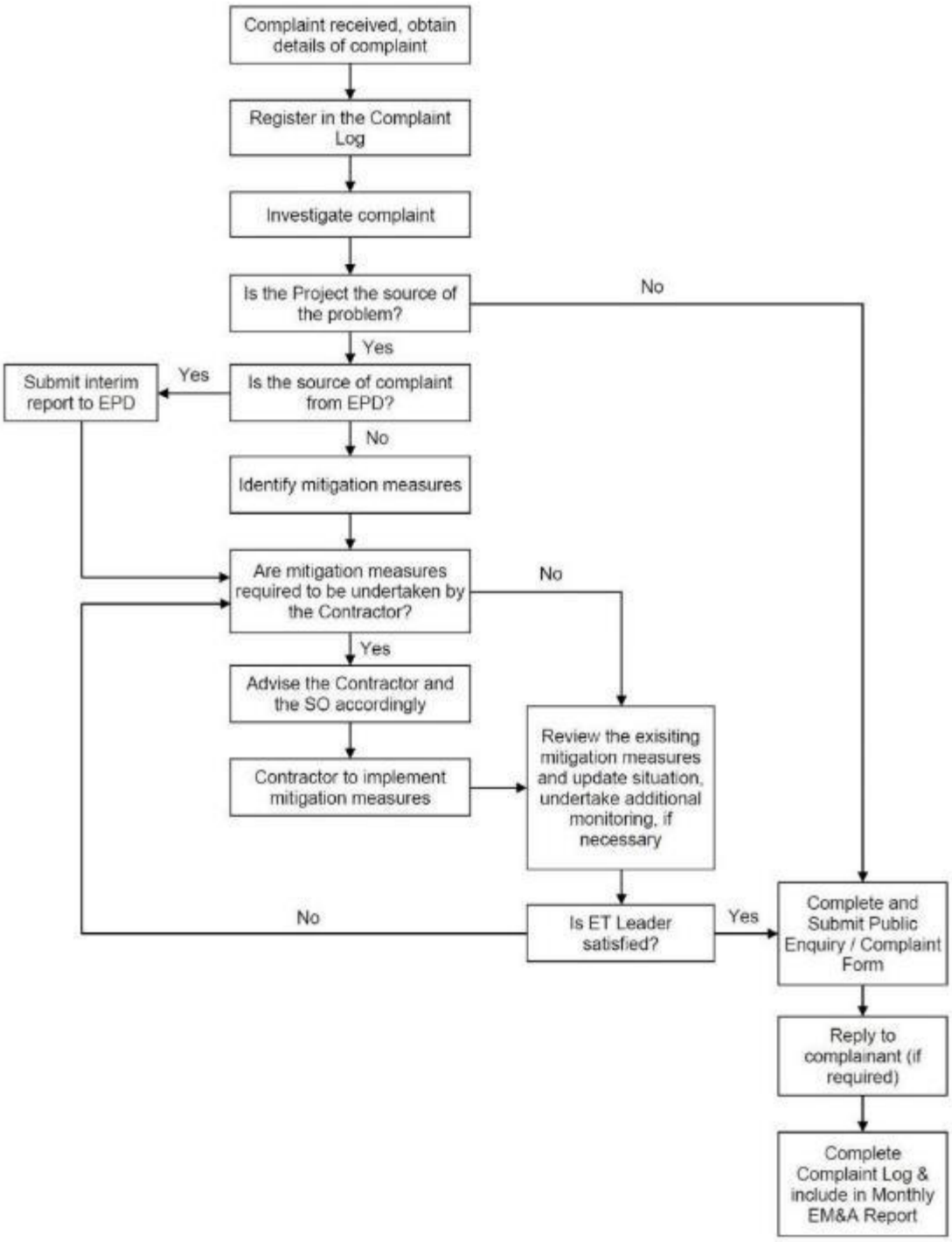


Figure 5.1 Environmental Complaint Handling Procedure

Impact monitoring for noise impact was scheduled in the reporting month for NSR4 – Creative Secondary School on 3, 9, 16, 22 and 28 February 2024 was construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**. No action or limit levels exceedance was recorded in the reporting period.

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. No landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations. The landfill gas monitoring was ceased from February 2024.

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

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

7. 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 9, 16, and 23 February 2024 at the site portions list in **Table 6.1** below. One joint site inspection with IEC was carried out on 23 February 2024.

Table 6.1 Site Inspection Record

Date	Inspected Site Portion	Time
09 February 2024	Portion J	09:30 – 10:30
16 February 2024	Portion J	09:30 – 10:30
23 February 2024	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**.

Table 6.2 Site Observations

Date	Environmental Observations	Follow-up Status
09 February 2024	No major environmental deficiency was observed during site inspection.	N.A.
16 February 2024	No major environmental deficiency was observed during site inspection.	N.A.
23 February 2024	No major environmental deficiency was observed during site inspection.	N.A.

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**.

8. FUTURE KEY ISSUES

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

Table 7.1. Key works for the next reporting month

Location	Construction activities to be carried out in next reporting month
Wan Po Road and TKO Area 137	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
TKO Promenade (Stage 1 Landfill) & Po Yap Road Roundabout	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
HK Velodrome	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Po Lam Road South / Ling Hong Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail
Tsui Lam Road / Abandoned Road	• Road surface reinstatement including surface drain and related utilities • Chamber construction, installation of accessories such as cat ladder and handrail

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

- Construction dust and noise generation of road reinstatement and remaining chambers construction;
- 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 Road reinstatement and remaining chambers construction;
- Reduction of noise from equipment and machinery on-site;
- Sorting and storage of general refuse and construction waste; and

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**.

9. CONCLUSION AND RECOMMENDATIONS

This is the 67th monthly Environmental Monitoring and Audit (EM&A) Report presenting the EM&A works undertaken during the period from 1 February to 29 February 2024 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 3, 9, 16, 22 and 28 February 2024 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.

Water quality monitoring was carried out during the disinfection procedure. According to Water Supply Department, the discharge of dechlorinated effluent arranged on 13 – 19 December 2023 and TRC monitoring at the sampling locations (outlet of the Service Reservoir) was carried out during the discharge. The TRC for the discharge are recorded less than 0.1mg/L and all results are below the action level.

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. No landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations. The landfill gas monitoring was ceased from February 2024.

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 was received in the reporting month. No 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.

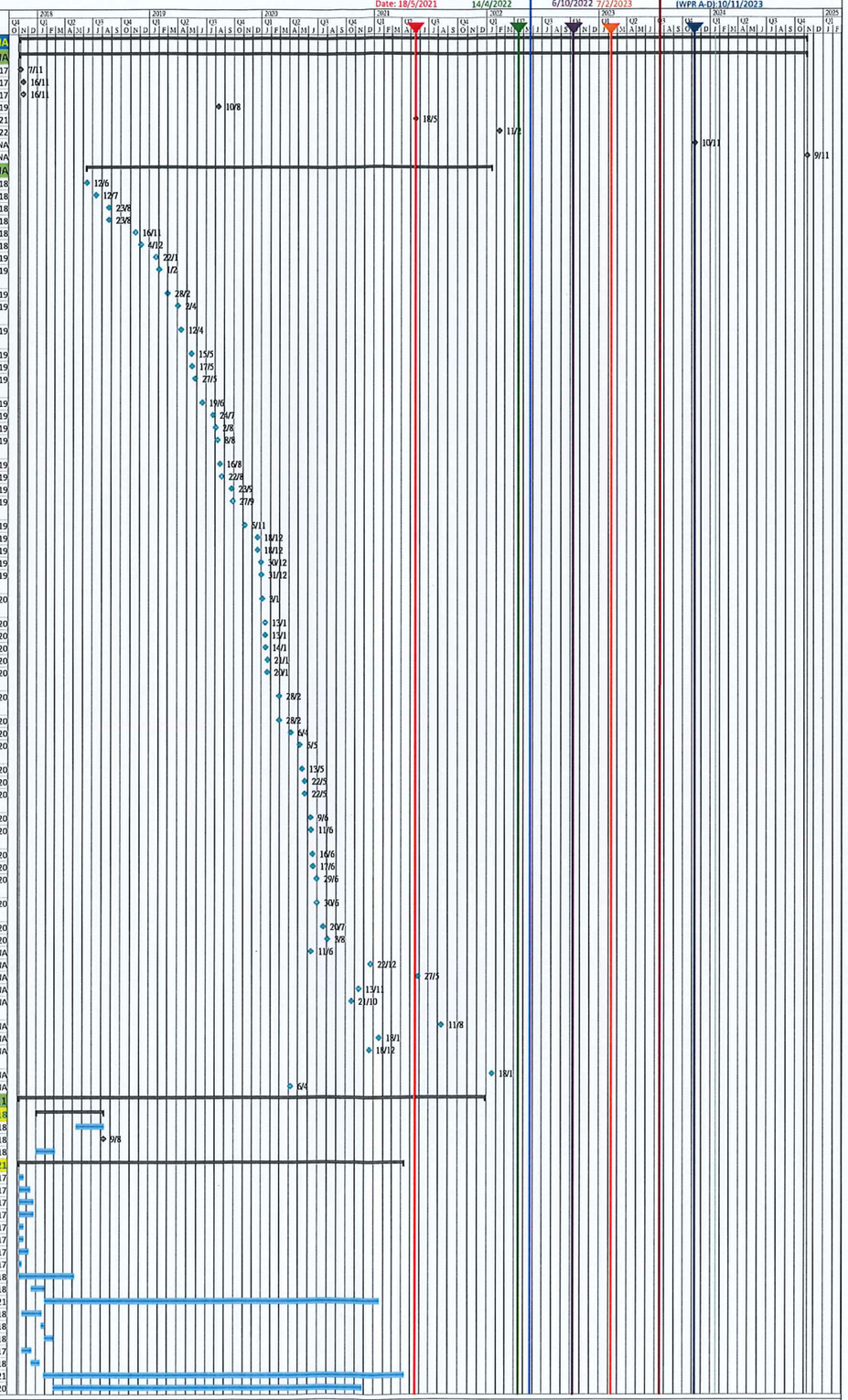
Appendix A

Construction Programme

Full Project Programme

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

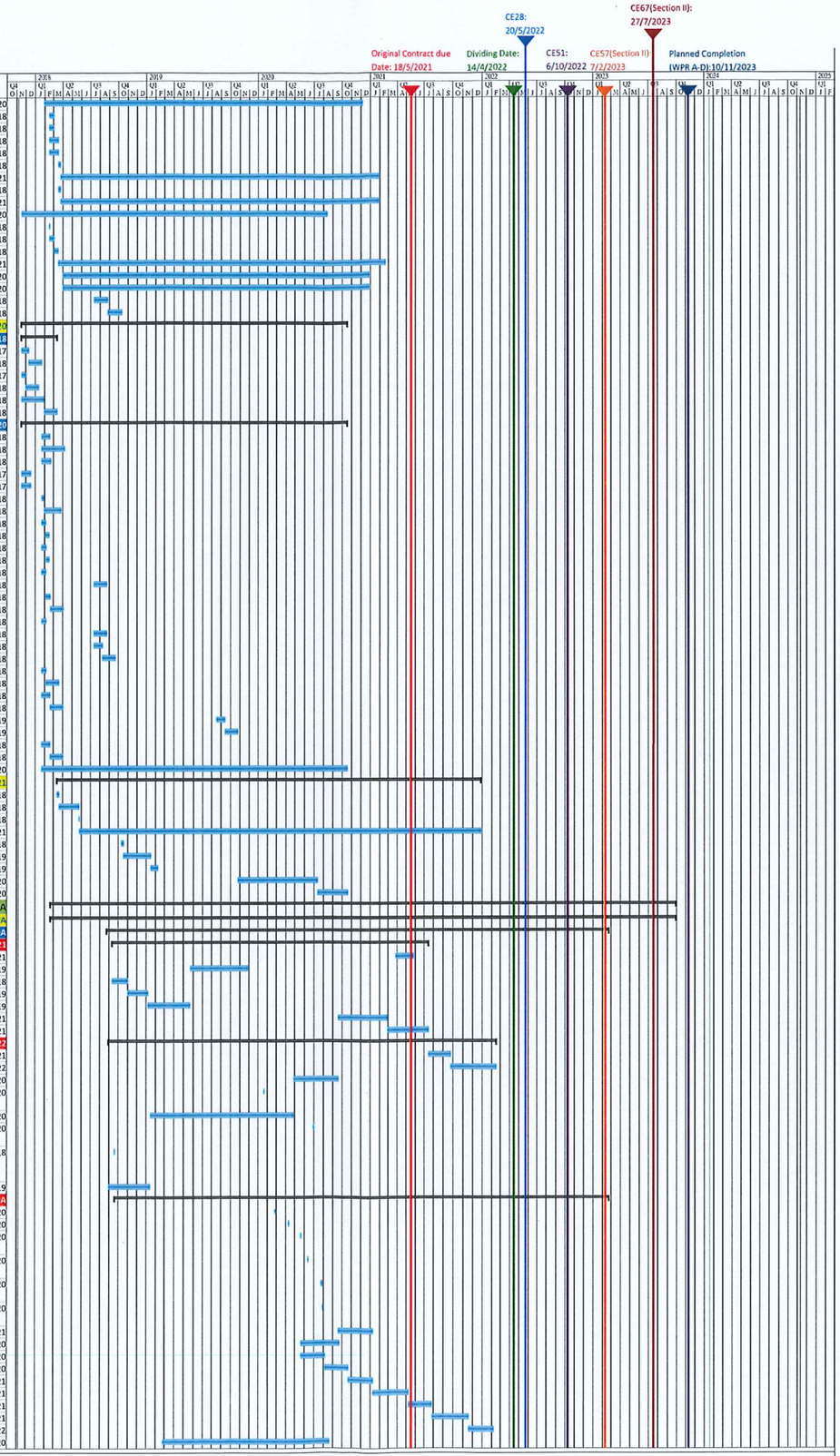
ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
1	**Contract No. 13/WSD/16 - Mainlaying in Tseung Kwan O**	1829 days	7/11/17	9/11/24	None			0 days	0 days	1829 days	90%	7/11/17	NA
2	**Key Dates**	1829 days	7/11/17	9/11/24	None			0 days	0 days	1829 days	0%	7/11/17	NA
3	Contract Date	0 days	7/11/17	7/11/17	Calendar Day		76,77,78,79,80,81,82,83,84	0 days	0 days	0 days	100%	7/11/17	7/11/17
4	Starting Date	0 days	16/11/17	16/11/17	Calendar Day			0 days	0 days	0 days	100%	16/11/17	16/11/17
5	Access Date of Portion 'A', 'B', 'C', 'D', 'E', 'F' and 'G'	0 days	16/11/17	16/11/17	Calendar Day		87,90,103,114,116,118,123,	0 days	0 days	0 days	100%	16/11/17	16/11/17
6	Contract Access Date of Portion 'H'	0 days	10/8/19	10/8/19	Calendar Day		573	0 days	0 days	0 days	100%	10/8/19	10/8/19
7	Contract Completion Date	0 days	18/5/21	18/5/21	Calendar Day			0 days	0 days	0 days	100%	18/5/21	18/5/21
8	Revised Completion Date (Accepted Programme No.2, including CE01 & CE23)	0 days	11/2/22	11/2/22	Calendar Day			0 days	0 days	0 days	100%	11/2/22	11/2/22
9	Planned Completion	0 days	10/11/23	10/11/23	Calendar Day	860,861	10FS+365 days	0 days	0 days	0 days	0%	NA	NA
10	Defect date	0 days	9/11/24	9/11/24	Calendar Day	9FS+365 days		0 days	0 days	0 days	0%	NA	NA
11	**Issue Date of Compensation Event**	1316 days	12/6/18	18/1/22	Calendar Day			0 days	0 days	1316 days	0%	12/6/18	NA
12	CE03 - Upgrading of bandwidth of Internet Services for Site Accommodation	0 days	12/6/18	12/6/18	Calendar Day			0 days	0 days	0 days	100%	12/6/18	12/6/18
13	CE01 - Change in Pressure Rating of Watermain, Valves and Fittings (from PN16 to PN25)	0 days	12/7/18	12/7/18	Calendar Day		110,133,137,138	0 days	0 days	0 days	100%	12/7/18	12/7/18
14	CE04 - Feasibility Study of Realigment of Pipeline Between Po Hong Road and TKOFPSR	0 days	23/8/18	23/8/18	Calendar Day			0 days	0 days	0 days	100%	23/8/18	23/8/18
15	CE05 - Feasibility Study of Realignment of Pipeline at TKO Stage 1 Landfill	0 days	23/8/18	23/8/18	Calendar Day		204	0 days	0 days	0 days	100%	23/8/18	23/8/18
16	CE02 - Water Supply to TKO Desalination Plant at Fill Bank of TKO Area 137	0 days	16/11/18	16/11/18	Calendar Day		863	0 days	0 days	0 days	100%	16/11/18	16/11/18
17	CE08 - Change in Number of Fixed IP Address for Broadband Connection for Site	0 days	4/12/18	4/12/18	Calendar Day			0 days	0 days	0 days	100%	4/12/18	4/12/18
18	CE07 - Water Supply to Tseung Kwan O Desalination Plant at Portion 'H'	0 days	22/1/19	22/1/19	Calendar Day		744	0 days	0 days	0 days	100%	22/1/19	22/1/19
19	CE06 - Unforeseen Underground Conditions during Trench Excavation for Mainlaying at Wan Po Road between CH.A6+90 and CH.A7+10	0 days	1/2/19	1/2/19	Calendar Day			0 days	0 days	0 days	100%	1/2/19	1/2/19
20	CE10 - Contractor's Design of The Realignments	0 days	28/2/19	28/2/19	Calendar Day		589,205	0 days	0 days	0 days	100%	28/2/19	28/2/19
21	CE14 - Manhole Inspection of Existing Drain/Outfall near HKVD and TKO Stage I Landfill and CCTV Survey of Existing Drain at Cycle Track near HKVD	0 days	2/4/19	2/4/19	Calendar Day			0 days	0 days	0 days	100%	2/4/19	2/4/19
22	CE12 - Provision of Suitabel Land Transport for Site Supervision in Tseung Kwan O Area 137	0 days	12/4/19	12/4/19	Calendar Day			0 days	0 days	0 days	100%	12/4/19	12/4/19
23	CE13 - Excavation of Inspection Pits for the Realignments	0 days	15/5/19	15/5/19	Calendar Day			0 days	0 days	0 days	100%	15/5/19	15/5/19
24	CE15 - Inclement Weather in Februrary 2019	0 days	17/5/19	17/5/19	Calendar Day			0 days	0 days	0 days	100%	17/5/19	17/5/19
25	CE18 - Unforeseen Underground Conditions at Open Trench of Mainlaying at WPR betweem CH.A12+89 and CH.A13+04	0 days	27/5/19	27/5/19	Calendar Day			0 days	0 days	0 days	100%	27/5/19	27/5/19
26	CE20 - Traffic Count and Preliminary Traffic Analysis in Po Lam Road and Tsui Lam Road	0 days	19/6/19	19/6/19	Calendar Day			0 days	0 days	0 days	100%	19/6/19	19/6/19
27	CE23 - Inclement Weather in June 2018	0 days	24/7/19	24/7/19	Calendar Day			0 days	0 days	0 days	100%	24/7/19	24/7/19
28	CE27 - Underground Utility Detection Survey for Working Pit D (CH.A22+75)	0 days	2/8/19	2/8/19	Calendar Day		352	0 days	0 days	0 days	100%	2/8/19	2/8/19
29	CE21 - Temporary Diversion of Unchartered Underground Utilities Near Wan O Road at CH.A16+00(Pit B)	0 days	8/8/19	8/8/19	Calendar Day		351	0 days	0 days	0 days	100%	8/8/19	8/8/19
30	CE26 - Change in Cathodic Protection System for Mild Steel Pipes	0 days	16/8/19	16/8/19	Calendar Day		144	0 days	0 days	0 days	100%	16/8/19	16/8/19
31	CE19 - Change in Design of Gate Valve Chamber at WPR near CH.A12+40	0 days	22/8/19	22/8/19	Calendar Day		196	0 days	0 days	0 days	100%	22/8/19	22/8/19
32	CE29 - Tree Transplanting Work in Wan Po Road near Wan O Road (Pit A CH.A13+70)	0 days	23/9/19	23/9/19	Calendar Day		350	0 days	0 days	0 days	100%	23/9/19	23/9/19
33	CE24 - Ground Investigation Works for Working Pit E, F & Trenchless Works across MTR's Tunnels	0 days	27/9/19	27/9/19	Calendar Day		412	0 days	0 days	0 days	100%	27/9/19	27/9/19
34	CE34 - Realignment of Watermain along TKO Stage 1 Landfill	0 days	5/11/19	5/11/19	Calendar Day		294,475	0 days	0 days	0 days	100%	5/11/19	5/11/19
35	CE33 - Inclement Weather in July 2018	0 days	18/12/19	18/12/19	Calendar Day			0 days	0 days	0 days	100%	18/12/19	18/12/19
36	CE37 - Inclement Weather in Angust 2018	0 days	18/12/19	18/12/19	Calendar Day			0 days	0 days	0 days	100%	18/12/19	18/12/19
37	CE11 - Replacing the Major Project Signboard with Project Banner	0 days	30/12/19	30/12/19	Calendar Day			0 days	0 days	0 days	100%	30/12/19	30/12/19
38	CE35 - Feasibility Study on the Alternative Alignment by Trenchless method beneath MTR's Tunnels in the Wan Po Road J/o Lohas Park Road	0 days	31/12/19	31/12/19	Calendar Day		206	0 days	0 days	0 days	100%	31/12/19	31/12/19
39	CE17 - Realignment of Water Main by Trenchless Method in TKO Area 137 (CH.CC0+00 - CH.CC1+38 & CH.KC0+00 - CH.KC1+38)	0 days	3/1/20	3/1/20	Calendar Day		748	0 days	0 days	0 days	100%	3/1/20	3/1/20
40	CE38-45 - Inclement Weather in September 2018, March to September 2019)	0 days	13/1/20	13/1/20	Calendar Day			0 days	0 days	0 days	100%	13/1/20	13/1/20
41	CE28 - Realignment of Water Mains along Po Yap Raod and Po Hong Road	0 days	13/1/20	13/1/20	Calendar Day		507,508,477	0 days	0 days	0 days	100%	13/1/20	13/1/20
42	CE30 - Removal of Debris along the U-channel at Spots 4-7 Hiking Trail at Tsui Lam	0 days	14/1/20	14/1/20	Calendar Day			0 days	0 days	0 days	100%	14/1/20	14/1/20
43	CE48 - Urgent Cleaning of Workfronts at CH.A6+54, CH.A12+36 and CH.A13+79 at WPR	0 days	21/1/20	21/1/20	Calendar Day			0 days	0 days	0 days	100%	21/1/20	21/1/20
44	CE22 - Instruction to Change in Mainlaying Method at Wan Po Road between CH.A6+54 and CH.A6+61	0 days	20/1/20	20/1/20	Calendar Day		174	0 days	0 days	0 days	100%	20/1/20	20/1/20
45	CE49 - Provision of Suitatble Land Transport for Site Supervision in TKO Area 137 (Feb 2020 - Jan 2021)	0 days	28/2/20	28/2/20	Calendar Day		572	0 days	0 days	0 days	100%	28/2/20	28/2/20
46	CE09 - Change of Procurement of Miscellaneous Items	0 days	28/2/20	28/2/20	Calendar Day			0 days	0 days	0 days	100%	28/2/20	28/2/20
47	CE53 - Inclement Weather in October 2019	0 days	6/4/20	6/4/20	Calendar Day			0 days	0 days	0 days	100%	6/4/20	6/4/20
48	CE55 - Design of the Water Main Structure and Associated Pipe Support across the Natural Stream Course for Alternative Alignment in Tsui Lam	0 days	5/5/20	5/5/20	Calendar Day		648	0 days	0 days	0 days	100%	5/5/20	5/5/20
49	CE61 - Inclement Weather in Februrary 2020	0 days	13/5/20	13/5/20	Calendar Day			0 days	0 days	0 days	100%	13/5/20	13/5/20
50	CE56 - Excavation of Inspection Pits for the Alternative Alignment (Batch No.2)	0 days	22/5/20	22/5/20	Calendar Day			0 days	0 days	0 days	100%	22/5/20	22/5/20
51	CE36 - Realignment of Water Mains along the Bituminous Road adjacent to Lohas Park Road (Area A)	0 days	22/5/20	22/5/20	Calendar Day		272	0 days	0 days	0 days	100%	22/5/20	22/5/20
52	CE64 - Tree Survey at Tsui Lam (Location A and B)	0 days	9/6/20	9/6/20	Calendar Day			0 days	0 days	0 days	100%	9/6/20	9/6/20
53	CE50 - Realignment of Water Mains at the Junction of WPR and PYP and the Junction of PHR and PSR	0 days	11/6/20	11/6/20	Calendar Day		477,556,557,562	0 days	0 days	0 days	100%	11/6/20	11/6/20
54	CE62 - Design of Pipe Support in Tsui Lam (Location B)	0 days	16/6/20	16/6/20	Calendar Day		681	0 days	0 days	0 days	100%	16/6/20	16/6/20
55	CE65 - Landscaping Survey near Po Yap Road and Pung Loi Road	0 days	17/6/20	17/6/20	Calendar Day			0 days	0 days	0 days	100%	17/6/20	17/6/20
56	CE25 - Unforeseen Underground Condition during Trench Excavation at Wan Po Road between CH.A6+68 and CH.A6+88	0 days	29/6/20	29/6/20	Calendar Day		176	0 days	0 days	0 days	100%	29/6/20	29/6/20
57	CE28A - Affected Trees along Cycle Track next to Hong Kong Velodrome and Tseung Kwan O Sports Ground	0 days	30/6/20	30/6/20	Calendar Day			0 days	0 days	0 days	100%	30/6/20	30/6/20
58	CE68 - TIA for TTA at Po Lam Road	0 days	20/7/20	20/7/20	Calendar Day			0 days	0 days	0 days	100%	20/7/20	20/7/20
59	CE51 - Realignment of Water Main in Tsui Lam Section	0 days	3/8/20	3/8/20	Calendar Day		590,592,593,594,595,596	0 days	0 days	0 days	100%	3/8/20	3/8/20
60	CE65 - Landscape Survey near Po Yap Road and Pung Loi Road	0 days	11/6/20	11/6/20	Calendar Day		207	1613 days	1613 days	0 days	0%	NA	NA
61	CE87 - Affected Trees near Pung Loi Road, Po Yap Road and Wan Po Road	0 days	22/12/20	22/12/20	Calendar Day		208	1419 days	1419 days	0 days	0%	NA	NA
62	CE60 - Realignment of Water Main near Pung Loi Road	0 days	27/5/21	27/5/21	Calendar Day		212	1263 days	1263 days	0 days	0%	NA	NA
63	CE59 - Realignment of Water Main near Pung Loi Road and Po Yap Round	0 days	13/11/20	13/11/20	Calendar Day		233	1458 days	1458 days	0 days	0%	NA	NA
64	CE77 - Design of Water Main Structure and Modification Works to the Affected Geotechnical Features in Wan Po Road and Lohas Park Road	0 days	21/10/20	21/10/20	Calendar Day		417	1481 days	1481 days	0 days	0%	NA	NA
65	CE67 - Realignment of Water Main near Wan Po Road and Lohas Park Road	0 days	11/8/21	11/8/21	Calendar Day		422	1187 days	1187 days	0 days	0%	NA	NA
66	CE98 - Tree Felling at Lohas Park Road	0 days	18/1/21	18/1/21	Calendar Day		427	1392 days	1392 days	0 days	0%	NA	NA
67	CE94 - Site Clearance of Affected Trees and Plants for Mainlaying works near Po Hong Road and Ling Hong Road	0 days	18/12/20	18/12/20	Calendar Day		485	1423 days	1423 days	0 days	0%	NA	NA
68	CE57 - Realignment of Water Main by Trenchless Method in SENTX	0 days	18/1/22	18/1/22	Calendar Day		752	1027 days	1027 days	0 days	0%	NA	NA
69	CE53, 61, 88, 89, 92 & 93 for Inclement Weather	0 days	6/4/20	6/4/20	Calendar Day			1679 days	1679 days	0 days	0%	NA	NA
70	**Preliminaries**	1511 days	7/11/17	26/12/21	Calendar Day			0 days	0 days	1511 days	100%	7/11/17	26/12/21
71	**Site Establishment**	220 days	2/1/18	9/8/18	Calendar Day			0 days	0 days	220 days	100%	2/1/18	9/8/18
72	Setting up PM's and Contractor Accommodation	90 days	12/5/18	9/8/18	Calendar Day		73	0 days	0 days	90 days	100%	12/5/18	9/8/18
73	Completion of PM's and Contractor Accommodation	0 days	9/8/18	9/8/18	Calendar Day	72		0 days	0 days	0 days	100%	9/8/18	9/8/18
74	Initial Survey of the Site	60 days	2/1/18	2/3/18	Calendar Day			0 days	0 days	60 days	100%	2/1/18	2/3/18
75	**Submission and Permit Application**	1250 days	7/11/17	9/4/21	Calendar Day			0 days	0 days	1250 days	100%	7/11/17	9/4/21
76	Submission of draft Safety Plan	14 days	7/11/17	20/11/17	Calendar Day	3	88	0 days	0 days	14 days	100%	7/11/17	20/11/17
77	Submission of Safety Plan	35 days	7/11/17	11/12/17	Calendar Day	3	88	0 days	0 days	35 days	100%	7/11/17	11/12/17
78	Submission of Environmental Management Plan	45 days	7/11/17	21/12/17	Calendar Day	3	107	0 days	0 days	45 days	100%	7/11/17	21/12/17
79	Submission of Site Management Plan and Trip Ticket	45 days	7/11/17	21/12/17	Calendar Day	3	88	0 days	0 days	45 days	100%	7/11/17	21/12/17
80	Submission of Key Person (Technical Manager)	14 days	7/11/17	20/11/17	Calendar Day	3		0 days	0 days	14 days	100%	7/11/17	20/11/17
81	Submission of Contractor's Other Key people	14 days	7/11/17	20/11/17	Calendar Day	3		0 days	0 days	14 days	100%	7/11/17	20/11/17
82	Submission of Subcontractor Management Plan	30 days	7/11/17	6/12/17	Calendar Day	3		0 days	0 days	30 days	100%	7/11/17	6/12/17
83	Submission of First Programme	7 days	7/11/17	13/11/17	Calendar Day	3		0 days	0 days	7 days	100%	7/11/17	13/11/17
84	Other Submission	180 days	7/11/17	5/5/18	Calendar Day	3		0 days	0 days	180 days	100%	7/11/17	5/5/18
85	Setting up of SLG and arrangement of 1st SLG meeting	45 days	16/12/17	29/1/18	Calendar Day	124	86,89,94	0 days	0 days	45 days	100%	16/12/17	29/1/18
86	Liaison with Relevant Authorities for Road works	1084 days	30/1/18	17/1/21	Calendar Day	85		0 days	0 days	1084 days	100%	30/1/18	17/1/21
87	Application of XP	64 days	16/11/17	18/1/18	Calendar Day	5	88,89	0 days	0 days	64 days	100%	16/11/17	18/1/18
88	Application of 1st RWA	7 days	19/1/18	25/1/18	Calendar Day	79,76,87,77	92	0 days	0 days	7 days	100%	19/1/18	25/1/18
89	Application of CNP	28 days	30/1/18	26/2/18	Calendar Day	85,87	93	0 days	0 days	28 days	100%	30/1/18	26/2/18
90	Submission of PN16 Pipe Material	30 days	16/11/17	15/12/17	Calendar Day	5	91,150	0 days	0 days	30 days	100%	16/11/17	15/12/17
91	Approval of PN16 Pipe material submission	28 days	16/12/17	12/1/18	Calendar Day	90		0 days	0 days	28 days	100%	16/12/17	12/1/18
92	Application and Extension of RWA	1170 days	26/1/18	9/4/21	Calendar Day	88		0 days	0 days	1170 days	100%	26/1/18	9/4/21
93	Application and Extension of CNP	1000 days	27/2/18	22/11/20	Calendar Day	89		0 days	0 days	1000 days	100%	27/2/18	22/11/20



Project Programme As of 14/4/

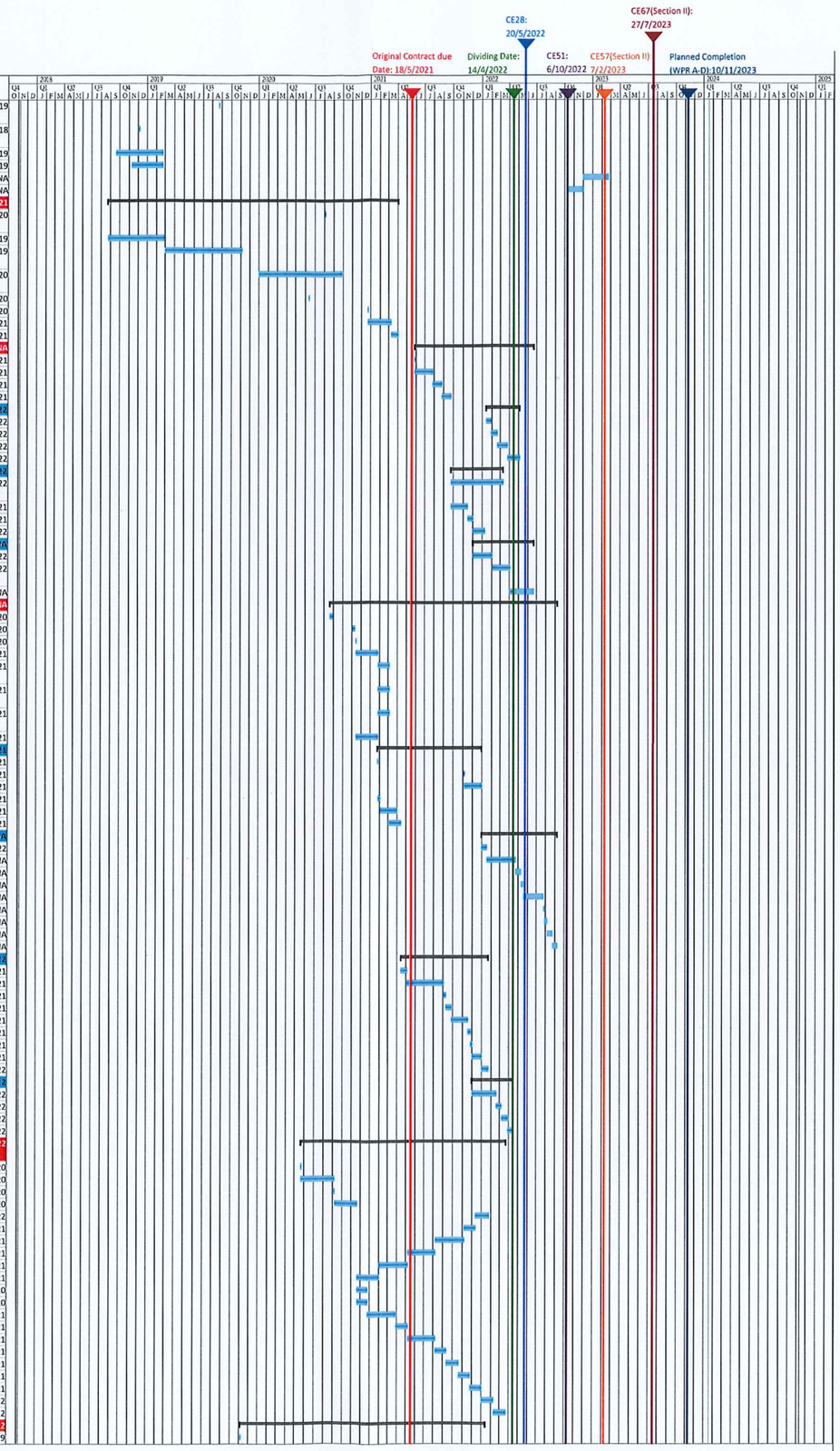
Task · Split · Milestone · Summary · Project Summary · Inactive Task · Inactive Milestone · Inactive Summary · Manual Task · Duration-only · Manual Summary Rollup · Manual Summary · Start-only · Finish-only · External Tasks · External Milestone · Deadline · Critical · Critical Split · Progress · Manual Progress

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
94	94	Regular SLG meeting	1040 days	30/1/18	4/12/20	Calendar Day	85		0 days	0 days	1040 days	100%	30/1/18	4/12/20
95	95	Submission of Method Statement (Open Cut)	14 days	15/2/18	28/2/18	Calendar Day	129	99	0 days	0 days	14 days	100%	15/2/18	28/2/18
96	96	Submission of Method Statement (Pipe Jacking)	14 days	15/2/18	28/2/18	Calendar Day	129	101	0 days	0 days	14 days	100%	15/2/18	28/2/18
97	97	Submission of Temporary Design (Open Cut)	30 days	15/2/18	16/3/18	Calendar Day	129	99	0 days	0 days	30 days	100%	15/2/18	16/3/18
98	98	Submission of Temporary Design (Pipe Jacking)	30 days	15/2/18	16/3/18	Calendar Day	129	101	0 days	0 days	30 days	100%	15/2/18	16/3/18
99	99	ICE Checking and Certificate (Open Cut)	7 days	17/3/18	23/3/18	Calendar Day	97,95	100	0 days	0 days	7 days	100%	17/3/18	23/3/18
100	100	ICE Checking & Certification for revised MS & temp. design (open cut)	1040 days	24/3/18	26/1/21	Calendar Day	99		0 days	0 days	1040 days	100%	24/3/18	26/1/21
101	101	ICE Checking and Certificate (Pipe Jacking)	7 days	17/3/18	23/3/18	Calendar Day	96,98	102	0 days	0 days	7 days	100%	17/3/18	23/3/18
102	102	ICE Checking & Certificate for revised MS & temp. design (pipe jacking)	1040 days	24/3/18	26/1/21	Calendar Day	101		0 days	0 days	1040 days	100%	24/3/18	26/1/21
103	103	Submission and Approval of other materials	1000 days	16/11/17	11/8/20	Calendar Day	5		0 days	0 days	1000 days	100%	16/11/17	11/8/20
104	104	Appointment of Environmental Team	2 days	14/2/18	15/2/18	Calendar Day	131	105	0 days	0 days	2 days	100%	14/2/18	15/2/18
105	105	Environmental Baseline Monitoring	14 days	16/2/18	1/3/18	Calendar Day	104	106	0 days	0 days	14 days	100%	16/2/18	1/3/18
106	106	Submission of Environmental Baseline Monitoring Report	14 days	2/3/18	15/3/18	Calendar Day	105	107	0 days	0 days	14 days	100%	2/3/18	15/3/18
107	107	Environment Monitoring and EM&A	1070 days	16/3/18	17/2/21	Calendar Day	78,106		0 days	0 days	1070 days	100%	16/3/18	17/2/21
108	108	As-constructed Drawing	1000 days	1/4/18	25/12/20	Calendar Day	143		0 days	0 days	1000 days	100%	1/4/18	25/12/20
109	109	BIM model	1000 days	1/4/18	25/12/20	Calendar Day	147		0 days	0 days	1000 days	100%	1/4/18	25/12/20
110	110	Submission of PN25 Pipes and Fittings for CE01	45 days	12/7/18	25/8/18	Calendar Day	13	111	0 days	0 days	45 days	100%	12/7/18	25/8/18
111	111	Approval of PN25 Pipes and Fittings for CE01	45 days	26/8/18	9/10/18	Calendar Day	110	154	0 days	0 days	45 days	100%	26/8/18	9/10/18
112	112	**Subcontracting**	1066 days	16/11/17	16/10/20	Calendar Day			0 days	0 days	1066 days	100%	16/11/17	16/10/20
113	113	**Submission and Approval**	117 days	16/11/17	12/3/18	Calendar Day			0 days	0 days	117 days	100%	16/11/17	12/3/18
114	114	Submission of sub-contractor selection procedure	24 days	16/11/17	9/12/17	Calendar Day	5	115	0 days	0 days	24 days	100%	16/11/17	9/12/17
115	115	Approval of sub-contractor selection procedure	42 days	10/12/17	20/1/18	Calendar Day	114	121,122,123,126,128,130,13	0 days	0 days	42 days	100%	10/12/17	20/1/18
116	116	Submission of Sub-contractor Condition	14 days	16/11/17	29/11/17	Calendar Day	5	117	0 days	0 days	14 days	100%	16/11/17	29/11/17
117	117	Approval of Sub-contractor Condition	42 days	30/11/17	10/1/18	Calendar Day	116	121,122,126,128,130,132,13	0 days	0 days	42 days	100%	30/11/17	10/1/18
118	118	Submission of Supplier Selection Procedure	75 days	16/11/17	29/1/18	Calendar Day	5	119	0 days	0 days	75 days	100%	16/11/17	29/1/18
119	119	Approval of Supplier Selection Procedure	42 days	30/1/18	12/3/18	Calendar Day	118	150	0 days	0 days	42 days	100%	30/1/18	12/3/18
120	120	**Subcontractor Selection and Subcontracting**	1066 days	16/11/17	16/10/20	Calendar Day			0 days	0 days	1066 days	100%	16/11/17	16/10/20
121	121	Consultancy: Independent Checking Engineer for Investigation Works	27 days	21/1/18	16/2/18	Calendar Day	117,115	473	0 days	0 days	27 days	100%	21/1/18	16/2/18
122	122	Construction of Temporary site office, hoarding and project sign board	75 days	21/1/18	5/4/18	Calendar Day	117,115		0 days	0 days	75 days	100%	21/1/18	5/4/18
123	123	Trial Pit Excavation	30 days	21/1/18	19/2/18	Calendar Day	115,5	472	0 days	0 days	30 days	100%	21/1/18	19/2/18
124	124	Traffic Consultant for Investigation Works	30 days	16/11/17	15/12/17	Calendar Day	5	85	0 days	0 days	30 days	100%	16/11/17	15/12/17
125	125	Consultancy: Landscape for Investigation Works	30 days	16/11/17	15/12/17	Calendar Day	5	472	0 days	0 days	30 days	100%	16/11/17	15/12/17
126	126	Tender list for traffic consultant	9 days	21/1/18	29/1/18	Calendar Day	117,115	127	0 days	0 days	9 days	100%	21/1/18	29/1/18
127	127	Consultancy: Traffic consultant	55 days	30/1/18	25/3/18	Calendar Day	126		0 days	0 days	55 days	100%	30/1/18	25/3/18
128	128	Tender list for independent checking engineer	13 days	21/1/18	2/2/18	Calendar Day	117,115	129	0 days	0 days	13 days	100%	21/1/18	2/2/18
129	129	Consultancy: Independent Checking Engineer	12 days	3/2/18	14/2/18	Calendar Day	128	95,96,97,98	0 days	0 days	12 days	100%	3/2/18	14/2/18
130	130	Tender List for Environmental Team	15 days	21/1/18	4/2/18	Calendar Day	117,115	131	0 days	0 days	15 days	100%	21/1/18	4/2/18
131	131	Environmental Team	9 days	5/2/18	13/2/18	Calendar Day	130	104	0 days	0 days	9 days	100%	5/2/18	13/2/18
132	132	Tender List (Trenchless): Batch 1	14 days	21/1/18	3/2/18	Calendar Day	117,115	133,134	0 days	0 days	14 days	100%	21/1/18	3/2/18
133	133	Tender for Trenchless Batch 1	42 days	12/7/18	22/8/18	Calendar Day	13,132		0 days	0 days	42 days	100%	12/7/18	22/8/18
134	134	Tender list (Trenchless): Batch 2	15 days	4/2/18	18/2/18	Calendar Day	132	135	0 days	0 days	15 days	100%	4/2/18	18/2/18
135	135	Tender for Trenchless Batch 2	42 days	19/2/18	1/4/18	Calendar Day	134		0 days	0 days	42 days	100%	19/2/18	1/4/18
136	136	Tender List (Open Cut Excavation): Batch 1	15 days	21/1/18	4/2/18	Calendar Day	117,115	137,138	0 days	0 days	15 days	100%	21/1/18	4/2/18
137	137	Tender for Open Cut Excavation Batch 1	42 days	12/7/18	22/8/18	Calendar Day	136,13	473	0 days	0 days	42 days	100%	12/7/18	22/8/18
138	138	Tender List (Open cut excavation): Batch 2	28 days	12/7/18	8/8/18	Calendar Day	136,13	139	0 days	0 days	28 days	100%	12/7/18	8/8/18
139	139	Tender for open cut excavation Batch 2	42 days	9/8/18	19/9/18	Calendar Day	138	745	0 days	0 days	42 days	100%	9/8/18	19/9/18
140	140	Tender List (Landscaping)	15 days	21/1/18	4/2/18	Calendar Day	117,115	141	0 days	0 days	15 days	100%	21/1/18	4/2/18
141	141	Tender of Landscaping	42 days	5/2/18	18/3/18	Calendar Day	140	728	0 days	0 days	42 days	100%	5/2/18	18/3/18
142	142	Tender List (Survey services)	28 days	21/1/18	17/2/18	Calendar Day	117,115	143	0 days	0 days	28 days	100%	21/1/18	17/2/18
143	143	Tender of Survey Services	42 days	18/2/18	31/3/18	Calendar Day	142	108	0 days	0 days	42 days	100%	18/2/18	31/3/18
144	144	Tender List (Cathodic Protection)	28 days	16/8/19	12/9/19	Calendar Day	117,115,30	145	0 days	0 days	28 days	100%	16/8/19	12/9/19
145	145	Tender of Cathodic Protection	42 days	13/9/19	24/10/19	Calendar Day	144	157	0 days	0 days	42 days	100%	13/9/19	24/10/19
146	146	Tender List (BIM)	28 days	21/1/18	17/2/18	Calendar Day	117,115	147	0 days	0 days	28 days	100%	21/1/18	17/2/18
147	147	Tender for BIM	42 days	18/2/18	31/3/18	Calendar Day	146	109	0 days	0 days	42 days	100%	18/2/18	31/3/18
148	148	Miscellaneous	1000 days	21/1/18	16/10/20	Calendar Day	117,115		0 days	0 days	1000 days	100%	21/1/18	16/10/20
149	149	**Procurement of Major Materials**	1385 days	13/3/18	26/12/21	Calendar Day			0 days	0 days	1385 days	100%	13/3/18	26/12/21
150	150	Preparation of Purchase Order	7 days	13/3/18	19/3/18	Calendar Day	119,90	151	0 days	0 days	7 days	100%	13/3/18	19/3/18
151	151	1st Batch of Material Delivery	65 days	20/3/18	23/5/18	Calendar Day	150	152	0 days	0 days	65 days	100%	20/3/18	23/5/18
152	152	1st Batch of Material Delivery on site	1 day	24/5/18	24/5/18	Calendar Day	151	153	0 days	0 days	1 day	100%	24/5/18	24/5/18
153	153	Material Delivery by Batches	1312 days	25/5/18	26/12/21	Calendar Day	152		0 days	0 days	1312 days	100%	25/5/18	26/12/21
154	154	Preparation of CE01 Purchase Order	7 days	10/10/18	16/10/18	Calendar Day	111	155	0 days	0 days	7 days	100%	10/10/18	16/10/18
155	155	1st Batch of CE01 Material Delivery	90 days	17/10/18	14/1/19	Calendar Day	154	156	0 days	0 days	90 days	100%	17/10/18	14/1/19
156	156	1st Batch of CE01 Material Delivery on site	23 days	15/1/19	6/2/19	Calendar Day	155		0 days	0 days	23 days	100%	15/1/19	6/2/19
157	157	SCAP Material Submission and Approval	261 days	25/10/19	11/7/20	Calendar Day	145	158	0 days	0 days	261 days	100%	25/10/19	11/7/20
158	158	SCAP Purchase Order & Material Delivery	100 days	12/7/20	19/10/20	Calendar Day	157		0 days	0 days	100 days	100%	12/7/20	19/10/20
159	159	**Mainlaying in Tseung Kwan O (Section I)**	1662 days	20/2/18	28/9/23	HK Working Day			7 days	7 days	1662 days	84%	20/2/18	NA
160	160	**Excavation, Pipe Laying, Backfilling and Reinstatement (CH.A0+00 to A42+10)**	1662 days	20/2/18	28/9/23	HK Working Day			7 days	7 days	1662 days	79%	20/2/18	NA
161	161	**Open Cut**	1331 days	23/8/18	20/2/23	HK Working Day			181 days	181 days	1331 days	96%	23/8/18	NA
162	162	**Wan Po Road Workfront 1 (CH.A0+00 - CH.A3+62(Pit 1))**	840 days	10/9/18	14/7/21	HK Working Day		834	0 days	0 days	840 days	100%	10/9/18	14/7/21
163	163	CH. A0+00 - CH. A0+14 OC	45 days	27/3/21	25/5/21	HK Working Day	790		0 days	0 days	45 days	100%	27/3/21	25/5/21
164	164	CH. A0+14 - CH. A0+50 OC	156 days	23/5/19	26/11/19	HK Working Day			0 days	0 days	156 days	100%	23/5/19	26/11/19
165	165	CH. A0+50 - CH.A1+50 OC	42 days	10/9/18	31/10/18	HK Working Day		166	0 days	0 days	42 days	100%	10/9/18	31/10/18
166	166	CH. A1+50 - CH. A1+60 OC	53 days	1/11/18	4/1/19	HK Working Day	165	167	0 days	0 days	53 days	100%	1/11/18	4/1/19
167	167	CH. A1+60 - CH. A2+14 OC	107 days	5/1/19	20/5/19	HK Working Day	166		0 days	0 days	107 days	100%	5/1/19	20/5/19
168	168	CH. A2+14- CH. A2+98 OC with DN600 IT	130 days	18/9/20	26/2/21	HK Working Day	173	169	0 days	0 days	130 days	100%	18/9/20	26/2/21
169	169	CH. A2+98 - 3+62 OC with DN150 DAV	110 days	27/2/21	14/7/21	HK Working Day	168	171,336SS	0 days	0 days	110 days	100%	27/2/21	14/7/21
170	170	**Wan Po Road Workfront 2 (CH.A5+29.5(Pit 2) - CH. A7+12)**	1024 days	30/8/18	14/2/22	HK Working Day		834	0 days	0 days	1024 days	100%	30/8/18	14/2/22
171	171	CH. A5+29.5 - 5+88 OC	60 days	15/7/21	23/9/21	HK Working Day	169	172	0 days	0 days	60 days	100%	15/7/21	23/9/21
172	172	CH. A5+88 - 6+54 OC + DN300 Washout Pump Pit	115 days	24/9/21	14/2/22	HK Working Day	171		0 days	0 days	115 days	100%	24/9/21	14/2/22
173	173	CH. A6+20 - 6+54 OC	120 days	27/4/20	17/9/20	HK Working Day	175	168,186	0 days	0 days	120 days	100%	27/4/20	17/9/20
174	174	Issue CE No. 22 - Instruction to Change in Mainlaying Method at Wan Po Road between CH.6+54 and A6+61	1 day	20/1/20	20/1/20	Calendar Day	44		0 days	0 days	1 day	100%	20/1/20	20/1/20
175	175	CH. A6+54 - 6+70 OC + Handshield Tunnelling	378 days	14/1/19	25/4/20	HK Working Day		173	0 days	0 days	378 days	100%	14/1/19	25/4/20
176	176	Issue CE No. 25 - Unforeseen Underground Conditions during Trench Excavation at Wan Po Road between CH. A6+68 and CH. A6+88	1 day	29/6/20	29/6/20	Calendar Day	56		0 days	0 days	1 day	100%	29/6/20	29/6/20
177	177	EWN No. 14 (covered by CNE No. 8 & CE No.06) - Unforeseen Underground Condition During Trench Excavation for Mainlaying at Wan Po Road Between CH.A6+90 and CH.A7+10	1 day	18/9/18	18/9/18	Calendar Day			0 days	0 days	1 day	100%	18/9/18	18/9/18
178	178	CH. A6+70 - CH. A7+12 OC	111 days	30/8/18	12/1/19	HK Working Day			0 days	0 days	111 days	100%	30/8/18	12/1/19
179	179	**Wan Po Road Workfront 3 (CH. A7+12 - CH.A13+79.5(Pit A))**	1308 days	19/9/18	20/2/23	HK Working Day		834	181 days	181 days	1308 days	93%	19/9/18	NA
180	180	EWN No. 108 - TTA Implementation outside the entrance gate of Green Valley Landfi	1 day	25/2/20	25/2/20	Calendar Day			0 days	0 days	1 day	100%	25/2/20	25/2/20
181	181	EWN No. 108 - TTA Implementation outside the entrance gate of Green Valley Landfi	1 day	9/4/20	9/4/20	Calendar Day			0 days	0 days	1 day	100%	9/4/20	9/4/20
182	182	EWN No. 159 - Confimation of Revised Pipe Alignment outside the Entrance Gate of Green Valley	1 day	20/5/20	20/5/20	Calendar Day		187,188	0 days	0 days	1 day	100%	20/5/20	20/5/20
183	183	EWN No. 173 - Additional Inspection Pit at Wan Po Road Northbound outside the Entrance Gate of	1 day	11/6/20	11/6/20	HK Working Day			0 days	0 days	1 day	100%	11/6/20	11/6/20
184	184	Batch No. 3 - Inspection Pit Excavation at the footpath of Wan Po Road near Green Valley Landfill	4 days	23/7/20	27/7/20	HK Working Day			0 days	0 days	4 days	100%	23/7/20	27/7/20
185	185	EWN No. 189 - Inspection Pit on Footpath at Wan Po Road Northbound outside the Entrance Gate of Green Valley Landfill	1 day	29/7/20	29/7/20	Calendar Day			0 days	0 days	1 day	100%	29/7/20	29/7/20
186	186	CH. A7+12 - 7+64 OC with DN600 IT & DN900 H.S.V. Chamber	90 days	18/9/20	7/1/21	HK Working Day	173		0 days	0 days	90 days	100%	18/9/20	7/1/21
187	187	CH. A7+64 - 8+28 Trenchless (Hand-shield Tunnelling)	105 days	20/5/20	21/9/20	HK Working Day	182		0 days	0 days	105 days	100%	20/5/20	21/9/20
188	188	CH. A8+28 - 8+60 OC with DN150 DAV	64 days	20/5/20	4/8/20	HK Working Day	182	189	0 days	0 days	64 days	100%	20/5/20	4/8/20
189	189	CH. A8+60 - 9+24 OC	64 days	5/8/20	20/10/20	HK Working Day	188	190	0 days	0 days	64 days	100%	5/8/20	20/10/20
190	190	CH. A9+24 - 9+88 OC	64 days	21/10/20	7/1/21	HK Working Day	189	191	0 days	0 days	64 days	100%	21/10/20	7/1/21
191	191	CH. A9+88 - 10+52 OC with DN600 IT	95 days	8/1/21	7/5/21	HK Working Day	190	192	0 days	0 days	95 days	100%	8/1/21	7/5/21
192	192	CH. A10+52 - 11+16 OC	64 days	8/5/21	24/7/21	HK Working Day	191	193	0 days	0 days	64 days	100%	8/5/21	24/7/21
193	193	CH. A11+16 - 11+80 OC with DN300 Washout Pump Pit & DN150 DAV	95 days	26/7/21	16/11/21	HK Working Day	192	194	0 days	0 days	95 days	100%	26/7/21	16/11/21
194	194	CH. A11+80 - 12+12 OC with DN600 IT	64 days	17/11/21	5/2/22	HK Working Day	193		0 days	0 days	64 days	100%	17/11/21	5/2/22
195	195	CH. A12+12 - 12+50 OC with DN900 H.S.V. Chamber	440 days	23/2/19	18/8/20	HK Working Day			0 days	0 days	440 days	100%	23/2/19	18/8/20



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

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
196	196	Issue CE No. 19 - Change in Design of Gate Valve Chamber at Wan Po Road near CH. A12+40	1 day	22/8/19	22/8/19	Calendar Day	31		0 days	0 days	1 day	100%	22/8/19	22/8/19
197	197	EWN No.23 (Covered by CNE No.16 & CE No. 18) - Unforeseen Ground Conditions at Open Trench of Mainlaying at Wan Po Road between CH.A12+89 and CH.A13+04	1 day	4/12/18	4/12/18	Calendar Day			0 days	0 days	1 day	100%	4/12/18	4/12/18
198	198	CH. A12+50 - 12+95 OC	125 days	19/9/18	21/2/19	HK Working Day			0 days	0 days	125 days	100%	19/9/18	21/2/19
199	199	CH. A12+95 - 13+13 OC	84 days	9/11/18	21/2/19	HK Working Day		200	0 days	0 days	84 days	100%	9/11/18	21/2/19
200	200	CH. A13+13 - 13+40 OC + DN150 DAV	65 days	30/11/22	20/2/23	HK Working Day	199,201		181 days	181 days	65 days	0%	NA	NA
201	201	CH. A13+40 - 13+60 OC (Pit A0)	40 days	14/10/22	29/11/22	HK Working Day	376	200	0 days	181 days	40 days	0%	NA	NA
202	202	Wan Po Road Nighwork Section (CH. A22+67.5 - CH.A42+10)	774 days	23/8/18	1/4/21	HK Working Day			0 days	0 days	774 days	100%	23/8/18	1/4/21
203	203	Suspension of Nightwork Section due to Restriction with Railway Protection Zone, TMLG requirements and failure of application for CNP	1 day	3/8/20	3/8/20	Calendar Day			0 days	0 days	1 day	100%	3/8/20	3/8/20
204	204	CE05 - Feasibility Study of Realignment of Pipeline at TKO Stage 1 Landfill	188 days	23/8/18	26/2/19	Calendar Day	15		0 days	0 days	188 days	100%	23/8/18	26/2/19
205	205	CE10 - Contractor Design of The Realignment - at the Junction of Wan Po Road and Pung Loi Avenuce	249 days	28/2/19	3/11/19	Calendar Day	20		0 days	0 days	249 days	100%	28/2/19	3/11/19
206	206	CE35 - Feasibility Study on the Alternative Alignment by Trenchless method beneath MTR's Tunnels in the Wan Po Road j/o Lohas Park Road	270 days	31/12/19	25/9/20	Calendar Day	38		0 days	0 days	270 days	100%	31/12/19	25/9/20
207	207	CE65 - Landscape Survey near Po Yap Road and Pung Loi Road	1 day	11/6/20	11/6/20	Calendar Day	60		0 days	0 days	1 day	100%	11/6/20	11/6/20
208	208	CE87 - Affected Trees near Pung Loi Road, Po Yap Road and Wan Po Road	1 day	22/12/20	22/12/20	Calendar Day	61	209	0 days	0 days	1 day	100%	22/12/20	22/12/20
209	209	TPRP Submission and Approval	60 days	22/12/20	8/3/21	HK Working Day	208	210	0 days	0 days	60 days	100%	22/12/20	8/3/21
210	210	Site Possession and Tree Removal Works	21 days	9/3/21	1/4/21	HK Working Day	209	222,223	0 days	0 days	21 days	100%	9/3/21	1/4/21
211	211	CE No. 60 - Realignment of Water Main near Pung Loi Road	390 days	27/5/21	20/6/22	Calendar Day		837	79 days	465 days	390 days	91%	27/5/21	NA
212	212	Nightwork Section (CH. A36+00 - CH. A39+00) Superseded by CE60	1 day	27/5/21	27/5/21	Calendar Day	62	213	0 days	0 days	1 day	100%	27/5/21	27/5/21
213	213	Tender Process and Tender Award	60 days	27/5/21	25/7/21	Calendar Day	212	214	0 days	0 days	60 days	100%	27/5/21	25/7/21
214	214	Design & Method Statement Submission and Approval ; Preparation Works	30 days	26/7/21	24/8/21	Calendar Day	213	215,219	0 days	0 days	30 days	100%	26/7/21	24/8/21
215	215	TTA preparation, SLG meetings and obtain RA	30 days	25/8/21	23/9/21	Calendar Day	214	222,223	0 days	0 days	30 days	100%	25/8/21	23/9/21
216	216	Open Trench underneath Pung Loi Avenue	88 days	13/1/22	8/5/22	HK Working Day			0 days	0 days	88 days	100%	13/1/22	8/5/22
217	217	Obtain Access from EPD (TKO Landfill Stage I Area B)	14 days	13/1/22	28/1/22	HK Working Day	328	219,218	0 days	0 days	14 days	100%	13/1/22	28/1/22
218	218	3 Inspection pit excavations under existing flyover	14 days	29/1/22	17/2/22	HK Working Day	217	219	0 days	0 days	14 days	100%	29/1/22	17/2/22
219	219	CH.FD0+00 - CH.FD0+65 OC	30 days	18/2/22	24/3/22	HK Working Day	214,217,218	220	0 days	0 days	30 days	100%	18/2/22	24/3/22
220	220	Construction DN900 SV Chamber at CH.FD0+25	30 days	25/3/22	4/5/22	HK Working Day	219		0 days	0 days	30 days	100%	25/3/22	4/5/22
221	221	Exposed Pipe From CH.FD0+45 to FD2+00	135 days	24/9/21	9/3/22	HK Working Day			0 days	0 days	135 days	100%	24/9/21	9/3/22
222	222	Excavation In Slope Toe; Construction of Flooding Protection Wall with U-Channel, Length = 135m, @12m per 12days	135 days	24/9/21	9/3/22	HK Working Day	210,215		0 days	0 days	135 days	100%	24/9/21	9/3/22
223	223	Exposed Pipe, Length = 173m, with concrete saddle Supports	42 days	24/9/21	13/11/21	HK Working Day	210,215	224	0 days	0 days	42 days	100%	24/9/21	13/11/21
224	224	DN1200 Pipe Laying on Concrete Support with Concrete Hunching	14 days	15/11/21	30/11/21	HK Working Day	223	225,227	0 days	0 days	14 days	100%	15/11/21	30/11/21
225	225	Apply top coating of aliphatic polyurethane on site	30 days	1/12/21	7/1/22	HK Working Day	224	229	0 days	0 days	30 days	100%	1/12/21	7/1/22
226	226	Open Trench Connecting Trenchless and Exposed Pipe	160 days	1/12/21	20/6/22	HK Working Day			381 days	381 days	160 days	68%	1/12/21	NA
227	227	CH.FD2+00 to CH.FD3+15 OC	50 days	1/12/21	31/1/22	HK Working Day	224	228,229	0 days	0 days	50 days	100%	1/12/21	31/1/22
228	228	CH.FDD3+15 to CH.FDD3+51 OC with DN900 Valve Chamber and By-pass Pipe and Connection to Pit WPR1	50 days	4/2/22	2/4/22	HK Working Day	227	229,254	0 days	0 days	50 days	100%	4/2/22	2/4/22
229	229	Make Good Slope Toe and Landscape Work	60 days	4/4/22	20/6/22	HK Working Day	225,227,228		381 days	381 days	60 days	15%	4/4/22	NA
230	230	CE59 - Water Mains near Pung Loi Road and Po Yap Road (CH.FE0+00 - CH.A3+58)	608 days	20/8/20	7/9/22	HK Working Day		837	0 days	314 days	608 days	87%	20/8/20	NA
231	231	Inspection Pit at Working Pit WPR1	7 days	20/8/20	27/8/20	HK Working Day			0 days	0 days	7 days	100%	20/8/20	27/8/20
232	232	Inspection Pit at Working Pit G1A	7 days	2/11/20	9/11/20	HK Working Day			0 days	0 days	7 days	100%	2/11/20	9/11/20
233	233	CE59 - Realignment of Water Main near Pung Loi Road and Po Yap Round	1 day	13/11/20	13/11/20	HK Working Day	63	234,238	0 days	0 days	1 day	100%	13/11/20	13/11/20
234	234	Tender Process and Tender Award for CE No. 59	60 days	13/11/20	25/1/21	HK Working Day	233	235,236,237	0 days	0 days	60 days	100%	13/11/20	25/1/21
235	235	Design & Method Statement Submission and Approval ; Preparation Works for Pit J1A	30 days	26/1/21	4/3/21	HK Working Day	234	245	0 days	0 days	30 days	100%	26/1/21	4/3/21
236	236	Design & Method Statement Submission and Approval ; Preparation Works for Pit G1A	30 days	26/1/21	4/3/21	HK Working Day	234		0 days	0 days	30 days	100%	26/1/21	4/3/21
237	237	Design & Method Statement Submission and Approval ; Preparation Works for Pit WPR1	30 days	26/1/21	4/3/21	HK Working Day	234	242	0 days	0 days	30 days	100%	26/1/21	4/3/21
238	238	TTA preparation, SLG meetings and obtain RA	60 days	13/11/20	25/1/21	HK Working Day	233	240,243,241	0 days	0 days	60 days	100%	13/11/20	25/1/21
239	239	Construction of Pits for Mainlaying by Pipe Jacking Method	275 days	25/1/21	29/12/21	HK Working Day			0 days	0 days	275 days	100%	25/1/21	29/12/21
240	240	Obtain consent for vehicular access construction for WPR1	1 day	25/1/21	25/1/21	HK Working Day	238		0 days	0 days	1 day	100%	25/1/21	25/1/21
241	241	Tree Truning at WPR1	2 days	3/11/21	4/11/21	HK Working Day	238	242	0 days	0 days	2 days	100%	3/11/21	4/11/21
242	242	Jacking Pit WPR1 (Near Pung Loi Road)	45 days	5/11/21	29/12/21	HK Working Day	241,237	247	0 days	0 days	45 days	100%	5/11/21	29/12/21
243	243	Planter Removal and Access Formation to pit G1A	7 days	26/1/21	2/2/21	HK Working Day	238	244	0 days	0 days	7 days	100%	26/1/21	2/2/21
244	244	Receiving Pit G1A (Near Po Yap Road)	45 days	3/2/21	30/3/21	HK Working Day	243	250,260	0 days	0 days	45 days	100%	3/2/21	30/3/21
245	245	Construction of Jacking Pit J1A	30 days	5/3/21	13/4/21	HK Working Day	235	257	0 days	0 days	30 days	100%	5/3/21	13/4/21
246	246	Trenchless between Pit WPR1 and Pit G1A and Pipe Installation	204 days	30/12/21	7/9/22	HK Working Day			314 days	314 days	204 days	42%	30/12/21	NA
247	247	TBM Establishment at Pit WPR1	14 days	30/12/21	15/1/22	HK Working Day	242	248	0 days	0 days	14 days	100%	30/12/21	15/1/22
248	248	Jacking DN1600 Precast Concrete Sleeve Pipe (224m; 3.0m/day)	75 days	17/1/22	21/4/22	HK Working Day	247	249	0 days	314 days	75 days	96%	17/1/22	NA
249	249	Remove setup including Thrust Wall at Pit WPR1	14 days	22/4/22	10/5/22	HK Working Day	248	250	0 days	314 days	14 days	0%	NA	NA
250	250	Setup for Pipe Laying inside Jacking Pit WPR1	6 days	11/5/22	17/5/22	HK Working Day	249,244	251	0 days	314 days	6 days	0%	NA	NA
251	251	DN1200 MS Pipe Laying inside Jacking Pipe (224m) (2 days per 8m)	56 days	18/5/22	23/7/22	HK Working Day	250	252	0 days	314 days	56 days	0%	NA	NA
252	252	Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	25/7/22	27/7/22	HK Working Day	251	253	0 days	314 days	3 days	0%	NA	NA
253	253	Grouting Works (30m per day)	8 days	28/7/22	5/8/22	HK Working Day	252	254	0 days	314 days	8 days	0%	NA	NA
254	254	Pipe Connection inside Working Pit WPR1 and Concrete Thrust Block	14 days	6/8/22	22/8/22	HK Working Day	253,228	255	0 days	314 days	14 days	0%	NA	NA
255	255	Remove ELS including extracting sheet piles at Pit WPR1; Reinstatement	14 days	23/8/22	7/9/22	HK Working Day	254		314 days	314 days	14 days	0%	NA	NA
256	256	Trenchless between Pit G1A and Pit J1A and Pipe Installation	233 days	14/4/21	21/1/22	HK Working Day			0 days	0 days	233 days	100%	14/4/21	21/1/22
257	257	Establishment at Pit J1A	16 days	14/4/21	3/5/21	HK Working Day	245	258	0 days	0 days	16 days	100%	14/4/21	3/5/21
258	258	Hand shield tunnelling (I.D. 1600 segment pipe), 0.65m/day	101 days	4/5/21	1/9/21	HK Working Day	257	259	0 days	0 days	101 days	100%	4/5/21	1/9/21
259	259	Remove Setup at Pit J1A	6 days	2/9/21	8/9/21	HK Working Day	258	260	0 days	0 days	6 days	100%	2/9/21	8/9/21
260	260	Setup for Pipe Laying inside Jacking Pit J1A	14 days	9/9/21	25/9/21	HK Working Day	259,244	261	0 days	0 days	14 days	100%	9/9/21	25/9/21
261	261	DN1200 MS Pipe Laying inside jacking pipe (~70m) (3 days per 4m)	42 days	27/9/21	16/11/21	HK Working Day	260	262	0 days	0 days	42 days	100%	27/9/21	16/11/21
262	262	Formwork & Setup for Grouting the gap between pipe and Sleeve	8 days	17/11/21	25/11/21	HK Working Day	261	263	0 days	0 days	8 days	100%	17/11/21	25/11/21
263	263	Grouting Works (30 meter/day)	3 days	26/11/21	29/11/21	HK Working Day	262	264,267	0 days	0 days	3 days	100%	26/11/21	29/11/21
264	264	Pipe Connection inside Working Pit G1A and Concrete Thrust Block	25 days	30/11/21	30/12/21	HK Working Day	263	265	0 days	0 days	25 days	100%	30/11/21	30/12/21
265	265	Remove ELS including extracting sheet piles at Pit G1A; Reinstatement	18 days	31/12/21	21/1/22	HK Working Day	264		0 days	0 days	18 days	100%	31/12/21	21/1/22
266	266	Open Trench between Pit K and J1A	108 days	30/11/21	13/6/22	HK Working Day			0 days	0 days	108 days	100%	30/11/21	13/6/22
267	267	Pipe Laying From Pit K to Pit J1A (OC) (48m)	62 days	30/11/21	16/2/22	HK Working Day	263	268	0 days	0 days	62 days	100%	30/11/21	16/2/22
268	268	Construction of Thrust Block from Pit K to Pit J1A	15 days	17/2/22	5/3/22	HK Working Day	267	269	0 days	0 days	15 days	100%	17/2/22	5/3/22
269	269	Backfill Trench and Remove ELS	18 days	7/3/22	26/3/22	HK Working Day	268	270	0 days	0 days	18 days	100%	7/3/22	26/3/22
270	270	Reinstatement of Plant and Shrubs in Roundabout	14 days	28/3/22	13/4/22	HK Working Day	269		0 days	0 days	14 days	100%	28/3/22	13/4/22
271	271	CE36 - Realignment of Water Mains along the Bituminous Road adjacent to Lohas Park Road (Area A) (CH. FB0+00 to CH.FB5+34)	545 days	22/5/20	21/3/22	HK Working Day		836	0 days	0 days	545 days	100%	22/5/20	21/3/22
272	272	Nightwork Section (CH. A22+67.5 - CH. 28+01.5) Superseded by CE36	1 day	22/5/20	22/5/20	HK Working Day	51	273	0 days	0 days	1 day	100%	22/5/20	22/5/20
273	273	Tender List Preparation & Approval, Tendering Process and PM's Approval	90 days	22/5/20	5/9/20	HK Working Day	272	274	0 days	0 days	90 days	100%	22/5/20	5/9/20
274	274	Tender Award / Issue LOA	1 day	5/9/20	5/9/20	HK Working Day	273	275	0 days	0 days	1 day	100%	5/9/20	5/9/20
275	275	Method Statement and Design Submission	60 days	7/9/20	18/11/20	HK Working Day	274	282,283,281	0 days	0 days	60 days	100%	7/9/20	18/11/20
276	276	CH. FB0+00 - 0+38 OC	35 days	11/12/21	24/1/22	HK Working Day	277		0 days	0 days	35 days	100%	11/12/21	24/1/22
277	277	CH. FB0+38 - 0+70 OC	30 days	6/11/21	10/12/21	HK Working Day	278	276	0 days	0 days	30 days	100%	6/11/21	10/12/21
278	278	CH. FB0+70 - 1+02 OC with DN150 DAV	75 days	7/8/21	5/11/21	HK Working Day	279	277	0 days	0 days	75 days	100%	7/8/21	5/11/21
279	279	CH. FB1+02 - 1+34 OC with DN300 Washout Pump Pit	75 days	8/5/21	6/8/21	HK Working Day	280	278	0 days	0 days	75 days	100%	8/5/21	6/8/21
280	280	CH. FB1+34 - 1+66 OC with DN900 H.S.V. Chamber	75 days	1/2/21	7/5/21	HK Working Day	281	279	0 days	0 days	75 days	100%	1/2/21	7/5/21
281	281	CH. FB1+66 - 2+06 OC	60 days	19/11/20	30/1/21	HK Working Day	275	280	0 days	0 days	60 days	100%	19/11/20	30/1/21
282	282	CH. FB2+06 - 2+38 OC	30 days	19/11/20	23/12/20	HK Working Day	275		0 days	0 days	30 days	100%	19/11/20	23/12/20
283	283	CH. FB2+38 - 2+70 OC	30 days	19/11/20	23/12/20	HK Working Day	275	284	0 days	0 days	30 days	100%	19/11/20	23/12/20
284	284	CH. FB2+70 - 3+02 OC with DN300 Washout Pump Pit	75 days	24/12/20	27/3/21	HK Working Day	283	285	0 days	0 days	75 days	100%	24/12/20	27/3/21
285	285	CH. FB3+02 3+34 OC	30 days	29/3/21	7/5/21	HK Working Day	284	286	0 days	0 days	30 days	100%	29/3/21	7/5/21
286	286	CH. FB3+34 - 3+66 OC with DN600 IT	75 days	8/5/21	6/8/21	HK Working Day	285	287	0 days	0 days	75 days	100%	8/5/21	6/8/21
287	287	CH. FB3+66 - 3+98 OC	30 days	7/8/21	10/9/21	HK Working Day	286	288	0 days	0 days	30 days	100%	7/8/21	10/9/21
288	288	CH. FB3+98 - 4+30 OC	30 days	11/9/21	19/10/21	HK Working Day	287	289	0 days	0 days	30 days	100%	11/9/21	19/10/21
289	289	CH. FB4+30 - 4+62 OC	30 days	20/10/21	23/11/21	HK Working Day	288	290	0 days	0 days	30 days	100%	20/10/21	23/11/21
290	290	CH. FB4+62 - 4+94 OC	30 days	24/11/21	30/12/21	HK Working Day	289	291	0 days	0 days	30 days	100%	24/11/21	30/12/21
291	291	CH. FB4+94 - 5+34 OC	30 days	31/12/21	8/2/22	HK Working Day	290	292	0 days	0 days	30 days	100%	31/12/21	8/2/22
292	292	Open Cut from CH.FB5+34 to Pit F)	35 days	9/2/22	21/3/22	HK Working Day	291		0 days	0 days	35 days	100%	9/2/22	21/3/22
293	293	CE34 - Realignment of Watermain along TKO Stage 1 Landfill (CH.FC0+00 - CH.FC13+44	649 days	5/11/19	12/1/22	HK Working Day		836	0 days	0 days	649 days	100%	5/11/19	12/1/22
294	294	Nightwork Section (CH. A28+01.5 - CH. 36+00) Superseded by CE34	1 day	5/11/19	5/11/19	HK Working Day	34	295	0 days	0 days	1 day	100%	5/11/19	5/11/19

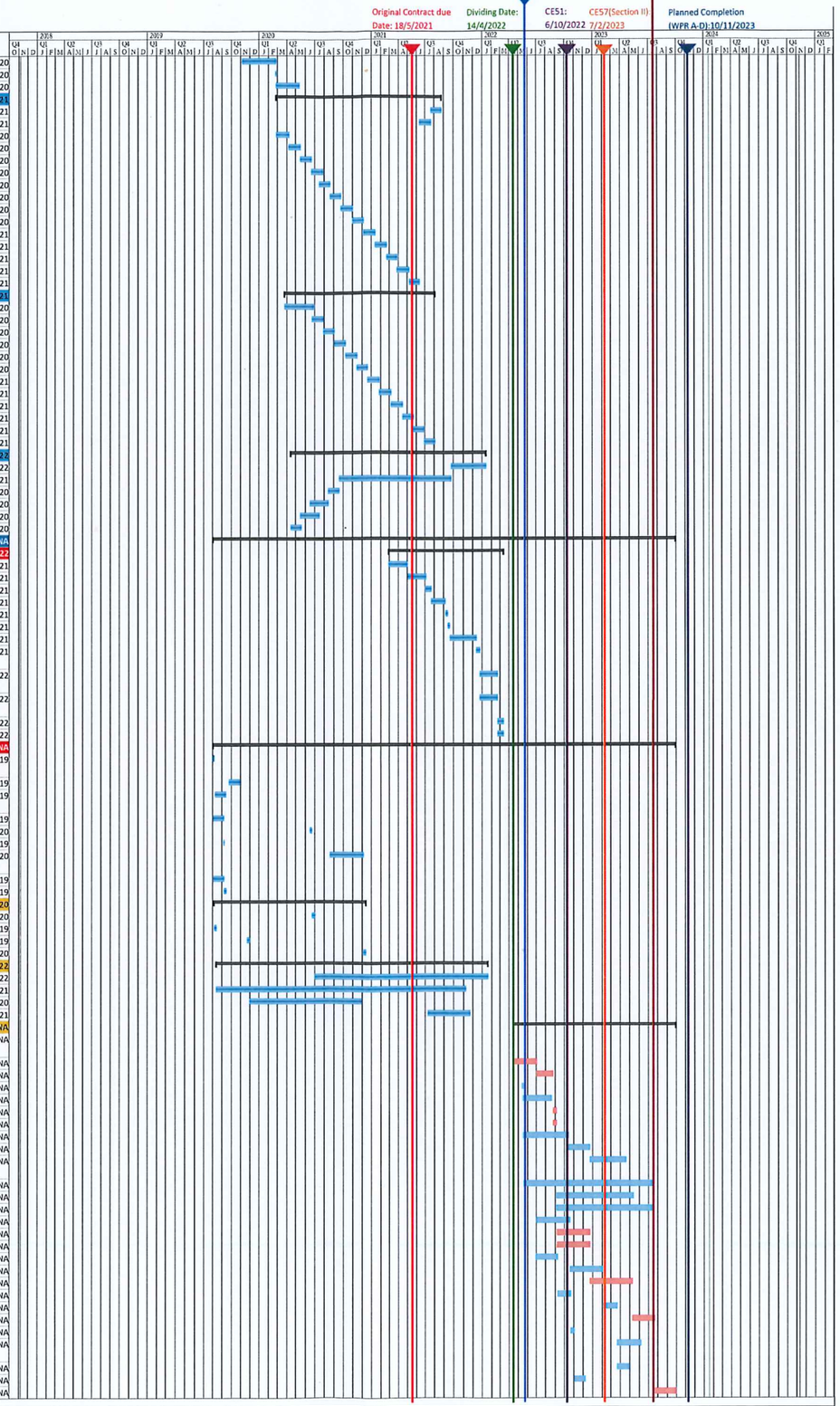


Project Programme As of 14/4/

Task · Split · Milestone · Summary · Project Summary · Inactive Task · Inactive Milestone · Inactive Summary · Manual Task · Duration-only · Manual Summary Rollup · Manual Summary · Start-only · Finish-only · External Tasks · External Milestone · Deadline · Critical · Critical Split · Progress · Manual Progress

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

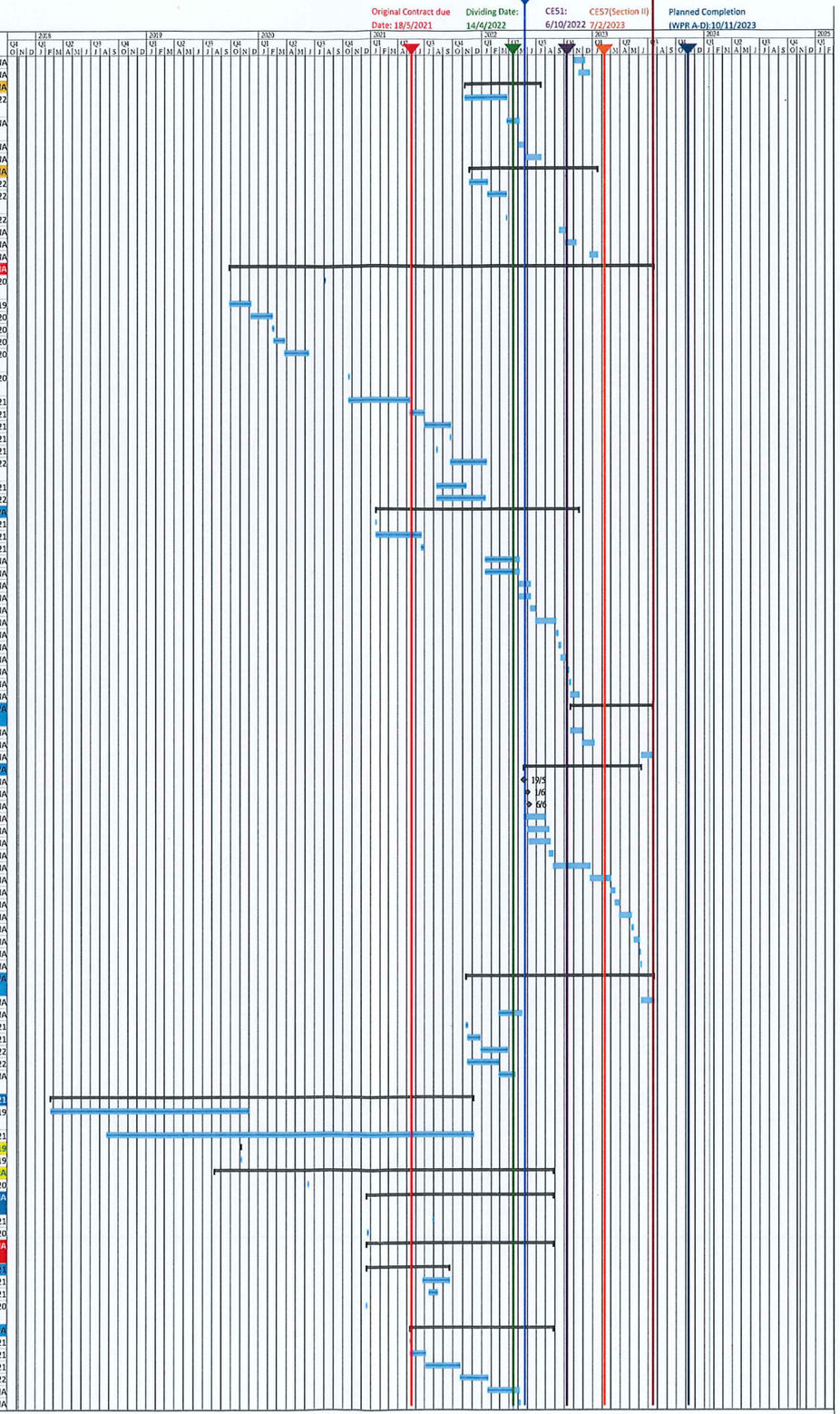
ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
295	295	Tender List Preparation & Approval, Tendering Process and PM's Approval	90 days	5/11/19	24/2/20	HK Working Day	294	296	0 days	0 days	90 days	100%	5/11/19	24/2/20
296	296	Tender Award / Issue LOA	1 day	24/2/20	24/2/20	HK Working Day	295	297	0 days	0 days	1 day	100%	24/2/20	24/2/20
297	297	Method Statement and Design Submission	60 days	25/2/20	11/5/20	HK Working Day	296		0 days	0 days	60 days	100%	25/2/20	11/5/20
298	298	TKO South Waterfront Promenade (CH. FC0+00 - 4+87)	442 days	26/2/20	23/8/21	HK Working Day			0 days	0 days	442 days	100%	26/2/20	23/8/21
299	299	CH. FC 0+00 - 0+33 OC	30 days	20/7/21	23/8/21	HK Working Day	300		0 days	0 days	30 days	100%	20/7/21	23/8/21
300	300	CH. FC 0+33 - 0+65 OC	30 days	12/6/21	19/7/21	HK Working Day	313	299	0 days	0 days	30 days	100%	12/6/21	19/7/21
301	301	CH. FC 0+65 - 0+95 OC	34 days	26/2/20	6/4/20	HK Working Day			0 days	0 days	34 days	100%	26/2/20	6/4/20
302	302	CH. FC 0+95 - 1+27 OC	30 days	6/4/20	15/5/20	HK Working Day			0 days	0 days	30 days	100%	6/4/20	15/5/20
303	303	CH. FC 1+27 - 1+59 OC	31 days	15/5/20	19/6/20	HK Working Day			0 days	0 days	31 days	100%	15/5/20	19/6/20
304	304	CH. FC 1+59 - 1+91 OC	31 days	19/6/20	27/7/20	HK Working Day			0 days	0 days	31 days	100%	19/6/20	27/7/20
305	305	CH. FC 1+91 - 2+23 OC	30 days	15/7/20	18/8/20	HK Working Day		306	0 days	0 days	30 days	100%	15/7/20	18/8/20
306	306	CH. FC 2+23 - 2+55 OC	30 days	19/8/20	22/9/20	HK Working Day	305	307	0 days	0 days	30 days	100%	19/8/20	22/9/20
307	307	CH. FC 2+55 - 2+87 OC	30 days	23/9/20	30/10/20	HK Working Day	306	308	0 days	0 days	30 days	100%	23/9/20	30/10/20
308	308	CH. FC 2+87 - 3+19 OC	30 days	31/10/20	4/12/20	HK Working Day	307	309	0 days	0 days	30 days	100%	31/10/20	4/12/20
309	309	CH. FC 3+19 - 3+51 OC	30 days	5/12/20	12/1/21	HK Working Day	308	310	0 days	0 days	30 days	100%	5/12/20	12/1/21
310	310	CH. FC 3+51 - 3+83 OC	30 days	13/1/21	19/2/21	HK Working Day	309	311	0 days	0 days	30 days	100%	13/1/21	19/2/21
311	311	CH. FC 3+83 - 4+15 OC	30 days	20/2/21	26/3/21	HK Working Day	310	312	0 days	0 days	30 days	100%	20/2/21	26/3/21
312	312	CH. FC 4+15 - 4+47 OC	30 days	27/3/21	6/5/21	HK Working Day	311	313	0 days	0 days	30 days	100%	27/3/21	6/5/21
313	313	CH. FC 4+47 - 4+87 OC	30 days	7/5/21	11/6/21	HK Working Day	312	300	0 days	0 days	30 days	100%	7/5/21	11/6/21
314	314	TKO South Waterfront Promenade (CH. FC4+87 - 8+71)	401 days	24/3/20	2/8/21	HK Working Day			0 days	0 days	401 days	100%	24/3/20	2/8/21
315	315	CH. FC 4+87 - 5+19 OC with DN600 IT	75 days	24/3/20	26/6/20	HK Working Day			0 days	0 days	75 days	100%	24/3/20	26/6/20
316	316	CH. FC 5+19 - 5+51 OC	30 days	22/6/20	28/7/20	HK Working Day		317	0 days	0 days	30 days	100%	22/6/20	28/7/20
317	317	CH. FC 5+51 - 5+83 OC	30 days	29/7/20	1/9/20	HK Working Day	316	318	0 days	0 days	30 days	100%	29/7/20	1/9/20
318	318	CH. FC 5+83 - 6+15 OC	30 days	2/9/20	8/10/20	HK Working Day	317	319	0 days	0 days	30 days	100%	2/9/20	8/10/20
319	319	CH. FC 6+15 - 6+47 OC	30 days	9/10/20	13/11/20	HK Working Day	318	320	0 days	0 days	30 days	100%	9/10/20	13/11/20
320	320	CH. FC 6+47 - 6+79 OC	30 days	14/11/20	18/12/20	HK Working Day	319	321	0 days	0 days	30 days	100%	14/11/20	18/12/20
321	321	CH. FC 6+79 - 7+11 OC	30 days	19/12/20	26/1/21	HK Working Day	320	322	0 days	0 days	30 days	100%	19/12/20	26/1/21
322	322	CH. FC 7+11 - 7+43 OC	30 days	27/1/21	5/3/21	HK Working Day	321	323	0 days	0 days	30 days	100%	27/1/21	5/3/21
323	323	CH. FC 7+43 - 7+75 OC	30 days	6/3/21	14/4/21	HK Working Day	322	324	0 days	0 days	30 days	100%	6/3/21	14/4/21
324	324	CH. FC 7+75 - 8+07 OC	30 days	15/4/21	21/5/21	HK Working Day	323	325	0 days	0 days	30 days	100%	15/4/21	21/5/21
325	325	CH. FC 8+07 - 8+39 OC	30 days	22/5/21	26/6/21	HK Working Day	324	326	0 days	0 days	30 days	100%	22/5/21	26/6/21
326	326	CH. FC 8+39 - 8+71 OC	30 days	28/6/21	2/8/21	HK Working Day	325		0 days	0 days	30 days	100%	28/6/21	2/8/21
327	327	TKO Landfill Stage I Area B (CH. FC 8+71 - 13+26)	521 days	14/4/20	12/1/22	HK Working Day			0 days	0 days	521 days	100%	14/4/20	12/1/22
328	328	CH. FC 8+71 - 9+55 OC	90 days	24/9/21	12/1/22	HK Working Day	329	217	0 days	0 days	90 days	100%	24/9/21	12/1/22
329	329	CH. FC 9+55 - 12+00 OC with DN150 DAV	300 days	18/9/20	23/9/21	HK Working Day	330	328	0 days	0 days	300 days	100%	18/9/20	23/9/21
330	330	CH. FC 12+00 - 12+30 OC	30 days	14/8/20	17/9/20	HK Working Day	331	329	0 days	0 days	30 days	100%	14/8/20	17/9/20
331	331	CH. FC 12+30 - 12+62 OC with Monitoring Chamber	50 days	15/6/20	13/8/20	HK Working Day		330	0 days	0 days	50 days	100%	15/6/20	13/8/20
332	332	CH. FC 12+62 - 13+02 OC	50 days	15/5/20	14/7/20	HK Working Day			0 days	0 days	50 days	100%	15/5/20	14/7/20
333	333	CH. FC 13+02 - 13+26 OC	28 days	14/4/20	18/5/20	HK Working Day			0 days	0 days	28 days	100%	14/4/20	18/5/20
334	334	Trenchless Works	1234 days	2/8/19	28/9/23	HK Working Day			7 days	7 days	1234 days	55%	2/8/19	NA
335	335	Wan Po Road J/O Chun Wang Street (CH.A3+62(Pit 1) to CH.A5+29.5(Pit 2)	308 days	27/2/21	12/3/22	HK Working Day		834	0 days	0 days	308 days	100%	27/2/21	12/3/22
336	336	Construction of Recieving Pit - Pit 1	50 days	27/2/21	30/4/21	HK Working Day	169SS	337,338	0 days	0 days	50 days	100%	27/2/21	30/4/21
337	337	Construction of Jacking Pit - Pit 2	50 days	3/5/21	2/7/21	HK Working Day	336	338	0 days	0 days	50 days	100%	3/5/21	2/7/21
338	338	TBM Establishment at Pit 2	15 days	3/7/21	20/7/21	HK Working Day	336,337	339	0 days	0 days	15 days	100%	3/7/21	20/7/21
339	339	Sleeve Pipe Jacking (CH. A3+62 - CH.A5+10)(L=180m, 4.5m/d)	40 days	21/7/21	4/9/21	HK Working Day	338	340	0 days	0 days	40 days	100%	21/7/21	4/9/21
340	340	Grouting around Sleeve Pipes & Remove TBM Establishment at Pit 2	6 days	6/9/21	11/9/21	HK Working Day	339	341	0 days	0 days	6 days	100%	6/9/21	11/9/21
341	341	Setup Guide Rail for Pipe Laying (Pit 2 - Pit 1)	6 days	13/9/21	18/9/21	HK Working Day	340	342	0 days	0 days	6 days	100%	13/9/21	18/9/21
342	342	DN1200 MS Pipe Laying inside Sleeve Pipe (8m per 3 days)	68 days	20/9/21	10/12/21	HK Working Day	341	343	0 days	0 days	68 days	100%	20/9/21	10/12/21
343	343	Formwork, Setup and Annular Grouting (the gap between Pipes and Sleeve Pipes)	10 days	11/12/21	22/12/21	HK Working Day	342	344,345	0 days	0 days	10 days	100%	11/12/21	22/12/21
344	344	Pipe Connection and Construction of Combined Inspection Tee and Washout Chamber (Type I) at Pit 1	45 days	23/12/21	19/2/22	HK Working Day	343	346	0 days	0 days	45 days	100%	23/12/21	19/2/22
345	345	Pipe Connection and Construction of Combined Inspection Tee and Washout Chamber (Type I) at Pit 2	45 days	23/12/21	19/2/22	HK Working Day	343	347	0 days	0 days	45 days	100%	23/12/21	19/2/22
346	346	Backfill, Remove ELS and Extract Sheetpile at Pit 1	18 days	21/2/22	12/3/22	HK Working Day	344		0 days	0 days	18 days	100%	21/2/22	12/3/22
347	347	Backfill, Remove ELS and Extract Sheetpile at Pit 2	18 days	21/2/22	12/3/22	HK Working Day	345		0 days	0 days	18 days	100%	21/2/22	12/3/22
348	348	Wan Po Road (from Chun Yat Street to Shek Kok Road) (Pit A to Pit D)	1234 days	2/8/19	28/9/23	HK Working Day		834	0 days	0 days	1234 days	47%	2/8/19	NA
349	349	EWN046 - Realignment of Trenchless Alignment along Wan Po Road from CH.A13+70 to CH.A 22+70	1 day	2/8/19	2/8/19	Calendar Day		356	0 days	0 days	1 day	100%	2/8/19	2/8/19
350	350	CE29 - Tree Transplant Works near CHA13+70	30 days	23/9/19	29/10/19	HK Working Day	32		0 days	0 days	30 days	100%	23/9/19	29/10/19
351	351	Temporary Diversion of Unchartered Underground Utilities Near Wan O Road at CH.A16+00 (Pit B)	30 days	8/8/19	11/9/19	HK Working Day	29		0 days	0 days	30 days	100%	8/8/19	11/9/19
352	352	Underground Utility Detection Survey for Working Pit D	30 days	2/8/19	5/9/19	HK Working Day	28	354	0 days	0 days	30 days	100%	2/8/19	5/9/19
353	353	Removal of Existing Planter for Jacking Pit A	6 days	15/6/20	20/6/20	HK Working Day		359	0 days	0 days	6 days	100%	15/6/20	20/6/20
354	354	Confirmation of Revised Lcoation of Pit D	1 day	6/9/19	6/9/19	Calendar Day	352		0 days	0 days	1 day	100%	6/9/19	6/9/19
355	355	TTA submission and Approval , Suspension of Parking Meters and TTA Implement for Jacking Pit D	90 days	19/8/20	4/12/20	HK Working Day		362	0 days	0 days	90 days	100%	19/8/20	4/12/20
356	356	ELS Design Submission and Method Statement with ICE Certificate	30 days	3/8/19	6/9/19	HK Working Day	349	357	0 days	0 days	30 days	100%	3/8/19	6/9/19
357	357	Approval of Design Submission and Method Statement	6 days	7/9/19	13/9/19	HK Working Day	356		0 days	0 days	6 days	100%	7/9/19	13/9/19
358	358	Inspection Pit Excavations	406 days	5/8/19	12/12/20	HK Working Day			0 days	0 days	406 days	100%	5/8/19	12/12/20
359	359	Inspection Pit for Pit A	7 days	27/6/20	30/6/20	HK Working Day	353	364	0 days	0 days	7 days	100%	22/6/20	30/6/20
360	360	Inspection Pit for Pit B	7 days	5/8/19	12/8/19	HK Working Day		365	0 days	0 days	7 days	100%	5/8/19	12/8/19
361	361	Inspection Pit for Pit C	7 days	22/11/19	29/11/19	HK Working Day		366	0 days	0 days	7 days	100%	22/11/19	29/11/19
362	362	Inspection Pit at Pit D	7 days	5/12/20	12/12/20	HK Working Day	355		0 days	0 days	7 days	100%	5/12/20	12/12/20
363	363	Construction of Pits (A, B, C and D)	723 days	13/8/19	18/1/22	HK Working Day			0 days	0 days	723 days	100%	13/8/19	18/1/22
364	364	Pit A	462 days	2/7/20	18/1/22	HK Working Day	359	386,388	0 days	0 days	462 days	100%	2/7/20	18/1/22
365	365	Pit B with additional ground grouting works	664 days	13/8/19	6/11/21	HK Working Day	360	399	0 days	0 days	664 days	100%	13/8/19	6/11/21
366	366	Pit C with additional ground grouting works	295 days	30/11/19	27/11/20	HK Working Day	361		0 days	0 days	295 days	100%	30/11/19	27/11/20
367	367	Pit D	112 days	10/7/21	20/11/21	HK Working Day		404	0 days	0 days	112 days	100%	10/7/21	20/11/21
368	368	New Routing From Pit A to Pit D	433 days	14/4/22	28/9/23	HK Working Day			0 days	0 days	433 days	0%	NA	NA
369	369	Instruction to Change Pit A to Pit D by Trenchless Method to Open Cut Method & Handshield	1 day	14/4/22	14/4/22	HK Working Day		370	0 days	0 days	1 day	0%	NA	NA
370	370	XP Application for WPR, SKR and Open Trench at Shek Kok Road	60 days	19/4/22	30/6/22	HK Working Day	369	382,371	0 days	0 days	60 days	0%	NA	NA
371	371	TTA Application and Endorsement	45 days	2/7/22	23/8/22	HK Working Day	370	374,375	0 days	0 days	45 days	0%	NA	NA
372	372	Trial Pit Excavation at Pit A1	3 days	14/5/22	17/5/22	HK Working Day			409 days	409 days	3 days	0%	NA	NA
373	373	Removal of Central Divider between Wan O Road amd Shek Kok Road	81 days	16/5/22	19/8/22	HK Working Day			330 days	330 days	81 days	0%	NA	NA
374	374	Trial Pit Excavation at Pit C1	10 days	24/8/22	3/9/22	HK Working Day	371	383	0 days	0 days	10 days	0%	NA	NA
375	375	Trial Pit Excavation at Pit D1	10 days	24/8/22	3/9/22	HK Working Day	371	380,381,384	0 days	0 days	10 days	0%	NA	NA
376	376	Pipe Laying (OC) from Pit A1 towward KLN (124m)	124 days	17/5/22	13/10/22	HK Working Day		377,201	0 days	136 days	124 days	0%	NA	NA
377	377	Pipe Laying (OC) from WPR (N/B)(the 1st Lane to the 3rd lane) (30m)	60 days	14/10/22	22/12/22	HK Working Day	376	378	0 days	136 days	60 days	0%	NA	NA
378	378	Pipe Laying (OC) crossing WPR Junction with Wan O Road to Central Divider (73m)	90 days	23/12/22	18/4/23	HK Working Day	377		136 days	136 days	90 days	0%	NA	NA
379	379	Pipe Laying (OC) along Central Divider to Pit C1 (340m)	340 days	20/5/22	12/7/23	HK Working Day			67 days	67 days	340 days	0%	NA	NA
380	380	Pipe Laying (OC) from Pit D1 to Pit D (1st 200m)	200 days	5/9/22	11/5/23	HK Working Day	375		117 days	117 days	200 days	0%	NA	NA
381	381	Pipe Laying (OC) from Pit D1 to Pit D (Remaining 110m)	250 days	5/9/22	12/7/23	HK Working Day	375		67 days	67 days	250 days	0%	NA	NA
382	382	Construction of Pit A1	90 days	2/7/22	18/10/22	HK Working Day	370	386	0 days	97 days	90 days	0%	NA	NA
383	383	Construction of Pit C1	90 days	5/9/22	21/12/22	HK Working Day	374	387	0 days	0 days	90 days	0%	NA	NA
384	384	Construction of Pit D1	90 days	5/9/22	21/12/22	HK Working Day	375	387	0 days	0 days	90 days	0%	NA	NA
385	385	Construction of Pit A0	60 days	29/6/22	7/9/22	HK Working Day		388	0 days	210 days	60 days	0%	NA	NA
386	386	Headshield Tunnelling fom Pit A to Pit A1 (102m)	85 days	19/10/22	1/2/23	HK Working Day	364,382	389	0 days	97 days	85 days	0%	NA	NA
387	387	Headshield Tunnelling fom Pit D1 to Pit C1 (64m)	107 days	22/12/22	8/5/23	HK Working Day	383,384	390	0 days	0 days	107 days	0%	NA	NA
388	388	Headshield Tunnelling fom Pit A to Pit A0 (20m)	34 days	8/9/22	20/10/22	HK Working Day	364,385	391	0 days	210 days	34 days	0%	NA	NA
389	389	MS Pipe Laying in Segment from Pit A to Pit A1	40 days	2/2/23	20/3/23	HK Working Day	386	392,393	0 days	97 days	40 days	0%	NA	NA
390	390	MS Pipe Laying in Segment from Pit D1 to Pit C1	60 days	9/5/23	20/7/23	HK Working Day	387	395	0 days	0 days	60 days	0%	NA	NA
391	391	MS Pipe Laying in Segment from Pit A to Pit A0	10 days	21/10/22	1/11/22	HK Working Day	388	392,394,396	0 days	210 days	10 days	0%	NA	NA
392	392	Pipe Connection works & Construction Special Combined Insepction Washout Chamber at Pit A	60 days	21/3/23	5/6/23	HK Working Day	389,391		97 days	97 days	60 days	0%	NA	NA
393	393	Pipe Connection works at Pit A1 concrete thrust block	30 days	21/3/23	28/4/23	HK Working Day	389		127 days	127 days	30 days	0%	NA	NA
394	394	Pipe Connection works at Pit A0 and concrete thrust block	30 days	2/11/22	6/12/22	HK Working Day	391		240 days	240 days	30 days	0%	NA	NA
395	395	Pipe Connection Works and construction of Inspoection Chamber at Pit C1	60 days	21/7/23	28/9/23	HK Working Day	390		0 days	0 days	60 days	0%	NA	NA



Project Programme As of 14/4/

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Critical | Critical Split | Progress | Manual Progress

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
396	396	Pipe Connection Works and Concrete Thrust Block at Pit D1	30 days	2/11/22	6/12/22	HK Working Day	391		240 days	240 days	30 days	0%	NA	NA
397	397	Pipe Connection Works and construction of Washout Chamber at Pit D	30 days	18/11/22	22/12/22	HK Working Day	408,441	409	0 days	208 days	30 days	0%	NA	NA
398	398	TBM Pipe Jacking (Pit B to Pit C) and Pipe Installation	202 days	8/11/21	16/7/22	HK Working Day			359 days	359 days	202 days	64%	8/11/21	NA
399	399	TBM Establishment at Pit B with additional ground treatment for stopping water ingress	112 days	8/11/21	24/3/22	HK Working Day	365	400	0 days	0 days	112 days	100%	8/11/21	24/3/22
400	400	Jacking DN1600 Precast Concrete Sleeve Pipe From Pit B to Pit C (L=326m; 2.5m/day)	30 days	25/3/22	4/5/22	HK Working Day	399	401	0 days	359 days	30 days	57%	25/3/22	NA
401	401	Extracting TBM and remove TBM from Pit B	15 days	5/5/22	23/5/22	HK Working Day	400	402	0 days	359 days	15 days	0%	NA	NA
402	402	ELS Removal and Reinstatement of Road works, Planter and Gullies' drains	45 days	24/5/22	16/7/22	HK Working Day	401		359 days	359 days	45 days	0%	NA	NA
403	403	Pipe Jacking from Pit D to Pit C and Pipe Installation	341 days	22/11/21	16/1/23	HK Working Day			208 days	208 days	341 days	61%	22/11/21	NA
404	404	TBM Establishment at Pit D	47 days	22/11/21	18/1/22	HK Working Day	367	405	0 days	0 days	47 days	100%	22/11/21	18/1/22
405	405	DN1920 Steel Jacked Pipe (Pit D - Pit C) (CH.A19+26 to CH.A22+80) in Soil (370m; 2.5m/day)	51 days	19/1/22	22/3/22	HK Working Day	404		0 days	0 days	51 days	100%	19/1/22	22/3/22
406	406	Pipe Jacking stopped on 23/3/2022	1 day	23/3/22	23/3/22	HK Working Day			0 days	0 days	1 day	100%	23/3/22	23/3/22
407	407	Abandonded MTBM and Filling the Installed Sleeve Pipe with Grout	15 days	15/9/22	3/10/22	HK Working Day		408	0 days	216 days	15 days	0%	NA	NA
408	408	Backfilling Pit D to formation level of washout pumppit	30 days	5/10/22	8/11/22	HK Working Day	407	397	8 days	216 days	30 days	0%	NA	NA
409	409	ELS Removal and Reinstatement of Road works	18 days	23/12/22	16/1/23	HK Working Day	397		208 days	208 days	18 days	0%	NA	NA
410	410	CE67 - Wan Ro Road (From Shek Kwok Road to Lohas Park Road)	1126 days	27/9/19	19/7/23	HK Working Day		835	0 days	68 days	1126 days	63%	27/9/19	NA
411	411	Suspension of Nightwork Section (CH.A22+70 to 24+00) due to Restriction with Railway Protection Zone and TMLG requirements	1 day	3/8/20	3/8/20	Calendar Day			0 days	0 days	1 day	100%	3/8/20	3/8/20
412	412	CE24 - Tender List Prepare & Approval, Tendering Process and PM's Approval	70 days	27/9/19	5/12/19	Calendar Day	33	413	0 days	0 days	70 days	100%	27/9/19	5/12/19
413	413	Coordination with MTR for Ground Investigation Works under MTR Tunnels	55 days	6/12/19	14/2/20	HK Working Day	412	414	0 days	0 days	55 days	100%	6/12/19	14/2/20
414	414	Mobilization and Establishment of GI equipment	4 days	15/2/20	19/2/20	HK Working Day	413	415	0 days	0 days	4 days	100%	15/2/20	19/2/20
415	415	Ground Investigation GI No. 3	30 days	20/2/20	25/3/20	HK Working Day	414	416	0 days	0 days	30 days	100%	20/2/20	25/3/20
416	416	PM review the Aignment and Profiles and Obtain Consent from MTR for the decision of realignment	60 days	26/3/20	10/6/20	HK Working Day	415		0 days	0 days	60 days	100%	26/3/20	10/6/20
417	417	Issue CE No. 77 - Design of Water Main Structure and Modification Works to the Affected Geotechnical Features in Wan Po Road and Lohas Park Road	1 day	21/10/20	21/10/20	HK Working Day	64	418	0 days	0 days	1 day	100%	21/10/20	21/10/20
418	418	Quotation Submission and Acceptant for CE No. 77	161 days	21/10/20	10/5/21	HK Working Day	417	419	0 days	0 days	161 days	100%	21/10/20	10/5/21
419	419	CE No. 77 - Submission of Geotechnical Assessment Repot	42 days	11/5/21	30/6/21	HK Working Day	418	420	0 days	0 days	42 days	100%	11/5/21	30/6/21
420	420	CE No. 77 - Design Submission	72 days	2/7/21	24/9/21	HK Working Day	419	421	0 days	0 days	72 days	100%	2/7/21	24/9/21
421	421	CE No. 77 - Approval of Design Submission	1 day	24/9/21	24/9/21	HK Working Day	420	423	0 days	0 days	1 day	100%	24/9/21	24/9/21
422	422	Issue CE No. 67 - Realignment of Water Main near Wan Po Road and Lohas Park Road	1 day	11/8/21	11/8/21	HK Working Day	65	424,425	0 days	0 days	1 day	100%	11/8/21	11/8/21
423	423	Obtain MTR's approval on the alignment and construction method about MTR's tunnels	91 days	25/9/21	14/1/22	HK Working Day	421	450,451,452	0 days	0 days	91 days	100%	25/9/21	14/1/22
424	424	Tender Process and Tender Award for CE No. 67	77 days	11/8/21	11/11/21	HK Working Day	422	466	0 days	0 days	77 days	100%	11/8/21	11/11/21
425	425	TTA approval and Implement for CE No. 67	125 days	11/8/21	10/1/22	HK Working Day	422	430,431,450,451,452	0 days	0 days	125 days	100%	11/8/21	10/1/22
426	426	Handshield Crossing Wan Po Road (CH.FA0+15 to CH.FA0+50)	543 days	18/1/21	17/11/22	HK Working Day			208 days	208 days	543 days	56%	18/1/21	NA
427	427	Issue CE No. 98 - Tree Felling at Lohas Park Road	1 day	18/1/21	18/1/21	HK Working Day	66	428	0 days	0 days	1 day	100%	18/1/21	18/1/21
428	428	TPRP Submission and Approval for Tree at Slope Feature 12SW-A/FR102	121 days	18/1/21	18/6/21	HK Working Day	427	429	0 days	0 days	121 days	100%	18/1/21	18/6/21
429	429	Tree Felling and Tree Works at Slope Feature 12SW-A/FR102	7 days	19/6/21	26/6/21	HK Working Day	428	430	0 days	0 days	7 days	100%	19/6/21	26/6/21
430	430	Strengthen Works at Feature 12SW-A/R27	90 days	11/1/22	4/5/22	HK Working Day	429,425	432	0 days	194 days	90 days	86%	11/1/22	NA
431	431	Strengthen Works at Feature 12SW-A/R28	90 days	11/1/22	4/5/22	HK Working Day	425	433	0 days	194 days	90 days	86%	11/1/22	NA
432	432	Concrete Coring and forming a opening on retaining wall (R27)	30 days	5/5/22	10/6/22	HK Working Day	430	434	0 days	194 days	30 days	0%	NA	NA
433	433	Concrete Coring and forming a opening on retaining wall (R28)	30 days	5/5/22	10/6/22	HK Working Day	431	434	0 days	194 days	30 days	0%	NA	NA
434	434	Handshield Establishment	14 days	11/6/22	27/6/22	HK Working Day	432,433	435	0 days	194 days	14 days	0%	NA	NA
435	435	Mild Steel Segment Rings in Soil Mix (35m; 0.4m/day)	58 days	28/6/22	3/9/22	HK Working Day	434	436	0 days	194 days	58 days	0%	NA	NA
436	436	Remove establishment	6 days	5/9/22	10/9/22	HK Working Day	435	437	0 days	194 days	6 days	0%	NA	NA
437	437	Setup for Pipe Laying inside jacking	6 days	13/9/22	19/9/22	HK Working Day	436	438	0 days	194 days	6 days	0%	NA	NA
438	438	DN900 MS Pipe Laying inside jacking pipe (35m) (say 3 days per 8m)	15 days	20/9/22	8/10/22	HK Working Day	437	439	0 days	194 days	15 days	0%	NA	NA
439	439	Formwork & Setup for Grouting the gap between pipe and Sleeve	6 days	10/10/22	15/10/22	HK Working Day	438	440	0 days	194 days	6 days	0%	NA	NA
440	440	Grouting Works (30 meter/day)	4 days	17/10/22	20/10/22	HK Working Day	439	441,443	0 days	194 days	4 days	0%	NA	NA
441	441	Pipe laying Works From Pit D to CH.FA0+15	24 days	21/10/22	17/11/22	HK Working Day	440	397	0 days	208 days	24 days	0%	NA	NA
442	442	Vertical Pipes, Exposed Pipes & Burried Pipes above MTR Tunnels (CH.FA0+50 to CH.FA0+83)	216 days	21/10/22	15/7/23	HK Working Day			71 days	71 days	216 days	0%	NA	NA
443	443	Vertical pipes with Concrete Surround	33 days	21/10/22	28/11/22	HK Working Day	440	444	0 days	194 days	33 days	0%	NA	NA
444	444	Exposed pipes with concrete surround	30 days	29/11/22	5/1/23	HK Working Day	443	445	123 days	194 days	30 days	0%	NA	NA
445	445	Open cut pipe laying with concrete surround	30 days	9/6/23	15/7/23	HK Working Day	444,462		71 days	71 days	30 days	0%	NA	NA
446	446	Hand Shield Pipe Jacking crossing Lohas Park Road	314 days	19/5/22	8/6/23	HK Working Day			79 days	79 days	314 days	0%	NA	NA
447	447	MTR Consent for Construction of Pit E	0 days	19/5/22	19/5/22	Calendar Day		450	0 days	436 days	0 days	0%	NA	NA
448	448	MTR Consent for Construction of Pit F	0 days	1/6/22	1/6/22	Calendar Day		451	0 days	82 days	0 days	0%	NA	NA
449	449	MTR Consent for Construction of Pit G	0 days	6/6/22	6/6/22	Calendar Day		452	0 days	418 days	0 days	0%	NA	NA
450	450	Construction of Receiving Pit E	60 days	19/5/22	29/7/22	HK Working Day	423,425,447		355 days	355 days	60 days	0%	NA	NA
451	451	Construction of Jacking Pit F	60 days	1/6/22	11/8/22	HK Working Day	423,425,448	453	0 days	68 days	60 days	0%	NA	NA
452	452	Construction of Receiving Pit G	60 days	6/6/22	15/8/22	HK Working Day	423,425,449		341 days	341 days	60 days	0%	NA	NA
453	453	Establishment at Pit F	12 days	12/8/22	25/8/22	HK Working Day	451	454	0 days	68 days	12 days	0%	NA	NA
454	454	Mild Steel Segment Rings (Pit F - Pit E) in Soil Mix (40m; 0.4m/day)	100 days	26/8/22	23/12/22	HK Working Day	453	455	0 days	68 days	100 days	0%	NA	NA
455	455	Mild Steel Segment Rings (Pit F - Pit G) in Soil Mix (20m; 0.4m/day)	50 days	24/12/22	27/2/23	HK Working Day	454	456	0 days	68 days	50 days	0%	NA	NA
456	456	Remove setup Including Thrust Wall at Pit F	12 days	28/2/23	13/3/23	HK Working Day	455	457	0 days	68 days	12 days	0%	NA	NA
457	457	Setup for Pipe Laying inside Jacking Pit F	12 days	14/3/23	27/3/23	HK Working Day	456	458	0 days	68 days	12 days	0%	NA	NA
458	458	DN900 MS Pipe Laying from Pit F to Pit E (40m) (say 3 days per 4m)	30 days	28/3/23	6/5/23	HK Working Day	457	459	0 days	68 days	30 days	0%	NA	NA
459	459	Modify Setup for Pipe Laying inside Jacking Pit F	6 days	8/5/23	13/5/23	HK Working Day	458	460	0 days	68 days	6 days	0%	NA	NA
460	460	DN900 MS Pipe Laying from Pit F to Pit G (20m) (say 3 days per 4m)	15 days	15/5/23	1/6/23	HK Working Day	459	461	0 days	68 days	15 days	0%	NA	NA
461	461	Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	2/6/23	5/6/23	HK Working Day	460	462	0 days	68 days	3 days	0%	NA	NA
462	462	Grouting Works (20 meter/day)	3 days	6/6/23	8/6/23	HK Working Day	461	445,464	0 days	68 days	3 days	0%	NA	NA
463	463	Vertical Pipes, Exposed Pipes & Burried Pipes above MTR Tunnels (CH.FA1+50 to CH.FA2+17)	496 days	12/11/21	19/7/23	HK Working Day			68 days	68 days	496 days	83%	12/11/21	NA
464	464	Vertical pipes with Concrete Surround	33 days	9/6/23	19/7/23	HK Working Day	462		68 days	68 days	33 days	0%	NA	NA
465	465	Exposed pipes with concrete surround	60 days	26/2/22	13/5/22	HK Working Day	469		419 days	419 days	60 days	67%	26/2/22	NA
466	466	Site Clearance at Storage Yard	3 days	12/11/21	15/11/21	HK Working Day	424	467,469	0 days	0 days	3 days	100%	12/11/21	15/11/21
467	467	Plate Load Tests for Tower P2	34 days	16/11/21	24/12/21	HK Working Day	466	468	0 days	0 days	34 days	100%	16/11/21	24/12/21
468	468	Construction footing of Tower P2 at CH.FA1+76	72 days	28/12/21	25/3/22	HK Working Day	467		0 days	0 days	72 days	100%	28/12/21	25/3/22
469	469	Open cut pipe laying with concrete surround (CH.FA1+76 to CH.FA2+04)	82 days	16/11/21	25/2/22	HK Working Day	466	465,470	0 days	0 days	82 days	100%	16/11/21	25/2/22
470	470	Open cut pipe laying from CH.FA2+04 to CH.FB0+03 & Connect to DN900SV Chamber	42 days	26/2/22	20/4/22	HK Working Day	469		437 days	437 days	42 days	95%	26/2/22	NA
471	471	Miscellaneous	1125 days	20/2/18	4/12/21	HK Working Day			0 days	0 days	1125 days	100%	20/2/18	4/12/21
472	472	Inspection Pit Excavation for Pit 1 to Pit 48 (Wan Po Road (OC & MTBM), CE04, CE05, CE28, CE34)	528 days	20/2/18	29/11/19	HK Working Day	123,125		0 days	0 days	528 days	100%	20/2/18	29/11/19
473	473	Liaison with MTRC for works inside MTR Railway Protection Zone	1200 days	23/8/18	4/12/21	Calendar Day	121,137		0 days	0 days	1200 days	100%	23/8/18	4/12/21
474	474	Excavation, Pipe Laying, Backfilling and Reinstatement (CH. B0+00 to B1+19)	1 day	5/11/19	5/11/19	Calendar Day			0 days	0 days	1 day	100%	5/11/19	5/11/19
475	475	Section (CH. B0+00 - CH.B1+19) Superseded by CE34	1 day	5/11/19	5/11/19	Calendar Day	34		0 days	0 days	1 day	100%	5/11/19	5/11/19
476	476	Excavation, Pipe Laying, Backfilling and Reinstatement (CH. A42+10 to A58+00)	795 days	10/8/19	26/8/22	None			284 days	284 days	795 days	96%	10/8/19	NA
477	477	Section (CH. A42+10 - CH.A55+42) superseded by CE28 & CE50	1 day	11/6/20	11/6/20	Calendar Day	53,41		0 days	0 days	1 day	100%	11/6/20	11/6/20
478	478	Nightworks Section (CH.A55+42 to CH.A58+00) superseded by Realignment between Pit P and Pit R	498 days	18/12/20	26/8/22	HK Working Day			324 days	324 days	498 days	82%	18/12/20	NA
479	479	PMI - Changing Construction Method and Alignment from Pit P to Pit T	1 day	30/7/21	30/7/21	HK Working Day			0 days	0 days	1 day	100%	30/7/21	30/7/21
480	480	Ground Investigation at Pit R	3 days	21/12/20	23/12/20	HK Working Day			0 days	0 days	3 days	100%	21/12/20	23/12/20
481	481	Trenchless Works between Pit P and Pit Y and Pit Y to Pit R Supersede Nightworks Section (CH.A55+42 to CH.A58+00)	498 days	18/12/20	26/8/22	HK Working Day		839	0 days	324 days	498 days	82%	18/12/20	NA
482	482	Pit Construction (Pit Y and Pit R)	223 days	18/12/20	20/9/21	HK Working Day			0 days	0 days	223 days	100%	18/12/20	20/9/21
483	483	Receiving Pit Y	74 days	25/6/21	20/9/21	HK Working Day			0 days	0 days	74 days	100%	25/6/21	20/9/21
484	484	Jacking / Receiving Pit R	25 days	16/7/21	13/8/21	HK Working Day		498	0 days	0 days	25 days	100%	16/7/21	13/8/21
485	485	Issue CE No. 94 - Site Clearance of Affected Trees and Plants for Mainlaying works near Po Hong Road and Ling Hong Road	1 day	18/12/20	18/12/20	HK Working Day	67		0 days	0 days	1 day	100%	18/12/20	18/12/20
486	486	Trenchless Works between Pit P and Pit R and Pipe Installation	385 days	12/5/21	26/8/22	HK Working Day			324 days	324 days	385 days	72%	12/5/21	NA
487	487	WSD agreed to carry out Horizontal grout from Pit P to Pit Y (45m)	1 day	12/5/21	12/5/21	Calendar Day		488	0 days	0 days	1 day	100%	12/5/21	12/5/21
488	488	Mobilization and Carry out Horizontal grouting	43 days	12/5/21	3/7/21	HK Working Day	487	489	0 days	0 days	43 days	100%	12/5/21	3/7/21
489	489	Establishment and Set up for pipe jacking at Pit P	93 days	5/7/21	23/10/21	HK Working Day	488	490	0 days	0 days	93 days	100%	5/7/21	23/10/21
490	490	Jacking DN1600 Precast Concrete Sleeve Pipe (217m; 3.0m/day)	72 days	25/10/21	19/1/22	HK Working Day	489	491	0 days	0 days	72 days	100%	25/10/21	19/1/22
491	491	DN1200 MS Pipe Laying inside jacking pipe (217m) (8m per 3 days)	82 days	20/1/22	4/5/22	HK Working Day	490	492	0 days	324 days	82 days	84%	20/1/22	NA
492	492	Formwork & Setup for Grouting the gap between pipe and Sleeve pipe	3 days	5/5/22	7/5/22	HK Working Day	491	493	0 days	324 days	3 days	0%	NA	NA

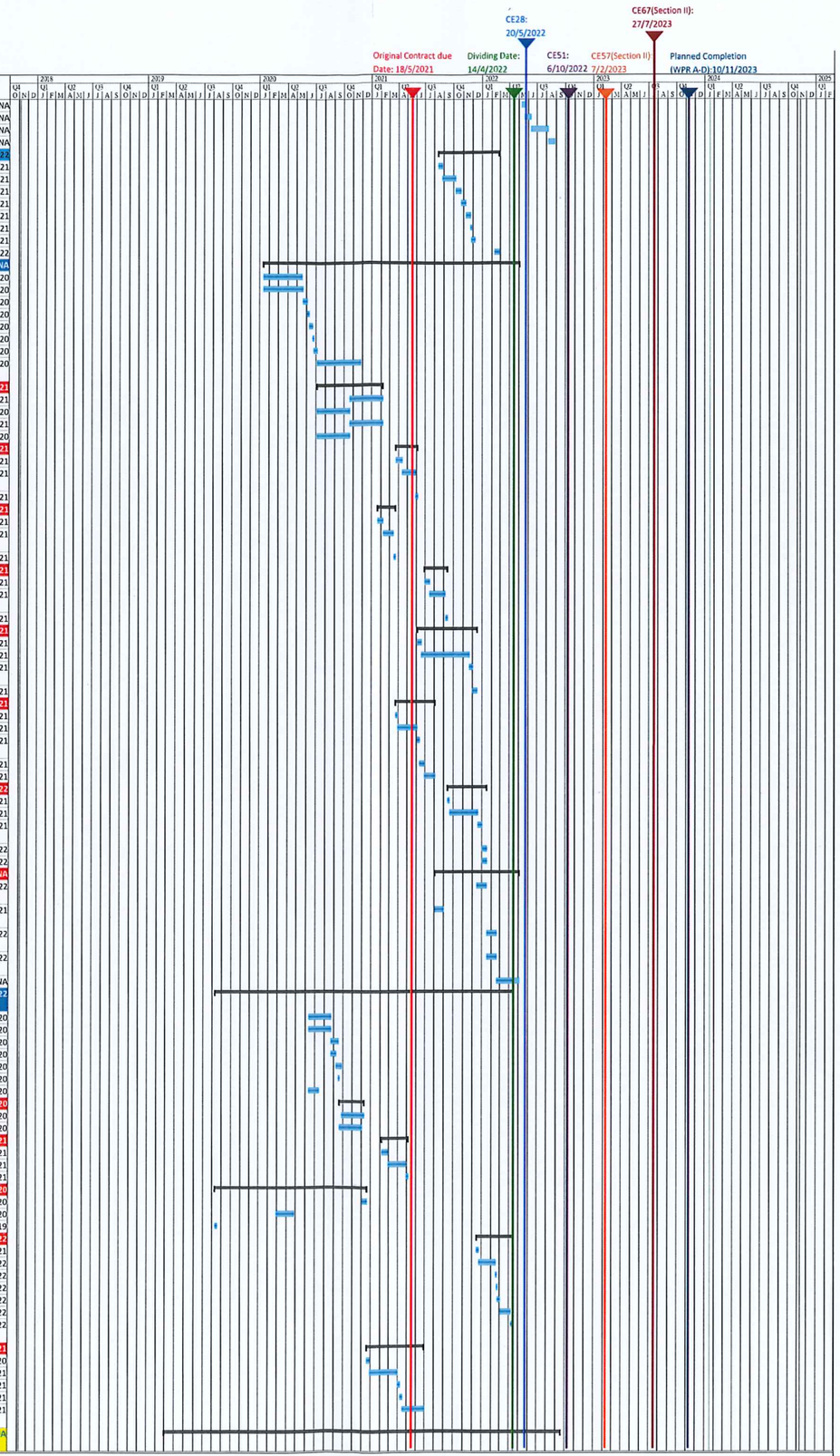


Project Programme As of 14/4/

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Critical | Critical Split | Progress | Manual Progress

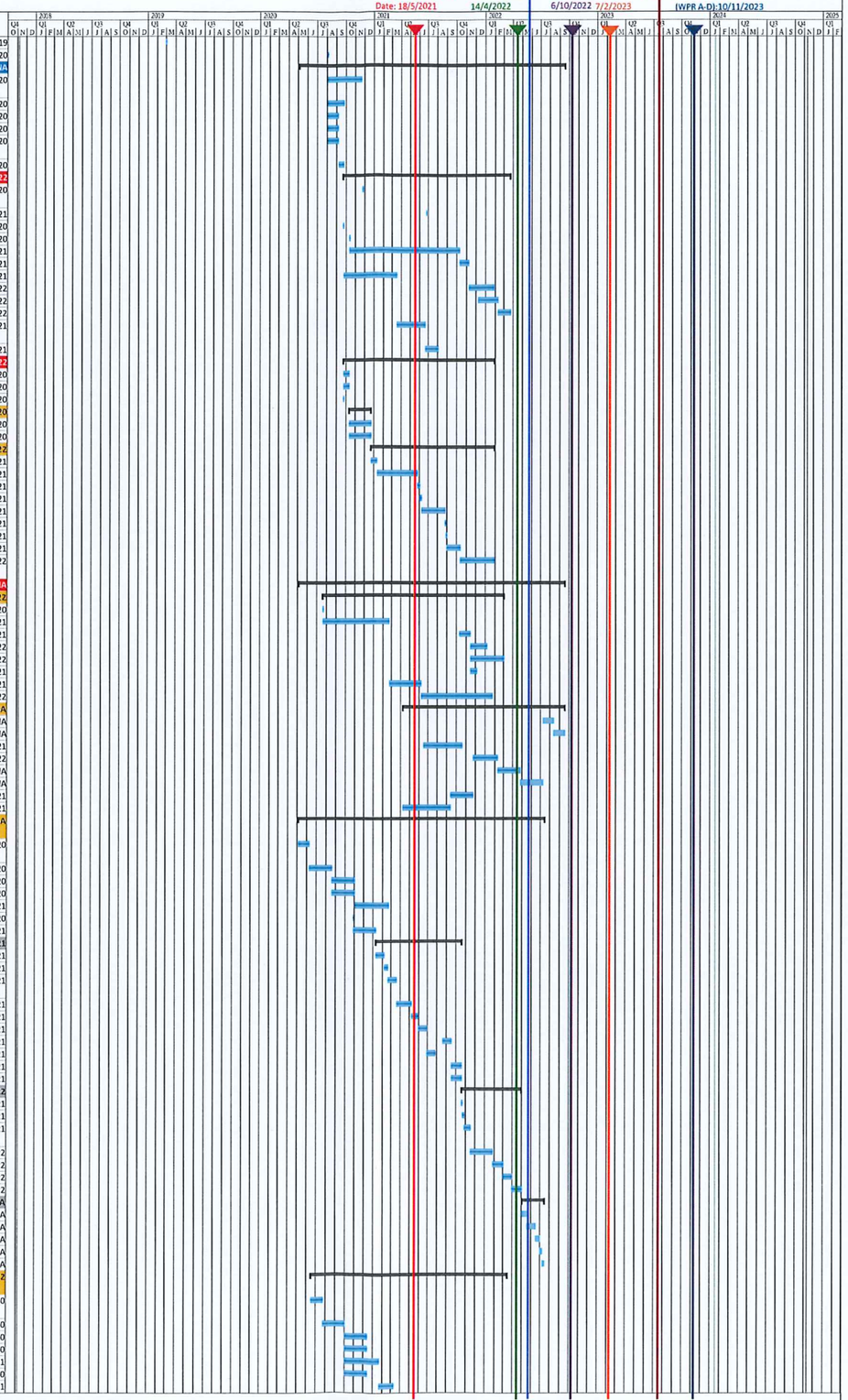
Contract No. 13/WSD/16 - Mainlaying in Tseung Kwan O

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
493	493	Grouting Works (30 meter/day)	8 days	10/5/22	18/5/22	HK Working Day	492	494	0 days	324 days	8 days	0%	NA	NA
494	494	Pipe Connection Inside Working Pit P	18 days	19/5/22	9/6/22	HK Working Day	493	495	0 days	324 days	18 days	0%	NA	NA
495	495	Construction of Combined chamber at Pit P	48 days	10/6/22	5/8/22	HK Working Day	494	496	0 days	324 days	48 days	0%	NA	NA
496	496	Remove ELS including extracting sheet piles at Pit P; Reinstatement	18 days	6/8/22	26/8/22	HK Working Day	495		324 days	324 days	18 days	0%	NA	NA
497	497	Trenchless Works between Pit R and Pit Y and Pipe Installation	138 days	14/8/21	24/2/22	HK Working Day			0 days	0 days	138 days	100%	14/8/21	24/2/22
498	498	Establishment at Pit R	10 days	14/8/21	25/8/21	HK Working Day	484	499	0 days	0 days	10 days	100%	14/8/21	25/8/21
499	499	Mild Steel Sleeve Pipe in Mix of Soil (26m)(0.8m/day)	35 days	26/8/21	7/10/21	HK Working Day	498	500	0 days	0 days	35 days	100%	26/8/21	7/10/21
500	500	Remove Setup at Pit R	13 days	8/10/21	23/10/21	HK Working Day	499	501	0 days	0 days	13 days	100%	8/10/21	23/10/21
501	501	Setup for Pipe Laying inside Jacking Pit R	12 days	25/10/21	6/11/21	HK Working Day	500	502	0 days	0 days	12 days	100%	25/10/21	6/11/21
502	502	DN1200 MS Pipe Laying inside Jacking Pipe (4m per 3 days)	13 days	8/11/21	22/11/21	HK Working Day	501	503	0 days	0 days	13 days	100%	8/11/21	22/11/21
503	503	Formwork & Setup for Grouting the gap between pipe and Sleeve	3 days	23/11/21	25/11/21	HK Working Day	502	504	0 days	0 days	3 days	100%	23/11/21	25/11/21
504	504	Grouting Works (30m/day)	9 days	26/11/21	6/12/21	HK Working Day	503	505,607	0 days	0 days	9 days	100%	26/11/21	6/12/21
505	505	Pipe Connection Inside Working Pit R	14 days	9/2/22	24/2/22	HK Working Day	504,607		0 days	0 days	14 days	100%	9/2/22	24/2/22
506	506	CE28 - Trenchless Works near HK Velodrome	680 days	13/1/20	3/5/22	HK Working Day		838	0 days	420 days	680 days	99%	13/1/20	NA
507	507	Tendering and Subletting for CE28	99 days	13/1/20	16/5/20	HK Working Day	41		0 days	0 days	99 days	100%	13/1/20	16/5/20
508	508	TTA preparation, SLG meetings, obtain RA and TPRP Approval for CE28	128 days	13/1/20	19/5/20	Calendar Day	41	509	0 days	0 days	128 days	100%	13/1/20	19/5/20
509	509	Coordination with LCSD and Notification to District Councillors	14 days	20/5/20	2/6/20	Calendar Day	508	510	0 days	0 days	14 days	100%	20/5/20	2/6/20
510	510	Forming Temporary Vehicle Access at HK Velodrome	5 days	3/6/20	8/6/20	HK Working Day	509	511	0 days	0 days	5 days	100%	3/6/20	8/6/20
511	511	Tree Transplanting Working & Tree Removal Works at TKO Sport Ground (CE No. 28)	10 days	9/6/20	19/6/20	HK Working Day	510	512	0 days	0 days	10 days	100%	9/6/20	19/6/20
512	512	Tree Pruning Working for driving Sheetpile at Pit M, Pit N & Pit O	3 days	20/6/20	23/6/20	HK Working Day	511	513	0 days	0 days	3 days	100%	20/6/20	23/6/20
513	513	Mobilization of Sheet-piles and Driving Machines	7 days	24/6/20	3/7/20	HK Working Day	512	514,519,517	0 days	0 days	7 days	100%	24/6/20	3/7/20
514	514	Tree Survey along Cycle Track; TPRP Approval; Tree Removal Works along Cycle Tracks under CE28A	120 days	4/7/20	24/11/20	HK Working Day	513		0 days	0 days	120 days	100%	4/7/20	24/11/20
515	515	Construction of Jacking / Receiving Pits (L, M, N, O)	180 days	4/7/20	5/2/21	HK Working Day			0 days	0 days	180 days	100%	4/7/20	5/2/21
516	516	Pit L	90 days	20/10/20	5/2/21	HK Working Day	517	521,567	0 days	0 days	90 days	100%	20/10/20	5/2/21
517	517	Pit M	90 days	4/7/20	19/10/20	HK Working Day	513	516,525,521	0 days	0 days	90 days	100%	4/7/20	19/10/20
518	518	Pit N	90 days	20/10/20	5/2/21	HK Working Day	519	525FS-14 days,529	0 days	0 days	90 days	100%	20/10/20	5/2/21
519	519	Pit O	90 days	4/7/20	19/10/20	HK Working Day	513	518,529,571	0 days	0 days	90 days	100%	4/7/20	19/10/20
520	520	TBM Sleeve Pipe Jacking from Pit M to Pit L	59 days	22/3/21	4/6/21	HK Working Day		533	0 days	0 days	59 days	100%	22/3/21	4/6/21
521	521	TBM Establishment at Pit M	15 days	22/3/21	12/4/21	HK Working Day	524,516,517	522	0 days	0 days	15 days	100%	22/3/21	12/4/21
522	522	DN1600 Precast Concrete Sleeve Pipe (Pit M - Pit L) (CH.GA0+09 to CH.GA1+80) in Soil (5m/day)	38 days	13/4/21	28/5/21	HK Working Day	521	523	0 days	0 days	38 days	100%	13/4/21	28/5/21
523	523	Grouting around Sleeve Pipes & Remove TBM Establishment at Pit M	6 days	29/5/21	4/6/21	HK Working Day	522		0 days	0 days	6 days	100%	29/5/21	4/6/21
524	524	TBM Sleeve Pipe Jacking from Pit M to Pit N	48 days	21/1/21	20/3/21	HK Working Day		521,538	0 days	0 days	48 days	100%	21/1/21	20/3/21
525	525	TBM Establishment at Pit M	15 days	21/1/21	6/2/21	HK Working Day	517,518FS-14 days	526	0 days	0 days	15 days	100%	21/1/21	6/2/21
526	526	DN1600 Precast Concrete Sleeve Pipe (Pit M - Pit N) CH.GA1+86 to CH.GA3+20) in Soil (5m/day)	27 days	8/2/21	13/3/21	HK Working Day	525	527	0 days	0 days	27 days	100%	8/2/21	13/3/21
527	527	(CH.GA1+86 to CH.GA3+20) in Soil (5m/day)	6 days	15/3/21	20/3/21	HK Working Day	526		0 days	0 days	6 days	100%	15/3/21	20/3/21
528	528	TBM Sleeve Pipe Jacking from Pit O to Pit N	64 days	29/6/21	11/9/21	HK Working Day		544	0 days	0 days	64 days	100%	29/6/21	11/9/21
529	529	TBM Establishment at Pit O	14 days	29/6/21	15/7/21	HK Working Day	582,518,519	530	0 days	0 days	14 days	100%	29/6/21	15/7/21
530	530	DN1600 Precast Concrete Sleeve Pipe (Pit O - Pit N) (CH.GA3+13 to CH.GA5+08) in Soil (5m/day)	44 days	16/7/21	4/9/21	HK Working Day	529	531	0 days	0 days	44 days	100%	16/7/21	4/9/21
531	531	Grouting around Sleeve Pipes & Remove TBM Establishment at Pit O	6 days	6/9/21	11/9/21	HK Working Day	530		0 days	0 days	6 days	100%	6/9/21	11/9/21
532	532	Pipe Laying Inside Sleeve Pipes from Pit M to Pit L	160 days	5/6/21	14/12/21	HK Working Day		575	0 days	0 days	160 days	100%	5/6/21	14/12/21
533	533	Setup for Pipe Laying (Pit M - Pit L)	10 days	5/6/21	17/6/21	HK Working Day	520	534	0 days	0 days	10 days	100%	5/6/21	17/6/21
534	534	DN1200 MS Pipe Laying inside Sleeve Pipe (171m-long, 4m per 2 days)	129 days	18/6/21	19/11/21	HK Working Day	533	535	0 days	0 days	129 days	100%	18/6/21	19/11/21
535	535	Formwork, Setup and Annular Grouting (the gap between Pipes and Sleeve Pipes) (30m per day)	9 days	20/11/21	30/11/21	HK Working Day	534	536	0 days	0 days	9 days	100%	20/11/21	30/11/21
536	536	Pipe Connection at Pit L	12 days	1/12/21	14/12/21	HK Working Day	535	550	0 days	0 days	12 days	100%	1/12/21	14/12/21
537	537	Pipe Laying Insdie Sleeve Pipes from Pit N to Pit M	107 days	22/3/21	2/8/21	HK Working Day			0 days	0 days	107 days	100%	22/3/21	2/8/21
538	538	Setup for Pipe Laying (Pit N - Pit M)	6 days	22/3/21	27/3/21	HK Working Day	524	539	0 days	0 days	6 days	100%	22/3/21	27/3/21
539	539	DN1200 MS Pipe Laying inside Sleeve Pipe (134m-long, 8m per 3 days)	51 days	29/3/21	2/6/21	HK Working Day	538	540	0 days	0 days	51 days	100%	29/3/21	2/6/21
540	540	Formwork, Setup and Annular Grouting (the gap between Pipes and Sleeve Pipes) (30m per day)	8 days	3/6/21	11/6/21	HK Working Day	539	541,548	0 days	0 days	8 days	100%	3/6/21	11/6/21
541	541	Pipe Connection at Pit M	12 days	12/6/21	26/6/21	HK Working Day	540	542	0 days	0 days	12 days	100%	12/6/21	26/6/21
542	542	Construction of IT Chamber at Pit M	30 days	28/6/21	2/8/21	HK Working Day	541	551	0 days	0 days	30 days	100%	28/6/21	2/8/21
543	543	Pipe Laying Insdie Sleeve Pipes from Pit O to Pit N	102 days	13/9/21	15/1/22	HK Working Day			0 days	0 days	102 days	100%	13/9/21	15/1/22
544	544	Setup for Pipe Laying (Pit O - Pit N)	6 days	13/9/21	18/9/21	HK Working Day	528	545	0 days	0 days	6 days	100%	13/9/21	18/9/21
545	545	DN1200 MS Pipe Laying inside Sleeve Pipe (195m total, 8m per 3 days)	74 days	20/9/21	17/12/21	HK Working Day	544	546	0 days	0 days	74 days	100%	20/9/21	17/12/21
546	546	Formwork, Setup and Annular Grouting (the gap between Pipes and Sleeve Pipes)(30m per day)	10 days	18/12/21	31/12/21	HK Working Day	545	547,548	0 days	0 days	10 days	100%	18/12/21	31/12/21
547	547	Pipe Connection at Pit O	12 days	3/1/22	15/1/22	HK Working Day	546,586	553	0 days	0 days	12 days	100%	3/1/22	15/1/22
548	548	Pipe Connection at Pit N	12 days	3/1/22	15/1/22	HK Working Day	540,546	552	0 days	0 days	12 days	100%	3/1/22	15/1/22
549	549	Reinstatement under CE28	221 days	3/8/21	3/5/22	HK Working Day			420 days	420 days	221 days	92%	3/8/21	NA
550	550	Remove ELS including extracting sheet piles at Pit L; Reinstatement of Cycle Track and planter	24 days	15/12/21	14/1/22	HK Working Day	536	554	0 days	0 days	24 days	100%	15/12/21	14/1/22
551	551	Remove ELS including extracting sheet piles at Pit M; Reinstatement of Cycle Track and planter	24 days	3/8/21	30/8/21	HK Working Day	542	554	0 days	0 days	24 days	100%	3/8/21	30/8/21
552	552	Remove ELS including extracting sheet piles at Pit N; Reinstatement of Cycle Track and planter	24 days	17/1/22	16/2/22	HK Working Day	548	554	0 days	0 days	24 days	100%	17/1/22	16/2/22
553	553	Remove ELS including extracting sheet piles at Pit O; Reinstatement of Cycle Track and planter	24 days	17/1/22	16/2/22	HK Working Day	547		0 days	0 days	24 days	100%	17/1/22	16/2/22
554	554	Reinstament of Cycle Track and Temporary Access Road	60 days	17/2/22	3/5/22	HK Working Day	550,551,552		420 days	420 days	60 days	80%	17/2/22	NA
555	555	CE50 - Realignment of Water Mains at the Junction of WPR and PYP and the Junction of PHR and PSR	795 days	10/8/19	14/4/22	HK Working Day		838	0 days	0 days	795 days	100%	10/8/19	14/4/22
556	556	Tendering and Subletting for CE50	60 days	11/6/20	21/8/20	HK Working Day	53		0 days	0 days	60 days	100%	11/6/20	21/8/20
557	557	TTA preparation, SLG meetings, obtain RA for CE50	60 days	11/6/20	21/8/20	HK Working Day	53	558,559	0 days	0 days	60 days	100%	11/6/20	21/8/20
558	558	Forming temporary Vehicle Access for Pit P	21 days	22/8/20	15/9/20	HK Working Day	557	561	0 days	0 days	21 days	100%	22/8/20	15/9/20
559	559	TTA Implement for Po Yap Load Roundabout	14 days	22/8/20	7/9/20	HK Working Day	557	560	0 days	0 days	14 days	100%	22/8/20	7/9/20
560	560	Trial Pit Excavation at Pit K	16 days	8/9/20	25/9/20	HK Working Day	559	564	0 days	0 days	16 days	100%	8/9/20	25/9/20
561	561	Trial Pit Excavation at Pit P	3 days	16/9/20	18/9/20	HK Working Day	558	565	0 days	0 days	3 days	100%	16/9/20	18/9/20
562	562	MTR's Approval for Trenchless Works from Pit L to Pit K	26 days	11/6/20	13/7/20	HK Working Day	53		0 days	0 days	26 days	100%	11/6/20	13/7/20
563	563	Construction of Jacking / Receiving Pits (K and P)	66 days	19/9/20	8/12/20	HK Working Day			0 days	0 days	66 days	100%	19/9/20	8/12/20
564	564	Pit K	60 days	26/9/20	8/12/20	HK Working Day	560	567	0 days	0 days	60 days	100%	26/9/20	8/12/20
565	565	Pit P	60 days	19/9/20	1/12/20	HK Working Day	561	571	0 days	0 days	60 days	100%	19/9/20	1/12/20
566	566	Hand Shield Tunnelling (Pit K to Pit L)	68 days	6/2/21	5/5/21	HK Working Day		575	0 days	0 days	68 days	100%	6/2/21	5/5/21
567	567	Establishment at Pit K	15 days	6/2/21	26/2/21	HK Working Day	564,516	568	0 days	0 days	15 days	100%	6/2/21	26/2/21
568	568	Segmental Sleeve Pipe @400mm (Pit L to Pit K)(~56m) in Soil (1.2m/day)	47 days	27/2/21	27/4/21	HK Working Day	567	569	0 days	0 days	47 days	100%	27/2/21	27/4/21
569	569	Remove setup including thrust wall at Pit K	6 days	28/4/21	5/5/21	HK Working Day	568		0 days	0 days	6 days	100%	28/4/21	5/5/21
570	570	TBM Pipe Jacking (Pit P to Pit O)	406 days	10/8/19	18/12/20	HK Working Day		583	0 days	0 days	406 days	100%	10/8/19	18/12/20
571	571	Establishment at Pit P	15 days	2/12/20	18/12/20	HK Working Day	565,519		0 days	0 days	15 days	100%	2/12/20	18/12/20
572	572	DN1600 Precast Concrete Sleeve Pipe (Pit P - Pit O) (200m) in Soil (4.5m/day)	45 days	28/2/20	24/4/20	HK Working Day	45		0 days	0 days	45 days	100%	28/2/20	24/4/20
573	573	Remove setup including thrust wall at Pit P	6 days	10/8/19	16/8/19	HK Working Day	6		0 days	0 days	6 days	100%	10/8/19	16/8/19
574	574	Pipe Laying Inside Sleeve Pipes from Pit K to Pit L	97 days	15/12/21	14/4/22	HK Working Day			0 days	0 days	97 days	100%	15/12/21	14/4/22
575	575	Setup for Pipe Laying at Pit K	6 days	15/12/21	21/12/21	HK Working Day	532,566	576	0 days	0 days	6 days	100%	15/12/21	21/12/21
576	576	DN1200 MS Pipe Laying inside jacking pipe (56m) (4m per 3 days)	42 days	22/12/21	15/2/22	HK Working Day	575	577	0 days	0 days	42 days	100%	22/12/21	15/2/22
577	577	Formwork & Setup for Grouting the gap between pipe and Sleeve pipe	3 days	16/2/22	18/2/22	HK Working Day	576	578	0 days	0 days	3 days	100%	16/2/22	18/2/22
578	578	Grouting Works (30 meter/day)	2 days	19/2/22	21/2/22	HK Working Day	577	579	0 days	0 days	2 days	100%	19/2/22	21/2/22
579	579	Pipe Connection Inside Pit L	7 days	22/2/22	1/3/22	HK Working Day	578	580	0 days	0 days	7 days	100%	22/2/22	1/3/22
580	580	Construction of Combined Inspection Tee and Washout Chamber (Type I)	30 days	2/3/22	6/4/22	HK Working Day	579	581	0 days	0 days	30 days	100%	2/3/22	6/4/22
581	581	Remove ELS including extracting sheet piles at Pit K; Reinstatement of Cycle Track and planter	7 days	7/4/22	14/4/22	HK Working Day	580		0 days	0 days	7 days	100%	7/4/22	14/4/22
582	582	Pipe Laying Inside Sleeve Pipes from Pit O to Pit P	151 days	19/12/20	28/6/21	HK Working Day		529	0 days	0 days	151 days	100%	19/12/20	28/6/21
583	583	Setup for Pipe Laying at Pit O	6 days	19/12/20	28/12/20	HK Working Day	570	584	0 days	0 days	6 days	100%	19/12/20	28/12/20
584	584	DN1200 MS Pipe Laying inside jacking pipe (200m) (8m per 3 days)	75 days	29/12/20	30/3/21	HK Working Day	583	585	0 days	0 days	75 days	100%	29/12/20	30/3/21
585	585	Formwork & Setup for Grouting the gap between pipe and Sleeve pipe	3 days	31/3/21	7/4/21	HK Working Day	584	586	0 days	0 days	3 days	100%	31/3/21	7/4/21
586	586	Grouting Works (30 meter/day)	7 days	8/4/21	15/4/21	HK Working Day	585	547,587	0 days	0 days	7 days	100%	8/4/21	15/4/21
587	587	Pipe Connection and Construction of Combined Inspection and Washout Chamber Type II at Pit P	60 days	16/4/21	28/6/21	HK Working Day	586		0 days	0 days	60 days	100%	16/4/21	28/6/21
588	588	Excavation, Pipe Laying, Backfilling and Reinstatement (CH. A58+00 to A83+76 and CH. D0+00 to D0+62)	1298 days	28/2/19	17/9/22	Calendar Day			383 days	383 days	1298 days	93%	28/2/19	NA



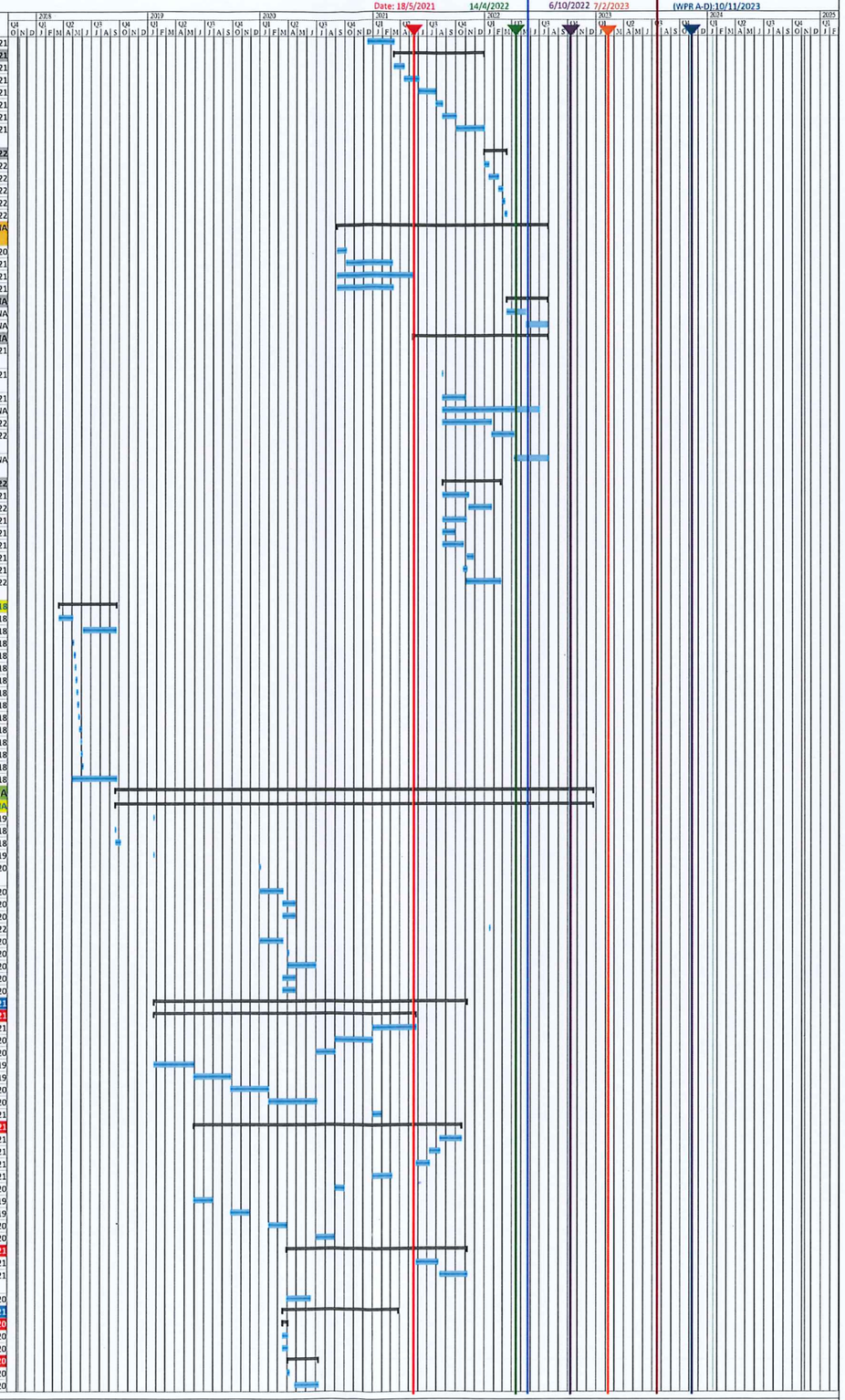
Contract No. 13/WSD/16 - Mainlaying in Tseung Kwan O

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
589	589	CE10 - Contractor's Design of The Realignments	1 day	28/2/19	28/2/19	Calendar Day	20		0 days	0 days	1 day	100%	28/2/19	28/2/19
590	590	Section (CH. A58+00 - CH.A83+76 and CH. D0+00 to D0+62) Superseded by CE51	1 day	3/8/20	3/8/20	Calendar Day	59		0 days	0 days	1 day	100%	3/8/20	3/8/20
591	591	CE51 - Realignment of Water Main in Tsui Lam Section	706 days	5/5/20	17/3/22	HK Working Day			310 days	310 days	706 days	93%	5/5/20	NA
592	592	Material Procurement for CE51 (Including Additional DN800 M.S. Pipe, EMF and BV)	90 days	3/8/20	18/11/20	HK Working Day	59		0 days	0 days	90 days	100%	3/8/20	18/11/20
593	593	TTA preparation, SLG meetings, obtain RA	45 days	3/8/20	23/9/20	HK Working Day	59		0 days	0 days	45 days	100%	3/8/20	23/9/20
594	594	Tendering and Subletting (Batch 1 - Mau Wu Tsai Abandoned Road)	30 days	3/8/20	5/9/20	HK Working Day	59	597	0 days	0 days	30 days	100%	3/8/20	5/9/20
595	595	Tendering and Subletting (Batch 2 - Po Lam Road South to Location A)	30 days	3/8/20	5/9/20	HK Working Day	59	597	0 days	0 days	30 days	100%	3/8/20	5/9/20
596	596	Tendering and Subletting (Batch 3 - Location A to TKOPFWSR)(Excluding Piling Works)	30 days	3/8/20	5/9/20	HK Working Day	59	597,703,705,706	0 days	0 days	30 days	100%	3/8/20	5/9/20
597	597	Mobilization and Setup & Preliminary Works	14 days	7/9/20	22/9/20	HK Working Day	594,595,596	605,612,613,614	0 days	0 days	14 days	100%	7/9/20	22/9/20
598	598	Batch 1 - Mau Wu Tsai Abandoned Road	443 days	22/9/20	22/3/22	HK Working Day		840	0 days	0 days	443 days	100%	22/9/20	22/3/22
599	599	Issue EWN No. 241 for Tree Issue for Changing Trenchless (Pit S to Pit T) to Open Cut at Control Site (CS-108)	1 day	24/11/20	24/11/20	Calendar Day			0 days	0 days	1 day	100%	24/11/20	24/11/20
600	600	Issue CE No. 121 - Non-explosive agent in Abandoned Road Near Mau Wu Tsai Village	1 day	25/6/21	25/6/21	Calendar Day			0 days	0 days	1 day	100%	25/6/21	25/6/21
601	601	Issue CE No. 70 - Landscaping Survey near Mau Wu Tsai Village	1 day	22/9/20	22/9/20	Calendar Day			0 days	0 days	1 day	100%	22/9/20	22/9/20
602	602	Issue CE No. 86 - Tree Affected in Mainlaying Works near Mau Wu Tsai Village	1 day	12/10/20	12/10/20	Calendar Day		603	0 days	0 days	1 day	100%	12/10/20	12/10/20
603	603	Tree survey, TPRP Submission and Receiving TPRP approval	295 days	12/10/20	9/10/21	HK Working Day	602	604,632	0 days	0 days	295 days	100%	12/10/20	9/10/21
604	604	Mobilization and Tree Removal	23 days	11/10/21	6/11/21	HK Working Day	603	606	0 days	0 days	23 days	100%	11/10/21	6/11/21
605	605	CH.HA0+80 to HA3+17 OC	141 days	23/9/20	16/3/21	HK Working Day	597	609	0 days	0 days	141 days	100%	23/9/20	16/3/21
606	606	Open Cut, CH.HA3+17 - CH.HA3+79	66 days	8/11/21	26/1/22	HK Working Day	604		0 days	0 days	66 days	100%	8/11/21	26/1/22
607	607	Open Cut, CH.HA0+28 - CH.HA0+48 with DAV Chamber (Connecting to Pit R)	49 days	7/12/21	8/2/22	HK Working Day	504,610	505,608	0 days	0 days	49 days	100%	7/12/21	8/2/22
608	608	Construction of DN900 Valve Chamber with by-pass at CH.HA0+44	36 days	9/2/22	22/3/22	HK Working Day	607		0 days	0 days	36 days	100%	9/2/22	22/3/22
609	609	Open Cut, CH.HA0+48 - CH.HA 1+20 OC with DN600 IT Chamber (Connecting to CH.HA0+80)	75 days	17/3/21	19/6/21	HK Working Day	605	610	0 days	0 days	75 days	100%	17/3/21	19/6/21
610	610	Construction of Wash Out Chamber & Reserved Tee at CH.HA0+49	36 days	21/6/21	2/8/21	HK Working Day	609	607	0 days	0 days	36 days	100%	21/6/21	2/8/21
611	611	Batch 2 - Po Lam Road South to Location A	401 days	23/9/20	29/1/22	HK Working Day		840	0 days	0 days	401 days	100%	23/9/20	29/1/22
612	612	Trial Pit Excavations at Pit W	14 days	23/9/20	10/10/20	HK Working Day	597	616	0 days	0 days	14 days	100%	23/9/20	10/10/20
613	613	Trial Pit Excavations at Pit X	14 days	23/9/20	10/10/20	HK Working Day	597	617	0 days	0 days	14 days	100%	23/9/20	10/10/20
614	614	CH.HA3+75 to HA5+55 OC (Depth < 2.5m, each stage of TTA 24-30m long)	1 day	23/9/20	23/9/20	HK Working Day	597		0 days	0 days	1 day	100%	23/9/20	23/9/20
615	615	Construction of Pits (W and X)	60 days	12/10/20	21/12/20	HK Working Day			0 days	0 days	60 days	100%	12/10/20	21/12/20
616	616	Pit W	60 days	12/10/20	21/12/20	HK Working Day	612	619	0 days	0 days	60 days	100%	12/10/20	21/12/20
617	617	Pit X	60 days	12/10/20	21/12/20	HK Working Day	613	619	0 days	0 days	60 days	100%	12/10/20	21/12/20
618	618	Hand shield Tunnelling and Pipe Installation (Pit W to Pit X)	327 days	22/12/20	29/1/22	HK Working Day			0 days	0 days	327 days	100%	22/12/20	29/1/22
619	619	Establishment at Pit W	14 days	22/12/20	9/1/21	HK Working Day	616,617	620	0 days	0 days	14 days	100%	22/12/20	9/1/21
620	620	Jacking Segmental Sleeve Pipe in Mix of Soil & Rock (0.8m /day)	107 days	11/1/21	25/5/21	HK Working Day	619	621	0 days	0 days	107 days	100%	11/1/21	25/5/21
621	621	Remove Setup including Thrust Wall at Pit X	6 days	26/5/21	1/6/21	HK Working Day	620	622	0 days	0 days	6 days	100%	26/5/21	1/6/21
622	622	Setup for Pipe Laying inside Jacking Pit X	6 days	2/6/21	8/6/21	HK Working Day	621	623	0 days	0 days	6 days	100%	2/6/21	8/6/21
623	623	DN1200 MS Pipe Laying inside Jacking Pipe (4m per 3 days)	64 days	9/6/21	24/8/21	HK Working Day	622	624	0 days	0 days	64 days	100%	9/6/21	24/8/21
624	624	Formwork & Setup for Grouting the gap between pipe and Sleeve pipe	3 days	25/8/21	27/8/21	HK Working Day	623	625	0 days	0 days	3 days	100%	25/8/21	27/8/21
625	625	Grouting Works (30m per day)	2 days	28/8/21	30/8/21	HK Working Day	624	626	0 days	0 days	2 days	100%	28/8/21	30/8/21
626	626	Open Cut, connecting CH. HA5+55 to DN1200 pipe end at Pit W	35 days	31/8/21	12/10/21	HK Working Day	625	627	0 days	0 days	35 days	100%	31/8/21	12/10/21
627	627	Open Cut, connecting CH. HA6+60 to DN1200 pipe end at Pit X with DN900 H.S.V. Chamber	90 days	13/10/21	29/1/22	HK Working Day	626		0 days	0 days	90 days	100%	13/10/21	29/1/22
628	628	Batch 3 - Location A to TKOPFWSR	706 days	5/5/20	17/3/22	HK Working Day			310 days	310 days	706 days	91%	5/5/20	NA
629	629	Open Trench Pipe Laying at Po Lam Road (West Bound)	422 days	20/7/20	1/3/22	None		840	0 days	0 days	422 days	100%	20/7/20	1/3/22
630	630	Issue CE No. 68 - TIA for TTA at Po Lam Road	1 day	20/7/20	20/7/20	HK Working Day		631	0 days	0 days	1 day	100%	20/7/20	20/7/20
631	631	Traffic Survey and Revise TIA, revised TTA Drawings, Obtain RA	177 days	20/7/20	20/2/21	HK Working Day	630	636	0 days	0 days	177 days	100%	20/7/20	20/2/21
632	632	Mobilization and Tree Removal	29 days	11/10/21	13/11/21	HK Working Day	603	633,634,635	0 days	0 days	29 days	100%	11/10/21	13/11/21
633	633	Construction of DAV Chamber at Pit X	41 days	15/11/21	4/1/22	HK Working Day	632		0 days	0 days	41 days	100%	15/11/21	4/1/22
634	634	Open Cut, fromt Pit X, CH.HA6+00 - CH.HA6+54	86 days	15/11/21	1/3/22	HK Working Day	632		0 days	0 days	86 days	100%	15/11/21	1/3/22
635	635	Construction of DN900 Valve Chamber and By Pass Pipes	17 days	15/11/21	3/12/21	HK Working Day	632		0 days	0 days	17 days	100%	15/11/21	3/12/21
636	636	Open Cut, CH.HA6+54 to CH.HA7+24 (Portion D2) with SACP	85 days	22/2/21	7/6/21	HK Working Day	631	637	0 days	0 days	85 days	100%	22/2/21	7/6/21
637	637	Open Cut, CH.HA7+24 - CH.HA7+61/CH.HB0+00 Excavation in Rock	189 days	8/6/21	22/1/22	HK Working Day	636		0 days	0 days	189 days	100%	8/6/21	22/1/22
638	638	Open Trench Pipe Laying at Po Lam Road (East Bound)	431 days	8/4/21	17/9/22	HK Working Day		840	0 days	306 days	431 days	76%	8/4/21	NA
639	639	Open Cut, CH.HC0+00 - CH.HC0+08; Connecting to CH.HB	30 days	9/7/22	12/8/22	HK Working Day	676,644	640	0 days	306 days	30 days	0%	NA	NA
640	640	Open Cut, CH.HC0+08 - CH.HC0+12	30 days	13/8/22	17/9/22	HK Working Day	676,639		306 days	306 days	30 days	0%	NA	NA
641	641	Open Cut, CH.HC0+12 - CH.HC0+97 with SACP	104 days	16/6/21	19/10/21	HK Working Day		642	0 days	0 days	104 days	100%	16/6/21	19/10/21
642	642	Open Cut, CH.HC0+97 - CH.HC1+56(Portion B4) with SACP	62 days	23/11/21	9/2/22	HK Working Day	641,645	643	0 days	0 days	62 days	100%	23/11/21	9/2/22
643	643	Open Cut, CH.HC1+56 - CH.HC2+04	60 days	10/2/22	25/4/22	HK Working Day	642	644	0 days	306 days	60 days	90%	10/2/22	NA
644	644	Open Cut, CH.HC2+04 - CH.HC2+70 with SACP	60 days	26/4/22	8/7/22	HK Working Day	643	639	0 days	306 days	60 days	0%	NA	NA
645	645	Open Cut, CH.HC2+70 - CH.HC3+22 with SACP	58 days	13/9/21	22/11/21	HK Working Day	646	642	0 days	0 days	58 days	100%	13/9/21	22/11/21
646	646	Open Cut, CH.HC3+22 - CH.HC3+70 /CH.HD0+00	131 days	8/4/21	11/9/21	HK Working Day		645	0 days	0 days	131 days	100%	8/4/21	11/9/21
647	647	Water Main Structure and Associated Pipe Support across the Natural Stream Course (CH. HB0+00 ~ 0+94)	651 days	5/5/20	14/7/22	HK Working Day		840	55 days	361 days	651 days	93%	5/5/20	NA
648	648	CE55 - Design Submission for Water Main Structure and Associated Pipe Support across the Natural Stream Course	30 days	5/5/20	8/6/20	HK Working Day	48	649	0 days	0 days	30 days	100%	5/5/20	8/6/20
649	649	WSD & GEO Review and Approval	60 days	9/6/20	19/8/20	HK Working Day	648	650,651	0 days	0 days	60 days	100%	9/6/20	19/8/20
650	650	TTA preparation, SLG meetings, obtain RA	60 days	20/8/20	31/10/20	HK Working Day	649		0 days	0 days	60 days	100%	20/8/20	31/10/20
651	651	Tender and Subletting for Mini-piles, Construction Pile Caps and Piers	60 days	20/8/20	31/10/20	HK Working Day	649	652	0 days	0 days	60 days	100%	20/8/20	31/10/20
652	652	Material procurement referring to Approved Design Submission	90 days	2/11/20	20/2/21	HK Working Day	651	659,670	0 days	0 days	90 days	100%	2/11/20	20/2/21
653	653	CE No.85 - Affected Trees across the Natural Stream Course at Tsui Lam Location A	1 day	28/10/20	28/10/20	Calendar Day		654	0 days	0 days	1 day	100%	28/10/20	28/10/20
654	654	Tree Survey, TPRP Submission and Approval	60 days	28/10/20	8/1/21	HK Working Day	653	656	0 days	0 days	60 days	100%	28/10/20	8/1/21
655	655	East Portion - Foundation Works (PC-C1, PC-T1 & PC-P1)	228 days	9/1/21	18/10/21	HK Working Day			0 days	0 days	228 days	100%	9/1/21	18/10/21
656	656	Mobilization and Tree Removal	24 days	9/1/21	5/2/21	HK Working Day	654	657	0 days	0 days	24 days	100%	9/1/21	5/2/21
657	657	Erect Temporary Timber Platform for Piling Works	7 days	6/2/21	17/2/21	HK Working Day	656	658	0 days	0 days	7 days	100%	6/2/21	17/2/21
658	658	Pre-drilling works (PD6, PD7 & PD8) & confirmation of rock head and depth of mini-pile	25 days	18/2/21	18/3/21	HK Working Day	657	659	0 days	0 days	25 days	100%	18/2/21	18/3/21
659	659	Mobilization and Driving Dia. 323mm steel Casting (14 nos)	38 days	19/3/21	7/5/21	HK Working Day	658,652	660	0 days	0 days	38 days	100%	19/3/21	7/5/21
660	660	Cleaning, Insert T50 reinforcement and Grouting	18 days	8/5/21	29/5/21	HK Working Day	659	661	0 days	0 days	18 days	100%	8/5/21	29/5/21
661	661	Setup and Loading Test of Mini-Pile (T-1)	24 days	31/5/21	28/6/21	HK Working Day	660	663,665	0 days	0 days	24 days	100%	31/5/21	28/6/21
662	662	Setup and Loading Test of Mini-Pile (C1-2)	24 days	20/8/21	16/9/21	HK Working Day	693	664,665	0 days	0 days	24 days	100%	20/8/21	16/9/21
663	663	Construction Pile Caps (T1) with Piers	24 days	29/6/21	27/7/21	HK Working Day	661	675	0 days	0 days	24 days	100%	29/6/21	27/7/21
664	664	Construction Pile Caps (C1) with Piers	24 days	17/9/21	18/10/21	HK Working Day	662	675	0 days	0 days	24 days	100%	17/9/21	18/10/21
665	665	Construction Pile Caps (P1) with Piers	24 days	17/9/21	18/10/21	HK Working Day	661,662	666,667,675	0 days	0 days	24 days	100%	17/9/21	18/10/21
666	666	West Portion - Foundation Works (PC-P2, PC-P3 & PC-C2)	157 days	19/10/21	30/4/22	HK Working Day	665		0 days	0 days	157 days	100%	19/10/21	30/4/22
667	667	Mobilization and Tree Removal	3 days	19/10/21	21/10/21	HK Working Day	665	668	0 days	0 days	3 days	100%	19/10/21	21/10/21
668	668	Erect Temporary Timber Platform for Piling Works	5 days	22/10/21	27/10/21	HK Working Day	667	669	0 days	0 days	5 days	100%	22/10/21	27/10/21
669	669	Pre-drilling works (PD1, PD2, PD3, PD4 & PD5) & confirmation of rock head and depth of mini-pile	16 days	28/10/21	15/11/21	HK Working Day	668	670	0 days	0 days	16 days	100%	28/10/21	15/11/21
670	670	Driving Dia. 323mm steel Casting (26 nos)	58 days	16/11/21	25/1/22	HK Working Day	669,652	671	0 days	0 days	58 days	100%	16/11/21	25/1/22
671	671	Cleaning, Insert T50 reinforcement and Grouting	27 days	26/1/22	1/3/22	HK Working Day	670	672	0 days	0 days	27 days	100%	26/1/22	1/3/22
672	672	Setup and Loading Test of Mini-Pile	24 days	2/3/22	29/3/22	HK Working Day	671	673	0 days	0 days	24 days	100%	2/3/22	29/3/22
673	673	Construction Pile Caps (P2, P3 & C2) with Piers	24 days	30/3/22	30/4/22	HK Working Day	672	675	0 days	0 days	24 days	100%	30/3/22	30/4/22
674	674	Pipelaying on Mini-pile Foundation	60 days	3/5/22	14/7/22	HK Working Day			325 days	325 days	60 days	0%	NA	NA
675	675	Temporary Working Platform for Pipe Installation	12 days	3/5/22	17/5/22	HK Working Day	663,664,665,673	676	0 days	325 days	12 days	0%	NA	NA
676	676	Pipe Installation / Welding / Testing / Painting	24 days	18/5/22	15/6/22	HK Working Day	675	677,639,640	0 days	325 days	24 days	0%	NA	NA
677	677	Concrete Hunching	12 days	16/6/22	29/6/22	HK Working Day	676	678	0 days	361 days	12 days	0%	NA	NA
678	678	Apply top coating of aliphatic polyurethane on site	6 days	30/6/22	7/7/22	HK Working Day	677	679	0 days	361 days	6 days	0%	NA	NA
679	679	Remove Temporary Working Platform	6 days	8/7/22	14/7/22	HK Working Day	678		361 days	361 days	6 days	0%	NA	NA
680	680	Water Main Structure and Associated Pipe Support from Po Lam Road to Tsui Lam Road (CH. HD0+00 ~ 1+00)	518 days	16/6/20	14/3/22	HK Working Day		840	0 days	0 days	518 days	100%	16/6/20	14/3/22
681	681	CE62 - Design Submission for Water Main Structure and Associated at Tsui Lam (Location B)	30 days	16/6/20	22/7/20	HK Working Day	54	682	0 days	0 days	30 days	100%	16/6/20	22/7/20
682	682	WSD & GEO Review and Approval	60 days	23/7/20	30/9/20	HK Working Day	681	683,684,685,686	0 days	0 days	60 days	100%	23/7/20	30/9/20
683	683	TTA preparation, SLG meetings, obtain RA	60 days	3/10/20	12/12/20	HK Working Day	682		0 days	0 days	60 days	100%	3/10/20	12/12/20
684	684	Tender and Subletting for Construction Pile Caps and Piers	60 days	3/10/20	12/12/20	HK Working Day	682	687,688	0 days	0 days	60 days	100%	3/10/20	12/12/20
685	685	Material procurement referring to Approved Design Submission	90 days	3/10/20	20/1/21	HK Working Day	682	687	0 days	0 days	90 days	100%	3/10/20	20/1/21
686	686	Tree survey, TPRP approval and Tree Removal Works	60 days	3/10/20	12/12/20	HK Working Day	682	687,688	0 days	0 days	60 days	100%	3/10/20	12/12/20
687	687	Obtain RA for TTA implement	38 days	21/1/21	9/3/21	HK Working Day	686,685,684		0 days	0 days	38 days	100%	21/1/21	9/3/21



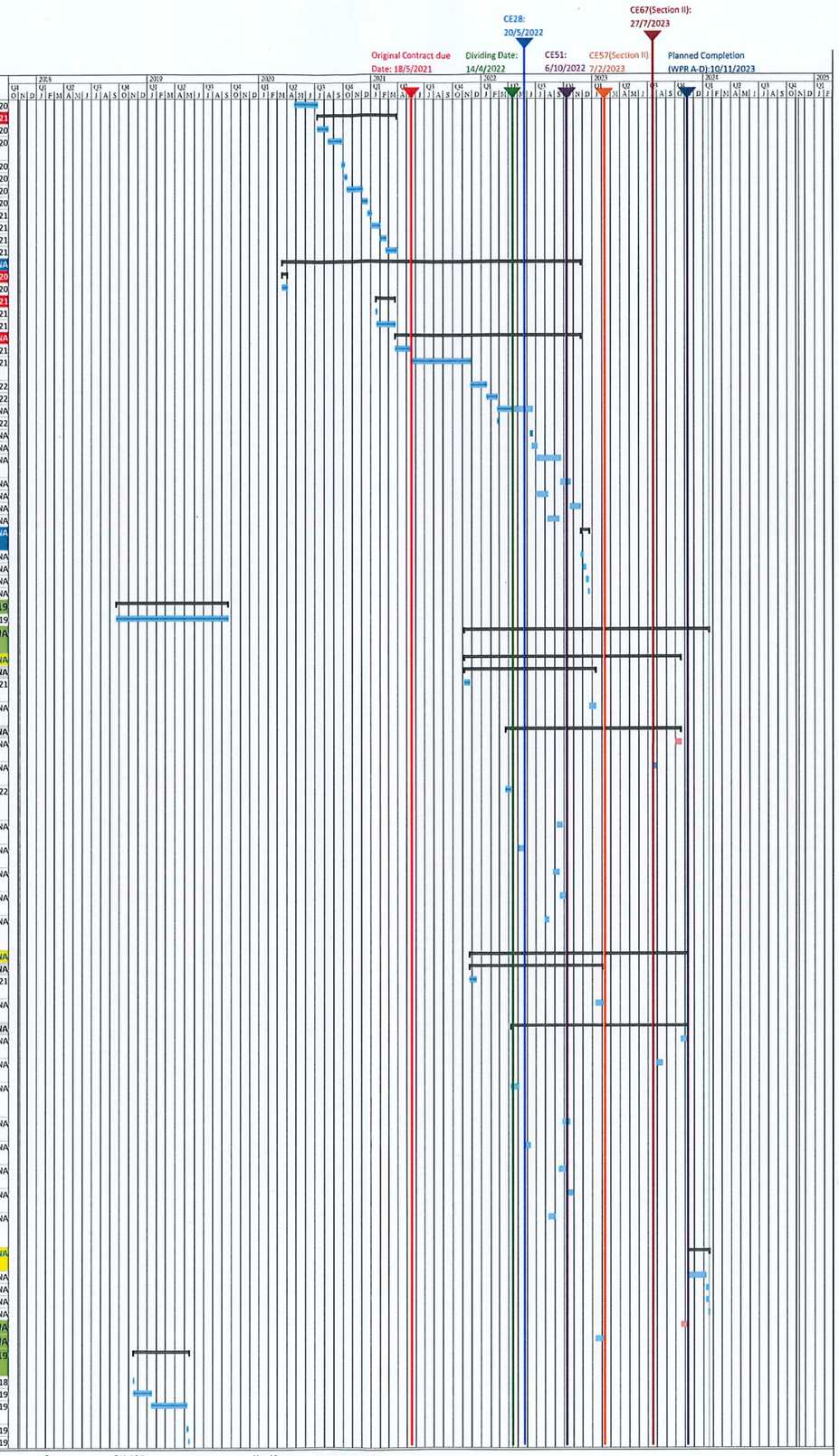
Contract No. 13/WSD/16 - Mainlaying in Tseung Kwan O

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
688	688	Site Clearance and Mobilization	69 days	14/12/20	10/3/21	HK Working Day	686,684	690	0 days	0 days	69 days	100%	14/12/20	10/3/21
689	689	Mini-pile Foundation Works	239 days	11/3/21	29/12/21	HK Working Day			0 days	0 days	239 days	100%	11/3/21	29/12/21
690	690	Erect Temporary Timber Platform for Piling Works	25 days	11/3/21	13/4/21	HK Working Day	688	691	0 days	0 days	25 days	100%	11/3/21	13/4/21
691	691	Pre-drilling works & confirmation of rock head and depth of mini-pile	40 days	14/4/21	1/6/21	HK Working Day	690	692	0 days	0 days	40 days	100%	14/4/21	1/6/21
692	692	Mobilization and Driving Dia. 273mm steel Casting (18 nos)	48 days	2/6/21	29/7/21	HK Working Day	691	693	0 days	0 days	48 days	100%	2/6/21	29/7/21
693	693	Cleaning, Insert T50 reinforcement and Grouting	18 days	30/7/21	19/8/21	HK Working Day	692	662,694	0 days	0 days	18 days	100%	30/7/21	19/8/21
694	694	Setup and Loading Test of Mini-Pile	36 days	20/8/21	2/10/21	HK Working Day	693	695	0 days	0 days	36 days	100%	20/8/21	2/10/21
695	695	Construction Pile Caps (PC-C, PC-P1, PC-P2, PC-P3 & PC-T) and Piers (P1, P2 & P3)	72 days	4/10/21	29/12/21	HK Working Day	694	697	0 days	0 days	72 days	100%	4/10/21	29/12/21
696	696	Pipelaying on Mini-pile Foundation	60 days	30/12/21	14/3/22	HK Working Day			0 days	0 days	60 days	100%	30/12/21	14/3/22
697	697	Temporary Working Platform for Pipe Installation	12 days	30/12/21	13/1/22	HK Working Day	695	698	0 days	0 days	12 days	100%	30/12/21	13/1/22
698	698	Pipe Installation / Welding / Testing / Painting (~115m)	24 days	14/1/22	14/2/22	HK Working Day	697	699	0 days	0 days	24 days	100%	14/1/22	14/2/22
699	699	Concrete Hunching	12 days	15/2/22	28/2/22	HK Working Day	698	700	0 days	0 days	12 days	100%	15/2/22	28/2/22
700	700	Apply top coating of aliphatic polyurethane on site	6 days	1/3/22	7/3/22	HK Working Day	699	701	0 days	0 days	6 days	100%	1/3/22	7/3/22
701	701	Remove Temporary Working Platform	6 days	8/3/22	14/3/22	HK Working Day	700	708	0 days	0 days	6 days	100%	8/3/22	14/3/22
702	702	From Tsui Lam Road to TKO Freshwater PSR (CH. HE.0+00 ~ CH. HE2+11) & (CH.HF0+00 CH.HF3+11)	692 days	6/9/20	29/7/22	Calendar Day			433 days	433 days	692 days	87%	6/9/20	NA
703	703	Batch No 3 - Temporary Works Design and Preliminary Works	30 days	6/9/20	5/10/20	Calendar Day	596	704	0 days	0 days	30 days	100%	6/9/20	5/10/20
704	704	TTA preparation, SLG meetings, obtain RA	150 days	6/10/20	4/3/21	Calendar Day	703		0 days	0 days	150 days	100%	6/10/20	4/3/21
705	705	Material procurement (DN800 MS PIPE) (360m)	255 days	6/9/20	18/5/21	Calendar Day	596	719,721,722,723	0 days	0 days	255 days	100%	6/9/20	18/5/21
706	706	Material procurement (Butterfly Valves)	183 days	6/9/20	7/3/21	Calendar Day	596		0 days	0 days	183 days	100%	6/9/20	7/3/21
707	707	Open Cut (CH.HE0+00 - CH.HE0+27)	108 days	15/3/22	27/7/22	HK Working Day			350 days	350 days	108 days	24%	15/3/22	NA
708	708	Open Cut across Tsui Lam Road (CH.HE0+00 to 0+06)	48 days	15/3/22	16/5/22	HK Working Day	701	709	0 days	350 days	48 days	54%	15/3/22	NA
709	709	Open Cut across Tsui Lam Road (CH.HE0+06 to 0+20)	60 days	17/5/22	27/7/22	HK Working Day	708	840	44 days	350 days	60 days	0%	NA	NA
710	710	Open Cut (CH.HE0+27 - CH.HE2+11)(Inlet B)	359 days	14/5/21	29/7/22	HK Working Day		841	0 days	352 days	359 days	76%	14/5/21	NA
711	711	Issue CE No. 114 - Non-explosive agent near TKO Freshwater Preliminary Service Reservoir	1 day	14/5/21	14/5/21	Calendar Day			0 days	0 days	1 day	100%	14/5/21	14/5/21
712	712	Receiving of Drawing No. SK40134/525 for Proposed Alternative Alignment at TKOFWSR	1 day	20/8/21	20/8/21	HK Working Day		713,714,715,719,721,722,7	0 days	0 days	1 day	100%	20/8/21	20/8/21
713	713	Open Cut, CH.HE0+20 -CH.HE0+27 (Excavation in Rock)	59 days	20/8/21	30/10/21	HK Working Day	712		0 days	0 days	59 days	100%	20/8/21	30/10/21
714	714	Open Cut, CH.HE0+27 -CH.HE1+98(Excavation in Rock)	254 days	20/8/21	30/6/22	HK Working Day	712		376 days	376 days	254 days	76%	20/8/21	NA
715	715	Construction of Combined EMF and MBV Chamber at CH.HE1+90	128 days	20/8/21	22/1/22	HK Working Day	712	716	0 days	0 days	128 days	100%	20/8/21	22/1/22
716	716	Open Cut CH.1+98 & connecting to the existing DN800 F.W. Main at CH.HE2+11	60 days	24/1/22	7/4/22	HK Working Day	715	717	0 days	0 days	60 days	100%	24/1/22	7/4/22
717	717	Construction of flowmeter kiosks and GI cable ducts for Combined EMF and MBV Chamber at CH.HE1+90	90 days	8/4/22	29/7/22	HK Working Day	716		352 days	352 days	90 days	7%	8/4/22	NA
718	718	Water Mains CH.HF0+00 - CH.HF3+10 (Inlet A)	150 days	21/8/21	22/2/22	HK Working Day		841	0 days	0 days	150 days	100%	21/8/21	22/2/22
719	719	Open Cut CH.HF0+00 - CH.HF0+19	67 days	21/8/21	10/11/21	HK Working Day	705,712	720	0 days	0 days	67 days	100%	21/8/21	10/11/21
720	720	Open Cut CH.HF0+19 - CH.HF1+30	60 days	11/11/21	22/1/22	HK Working Day	719		0 days	0 days	60 days	100%	11/11/21	22/1/22
721	721	Construction of Combined EMF and MBV Chamber at CH.HF1+30	60 days	21/8/21	2/11/21	HK Working Day	705,712	726	0 days	0 days	60 days	100%	21/8/21	2/11/21
722	722	Open Cut CH.HF1+30 - CH.HF1+36	31 days	21/8/21	27/9/21	HK Working Day	705,712		0 days	0 days	31 days	100%	21/8/21	27/9/21
723	723	Exposed Pipe CH.HF1+36 - CH.HF2+85	53 days	21/8/21	25/10/21	HK Working Day	705,712	725	0 days	0 days	53 days	100%	21/8/21	25/10/21
724	724	Exposed Pipe to the side wall of TKOFWSR	18 days	5/11/21	25/11/21	HK Working Day	725		0 days	0 days	18 days	100%	5/11/21	25/11/21
725	725	Form Opening and Cast-in short pipe at TKOFWSR	9 days	26/10/21	4/11/21	HK Working Day	723	724	0 days	0 days	9 days	100%	26/10/21	4/11/21
726	726	Construction of flowmeter kiosks and GI cable ducts for Combined EMF and MBV Chamber at CH.HF1+30	90 days	3/11/21	22/2/22	HK Working Day	721		0 days	0 days	90 days	100%	3/11/21	22/2/22
727	727	Landscaping Works	154 days	19/3/18	22/9/18	HK Working Day			0 days	0 days	154 days	100%	19/3/18	22/9/18
728	728	Tree Survey of Exsiting Trees	45 days	19/3/18	2/5/18	Calendar Day	141	741,730	0 days	0 days	45 days	100%	19/3/18	2/5/18
729	729	Tree Planting for Compensation	90 days	6/6/18	20/9/18	HK Working Day	740	827	0 days	0 days	90 days	100%	6/6/18	20/9/18
730	730	Tree Felling (B1, B2)	3 days	3/5/18	5/5/18	HK Working Day	728	731	0 days	0 days	3 days	100%	3/5/18	5/5/18
731	731	Tree Felling (B3 - B8)	4 days	7/5/18	10/5/18	HK Working Day	730	732	0 days	0 days	4 days	100%	7/5/18	10/5/18
732	732	Tree Felling (B9 - B11)	2 days	11/5/18	12/5/18	HK Working Day	731	733	0 days	0 days	2 days	100%	11/5/18	12/5/18
733	733	Tree Felling (B12 - B17)	3 days	14/5/18	16/5/18	HK Working Day	732	734	0 days	0 days	3 days	100%	14/5/18	16/5/18
734	734	Tree Felling (B18)	2 days	17/5/18	18/5/18	HK Working Day	733	735	0 days	0 days	2 days	100%	17/5/18	18/5/18
735	735	Tree Felling (B19 - B22)	2 days	19/5/18	21/5/18	HK Working Day	734	736	0 days	0 days	2 days	100%	19/5/18	21/5/18
736	736	Tree Felling (B23)	2 days	23/5/18	24/5/18	HK Working Day	735	737	0 days	0 days	2 days	100%	23/5/18	24/5/18
737	737	Tree Felling (B24 - B29)	4 days	25/5/18	29/5/18	HK Working Day	736	738	0 days	0 days	4 days	100%	25/5/18	29/5/18
738	738	Tree Felling (B30 - B32)	2 days	30/5/18	31/5/18	HK Working Day	737	739	0 days	0 days	2 days	100%	30/5/18	31/5/18
739	739	Tree Felling (B33)	2 days	1/6/18	2/6/18	HK Working Day	738	740	0 days	0 days	2 days	100%	1/6/18	2/6/18
740	740	Tree Felling (B34 - B35)	2 days	4/6/18	5/6/18	HK Working Day	739	729	0 days	0 days	2 days	100%	4/6/18	5/6/18
741	741	Tree Preservation	120 days	3/5/18	22/9/18	HK Working Day	728		0 days	0 days	120 days	100%	3/5/18	22/9/18
742	742	Mainlaying in Tseung Kwan O (Section II)	1112 days	19/9/18	22/12/22	None			200 days	200 days	1112 days	90%	19/9/18	NA
743	743	Excavation, Pipe Laying, Backfilling and Reinstatement (CH. C0+00 to C15+81)	1263 days	19/9/18	22/12/22	HK Working Day		832	0 days	226 days	1263 days	90%	19/9/18	NA
744	744	CE07 - Realignmengt of Pipeling from CH.C0+00 to CH.C12+00	1 day	22/1/19	22/1/19	HK Working Day	18	747	0 days	0 days	1 day	100%	22/1/19	22/1/19
745	745	CE07 - Early Possession of Portion H	1 day	19/9/18	19/9/18	HK Working Day	139	746	0 days	0 days	1 day	100%	19/9/18	19/9/18
746	746	CE07 - Trial Pit Excavation along Open Cut Trench	12 days	20/9/18	5/10/18	HK Working Day	745	763	0 days	0 days	12 days	100%	20/9/18	5/10/18
747	747	CE07 - HDPE Pipe, Fitting and Valves Procurement and Delivery in Batches	1 day	22/1/19	22/1/19	HK Working Day	744	763	0 days	0 days	1 day	100%	22/1/19	22/1/19
748	748	CE17 - Construction Method for Pipeline from CH.C14+82 - CH.C15+81 being changed to Trenchless Method	1 day	3/1/20	3/1/20	HK Working Day	39	749	0 days	0 days	1 day	100%	3/1/20	3/1/20
749	749	CE17 - Tendering and Subletting	60 days	3/1/20	16/3/20	HK Working Day	748	750,751,784,785	0 days	0 days	60 days	100%	3/1/20	16/3/20
750	750	CE17 - Method Statement and Temporary Works Design Submission	30 days	17/3/20	24/4/20	HK Working Day	749	788,789	0 days	0 days	30 days	100%	17/3/20	24/4/20
751	751	CE17 - Method Statement Submission for TBM	30 days	17/3/20	24/4/20	HK Working Day	749		0 days	0 days	30 days	100%	17/3/20	24/4/20
752	752	CE57 - Realignment of Water Main by Trenchless Method in SENTX	1 day	18/1/22	18/1/22	HK Working Day	68		0 days	0 days	1 day	100%	18/1/22	18/1/22
753	753	CE57 - Tendering and Subletting	60 days	3/1/20	16/3/20	HK Working Day		756,757,803	0 days	0 days	60 days	100%	3/1/20	16/3/20
754	754	CE57 - WSD Instructed to Retender	1 day	3/4/20	3/4/20	Calendar Day		755	0 days	0 days	1 day	100%	3/4/20	3/4/20
755	755	CE57 - Retendering, Review and Approval	88 days	3/4/20	29/6/20	Calendar Day	754		0 days	0 days	88 days	100%	3/4/20	29/6/20
756	756	CE57 - Method Statement and Temporary Works Design Submission	30 days	17/3/20	24/4/20	HK Working Day	753	806	0 days	0 days	30 days	100%	17/3/20	24/4/20
757	757	CE57 - Method Statement Submission for TBM	30 days	17/3/20	24/4/20	HK Working Day	753	808	0 days	0 days	30 days	100%	17/3/20	24/4/20
758	758	CE07 - Common Trench Excavation by Open Cut	825 days	23/1/19	5/11/21	HK Working Day		822	0 days	0 days	825 days	100%	23/1/19	5/11/21
759	759	DN1200 MS Pipe, Open Cut	689 days	23/1/19	25/5/21	HK Working Day			0 days	0 days	689 days	100%	23/1/19	25/5/21
760	760	CH.CT15+51 - CH.CT2+65 OC	114 days	2/1/21	25/5/21	HK Working Day	761	771,779,780	0 days	0 days	114 days	100%	2/1/21	25/5/21
761	761	CH.CT.0+51 - CH.CT1+51 OC	100 days	1/9/20	31/12/20	HK Working Day	762	760,767,772	0 days	0 days	100 days	100%	1/9/20	31/12/20
762	762	CH.CT.0+00 - CH.CT0+51 OC	51 days	3/7/20	31/8/20	HK Working Day	766	761,773	0 days	0 days	51 days	100%	3/7/20	31/8/20
763	763	CH.CA0+00 - CH.CA1+00 OC	100 days	23/1/19	29/5/19	HK Working Day	746,747	764,774	0 days	0 days	100 days	100%	23/1/19	29/5/19
764	764	CH.CA1+00 - CH.CA2+00 OC	100 days	30/5/19	26/9/19	HK Working Day	763	765,775	0 days	0 days	100 days	100%	30/5/19	26/9/19
765	765	CH.CA2+00 - CH.CA3+00 OC	100 days	27/9/19	30/1/20	HK Working Day	764	766,776	0 days	0 days	100 days	100%	27/9/19	30/1/20
766	766	CH.CA3+00 - CH.CA4+00 OC	124 days	31/1/20	2/7/20	HK Working Day	765	762,777	0 days	0 days	124 days	100%	31/1/20	2/7/20
767	767	CH.CA4+00 - CH.CA-4+24 OC	24 days	2/1/21	29/1/21	HK Working Day	761		0 days	0 days	24 days	100%	2/1/21	29/1/21
768	768	NS250 HDPE Pipe with Valves, Open Cut	710 days	30/5/19	19/10/21	HK Working Day		831	0 days	0 days	710 days	100%	30/5/19	19/10/21
769	769	CH.KT2+80 - CH.KT3+60 OC with addtioanal tees and fire hydrant	56 days	12/8/21	19/10/21	HK Working Day	770		0 days	0 days	56 days	100%	12/8/21	19/10/21
770	770	CH.KT2+23 - CH.KT2+80 OC	29 days	9/7/21	11/8/21	HK Working Day	771	769,780	0 days	0 days	29 days	100%	9/7/21	11/8/21
771	771	CH.KT1+51 - CH.KT2+23 OC	36 days	26/5/21	8/7/21	HK Working Day	760,772	770	0 days	0 days	36 days	100%	26/5/21	8/7/21
772	772	CH.KT0+51 - CH.KT1+51 OC	50 days	2/1/21	4/3/21	HK Working Day	761,773	771	0 days	0 days	50 days	100%	2/1/21	4/3/21
773	773	CK.KT0+00 - CH.KT0+51 OC	26 days	1/9/20	30/9/20	HK Working Day	762	772	0 days	0 days	26 days	100%	1/9/20	30/9/20
774	774	CH.KA0+00 - CH.KA1+00 OC	50 days	30/5/19	29/7/19	HK Working Day	763	775	0 days	0 days	50 days	100%	30/5/19	29/7/19
775	775	CH.KA1+00 - CH.KA2+00 OC	50 days	27/9/19	26/11/19	HK Working Day	764,774	776	0 days	0 days	50 days	100%	27/9/19	26/11/19
776	776	CH.KA2+00 - CH.KA3+00 OC	50 days	31/1/20	28/3/20	HK Working Day	765,775	777,781	0 days	0 days	50 days	100%	31/1/20	28/3/20
777	777	CH.KA3+00 - CH.KA4+00 OC	50 days	3/7/20	29/8/20	HK Working Day	766,776		0 days	0 days	50 days	100%	3/7/20	29/8/20
778	778	Construction of Chambers	475 days	30/3/20	5/11/21	HK Working Day		831	0 days	0 days	475 days	100%	30/3/20	5/11/21
779	779	Combined DAV & IT Chamber for DN1200 MS Pipe at CH.CT2+47	60 days	26/5/21	5/8/21	HK Working Day	760	780	0 days	0 days	60 days	100%	26/5/21	5/8/21
780	780	Combiined Washout Pump Pit for DN1200 MS Pipe and NS250 HDPE Pipe at CH.CT2+43	71 days	12/8/21	5/11/21	HK Working Day	760,770,779		0 days	0 days	71 days	100%	12/8/21	5/11/21
781	781	DN900 Valve Chamber with by-pass DN150 Pipe at CH.CA4+24	60 days	30/3/20	13/6/20	HK Working Day	776		0 days	0 days	60 days	100%	30/3/20	13/6/20
782	782	CE17 - Trenchless Work between Pit 137A and Pit 137B	269 days	17/3/20	26/3/21	None		822	0 days	0 days	269 days	100%	17/3/20	26/3/21
783	783	Inspection Pit Excavation	12 days	17/3/20	1/4/20	None			0 days	0 days	12 days	100%	17/3/20	1/4/20
784	784	Inspection Pit Excavation - Pit137A	14 days	17/3/20	1/4/20	HK Working Day	749	787,788	0 days	0 days	14 days	100%	17/3/20	1/4/20
785	785	Inspection Pit Excavation - Pit137B	14 days	17/3/20	1/4/20	HK Working Day	749	787,789	0 days	0 days	14 days	100%	17/3/20	1/4/20
786	786	Construction Jacking / Receiving Pits	70 days	2/4/20	8/7/20	None			0 days	0 days	70 days	100%	2/4/20	8/7/20
787	787	Mobilization, Setup and Perliminary Works	3 days	2/4/20	6/4/20	HK Working Day	784,785	788,789	0 days	0 days	3 days	100%	2/4/20	6/4/20
788	788	Construction of Pit 137A	60 days	25/4/20	8/7/20	HK Working Day	784,750,787		0 days	0 days	60 days	100%	25/4/20	8/7/20



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

ID		Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
789	789	Construction of Pit 137B	60 days	25/4/20	8/7/20	HK Working Day	785,750,787	791	0 days	0 days	60 days	100%	25/4/20	8/7/20
790	790	TBM Sleeve Pipe Jacking from Pit 137B to Pit 137A	215 days	9/7/20	26/3/21	HK Working Day		163	0 days	0 days	215 days	100%	9/7/20	26/3/21
791	791	Establishment at Pit 137B	30 days	9/7/20	12/8/20	HK Working Day	789	792	0 days	0 days	30 days	100%	9/7/20	12/8/20
792	792	OD1920 Steel Sleeve Pipe for both DN1200 & NS250 (Pit 137B - Pit 137A) (CH.CC0+10 to CH.CC.1+24) in Soil (114m; 3m/day)	38 days	13/8/20	25/9/20	HK Working Day	791	793	0 days	0 days	38 days	100%	13/8/20	25/9/20
793	793	Remove setup at Pit 137B	6 days	26/9/20	5/10/20	HK Working Day	792	794	0 days	0 days	6 days	100%	26/9/20	5/10/20
794	794	Setup for Pipe Laying at Pit 137B	6 days	6/10/20	12/10/20	HK Working Day	793	795	0 days	0 days	6 days	100%	6/10/20	12/10/20
795	795	DN1200 MS Pipe Laying inside jacking pipe (114m) (8m per 3 days)	43 days	13/10/20	2/12/20	HK Working Day	794	796	0 days	0 days	43 days	100%	13/10/20	2/12/20
796	796	NS250 HDPE Pipe Laying inside jacking pipe (114m) (8m per day)	15 days	3/12/20	19/12/20	HK Working Day	795	797	0 days	0 days	15 days	100%	3/12/20	19/12/20
797	797	Formwork & Setup for Grouting the gap between pipe and Sleeve pipe	9 days	21/12/20	2/1/21	HK Working Day	796	798	0 days	0 days	9 days	100%	21/12/20	2/1/21
798	798	Grouting Works (30 meter/day)	24 days	4/1/21	30/1/21	HK Working Day	797	799,808	0 days	0 days	24 days	100%	4/1/21	30/1/21
799	799	Pipe Laying (HB, BVB, Short Pipe), Thrust Block & backfilling inside Pit 137A	14 days	1/2/21	19/2/21	HK Working Day	798	800	0 days	0 days	14 days	100%	1/2/21	19/2/21
800	800	Remove ELS and Extract Sheetpile at Pit 137A	30 days	20/2/21	26/3/21	HK Working Day	799		0 days	0 days	30 days	100%	20/2/21	26/3/21
801	801	CE57 - Trenchless Work between Pit 137B & Pit 137C	798 days	17/3/20	24/11/22	HK Working Day		822	0 days	226 days	798 days	61%	17/3/20	NA
802	802	Inspection Pit Excavation	14 days	17/3/20	1/4/20	HK Working Day			0 days	0 days	14 days	100%	17/3/20	1/4/20
803	803	Inspection Pit Excavation - Pit137C	14 days	17/3/20	1/4/20	HK Working Day	753	806	0 days	0 days	14 days	100%	17/3/20	1/4/20
804	804	Construction Jacking / Receiving Pits	52 days	18/1/21	22/3/21	HK Working Day			0 days	0 days	52 days	100%	18/1/21	22/3/21
805	805	Mobilization, Setup and Perliminary Works	3 days	18/1/21	20/1/21	HK Working Day		806	0 days	0 days	3 days	100%	18/1/21	20/1/21
806	806	Construction of Pit 137C	49 days	21/1/21	22/3/21	HK Working Day	756,805,803	808	0 days	0 days	49 days	100%	21/1/21	22/3/21
807	807	TBM Sleeve Pipe Jacking from Pit 137B to Pit 137C	497 days	23/3/21	24/11/22	HK Working Day			226 days	226 days	497 days	56%	23/3/21	NA
808	808	Revised Establishment at Pit 137B	39 days	23/3/21	12/5/21	HK Working Day	806,757,798	809	0 days	0 days	39 days	100%	23/3/21	12/5/21
809	809	OD1920 Steel Sleeve Pipe for both DN1200 & NS250 (from Pit 137B - Pit 137C) (CH.CB0+00 to CH.CB.2+46) in Soil (246m; 1.5m/day)	164 days	13/5/21	26/11/21	HK Working Day	808	810	0 days	0 days	164 days	100%	13/5/21	26/11/21
810	810	Annulus Grouting and Remove setup at Pit 137B	41 days	27/11/21	17/1/22	HK Working Day	809	811	0 days	0 days	41 days	100%	27/11/21	17/1/22
811	811	Setup for Pipe Laying at Pit 137B	28 days	18/1/22	22/2/22	HK Working Day	810	812,813	0 days	0 days	28 days	100%	18/1/22	22/2/22
812	812	DN1200 MS Pipe Laying inside jacking pipe (246m) (8m per 3 days)	93 days	23/2/22	18/6/22	HK Working Day	811	814	0 days	222 days	93 days	46%	23/2/22	NA
813	813	NS250 HDPE Pipe Laying inside jacking pipe (246m) (8m per day)	4 days	23/2/22	26/2/22	HK Working Day	811	814	0 days	0 days	4 days	100%	23/2/22	26/2/22
814	814	Formwork & Setup for Grouting the gap between pipe and Sleeve pipe	3 days	15/6/22	17/6/22	HK Working Day	812,813	815	0 days	226 days	3 days	0%	NA	NA
815	815	Grouting Works (20 meter/day)	13 days	18/6/22	4/7/22	HK Working Day	814	816,818	0 days	226 days	13 days	0%	NA	NA
816	816	Pipe Connection and Construction of Combined Inspection Pit and Washout Chamber (Type III) at Pit 137C	66 days	5/7/22	20/9/22	HK Working Day	815	817	0 days	226 days	66 days	0%	NA	NA
817	817	Thrust Block & backfilling inside Pit 137C	24 days	21/9/22	20/10/22	HK Working Day	816	819	0 days	226 days	24 days	0%	NA	NA
818	818	Pipe Connection, Thrust Block & backfilling inside Pit 137B	30 days	5/7/22	8/8/22	HK Working Day	815	820	0 days	286 days	30 days	0%	NA	NA
819	819	Remove ELS and Extract Sheetpile at Pit 137C	30 days	21/10/22	24/11/22	HK Working Day	817		226 days	226 days	30 days	0%	NA	NA
820	820	Remove ELS and Extract Sheetpile at Pit 137B	30 days	9/8/22	13/9/22	HK Working Day	818		286 days	286 days	30 days	0%	NA	NA
821	821	NS250 HDPE Pipe Static Pressure, Pipeling Cleaning, CCTV Inspection, Sterilization, Water Sampling and Handover to WSD	24 days	25/11/22	22/12/22	HK Working Day			226 days	226 days	24 days	0%	NA	NA
822	822	NS250 HDPE Pipe - Static Pressure Test - Portion H (Area 137)	7 days	25/11/22	2/12/22	HK Working Day	758,801,782	823	0 days	226 days	7 days	0%	NA	NA
823	823	NS250 HDPE Pipe - Pipeline Cleaning and CCTV Inspection at Portion H (Area 137)	7 days	3/12/22	10/12/22	HK Working Day	822	824	0 days	226 days	7 days	0%	NA	NA
824	824	NS250 HDPE Pipe - Sterilization and Water Sampling Portion H (Area 137)	7 days	12/12/22	19/12/22	HK Working Day	823	825	0 days	226 days	7 days	0%	NA	NA
825	825	NS250 HDPE Pipe - Portion H (Area 137)	3 days	20/12/22	22/12/22	HK Working Day	824		226 days	226 days	3 days	0%	NA	NA
826	826	Establishment	365 days	21/9/18	20/9/19	Calendar Day			0 days	0 days	365 days	100%	21/9/18	20/9/19
827	827	Establishment of Landscape Works	365 days	21/9/18	20/9/19	Calendar Day	729		0 days	0 days	365 days	100%	21/9/18	20/9/19
828	828	MS Pipe Static Pressure Test, Pipeline Cleaning, CCTV Inspection, Sterilization and Water Sampling	652 days	6/11/21	18/1/24	HK Working Day			252 days	252 days	652 days	13%	6/11/21	NA
829	829	Static Pressure Test for DN1200 MS Pipe	711 days	6/11/21	17/10/23	Calendar Day			0 days	0 days	711 days	22%	6/11/21	NA
830	830	Section II	308 days	6/11/21	11/1/23	None		861	0 days	199 days	308 days	50%	6/11/21	NA
831	831	CE07 - DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at CH.CA4+24 to CH.CT.2+65	14 days	6/11/21	22/11/21	HK Working Day	768,778	844	0 days	0 days	14 days	100%	6/11/21	22/11/21
832	832	CE17 & CE57 - DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at CH.CA4+24 to Wan Po Road (CH. A0+00)	14 days	23/12/22	11/1/23	HK Working Day	743	845	0 days	226 days	14 days	0%	NA	NA
833	833	Section I	411 days	22/3/22	17/10/23	None		860	0 days	0 days	411 days	14%	22/3/22	NA
834	834	DN1200 MS Pipe - Static Pressure Test From DN900 Valve Chamber at Wan Po Road (CH. A0+00) to Pit D (CH.A 22+70)	14 days	29/9/23	17/10/23	HK Working Day	348,162,170,179,335	847	0 days	0 days	14 days	0%	NA	NA
835	835	CE67 - DN1200 MS Pipe - Static Pressure Test From Pit D at SKR Carpark to DN900 Valve Chamber at TKO Landfill Stage I Area A (CH.FB1+66)	7 days	20/7/23	27/7/23	HK Working Day	410	848	0 days	68 days	7 days	0%	NA	NA
836	836	CE36 & CE34 - 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 TKO Landfill Stage I Area B (CH. FC 13+44)	14 days	22/3/22	7/4/22	HK Working Day	271,293	849	0 days	0 days	14 days	100%	22/3/22	7/4/22
837	837	CE59 & 60 - DN1200 MS Pipe - Static Pressure Test From TKO Landfill Stage I Area B (CH.FC13+44) to Pit K at Po Yap Road Roundabout	14 days	8/9/22	24/9/22	HK Working Day	230,211	850	0 days	314 days	14 days	0%	NA	NA
838	838	CE28 & CE50 - DN1200 MS Pipe - Static Pressure Test From Pit K at Po Yap Road Roundabout to Pit P at Po Shun Road Verge Area	14 days	4/5/22	20/5/22	HK Working Day	506,555	851	0 days	420 days	14 days	0%	NA	NA
839	839	CE51 - DN1200 MS Pipe - Static Pressure Test From Pit P at Po Shun Road - Pit R at Control Site CS-108 (Abandoned Road)	14 days	27/8/22	13/9/22	HK Working Day	481	852	0 days	324 days	14 days	0%	NA	NA
840	840	CE51 - DN1200 MS Pipe - Static Pressure Test From Pit R at Mau Wu Tsai Abandoned Road to DN800 EMF & BV Chamber at TKO F.W.S.R.(CH. HE1+90)	14 days	19/9/22	6/10/22	HK Working Day	680,647,638,629,611	853	0 days	306 days	14 days	0%	NA	NA
841	841	CE51 - DN800 & DN1200 MS Pipe - Static Pressure Test From DN800 EMF & BV Chamber at TKO F.W.S.R.(CH. HE1+70) to CH. J0+57 and to DN800 EMF & BV Chamber (CH. HE1+90)	10 days	30/7/22	10/8/22	HK Working Day	710,718	854	0 days	352 days	10 days	0%	NA	NA
842	842	Pipeline Cleaning and CCTV Inspection for DN1200 MS Pipe	580 days	23/11/21	8/11/23	HK Working Day		856	0 days	249 days	580 days	13%	23/11/21	NA
843	843	Section II	354 days	23/11/21	4/2/23	HK Working Day			475 days	475 days	354 days	50%	23/11/21	NA
844	844	CE07 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber at CH.CA4+24 to to CH.CT.2+65	18 days	23/11/21	13/12/21	HK Working Day	831		0 days	0 days	18 days	100%	23/11/21	13/12/21
845	845	CE17 & CE57 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber at CH.CA4+24 to Wan Po Road (CH. A0+00)	18 days	12/1/23	4/2/23	HK Working Day	832		475 days	475 days	18 days	0%	NA	NA
846	846	Section I	470 days	8/4/22	8/11/23	HK Working Day			249 days	249 days	470 days	4%	8/4/22	NA
847	847	DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From Pit D at SKR Carpark to DN900 Valve Chamber at TKO Landfill Stage I Area A (CH.FB1+66)	18 days	18/10/23	8/11/23	HK Working Day	834		249 days	249 days	18 days	0%	NA	NA
848	848	CE67 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From Pit D at SKR Carpark to DN900 Valve Chamber at TKO Landfill Stage I Area A (CH.FB1+66)	18 days	28/7/23	17/8/23	HK Working Day	835		317 days	317 days	18 days	0%	NA	NA
849	849	CE36 & CE34 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN900 Valve Chamber at TKO Landfill Stage I Area A (CH. FB1+66) to DN900 Valve Chamber at TKO Landfill Stage I Area B (CH. FC 13+26)	18 days	8/4/22	3/5/22	HK Working Day	836		701 days	701 days	18 days	33%	8/4/22	NA
850	850	CE59 & CE60 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From TKO Landfill Stage I Area B (CH.FC13+44) to Pit K at Po Yap Road Roundabout	18 days	26/9/22	18/10/22	HK Working Day	837		563 days	563 days	18 days	0%	NA	NA
851	851	CE28 & CE50 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From Pit K at Po Yap Road Roundabout to Pit P at Po Shun Road Verge Area	18 days	21/5/22	11/6/22	HK Working Day	838		669 days	669 days	18 days	0%	NA	NA
852	852	CE51 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From Pit P at Po Shun Road - Pit R at Control Site CS-108 (Abandoned Road)	18 days	14/9/22	6/10/22	HK Working Day	839		573 days	573 days	18 days	0%	NA	NA
853	853	CE51 - DN1200 MS Pipe - Pipeline Cleaning and CCTV Inspection From Pit R at Mau Wu Tsai Abandoned Road to DN800 EMF & BV Chamber at TKO	18 days	7/10/22	27/10/22	HK Working Day	840		555 days	555 days	18 days	0%	NA	NA
854	854	CE51 - DN800 MS Pipe - Pipeline Cleaning and CCTV Inspection From DN800 EMF & BV Chamber at TKO F.W.S.R.(CH. HE1+70) to CH. J0+57 and to DN800 EMF & BV Chamber	18 days	11/8/22	31/8/22	HK Working Day	841		601 days	601 days	18 days	0%	NA	NA
855	855	Sterilization, Water Sampling and Final Connection to TKO Fresh Water Service Reservoir & Handover to WSD Region	71 days	9/11/23	18/1/24	Calendar Day			296 days	296 days	71 days	0%	NA	NA
856	856	DN800 & DN1200 MS Pipe - Portion I & Portion H (Total Water = 9700 cu.m)	60 days	9/11/23	7/1/24	Calendar Day	842	857,858	0 days	296 days	60 days	0%	NA	NA
857	857	Final Connection of DN800 (Inlet B)	7 days	8/1/24	15/1/24	HK Working Day	856	859	0 days	252 days	7 days	0%	NA	NA
858	858	Final Connection of DN800 (Inlet A)	7 days	8/1/24	15/1/24	HK Working Day	856	859	0 days	252 days	7 days	0%	NA	NA
859	859	DN800 & DN1200 MS Pipe Handover to WSD Region - Portion I & Portion H (Area 137)	3 days	16/1/24	18/1/24	HK Working Day	857,858		252 days	252 days	3 days	0%	NA	NA
860	860	EOT for Section I	20 days	18/10/23	10/11/23	HK Working Day	833	9	0 days	0 days	20 days	0%	NA	NA
861	861	EOT for Section II	20 days	12/1/23	7/2/23	HK Working Day	830	9	226 days	226 days	20 days	0%	NA	NA
862	862	Water Supply to Tseung Kwan O Desalination Plant at Fill Bank of Tseung Kwan O Area 137 (Portion J)	143 days	16/11/18	15/5/19	HK Working Day			0 days	0 days	143 days	100%	16/11/18	15/5/19
863	863	CE02 - Water Supply to TKO Desalination Plant at Fill Bank of TKO Area 137	1 day	16/11/18	16/11/18	HK Working Day	16	864	0 days	0 days	1 day	100%	16/11/18	16/11/18
864	864	Procurement of Major Material	48 days	16/11/18	14/1/19	HK Working Day	863	865	0 days	0 days	48 days	100%	16/11/18	14/1/19
865	865	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	15/1/19	7/5/19	HK Working Day	864	866	0 days	0 days	89 days	100%	15/1/19	7/5/19
866	866	Sterilization and Flushing NS250 HDPE Pipe (From T0+00 to T23+64)	4 days	8/5/19	11/5/19	HK Working Day	865	867	0 days	0 days	4 days	100%	8/5/19	11/5/19
867	867	Water Sampling	1 day	14/5/19	14/5/19	HK Working Day	866	868	0 days	0 days	1 day	100%	14/5/19	14/5/19

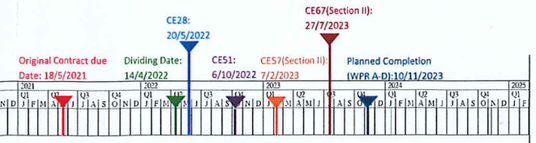


Project Programme As of 14/4/

Task, Split, Milestone, Summary, Project Summary, Inactive Task, Inactive Milestone, Inactive Summary, Manual Task, Duration-only, Manual Summary Rollup, Manual Summary, Start-only, Finish-only, External Tasks, External Milestone, Deadline, Critical, Critical Split, Progress, Manual Progress

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

ID	ID	Task Name	Duration	Start	Finish	Task Calendar	Predecessors	Successors	Free Slack	Total Slack	Duration	% Complete	Actual Start	Actual Finish
868	868	Backfill at T23+64 after completion of Water Sampling Test	1 day	15/5/19	15/5/19	HK Working Day	867	869	0 days	0 days	1 day	100%	15/5/19	15/5/19
869	869	Handover Portion J to WSD Region	1 day	15/5/19	15/5/19	HK Working Day	868		0 days	0 days	1 day	100%	15/5/19	15/5/19



Appendix B

Overview of Mainlaying in Tseung Kwan O

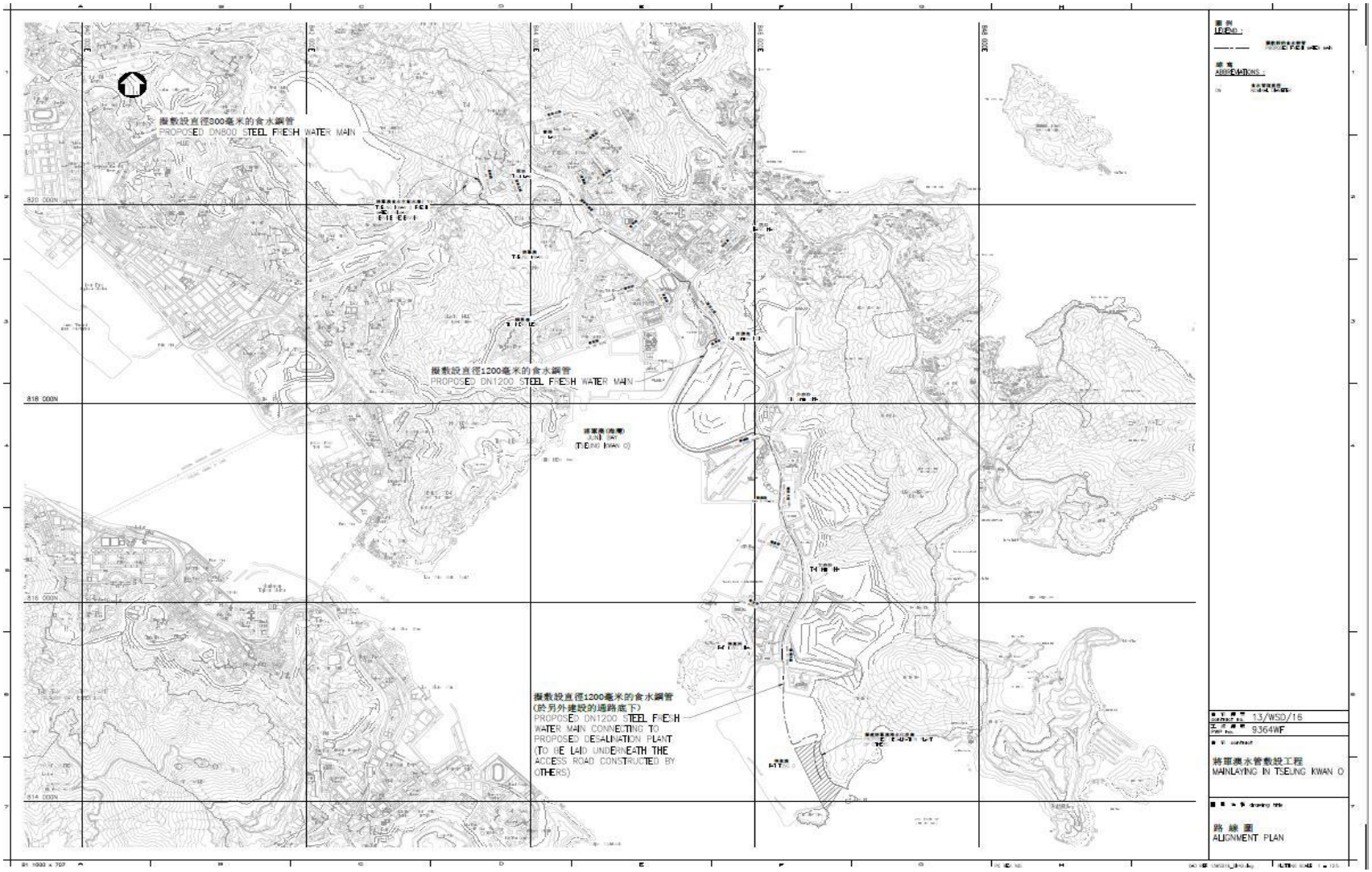


Figure B1. Overview of Mainlaying in TKO

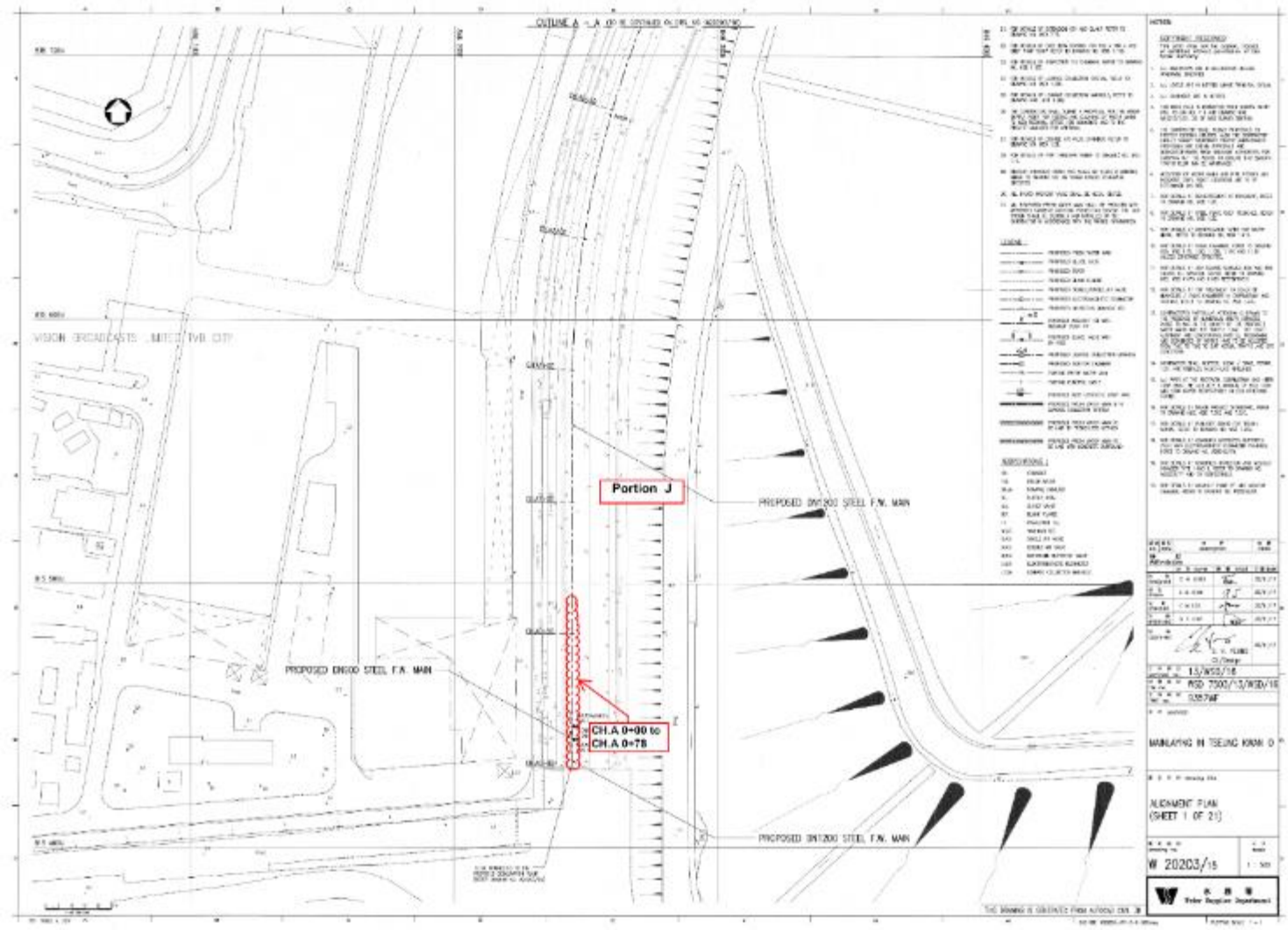


Figure B2. Location Plan for Portion J - CH.A 0+00 to CH.A 0+78

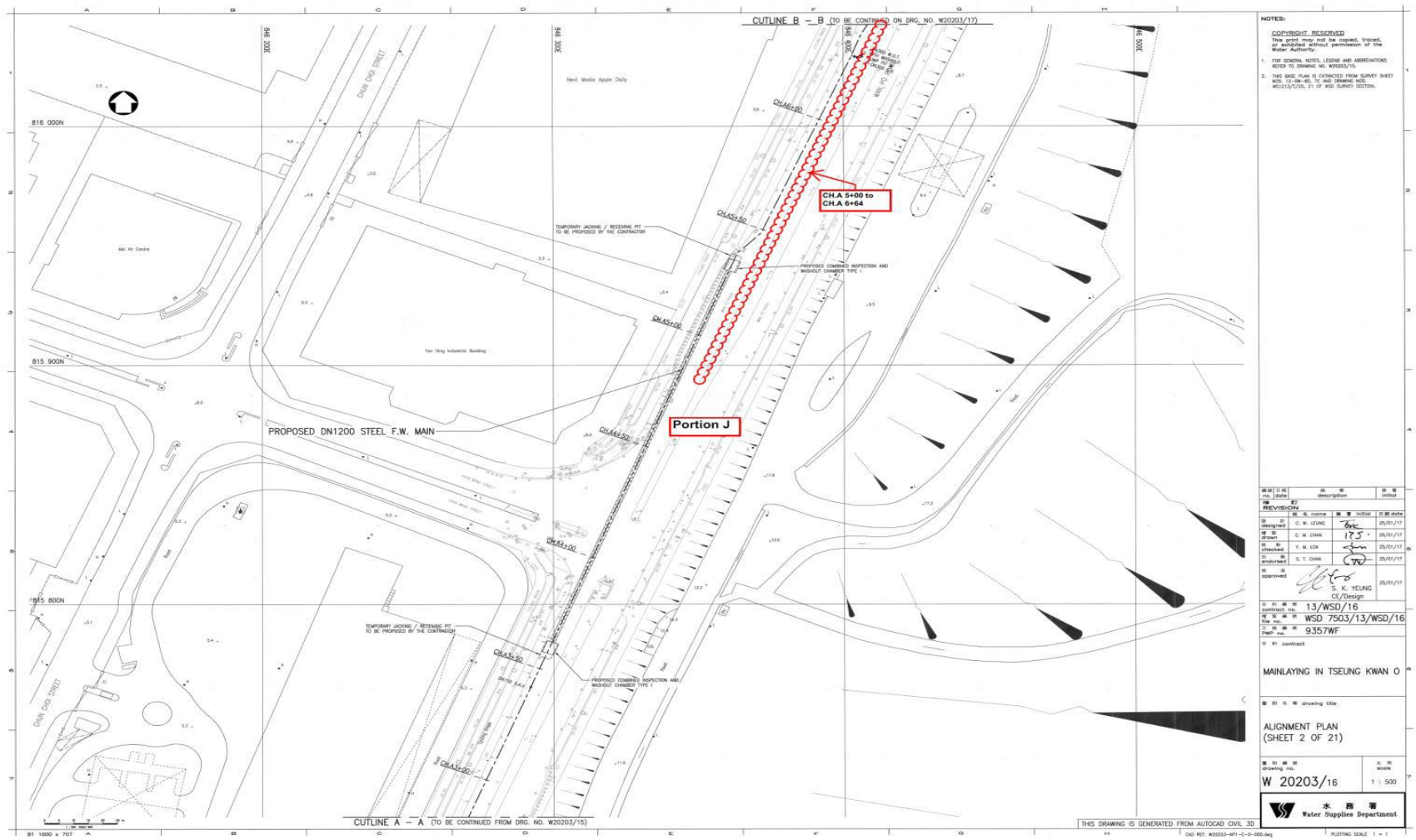


Figure B3. Location Plan for Portion J - CH.A 5+00 to CH.A 6+64

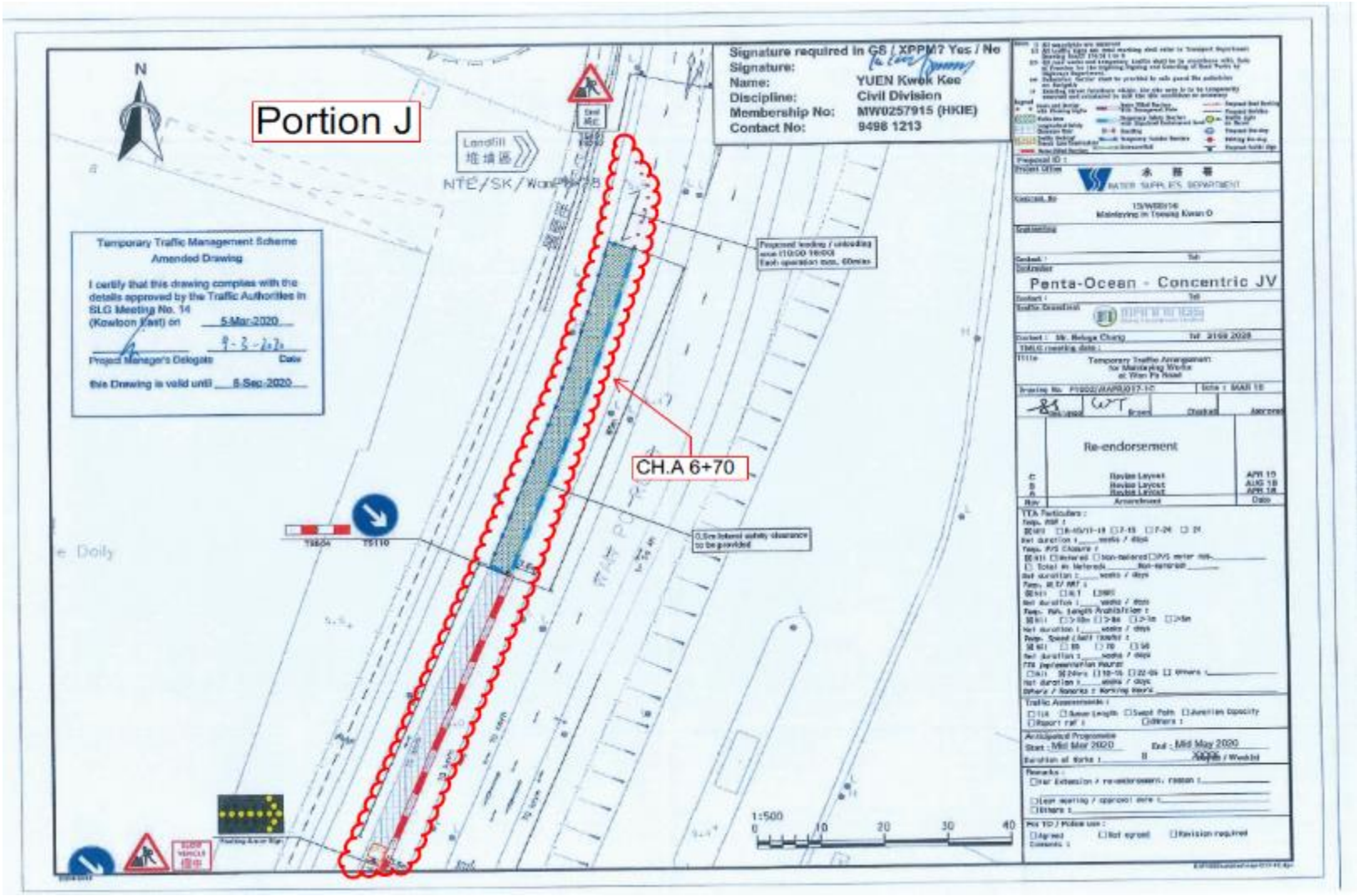


Figure B4. Location Plan for Portion J - CH.A 6+70

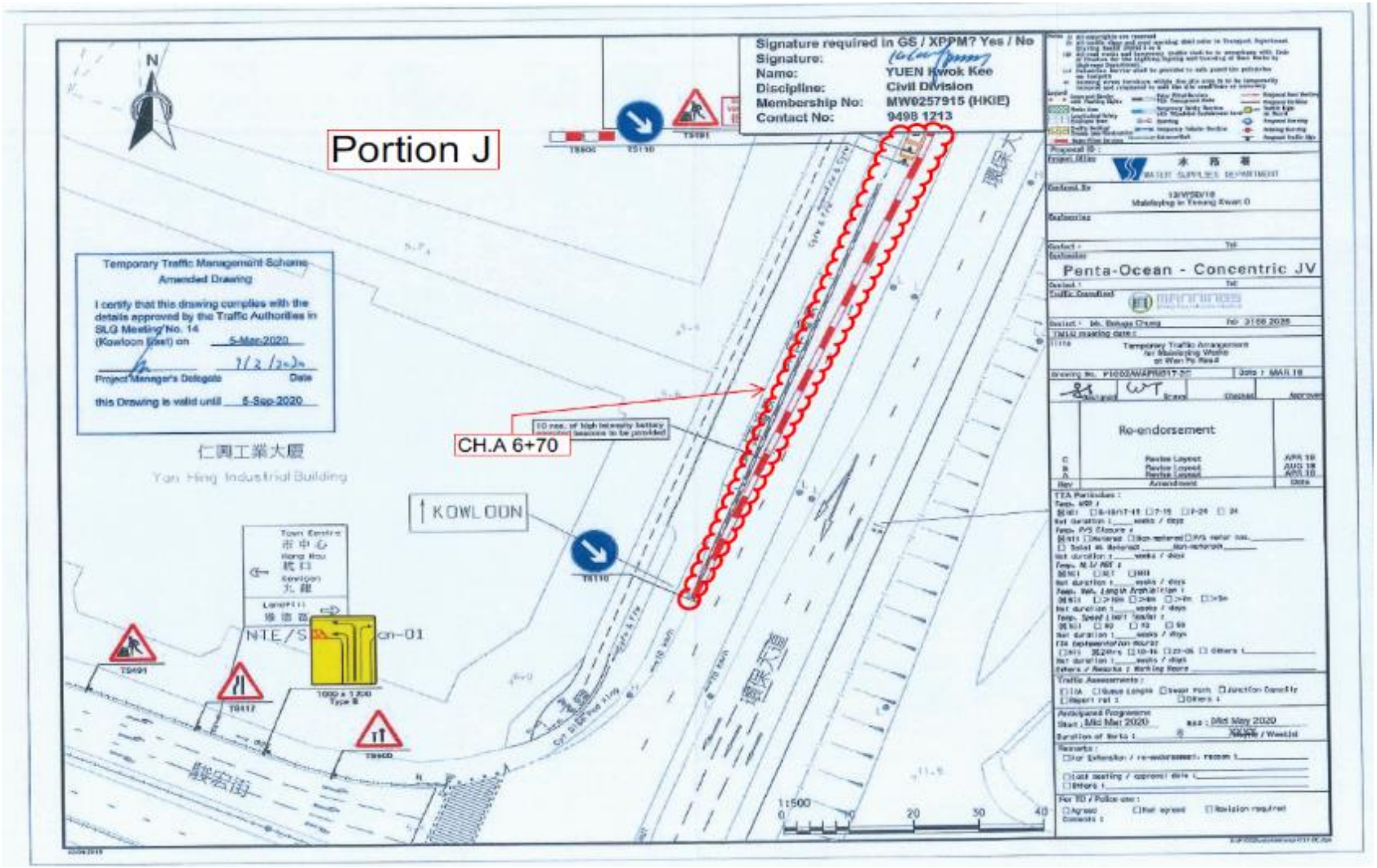


Figure B5. Location Plan for Portion J - CH.A 6+70

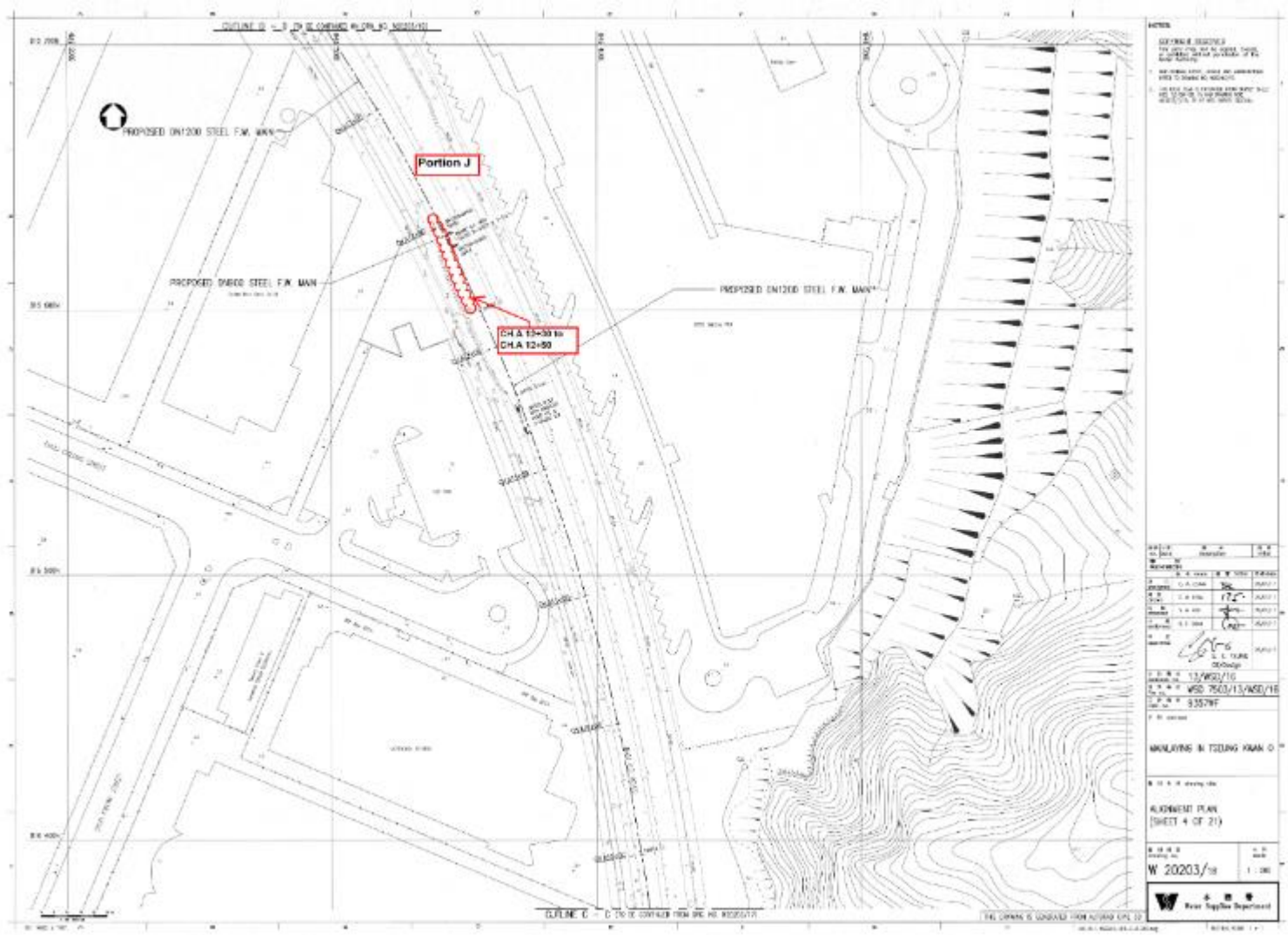


Figure B6. Location Plan for Portion J - CH.A 12+30 to CH.A 12+50

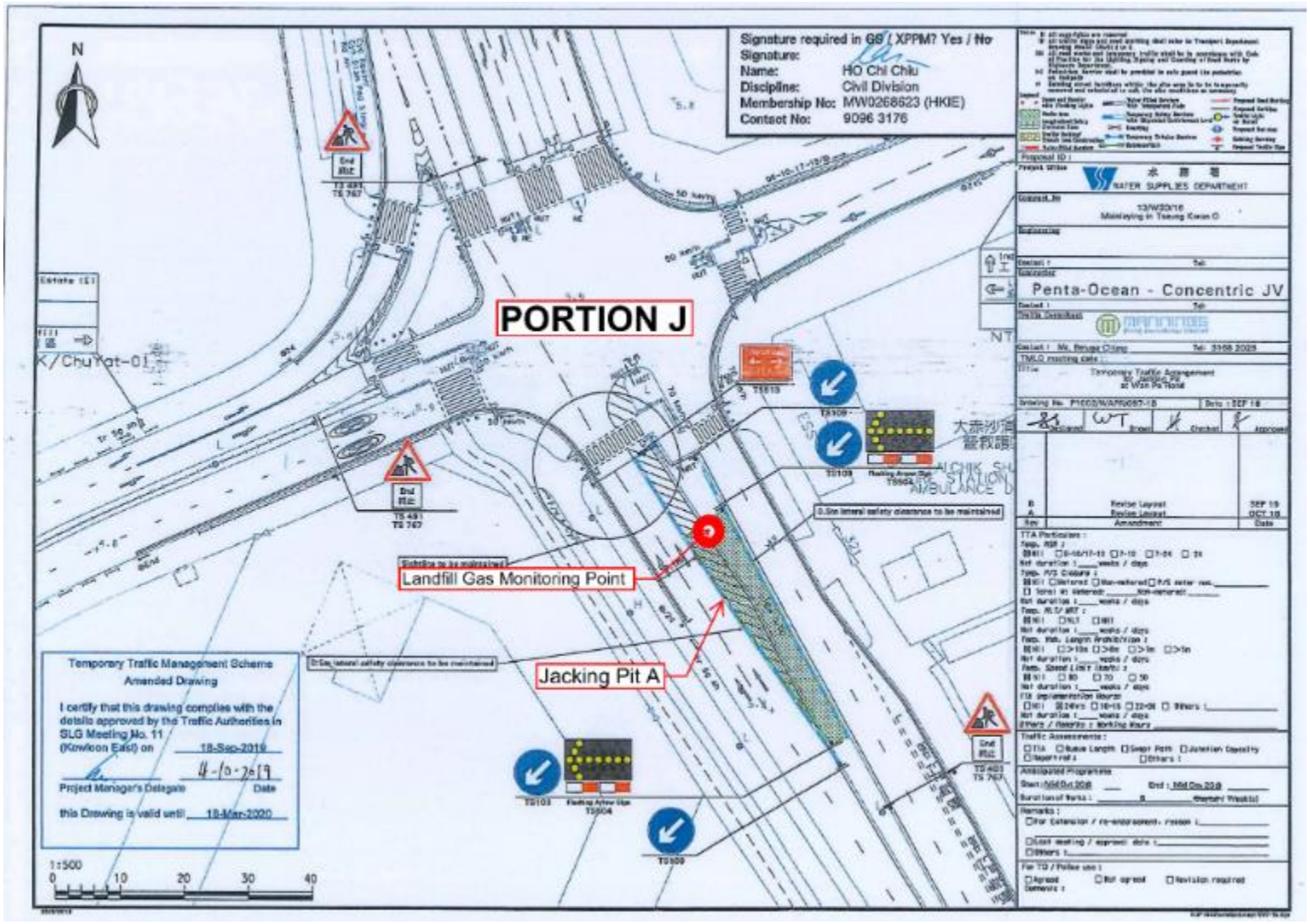


Figure B7. Location Plan for Portion J – CH. A13+50 to CH.A 14+00 (Pit A)

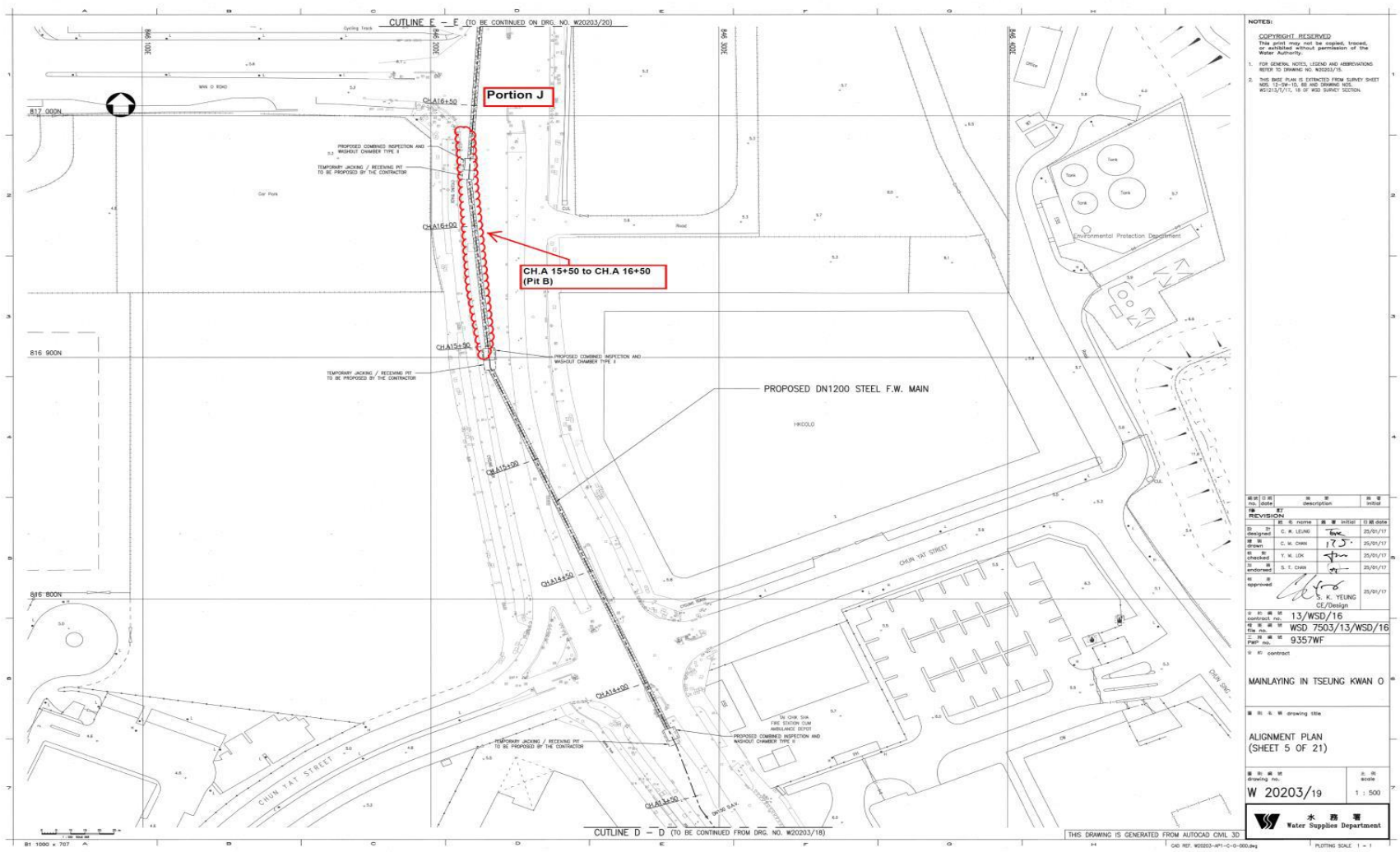


Figure B8. Location Plan for Portion J – CH. A15+50 to CH.A 16+50 (Pit B)

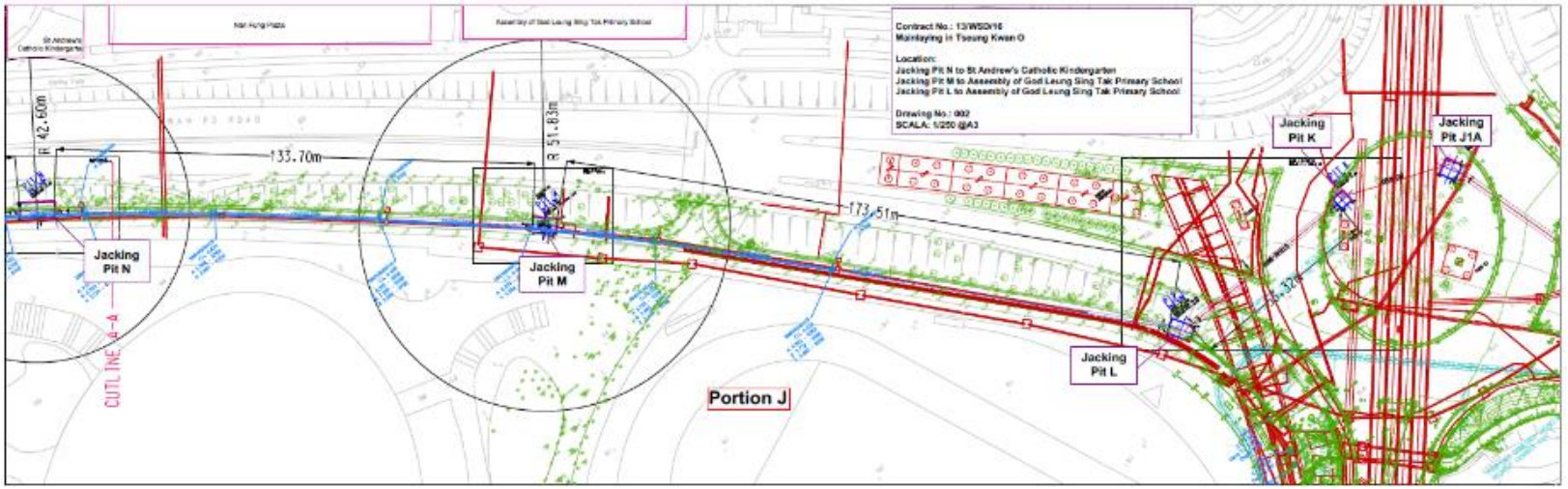


Figure B8a. Location Plan for Portion J – Pit L-M-N, K, J1A

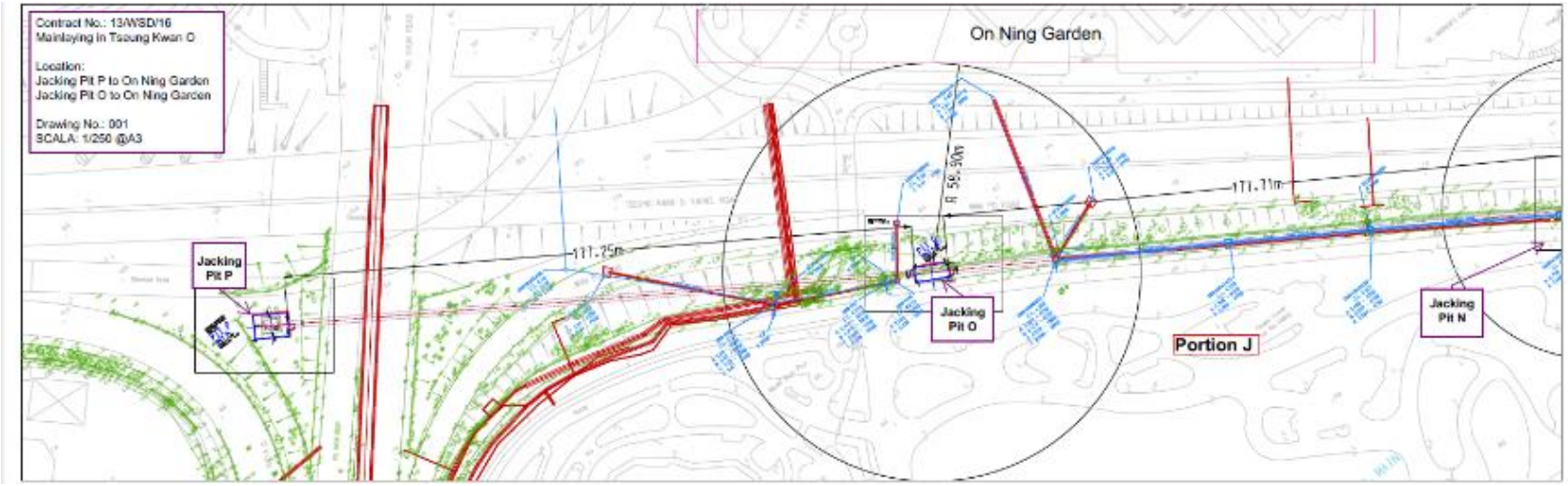


Figure B8b. Location Plan for Portion J – Pit N-O-P

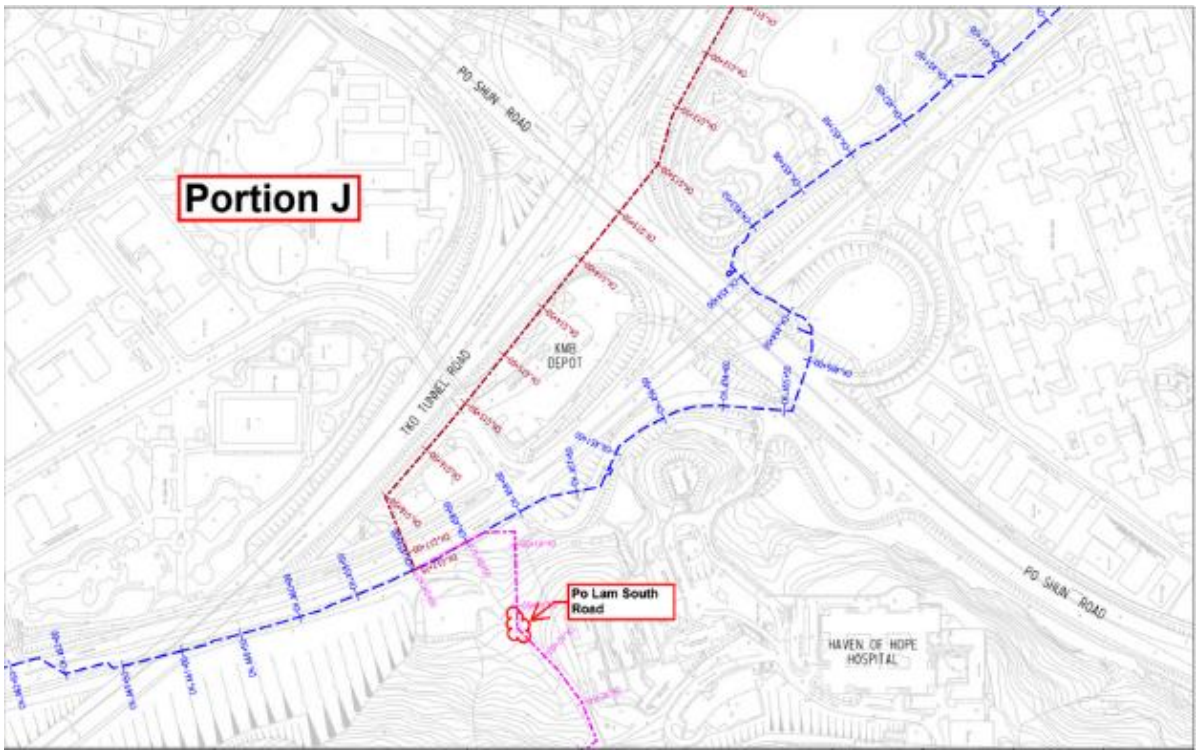


Figure B9a. Location Plan for Mau Wu Tsai 1

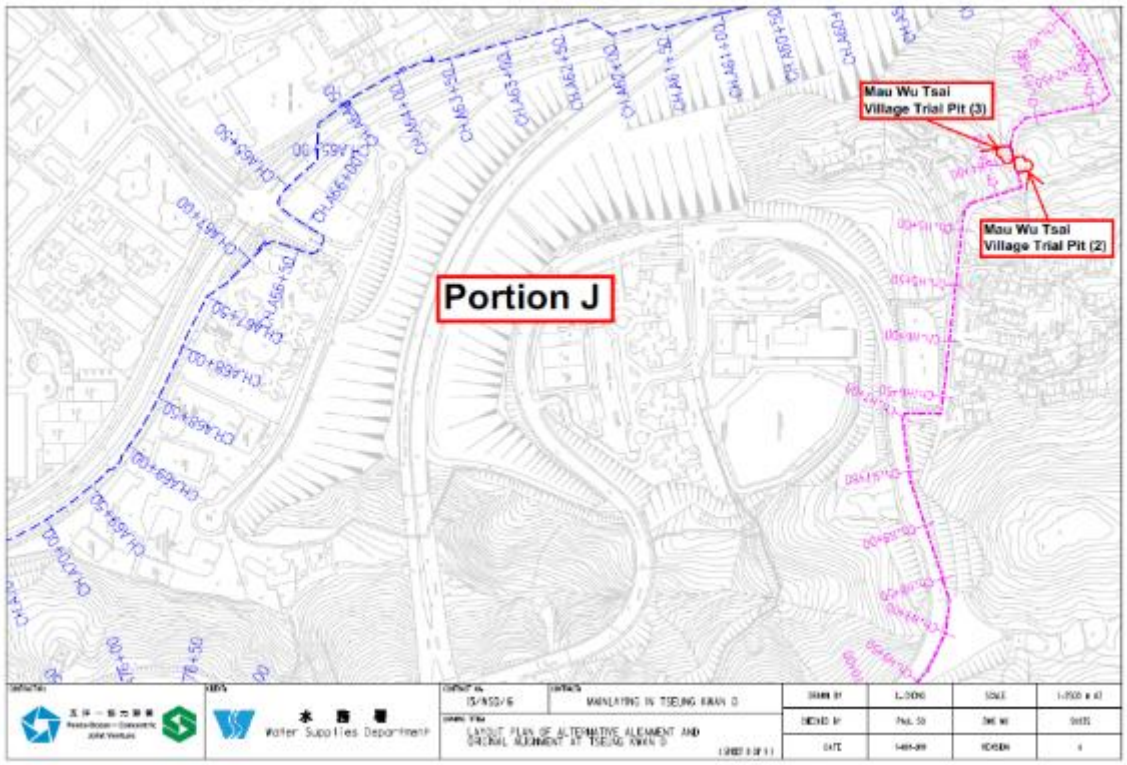


Figure B9b. Location Plan for Mau Wu Tsai 2 & 3

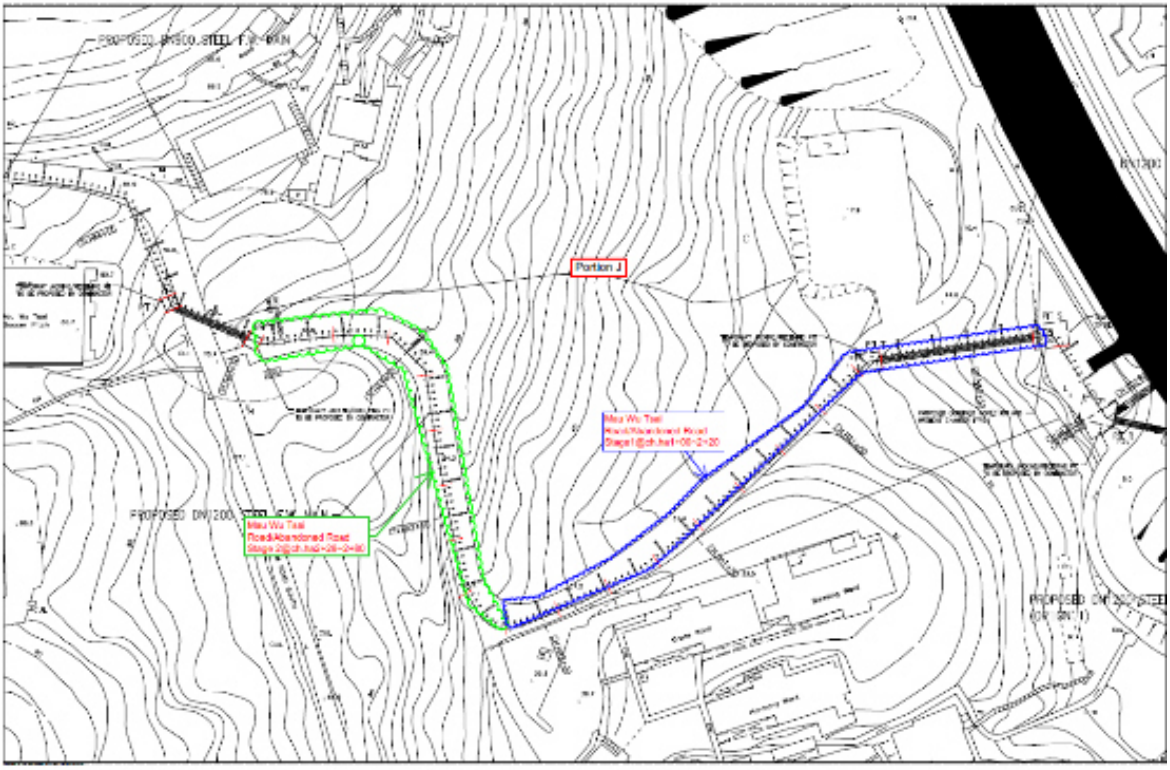


Figure B9c. Abandoned Mau Wu Tsai Road

Figure B10. Monitoring Location – Po Lam South Road

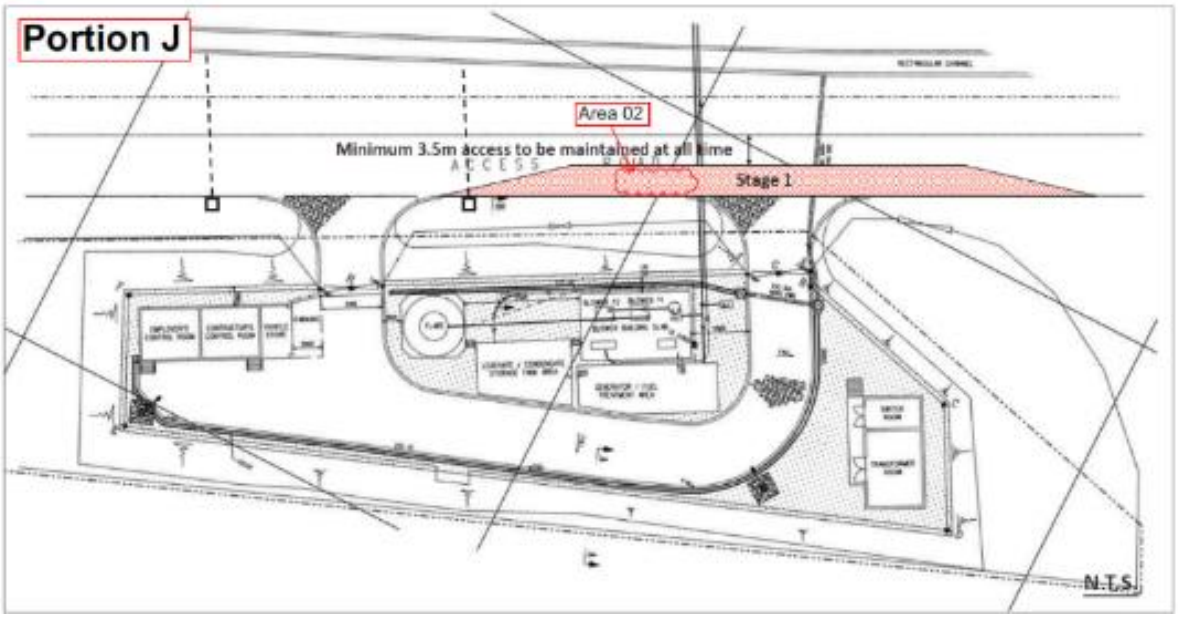


Figure B11. Monitoring Location – Area A02

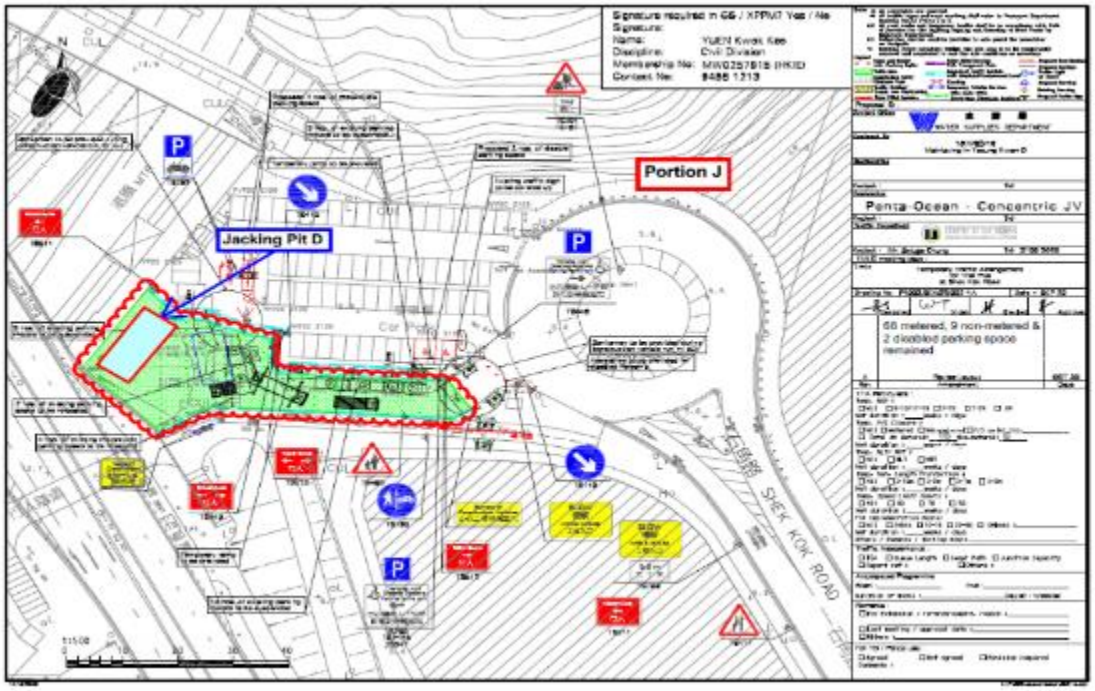


Figure B12. Location Plan for Jacking Pit D

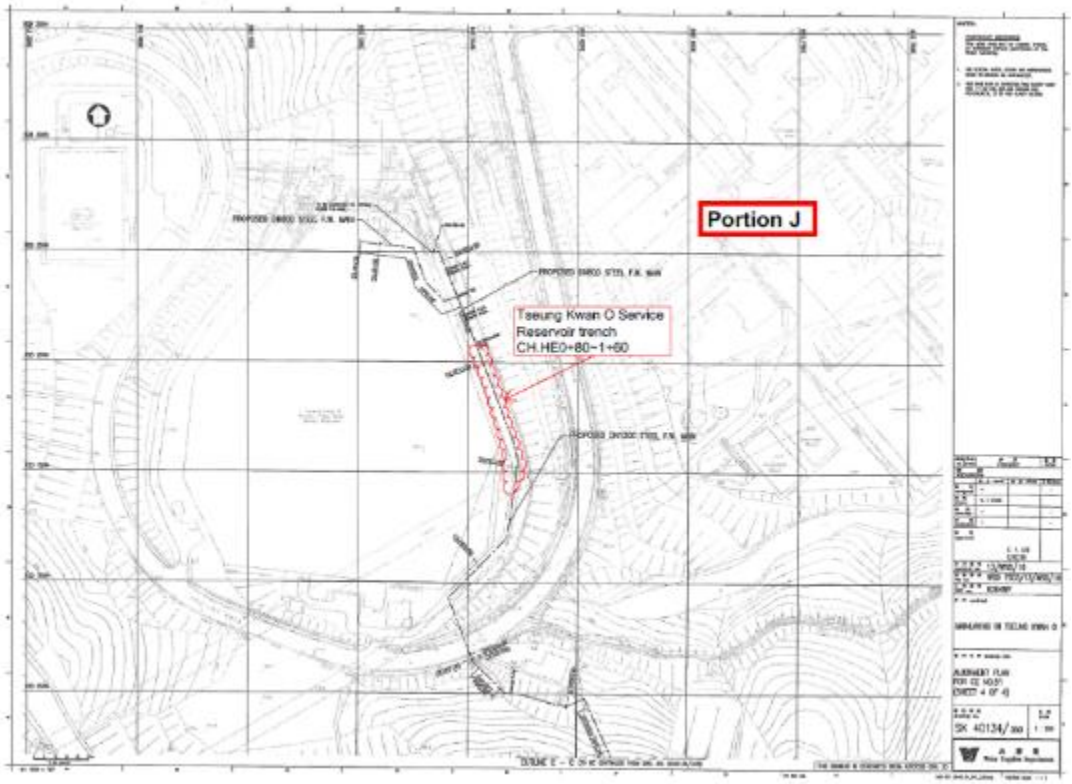


Figure B13. Location Plan for CH.HE0+80-1+60

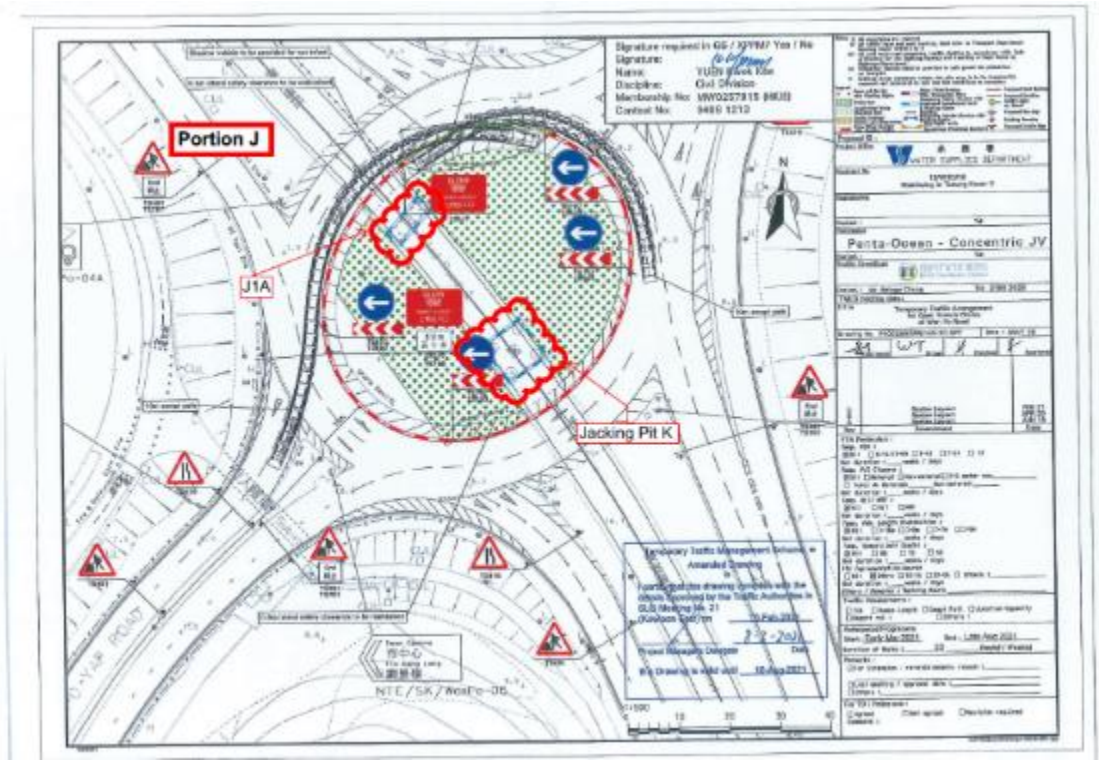


Figure B14. Location Plan for Pit K

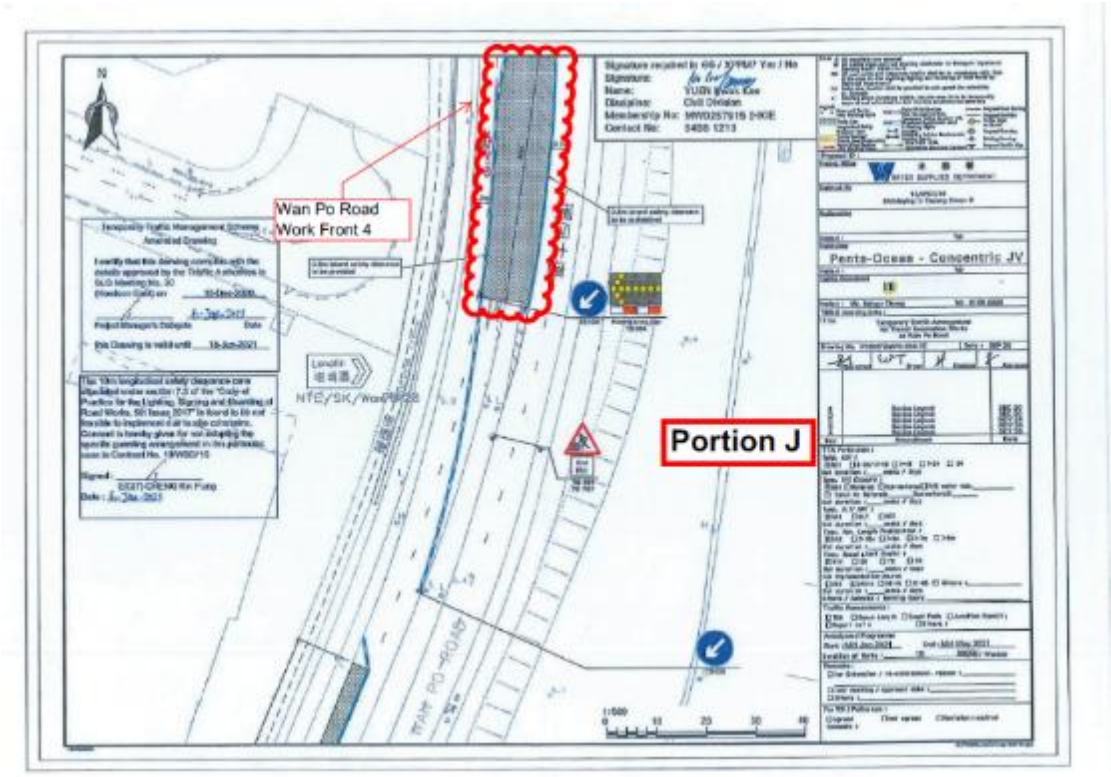


Figure B15. Location Plan for Wan Po Road 4

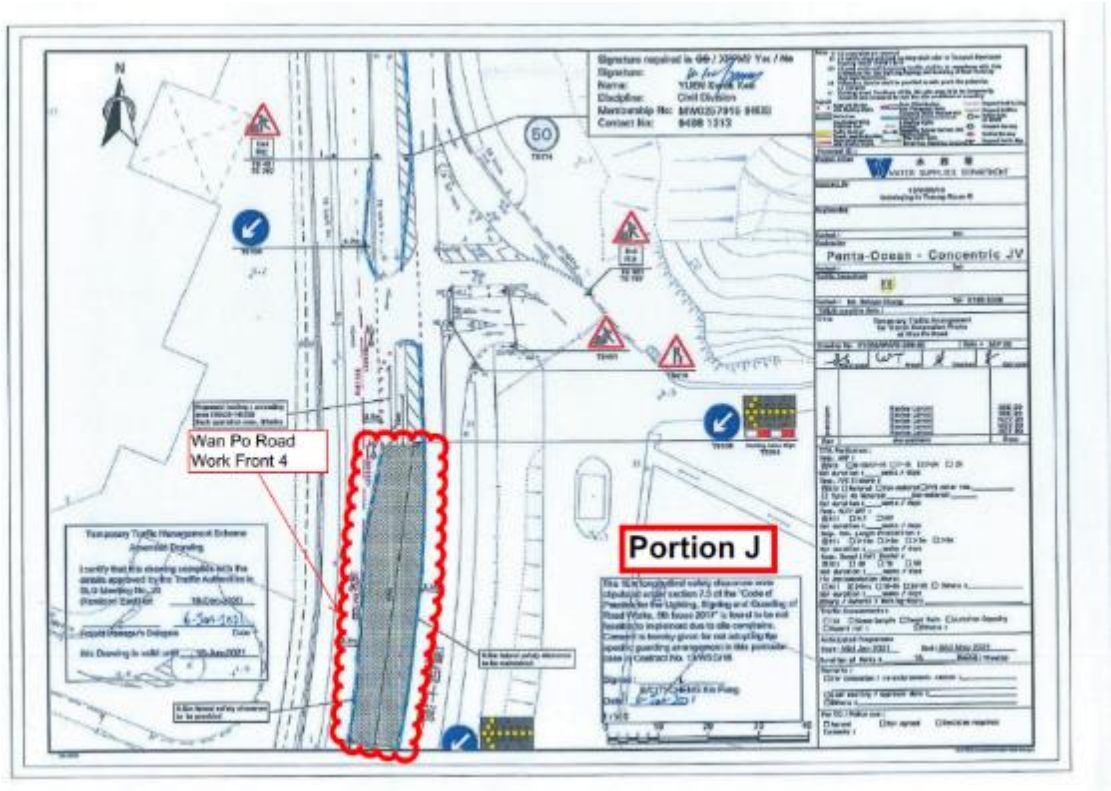


Figure B16. Location Plan for Wan Po Road 4

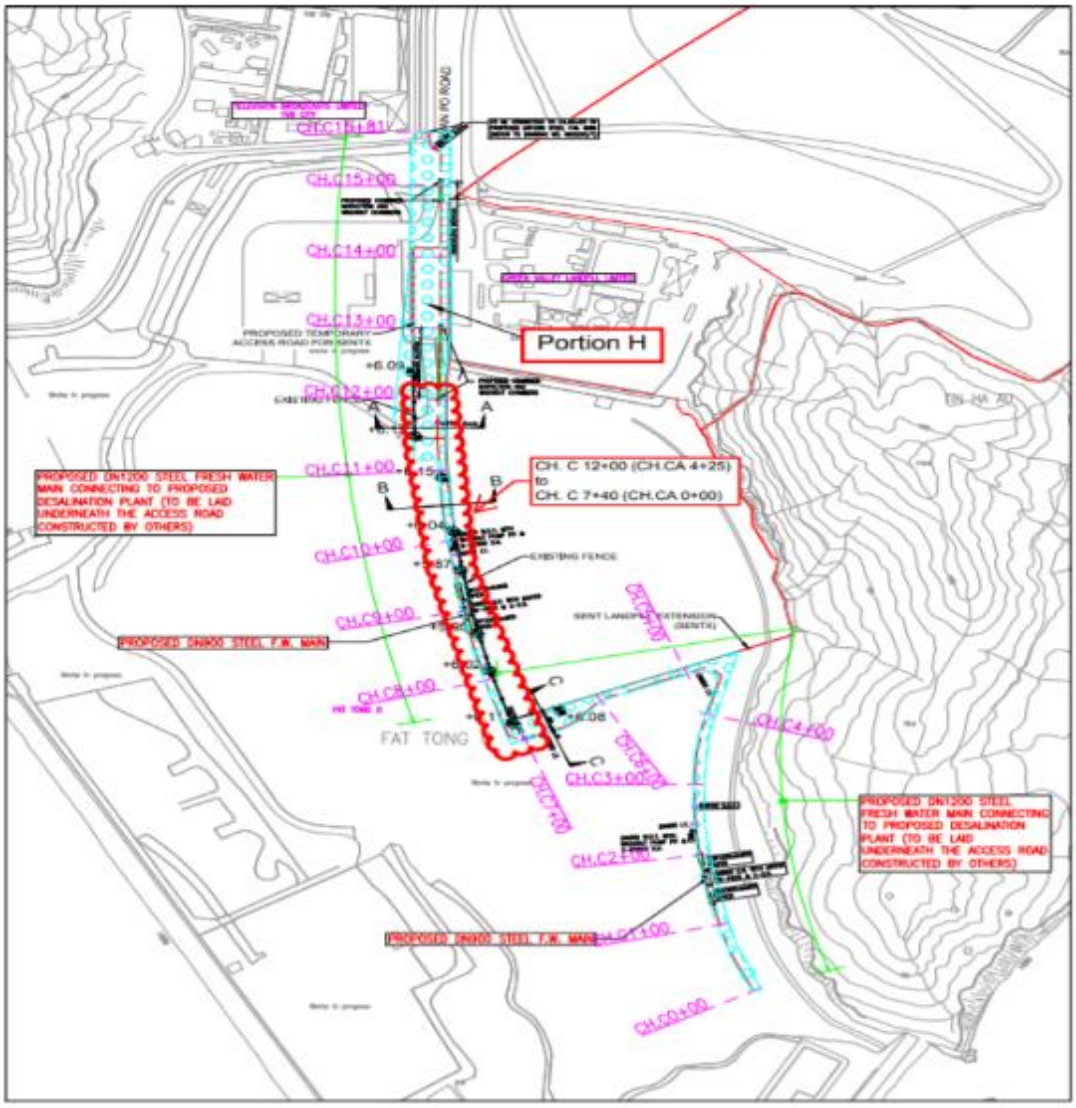


Figure B17. Location Plan for Portion H– CH.C 7+40~CH.C 12+00 (CH.CA 0+00 ~ CH.CA4+25)

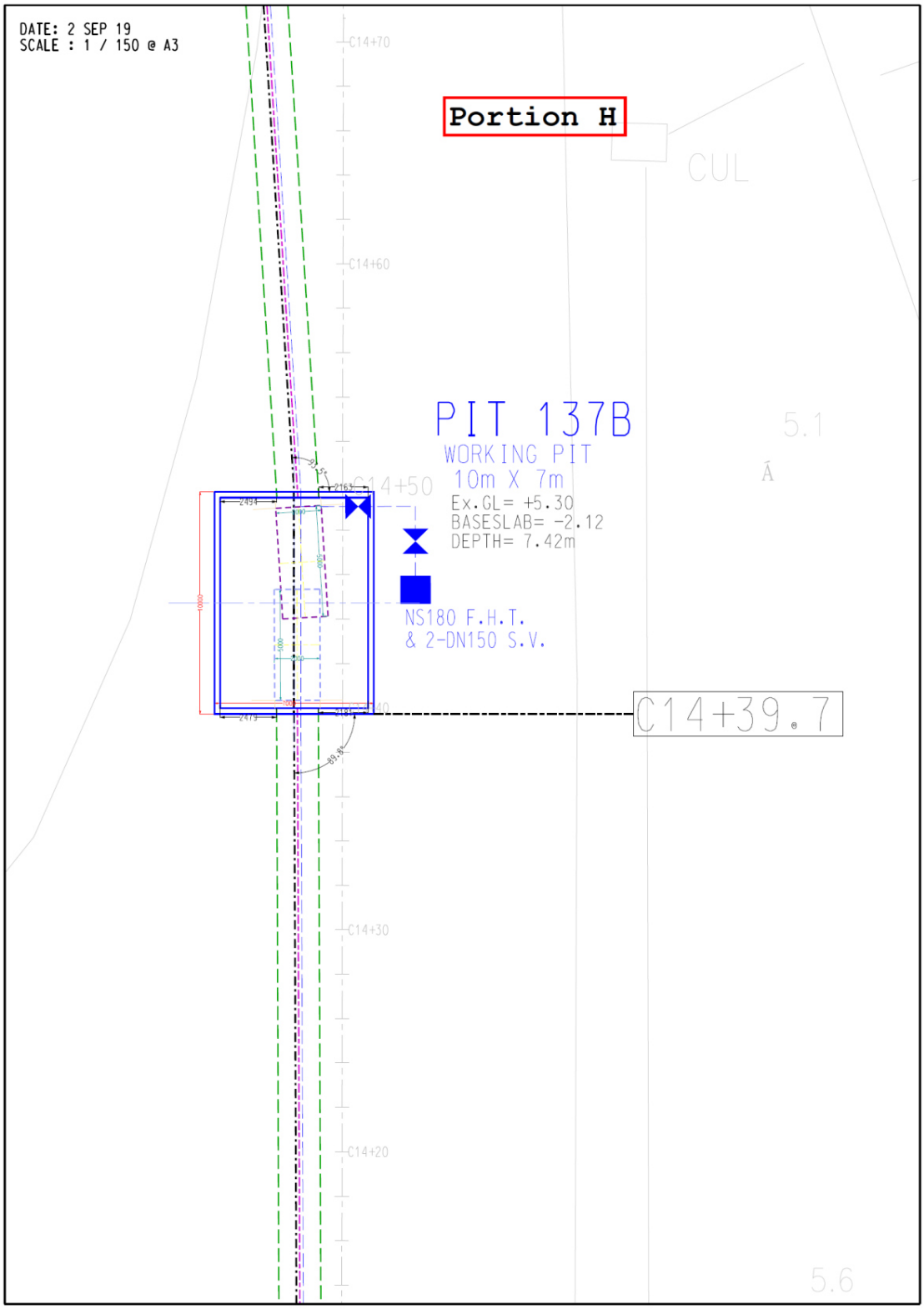


Figure B18. Location Plan for Portion H– Pit 137B

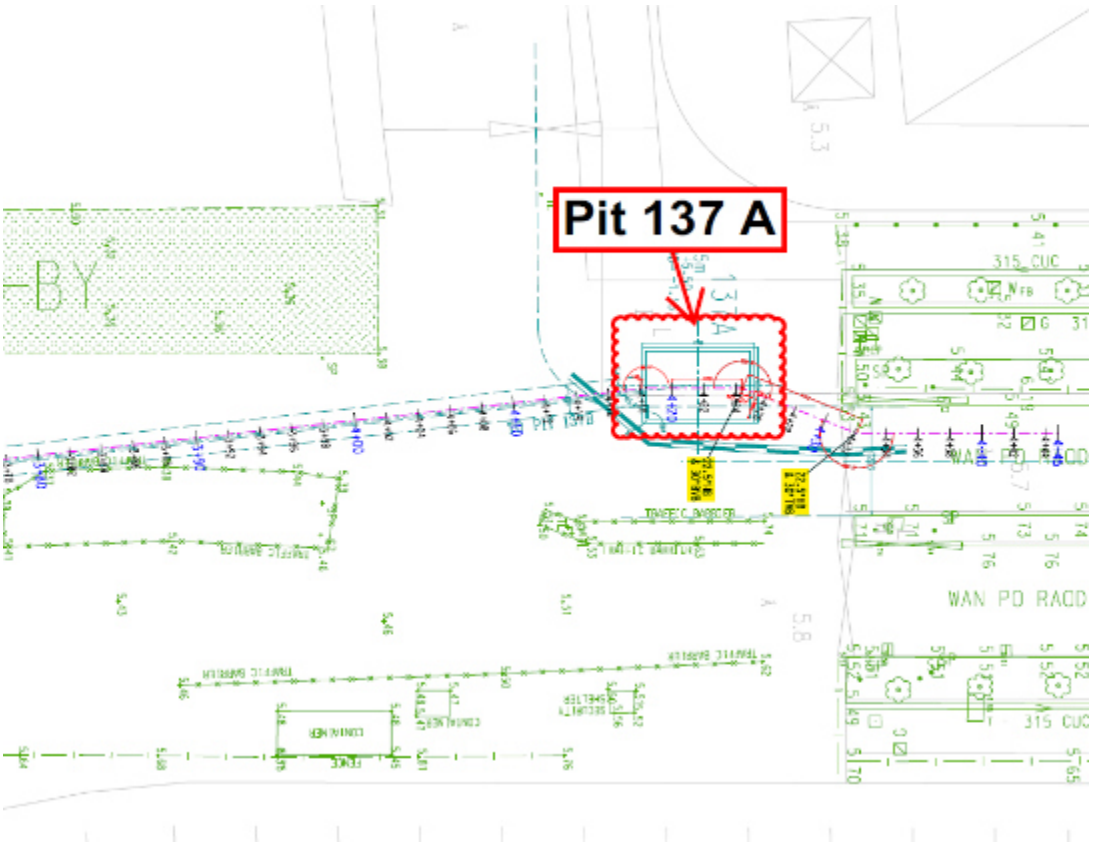


Figure B19. Location Plan for Portion H– Pit 137A

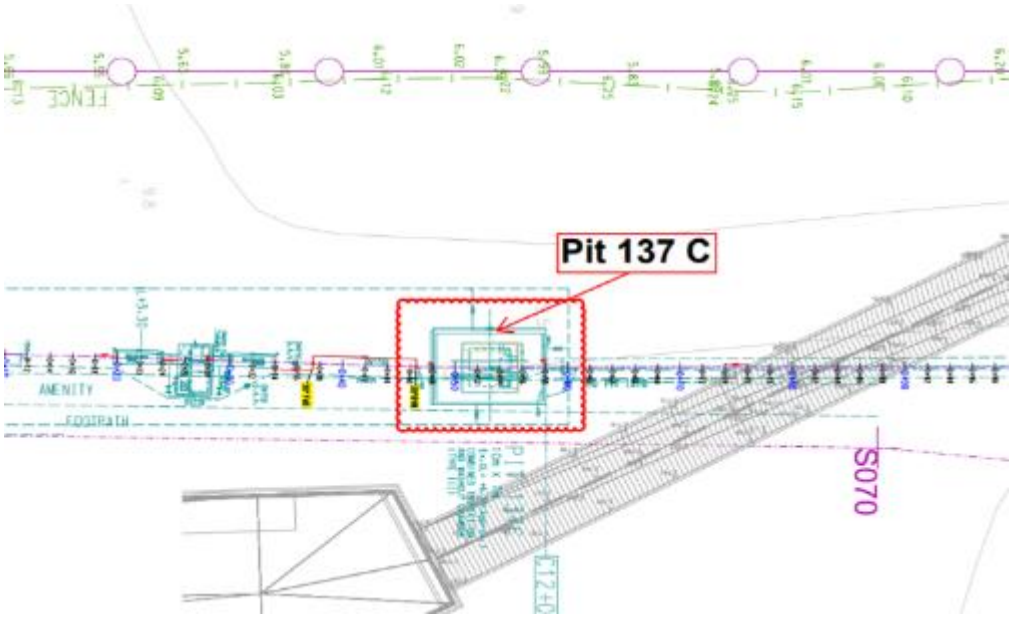


Figure B20. Location Plan for Portion H– Pit 137C

Appendix C

Summary of Implementation Status of Environmental Mitigation

EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
Air Quality								
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)
S4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		✓		N/A	
S4.8.1	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	
S4.8.1	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	
S4.8.1	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 Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
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)		✓		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 Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
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/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
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	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	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	
S5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		✓		Implemented	
S5.7	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	
S5.7	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	
S5.7	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	
S5.7	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^{-2} and have no openings or gaps.	Noise control/ During construction	Contractor(s)		✓		N/A	
S5.7	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/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
S5.7	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	-
S5.7	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^{-2} 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)	✓	✓		Implemented	-
S5.9	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		✓		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 & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
Water Quality								
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
S6.9	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	-
S6.9	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	-

EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
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
S6.9	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	-

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

EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
Waste Management								
S8.5	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)		✓	✓	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

EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
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)
S8.5	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
S8.5	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)		✓		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
S8.5	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	-
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	-
S8.5	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 Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
S8.5	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
S8.5	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
S8.5	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
S8.5	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	-
S8.5	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	-
S8.5	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)
S8.5	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 Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
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, Handling and Storage of Chemical Wastes
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	
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	
S8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	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	
S8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	
S8.5	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	
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/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
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	-
S8.5	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	-
S8.5	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	-
S8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control Ordinance (Cap 311)
S8.7	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

EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
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	-
S9.7	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 & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
Landscape & Visual								
S11.10	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)	N/A	N/A	N/A	Not applicable for this project	-
S11.10	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)	N/A	N/A	N/A	Not applicable for this project	-
S11.10	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)	N/A	N/A	N/A	Not applicable for this project	-
S11.10	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.
S11.10	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	N/A	N/A	Not applicable for this project	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 & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
Landfill Gas Hazard								
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	-
S12.7	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	
S12.7	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	

	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)	✓	✓	✓	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	
S12.7	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)	✓	✓	✓	Implemented	

	and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.							
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 hazards are being minimized on-site.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	

Appendix D

Impact Monitoring Schedule of the Reporting Month

Contract No. 13/WSD/16
Mainlaying in Tseung Kwon O
Tentative Environmental Monitoring Schedule (February 2024)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 Impact Noise Monitoring
4	5	6	7	8	9 Impact Noise Monitoring	10
11	12	13	14	15	16 Impact Noise Monitoring	17
18	19	20	21	22 Impact Noise Monitoring	23	24
25	26	27	28 Impact Noise Monitoring	29		

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

Appendix E

Noise Monitoring Equipment Calibration Certificate

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

Certificate of Calibration

for

Description:	***Sound Level Calibrator***
Manufacturer:	***RION***
Type No.:	***NC-75***
Serial No.:	***35124527***

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**
☐ **Outside**

the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 19 October 2023

Date of calibration: 27 October 2023

Date of NEXT calibration: 26 October 2024

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: *27* **October 2023**

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

1. *Calibration Precautions:*

- 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.

2. *Calibration Specifications:*

Calibration check

3. *Calibration Conditions:*

Air Temperature:	24.4 °C
Air Pressure:	1013 hPa
Relative Humidity:	65.4 %

4. *Calibration Equipment:*

Test Equipment	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV220120	HOKLAS

5. *Calibration Results*

5.1 Sound Pressure Level

Nominal value dB	Accept lower level dB	Accept upper level dB	Measured value dB
94.0	93.6	94.4	94.0

Note:
The values given in this certification only related to the values measured at the time of the calibration.

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Certificate of Calibration

for

Description:	***Sound Level Meter***
Manufacturer:	***SVANTEK***
Type No.:	***Svan 971 (Serial No.: 77731)***
Microphone:	***BA3871 (Serial No.: 13905)***
Preamplifier:	***SV18 (Serial No.: 121481)***

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 (31.5Hz – 8kHz)**
☐ **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: 16 March 2023

Date of calibration: 21 March 2023

Date of NEXT calibration: 20 March 2024

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: **21 March 2023**

Certificate No.: APJ22-157-CC001

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1. *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.

2. *Calibration Conditions:*

Air Temperature:	22.1 °C
Air Pressure:	1003 hPa
Relative Humidity:	62.2 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS

4. *Calibration Results*

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
20-120	dBA SPL	Fast	94	1000	94.1	±0.4

Linearity

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
20-120	dBA SPL	Fast	94	1000	94.1	Ref
			104		104.1	±0.3
			114		114.1	±0.3

Time Weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
20-120	dBA SPL	Fast	94	1000	94.1	Ref
		Slow			94.1	±0.3

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Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
20-120	dB SPL	Fast	94	31.5	94.2	±2.0
				63	94.2	±1.5
				125	94.2	±1.5
				250	94.1	±1.4
				500	94.1	±1.4
				1000	94.1	Ref
				2000	93.8	±1.6
				4000	92.9	±1.6
				8000	91.4	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
20-120	dBA SPL	Fast	94	31.5	54.9	-39.4 ±2.0
				63	68.1	-26.2 ±1.5
				125	78.1	-16.1 ±1.5
				250	85.5	-8.6 ±1.4
				500	90.9	-3.2 ±1.4
				1000	94.1	Ref
				2000	95.0	+1.2 ±1.6
				4000	93.9	+1.0 ±1.6
				8000	90.5	-1.1+2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
20-120	dBC SPL	Fast	94	31.5	91.2	-3.0 ±2.0
				63	93.4	-0.8 ±1.5
				125	94.0	-0.2 ±1.5
				250	94.1	-0.0 ±1.4
				500	94.2	-0.0 ±1.4
				1000	94.1	Ref
				2000	93.6	-0.2 ±1.6
				4000	92.1	-0.8 ±1.6
				8000	88.6	−3.0 +2.1: −3.1

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5. *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	± 0.10
	125 Hz	± 0.05
	250 Hz	± 0.10
	500 Hz	± 0.10
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 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.

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Appendix F

Event / Action Plan for Noise Exceedance

Event and Action Plan for Construction Noise Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level	1. Carry out investigation to identify the source and cause of the complaint/ exceedance(s) 2. Notify IEC, ER, and Contractor and report the results of investigation to the Contractor, ER and the IEC 3. Discuss with the Contractor and IEC for remedial measures required 4. 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. Review the analyzed results submitted by the ET 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly 3. Supervise the implementation of remedial measures	1. Confirm receipt of Notification of Exceedance in writing 2. Require Contractor to propose remedial measures for the analysed noise problem 3. Ensure remedial measures are properly implemented	1. Submit noise mitigation proposals, if required, to the IEC and ER 2. Implement noise mitigation proposals.
Limit Level	1. Notify IEC, ER, EPD and Contractor 2. 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. 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. inform IEC, ER and EPD the cause & actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions 2. Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly 3.Supervise the implementation of the remedial measures	1. Confirm receipt of notification of exceedance in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analyzed noise problem 4. Ensure remedial measures are properly implemented 5. 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	1. Take immediate action to avoid further exceedance 2. Identify practicable measures to minimize the noise impact. Submit proposals for remedial actions to ER within three working days of notification 3. Implement the agreed proposals 4. Resubmit proposal if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated

Appendix G

Noise Monitoring Data

Table G 1 Summary of Noise Monitoring Result

Date	Time	Weather	$L_{eq-5min}$, dB(A)						$L_{eq-30min}$, dB(A)	$L_{10-30mins}$, dB(A)	$L_{90-30mins}$ dB(A)	Limit Level, dB(A)*	Noise Meter
			Reading (1)	Reading (2)	Reading (3)	Reading (4)	Reading (5)	Reading (6)					
3/2/2024	11:09 - 11:39	Sunny	66.3	63.9	65.6	67.3	64.4	65.7	65.7	70.1	62.4	70.0	SVANTEK 971
9/2/2024	11:50 - 12:20	Sunny	62.0	60.8	64.2	61.3	61.9	62.6	62.3	65.4	59.3	70.0	SVANTEK 971
16/2/2024	11:15 - 11:45	Sunny	64.6	65.5	68.4	64.3	66.7	65.3	66.0	69.9	62.8	70.0	SVANTEK 971
22/2/2024	11:21 - 11:51	Fine	66	64.5	65.8	64.8	66.9	65.2	65.6	69.8	61.6	70.0	SVANTEK 971
28/2/2024	11:12 - 11:42	Sunny	64.5	62.4	63.5	64.5	64.1	65.9	64.3	68.8	61.3	70.0	SVANTEK 971

Appendix H

Waste Flow Table

Appendix H – Waste Flow Table

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of Non-C&D Wastes Generated Monthly				
	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^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in'000kg)	(in'000kg)	(in'000kg)	(in'000kg)	(in '000m^3)
Jan 2024	0.280	0.000	0.264	--	0.016	0.029	--	0.061	--	--	0.003
Feb 2024	0.135	0.000	0.135	--	0.000	0.010	--	0.042	--	--	0.002
Mar 2024											
Apr 2024											
May 2024											
Jun 2024											
Sub-total	0.415	0.000	0.399	0.000	0.016	0.039	0.000	0.103	0.000	0.000	0.005
Jul 2024											
Aug 2024											
Sep 2024											
Oct 2024											
Nov 2024											
Dec 2024											
Total	0.415	0.000	0.399	0.000	0.016	0.039	0.000	0.103	0.000	0.000	0.005

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.

Appendix I

Landfill Gas Monitoring Equipment Calibration Certificate

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. The landfill gas monitoring was ceased from February 2024.

Appendix J

Landfill Gas Monitoring Data

According to the Contractors, all pits or trenches were backfilled and undergo reinstatement. The landfill gas monitoring was ceased from February 2024.

Appendix K

Complaint Log and Regulatory Compliance Proforma

Table K-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
1 – 29 February 2024	0	5	N/A

Table K-2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Details
1 – 29 February 2024	0	0	N/A

Table K-3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Details
1 – 29 February 2024	0	0	N/A

Appendix L

Site Inspection Proforma

ACUITY sustainability
Member of the Aurecon Group

aurecon

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

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 9 Feb 2024 **Inspected by:** ET: Alex Lang WSD: _____
Inspection Time: 14:30 Contractor: Colin Chik IEC: _____

Weather							
Condition	☑ Sunny	☐ Fine	☐ Overcast	☐ Drizzle	☐ Rain	☐ Storm	☐ Hazy
Temperature	20 °C		**Humidity**	☑ High	☐ Moderate	☐ Low	
Wind	☑ Calm	☐ Light	☐ Breeze	☐ Strong			

		N/A	Yes	No	Remarks
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?	☐	☑	☐	
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 sites 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?	☐	☑	☐	
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 materials?	☑	☐	☐	
1.09	Are 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?	☐	☑	☐	
1.11	Is exposed earth properly treated within six months after the last construction activity on site?	☐	☑	☐	
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?	☐	☑	☐	
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	☑	☐	☐	
1.16	Are hoardings of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	☑	☐	☐	
1.17	Is open burning prohibited?	☐	☑	☐	

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

		N/A	Yes	No	Remarks
2.00	**Construction Noise (Airborne)**				
2.01	Are quiet plants adopted on site?	☐	☑	☐	
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?	☐	☑	☐	
2.03	Are plants throttled down or turned off when not in use?	☐	☑	☐	
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?	☑	☐	☐	
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?	☑	☐	☐	
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	☑	☐	☐	
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 hours?	☐	☑	☐	
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?	☐	☑	☐	
3.00	**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?	☐	☑	☐	
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	☑	☐	☐	
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?	☐	☑	☐	
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?	☑	☐	☐	
3.10	Are temporary access roads protected by crushed gravel?	☑	☐	☐	
3.11	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?	☑	☐	☐	

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

		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	☑	☐	☐	
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?	☑	☐	☐	
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?	☐	☑	☐	
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 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?	☐	☑	☐	
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?	☑	☐	☐	
4.05	Is chemical waste reused and recycled on site as far as practicable?	☑	☐	☐	
4.06	Are all containers for chemical waste properly labelled?	☑	☐	☐	
4.07	Is drip tray provided for chemical storage?	☐	☑	☐	
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?	☐	☑	☐	
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	Is a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?	☐	☑	☐	

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

		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?	☐	☑	☐	
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?	☐	☑	☐	
4.18	Are C&D waste disposed of properly?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
5.05	Are damages to trees outside site boundary due construction works avoided?	☐	☑	☐	
5.06	Are 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?	☐	☑	☐	
5.08	Are surgery works carried out for damaged trees?	☑	☐	☐	
6.00	**Ecology**				
6.01	Is site runoff properly treated to prevent any silly runoff?	☐	☑	☐	
6.02	Are silt trap installed and well-maintained?	☐	☑	☐	
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?	☐	☑	☐	

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

Remark / Observation(s) / Recommendation and Non-compliance(s) of Weekly Site Inspection:

Observation -

NIL

Signatures:

ET Representative	Contractor's Representative	WSD's Representative	IEC's Representative
(Name: Alex Leung)	(Name: Calvin Chiu)	(Name:)	(Name:)

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

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 16 Feb 2024 **Inspected by:** ET: Alex Leung WSD:
Contractor: Calvin Chiu IEC:
Inspection Time: ~~11~~ 10:00 am

Weather							
Condition	☑ Sunny	☐ Fine	☐ Overcast	☐ Drizzle	☐ Rain	☐ Storm	☐ Hazy
Temperature	21 °C		**Humidity**	☑ High	☐ Moderate	☐ Low	
Wind	☑ Calm	☐ Light	☐ Breeze	☐ Strong			

		N/A	Yes	No	Remarks
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?	☐	☑	☐	
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 sites 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?	☐	☑	☐	
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 materials?	☑	☐	☐	
1.09	Are 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?	☐	☑	☐	
1.11	Is exposed earth properly treated within six months after the last construction activity on site?	☐	☑	☐	
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?	☐	☑	☐	
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	☑	☐	☐	
1.16	Are hoardings of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	☑	☐	☐	
1.17	Is open burning prohibited?	☐	☑	☐	

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

		N/A	Yes	No	Remarks
2.00	**Construction Noise (Airborne)**				
2.01	Are quiet plants adopted on site?	☐	☑	☐	
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?	☐	☑	☐	
2.03	Are plants throttled down or turned off when not in use?	☐	☑	☐	
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?	☑	☐	☐	
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?	☑	☐	☐	
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	☑	☐	☐	
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 hours?	☐	☑	☐	
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?	☐	☑	☐	
3.00	**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?	☐	☑	☐	
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	☑	☐	☐	
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?	☐	☑	☐	
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?	☑	☐	☐	
3.10	Are temporary access roads protected by crushed gravel?	☑	☐	☐	
3.11	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?	☑	☐	☐	

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

		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	☑	☐	☐	
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?	☑	☐	☐	
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?	☐	☑	☐	
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 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?	☐	☑	☐	
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?	☑	☐	☐	
4.05	Is chemical waste reused and recycled on site as far as practicable?	☑	☐	☐	
4.06	Are all containers for chemical waste properly labelled?	☑	☐	☐	
4.07	Is drip tray provided for chemical storage?	☐	☑	☐	
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?	☐	☑	☐	
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	Is a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?	☐	☑	☐	

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

		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?	☐	☑	☐	
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?	☐	☑	☐	
4.18	Are C&D waste disposed of properly?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
5.05	Are damages to trees outside site boundary due construction works avoided?	☐	☑	☐	
5.06	Are 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?	☐	☑	☐	
5.08	Are surgery works carried out for damaged trees?	☑	☐	☐	
6.00	**Ecology**				
6.01	Is site runoff properly treated to prevent any silly runoff?	☐	☑	☐	
6.02	Are silt trap installed and well-maintained?	☐	☑	☐	
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?	☐	☑	☐	

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

Remark / Observation(s) / Recommendation and Non-compliance(s) of Weekly Site Inspection:

Observation :-

N/L

Signatures:

ET Representative	Contractor's Representative	WSD's Representative	IEC's Representative
(Name: Alex Leung)	(Name: Calvin Chik)	(Name:)	(Name:)

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

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date: 23 Feb 2024 **Inspected by:** ET: Alex Leung WSD: W.S. Chan
Contractor: Calvin Chiu IEC: Alex Chan
Inspection Time: 9:30am

Weather							
Condition	☑ Sunny	☐ Fine	☐ Overcast	☐ Drizzle	☐ Rain	☐ Storm	☐ Hazy
Temperature	22 °C		**Humidity**	☐ High	☑ Moderate	☐ Low	
Wind	☑ Calm	☐ Light	☐ Breeze	☐ Strong			

		N/A	Yes	No	Remarks
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?	☐	☑	☐	
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 sites 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?	☐	☑	☐	
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 materials?	☑	☐	☐	
1.09	Are 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?	☐	☑	☐	
1.11	Is exposed earth properly treated within six months after the last construction activity on site?	☐	☑	☐	
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?	☐	☑	☐	
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	☑	☐	☐	
1.16	Are hoardings of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	☑	☐	☐	
1.17	Is open burning prohibited?	☐	☑	☐	

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

		N/A	Yes	No	Remarks
2.00	**Construction Noise (Airborne)**				
2.01	Are quiet plants adopted on site?	☐	☑	☐	
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?	☐	☑	☐	
2.03	Are plants throttled down or turned off when not in use?	☐	☑	☐	
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?	☑	☐	☐	
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?	☑	☐	☐	
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	☑	☐	☐	
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 hours?	☐	☑	☐	
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?	☐	☑	☐	
3.00	**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?	☐	☑	☐	
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	☑	☐	☐	
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?	☐	☑	☐	
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?	☑	☐	☐	
3.10	Are temporary access roads protected by crushed gravel?	☑	☐	☐	
3.11	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?	☑	☐	☐	

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

		N/A	Yes	No	Remarks
3.12	Are exposed slope surface properly protected?	✓			
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?	✓			
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?		✓		
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 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?		✓		
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?	✓			
4.05	Is chemical waste reused and recycled on site as far as practicable?	✓			
4.06	Are all containers for chemical waste properly labelled?	✓			
4.07	Is drip tray provided for chemical storage?		✓		
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?		✓		
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	Is a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?		✓		

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

		N/A	Yes	No	Remarks
4.13	Are sufficient general refuse disposal/collection points provided on site?	☐	☑	☐	
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?	☐	☑	☐	
4.18	Are C&D waste disposed of properly?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
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?	☐	☑	☐	
5.05	Are damages to trees outside site boundary due construction works avoided?	☐	☑	☐	
5.06	Are 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?	☐	☑	☐	
5.08	Are surgery works carried out for damaged trees?	☑	☐	☐	
6.00	**Ecology**				
6.01	Is site runoff properly treated to prevent any silly runoff?	☐	☑	☐	
6.02	Are silt trap installed and well-maintained?	☐	☑	☐	
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?	☐	☑	☐	

ACUITY sustainability
Member of the Aurecon Group

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

Remark / Observation(s) / Recommendation and Non-compliance(s) of Weekly Site Inspection:

Observation :-

NIL

Reminder :-

① Contractor was reminded to clear the general refue regularly. (Pit N)
② Contractor was reminded to spray water regularly. (Pit N)

Signatures:

ET Representative	Contractor's Representative	WSD's Representative	IEC's Representative
(Name: Alexleung)	(Name: Calvin Chiu)	(Name: W. S. Cham)	(Name: Alex Chan)

Appendix M

Proactive Environmental Protection Proforma

Proactive Environmental Protection for the Next Reporting Month

Reporting Period	Activity	Major Environmental Impact	Environmental Mitigation Measure
1– 29 February 2024	- Road surface reinstatement including surface drain and related utilities, - Chamber construction, - Installation of accessories such as cat ladder and handrail	- Construction dust - Noise generation; - Construction waste - Impact of water quality - Ecology	- Dust suppression by regular wetting and water spraying - Reduction of noise from equipment and machinery on-site - Sorting and storage of general refuse and construction waste - Chemical shall be stored properly with drip tray. - Treatment of water with water treatment facilities before discharge. - Rainwater pumped from trench should be discharged via waster water treatment facilities. - Retained tree shall be carefully protected and tree protect zone should be established.

Appendix N

Impact Monitoring Schedule of Next Reporting Month

Contract No. 13/WSD/16
Mainlaying in Tseung Kwon O
Tentative Environmental Monitoring Schedule (March 2024)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	1	2 Impact Noise Monitoring
3	4	5 Impact Noise Monitoring	6	7	8	9
10	11 Impact Noise Monitoring	12	13	14	15	16
17	18	19	20	21	22 Impact Noise Monitoring	23
24	25	26	27	28 Impact Noise Monitoring	29	30
31						

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

Appendix O

Academic Calendar (s)

啓思中學
CREATIVE SECONDARY SCHOOL

2023/24 Creative Secondary School Calendar

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Particulars/Remarks
August	13	*14*	15	16	17	18	19	14-16/8 F1 Bridging Programme. 17/8 F1, F5 Orientation. 18/8 Whole School Assembly
	20	21A	22B	23C	24D	25E	26	
	27	28F	29G	30A	31B			
September						1C	2	
	3	4D	5E	6F	7G	8A	9	
	10	11B	12C	13D	14E	15F	16	15/9 Swimming Gala
	17	18G	19A	20B	21C	22D	23	19/9 MY1 & F1 3-way conference
	24	25E	26F	27G	28A	**29**	30	29/9 The 1st PD Day. 30/9 The day following the Chinese Mid-Autumn Festival
October	1	2	3B	4C	5D	6E	7	2/10 The day following National Day
	8	9F	10G	11A	12B	13C	14	9/10 F6 3-way conference
	15	**16**	**17**	**18**	**19**	**20**	**21**	16-22/10 Term Break
	22	23	24D	25E	26F	27G	28	23/10 Chung Yeung Festival
	29	30A	31B					
November				1C	2D	3E	4	1/11 Hong Kong University Road Show. 2/11 F5 3-way conference
	5	6F	7G	8A	9B	10C	11	11/11 Open Day
	12	**13**	14D	15E	16F	17G	18	13/11 The Monday following Open Day
	19	20A	21B	**22**	23C	***24***	25	22/11 The 2nd PD Day. 23/11 F3 3-way conference. 24/11 Sports Day Day 1
	26	27D	28E	29F	30G			30/11-20/12 F5 DSE assessment weeks
December						1A	2	30/11-20/12 F5 DSE assessment weeks
	3	4B	5C	6D	7E	8F	9	
	10	11	12A	13B	14C	***15***	16	11/12 the day after election 12/12 F2 3-way conference. 15/12 Sports Day Day 2
	17	18D	19E	20F	21	**22**	**23**	21/12 Creative Christmas Festival (half day). 22/12-6/1 Christmas Holiday
	24	25	26	**27**	**28**	**29**	**30**	25/12 Christmas Day. 26/12 The first weekday after Christmas
	31							
January		1	**2**	**3**	**4**	**5**	**6**	
	7	8G	9A	10B	11C	12D	13	8-19/1 F6 Mock exams
	14	15E	16F	17G	18A	19B	20	
	21	22C	23D	24E	25F	26G	27	22/1 F4 3-way conference
	28	29A	30B	31C				
February					1D	2E	3	
	4	5F	6	**7**	**8**	**9**	10	6/2 Creative Chinese Festival (half day). 10/2 Lunar New Year
	11	12	13	**14**	**15**	**16**	**17**	7-17/2 Chinese New Year Holiday
	18	19G	20A	21B	22C	23D	24	
	25	26E	27F	28G	29A			
March						1B	2	2/3 The Hispanic Festival
	3	4C	5D	6E	7F	8G	9	6/3 MYI/F1 3-way conference. 8/3 F6 HKDSE last school day
	10	11A	12B	13C	14D	15E	16	
	17	*18*	*19*	*20*	*21*	*22*	23	18-22/3 Creative Week
	24	25F	26G	27A	**28**	29	30	27/3 F6 IBDP last school day. 29/3 Good Friday, 30/3 The day following good Friday
	31							31/3 Easter Sunday. 28/3-6/4 Easter Holiday
April		1	**2**	**3**	4	**5**	**6**	1/4 Easter Monday. 4/4 Ching Ming Festival
	7	8B	9C	10D	11E	12F	13	11-16/4 HKDSE exams (core subjects)
	14	15G	16A	17B	18C	19D	20	17/4-6/5 HKDSE exams (elective subjects). 24/4-16/5 IBDP exams
	21	22E	23F	24G	25A	26B	27	23/4-24/4 F3 TSA Chinese and English Speaking Test
	28	29C	30D					
May				1	2E	3F	4	1/5 Labour Day
	5	6G	7A	8B	9C	10D	11	6-17/5 F5 IBDP Exams
	12	13E	14F	15	16G	17A	18	15/5 Buddha's Birthday
	19	20B	21C	22D	23E	24F	25	20-30/5 F5 HKDSE exam. 24-30/5 F4 HKDSE Exams
	26	27G	28A	29B	30C	**31**		31/5 The 3rd PD Day
June							1	
	2	3D	4E	5F	6G	7A	8	
	9	10	11B	12C	13D	14E	15	10/6 Dragon Boat Festival
	16	17F	18G	19A	20B	21C	22	19/6-20/6 F3 TSA Chinese and English Written Test
	23	24D	25E	26F	27G	*28*	29	28/6 Last school day (half day)
	30							
July		1	2	3	4	5	6	1/7 Hong Kong Special Administrative Region Establishment Day
	7	8	9	10	11	12	13	2/7 -10/8 Summer Holiday
	14	15	16	17	18	19	20	
	21	22	23	24	25	26	27	
	28	29	30	31				
August					1	2	3	
	4	5	6	7	8	9	10	
	11	12	13	14	15	16	17	
	18	19	20	21	22	23	24	

School Holiday Staff Development Day Public Holiday