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Civil Engineering and Development Department

Service Contract No. WD/02/2021

Environmental Team for Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 – Site Formation and Engineering Infrastructure

Monthly EM&A Report (December 2022)

(Environmental Permit No. EP-528/2017)

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By Post and Email

Civil Engineering and Development Department
West Development Office
9/F, Sha Tin Government Office,
1 Sheung Wo Che Road, Sha Tin,
New Territories

Attn: Mr. HO Kai Ho, Chief Engineer/West 4 (CE/W4)

Dear Mr. HO,

Agreement No. WD/01/2021
Hung Shui Kiu / Ha Tsuen New Development Area Stage 1 Works – Independent Environmental Checker
Verification of Monthly EM&A Report (December 2022)

Reference is made to the captioned report (Document No. ASCL / 210168223 / MRPT01 / 2 dated 18 January 2023) provided by the Environmental Team (ET) with the ET Leader's certification. We hereby verify the captioned for submission under Condition 3.4 of Environmental Permit No. EP-528/2017.

Yours faithfully,
For and On Behalf Of
Lam Environmental Services Limited

Raymond Dai
Independent Environmental Checker

c.c.:	Acuity Sustainability Consulting Limited	Mr. F.C. Tsang	(By email)
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Revision History

Rev.	Description of Modification	Date
0.	First issue for comments	11/01/2023
1.	Revised according to IEC's comments	14/01/2023
2.	Revised according to IEC's comments	18/01/2023

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EXECUTIVE SUMMARY

This is the 1st Monthly Environment Monitoring and Audit (EM&A) Report for Hung Shui Kiu/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure (the Project). This report was prepared by Acuity Sustainability Consulting Limited under Service Contract No. WD/02/2021 Environmental Team for Hung Shui Kiu / Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure (hereinafter called the "Service Contract"). This report documents the findings of EM&A works during the reporting period from 5 to 31 December 2022.

The project construction was commenced on 5 December 2022 and the construction phase EM&A programme started on 6 December 2022.

Key Construction Works in the Reporting Period

A summary of construction activities undertaken during the reporting period is presented below:

- Construction of Box Culvert at Road D1

Environmental Monitoring and Audit Programme

The monthly EM&A programme was undertaken by the ET in accordance with the Updated EM&A Manual. A summary of the monitoring and audit activities during the reporting period is presented below:

Table I Summary of EM&A activities in the Reporting Period

EM&A Activities	Date
Water Quality Monitoring	6, 8, 10, 13, 15, 17, 20, 22, 24, 26, 28 and 30 Dec 2022
Weekly Environmental Site Inspection	9, 16, 23 and 28 Dec 2022

Breaches of Action and Limit Levels

Summary of the environmental exceedances of the reporting month is tabulated in **Table II**.

Table II Summary of Exceedance in the Reporting Period

Environmental Monitoring	Parameter	No. of non-project related exceedances		Total No. of non-project related exceedances	No. of exceedances related to the the project		Total No. of exceedance related to the project
		AL	LL		AL	LL	
Water Quality	pH	0	0	0	0	0	0
	DO	14	14	28	0	0	0
	Turbidity	1	2	3	0	0	0
	SS	0	1	1	0	0	0

Water Quality

All water quality monitoring was conducted as scheduled in the reporting period. Fourteen (14) action level exceedances and fourteen (14) limit level exceedances for dissolved oxygen were recorded. One (1) action level exceedance and two (2) limit level exceedances for turbidity were recorded, and one (1) limit level exceedance for Suspended Solids was recorded. After investigation, all exceedances were considered non-project related.

Complaint Log

No environmental complaint was received in the reporting period.

Notification of Summons and Successful Prosecutions

No notification of summons or successful prosecutions was received in the reporting period.

Reporting Changes

There was no reporting change in the reporting period.

Future Key Issues

The major site activities for the coming months are summarized below:

- Construction of Box Culvert
- Diversion of watermains

1 Introduction

Project Background

1.1. The HSK/HT NDA occupies an area of approximately 714 ha and is located in the north-western part of the New Territories, midway between Tuen Mun and Tin Shui Wai New Towns. It is bounded by Tin Ying Road/ Ping Ha Road/ Kiu Hung Road to the east, Castle Peak Road to the south, Kong Sham Western Highway ("KSWH") to the west, and Tin Ha Road, Lau Fau Shan Road and hillslopes along Deep Bay Road to the north. In the wider context, the proposed Project is strategically located in close proximity to Shenzhen, particularly Shenzhen Bay Control Point, Qianhai, and Shekou and efficiently linked with the Greater Pearl River Delta ("PRD") region. The KSWH and the possible highway connecting the Project area with the Tuen Mun - Chek Lap Kok Link, the Hong Kong International Airport, Kwai Tsing Container Terminals, and the Hong Kong-Zhuhai-Macao Bridge and its Boundary Crossing facilities. New strategic highway infrastructure connecting the Project area with the urban area will also be planned to address the long-term development needs of North West New Territories ("NWNT"). The proposed West Rail Hung Shui Kiu Station ("HSK Station"), with its alignment traversing the Project allows convenient and efficient access to and from the Project area.

1.2. The works under HSK/HT NDA Stage 1 works comprises the construction of interim section of new distributor road (Road D1) (hereinafter call "the Project") that is a designated project ("DP") (defined under item A1 in Schedule 2 of the Environmental Impact Assessment Ordinance) connecting the site for the first batch of multi-storey buildings ("MSBs") at Sites 3-6, 3-7 and 3-8 to the existing Ha Tsuen Roundabout of KSWH.

1.3. The HSK/HT NDA Stage 1 works would be implemented under a fast track programme, involving various complex tasks for providing infrastructure and forming the five development sites to be conducted in parallel, so as to tie in with operation of the development MSBs or other land-efficient means and population intake of the village resite house in 2025 tentatively.

1.4. The scope of works covered by Public Works Programme (PWP) Item No. 7796CL comprise the followings:

(i) Site formation works for Site 2-18, Site 2-19, Site 3-6, Site 3-7 and Site 3-8;

(ii) Land decontamination works including ground investigation works for Site 2-18, Site 2-19, Site 3-6, Site 3-7 and Site 3-8 and other areas within the boundaries of the site;

(iii) Construction of a district distributor road connecting to the existing interchange underneath KSWH, construction of local roads, widening of a section of Fung Kong Tsuen Road and associated junction/ road improvements; and

(iv) Engineering infrastructure works comprising sewerage works (including a pumping station), drainage works (including a detention pond), waterworks and landscaping works.

1.5. Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection Department (EPD) granted the Environmental Permits (Nos.: EP-526/2017, EP-527/2017, EP-528/2017, EP-529/2017, EP-530/2017 and EP-531/2017) to the CEDD for the Project. The HSK/HT NDA Stage 1 works comprise the interim section of Road D1 that is governed under Environmental Permit No. EP-528/2017. No other DPs are identified within the scope of HSK/HT NDA Stage 1 works.

1.6. Acuity Sustainability Consulting Limited (ASCL) is commissioned by Civil Engineering and Development Department (CEDD) to undertake the Environmental Team (ET) services as required and/or implied, both explicitly and implicitly, in the Environmental Permit (EP), Environmental Impact Assessment (EIA) Report (Register No. AEIAR-203/2016) and Environmental Monitoring and Audit (EM&A) Manual for the Project; and to carry out the EM&A programme in fulfillment of the EIA Report's, EM&A requirements under Service Contract No. WD/02/2021.

1.7. For construction phase of the Project, the construction has been commenced on 5 December 2022 and the construction phase EM&A programme was started on 6 December 2022.

1.8. This is the 1st Monthly EM&A Report summarizing the key findings of the construction phase EM&A programme from 6 December to 31 December 2022 (the reporting period) and is submitted to fulfill the requirements in Condition 3.4 of EP-528/2017 and Section 15.3 of the Updated EM&A Manual of the Project.

Project Organization

1.9. Different parties with different levels of involvement in the Project organization include:

- Project Proponent – Civil Engineering and Development Department (CEDD)
- Supervisor / Engineer's Representative (ER) – Mott MacDonald Hong Kong Limited
- Contractor - China Geo-Engineering Corporation
- Environmental Team (ET) – Acuity Sustainability Consulting Limited
- Independent Environmental Checker (IEC) – Lam Environmental Services Limited

1.10. The key personnel contact names and numbers are summarized in **Appendix B.**

Construction Works Programme and Construction Works Area

1.11. The construction works commenced on 5 December 2022. The construction works programme and the construction works area of the Project are shown in **Appendix A** and **Figure 1** respectively. A summary of construction activities undertaken during this reporting period is presented below:

- Construction of Box Culvert at Road D1

License, Notifications and Permits

1.12. A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project is presented in **Table 1.1**.

Table 1.1 Status of Environmental License, Notifications and Permits

Permit / License No.	Valid Period		Status
	From	To	
Environmental Permit			
EP-528/2017	21/02/2017	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation			
467008	29/04/2021	N/A	Valid
Billing Account for Disposal of Construction Waste			
7040500	13/05/2021	N/A	Valid
Registration of Chemical Waste Producer			
467007	29/04/2021	N/A	Valid
Effluent Discharge License under Water Pollution Control Ordinance			
N/A	N/A	N/A	Under application
Construction Noise Permit (CNP)			
N/A	N/A	N/A	N/A

Submission Status under Environmental Permit

1.13. The summary of submission status under Environmental Permit EP-528/2021 was presented in **Appendix K**.

2 Air Quality

Monitoring Requirement

2.1. In accordance with the Updated EM&A Manual, the ET shall carry out impact monitoring during the construction phase of the Project. 1-hour Total Suspended Particulates (TSP) should be conducted at a frequency of at least three times in every six days when the highest dust impact occurs.

Monitoring Location

2.2. According to the Updated EM&A Manual, the designated locations for impact air quality monitoring are listed in **Table 2.1** and their locations are shown in **Figure 2.1**.

Table 2.1 Summary of Proposed Air Quality Monitoring Location

Station(s)	EIA ID	Monitoring Location
AM23	P1032	Planned Port Back-up, Storage and Workshop (at Site 3-6)
AM24	P1501	Planned Port Back-up, Storage and Workshop (at Site 3-8)
AM25a	-	San Wai Sewage Treatment Plant near the Planned Port Back-up, Storage and Workshop (at Site 3-14)

2.3. In accordance with the Table A2.4 in Appendix A of the Updated EM&A Manual, impact air quality monitoring will be carried out at monitoring stations AM23, AM24 and AM25a after the occupation of the planned port back-up, storage and workshop.

2.4. As confirmed with ER, the planned port back-up, storages and workshops at Site 3-6, Site 3-8 and Site 3-14 are not constructed yet. Thus, the impact air quality monitoring will be carried out at AM23, AM24 and AM25a after the construction and occupation of these planned port back-up, storages and workshops. No air quality monitoring was carried out in this reporting month.

3 Water Quality

Monitoring Requirement

3.1. In accordance with the Updated EM&A Manual, impact water quality monitoring should be carried out three days per week at all designated monitoring stations during the construction period. The interval between two sets of monitoring should not be less than 36 hours.

3.2. Replicate in-situ measurements of dissolved oxygen (DO), temperature, turbidity, pH, and suspended solids (SS) for each independent sampling event shall be collected to ensure a robust statistically interpretable database.

Monitoring Location

3.3. Impact water quality monitoring was conducted at 6 monitoring stations which is summarized in **Table 3.1**. The location of water quality monitoring stations is shown in **Figure 3.1**.

Table 3.1 Summary of Impact Water Quality Monitoring Stations

Station	Description	Easting	Northing
U1	Upstream Station	815936	834150
U2	Upstream Station	816240	834009
SW	Gradient station (Downstream of U1 and the construction site of Road D1)	816304	834321
HT	Gradient station (Downstream of U2 and the construction site of Road D1)	816866	834314
TKW1	Gradient station (Downstream of the construction site of Road D1)	816563	834686
TKW	Gradient station (Downstream of TKW1 and construction site of Road D1)	816594	834690

Remark: The original water quality monitoring station DB was surrounded by scrubs and vegetation and located along the steep slope of the hill to south-west of Fung Kong Tsuen. The watercourse runs towards the north of Road D1, but no downstream watercourse was identified. Thus, water quality monitoring station DB is not recommended for this Contract without upstream/ downstream monitoring locations identified. An updated water quality monitoring stations TKW and TKW1 were proposed by ET and approved by IEC and EPD.

Monitoring Parameter and Frequency

3.4. The parameters that have been selected for measurement in-situ and in the laboratory are those that are either determined in the EIA to be those that are likely be affected by the construction works or a standard check on water quality conditions. Parameters to be measured in the impact water quality monitoring are listed in **Table 3.2**.

Table 3.2 Parameters measured in the Impact Water Quality Monitoring

Parameters	Units	Abbreviations	Frequency
In-situ measurements			3 days per week
Dissolved oxygen	mg/L	DO	
Dissolved oxygen saturation	%	DO%	
Temperature	℃	-	
pH	-	-	
Turbidity	NTU	-	
Laboratory measurements			
Suspended Solids	mg/L	SS	

3.5. Monitoring location and position, time, sampling depth, weather conditions and any special phenomena or work underway nearby was also be recorded.

Sampling Depths & Replication

3.6. During impact water quality monitoring, each station was sampled, and measurements / water samples was taken at three depths, 1 m below the water surface, mid-depth and 1 m above riverbed. If the water depth was less than 6 m, mid-depth might be omitted. If the water depth was less than 3 m, mid-depth sampling only. For in situ measurements, duplicate readings were made at each water depth at each station. Duplicate water samples were collected at each water depth at each station.

Monitoring Equipment

3.7. A multi-parameter meter (Model HORIBA U-53) was used to measure DO, turbidity, salinity, pH and temperature.

Dissolved Oxygen and Temperature Measuring Equipment

3.8. The instrument for measuring dissolved oxygen and temperature should be portable and weatherproof complete with cable, sensor, and use DC power source. The equipment was capable of measuring:

- A dissolved oxygen level in the range of 0 – 20 mg/L and 0 - 200% saturation; and
- The temperature within 0 - 45 ℃.

3.9. The equipment had a membrane electrode with automatic temperature compensation complete with a cable.

3.10. Sufficient stocks of spare electrodes and cables were available for replacement where necessary.

Turbidity Measurement Equipment

3.11. Turbidity was measured in situ by using the nephelometric method. The instrument was portable and weatherproof using a DC power source complete with cable, sensor and comprehensive operation manuals. The equipment was capable of measuring turbidity between 0 - 1000 NTU. The probe cable was not less than 25 m in length.

Water Depth Detector

3.12. A portable, battery-operated and handheld echo sounder was used for the determination of water depth at each designated monitoring station.

pH

3.13. The instrument was consisting of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It was readable to 0.1 pH value in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 were used for calibration of the instrument before and after use.

Sample Container and Storage

3.14. Following collection, water samples for laboratory analysis were stored in high density polyethylene bottles with appropriate preservatives added, packed in the ice (cooled to 4 ℃ without being frozen). The sample were delivered to Acumen Laboratory and Testing Limited (ACUMEN) (HOKLAS Registration No. 241) and analysed as soon as possible after collection of the water samples. Sufficient volume of samples was collected to achieve the detection limit.

Calibration of In Situ Instruments

3.15. The pH meter, DO meter and turbidimeter were checked and calibrated before use. DO meter and turbidimeter were certified before use and subsequently recalibrated at quarterly basis throughout all stage of water quality monitoring programme. Response of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement.

3.16. For the on-site calibration of field equipment (Multi-parameter Water Quality System), the BS 1427:2009, "Guide to on-site test methods for analysis of waters" was observed.

Back-up Equipment

3.17. Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.

3.18. **Table 3.3** summarizes the equipment used in the water quality monitoring programme. Copies of the calibration certificates of multi-parameter water quality monitoring system are shown in **Appendix E**.

Table 3.3 Water Quality Monitoring Equipment

Equipment	Brand and Model Number	Quantity
Multi-parameter Water Quality System	HORIBA U-53	1

Monitoring Methodology

3.19. A multi-parameter meter (Model HORIBA U-53) was used to measure DO, turbidity, salinity, pH and temperature.

Operating/ Analytical Procedures

3.20. At each measurement, two consecutive measurements of DO concentration, DO saturation, salinity, turbidity, pH and temperature were taken. The probes were retrieved out of water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded, and further readings were taken.

Laboratory Analytical Methods

3.21. Duplicate samples from each independent sampling event are required for all parameters. Analysis of suspended solids were carried out by ACUMEN and comprehensive quality assurance and control procedures in place in order to ensure the quality and consistency of the results. The reporting limit and detection limit are provided in **Table 3.4** and the detection limit for the in-situ measurement are shown in **Table 3.5**.

Table 3.4 Method for Laboratory Analysis for Water Samples

Determinant	Proposed Method	Limit of Reporting
Total Suspended Solid (SS)	APHA 2540 D	1.0 mg/L

Table 3.5 Detection Limits and Precision for Water Quality Parameters

Parameters	Detection limit	Accuracy	Precision
DO	0 – 20 mg/L	± 0.1 mg/L	25%
Temperature	0 – 45 °C	± 0.1 °C	
pH	0 – 14	± 0.1	
Turbidity	0 – 1000 NTU	± 2 NTU	

QA/QC Requirements

Decontamination Procedures

3.22. Water sampling equipment used during the course of the monitoring process was decontaminated by manual washing and rinsed with distilled water after each sampling event. All of the disposable components/ accessories were discarded after sampling.

Sampling Management and Supervision

3.23. All sampling bottles were labelled with the sample ID numbers (including the sampling station), and sampling date. Water samples were dispatched to the testing laboratory for analysis as soon as possible. All the collected samples were stored in a cool box to keep the temperature less than 4 °C but without frozen. All water samples were handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory.

Quality Control Measures for Sample Testing

3.24. Quality control of laboratory analysis of water samples was performed by ACUMEN for every batch of 20 samples:

- One method blank; and
- One set of QC sample

Event and Action Plan

3.25. Should any non-compliance of the criteria occur, action in accordance with the Event and Action Plan in **Appendix H** shall be followed. Investigation of the exceedances of environmental quality performance limits should be conducted, and the ET will immediately notify the IEC and EPD, as appropriate. The notification should be followed up with advice to the IEC and EPD on the results of the investigation, proposed actions and success of the action taken, with any necessary follow-up proposals.

Results and Observations

3.26. All water quality monitoring was conducted as scheduled in the reporting month. The water quality monitoring schedule for this reporting month is shown in **Appendix D**.

3.27. The monitoring results and graphical presentation of water quality monitoring at the monitoring stations are shown in **Appendix F**.

3.28. During the reporting month, fourteen (14) action level exceedances and fourteen (14) limit level exceedances for DO were recorded, and one (1) action level exceedance and two (2) limit level exceedances for turbidity were recorded, and one (1) limit level exceedance of SS during impact water quality monitoring were recorded. Summaries of exceedance records are shown in **Table 3.6** and **Table 3.7**. Action and Limit Levels for impact water quality monitoring are presented in **Table 3.8**.

Table 3.6 Summary of Exceedance Records of Water Quality Monitoring

Date	Station	Parameter (Unit)	Depth-averaged Measured Value	Exceedance		Exceedances due to the Project
				AL	LL	
6/12	TKW1	DO (mg/L)	2.2		✓	N
	HT		2.2	✓		N
	TKW	Turbidity (NTU)	26.5		✓	N
	SW	SS (mg/L)	13.5		✓	N
8/12	SW	Turbidity (NTU)	22.3	✓		N
10/12	TKW1	DO (mg/L)	2.4		✓	N
	TKW		2.4	✓		N
	SW		2.3		✓	N
	HT		2.3	✓		N
13/12	TKW	DO (mg/L)	2.2		✓	N
	SW		2.0		✓	N
	HT		2.1		✓	N
15/12	TKW1	DO (mg/L)	2.3		✓	N
	SW		3.6	✓		N

Date	Station	Parameter (Unit)	Depth-averaged Measured Value	Exceedance		Exceedances due to the Project
				AL	LL	
	HT		2.4	✓		N
	TKW	Turbidity (NTU)	25.1		✓	N
17/12	TKW1	DO (mg/L)	2.5		✓	N
	TKW		2.3		✓	N
	SW		3.6	✓		N
	HT		2.3	✓		N
20/12	TKW1	DO (mg/L)	2.7		✓	N
	TKW		2.5	✓		N
	SW		3.3		✓	N
	HT		2.3	✓		N
22/12	TKW1	DO (mg/L)	2.7		✓	N
	TKW		2.4	✓		N
	SW		3.6	✓		N
	HT		2.4	✓		N
24/12	TKW1	DO (mg/L)	2.2		✓	N
	SW		3.6	✓		N
	HT		2.4	✓		N

Table 3.7 Summary of Exceedance Records of Water Quality Monitoring

Parameter	No. of non-project related exceedances		Total No. of non-project related exceedances	No. of exceedance related to the Project		Total No. of exceedance related to the Project
	AL	LL		AL	LL	
pH	0	0	0	0	0	0
Dissolved Oxygen	14	14	28	0	0	0
Turbidity	1	2	3	0	0	0
Suspended Solids	0	1	1	0	0	0

Table 3.8 Derived Action and Limit Levels for Water Quality

Parameters	Action Levels	Limit Levels
SW		
DO (mg/L)	3.7	3.5
Turbidity (NTU)	21.4	22.9
SS (mg/L)	9.7	9.9
pH	Less than 6.6 or greater than 8.4	Less than 6.5 or greater than 8.5
HT		
DO (mg/L)	2.4	2.2
Turbidity (NTU)	32.3	32.6
SS (mg/L)	34.0	38.7
pH	Less than 6.6 or greater than 8.4	Less than 6.5 or greater than 8.5
TKW1		
DO (mg/L)	2.8	2.8
Turbidity (NTU)	27.9	29.2
SS (mg/L)	16.0	18.4
pH	Less than 6.6 or greater than 8.4	Less than 6.5 or greater than 8.5
TKW		
DO (mg/L)	2.5	2.4
Turbidity (NTU)	24.2	24.6
SS (mg/L)	19.8	21.6
pH	Less than 6.6 or greater than 8.4	Less than 6.5 or greater than 8.5

Notes:
(1) For DO, non-compliance of the water quality limit occurs when monitoring result is lower than the limit.
(2) For Turbidity and SS, non-compliance of the water quality limit occurs when monitoring result is higher than the limit.
(3) The Action Levels and Limit Levels for dissolved oxygen only apply to mid-depth.

3.29. After confirmation of exceedance of the water quality monitoring results, ET has sent the emails for Notification of Exceedance (NOE) to inform relevant parties (i.e., EPD, ER, IEC and Contractor) about the exceedances. After investigation, all action and limit level exceedances recorded during the reporting period were considered non-project related. Detail of the investigation results are presented in **Appendix M**.

Recommendations

3.30. In view of the non-project related exceedances of action and limit levels recorded frequently in December 2022, review of the water quality baseline condition was proposed to reflect the baseline condition during dry season and to reduce the number of false alarms. After site investigation, there is no evidence to indicate that the water quality monitored between 6 and 31 December 2022 was affected by the stie activities, and the water quality monitoring exceedances were caused by other composite factors including surface runoff and effluent discharges from the workshops, open storages, warehouses, private toilet(s) and residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality.

3.31. It is proposed to adopt the water quality data collected in December 2022 as the baseline water quality during the dry season and to derive a supplementary Action/ Limit Levels for the dry season. (The Action/ Limit Levels derived from the water quality data collected in May 2022 would then be applied for wet season.) An updated Baseline Water Quality Monitoring Report would be submitted to IEC and EPD for approval.

4 Waste Management

4.1. Waste generated from the Project include inert construction and demolition (C&D) materials and non-inert C&D wastes in the reporting period. The amount of waste generated by the construction works of the Project during the reporting period are shown in **Appendix I**.

4.2. Construction and demolition (C&D) materials sorting was carried out on site. Sufficient numbers of receptacles were provided for general refuse collection and sorting. Excavated inert C&D materials were reused to minimize the disposal of C&D waste to public fill.

4.3. The Contractor is advised to minimize the wastes generated through recycling or reusing. All applicable mitigation measures stipulated in the Updated EM&A Manual and waste management plans will be fully implemented.

5 Environmental Site Inspection and Audit

5.1. Site inspections were carried out by ET on a weekly basis to monitor the implementation of proper environmental pollution control mitigation measures for the Project. During the reporting period, site inspections were carried out on 9, 16, 23 and 28 December 2022. Joint IEC site inspection was carried out on 28 December 2022.

5.2. Bi-weekly landscape and visual site audits were carried out by a Registered Landscape Architect (RLA) on 16 and 28 December 2022. No particular observation was recorded in this reporting period.

5.3. During site inspection in the reporting period, no non-conformance was identified. Key observations and reminders during the site inspection and landscape and visual site audit are described in **Table 5.1.**

Table 5.1 Summary of Site Inspections and Recommendations

Inspection Date	Key Observation / Reminders	Follow-up Action
9 Dec 2022	1. Fugitive dust was observed when a truck was moving on the haul road within the site. The Contractor had implemented water spraying on site and was reminded to enhance the measure over the haul road. 2. The Contractor was reminded to place a copy of relevant environmental permit at the site entrance.	1. Water spraying was provided on site to prevent dust generation. 2. Copies of environmental permit to be provided at the site entrance.
16 Dec 2022	1. It is understood that the application of effluent discharge licenses is still underway. No effluent discharge away from the site was observed during the inspection. The Contractor was reminded that no effluent is allowed to be discharged off-site before the issue of license.	1. No effluent will be discharged before the effluent discharge license is acquired.
23 Dec 2022	1. Drip tray should be provided for chemical storage and chemical containers shall be properly labelled.	1. Drip tray was provided for chemical storage. 2. Copies of environmental permit to be provided at the site entrance.

Inspection Date	Key Observation / Reminders	Follow-up Action
	2. Contractor was reminded to display Environmental Permit on site exit. 3. The Contractor was reminded to replace the faded NRMM Label. 4. The Contractor was reminded that no effluent is allowed to be discharged off-stie before the issue of license.	3. NRMM Label was replaced. 4. No effluent will be discharged before acquired the effluent discharge license.
28 Dec 2022	1. At the construction site of Road D1, stagnant water within the drip tray of a generator should be properly removed.	1. Stagnant water in drip tray was removed.

Implementation Status of Environmental Mitigation Measures

5.4. According to the EIA Report, EP and the Updated EM&A Manual, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. A summary of the Project Implementation Schedule is provided in **Appendix C**.

6 Environmental Non-Conformance

Summary of Exceedances

6.1. Fourteen (14) action level exceedances and fourteen (14) limit level exceedances for DO were recorded. One (1) action level exceedance and two (2) limit level exceedances for turbidity were recorded, and one (1) limit level exceedance for SS was recorded. After investigation, all exceedances were considered non-project related.

6.2. Should the monitoring results of the environmental monitoring parameters at any designated monitoring stations indicate that the Action / Limit Levels are exceeded, the actions in accordance with the Event and Action Plans in **Appendix H** would be carried out.

6.3. Bi-weekly landscape and visual site audits were carried out by a Registered Landscape Architect (RLA) on 16 and 28 December 2022. No particular observation was recorded in this reporting period.

6.4. Should the audit results indicate that the nonconformity occasion, the actions in accordance with the Event and Action Plans in **Appendix H** would be carried out.

Summary of Environmental Non-Compliance

6.5. No environmental non-compliance was recorded in the reporting period.

Summary of Environmental Complaint

6.6. No environmental complaint was received in the reporting period. The Cumulative Complaint Log is presented in **Appendix J**.

Summary of Environmental Summon and Successful Prosecution

6.7. There was no successful environmental prosecution or notification of summons received since the Project commencement. The Cumulative Log for environmental summon and successful prosecution is presented in **Appendix J**.

7 Future Key Issues

7.1. Works to be undertaken in the next reporting period are summarized in below:

- Construction of Box Culvert
- Diversion of watermains

7.2. Potential environmental impacts arising from the above construction activities are mainly associated with construction dust impact, noise impact, water quality impact and waste management.

Recommendation

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

Dust

- Regular watering to reduce dust emissions from exposed site surface;
- Stockpile of dusty materials shall be covered entirely by impervious sheeting;
- Provide vehicles washing facilities at all site exits to wash away any dusty materials from vehicle body;
- NRMM Labels should be displayed on the applicable equipment on site by the Contractor;
- Provision of water sprinklers along the haul road for dust suppression.

Noise

- Only well-maintained plant should be operated on-site, and plant should be maintained regularly during the construction programme;
- Quality Powered Mechanical Equipment (QPME) should be adopted as far as possible.

Water Quality

- No effluent discharge would be allowed before acquired the effluent discharge license.

Waste Management

- Provision of sufficient waste disposal points and regular collection of waste;

- Regular cleaning and maintenance programme for drainage system; and
- Chemical containers shall be stored with drip tray underneath.

Landscape and Visual

- Construction activities shall be carefully designed to minimize impact in existing retained trees.

7.4. The construction programme for the Project for next reporting period is presented in **Appendix A**.

8 Conclusions and Recommendations

Conclusion

8.1. This Monthly EM&A Report presents the EM&A works during the reporting period from 6 to 31 December 2022 in accordance with the Updated EM&A Manual.

8.2. Fourteen (14) action level exceedances and fourteen (14) limit level exceedances for dissolved oxygen were recorded. One (1) action level exceedance and two (2) limit level exceedances for turbidity of impact water quality monitoring were recorded, and one (1) limit level exceedance for SS was recorded. After investigation, all exceedances were considered non-project related.

8.3. Environmental site inspections were conducted on 9, 16, 23 and 28 December 2022 by the ET in the reporting period.

8.4. No environmental complaint was received in the reporting period.

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

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

8.7. No change of EM&A programme was made in this reporting period.

Comments/ Recommendations

8.8. The baseline water quality monitoring was conducted during a typical wet season in Hong Kong. During the dry season, however, the rainfall is less, and the stream flow would contain higher portion of expedient discharge from local village houses and contaminated runoff from brownfield sites/ open storage area. It is anticipated that the stream flow would contain higher content of turbidity and SS during the dry season. Thus, review of the water quality baseline condition would be required during the construction phase of the Project, particularly when the non-project related exceedances of Action and Limit Levels become frequent. The environmental performance criteria may need to be updated if it is evident that the baseline conditions have changed significantly.

8.9. As frequent non-project related exceedances of the water quality parameters were reported during the monitoring in December 2022, a supplementary set of Action/ Limit Levels of the water quality parameters would be proposed for the dry season due to change of the baseline water quality during the dry season.

Figure(s)

SITE 3–7

SITE 3–8

ROAD D1

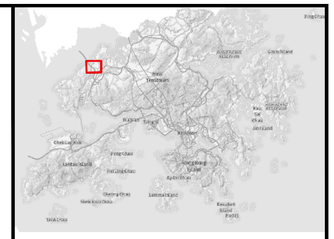
N

SAN WAI SEWAGE
TREATMENT PLANT

KONG SHAM WESTERN HIGHWAY

0 20 60 100

1 : 1000 SCALE BAR



Legend:

Site Boundary of Interim Section of Road D1

Client

CEDD

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Project

CONTRACT NO. YL/2020/03
HUNG SHUI KIU / HA TSUEN
NEW DEVELOPMENT AREA
STAGE 1 WORKS - SITE FORMATION
AND ENGINEERING INFRASTRUCTURE

Drawing Title

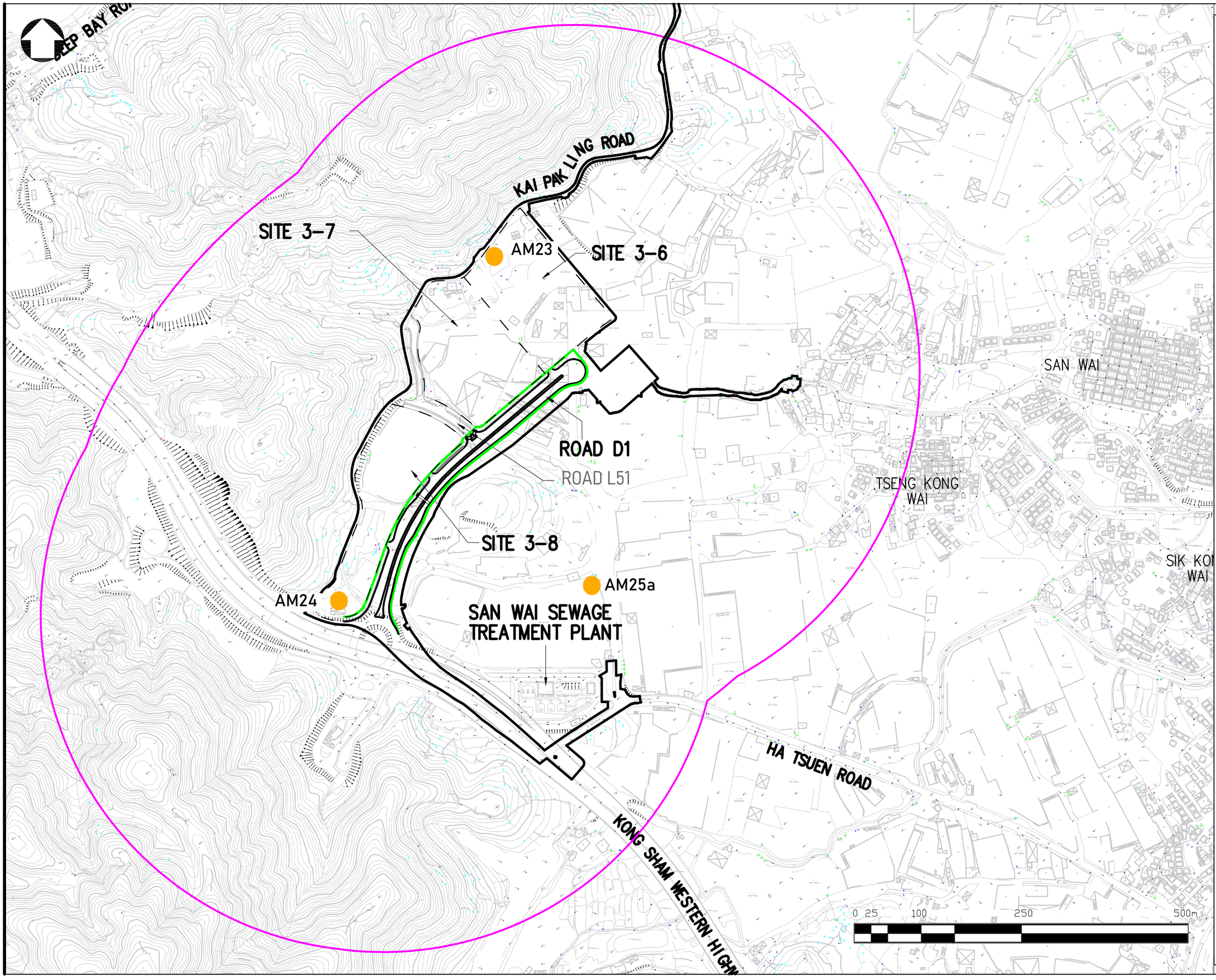
Location Plan of the Interim Section of Road D1

ACUITY sustainability
Member of the Aurecon Group

aurecon

Scale	Date	Rev
1000@A1	June 2022	

Drawing Number LP-01



General Notes

LEGEND:

- SITE BOUNDARY
- PROPOSED SITE
- PROPOSED ROAD
- SITE BOUNDARY OF ROAD D1
- 500M BUFFER ZONE
- AIR QUALITY MONITORING LOCATIONS

No.	Revision/Issue	Date

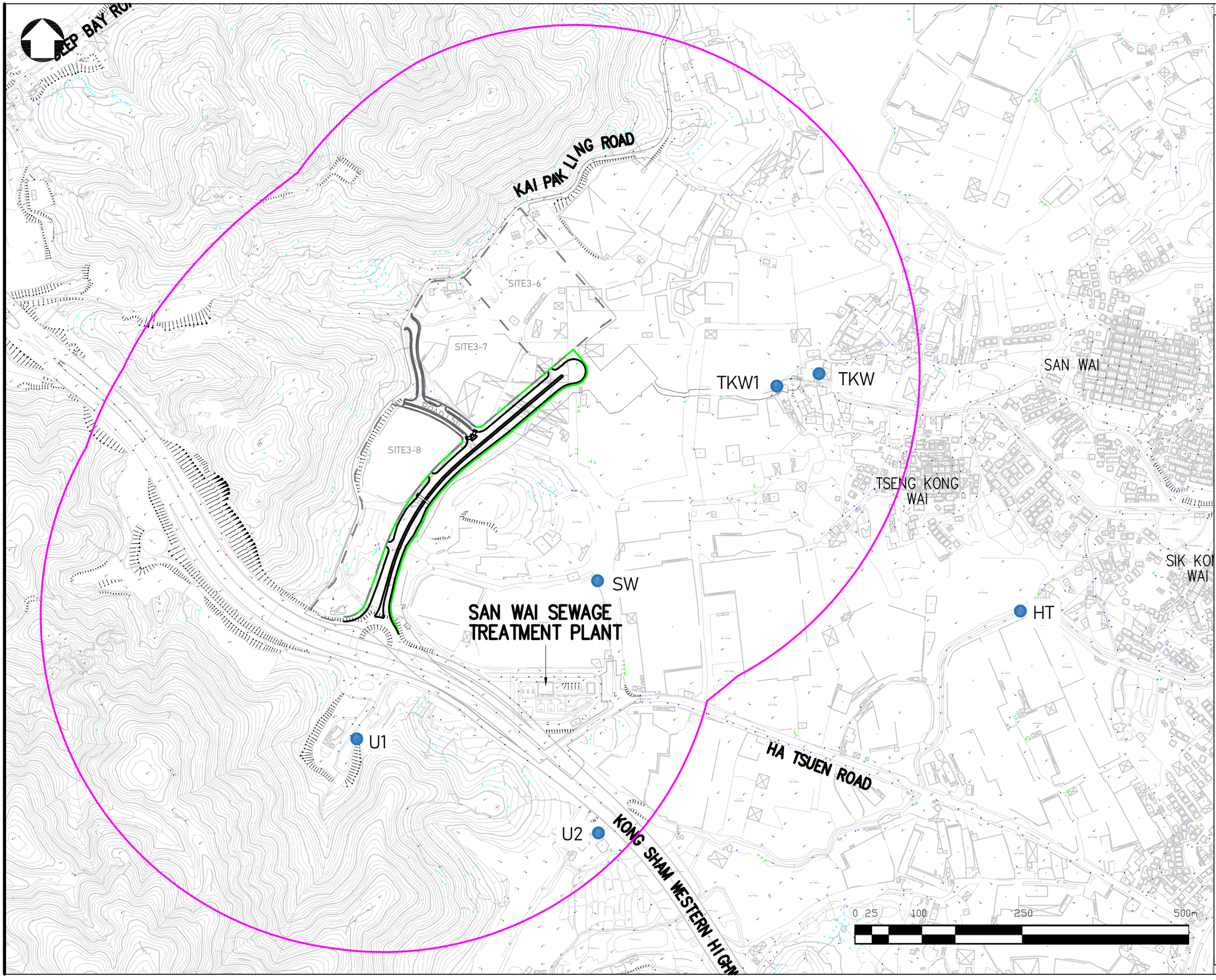
Drawing Title

Figure A2.1 Locations of Air Quality Monitoring Stations for the EM&A Programme of Road D1

Project Title:

Service Contract No. WD/02/2021 Environmental Team for Hung Shui Kiu/ Ha Tsuen New Development Area Stage 1 Works–Site Formation and Engineering Infrastructure

Sheet No.	CEDD 土木工程拓展署 Civil Engineering and Development Department
Date	
Scale	ACUITY SUSTAINABILITY CONSULTING LIMITED



General Notes

LEGEND:

- PROPOSED ROAD
- SITE BOUNDARY OF ROAD D1
- 500M BUFFER ZONE
- WATER QUALITY MONITORING LOCATIONS

No.	Revision/Issue	Date

Drawing Title

Figure A2.3 Locations of Water Quality Monitoring Stations for the EM&A of Road D1

Project:
Service Contract No. WD/02/2021
Environmental Team for Hung Shui Kiu/ Ha Tsuen New Development Area
Stage 1 Works–Site Formation and Engineering Infrastructure

Sheet No.

Date

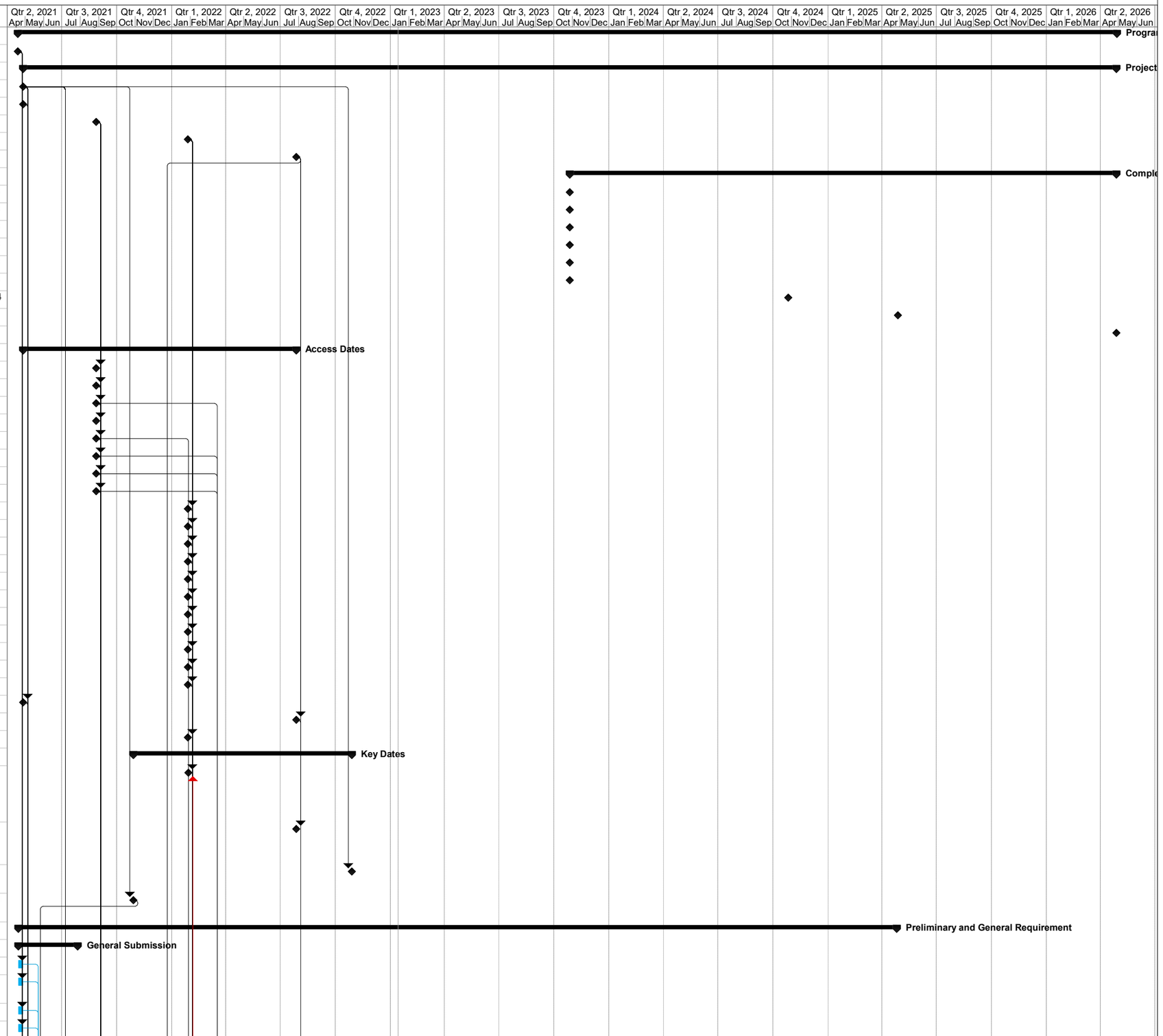
Scale

ACUITY SUSTAINABILITY CONSULTANTS

Appendix A

Construction Programme

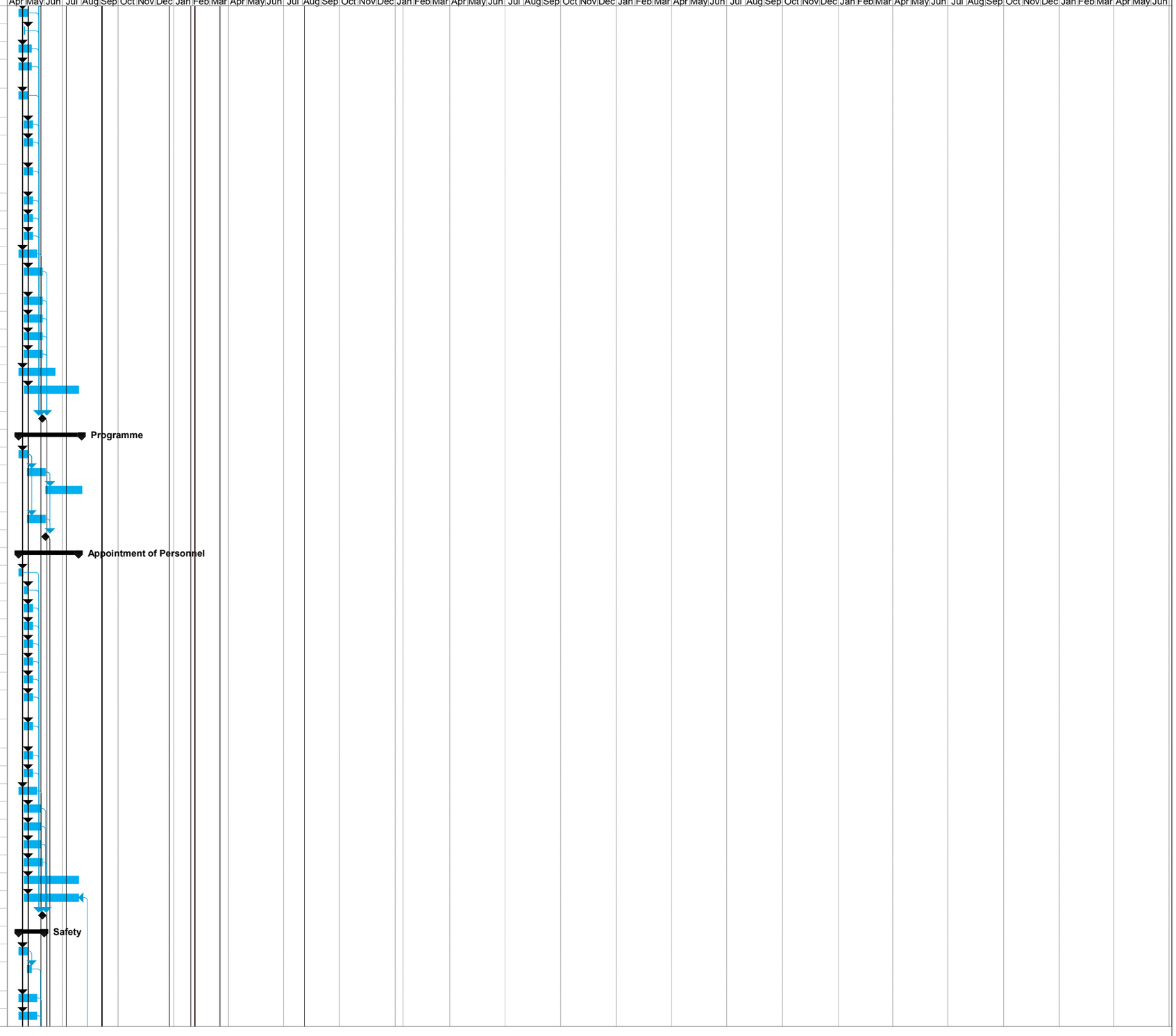
ID	Task Name	Duration	Start	Finish
1	**Programme of YL/2020/03**	**1836 days**	**Mon 19/4/21**	**Tue 28/4/26**
2	Contract Date	0 days	Mon 19/4/21	Mon 19/4/21
3	**Project Dates**	**1826 days**	**Wed 28/4/21**	**Tue 28/4/26**
4	Starting Date	0 days	Wed 28/4/21	Wed 28/4/21
5	Access Date 1	0 days	Wed 28/4/21	Wed 28/4/21
6	Access Date 122	0 days	Sat 28/8/21	Sat 28/8/21
7	Access Date 275	0 days	Fri 28/1/22	Fri 28/1/22
8	Access Date 456	0 days	Thu 28/7/22	Thu 28/7/22
9	**Completion Dates**	**913 days**	**Sat 28/10/23**	**Tue 28/4/26**
10	Completion Date 913 Section 1A1	0 days	Sat 28/10/23	Sat 28/10/23
11	Completion Date 913 Section 1A2	0 days	Sat 28/10/23	Sat 28/10/23
12	Completion Date 913 Section 1A3	0 days	Sat 28/10/23	Sat 28/10/23
13	Completion Date 913 Section 1A4	0 days	Sat 28/10/23	Sat 28/10/23
14	Completion Date 913 Section 1A5	0 days	Sat 28/10/23	Sat 28/10/23
15	Completion Date 913 Section 1A6	0 days	Sat 28/10/23	Sat 28/10/23
16	Completion Date 1278 Section 1B	0 days	Sun 27/10/24	Sun 27/10/24
17	Completion Date 1461 Section 2A	0 days	Mon 28/4/25	Mon 28/4/25
18	Completion Date 1826 Section 2B	0 days	Tue 28/4/26	Tue 28/4/26
19	**Access Dates**	**456 days**	**Wed 28/4/21**	**Thu 28/7/22**
20	Access Date of Portion A1	0 days	Sat 28/8/21	Sat 28/8/21
21	Access Date of Portion A2	0 days	Sat 28/8/21	Sat 28/8/21
22	Access Date of Portion A3	0 days	Sat 28/8/21	Sat 28/8/21
23	Access Date of Portion A4	0 days	Sat 28/8/21	Sat 28/8/21
24	Access Date of Portion A5	0 days	Sat 28/8/21	Sat 28/8/21
25	Access Date of Portion A6	0 days	Sat 28/8/21	Sat 28/8/21
26	Access Date of Portion A7	0 days	Sat 28/8/21	Sat 28/8/21
27	Access Date of Portion A8	0 days	Sat 28/8/21	Sat 28/8/21
28	Access Date of Portion B1	0 days	Fri 28/1/22	Fri 28/1/22
29	Access Date of Portion B2	0 days	Fri 28/1/22	Fri 28/1/22
30	Access Date of Portion B3	0 days	Fri 28/1/22	Fri 28/1/22
31	Access Date of Portion B4	0 days	Fri 28/1/22	Fri 28/1/22
32	Access Date of Portion B5	0 days	Fri 28/1/22	Fri 28/1/22
33	Access Date of Portion B6	0 days	Fri 28/1/22	Fri 28/1/22
34	Access Date of Portion B7	0 days	Fri 28/1/22	Fri 28/1/22
35	Access Date of Portion B8	0 days	Fri 28/1/22	Fri 28/1/22
36	Access Date of Portion B9	0 days	Fri 28/1/22	Fri 28/1/22
37	Access Date of Portion B10	0 days	Fri 28/1/22	Fri 28/1/22
38	Access Date of Portion B11	0 days	Fri 28/1/22	Fri 28/1/22
39	Access Date of Portion C1	0 days	Wed 28/4/21	Wed 28/4/21
40	Access Date of Portion D1	0 days	Thu 28/7/22	Thu 28/7/22
41	Access Date of Portion D2	0 days	Fri 28/1/22	Fri 28/1/22
42	**Key Dates**	**365 days**	**Thu 28/10/21**	**Fri 28/10/22**
43	Submission of the Detailed Boulder Survey Report with the Boulder Hazard Mitigation Measures to the Geotechnical Engineering Office of the Civil Engineering and Development Department	0 days	Fri 28/1/22	Fri 28/1/22
44	Submission of the Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) to the Environmental Protection Department	0 days	Thu 28/7/22	Thu 28/7/22
45	Acceptance in principle by the Project Manager of the Contractor's Design for the Sewage Pumping Station	0 days	Fri 28/10/22	Fri 28/10/22
46	Acceptance in principle by the Project Manager of the Contractor's Design of the Boost-up Transformer Room	0 days	Thu 28/10/21	Thu 28/10/21
47	**Preliminary and General Requirement**	**1467 days**	**Tue 20/4/21**	**Fri 25/4/25**
48	**General Submission**	**99 days**	**Tue 20/4/21**	**Tue 27/7/21**
49	Particulars of underground services detection equipment	7 days	Tue 20/4/21	Mon 26/4/21
50	Details of Contract Computer Facilities and Software (PS1.49A)	7 days	Tue 20/4/21	Mon 26/4/21
51	Mobile phone for the contract (PS1.16)	7 days	Tue 20/4/21	Mon 26/4/21
52	Specialist Provider of Smart Card System (PS29.06)	7 days	Tue 20/4/21	Mon 26/4/21



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

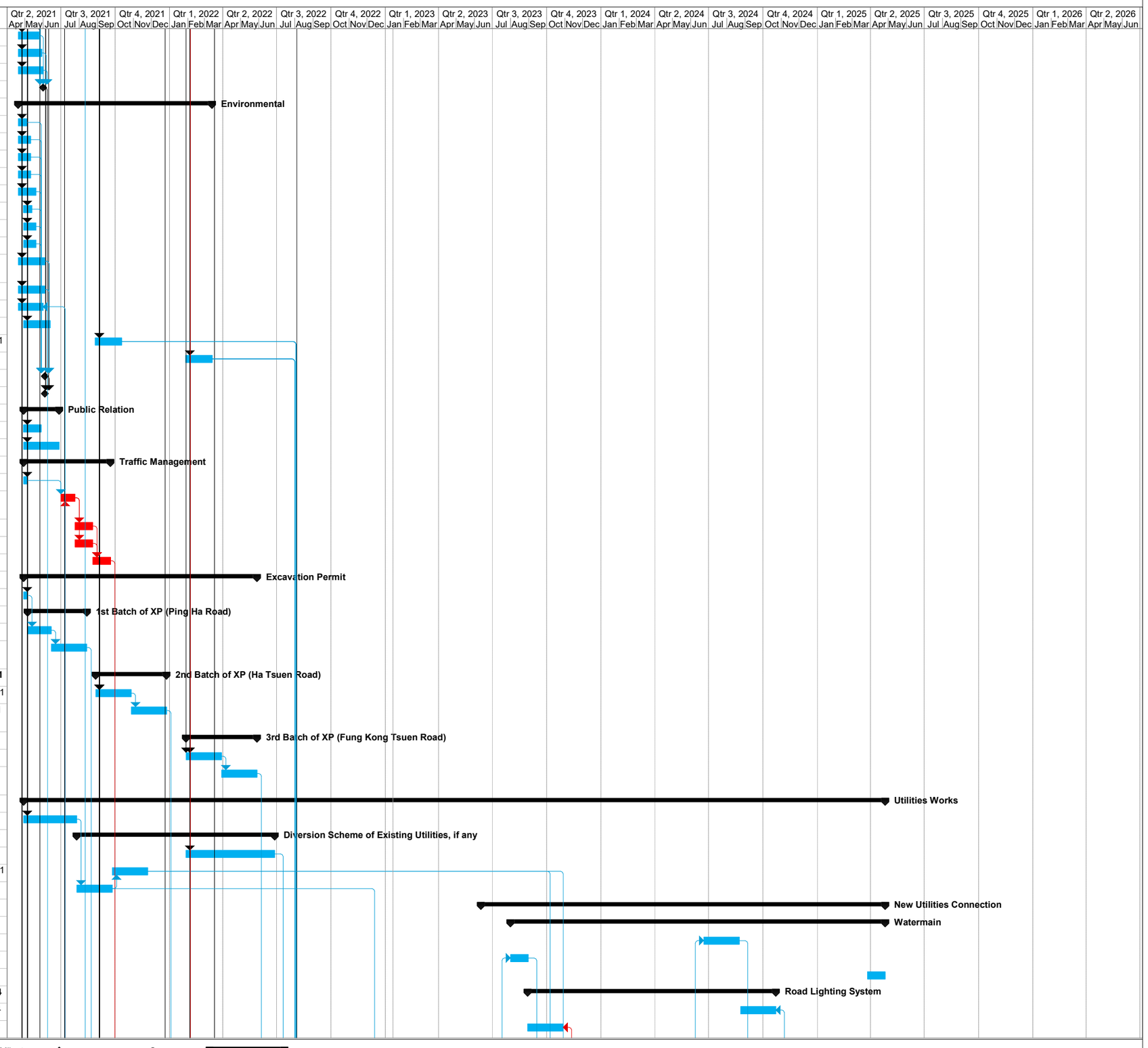
ID	Task Name	Duration	Start	Finish
53	Proposal of Security System (PS1.53A)	14 days	Tue 20/4/21	Mon 3/5/21
54	Professional photographer and use of aircraft (PS1.55S)	1 day	Thu 29/4/21	Thu 29/4/21
55	Procedures for selecting Subcontractors (ACC C9)	21 days	Tue 20/4/21	Mon 10/5/21
56	Competitive process for selection of supplier of plant and materials, equipment and insurance (ACC C11)	21 days	Tue 20/4/21	Mon 10/5/21
57	Designated bank and payment of wages to all the site personnel (PS29.05)	14 days	Tue 20/4/21	Mon 3/5/21
58	Hygiene and Welfare facilities (PS1.50A)	14 days	Thu 29/4/21	Wed 12/5/21
59	Necessary Arrangement with Bank to implement the arrangement on payment of wages to Workers (ACC E6)	14 days	Thu 29/4/21	Wed 12/5/21
60	Professional video production company and a competent video director (PS1.119)	14 days	Thu 29/4/21	Wed 12/5/21
61	Details of ESIS and DRIS System (PS1.129)	14 days	Thu 29/4/21	Wed 12/5/21
62	Hoarding Plan (PS1.48)	14 days	Thu 29/4/21	Wed 12/5/21
63	Transport for PM and Supervisor (PS1.52)	14 days	Thu 29/4/21	Wed 12/5/21
64	Sub-contractor Management Plan (ACC C5)	30 days	Tue 20/4/21	Wed 19/5/21
65	Weather Protection Scheme against inclement weather (PS1.86)	30 days	Thu 29/4/21	Fri 28/5/21
66	Temp Drainage Management Plan	30 days	Thu 29/4/21	Fri 28/5/21
67	Contingency Plan to deal with Flooding	30 days	Thu 29/4/21	Fri 28/5/21
68	Supply of Brand New Survey Equipment (PS Appendix 1.17)	30 days	Thu 29/4/21	Fri 28/5/21
69	Site Uniform (PS1.88)	30 days	Thu 29/4/21	Fri 28/5/21
70	PII insurance Policy	60 days	Tue 20/4/21	Fri 18/6/21
71	Book with a certification body acceptable to the Employer the date of audit for the ISO 9001:2015 certification	90 days	Thu 29/4/21	Tue 27/7/21
72	Completion of Initial General Submission	0 days	Fri 28/5/21	Fri 28/5/21
73	**Programme**	**104 days**	**Tue 20/4/21**	**Sun 1/8/21**
74	First Programme (CDP1 3)	14 days	Tue 20/4/21	Mon 3/5/21
75	Acceptance of the First Programme	30 days	Tue 4/5/21	Wed 2/6/21
76	Expanded and more detailed version of the first programme (PSA 1.3)	60 days	Thu 3/6/21	Sun 1/8/21
77	First Monthly Progress Report (PS1.08A)	30 days	Tue 4/5/21	Wed 2/6/21
78	Completion of Initial Programme Submission	0 days	Wed 2/6/21	Wed 2/6/21
79	**Appointment of Personnel**	**99 days**	**Tue 20/4/21**	**Tue 27/7/21**
80	Contractor's Labour Officer (PS29.09)	7 days	Tue 20/4/21	Mon 26/4/21
81	Contractor's Surveyor (PS1.09)	7 days	Thu 29/4/21	Wed 5/5/21
82	List of Staff for Construction Management Team (ACC D1)	14 days	Thu 29/4/21	Wed 12/5/21
83	RSO and SS (ACC D1)	14 days	Thu 29/4/21	Wed 12/5/21
84	EO and ES (ACC D1)	14 days	Thu 29/4/21	Wed 12/5/21
85	Site Agents and Employees (PS1.12)	14 days	Thu 29/4/21	Wed 12/5/21
86	Construction Manager (PS1.12A)	14 days	Thu 29/4/21	Wed 12/5/21
87	Construction, Landscape and Land Decontanmination Leader (PS1.12B)	14 days	Thu 29/4/21	Wed 12/5/21
88	Geotechnical Engineer, Geologist, Geotechnical Supervisor and GFT (1.12C)	14 days	Thu 29/4/21	Wed 12/5/21
89	Foreman for Road and Drainage Works	14 days	Thu 29/4/21	Wed 12/5/21
90	Particulars of Emergency Unit (PS1.99)	14 days	Thu 29/4/21	Wed 12/5/21
91	Tree Supervisor (PS26.02)	30 days	Tue 20/4/21	Wed 19/5/21
92	Public Relocation Officer (PS 1.12F)	28 days	Thu 29/4/21	Wed 26/5/21
93	Quantity Surevying Clerk (PS1.49)	28 days	Thu 29/4/21	Wed 26/5/21
94	Field and Drafting assistant (PS1.49C)	28 days	Thu 29/4/21	Wed 26/5/21
95	Independent Checking Engineer (PS1.105)	30 days	Thu 29/4/21	Fri 28/5/21
96	Employ CEG and TA (PS1.83)	90 days	Thu 29/4/21	Tue 27/7/21
97	BIM Team Leader (PS1.108)	90 days	Thu 29/4/21	Tue 27/7/21
98	Completion of Construction Management Team Submission	0 days	Fri 28/5/21	Fri 28/5/21
99	**Safety**	**42 days**	**Tue 20/4/21**	**Mon 31/5/21**
100	Draft Construction Health and Safety Plan (ACC D6)	14 days	Tue 20/4/21	Mon 3/5/21
101	Ad-hoc meeting with Supervisor ro discuss the draft Safety Plan (ACC D6)	7 days	Tue 4/5/21	Mon 10/5/21
102	Monthly Reports on Safety Performance (ACC D28)	30 days	Tue 20/4/21	Wed 19/5/21
103	Monthly Safety Report	30 days	Tue 20/4/21	Wed 19/5/21



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

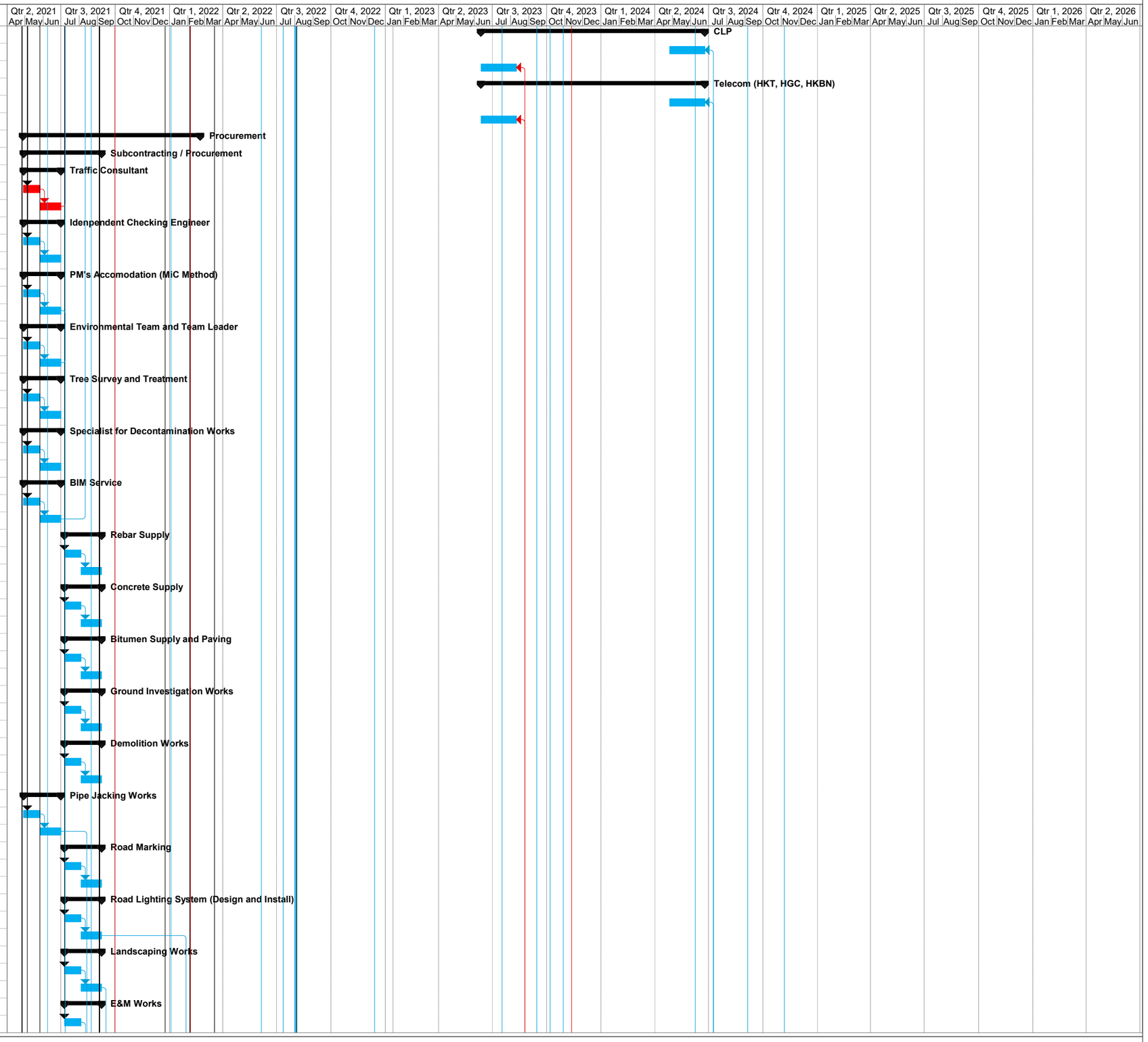
ID	Task Name	Duration	Start	Finish
104	Submission of Safety Plan (ACC D6)	35 days	Tue 20/4/21	Mon 24/5/21
105	Establish and conduct first SSC and SSMC meeting (PS1.65)	40 days	Tue 20/4/21	Sat 29/5/21
106	Site Traffic Safety Management Plan (PS1.71C)	42 days	Tue 20/4/21	Mon 31/5/21
107	Completion of Initial Safety Submission	0 days	Mon 31/5/21	Mon 31/5/21
108	**Environmental**	**328 days**	**Tue 20/4/21**	**Sun 13/3/22**
109	Register of the DDF and Trip Ticket System	14 days	Tue 20/4/21	Mon 3/5/21
110	Draft Environmental Management Plan (ACC D20, PS1.97)	21 days	Tue 20/4/21	Mon 10/5/21
111	Daily Cleaning Supervisor (PS1.32)	21 days	Tue 20/4/21	Mon 10/5/21
112	Inspection Checklsit for Daily Cleaning (PS1.32)	21 days	Tue 20/4/21	Mon 10/5/21
113	Monthly Reports on Environmental Management (PS1.98)	30 days	Tue 20/4/21	Wed 19/5/21
114	Rodents Disinfestation Operation	14 days	Thu 29/4/21	Wed 12/5/21
115	Apply for registration as Chemical Waste Producer (GS25.28)	21 days	Thu 29/4/21	Wed 19/5/21
116	Trip Ticket System Proposal	21 days	Thu 29/4/21	Wed 19/5/21
117	Site Management Plan for implementaton of Trip Ticket System (PS25.25S)	45 days	Tue 20/4/21	Thu 3/6/21
118	Finalized Environmental Mangement Plan	45 days	Tue 20/4/21	Thu 3/6/21
119	Appoint ET and ET Leader	42 days	Tue 20/4/21	Mon 31/5/21
120	Application of Discharge License - First Batch	45 days	Thu 29/4/21	Sat 12/6/21
121	Application of Discharge License - Second Batch	45 days	Sat 28/8/21	Mon 11/10/21
122	Application of Discharge License - Third Batch	45 days	Fri 28/1/22	Sun 13/3/22
123	Completion of Initial Environmental Submission	0 days	Thu 3/6/21	Thu 3/6/21
124	Ready for Commencement of Site Works	0 days	Thu 3/6/21	Thu 3/6/21
125	**Public Relation**	**60 days**	**Thu 29/4/21**	**Sun 27/6/21**
126	Provision of PRO (PS1.12F)	30 days	Thu 29/4/21	Fri 28/5/21
127	Setup 24-hour telephone line cum information centre	60 days	Thu 29/4/21	Sun 27/6/21
128	**Traffic Management**	**147 days**	**Thu 29/4/21**	**Wed 22/9/21**
129	Traffic Consultant and Traffic Engineer (PS1.16A)	7 days	Thu 29/4/21	Wed 5/5/21
130	Prepare Detailed Construction Sequence with associated TTA and obtain endoresement in principle	24 days	Thu 1/7/21	Sat 24/7/21
131	Setup TMLG	30 days	Sun 25/7/21	Mon 23/8/21
132	Setup SLG	30 days	Sun 25/7/21	Mon 23/8/21
133	Arrange First TMLG meeting	30 days	Tue 24/8/21	Wed 22/9/21
134	**Excavation Permit**	**395 days**	**Thu 29/4/21**	**Sat 28/5/22**
135	Request employer to apply for XP (ACC D18)	7 days	Thu 29/4/21	Wed 5/5/21
136	**1st Batch of XP (Ping Ha Road)**	**100 days**	**Thu 6/5/21**	**Fri 13/8/21**
137	Prepare particular for XP Application	40 days	Thu 6/5/21	Mon 14/6/21
138	Application and approval of Excavation Permit for street maintained by HyD - (ACC D18)	60 days	Tue 15/6/21	Fri 13/8/21
139	**2nd Batch of XP (Ha Tsuen Road)**	**120 days**	**Sun 29/8/21**	**Sun 26/12/21**
140	Prepare particular for XP Application	60 days	Sun 29/8/21	Wed 27/10/21
141	Application and approval of Excavation Permit for street maintained by HyD -(ACC D18)	60 days	Thu 28/10/21	Sun 26/12/21
142	**3rd Batch of XP (Fung Kong Tsuen Road)**	**120 days**	**Sat 29/1/22**	**Sat 28/5/22**
143	Prepare particular for XP Application	60 days	Sat 29/1/22	Tue 29/3/22
144	Application and approval of Excavation Permit for street maintained by HyD -(ACC D18)	60 days	Wed 30/3/22	Sat 28/5/22
145	**Utilities Works**	**1458 days**	**Thu 29/4/21**	**Fri 25/4/25**
146	Setup of Utilities Liaison Group	90 days	Thu 29/4/21	Tue 27/7/21
147	**Diversion Scheme of Existing Utilities, if any**	**335 days**	**Wed 28/7/21**	**Mon 27/6/22**
148	Drainage Diversion (Existing Stream at Road D1)	150 days	Sat 29/1/22	Mon 27/6/22
149	Exisiting Service at Road D1 and L51	60 days	Sun 26/9/21	Wed 24/11/21
150	Exisiting Service at Road L53 and L54	60 days	Wed 28/7/21	Sat 25/9/21
151	**New Utilities Connection**	**684 days**	**Mon 12/6/23**	**Fri 25/4/25**
152	**Watermain**	**634 days**	**Tue 1/8/23**	**Fri 25/4/25**
153	Road D1, L51 and Ha Tsuen Road	60 days	Sun 23/6/24	Wed 21/8/24
154	Road L53 and L54	30 days	Tue 1/8/23	Wed 30/8/23
155	Ping Ha Road	30 days	Thu 27/3/25	Fri 25/4/25
156	**Road Lighting System**	**420 days**	**Wed 30/8/23**	**Tue 22/10/24**
157	Road D1 and L51	60 days	Sat 24/8/24	Tue 22/10/24
158	Road L53 and L54	60 days	Wed 30/8/23	Sat 28/10/23



Task Critical Task Milestone Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

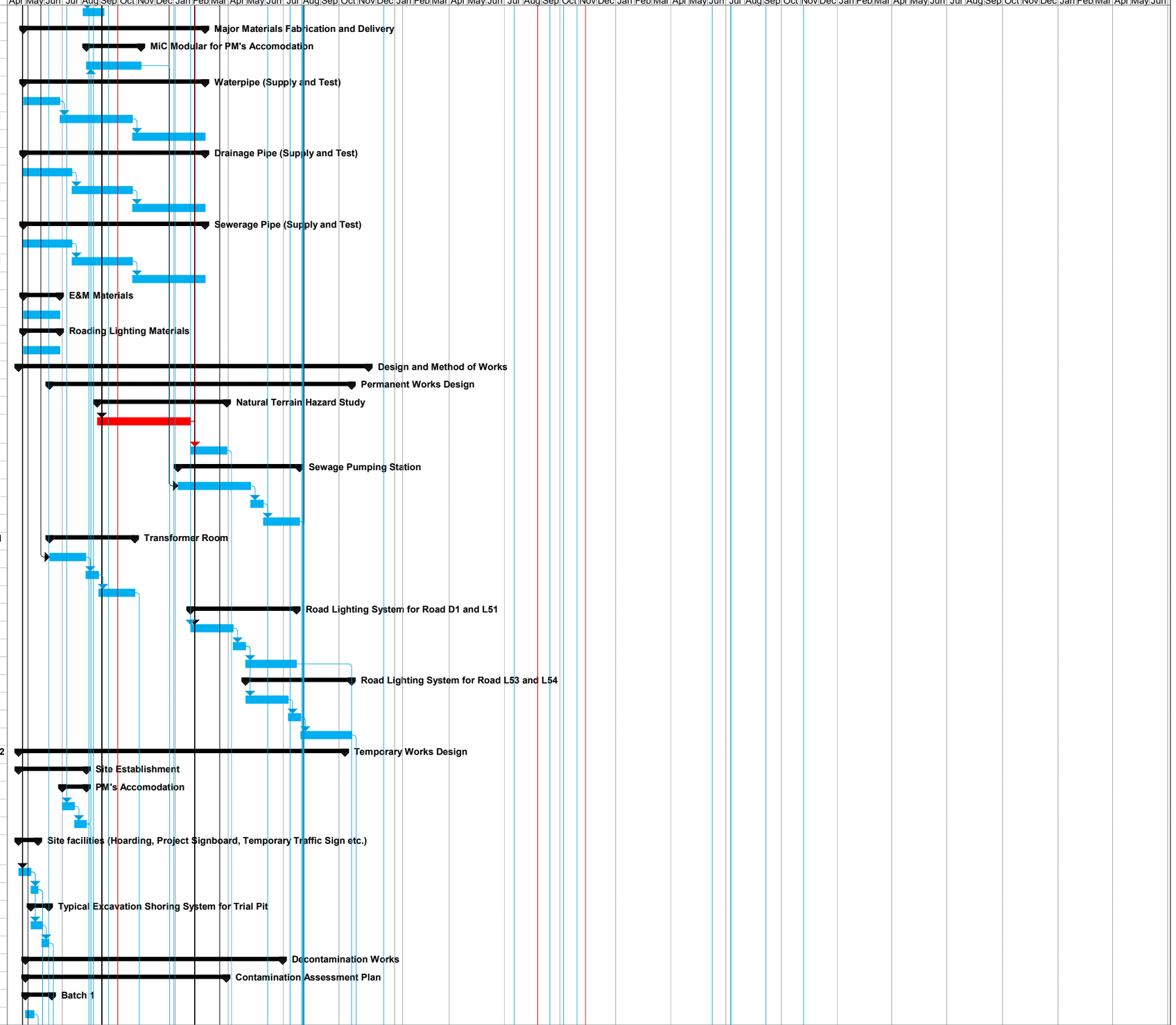
ID	Task Name	Duration	Start	Finish
159	**CLP**	**379 days**	**Mon 12/6/23**	**Mon 24/6/24**
160	Road D1 and L51	60 days	Fri 26/4/24	Mon 24/6/24
161	Road L53 and L54	60 days	Mon 12/6/23	Thu 10/8/23
162	**Telecom (HKT, HGC, HKBN)**	**379 days**	**Mon 12/6/23**	**Mon 24/6/24**
163	Road D1 and L51	60 days	Fri 26/4/24	Mon 24/6/24
164	Road L53 and L54	60 days	Mon 12/6/23	Thu 10/8/23
165	**Procurement**	**300 days**	**Wed 28/4/21**	**Mon 21/2/22**
166	**Subcontracting / Procurement**	**132 days**	**Thu 29/4/21**	**Tue 7/9/21**
167	**Traffic Consultant**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
168	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
169	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
170	**Idenpendent Checking Engineer**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
171	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
172	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
173	**PM's Accomodation (MiC Method)**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
174	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
175	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
176	**Environmental Team and Team Leader**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
177	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
178	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
179	**Tree Survey and Treatment**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
180	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
181	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
182	**Specialist for Decontamination Works**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
183	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
184	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
185	**BIM Service**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
186	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
187	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
188	**Rebar Supply**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
189	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
190	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
191	**Concrete Supply**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
192	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
193	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
194	**Bitumen Supply and Paving**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
195	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
196	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
197	**Ground Investigation Works**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
198	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
199	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
200	**Demolition Works**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
201	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
202	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
203	**Pipe Jacking Works**	**63 days**	**Thu 29/4/21**	**Wed 30/6/21**
204	Subletting	28 days	Thu 29/4/21	Wed 26/5/21
205	Submission and Approval	35 days	Thu 27/5/21	Wed 30/6/21
206	**Road Marking**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
207	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
208	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
209	**Road Lighting System (Design and Install)**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
210	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
211	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
212	**Landscaping Works**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
213	Subletting	28 days	Wed 7/7/21	Tue 3/8/21
214	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
215	**E&M Works**	**63 days**	**Wed 7/7/21**	**Tue 7/9/21**
216	Subletting	28 days	Wed 7/7/21	Tue 3/8/21



Task Critical Task Milestone Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

ID	Task Name	Duration	Start	Finish
217	Submission and Approval	35 days	Wed 4/8/21	Tue 7/9/21
218	**Major Materials Fabrication and Delivery**	**300 days**	**Wed 28/4/21**	**Mon 21/2/22**
219	**MiC Modular for PM's Accomodation**	**90 days**	**Tue 10/8/21**	**Sun 7/11/21**
220	Fabrication and Delivery	90 days	Tue 10/8/21	Sun 7/11/21
221	**Waterpipe (Supply and Test)**	**300 days**	**Wed 28/4/21**	**Mon 21/2/22**
222	Batch 1	60 days	Wed 28/4/21	Sat 26/6/21
223	Batch 2	120 days	Sun 27/6/21	Sun 24/10/21
224	Batch 3	120 days	Mon 25/10/21	Mon 21/2/22
225	**Drainage Pipe (Supply and Test)**	**300 days**	**Wed 28/4/21**	**Mon 21/2/22**
226	Batch 1	80 days	Wed 28/4/21	Fri 16/7/21
227	Batch 2	100 days	Sat 17/7/21	Sun 24/10/21
228	Batch 3	120 days	Mon 25/10/21	Mon 21/2/22
229	**Sewerage Pipe (Supply and Test)**	**300 days**	**Wed 28/4/21**	**Mon 21/2/22**
230	Batch 1	80 days	Wed 28/4/21	Fri 16/7/21
231	Batch 2	100 days	Sat 17/7/21	Sun 24/10/21
232	Batch 3	120 days	Mon 25/10/21	Mon 21/2/22
233	**E&M Materials**	**60 days**	**Wed 28/4/21**	**Sat 26/6/21**
234	Fabrication and Delivery	60 days	Wed 28/4/21	Sat 26/6/21
235	**Roading Lighting Materials**	**60 days**	**Wed 28/4/21**	**Sat 26/6/21**
236	Fabrication and Delivery	60 days	Wed 28/4/21	Sat 26/6/21
237	**Design and Method of Works**	**578 days**	**Tue 20/4/21**	**Fri 18/11/22**
238	**Permanent Works Design**	**499 days**	**Thu 10/6/21**	**Fri 21/10/22**
239	**Natural Terrain Hazard Study**	**214 days**	**Sat 28/8/21**	**Tue 29/3/22**
240	Submission of the Detailed Boulder Survey Report with the Boulder Hazard Mitigation Measures	154 days	Sat 28/8/21	Fri 28/1/22
241	Approval from GEO	60 days	Sat 29/1/22	Tue 29/3/22
242	**Sewage Pumping Station**	**201 days**	**Sat 8/1/22**	**Wed 27/7/22**
243	Prepare and Submit Design	120 days	Sat 8/1/22	Sat 7/5/22
244	ICE Certification, Approval and Consent	21 days	Sun 8/5/22	Sat 28/5/22
245	Approval from DSD	60 days	Sun 29/5/22	Wed 27/7/22
246	**Transformer Room**	**141 days**	**Thu 10/6/21**	**Thu 28/10/21**
247	Prepare and Submit Design	60 days	Thu 10/6/21	Sun 8/8/21
248	ICE Certification, Approval and Consent	21 days	Mon 9/8/21	Sun 29/8/21
249	Approval from CLP	60 days	Mon 30/8/21	Thu 28/10/21
250	**Road Lighting System for Road D1 and L51**	**175 days**	**Sat 29/1/22**	**Fri 22/7/22**
251	Prepare and Submit Design	70 days	Sat 29/1/22	Fri 8/4/22
252	ICE Certification, Approval and Consent	21 days	Sat 9/4/22	Fri 29/4/22
253	Approval from HyD Lighting Division	84 days	Sat 30/4/22	Fri 22/7/22
254	**Road Lighting System for Road L53 and L54**	**175 days**	**Sat 30/4/22**	**Fri 21/10/22**
255	Prepare and Submit Design	70 days	Sat 30/4/22	Fri 8/7/22
256	ICE Certification, Approval and Consent	21 days	Sat 9/7/22	Fri 29/7/22
257	Approval from HyD Lighting Division	84 days	Sat 30/7/22	Fri 21/10/22
258	**Temporary Works Design**	**539 days**	**Tue 20/4/21**	**Mon 10/10/22**
259	**Site Establishment**	**112 days**	**Tue 20/4/21**	**Mon 9/8/21**
260	**PM's Accomodation**	**40 days**	**Thu 1/7/21**	**Mon 9/8/21**
261	Prepare and Submit Design	20 days	Thu 1/7/21	Tue 20/7/21
262	ICE certification, approval and Consent	20 days	Wed 21/7/21	Mon 9/8/21
263	**Site facilities (Hoarding, Project Signboard, Temporary Traffic Sign etc.)**	**32 days**	**Tue 20/4/21**	**Fri 21/5/21**
264	Prepare and Submit Design	20 days	Tue 20/4/21	Sun 9/5/21
265	ICE Certification, Approval and Consent	12 days	Mon 10/5/21	Fri 21/5/21
266	**Typical Excavation Shoring System for Trial Pit**	**30 days**	**Mon 10/5/21**	**Tue 8/6/21**
267	Prepare and Submit Design	18 days	Mon 10/5/21	Thu 27/5/21
268	ICE Certification, Approval and Consent	12 days	Fri 28/5/21	Tue 8/6/21
269	**Decontamination Works**	**425 days**	**Sat 1/5/21**	**Wed 29/6/22**
270	**Contamination Assessment Plan**	**332 days**	**Sat 1/5/21**	**Mon 28/3/22**
271	**Batch 1**	**44 days**	**Sat 1/5/21**	**Sun 13/6/21**
272	Site Appraisal and Preparation of Plan	14 days	Sat 1/5/21	Fri 14/5/21



Task | Critical Task | Milestone | Summary

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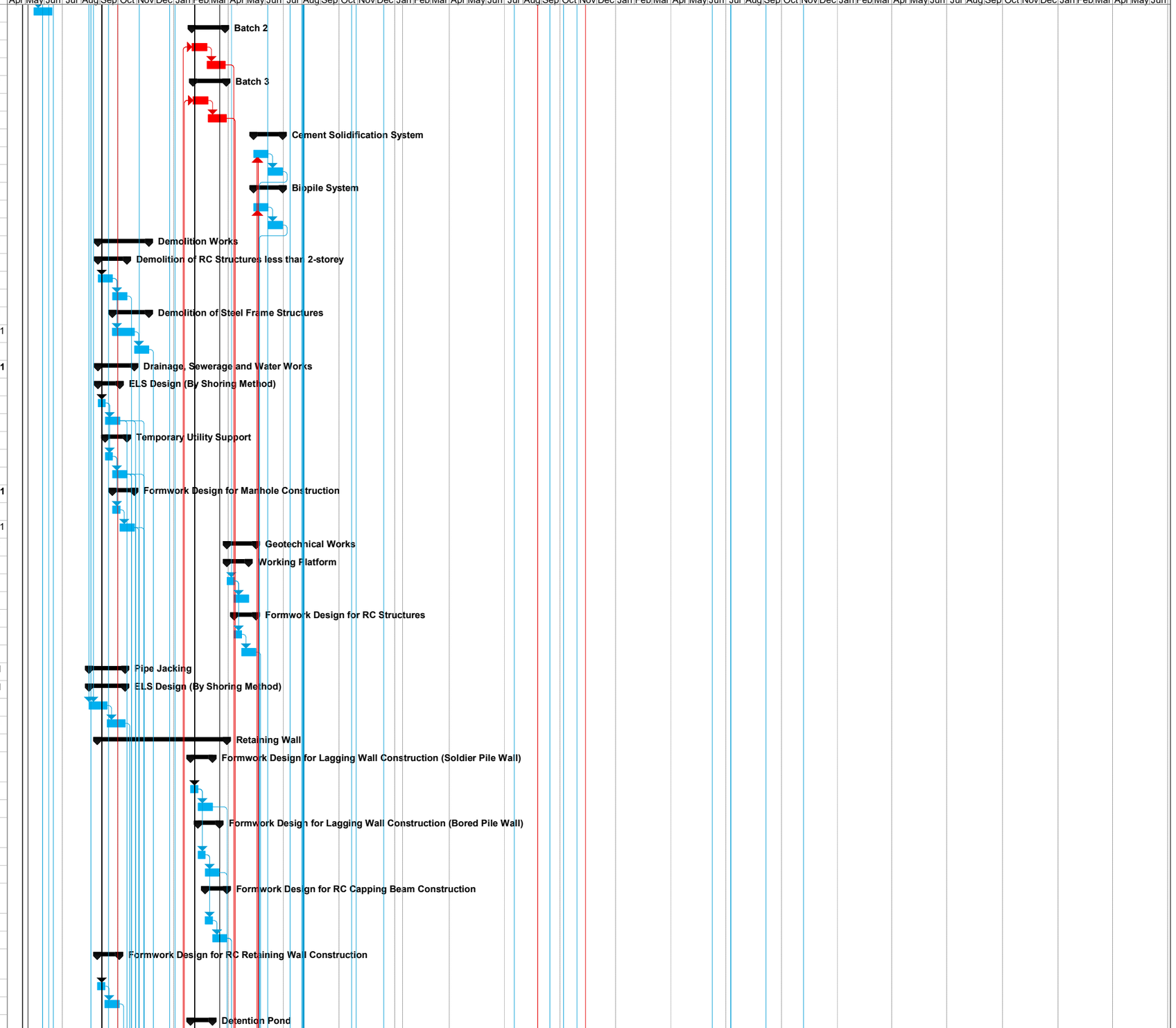
ID	Task Name	Duration	Start	Finish
273	Submission and Endorsement by EPD	30 days	Sat 15/5/21	Sun 13/6/21
274	**Batch 2**	**55 days**	**Mon 31/1/22**	**Sat 26/3/22**
275	Site Appraisal and Preparation of Plan	25 days	Mon 31/1/22	Thu 24/2/22
276	Submission and Endorsement by EPD	30 days	Fri 25/2/22	Sat 26/3/22
277	**Batch 3**	**55 days**	**Wed 2/2/22**	**Mon 28/3/22**
278	Site Appraisal and Preparation of Plan	25 days	Wed 2/2/22	Sat 26/2/22
279	Submission and Endorsement by EPD	30 days	Sun 27/2/22	Mon 28/3/22
280	**Cement Solidification System**	**48 days**	**Fri 13/5/22**	**Wed 29/6/22**
281	Prepare and Submit Design	24 days	Fri 13/5/22	Sun 5/6/22
282	ICE Certification, Approval and Consent	24 days	Mon 6/6/22	Wed 29/6/22
283	**Biopile System**	**48 days**	**Fri 13/5/22**	**Wed 29/6/22**
284	Prepare and Submit Design	24 days	Fri 13/5/22	Sun 5/6/22
285	ICE Certification, Approval and Consent	24 days	Mon 6/6/22	Wed 29/6/22
286	**Demolition Works**	**84 days**	**Sun 29/8/21**	**Sat 20/11/21**
287	**Demolition of RC Structures less than 2-storey**	**48 days**	**Sun 29/8/21**	**Fri 15/10/21**
288	Prepare and Submit Design	24 days	Sun 29/8/21	Tue 21/9/21
289	ICE Certification, Approval and Consent	24 days	Wed 22/9/21	Fri 15/10/21
290	**Demolition of Steel Frame Structures**	**60 days**	**Wed 22/9/21**	**Sat 20/11/21**
291	Prepare and Submit Design	36 days	Wed 22/9/21	Wed 27/10/21
292	ICE Certification, Approval and Consent	24 days	Thu 28/10/21	Sat 20/11/21
293	**Drainage, Sewerage and Water Works**	**60 days**	**Sun 29/8/21**	**Wed 27/10/21**
294	**ELS Design (By Shoring Method)**	**36 days**	**Sun 29/8/21**	**Sun 3/10/21**
295	Prepare and Submit Design	12 days	Sun 29/8/21	Thu 9/9/21
296	ICE Certification, Approval and Consent	24 days	Fri 10/9/21	Sun 3/10/21
297	**Temporary Utility Support**	**36 days**	**Fri 10/9/21**	**Fri 15/10/21**
298	Prepare and Submit Design	12 days	Fri 10/9/21	Tue 21/9/21
299	ICE Certification, Approval and Consent	24 days	Wed 22/9/21	Fri 15/10/21
300	**Formwork Design for Manhole Construction**	**36 days**	**Wed 22/9/21**	**Wed 27/10/21**
301	Prepare and Submit Design	12 days	Wed 22/9/21	Sun 3/10/21
302	ICE Certification, Approval and Consent	24 days	Mon 4/10/21	Wed 27/10/21
303	**Geotechnical Works**	**48 days**	**Wed 30/3/22**	**Mon 16/5/22**
304	**Working Platform**	**36 days**	**Wed 30/3/22**	**Wed 4/5/22**
305	Prepare and Submit Design	12 days	Wed 30/3/22	Sun 10/4/22
306	ICE Certification, Approval and Consent	24 days	Mon 11/4/22	Wed 4/5/22
307	**Formwork Design for RC Structures**	**36 days**	**Mon 11/4/22**	**Mon 16/5/22**
308	Prepare and Submit Design	12 days	Mon 11/4/22	Fri 22/4/22
309	ICE Certification, Approval and Consent	24 days	Sat 23/4/22	Mon 16/5/22
310	**Pipe Jacking**	**60 days**	**Sat 14/8/21**	**Tue 12/10/21**
311	**ELS Design (By Shoring Method)**	**60 days**	**Sat 14/8/21**	**Tue 12/10/21**
312	Prepare and Submit Design	30 days	Sat 14/8/21	Sun 12/9/21
313	ICE Certification, Approval and Consent	30 days	Mon 13/9/21	Tue 12/10/21
314	**Retaining Wall**	**214 days**	**Sat 28/8/21**	**Tue 29/3/22**
315	**Formwork Design for Lagging Wall Construction (Soldier Pile Wall)**	**36 days**	**Sat 29/1/22**	**Sat 5/3/22**
316	Prepare and Submit Design	12 days	Sat 29/1/22	Wed 9/2/22
317	ICE Certification, Approval and Consent	24 days	Thu 10/2/22	Sat 5/3/22
318	**Formwork Design for Lagging Wall Construction (Bored Pile Wall)**	**36 days**	**Thu 10/2/22**	**Thu 17/3/22**
319	Prepare and Submit Design	12 days	Thu 10/2/22	Mon 21/2/22
320	ICE Certification, Approval and Consent	24 days	Tue 22/2/22	Thu 17/3/22
321	**Formwork Design for RC Capping Beam Construction**	**36 days**	**Tue 22/2/22**	**Tue 29/3/22**
322	Prepare and Submit Design	12 days	Tue 22/2/22	Sat 5/3/22
323	ICE Certification, Approval and Consent	24 days	Sun 6/3/22	Tue 29/3/22
324	**Formwork Design for RC Retaining Wall Construction**	**36 days**	**Sat 28/8/21**	**Sat 2/10/21**
325	Prepare and Submit Design	12 days	Sat 28/8/21	Wed 8/9/21
326	ICE Certification, Approval and Consent	24 days	Thu 9/9/21	Sat 2/10/21
327	**Detention Pond**	**36 days**	**Sat 29/1/22**	**Sat 5/3/22**



Task Critical Task Milestone Summary

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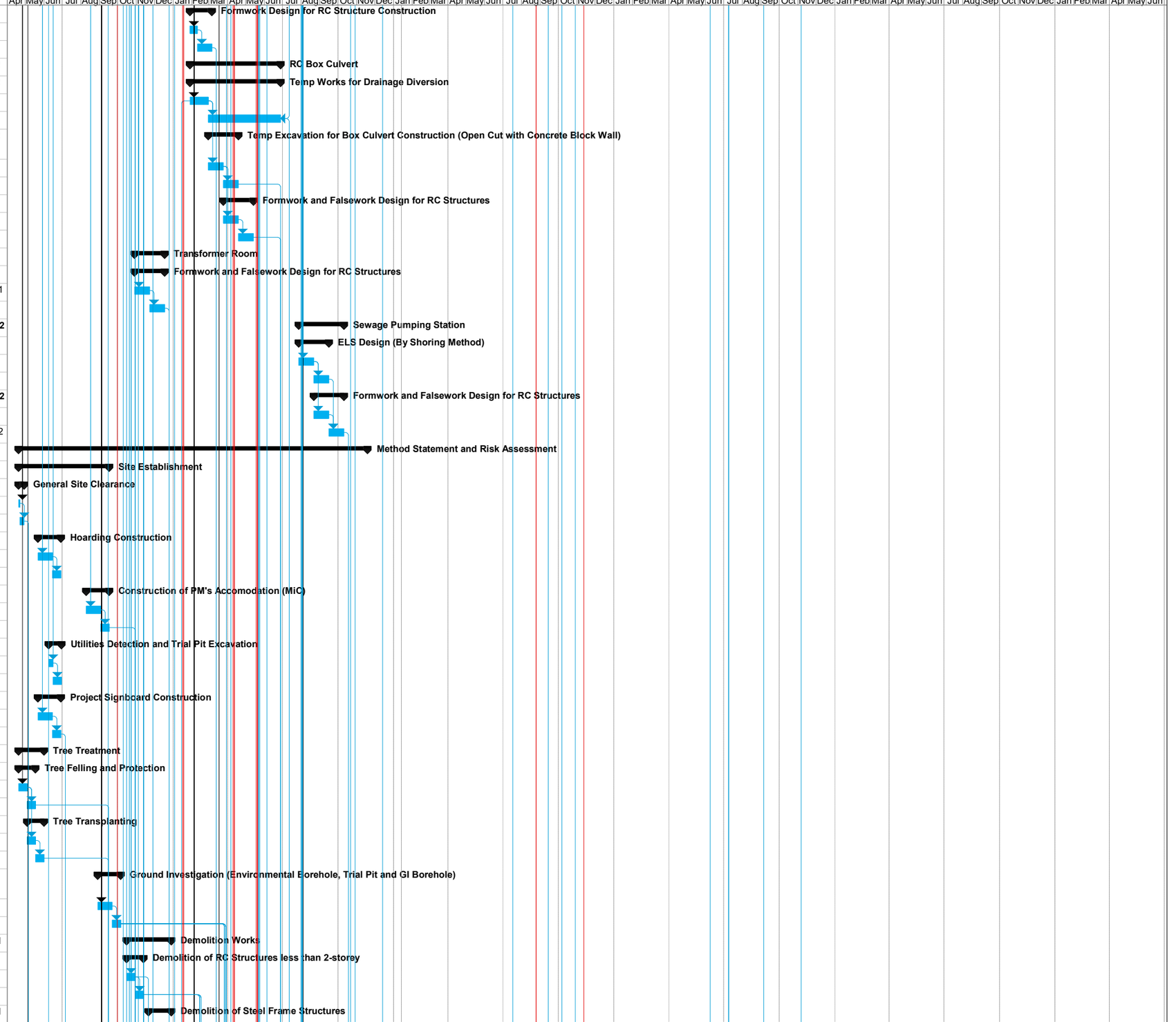
ID	Task Name	Duration	Start	Finish
328	**Formwork Design for RC Structure Construction**	**36 days**	**Sat 29/1/22**	**Sat 5/3/22**
329	Prepare and Submit Design	12 days	Sat 29/1/22	Wed 9/2/22
330	ICE Certification, Approval and Consent	24 days	Thu 10/2/22	Sat 5/3/22
331	**RC Box Culvert**	**150 days**	**Sat 29/1/22**	**Mon 27/6/22**
332	**Temp Works for Drainage Diversion**	**150 days**	**Sat 29/1/22**	**Mon 27/6/22**
333	Prepare and Submit Design	30 days	Sat 29/1/22	Sun 27/2/22
334	ICE Certification, Approval and Consent (By DSD)	120 days	Mon 28/2/22	Mon 27/6/22
335	**Temp Excavation for Box Culvert Construction (Open Cut with Concrete Block Wall)**	**50 days**	**Mon 28/2/22**	**Mon 18/4/22**
336	Prepare and Submit Design	25 days	Mon 28/2/22	Thu 24/3/22
337	ICE Certification, Approval and Consent	25 days	Fri 25/3/22	Mon 18/4/22
338	**Formwork and Falsework Design for RC Structures**	**50 days**	**Fri 25/3/22**	**Fri 13/5/22**
339	Prepare and Submit Design	25 days	Fri 25/3/22	Mon 18/4/22
340	ICE Certification, Approval and Consent	25 days	Tue 19/4/22	Fri 13/5/22
341	**Transformer Room**	**50 days**	**Fri 29/10/21**	**Fri 17/12/21**
342	**Formwork and Falsework Design for RC Structures**	**50 days**	**Fri 29/10/21**	**Fri 17/12/21**
343	Prepare and Submit Design	25 days	Fri 29/10/21	Mon 22/11/21
344	ICE Certification, Approval and Consent	25 days	Tue 23/11/21	Fri 17/12/21
345	**Sewage Pumping Station**	**75 days**	**Thu 28/7/22**	**Mon 10/10/22**
346	**ELS Design (By Shoring Method)**	**50 days**	**Thu 28/7/22**	**Thu 15/9/22**
347	Prepare and Submit Design	25 days	Thu 28/7/22	Sun 21/8/22
348	ICE Certification, Approval and Consent	25 days	Mon 22/8/22	Thu 15/9/22
349	**Formwork and Falsework Design for RC Structures**	**50 days**	**Mon 22/8/22**	**Mon 10/10/22**
350	Prepare and Submit Design	25 days	Mon 22/8/22	Thu 15/9/22
351	ICE Certification, Approval and Consent	25 days	Fri 16/9/22	Mon 10/10/22
352	**Method Statement and Risk Assessment**	**578 days**	**Tue 20/4/21**	**Fri 18/11/22**
353	**Site Establishment**	**150 days**	**Tue 20/4/21**	**Thu 16/9/21**
354	**General Site Clearance**	**9 days**	**Tue 20/4/21**	**Wed 28/4/21**
355	Prepare and Submit Method Statement/Risk Assessment	2 days	Tue 20/4/21	Wed 21/4/21
356	Approval and Consent	7 days	Thu 22/4/21	Wed 28/4/21
357	**Hoarding Construction**	**38 days**	**Sat 22/5/21**	**Mon 28/6/21**
358	Prepare and Submit Method Statement/Risk Assessment	24 days	Sat 22/5/21	Mon 14/6/21
359	Approval and Consent	14 days	Tue 15/6/21	Mon 28/6/21
360	**Construction of PM's Accomodation (MiC)**	**38 days**	**Tue 10/8/21**	**Thu 16/9/21**
361	Prepare and Submit Method Statement/Risk Assessment	24 days	Tue 10/8/21	Thu 2/9/21
362	Approval and Consent	14 days	Fri 3/9/21	Thu 16/9/21
363	**Utilities Detection and Trial Pit Excavation**	**21 days**	**Wed 9/6/21**	**Tue 29/6/21**
364	Prepare and Submit Method Statement/Risk Assessment	7 days	Wed 9/6/21	Tue 15/6/21
365	Approval and Consent	14 days	Wed 16/6/21	Tue 29/6/21
366	**Project Signboard Construction**	**38 days**	**Sat 22/5/21**	**Mon 28/6/21**
367	Prepare and Submit Method Statement/Risk Assessment	24 days	Sat 22/5/21	Mon 14/6/21
368	Approval and Consent	14 days	Tue 15/6/21	Mon 28/6/21
369	**Tree Treatment**	**42 days**	**Tue 20/4/21**	**Mon 31/5/21**
370	**Tree Felling and Protection**	**28 days**	**Tue 20/4/21**	**Mon 17/5/21**
371	Prepare and Submit Method Statement/Risk Assessment	14 days	Tue 20/4/21	Mon 3/5/21
372	Approval and Consent	14 days	Tue 4/5/21	Mon 17/5/21
373	**Tree Transplanting**	**28 days**	**Tue 4/5/21**	**Mon 31/5/21**
374	Prepare and Submit Method Statement/Risk Assessment	14 days	Tue 4/5/21	Mon 17/5/21
375	Approval and Consent	14 days	Tue 18/5/21	Mon 31/5/21
376	**Ground Investigation (Environmental Borehole, Trial Pit and GI Borehole)**	**38 days**	**Sun 29/8/21**	**Tue 5/10/21**
377	Prepare and Submit Method Statement/Risk Assessment	24 days	Sun 29/8/21	Tue 21/9/21
378	Approval and Consent	14 days	Wed 22/9/21	Tue 5/10/21
379	**Demolition Works**	**74 days**	**Sat 16/10/21**	**Tue 28/12/21**
380	**Demolition of RC Structures less than 2-storey**	**28 days**	**Sat 16/10/21**	**Fri 12/11/21**
381	Prepare and Submit Method Statement/Risk Assessment	14 days	Sat 16/10/21	Fri 29/10/21
382	Approval and Consent	14 days	Sat 30/10/21	Fri 12/11/21
383	**Demolition of Steel Frame Structures**	**38 days**	**Sun 21/11/21**	**Tue 28/12/21**



Task Critical Task Milestone Summary

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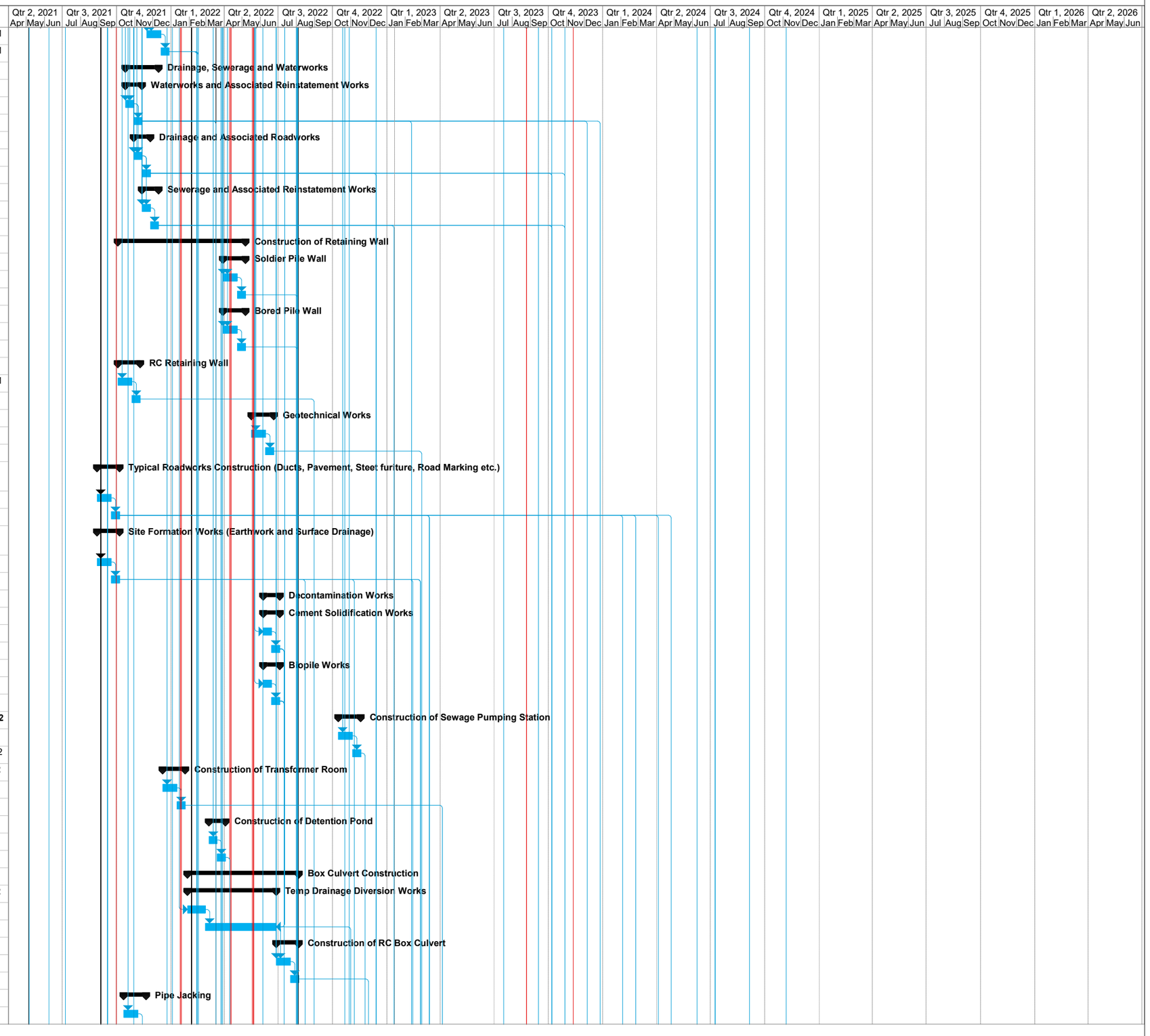
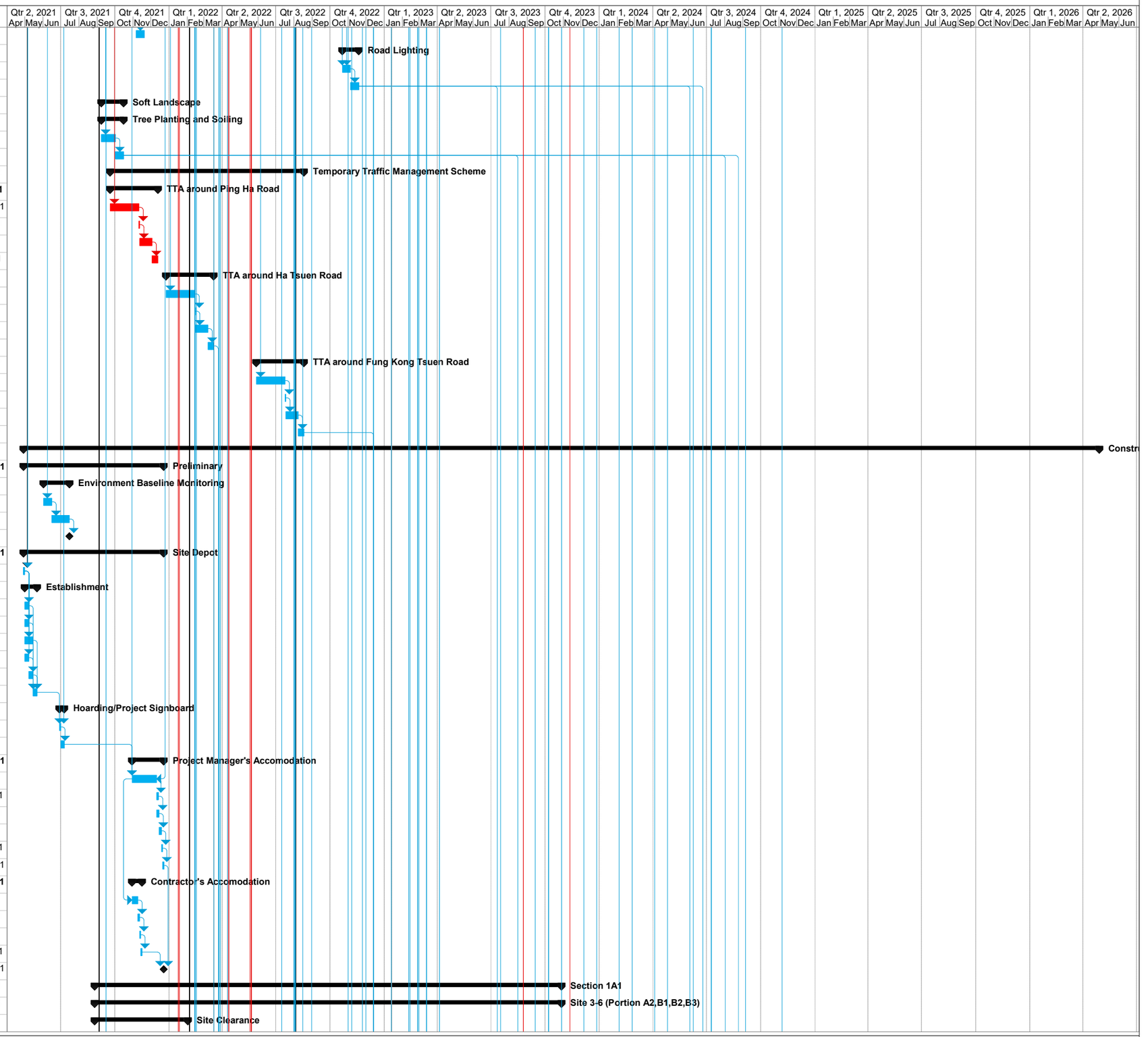
ID	Task Name	Duration	Start	Finish
384	Prepare and Submit Method Statement/Risk Assessment	24 days	Sun 21/11/21	Tue 14/12/21
385	Approval and Consent	14 days	Wed 15/12/21	Tue 28/12/21
386	**Drainage, Sewerage and Waterworks**	**56 days**	**Sat 16/10/21**	**Fri 10/12/21**
387	**Waterworks and Associated Reinstatement Works**	**28 days**	**Sat 16/10/21**	**Fri 12/11/21**
388	Prepare and Submit Method Statement/Risk Assessment	14 days	Sat 16/10/21	Fri 29/10/21
389	Approval and Consent	14 days	Sat 30/10/21	Fri 12/11/21
390	**Drainage and Associated Roadworks**	**28 days**	**Sat 30/10/21**	**Fri 26/11/21**
391	Prepare and Submit Method Statement/Risk Assessment	14 days	Sat 30/10/21	Fri 12/11/21
392	Approval and Consent	14 days	Sat 13/11/21	Fri 26/11/21
393	**Sewerage and Associated Reinstatement Works**	**28 days**	**Sat 13/11/21**	**Fri 10/12/21**
394	Prepare and Submit Method Statement/Risk Assessment	14 days	Sat 13/11/21	Fri 26/11/21
395	Approval and Consent	14 days	Sat 27/11/21	Fri 10/12/21
396	**Construction of Retaining Wall**	**216 days**	**Sun 3/10/21**	**Fri 6/5/22**
397	**Soldier Pile Wall**	**38 days**	**Wed 30/3/22**	**Fri 6/5/22**
398	Prepare and Submit Method Statement/Risk Assessment	24 days	Wed 30/3/22	Fri 22/4/22
399	Approval and Consent	14 days	Sat 23/4/22	Fri 6/5/22
400	**Bored Pile Wall**	**38 days**	**Wed 30/3/22**	**Fri 6/5/22**
401	Prepare and Submit Method Statement/Risk Assessment	24 days	Wed 30/3/22	Fri 22/4/22
402	Approval and Consent	14 days	Sat 23/4/22	Fri 6/5/22
403	**RC Retaining Wall**	**38 days**	**Sun 3/10/21**	**Tue 9/11/21**
404	Prepare and Submit Method Statement/Risk Assessment	24 days	Sun 3/10/21	Tue 26/10/21
405	Approval and Consent	14 days	Wed 27/10/21	Tue 9/11/21
406	**Geotechnical Works**	**38 days**	**Tue 17/5/22**	**Thu 23/6/22**
407	Prepare and Submit Method Statement/Risk Assessment	24 days	Tue 17/5/22	Thu 9/6/22
408	Approval and Consent	14 days	Fri 10/6/22	Thu 23/6/22
409	**Typical Roadworks Construction (Ducts, Pavement, Steet furiture, Road Marking etc.)**	**38 days**	**Sun 29/8/21**	**Tue 5/10/21**
410	Prepare and Submit Method Statement/Risk Assessment	24 days	Sun 29/8/21	Tue 21/9/21
411	Approval and Consent	14 days	Wed 22/9/21	Tue 5/10/21
412	**Site Formation Works (Earthwork and Surface Drainage)**	**38 days**	**Sun 29/8/21**	**Tue 5/10/21**
413	Prepare and Submit Method Statement/Risk Assessment	24 days	Sun 29/8/21	Tue 21/9/21
414	Approval and Consent	14 days	Wed 22/9/21	Tue 5/10/21
415	**Decontamination Works**	**28 days**	**Mon 6/6/22**	**Sun 3/7/22**
416	**Cement Solidification Works**	**28 days**	**Mon 6/6/22**	**Sun 3/7/22**
417	Prepare and Submit Method Statement/Risk Assessment	14 days	Mon 6/6/22	Sun 19/6/22
418	Approval and Consent	14 days	Mon 20/6/22	Sun 3/7/22
419	**Biopile Works**	**28 days**	**Mon 6/6/22**	**Sun 3/7/22**
420	Prepare and Submit Method Statement/Risk Assessment	14 days	Mon 6/6/22	Sun 19/6/22
421	Approval and Consent	14 days	Mon 20/6/22	Sun 3/7/22
422	**Construction of Sewage Pumping Station**	**38 days**	**Tue 11/10/22**	**Thu 17/11/22**
423	Prepare and Submit Method Statement/Risk Assessment	24 days	Tue 11/10/22	Thu 3/11/22
424	Approval and Consent	14 days	Fri 4/11/22	Thu 17/11/22
425	**Construction of Transformer Room**	**38 days**	**Sat 18/12/21**	**Mon 24/1/22**
426	Prepare and Submit Method Statement/Risk Assessment	24 days	Sat 18/12/21	Mon 10/1/22
427	Approval and Consent	14 days	Tue 11/1/22	Mon 24/1/22
428	**Construction of Detention Pond**	**28 days**	**Sun 6/3/22**	**Sat 2/4/22**
429	Prepare and Submit Method Statement/Risk Assessment	14 days	Sun 6/3/22	Sat 19/3/22
430	Approval and Consent	14 days	Sun 20/3/22	Sat 2/4/22
431	**Box Culvert Construction**	**188 days**	**Sat 29/1/22**	**Thu 4/8/22**
432	**Temp Drainage Diversion Works**	**150 days**	**Sat 29/1/22**	**Mon 27/6/22**
433	Prepare and Submit Method Statement/Risk Assessment	30 days	Sat 29/1/22	Sun 27/2/22
434	Approval and Consent (By DSD)	120 days	Mon 28/2/22	Mon 27/6/22
435	**Construction of RC Box Culvert**	**38 days**	**Tue 28/6/22**	**Thu 4/8/22**
436	Prepare and Submit Method Statement/Risk Assessment	24 days	Tue 28/6/22	Thu 21/7/22
437	Approval and Consent	14 days	Fri 22/7/22	Thu 4/8/22
438	**Pipe Jacking**	**38 days**	**Wed 13/10/21**	**Fri 19/11/21**
439	Prepare and Submit Method Statement/Risk Assessment	24 days	Wed 13/10/21	Fri 5/11/21



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

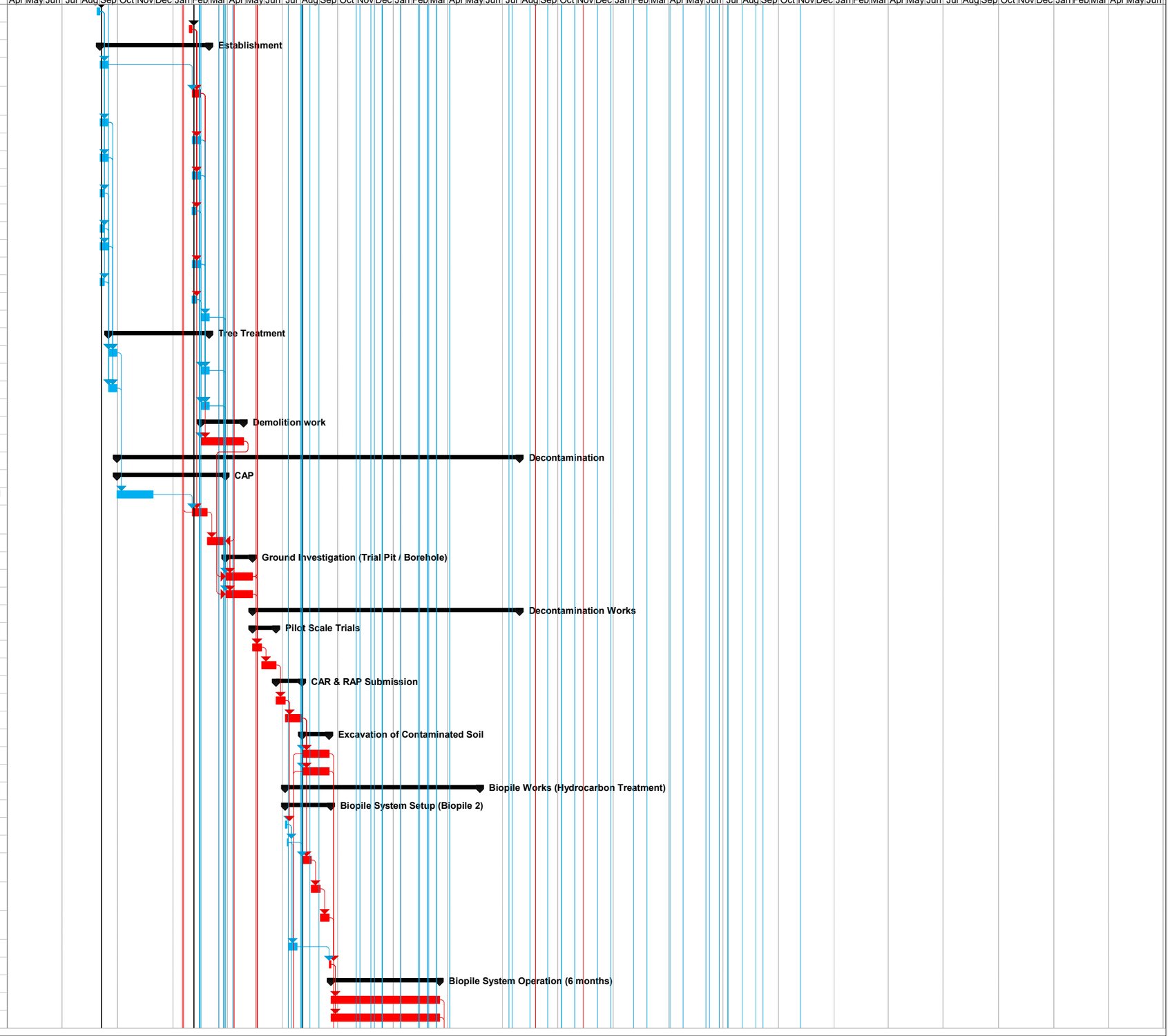
ID	Task Name	Duration	Start	Finish
440	Approval and Consent	14 days	Sat 6/11/21	Fri 19/11/21
441	**Road Lighting**	**28 days**	**Sat 22/10/22**	**Fri 18/11/22**
442	Prepare and Submit Method Statement/Risk Assessment	14 days	Sat 22/10/22	Fri 4/11/22
443	Approval and Consent	14 days	Sat 5/11/22	Fri 18/11/22
444	**Soft Landscape**	**38 days**	**Wed 8/9/21**	**Fri 15/10/21**
445	**Tree Planting and Soiling**	**38 days**	**Wed 8/9/21**	**Fri 15/10/21**
446	Prepare and Submit Method Statement/Risk Assessment	24 days	Wed 8/9/21	Fri 1/10/21
447	Approval and Consent	14 days	Sat 2/10/21	Fri 15/10/21
448	**Temporary Traffic Management Scheme**	**329 days**	**Thu 23/9/21**	**Wed 17/8/22**
449	**TTA around Ping Ha Road**	**81 days**	**Thu 23/9/21**	**Sun 12/12/21**
450	Preparation of TTMS	49 days	Thu 23/9/21	Wed 10/11/21
451	Present and Approved at TMLG	1 day	Thu 11/11/21	Thu 11/11/21
452	Endorsement of TTMS	21 days	Fri 12/11/21	Thu 2/12/21
453	RWA Application and 2 Days Notification	10 days	Fri 3/12/21	Sun 12/12/21
454	**TTA around Ha Tsuen Road**	**81 days**	**Mon 27/12/21**	**Thu 17/3/22**
455	Preparation of TTMS	49 days	Mon 27/12/21	Sun 13/2/22
456	Present and Approved at TMLG	1 day	Mon 14/2/22	Mon 14/2/22
457	Endorsement of TTMS	21 days	Tue 15/2/22	Mon 7/3/22
458	RWA Application and 2 Days Notification	10 days	Tue 8/3/22	Thu 17/3/22
459	**TTA around Fung Kong Tsuen Road**	**81 days**	**Sun 29/5/22**	**Wed 17/8/22**
460	Preparation of TTMS	49 days	Sun 29/5/22	Sat 16/7/22
461	Present and Approved at TMLG	1 day	Sun 17/7/22	Sun 17/7/22
462	Endorsement of TTMS	21 days	Mon 18/7/22	Sun 7/8/22
463	RWA Application and 2 Days Notification	10 days	Mon 8/8/22	Wed 17/8/22
464	**Construction**	**1826 days**	**Thu 29/4/21**	**Tue 28/4/26**
465	**Preliminary**	**238 days**	**Thu 29/4/21**	**Wed 22/12/21**
466	**Environment Baseline Monitoring**	**44 days**	**Wed 2/6/21**	**Thu 15/7/21**
467	Submission of Baseline Monitoring Plan	14 days	Wed 2/6/21	Tue 15/6/21
468	Conduct Baseline Monitoring	30 days	Wed 16/6/21	Thu 15/7/21
469	Completion of Baseline Monitoring	0 days	Thu 15/7/21	Thu 15/7/21
470	**Site Depot**	**238 days**	**Thu 29/4/21**	**Wed 22/12/21**
471	Site Clearance	2 days	Thu 29/4/21	Fri 30/4/21
472	**Establishment**	**21 days**	**Sat 1/5/21**	**Fri 21/5/21**
473	Condition Survey	7 days	Sat 1/5/21	Fri 7/5/21
474	Tree Survey	7 days	Sat 1/5/21	Fri 7/5/21
475	Initial Survey	14 days	Sat 1/5/21	Fri 14/5/21
476	Health & Hygiene Facilities	7 days	Sat 1/5/21	Fri 7/5/21
477	Underground Utilities Detection	7 days	Sat 8/5/21	Fri 14/5/21
478	Setting up Temporary Office	7 days	Sat 15/5/21	Fri 21/5/21
479	**Hoarding/Project Signboard**	**8 days**	**Tue 29/6/21**	**Tue 6/7/21**
480	Construction of Concrete Strip	2 days	Tue 29/6/21	Wed 30/6/21
481	Erection of Project Signboard	6 days	Thu 1/7/21	Tue 6/7/21
482	**Project Manager's Accomodation**	**54 days**	**Sat 30/10/21**	**Wed 22/12/21**
483	Construction of Foundation	42 days	Sat 30/10/21	Fri 10/12/21
484	Delivery of MiC Modulars	3 days	Sat 11/12/21	Mon 13/12/21
485	Erection of MiC Modulars	4 days	Sat 11/12/21	Tue 14/12/21
486	Connection of Power and associated E&M works	4 days	Wed 15/12/21	Sat 18/12/21
487	Testing and Commissioning	2 days	Sun 19/12/21	Mon 20/12/21
488	Delivery of Office Furniture and Equipments	2 days	Tue 21/12/21	Wed 22/12/21
489	**Contractor's Accomodation**	**17 days**	**Sat 30/10/21**	**Mon 15/11/21**
490	Construction of Foundation	10 days	Sat 30/10/21	Mon 8/11/21
491	Delivery and Erection of Office Containers	3 days	Tue 9/11/21	Thu 11/11/21
492	Connection of Power Supply	2 days	Fri 12/11/21	Sat 13/11/21
493	Delivery of office Furniture and Equipments	2 days	Sun 14/11/21	Mon 15/11/21
494	Completion of Site Accomodation	0 days	Wed 22/12/21	Wed 22/12/21
495	**Section 1A1**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
496	**Site 3-6 (Portion A2,B1,B2,B3)**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
497	**Site Clearance**	**158 days**	**Sat 28/8/21**	**Tue 1/2/22**



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

ID	Task Name	Duration	Start	Finish
498	Site Clearance for Portion A2	5 days	Sat 28/8/21	Wed 1/9/21
499	Site Clearance for Portion B1,B2,B3	5 days	Fri 28/1/22	Tue 1/2/22
500	**Establishment**	**181 days**	**Thu 2/9/21**	**Tue 1/3/22**
501	Condition Survey for Existing Structures to be Demolished for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
502	Condition Survey for Existing Structures to be Demolished for Portion B1,B2,B3	14 days	Wed 2/2/22	Tue 15/2/22
503	Tree Survey for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
504	Tree Survey for Portion B1,B2,B3	14 days	Wed 2/2/22	Tue 15/2/22
505	Initial Survey for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
506	Initial Survey for Portion B1,B2,B3	14 days	Wed 2/2/22	Tue 15/2/22
507	Site Haul Road for Portion A2	7 days	Thu 2/9/21	Wed 8/9/21
508	Site Haul Road for Portion B1,B2,B3	7 days	Wed 2/2/22	Tue 8/2/22
509	Health & Hygiene Facilities	7 days	Thu 2/9/21	Wed 8/9/21
510	Fence Work & Gate for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
511	Fence Work for Portion B1,B2,B3	14 days	Wed 2/2/22	Tue 15/2/22
512	Underground Utilities Detection for Portion A2	7 days	Thu 2/9/21	Wed 8/9/21
513	Underground Utilities Detection for Portion B1,B2,B3	7 days	Wed 2/2/22	Tue 8/2/22
514	Install Monitoring Points	14 days	Wed 16/2/22	Tue 1/3/22
515	**Tree Treatment**	**167 days**	**Thu 16/9/21**	**Tue 1/3/22**
516	Tree Felling for Portion A2	14 days	Thu 16/9/21	Wed 29/9/21
517	Tree Felling for Portion B1,B2,B3	14 days	Wed 16/2/22	Tue 1/3/22
518	Tree Protection Portion A2	14 days	Thu 16/9/21	Wed 29/9/21
519	Tree Protection Portion B1,B2,B3	14 days	Wed 16/2/22	Tue 1/3/22
520	**Demolition work**	**71 days**	**Wed 16/2/22**	**Wed 27/4/22**
521	Demolition of Existing Structures	71 days	Wed 16/2/22	Wed 27/4/22
522	**Decontamination**	**668 days**	**Thu 30/9/21**	**Sat 29/7/23**
523	**CAP**	**180 days**	**Thu 30/9/21**	**Mon 28/3/22**
524	Site Appraisal for Portion A2	60 days	Thu 30/9/21	Sun 28/11/21
525	Site Appraisal for Portion B1,B2,B3 & Preparation of CAP for all Portions	25 days	Wed 2/2/22	Sat 26/2/22
526	Submission & Endorsement by EPD	30 days	Sun 27/2/22	Mon 28/3/22
527	**Ground Investigation (Trial Pit / Borehole)**	**45 days**	**Tue 29/3/22**	**Thu 12/5/22**
528	Trial Pit Sampling & Testing	45 days	Tue 29/3/22	Thu 12/5/22
529	Inspection Pit for installing Groundwater Wells	45 days	Tue 29/3/22	Thu 12/5/22
530	**Decontamination Works**	**443 days**	**Fri 13/5/22**	**Sat 29/7/23**
531	**Pilot Scale Trials**	**39 days**	**Fri 13/5/22**	**Mon 20/6/22**
532	Pilot Trial	15 days	Fri 13/5/22	Fri 27/5/22
533	Treatability Test for Heavy Metal	24 days	Sat 28/5/22	Mon 20/6/22
534	**CAR & RAP Submission**	**43 days**	**Tue 21/6/22**	**Tue 2/8/22**
535	Preparation of CAR & RAP	15 days	Tue 21/6/22	Tue 5/7/22
536	Review & Accepted by EPD	28 days	Wed 6/7/22	Tue 2/8/22
537	**Excavation of Contaminated Soil**	**45 days**	**Wed 3/8/22**	**Fri 16/9/22**
538	To Stockpile for Biopile 2	45 days	Wed 3/8/22	Fri 16/9/22
539	To Stockpile for Cement Solidification Plant 2	45 days	Wed 3/8/22	Fri 16/9/22
540	**Biopile Works (Hydrocarbon Treatment)**	**323 days**	**Wed 6/7/22**	**Wed 24/5/23**
541	**Biopile System Setup (Biopile 2)**	**76 days**	**Wed 6/7/22**	**Mon 19/9/22**
542	Preparation of Base	3 days	Wed 6/7/22	Fri 8/7/22
543	Waterproofing Works	2 days	Sat 9/7/22	Sun 10/7/22
544	Placing 1st layer of contaminated soil & associated pipe	15 days	Wed 3/8/22	Wed 17/8/22
545	Placing 2nd layer of contaminated soil & associated pipe	15 days	Thu 18/8/22	Thu 1/9/22
546	Placing final layer of contaminated soil & cover up the whole biople	15 days	Fri 2/9/22	Fri 16/9/22
547	Erect of Shelter for Biopile System	15 days	Mon 11/7/22	Mon 25/7/22
548	Connection & Commissioning of Biopile System	3 days	Sat 17/9/22	Mon 19/9/22
549	**Biopile System Operation (6 months)**	**180 days**	**Tue 20/9/22**	**Sat 18/3/23**
550	Operation & Maintenance	180 days	Tue 20/9/22	Sat 18/3/23
551	Vertification, Sampling & Testing	180 days	Tue 20/9/22	Sat 18/3/23



Task | Critical Task | Milestone | Summary

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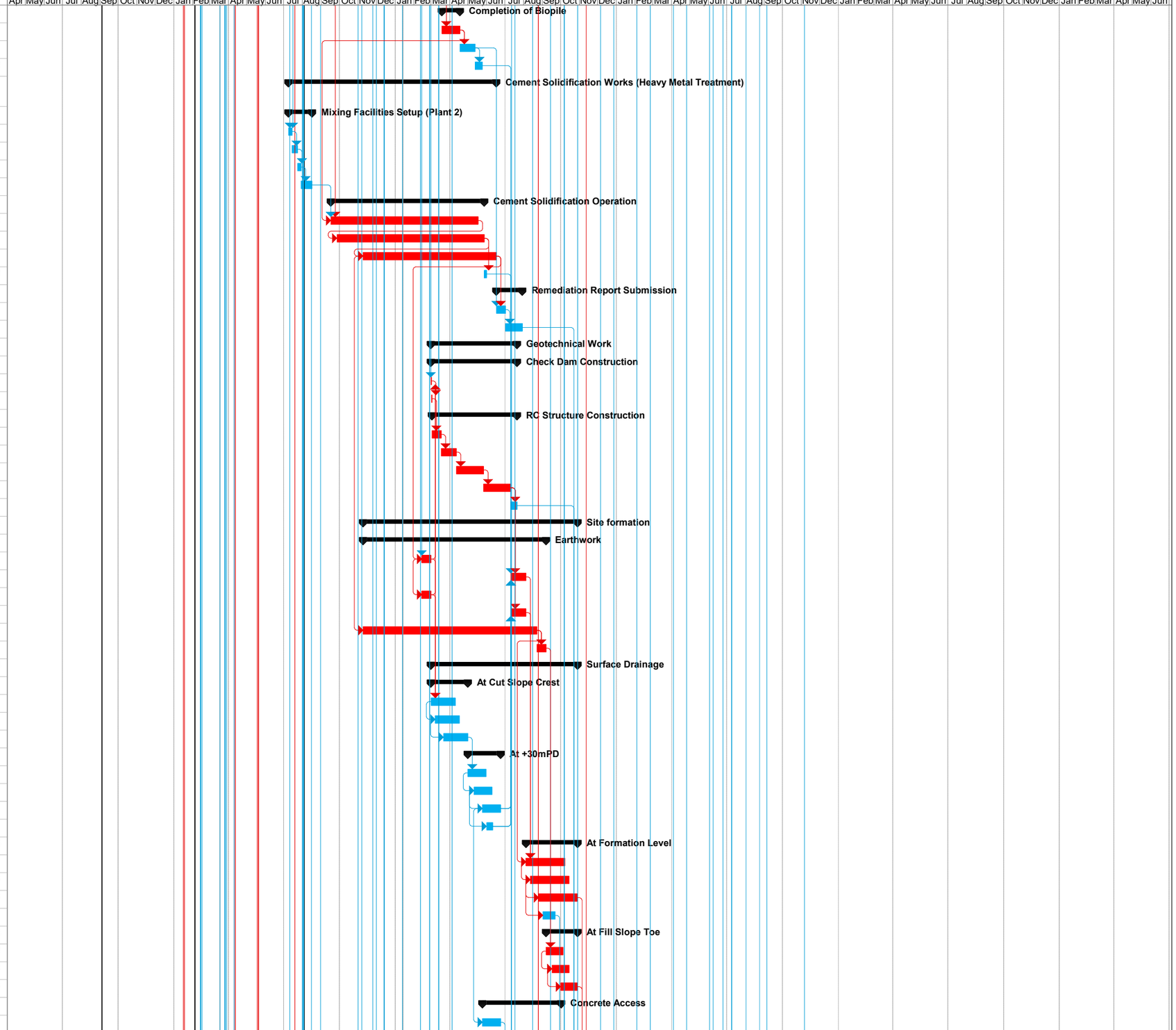
ID	Task Name	Duration	Start	Finish
552	**Completion of Biopile**	**30 days**	**Sun 19/3/23**	**Mon 17/4/23**
553	Submission of Closure Assessment Report	30 days	Sun 19/3/23	Mon 17/4/23
554	Backfilling to Formation	25 days	Tue 18/4/23	Fri 12/5/23
555	Removal of Facilities	12 days	Sat 13/5/23	Wed 24/5/23
556	**Cement Solidification Works (Heavy Metal Treatment)**	**343 days**	**Sat 9/7/22**	**Fri 16/6/23**
557	**Mixing Facilities Setup (Plant 2)**	**39 days**	**Sat 9/7/22**	**Tue 16/8/22**
558	Preparation of Base	6 days	Sat 9/7/22	Thu 14/7/22
559	Placing Concrete Block Barrier	9 days	Fri 15/7/22	Sat 23/7/22
560	Waterproofing Works	6 days	Sun 24/7/22	Fri 29/7/22
561	Erection of Shelter	18 days	Sat 30/7/22	Tue 16/8/22
562	**Cement Solidification Operation**	**253 days**	**Sat 17/9/22**	**Sat 27/5/23**
563	Mixing Operation	243 days	Sat 17/9/22	Wed 17/5/23
564	Confirmation Test	243 days	Tue 27/9/22	Sat 27/5/23
565	Backfilling to Formation	220 days	Wed 9/11/22	Fri 16/6/23
566	Decommissing of Facilities	4 days	Sun 28/5/23	Wed 31/5/23
567	**Remediation Report Submission**	**43 days**	**Sat 17/6/23**	**Sat 29/7/23**
568	Preparation of Remediation Report	15 days	Sat 17/6/23	Sat 1/7/23
569	Review & Accepted by EPD	28 days	Sun 2/7/23	Sat 29/7/23
570	**Geotechnical Work**	**142 days**	**Wed 1/3/23**	**Thu 20/7/23**
571	**Check Dam Construction**	**142 days**	**Wed 1/3/23**	**Thu 20/7/23**
572	Excavation to Formation	1 day	Wed 1/3/23	Wed 1/3/23
573	Blinding Concrete	1 day	Thu 2/3/23	Thu 2/3/23
574	**RC Structure Construction**	**140 days**	**Fri 3/3/23**	**Thu 20/7/23**
575	Base Slab & Wall Base	15 days	Fri 3/3/23	Fri 17/3/23
576	Slab on Cut Slope	25 days	Sat 18/3/23	Tue 11/4/23
577	Lower Portion of Wall	45 days	Wed 12/4/23	Fri 26/5/23
578	Upper Portion of Wall	45 days	Sat 27/5/23	Mon 10/7/23
579	Baffle Structures	10 days	Tue 11/7/23	Thu 20/7/23
580	**Site formation**	**354 days**	**Wed 9/11/22**	**Sat 28/10/23**
581	**Earthwork**	**302 days**	**Wed 9/11/22**	**Wed 6/9/23**
582	Excavation to +30mPD	15 days	Tue 14/2/23	Tue 28/2/23
583	Excavation to Formation	25 days	Tue 11/7/23	Fri 4/8/23
584	Cut Slope to +30mPD	15 days	Tue 14/2/23	Tue 28/2/23
585	Cut Slope to Formation	25 days	Tue 11/7/23	Fri 4/8/23
586	Backfilling & Compaction to Formation	287 days	Wed 9/11/22	Tue 22/8/23
587	Trimming for Fill Slope	15 days	Wed 23/8/23	Wed 6/9/23
588	**Surface Drainage**	**242 days**	**Wed 1/3/23**	**Sat 28/10/23**
589	**At Cut Slope Crest**	**61 days**	**Wed 1/3/23**	**Sun 30/4/23**
590	Excavation to Formation	40 days	Wed 1/3/23	Sun 9/4/23
591	Catchpit	40 days	Wed 8/3/23	Sun 16/4/23
592	U-channel	40 days	Wed 22/3/23	Sun 30/4/23
593	**At +30mPD**	**54 days**	**Mon 1/5/23**	**Fri 23/6/23**
594	Excavation to Formation	30 days	Mon 1/5/23	Tue 30/5/23
595	Catchpit	30 days	Thu 11/5/23	Fri 9/6/23
596	U-channel	30 days	Thu 25/5/23	Fri 23/6/23
597	Stepped Channel	10 days	Thu 1/6/23	Sat 10/6/23
598	**At Formation Level**	**85 days**	**Sat 5/8/23**	**Sat 28/10/23**
599	Excavation to Formation	64 days	Sat 5/8/23	Sat 7/10/23
600	Catchpit	64 days	Sat 12/8/23	Sat 14/10/23
601	U-channel	64 days	Sat 26/8/23	Sat 28/10/23
602	Stepped Channel	20 days	Sat 2/9/23	Thu 21/9/23
603	**At Fill Slope Toe**	**52 days**	**Thu 7/9/23**	**Sat 28/10/23**
604	Excavation to Formation	28 days	Thu 7/9/23	Wed 4/10/23
605	Catchpit	28 days	Sun 17/9/23	Sat 14/10/23
606	U-channel	28 days	Sun 1/10/23	Sat 28/10/23
607	**Concrete Access**	**130 days**	**Thu 25/5/23**	**Sun 1/10/23**
608	Maintenance Access	30 days	Thu 25/5/23	Fri 23/6/23



Task Critical Task Milestone Summary

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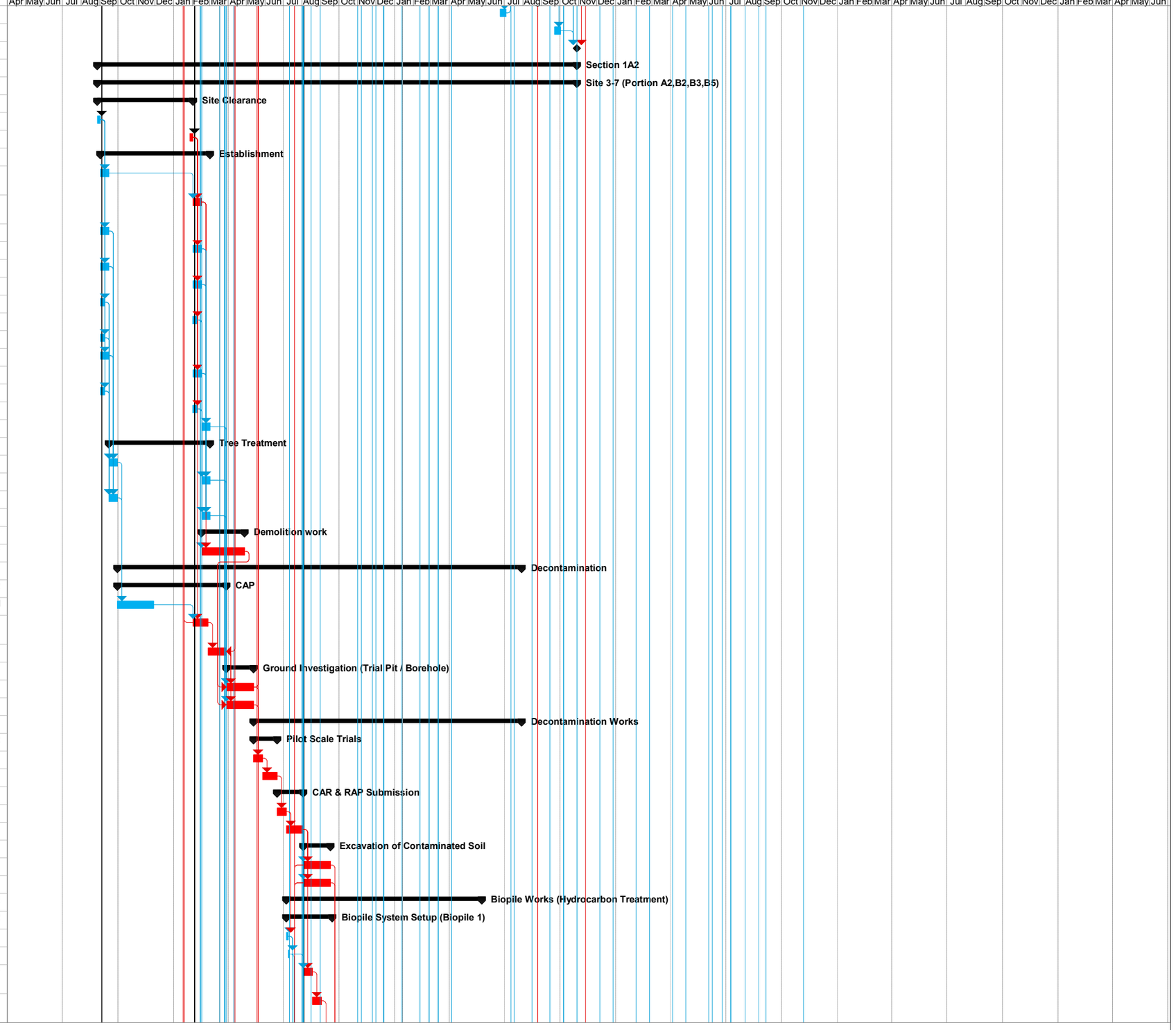
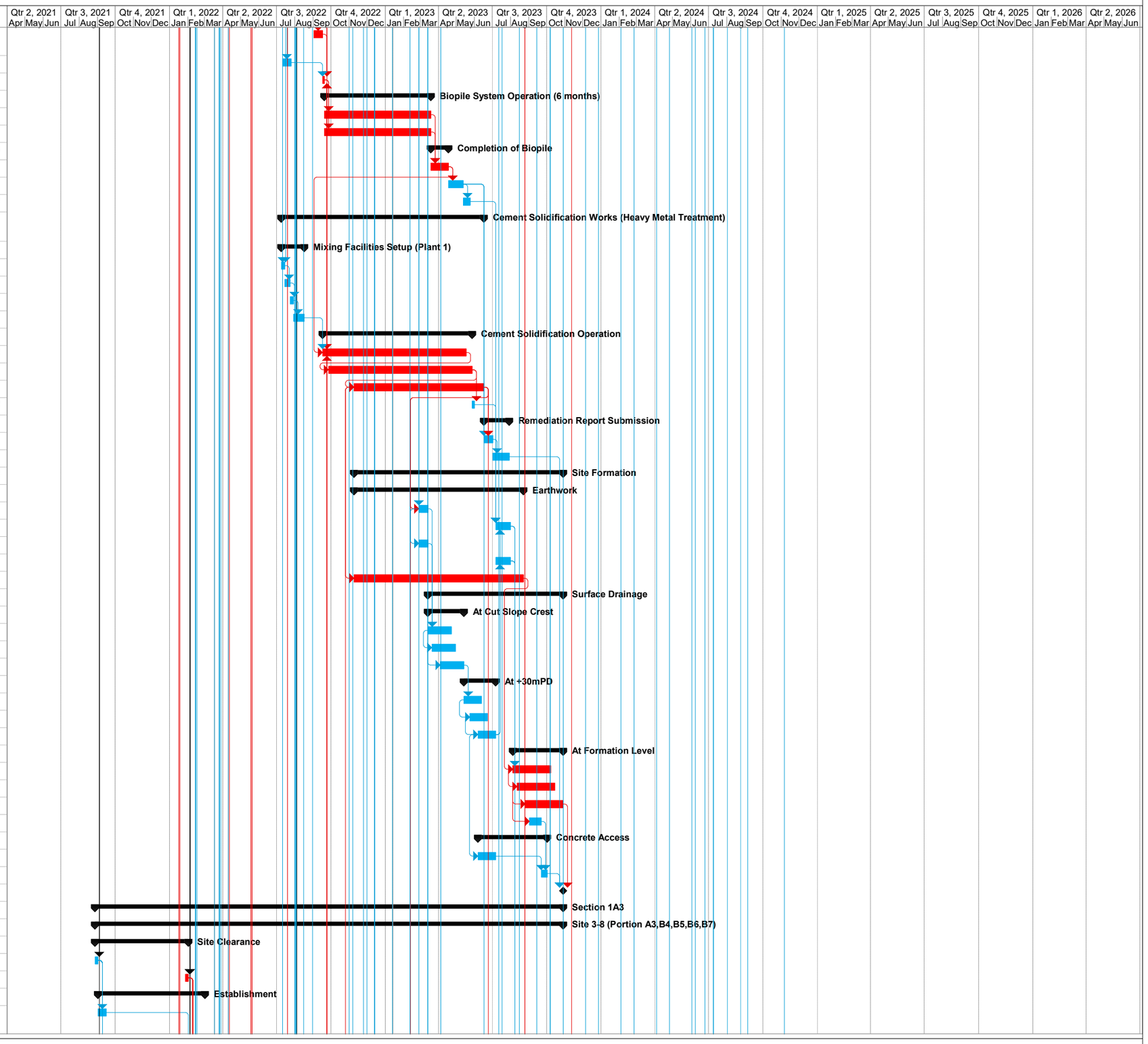
ID	Task Name	Duration	Start	Finish
609	Stairway above +30mPD	10 days	Sat 24/6/23	Mon 3/7/23
610	Stairway above Formation Level	10 days	Fri 22/9/23	Sun 1/10/23
611	**Planned Completion of Section 1A1**	0 days	Sat 28/10/23	Sat 28/10/23
612	**Section 1A2**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
613	**Site 3-7 (Portion A2,B2,B3,B5)**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
614	**Site Clearance**	**158 days**	**Sat 28/8/21**	**Tue 1/2/22**
615	Site Clearance for Portion A2	5 days	Sat 28/8/21	Wed 1/9/21
616	Site Clearance for Portion B2,B3,B5	5 days	Fri 28/1/22	Tue 1/2/22
617	**Establishment**	**181 days**	**Thu 2/9/21**	**Tue 1/3/22**
618	Condition Survey for Existing Structures to be Demolished for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
619	Condition Survey for Existing Structures to be Demolished for Portion B2,B3,B5	14 days	Wed 2/2/22	Tue 15/2/22
620	Tree Survey for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
621	Tree Survey for Portion B2,B3,B5	14 days	Wed 2/2/22	Tue 15/2/22
622	Initial Survey for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
623	Initial Survey for Portion B2,B3,B5	14 days	Wed 2/2/22	Tue 15/2/22
624	Site Haul Road for Portion A2	7 days	Thu 2/9/21	Wed 8/9/21
625	Site Haul Road for Portion B2,B3,B5	7 days	Wed 2/2/22	Tue 8/2/22
626	Health & Hygiene Facilities	7 days	Thu 2/9/21	Wed 8/9/21
627	Fence Work & Gate for Portion A2	14 days	Thu 2/9/21	Wed 15/9/21
628	Fence Work for Portion B2,B3,B5	14 days	Wed 2/2/22	Tue 15/2/22
629	Underground Utilities Detection for Portion A2	7 days	Thu 2/9/21	Wed 8/9/21
630	Underground Utilities Detection for Portion B2,B3,B5	7 days	Wed 2/2/22	Tue 8/2/22
631	Install Monitoring Points	14 days	Wed 16/2/22	Tue 1/3/22
632	**Tree Treatment**	**167 days**	**Thu 16/9/21**	**Tue 1/3/22**
633	Tree Felling for Portion A2	14 days	Thu 16/9/21	Wed 29/9/21
634	Tree Felling for Portion B2,B3,B5	14 days	Wed 16/2/22	Tue 1/3/22
635	Tree Protection Portion A2	14 days	Thu 16/9/21	Wed 29/9/21
636	Tree Protection Portion B2,B3,B5	14 days	Wed 16/2/22	Tue 1/3/22
637	**Demolition work**	**71 days**	**Wed 16/2/22**	**Wed 27/4/22**
638	Demolition of Existing Structures	71 days	Wed 16/2/22	Wed 27/4/22
639	**Decontamination**	**668 days**	**Thu 30/9/21**	**Sat 29/7/23**
640	**CAP**	**180 days**	**Thu 30/9/21**	**Mon 28/3/22**
641	Site Appraisal for Portion A2	60 days	Thu 30/9/21	Sun 28/11/21
642	Site Appraisal for Portion B2,B3,B5 & Preparation of CAP for all Portions	25 days	Wed 2/2/22	Sat 26/2/22
643	Submission & Endorsement by EPD	30 days	Sun 27/2/22	Mon 28/3/22
644	**Ground Investigation (Trial Pit / Borehole)**	**45 days**	**Tue 29/3/22**	**Thu 12/5/22**
645	Trial Pit Sampling & Testing	45 days	Tue 29/3/22	Thu 12/5/22
646	Inspection Pit for installing Groundwater Wells	45 days	Tue 29/3/22	Thu 12/5/22
647	**Decontamination Works**	**443 days**	**Fri 13/5/22**	**Sat 29/7/23**
648	**Pilot Scale Trials**	**39 days**	**Fri 13/5/22**	**Mon 20/6/22**
649	Pilot Trial	15 days	Fri 13/5/22	Fri 27/5/22
650	Treatability Test for Heavy Metal	24 days	Sat 28/5/22	Mon 20/6/22
651	**CAR & RAP Submission**	**43 days**	**Tue 21/6/22**	**Tue 2/8/22**
652	Preparation of CAR & RAP	15 days	Tue 21/6/22	Tue 5/7/22
653	Review & Accepted by EPD	28 days	Wed 6/7/22	Tue 2/8/22
654	**Excavation of Contaminated Soil**	**45 days**	**Wed 3/8/22**	**Fri 16/9/22**
655	To Stockpile for Biopile 1	45 days	Wed 3/8/22	Fri 16/9/22
656	To Stockpile for Cement Solidification Plant 1	45 days	Wed 3/8/22	Fri 16/9/22
657	**Biopile Works (Hydrocarbon Treatment)**	**323 days**	**Wed 6/7/22**	**Wed 24/5/23**
658	**Biopile System Setup (Biopile 1)**	**76 days**	**Wed 6/7/22**	**Mon 19/9/22**
659	Preparation of Base	3 days	Wed 6/7/22	Fri 8/7/22
660	Waterproofing Works	2 days	Sat 9/7/22	Sun 10/7/22
661	Placing 1st layer of contaminated soil & associated pipe	15 days	Wed 3/8/22	Wed 17/8/22
662	Placing 2nd layer of contaminated soil & associated pipe	15 days	Thu 18/8/22	Thu 1/9/22



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

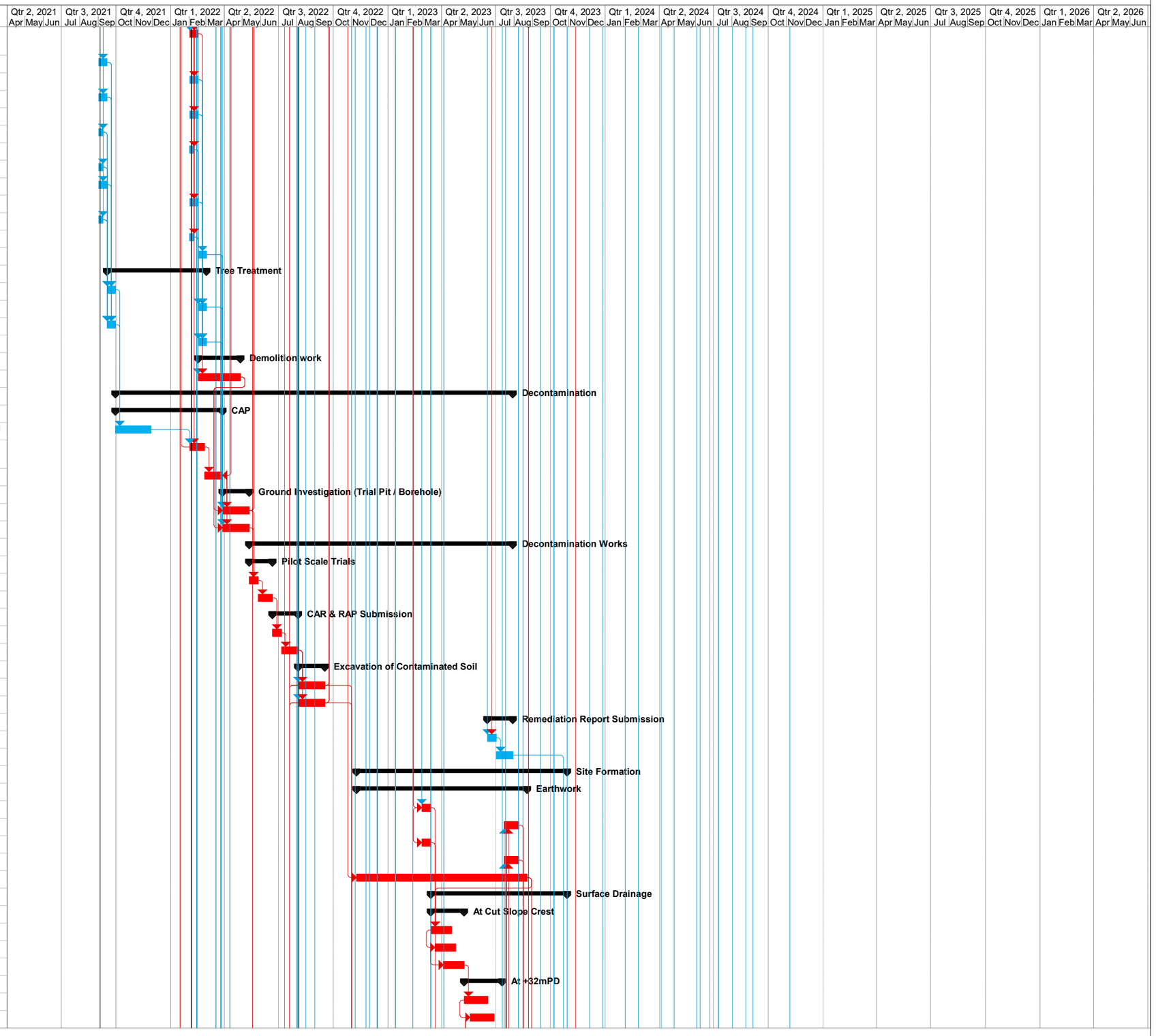
ID	Task Name	Duration	Start	Finish
663	Placing final layer of contaminated soil & cover up the whole biople	15 days	Fri 2/9/22	Fri 16/9/22
664	Erect of Shelter for Biopile System	15 days	Mon 11/7/22	Mon 25/7/22
665	Connection & Commissioning of Biopile System	3 days	Sat 17/9/22	Mon 19/9/22
666	**Biopile System Operation (6 months)**	**180 days**	**Tue 20/9/22**	**Sat 18/3/23**
667	Operation & Maintenance	180 days	Tue 20/9/22	Sat 18/3/23
668	Vertification, Sampling & Testing	180 days	Tue 20/9/22	Sat 18/3/23
669	**Completion of Biopile**	**30 days**	**Sun 19/3/23**	**Mon 17/4/23**
670	Submission of Closure Assessment Report	30 days	Sun 19/3/23	Mon 17/4/23
671	Backfilling to Formation	25 days	Tue 18/4/23	Fri 12/5/23
672	Removal of Facilities	12 days	Sat 13/5/23	Wed 24/5/23
673	**Cement Solidification Works (Heavy Metal Treatment)**	**343 days**	**Sat 9/7/22**	**Fri 16/6/23**
674	**Mixing Facilities Setup (Plant 1)**	**39 days**	**Sat 9/7/22**	**Tue 16/8/22**
675	Preparation of Base	6 days	Sat 9/7/22	Thu 14/7/22
676	Placing Concrete Block Barrier	9 days	Fri 15/7/22	Sat 23/7/22
677	Waterproofing Works	6 days	Sun 24/7/22	Fri 29/7/22
678	Erection of Shelter	18 days	Sat 30/7/22	Tue 16/8/22
679	**Cement Solidification Operation**	**253 days**	**Sat 17/9/22**	**Sat 27/5/23**
680	Mixing Operation	243 days	Sat 17/9/22	Wed 17/5/23
681	Confirmation Test	243 days	Tue 27/9/22	Sat 27/5/23
682	Backfilling to Formation	220 days	Wed 9/11/22	Fri 16/6/23
683	Decommissing of Facilities	4 days	Sun 28/5/23	Wed 31/5/23
684	**Remediation Report Submission**	**43 days**	**Sat 17/6/23**	**Sat 29/7/23**
685	Preparation of Remediation Report	15 days	Sat 17/6/23	Sat 1/7/23
686	Review & Accepted by EPD	28 days	Sun 2/7/23	Sat 29/7/23
687	**Site Formation**	**354 days**	**Wed 9/11/22**	**Sat 28/10/23**
688	**Earthwork**	**287 days**	**Wed 9/11/22**	**Tue 22/8/23**
689	Excavation to +30mPD	15 days	Mon 27/2/23	Mon 13/3/23
690	Excavation to Formation	25 days	Fri 7/7/23	Mon 31/7/23
691	Cut Slope to +30mPD	15 days	Mon 27/2/23	Mon 13/3/23
692	Cut Slope to Formation	25 days	Fri 7/7/23	Mon 31/7/23
693	Backfilling & Compaction to Formation	287 days	Wed 9/11/22	Tue 22/8/23
694	**Surface Drainage**	**229 days**	**Tue 14/3/23**	**Sat 28/10/23**
695	**At Cut Slope Crest**	**61 days**	**Tue 14/3/23**	**Sat 13/5/23**
696	Excavation to Formation	40 days	Tue 14/3/23	Sat 22/4/23
697	Catchpit	40 days	Tue 21/3/23	Sat 29/4/23
698	U-channel	40 days	Tue 4/4/23	Sat 13/5/23
699	**At +30mPD**	**54 days**	**Sun 14/5/23**	**Thu 6/7/23**
700	Excavation to Formation	30 days	Sun 14/5/23	Mon 12/6/23
701	Catchpit	30 days	Wed 24/5/23	Thu 22/6/23
702	U-channel	30 days	Wed 7/6/23	Thu 6/7/23
703	**At Formation Level**	**85 days**	**Sat 5/8/23**	**Sat 28/10/23**
704	Excavation to Formation	64 days	Sat 5/8/23	Sat 7/10/23
705	Catchpit	64 days	Sat 12/8/23	Sat 14/10/23
706	U-channel	64 days	Sat 26/8/23	Sat 28/10/23
707	Stepped Channel	20 days	Sat 2/9/23	Thu 21/9/23
708	**Concrete Access**	**117 days**	**Wed 7/6/23**	**Sun 1/10/23**
709	Maintenance Access	30 days	Wed 7/6/23	Thu 6/7/23
710	Stairway above Formation Level	10 days	Fri 22/9/23	Sun 1/10/23
711	**Planned Completion of Section 1A2**	0 days	Sat 28/10/23	Sat 28/10/23
712	**Section 1A3**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
713	**Site 3-8 (Portion A3,B4,B5,B6,B7)**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
714	**Site Clearance**	**158 days**	**Sat 28/8/21**	**Tue 1/2/22**
715	Site Clearance for Portion A3	5 days	Sat 28/8/21	Wed 1/9/21
716	Site Clearance for Portion B4,B5,B6,B7	5 days	Fri 28/1/22	Tue 1/2/22
717	**Establishment**	**181 days**	**Thu 2/9/21**	**Tue 1/3/22**
718	Condition Survey for Existing Structures to be Demolished for Portion A3	14 days	Thu 2/9/21	Wed 15/9/21



Task Critical Task Milestone Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

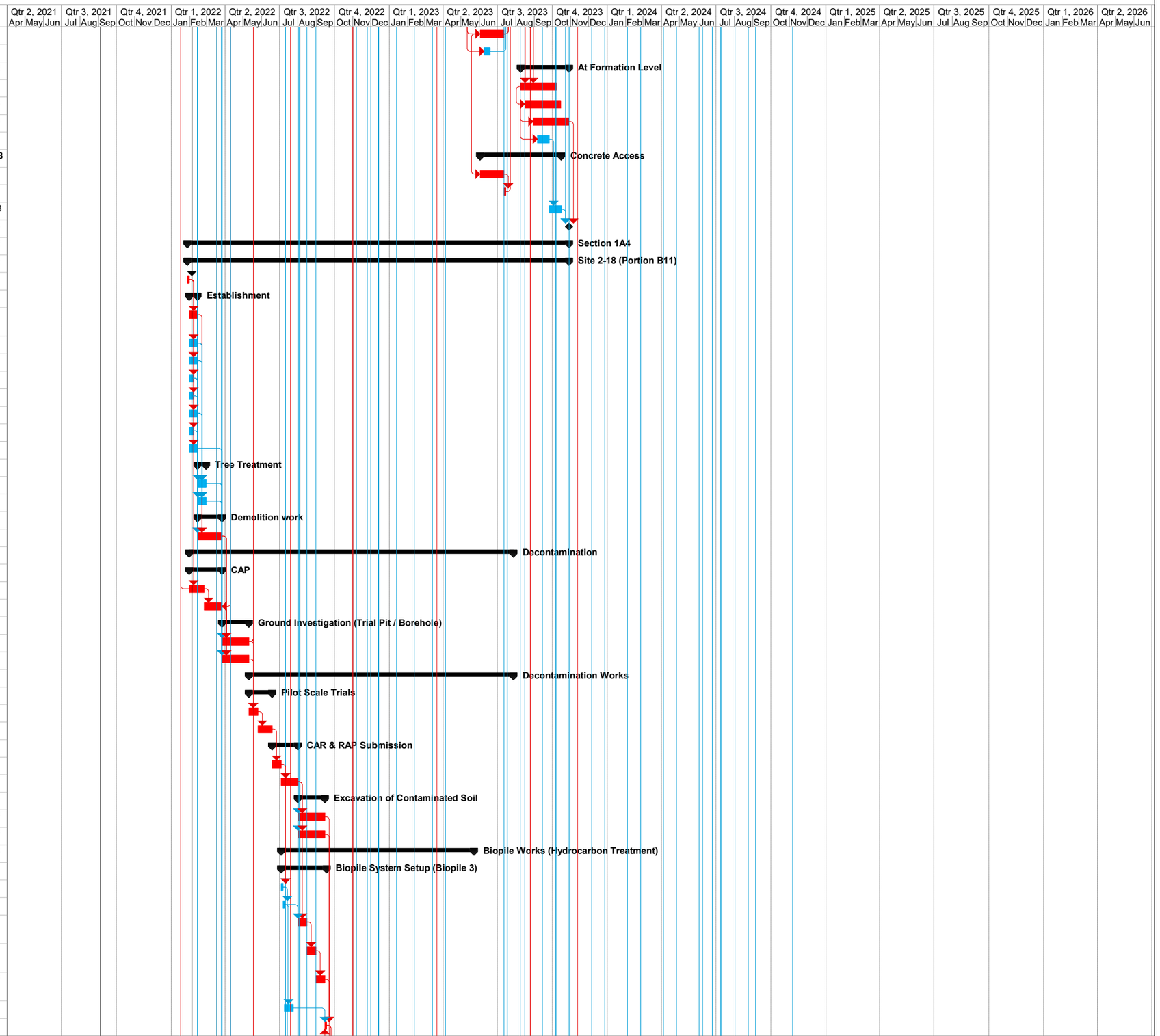
ID	Task Name	Duration	Start	Finish
719	Condition Survey for Existing Structures to be Demolished for Portion B4,B5,B6,B7	14 days	Wed 2/2/22	Tue 15/2/22
720	Tree Survey for Portion A3	14 days	Thu 2/9/21	Wed 15/9/21
721	Tree Survey for Portion B4,B5,B6,B7	14 days	Wed 2/2/22	Tue 15/2/22
722	Initial Survey for Portion A3	14 days	Thu 2/9/21	Wed 15/9/21
723	Initial Survey for Portion B4,B5,B6,B7	14 days	Wed 2/2/22	Tue 15/2/22
724	Site Haul Road for Portion A3	7 days	Thu 2/9/21	Wed 8/9/21
725	Site Haul Road for Portion B4,B5,B6,B7	7 days	Wed 2/2/22	Tue 8/2/22
726	Health & Hygiene Facilities	7 days	Thu 2/9/21	Wed 8/9/21
727	Fence Work & Gate for Portion A3	14 days	Thu 2/9/21	Wed 15/9/21
728	Fence Work for Portion B4,B5,B6,B7	14 days	Wed 2/2/22	Tue 15/2/22
729	Underground Utilities Detection for Portion A3	7 days	Thu 2/9/21	Wed 8/9/21
730	Underground Utilities Detection for Portion B4,B5,B6,B7	7 days	Wed 2/2/22	Tue 8/2/22
731	Install Monitoring Points	14 days	Wed 16/2/22	Tue 1/3/22
732	**Tree Treatment**	**167 days**	**Thu 16/9/21**	**Tue 1/3/22**
733	Tree Felling for Portion A3	14 days	Thu 16/9/21	Wed 29/9/21
734	Tree Felling for Portion B4,B5,B6,B7	14 days	Wed 16/2/22	Tue 1/3/22
735	Tree Protection for Portion A3	14 days	Thu 16/9/21	Wed 29/9/21
736	Tree Protection for Portion B4,B5,B6,B7	14 days	Wed 16/2/22	Tue 1/3/22
737	**Demolition work**	**71 days**	**Wed 16/2/22**	**Wed 27/4/22**
738	Demolition of Existing Structures	71 days	Wed 16/2/22	Wed 27/4/22
739	**Decontamination**	**668 days**	**Thu 30/9/21**	**Sat 29/7/23**
740	**CAP**	**180 days**	**Thu 30/9/21**	**Mon 28/3/22**
741	Site Appraisal for Portion A3	60 days	Thu 30/9/21	Sun 28/11/21
742	Site Appraisal for Portion B4,B5,B6,B7 & Preparation of CAP for all Portions	25 days	Wed 2/2/22	Sat 26/2/22
743	Submission & Endorsement by EPD	30 days	Sun 27/2/22	Mon 28/3/22
744	**Ground Investigation (Trial Pit / Borehole)**	**45 days**	**Tue 29/3/22**	**Thu 12/5/22**
745	Trial Pit Sampling & Testing	45 days	Tue 29/3/22	Thu 12/5/22
746	Inspection Pit for installing Groundwater Wells	45 days	Tue 29/3/22	Thu 12/5/22
747	**Decontamination Works**	**443 days**	**Fri 13/5/22**	**Sat 29/7/23**
748	**Pilot Scale Trials**	**39 days**	**Fri 13/5/22**	**Mon 20/6/22**
749	Pilot Trial	15 days	Fri 13/5/22	Fri 27/5/22
750	Treatability Test for Heavy Metal	24 days	Sat 28/5/22	Mon 20/6/22
751	**CAR & RAP Submission**	**43 days**	**Tue 21/6/22**	**Tue 2/8/22**
752	Preparation of CAR & RAP	15 days	Tue 21/6/22	Tue 5/7/22
753	Review & Accepted by EPD	28 days	Wed 6/7/22	Tue 2/8/22
754	**Excavation of Contaminated Soil**	**45 days**	**Wed 3/8/22**	**Fri 16/9/22**
755	To Stockpile for Biopile 1	45 days	Wed 3/8/22	Fri 16/9/22
756	To Stockpile for Cement Solidification Plant 1	45 days	Wed 3/8/22	Fri 16/9/22
757	**Remediation Report Submission**	**43 days**	**Sat 17/6/23**	**Sat 29/7/23**
758	Preparation of Remediation Report	15 days	Sat 17/6/23	Sat 1/7/23
759	Review & Accepted by EPD	28 days	Sun 2/7/23	Sat 29/7/23
760	**Site Formation**	**354 days**	**Wed 9/11/22**	**Sat 28/10/23**
761	**Earthwork**	**287 days**	**Wed 9/11/22**	**Tue 22/8/23**
762	Excavation to +32mPD	15 days	Mon 27/2/23	Mon 13/3/23
763	Excavation to Formation	25 days	Sat 15/7/23	Tue 8/8/23
764	Cut Slope to +32mPD	15 days	Mon 27/2/23	Mon 13/3/23
765	Cut Slope to Formation	25 days	Sat 15/7/23	Tue 8/8/23
766	Backfilling & Compaction to Formation	287 days	Wed 9/11/22	Tue 22/8/23
767	**Surface Drainage**	**229 days**	**Tue 14/3/23**	**Sat 28/10/23**
768	**At Cut Slope Crest**	**56 days**	**Tue 14/3/23**	**Mon 8/5/23**
769	Excavation to Formation	35 days	Tue 14/3/23	Mon 17/4/23
770	Catchpit	35 days	Tue 21/3/23	Mon 24/4/23
771	U-channel	35 days	Tue 4/4/23	Mon 8/5/23
772	**At +32mPD**	**64 days**	**Tue 9/5/23**	**Tue 11/7/23**
773	Excavation to Formation	40 days	Tue 9/5/23	Sat 17/6/23
774	Catchpit	40 days	Fri 19/5/23	Tue 27/6/23



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

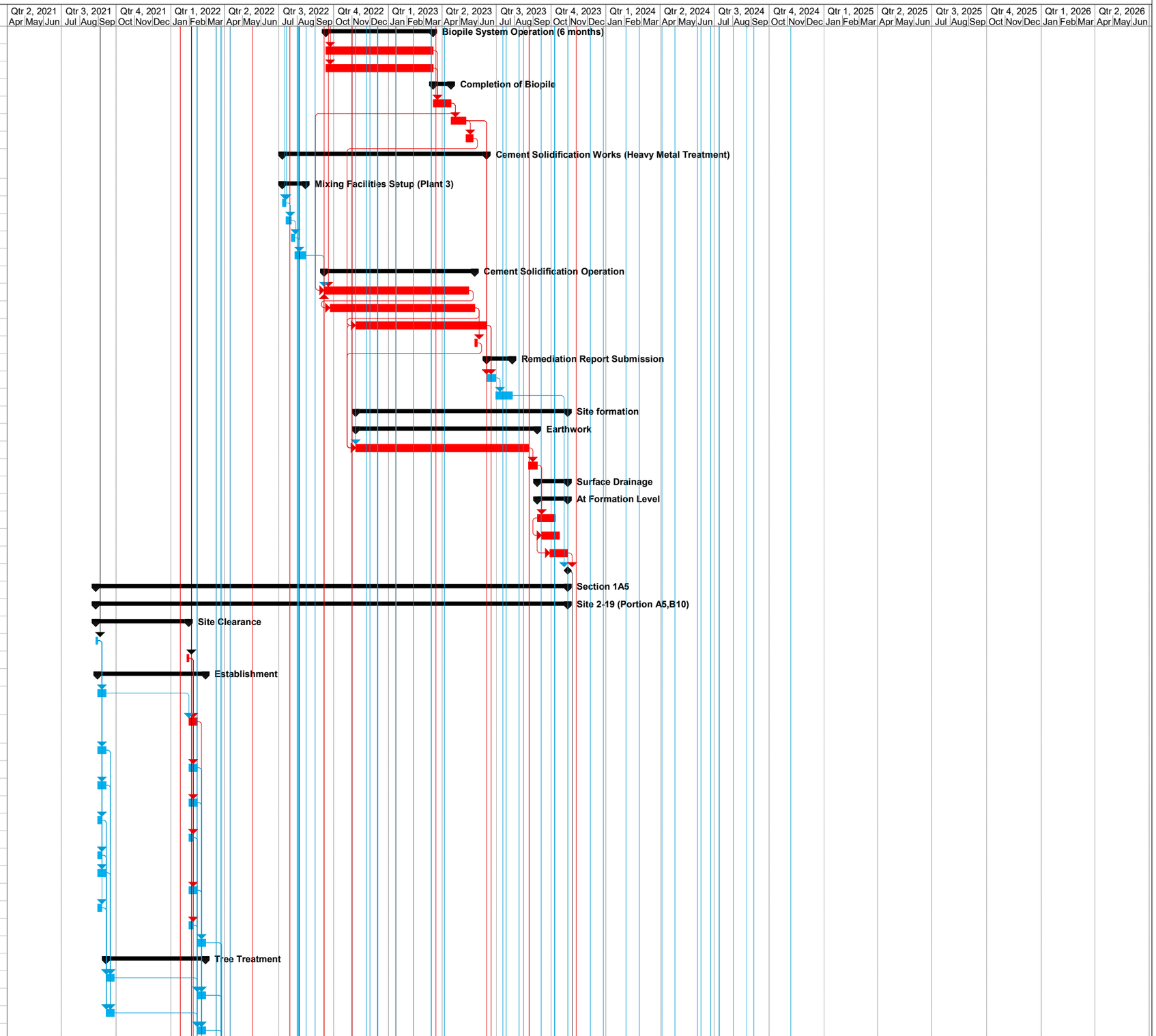
ID	Task Name	Duration	Start	Finish
775	U-channel	40 days	Fri 2/6/23	Tue 11/7/23
776	Stepped Channel	10 days	Fri 9/6/23	Sun 18/6/23
777	**At Formation Level**	**81 days**	**Wed 9/8/23**	**Sat 28/10/23**
778	Excavation to Formation	60 days	Wed 9/8/23	Sat 7/10/23
779	Catchpit	60 days	Wed 16/8/23	Sat 14/10/23
780	U-channel	60 days	Wed 30/8/23	Sat 28/10/23
781	Stepped Channel	20 days	Wed 6/9/23	Mon 25/9/23
782	**Concrete Access**	**136 days**	**Fri 2/6/23**	**Sun 15/10/23**
783	Maintenance Access	40 days	Fri 2/6/23	Tue 11/7/23
784	Stairway above +32mPD	3 days	Wed 12/7/23	Fri 14/7/23
785	Stairway above Formation Level	20 days	Tue 26/9/23	Sun 15/10/23
786	**Planned Completion of Section 1A3**	0 days	Sat 28/10/23	Sat 28/10/23
787	**Section 1A4**	**639 days**	**Fri 28/1/22**	**Sat 28/10/23**
788	**Site 2-18 (Portion B11)**	**639 days**	**Fri 28/1/22**	**Sat 28/10/23**
789	Site Clearance	3 days	Fri 28/1/22	Sun 30/1/22
790	**Establishment**	**14 days**	**Mon 31/1/22**	**Sun 13/2/22**
791	Condition Survey for Existing Structures to be Demolished	14 days	Mon 31/1/22	Sun 13/2/22
792	Tree Survey	14 days	Mon 31/1/22	Sun 13/2/22
793	Initial Survey	14 days	Mon 31/1/22	Sun 13/2/22
794	Site Haul Road	7 days	Mon 31/1/22	Sun 6/2/22
795	Health & Hygiene Facilities	7 days	Mon 31/1/22	Sun 6/2/22
796	Fence Work	14 days	Mon 31/1/22	Sun 13/2/22
797	Underground Utilities Detection	7 days	Mon 31/1/22	Sun 6/2/22
798	Install Monitoring Points	14 days	Mon 31/1/22	Sun 13/2/22
799	**Tree Treatment**	**14 days**	**Mon 14/2/22**	**Sun 27/2/22**
800	Tree Felling	14 days	Mon 14/2/22	Sun 27/2/22
801	Tree Protection	14 days	Mon 14/2/22	Sun 27/2/22
802	**Demolition work**	**41 days**	**Mon 14/2/22**	**Sat 26/3/22**
803	Demolition of Existing Structures	41 days	Mon 14/2/22	Sat 26/3/22
804	**Decontamination**	**543 days**	**Mon 31/1/22**	**Thu 27/7/23**
805	**CAP**	**55 days**	**Mon 31/1/22**	**Sat 26/3/22**
806	Site Appraisal & Preparation of CAP	25 days	Mon 31/1/22	Thu 24/2/22
807	Submission & Endorsement by EPD	30 days	Fri 25/2/22	Sat 26/3/22
808	**Ground Investigation (Trial Pit / Borehole)**	**45 days**	**Sun 27/3/22**	**Tue 10/5/22**
809	Trial Pit Sampling & Testing	45 days	Sun 27/3/22	Tue 10/5/22
810	Inspection Pit for installing Groundwater Wells	45 days	Sun 27/3/22	Tue 10/5/22
811	**Decontamination Works**	**443 days**	**Wed 11/5/22**	**Thu 27/7/23**
812	**Pilot Scale Trials**	**39 days**	**Wed 11/5/22**	**Sat 18/6/22**
813	Pilot Trial	15 days	Wed 11/5/22	Wed 25/5/22
814	Treatability Test for Heavy Metal	24 days	Thu 26/5/22	Sat 18/6/22
815	**CAR & RAP Submission**	**43 days**	**Sun 19/6/22**	**Sun 31/7/22**
816	Preparation of CAR & RAP	15 days	Sun 19/6/22	Sun 3/7/22
817	Review & Accepted by EPD	28 days	Mon 4/7/22	Sun 31/7/22
818	**Excavation of Contaminated Soil**	**45 days**	**Mon 1/8/22**	**Wed 14/9/22**
819	To Stockpile for Biopile 3	45 days	Mon 1/8/22	Wed 14/9/22
820	To Stockpile for Cement Solidification Plant 3	45 days	Mon 1/8/22	Wed 14/9/22
821	**Biopile Works (Hydrocarbon Treatment)**	**323 days**	**Mon 4/7/22**	**Mon 22/5/23**
822	**Biopile System Setup (Biopile 3)**	**76 days**	**Mon 4/7/22**	**Sat 17/9/22**
823	Preparation of Base	3 days	Mon 4/7/22	Wed 6/7/22
824	Waterproofing Works	2 days	Thu 7/7/22	Fri 8/7/22
825	Placing 1st layer of contaminated soil & associated pipe	15 days	Mon 1/8/22	Mon 15/8/22
826	Placing 2nd layer of contaminated soil & associated pipe	15 days	Tue 16/8/22	Tue 30/8/22
827	Placing final layer of contaminated soil & cover up the whole biople	15 days	Wed 31/8/22	Wed 14/9/22
828	Erect of Shelter for Biopile System	15 days	Sat 9/7/22	Sat 23/7/22
829	Connection & Commissioning of Biopile System	3 days	Thu 15/9/22	Sat 17/9/22



Task Critical Task Milestone Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

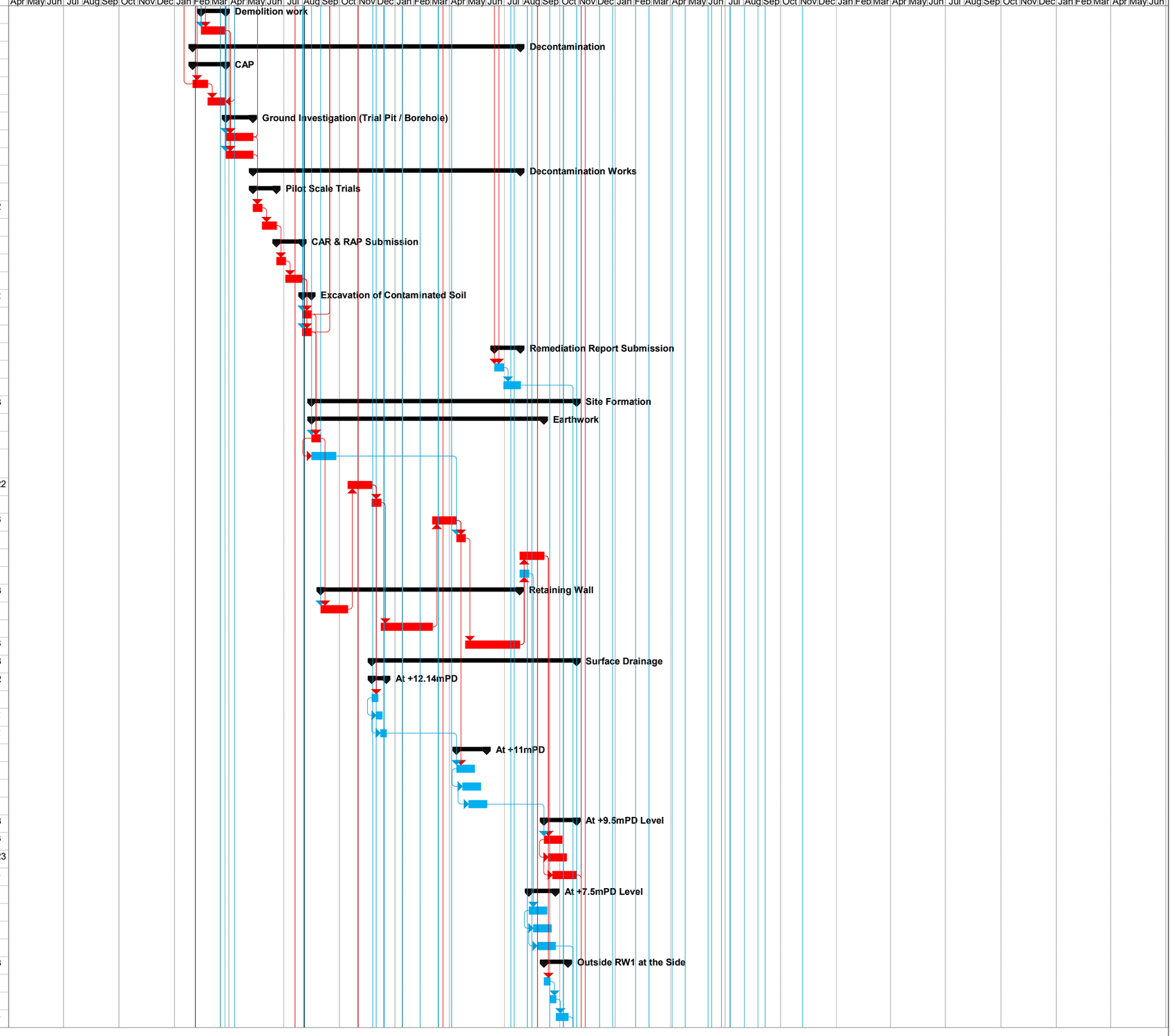
ID	Task Name	Duration	Start	Finish
830	**Biopile System Operation (6 months)**	**180 days**	**Sun 18/9/22**	**Thu 16/3/23**
831	Operation & Maintenance	180 days	Sun 18/9/22	Thu 16/3/23
832	Vertification, Sampling & Testing	180 days	Sun 18/9/22	Thu 16/3/23
833	**Completion of Biopile**	**30 days**	**Fri 17/3/23**	**Sat 15/4/23**
834	Submission of Closure Assessment Report	30 days	Fri 17/3/23	Sat 15/4/23
835	Backfilling to Formation	25 days	Sun 16/4/23	Wed 10/5/23
836	Removal of Facilities	12 days	Thu 11/5/23	Mon 22/5/23
837	**Cement Solidification Works (Heavy Metal Treatment)**	**343 days**	**Thu 7/7/22**	**Wed 14/6/23**
838	**Mixing Facilities Setup (Plant 3)**	**39 days**	**Thu 7/7/22**	**Sun 14/8/22**
839	Preparation of Base	6 days	Thu 7/7/22	Tue 12/7/22
840	Placing Concrete Block Barrier	9 days	Wed 13/7/22	Thu 21/7/22
841	Waterproofing Works	6 days	Fri 22/7/22	Wed 27/7/22
842	Erection of Shelter	18 days	Thu 28/7/22	Sun 14/8/22
843	**Cement Solidification Operation**	**253 days**	**Thu 15/9/22**	**Thu 25/5/23**
844	Mixing Operation	243 days	Thu 15/9/22	Mon 15/5/23
845	Confirmation Test	243 days	Sun 25/9/22	Thu 25/5/23
846	Backfilling to Formation	220 days	Mon 7/11/22	Wed 14/6/23
847	Decommissing of Facilities	4 days	Fri 26/5/23	Mon 29/5/23
848	**Remediation Report Submission**	**43 days**	**Thu 15/6/23**	**Thu 27/7/23**
849	Preparation of Remediation Report	15 days	Thu 15/6/23	Thu 29/6/23
850	Review & Accepted by EPD	28 days	Fri 30/6/23	Thu 27/7/23
851	**Site formation**	**356 days**	**Mon 7/11/22**	**Sat 28/10/23**
852	**Earthwork**	**305 days**	**Mon 7/11/22**	**Thu 7/9/23**
853	Backfilling & Compaction to Formation	290 days	Mon 7/11/22	Wed 23/8/23
854	Trimming for Fill Slope	15 days	Thu 24/8/23	Thu 7/9/23
855	**Surface Drainage**	**51 days**	**Fri 8/9/23**	**Sat 28/10/23**
856	**At Formation Level**	**51 days**	**Fri 8/9/23**	**Sat 28/10/23**
857	Excavation to Formation	30 days	Fri 8/9/23	Sat 7/10/23
858	Catchpit	30 days	Fri 15/9/23	Sat 14/10/23
859	U-channel	30 days	Fri 29/9/23	Sat 28/10/23
860	**Planned Completion of Section 1A4**	0 days	Sat 28/10/23	Sat 28/10/23
861	**Section 1A5**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
862	**Site 2-19 (Portion A5,B10)**	**792 days**	**Sat 28/8/21**	**Sat 28/10/23**
863	**Site Clearance**	**156 days**	**Sat 28/8/21**	**Sun 30/1/22**
864	Site Clearance for Portion A5	3 days	Sat 28/8/21	Mon 30/8/21
865	Site Clearance for Portion B10	3 days	Fri 28/1/22	Sun 30/1/22
866	**Establishment**	**181 days**	**Tue 31/8/21**	**Sun 27/2/22**
867	Condition Survey for Existing Structures to be Demolished for Portion A5	14 days	Tue 31/8/21	Mon 13/9/21
868	Condition Survey for Existing Structures to be Demolished for Portion B10	14 days	Mon 31/1/22	Sun 13/2/22
869	Tree Survey for Portion A5	14 days	Tue 31/8/21	Mon 13/9/21
870	Tree Survey for Portion B10	14 days	Mon 31/1/22	Sun 13/2/22
871	Initial Survey for Portion A5	14 days	Tue 31/8/21	Mon 13/9/21
872	Initial Survey for Portion B10	14 days	Mon 31/1/22	Sun 13/2/22
873	Site Haul Road for Portion A5	7 days	Tue 31/8/21	Mon 6/9/21
874	Site Haul Road for Portion B10	7 days	Mon 31/1/22	Sun 6/2/22
875	Health & Hygiene Facilities	7 days	Tue 31/8/21	Mon 6/9/21
876	Fence Work & Gate for Portion A5	14 days	Tue 31/8/21	Mon 13/9/21
877	Fence Work for Portion B10	14 days	Mon 31/1/22	Sun 13/2/22
878	Underground Utilities Detection for Portion A5	7 days	Tue 31/8/21	Mon 6/9/21
879	Underground Utilities Detection for Portion B10	7 days	Mon 31/1/22	Sun 6/2/22
880	Install Monitoring Points	14 days	Mon 14/2/22	Sun 27/2/22
881	**Tree Treatment**	**167 days**	**Tue 14/9/21**	**Sun 27/2/22**
882	Tree Felling for Portion A5	14 days	Tue 14/9/21	Mon 27/9/21
883	Tree Felling for Portion B10	14 days	Mon 14/2/22	Sun 27/2/22
884	Tree Protection for Portion A5	14 days	Tue 14/9/21	Mon 27/9/21
885	Tree Protection for Portion B10	14 days	Mon 14/2/22	Sun 27/2/22



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

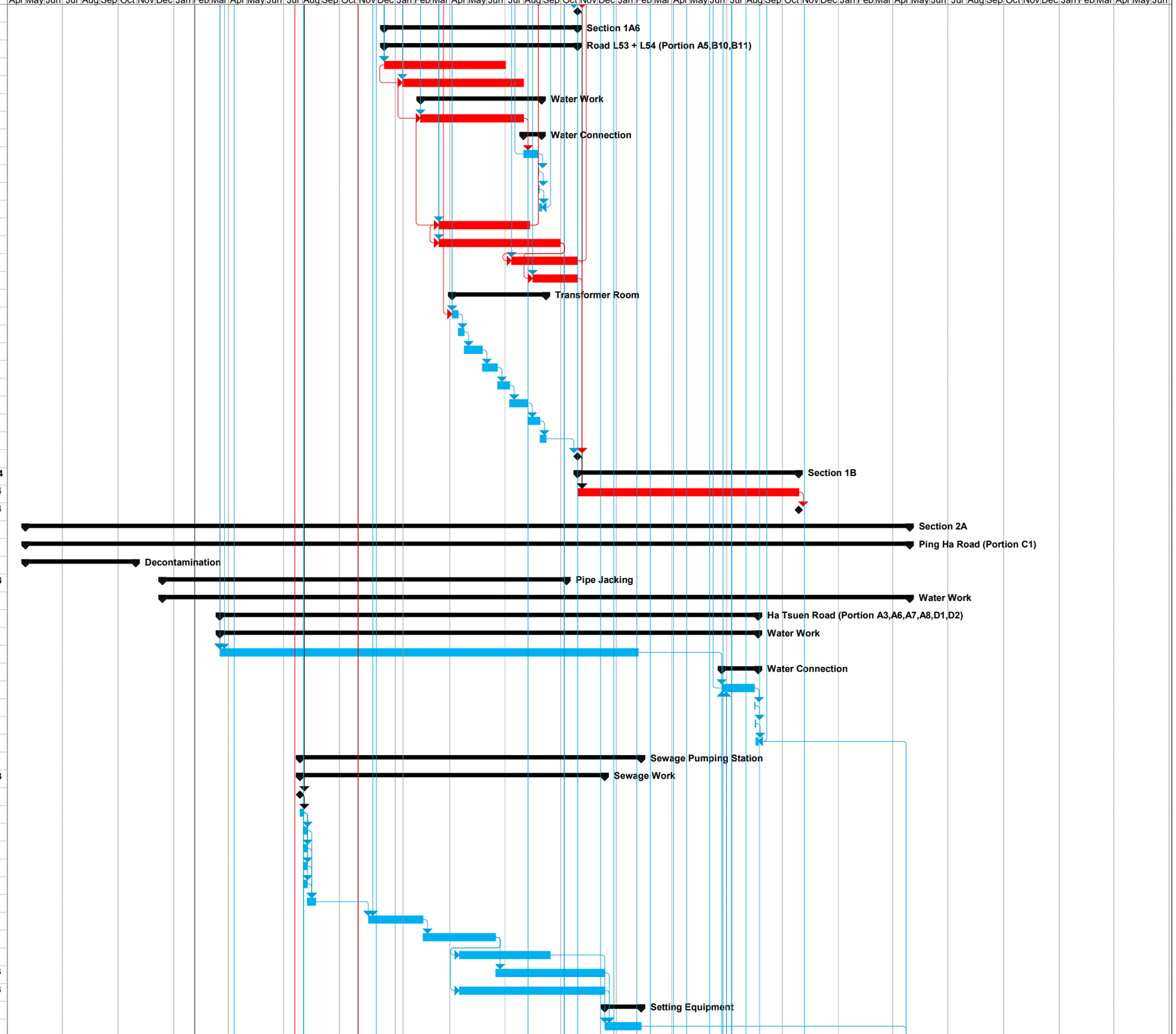
ID	Task Name	Duration	Start	Finish
886	**Demolition work**	**41 days**	**Mon 14/2/22**	**Sat 26/3/22**
887	Demolition of Existing Structures	41 days	Mon 14/2/22	Sat 26/3/22
888	**Decontamination**	**543 days**	**Mon 31/1/22**	**Thu 27/7/23**
889	**CAP**	**55 days**	**Mon 31/1/22**	**Sat 26/3/22**
890	Site Appraisal for Portion B10 & Preparation of CAP	25 days	Mon 31/1/22	Thu 24/2/22
891	Submission & Endorsement by EPD	30 days	Fri 25/2/22	Sat 26/3/22
892	**Ground Investigation (Trial Pit / Borehole)**	**45 days**	**Sun 27/3/22**	**Tue 10/5/22**
893	Trial Pit Sampling & Testing	45 days	Sun 27/3/22	Tue 10/5/22
894	Inspection Pit for installing Groundwater Wells	45 days	Sun 27/3/22	Tue 10/5/22
895	**Decontamination Works**	**443 days**	**Wed 11/5/22**	**Thu 27/7/23**
896	**Pilot Scale Trials**	**39 days**	**Wed 11/5/22**	**Sat 18/6/22**
897	Pilot Trial	15 days	Wed 11/5/22	Wed 25/5/22
898	Treatability Test for Heavy Metal	24 days	Thu 26/5/22	Sat 18/6/22
899	**CAR & RAP Submission**	**43 days**	**Sun 19/6/22**	**Sun 31/7/22**
900	Preparation of CAR & RAP	15 days	Sun 19/6/22	Sun 3/7/22
901	Review & Accepted by EPD	28 days	Mon 4/7/22	Sun 31/7/22
902	**Excavation of Contaminated Soil**	**15 days**	**Mon 1/8/22**	**Mon 15/8/22**
903	To Stockpile for Biopile 3	15 days	Mon 1/8/22	Mon 15/8/22
904	To Stockpile for Cement Solidification Plant 3	15 days	Mon 1/8/22	Mon 15/8/22
905	**Remediation Report Submission**	**43 days**	**Thu 15/6/23**	**Thu 27/7/23**
906	Preparation of Remediation Report	15 days	Thu 15/6/23	Thu 29/6/23
907	Review & Accepted by EPD	28 days	Fri 30/6/23	Thu 27/7/23
908	**Site Formation**	**439 days**	**Tue 16/8/22**	**Sat 28/10/23**
909	**Earthwork**	**385 days**	**Tue 16/8/22**	**Mon 4/9/23**
910	Excavation to Formation of RW1 & +11mPD	15 days	Tue 16/8/22	Tue 30/8/22
911	Backfilling & Compaction to Formation (Contamination Area)	40 days	Tue 16/8/22	Sat 24/9/22
912	Backfilling & Compaction at the Back of RW1	40 days	Sat 15/10/22	Wed 23/11/22
913	Excavation to Formation of RW3 & +9.5mPD	15 days	Thu 24/11/22	Thu 8/12/22
914	Backfilling & Compaction at the Back of RW3	40 days	Sat 4/3/23	Wed 12/4/23
915	Excavation to Formation of RW2 & +7.5mPD	15 days	Thu 13/4/23	Thu 27/4/23
916	Backfilling & Compaction at the Back of RW2	40 days	Thu 27/7/23	Mon 4/9/23
917	Cut Slope	15 days	Thu 27/7/23	Thu 10/8/23
918	**Retaining Wall**	**330 days**	**Wed 31/8/22**	**Wed 26/7/23**
919	RW1 above +11mPD	45 days	Wed 31/8/22	Fri 14/10/22
920	RW1 at both sides, RW3 above +9.5mPD	85 days	Fri 9/12/22	Fri 3/3/23
921	RW1 at both sides, RW2 above +7.5mPD	90 days	Fri 28/4/23	Wed 26/7/23
922	**Surface Drainage**	**339 days**	**Thu 24/11/22**	**Sat 28/10/23**
923	**At +12.14mPD**	**24 days**	**Thu 24/11/22**	**Sat 17/12/22**
924	Excavation to Formation	10 days	Thu 24/11/22	Sat 3/12/22
925	Catchpit	10 days	Thu 1/12/22	Sat 10/12/22
926	U-channel	10 days	Thu 8/12/22	Sat 17/12/22
927	**At +11mPD**	**50 days**	**Thu 13/4/23**	**Thu 1/6/23**
928	Excavation to Formation	30 days	Thu 13/4/23	Fri 12/5/23
929	Catchpit	30 days	Sun 23/4/23	Mon 22/5/23
930	U-channel	30 days	Wed 3/5/23	Thu 1/6/23
931	**At +9.5mPD Level**	**54 days**	**Tue 5/9/23**	**Sat 28/10/23**
932	Excavation to Formation	30 days	Tue 5/9/23	Wed 4/10/23
933	Catchpit	30 days	Tue 12/9/23	Wed 11/10/23
934	U-channel	40 days	Tue 19/9/23	Sat 28/10/23
935	**At +7.5mPD Level**	**44 days**	**Fri 11/8/23**	**Sat 23/9/23**
936	Excavation to Formation	30 days	Fri 11/8/23	Sat 9/9/23
937	Catchpit	30 days	Fri 18/8/23	Sat 16/9/23
938	U-channel	30 days	Fri 25/8/23	Sat 23/9/23
939	**Outside RW1 at the Side**	**40 days**	**Tue 5/9/23**	**Sat 14/10/23**
940	Excavation to Formation	10 days	Tue 5/9/23	Thu 14/9/23
941	Catchpit	10 days	Fri 15/9/23	Sun 24/9/23
942	U-channel	20 days	Mon 25/9/23	Sat 14/10/23



Task | Critical Task | Milestone | Summary

*E=Excavator L=Lorry W=Worker D=Drill plant C=Crane Lorry R=Rotter

ID	Task Name	Duration	Start	Finish
943	**Planned Completion of Section 1A5**	0 days	Sat 28/10/23	Sat 28/10/23
944	**Section 1A6**	**319 days**	**Wed 14/12/22**	**Sat 28/10/23**
945	**Road L53 + L54 (Portion A5,B10,B11)**	**319 days**	**Wed 14/12/22**	**Sat 28/10/23**
946	Drainage Work	200 days	Wed 14/12/22	Sat 1/7/23
947	Sewer Work	200 days	Fri 13/1/23	Mon 31/7/23
948	**Water Work**	**200 days**	**Sun 12/2/23**	**Wed 30/8/23**
949	Water Pipe Installation	170 days	Sun 12/2/23	Mon 31/7/23
950	**Water Connection**	**30 days**	**Tue 1/8/23**	**Wed 30/8/23**
951	Testing and Submission	24 days	Tue 1/8/23	Thu 24/8/23
952	Approval from WSD	1 day	Fri 25/8/23	Fri 25/8/23
953	Water Connection	1 day	Sat 26/8/23	Sat 26/8/23
954	Reinstatement Works	4 days	Sun 27/8/23	Wed 30/8/23
955	Utilities	150 days	Tue 14/3/23	Thu 10/8/23
956	Road Work	200 days	Tue 14/3/23	Fri 29/9/23
957	Road Lighting	109 days	Wed 12/7/23	Sat 28/10/23
958	Landscaping Work	74 days	Wed 16/8/23	Sat 28/10/23
959	**Transformer Room**	**155 days**	**Wed 5/4/23**	**Wed 6/9/23**
960	Excavation to Formation Level	10 days	Wed 5/4/23	Fri 14/4/23
961	Construction of Footing & Trench	10 days	Sat 15/4/23	Mon 24/4/23
962	Construction of RC Structures	30 days	Tue 25/4/23	Wed 24/5/23
963	Waterproofing, Finishing & Painting Works	25 days	Thu 25/5/23	Sun 18/6/23
964	Hardware	20 days	Mon 19/6/23	Sat 8/7/23
965	E&M Works	30 days	Sun 9/7/23	Mon 7/8/23
966	Testing & Commissioning	20 days	Tue 8/8/23	Sun 27/8/23
967	Handover to CLP	10 days	Mon 28/8/23	Wed 6/9/23
968	**Planned Completion of Section 1A6**	0 days	Sat 28/10/23	Sat 28/10/23
969	**Section 1B**	**365 days**	**Sun 29/10/23**	**Sun 27/10/24**
970	Establishment works of Sections 1A4, 1A5, 1A6	365 days	Sun 29/10/23	Sun 27/10/24
971	**Planned Completion of Section 1B**	0 days	Sun 27/10/24	Sun 27/10/24
972	**Section 2A**	**1459 days**	**Sat 1/5/21**	**Mon 28/4/25**
973	**Ping Ha Road (Portion C1)**	**1459 days**	**Sat 1/5/21**	**Mon 28/4/25**
974	**Decontamination**	**182 days**	**Sat 1/5/21**	**Fri 29/10/21**
991	**Pipe Jacking**	**667 days**	**Mon 13/12/21**	**Tue 10/10/23**
1004	**Water Work**	**1233 days**	**Mon 13/12/21**	**Mon 28/4/25**
1011	**Ha Tsuen Road (Portion A3,A6,A7,A8,D1,D2)**	**888 days**	**Fri 18/3/22**	**Wed 21/8/24**
1012	**Water Work**	**888 days**	**Fri 18/3/22**	**Wed 21/8/24**
1013	Water Pipe Installation (Ha Tsuen Road to Road D1)	690 days	Fri 18/3/22	Mon 5/2/24
1014	**Water Connection**	**60 days**	**Sun 23/6/24**	**Wed 21/8/24**
1015	Testing and Submission	54 days	Sun 23/6/24	Thu 15/8/24
1016	Approval from WSD	1 day	Fri 16/8/24	Fri 16/8/24
1017	Water Connection	1 day	Sat 17/8/24	Sat 17/8/24
1018	Reinstatement Works	4 days	Sun 18/8/24	Wed 21/8/24
1019	**Sewage Pumping Station**	**563 days**	**Thu 28/7/22**	**Sat 10/2/24**
1020	**Sewage Work**	**503 days**	**Thu 28/7/22**	**Tue 12/12/23**
1021	**Access day 456**	0 days	Thu 28/7/22	Thu 28/7/22
1022	Site Clearance	5 days	Thu 28/7/22	Mon 1/8/22
1023	Initial Survey	7 days	Tue 2/8/22	Mon 8/8/22
1024	Tree Survey	7 days	Tue 2/8/22	Mon 8/8/22
1025	Fence Work	7 days	Tue 2/8/22	Mon 8/8/22
1026	Underground Utilities Detection	7 days	Tue 2/8/22	Mon 8/8/22
1027	Install Monitoring Points	14 days	Tue 9/8/22	Mon 22/8/22
1028	ELS	90 days	Fri 18/11/22	Wed 15/2/23
1029	Construction of RC Structures	120 days	Thu 16/2/23	Thu 15/6/23
1030	Builder's Works and Finish	150 days	Mon 17/4/23	Wed 13/9/23
1031	E&M Works	180 days	Fri 16/6/23	Tue 12/12/23
1032	Rising Main	240 days	Mon 17/4/23	Tue 12/12/23
1033	**Setting Equipment**	**60 days**	**Wed 13/12/23**	**Sat 10/2/24**
1034	Test and Commissioning	60 days	Wed 13/12/23	Sat 10/2/24



Task | Critical Task | Milestone | Summary

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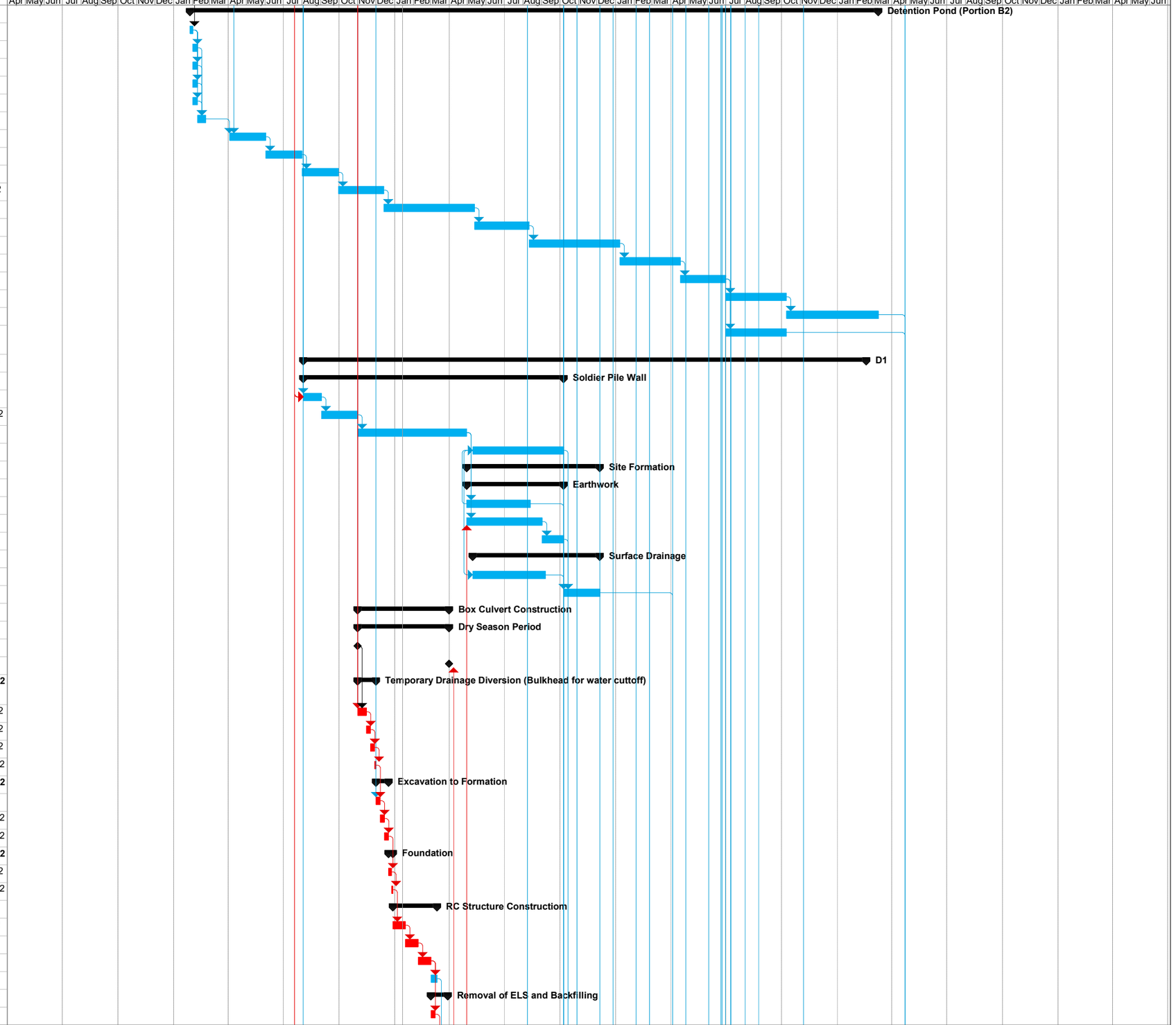
ID	Task Name	Duration	Start	Finish
1035	**Detention Pond (Portion B2)**	**1137 days**	**Fri 28/1/22**	**Sun 9/3/25**
1036	Site Clearance	5 days	Fri 28/1/22	Tue 1/2/22
1037	Initial Survey	7 days	Wed 2/2/22	Tue 8/2/22
1038	Tree Survey	7 days	Wed 2/2/22	Tue 8/2/22
1039	Fence Work	7 days	Wed 2/2/22	Tue 8/2/22
1040	Underground Utilities Detection	7 days	Wed 2/2/22	Tue 8/2/22
1041	Install Monitoring Points	14 days	Wed 9/2/22	Tue 22/2/22
1042	Excavation to Bottom Level & Cut Slope	60 days	Sun 3/4/22	Wed 1/6/22
1043	Laying 1st Layer of Granular Material with Geotextile Filter	60 days	Thu 2/6/22	Sun 31/7/22
1044	Laying 2nd Layer of Granular Material with Geotextile Filter	60 days	Mon 1/8/22	Thu 29/9/22
1045	300 u-channel at +17.2mPD	75 days	Fri 30/9/22	Tue 13/12/22
1046	Construction of Toe Block & Outlet Chamber	150 days	Wed 14/12/22	Fri 12/5/23
1047	Laying Granular Material with Geotextile Filter on Slope	90 days	Sat 13/5/23	Thu 10/8/23
1048	Laying 150mm thk. Cast In-situ Cellar Reinforced Paving	150 days	Fri 11/8/23	Sun 7/1/24
1049	Install Drainage Trunk Main No.1 & No.2	100 days	Mon 8/1/24	Tue 16/4/24
1050	Access Road from +17.2mPD to Top	75 days	Wed 17/4/24	Sun 30/6/24
1051	2 Nos. 600Dia Pipe to Outlet	100 days	Mon 1/7/24	Tue 8/10/24
1052	Construction of Outlet Structure	152 days	Wed 9/10/24	Sun 9/3/25
1053	150 u-channel & Concrete Slab on Top Level around the Pond	100 days	Mon 1/7/24	Tue 8/10/24
1054	**D1**	**930 days**	**Wed 3/8/22**	**Mon 17/2/25**
1055	**Soldier Pile Wall**	**430 days**	**Wed 3/8/22**	**Fri 6/10/23**
1056	Working platform	30 days	Wed 3/8/22	Thu 1/9/22
1057	Pre-drilling	60 days	Fri 2/9/22	Mon 31/10/22
1058	Socket H-Pile	180 days	Tue 1/11/22	Sat 29/4/23
1059	Lagging Wall & Capping Beam	150 days	Wed 10/5/23	Fri 6/10/23
1060	**Site Formation**	**220 days**	**Sun 30/4/23**	**Tue 5/12/23**
1061	**Earthwork**	**160 days**	**Sun 30/4/23**	**Fri 6/10/23**
1062	Excavation to Formation	105 days	Sun 30/4/23	Sat 12/8/23
1063	Backfilling & Compaction to Formation	125 days	Sun 30/4/23	Fri 1/9/23
1064	Trimming for Fill Slope	35 days	Sat 2/9/23	Fri 6/10/23
1065	**Surface Drainage**	**210 days**	**Wed 10/5/23**	**Tue 5/12/23**
1066	At Capping Beam Level	120 days	Wed 10/5/23	Wed 6/9/23
1067	At Cut Slope Toe Level	60 days	Sat 7/10/23	Tue 5/12/23
1068	**Box Culvert Construction**	**151 days**	**Tue 1/11/22**	**Fri 31/3/23**
1069	**Dry Season Period**	**151 days**	**Tue 1/11/22**	**Fri 31/3/23**
1070	Start of Dry Season	0 days	Tue 1/11/22	Tue 1/11/22
1071	End of Dry Season	0 days	Fri 31/3/23	Fri 31/3/23
1072	**Temporary Drainage Diversion (Bulkhead for water cuttoff)**	**30 days**	**Tue 1/11/22**	**Wed 30/11/22**
1073	Placing Sand Bag	14 days	Tue 1/11/22	Mon 14/11/22
1074	Install Diversion Pipes	7 days	Tue 15/11/22	Mon 21/11/22
1075	Sealing and Waterproof works for Bulkhead	7 days	Tue 22/11/22	Mon 28/11/22
1076	Pumping water to Dry Condition	2 days	Tue 29/11/22	Wed 30/11/22
1077	**Excavation to Formation**	**21 days**	**Thu 1/12/22**	**Wed 21/12/22**
1078	Excavation (Open Cut)	7 days	Thu 1/12/22	Wed 7/12/22
1079	Placing Precast Concrete Block	7 days	Thu 8/12/22	Wed 14/12/22
1080	Temp Backfilling	7 days	Thu 15/12/22	Wed 21/12/22
1081	**Foundation**	**7 days**	**Thu 22/12/22**	**Wed 28/12/22**
1082	Rockfill and Subbase	5 days	Thu 22/12/22	Mon 26/12/22
1083	Blinding Concrete	2 days	Tue 27/12/22	Wed 28/12/22
1084	**RC Structure Constructiom**	**73 days**	**Thu 29/12/22**	**Sat 11/3/23**
1085	Base Slab	21 days	Thu 29/12/22	Wed 18/1/23
1086	Wall	21 days	Thu 19/1/23	Wed 8/2/23
1087	Top Slab	21 days	Thu 9/2/23	Wed 1/3/23
1088	Removal of Falsework and Defect Rectification	10 days	Thu 2/3/23	Sat 11/3/23
1089	**Removal of ELS and Backfilling**	**28 days**	**Thu 2/3/23**	**Wed 29/3/23**
1090	Excavation	7 days	Thu 2/3/23	Wed 8/3/23



Task Critical Task Milestone Summary

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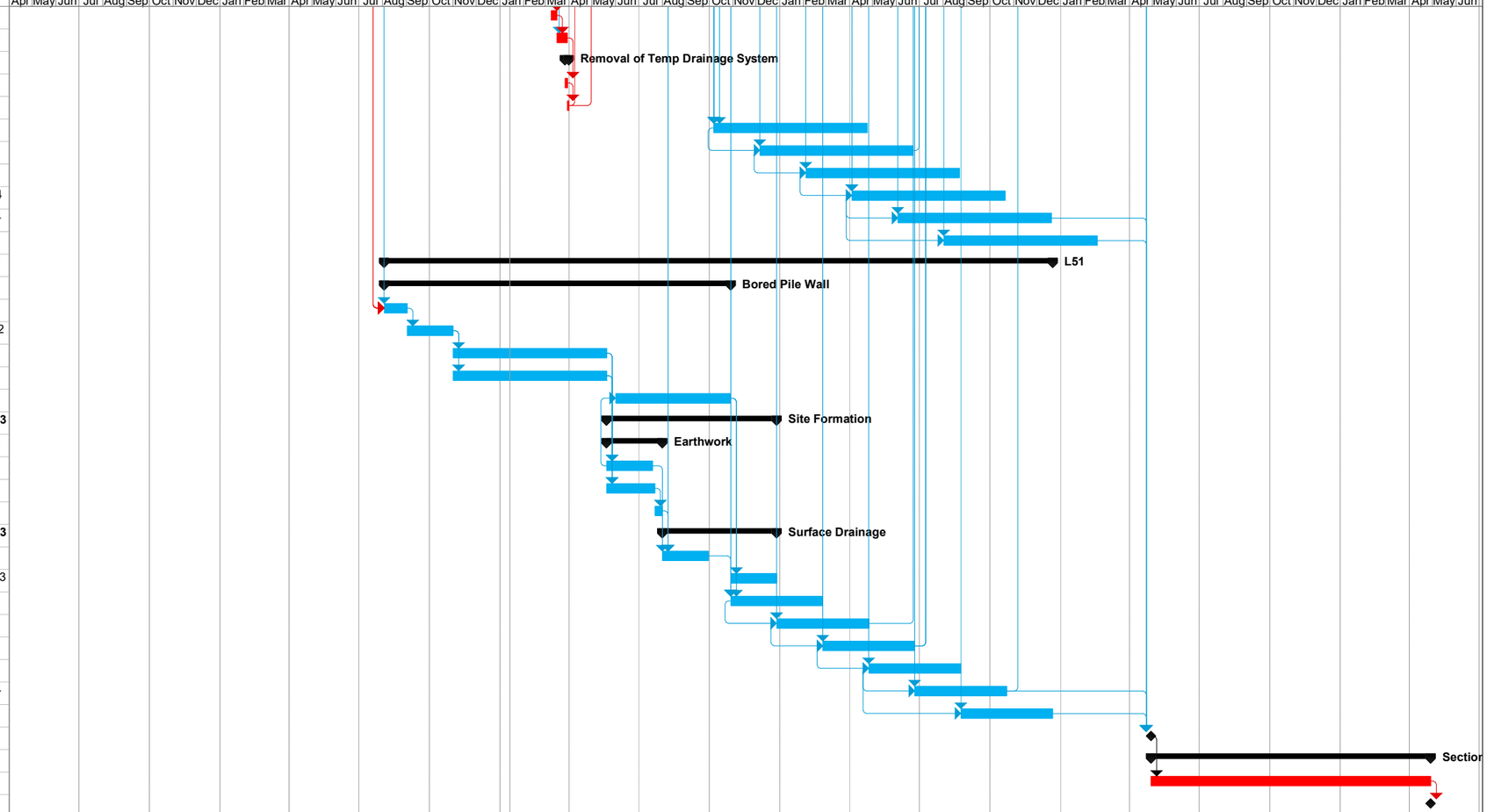
ID	Task Name	Duration	Start	Finish
1091	Removal Concrete Block	7 days	Thu 9/3/23	Wed 15/3/23
1092	Backfilling to Formation	14 days	Thu 16/3/23	Wed 29/3/23
1093	**Removal of Temp Drainage System**	**5 days**	**Mon 27/3/23**	**Fri 31/3/23**
1094	Removal of Pipe	3 days	Mon 27/3/23	Wed 29/3/23
1095	Removal of Bulk Head	2 days	Thu 30/3/23	Fri 31/3/23
1096	Drainage and Sewerage	200 days	Sat 7/10/23	Tue 23/4/24
1097	Water Pipe Installation	200 days	Wed 6/12/23	Sat 22/6/24
1098	Utilities	200 days	Sun 4/2/24	Wed 21/8/24
1099	Road Work	200 days	Thu 4/4/24	Sun 20/10/24
1100	Road Lighting	200 days	Mon 3/6/24	Thu 19/12/24
1101	Landscaping Work	200 days	Fri 2/8/24	Mon 17/2/25
1102	**L51**	**872 days**	**Wed 3/8/22**	**Sat 21/12/24**
1103	**Bored Pile Wall**	**452 days**	**Wed 3/8/22**	**Sat 28/10/23**
1104	Working platform	30 days	Wed 3/8/22	Thu 1/9/22
1105	Pre-drilling	60 days	Fri 2/9/22	Mon 31/10/22
1106	A1 Bored Piles ϕ1200 16Nr	200 days	Tue 1/11/22	Fri 19/5/23
1107	A2 Bored Piles ϕ1800 31Nr	200 days	Tue 1/11/22	Fri 19/5/23
1108	Lagging Wall & Capping Beam	150 days	Thu 1/6/23	Sat 28/10/23
1109	**Site Formation**	**222 days**	**Sat 20/5/23**	**Wed 27/12/23**
1110	**Earthwork**	**73 days**	**Sat 20/5/23**	**Mon 31/7/23**
1111	Excavation to Formation	60 days	Sat 20/5/23	Tue 18/7/23
1112	Backfilling & Compaction for Fill Slope	63 days	Sat 20/5/23	Fri 21/7/23
1113	Trimming for Fill Slope	10 days	Sat 22/7/23	Mon 31/7/23
1114	**Surface Drainage**	**149 days**	**Tue 1/8/23**	**Wed 27/12/23**
1115	At Road Level	60 days	Tue 1/8/23	Fri 29/9/23
1116	At Capping Beam Level	60 days	Sun 29/10/23	Wed 27/12/23
1117	Drainage and Sewerage	120 days	Sun 29/10/23	Sun 25/2/24
1118	Water Pipe Installation	120 days	Thu 28/12/23	Thu 25/4/24
1119	Utilities	120 days	Mon 26/2/24	Mon 24/6/24
1120	Road Work	120 days	Fri 26/4/24	Fri 23/8/24
1121	Road Lighting	120 days	Tue 25/6/24	Tue 22/10/24
1122	Landscaping Work	120 days	Sat 24/8/24	Sat 21/12/24
1123	**Planned Completion of Section 2A**	0 days	Mon 28/4/25	Mon 28/4/25
1124	**Section 2B**	**365 days**	**Tue 29/4/25**	**Tue 28/4/26**
1125	Establishment works of Sections 1A1, 1A2, 1A3, 2A	365 days	Tue 29/4/25	Tue 28/4/26
1126	**Planned Completion of Section 2B**	0 days	Tue 28/4/26	Tue 28/4/26



Task Critical Task Milestone Summary

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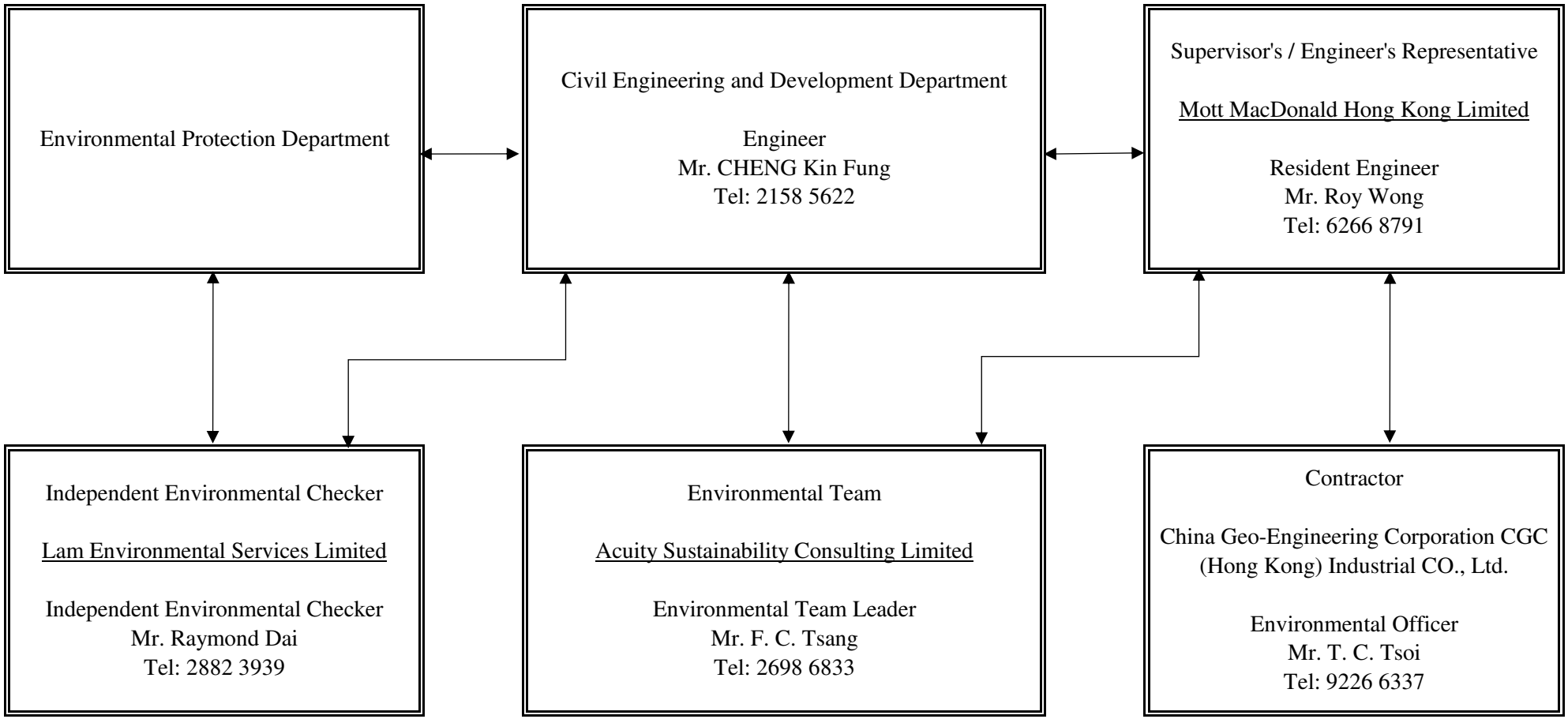
Appendix B

Project Organization Chart

Project Organization Chart



Appendix C

Project Implementation Schedule (PIS)

Environmental Mitigation Implementation Schedule (EMIS)

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
Air Quality						
S4.10	Watering once per hour on active works areas, exposed areas and unpaved haul roads to reduce dust emission	To minimize the dust impact	Contractor	Construction Phase	• Air Pollution Control Ordinance (APCO) • To control the dust impact to meet HKAQO and TM-EIAO criteria	Implemented after reminder
	The active construction works area should be reduced to one-third of monthly average work of the respective Work Contract so as to alleviate adverse dust impact.					Implemented
	When there are open excavation and spoil handling works, hoarding of 3m high should be provided along the construction site boundary adjacent to the non-construction areas such as residential, educational institutes or recreation area in use so as to minimize the dust impact					To be Implemented
	Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices: • Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. • Use of frequent watering for particularly dusty construction areas and areas close to Air Sensitive Receivers (ASRs). • Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines. • Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. • Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.				• Air Pollution Control (Construction Dust) Ordinance (APCO) • To control the dust impact to meet HKAQO and TM-EIAO criteria	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	• Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading area of barging point, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods. • Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period. • Imposition of speed controls for vehicles on site haul roads. • Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs. • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.					
Construction Noise						
S5.13	Use of quiet plant which should be made reference to the Powered Mechanical Equipment (PME) listed in the Technical Memorandum or the Quality Powered Mechanical Equipment (QPME) / other commonly used PME listed in Environmental Protection Department (EPD) web pages as far as possible which includes the Sound Power Level (SWLs) for specific quiet PME.	Reduce the noise levels of plant items	Contractor	Construction Phase	EIAO-TM	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S5.13	Install movable noise barrier and enclosures. The movable noise barrier can provide 5 dB(A) noise reduction for mobile plant and 10 dB(A) noise reduction for static plant. The barrier material shall have a surface mass of not less than 14 kg/m2. The enclosures can provide 15 dB(A) noise reduction	Screen the noisy plant items to be used at all construction sites				To be implemented
S5.13	Proper workfront management and proper grouping of PME during construction activities operated at the critical work areas	Reduce the construction noise impact				Implemented
S5.13	Maintain the recommended minimum separation between the schools and the critical works areas during examination periods					N/A
S5.13	Good Site Management Practices • only well-maintained plant should be operated on-site, and plant should be serviced regularly during the construction programme; • machines and plant (such as trucks and cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs • silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works • mobile plant should be sited as far away from NSRs as possible and practicable; and • material stockpiles, site offices and other structures should be effectively utilized, where practicable, to screen noise from on-site construction activities.	Control construction airborne noise				Implemented
S5.13	Liaison with the school representative(s) to obtain the examination schedule so as to avoid noisy construction activities during school examination period.					N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S5.13	Set up a liaison group among CEDD, relevant government departments, contractors of the Works contracts, etc. during construction phase of the Project to ensure proper implementation of mitigation measures					To be implemented
Water Quality						
S6.11	Surface run-off from construction sites should be discharged into stormwater drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels/earth bunds/sandbag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels should be provided on site boundaries where necessary to intercept stormwater run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	To minimise impact from construction site run-off	Contractor	Construction Phase	• Water Pollution Control Ordinance (WPCO), Technical Memorandum on EIA Ordinance (EIAO-TM), ProPECC PN 1/94, • Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS)	To be implemented
S6.11	Silt removal facilities, channels and manholes should be maintained, and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains.					To be implemented
S6.11	Construction works should be programmed to minimise soil excavation works in rainy seasons (April to September). If excavation in soil cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g., along the crest / edge of excavation) to prevent stormwater run-off from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface					To be implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	protection measures can be safely carried out well before the arrival of a rainstorm.					
S6.11	Earthworks final surfaces should be well compacted, and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.					To be implemented
S6.11	Measures should be taken to minimise the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into stormwater drains via silt removal facilities.					N/A
S6.11	Open stockpiles of construction materials (e.g., aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms.					Implemented
S6.11	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent stormwater run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.					To be implemented
S6.11	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.					Implemented
S6.11	Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into stormwater drains via silt removal facilities.	To minimise impact from boring and drilling water				N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S6.11	All vehicles and plant should be cleaned before they leave a construction site to minimise the deposition of earth, mud, debris on roads. A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into stormwater drains. The section of construction road between the wheel washing bay and the public road should be paved with backfall to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains	To minimise impact from wheel washing water				Implemented
S6.11	Acidic wastewater generated from acid cleaning, etching, pickling and similar activities should be neutralised to within the pH range of 6 to 10 before discharging into foul sewers.	To minimise impact from acidic wastewater				N/A
S6.11	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the run-off and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS.	To minimise impact from effluent discharges				Implemented
S6.11	Beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.	To minimise impact from effluent discharges				Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S6.11	To minimise the potential water quality impacts from the construction works located near any inland watercourses, the practices outlined in ETWB TC (Works) No. 5/2005 "Protection of natural streams/rivers from adverse impacts arising from construction works" should be adopted where applicable: • Impermeable sheet piles and cofferdams should be used as required to divert water flow from the construction works area so that all the construction works would be undertaken within a dry zone and physically separated from the watercourses. • The proposed works should preferably be carried out within the dry season where the flow in the stormwater culvert/water channel/stream is low. • The use of less or smaller construction plants may be specified in works areas close to the inland water bodies. • Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any watercourses during carrying out of the construction works. • Stockpiling of construction materials and dusty materials should be covered and located away from any watercourses. • Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers. • Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the watercourses, where practicable. • Mitigation measures to control site run-off from entering the nearby water environment should be implemented to minimise water quality impacts. Surface channels should	To minimise impact from construction works near watercourses			• WPCO, EIAO-TM, ETWB TC9Works) No. 5/2005	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	be provided along the edge of the waterfront within the work sites to intercept the run-off. • Construction effluent, site run-off and sewage should be properly collected and/or treated. • Any temporary works site inside the stormwater watercourses should be temporarily isolated, such as by placing of sandbags or silt curtains with lead edge at bottom and properly supported props to prevent adverse impact on the stormwater quality. • Proper shoring may need to be erected in order to prevent soil/mud from slipping into the inland water bodies.					
S6.11	The key water quality measure for protection of the revitalised drainage channel water is to avoid polluted site run-off from reaching the revitalised drainage channel water. Relevant mitigation measures should follow the practices outlined in ETWB TC (Works) No. 5/2005 "Protection of natural streams / rivers from adverse impacts arising from construction works" as listed below: • Impermeable sheet piles and cofferdams should be used as required to divert water flow from the construction works area so that all the construction works would be undertaken within a dry zone and physically separated from the revitalised drainage channel water. • The proposed works should preferably be carried out within the dry season where the flow in the revitalised drainage channel is low. • The use of less or smaller construction plants may be specified in works areas close to the revitalised drainage channel. • Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from	To minimise impact from revitalisation and greening of Drainage Channel Banks				N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	the revitalised drainage channel during carrying out of the construction works. • Stockpiling of construction materials and dusty materials should be covered and located away from the revitalised drainage channel water. • Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby revitalised drainage channel. • Construction activities, which generate large amount of wastewater, should be carried out a distance away from the revitalised drainage channel, where practicable. • Mitigation measures to control site run-off from entering the nearby revitalised drainage channel should be implemented to minimise water quality impacts. Surface channels should be provided along the edge of the revitalised drainage channel within the work sites to intercept the run-off. • Construction effluent, site run-off and sewage should be properly collected and/or treated. • Any temporary works site inside the revitalised drainage channel should be temporarily isolated, such as by placing of sandbags or silt curtains with lead edge at bottom and properly supported props to prevent adverse impact on the revitalised drainage channel water. Proper shoring may need to be erected in order to prevent soil / mud from slipping into the revitalised drainage channel.					
S6.11	The construction method and sequence of the proposed construction in watercourses / concrete flood storage pond for works sites of DP12 should be carefully designed so that all the construction works including any excavation and pilling operations would be undertaken within a dry zone and physically separated from the watercourses downstream.	To minimise impact from construction in watercourses / concrete flood storage pond			WPCO, EIAO-TM	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S6.11	Impermeable sheet pile walls or cofferdam walls or steel casing should be installed to fully enclose the construction works area (including all the excavation and piling works) in the watercourse / pond prior to the commencement of any works in watercourse / pond. Dewatering of the construction works area or diversion of water flow should be undertaken before the construction works to avoid water flow in the construction works area. Silt removal facilities should be used to clarify the effluent generated from the dewatering operation before discharging back to the watercourse / drainage system.	To minimise impact from construction in watercourses / concrete flood storage pond			WPCO, EIAO-TM, TM-DSS	N/A
S6.11	Any construction works including excavation and pilling activities should be undertaken in a dry zone surrounded by the impermeable sheet pile walls or cofferdam walls or steel casing. Silt curtains should also be deployed around the construction works area inside the watercourse, where practicable, as a second layer of protection to further minimise sediment and contaminant release. All wastewater generated from the pilling activities should be regarded as part of the construction site effluent, which should be properly collected and treated as appropriate to meet the standards stipulated in the TM-DSS before disposal. It is recommended that the construction works in watercourses / pond should be undertaken in dry seasons, where practicable, when the water flow is low.	To minimise impact from construction in watercourses / concrete flood storage pond			WPCO, EIAO-TM	N/A
S6.11	Construction works for removal and diversion of watercourses should be undertaken within a dry zone. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate the works areas from the neighbouring waters.	To minimise impact from removal and diversion of watercourse			WPCO, EIAO-TM	N/A
S6.11	Construction works at watercourse should be undertaken only after flow diversion or dewatering operation is fully completed to avoid water flow in the works area. Dewatering of watercourse should be performed by diverting the water flow to new or temporary drainage. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate				WPCO, EIAO-TM, TM-DSS	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	the works areas from neighbouring waters. The permanent or temporary drainage for carrying the diverted flow from existing watercourse to be removed should be constructed and completed before dewatering of that existing watercourse. Construction of all the proposed permanent and temporary drainage should be undertaken in a dry zone prior to receiving any water flow					
S6.11	The Contractor should provide a dry zone for all the construction works to be undertaken in watercourses and stormwater drainage following the tentative works sequence as described above or using other approved methods as appropriate to suit the works condition. The flow diversion works should be conducted in dry season, where possible, when the flow in the watercourse is low. The wastewater and ingress water from the site should be properly treated to comply with the WPCO and the TM-DSS before discharge.				WPCO, EIAO-TM, TM-DSS	N/A
S6.11	The site practices outlined in the ProPECC PN 1/94 "Construction Site Drainage" and ETWB TC (Works) No. 5/2005 "Protection of natural streams/rivers from adverse impacts arising from construction works" should be adopted for the proposed demolition or diversion of watercourses where applicable.				WPCO, EIAO-TM, ProPECC PN 1/94, ETWB TC (Works) No. 5/2005	Implemented
S6.11	Construction works at the existing ponds / wet areas should be conducted only after dewatering of these ponds / wet areas is fully completed. The drained water generated from the dewatering of these ponds / wet areas to be removed should be temporarily stored in appropriate storage tanks or containers for reuse on-site as far as possible. Any surplus drained water should be tankered away for proper disposal at STW in a controlled manner.	To minimise impact from removal of ponds / wet areas			WPCO, EIAO-TM	N/A
S6.11	It is recommended to drain only one pond at a time to minimise the potential water quality impact. Dewatering works at ponds / wet areas should be conducted within dry season to minimise the quantity of drained water. No direct discharge of drained					N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	water to the stormwater drainage system or marine water should be allowed.					
S6.11	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied with for control of chemical wastes.	To minimise impact from accidental spillage			WPCO, Waste Disposal Ordinance (WDO), Waste Disposal (Chemical Waste) (General) Regulation, EIAO-TM	Implemented
S6.11	Any service workshop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.				WPCO, WDO, Waste Disposal (Chemical Waste) (General) Regulation, EIAO-TM	N/A
S6.11	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. • Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.					Implemented
S6.11	No discharge of sewage to the stormwater system and marine water will be allowed. Adequate and sufficient portable chemical toilets should be provided in the works areas to handle	To minimise impact from workforce sewage effluent			WPCO, EIAO-TM, TM-DSS	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	sewage from construction workforce. A licensed waste collector should be employed to clean and maintain the chemical toilets on a regular basis.					
S6.11	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment. Regular environmental audit of the construction site should be conducted to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.				WPCO, EIAO-TM	Implemented
S6.11	Any excavated contaminated material and exposed contaminated surface should be properly housed and covered to avoid generation of contaminated run-off. Open stockpiling of contaminated materials should not be allowed. Any contaminated run-off or wastewater generated from the land decontamination processes should be properly collected and diverted to wastewater treatment facilities (WTF). The WTF shall deploy suitable treatment processes (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment system shall meet the requirements as stated in TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal.	To minimise impact from contaminated site run-off and wastewater from land decontamination			WPCO, EIAO-TM, TM-DSS	N/A
S6.11	No direct discharge of groundwater from contaminated areas should be adopted. Prior to any excavation works within the potentially contaminated areas, the baseline groundwater quality in these areas should be reviewed based on the past relevant site investigation data and any additional groundwater quality measurements to be performed with reference to Guidance Note for Contaminated Land Assessment and Remediation and the review results should be submitted to EPD for examination. If the review results indicated that the groundwater to be generated from the excavation works would	To minimise impact from groundwater from contaminated areas			WPCO, TM-DSS, Guidance Note for Contaminated Land Assessment and Remediation	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	be contaminated, this contaminated groundwater should be either properly treated or properly recharged into the ground in compliance with the requirements of the TM-DSS. If wastewater treatment is to be deployed for treating the contaminated groundwater, the wastewater treatment unit shall deploy suitable treatment processes (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment plant shall meet the requirements as stated in the TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal.					
S6.11	If deployment of wastewater treatment is not feasible for handling the contaminated groundwater, groundwater recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in section 2.3 of the TM-DSS. The baseline groundwater quality should be determined prior to the selection of the recharge wells and submit a working plan to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Groundwater monitoring wells should be installed near the recharge points to monitor the effectiveness of the recharge wells and to ensure that no likelihood of increase of groundwater level and transfer of pollutants beyond the site boundary. Prior to recharge, free products should be removed as necessary by installing the petrol interceptor. The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater recharge operation or discharge of treated groundwater.	To minimise impact from groundwater from contaminated areas			WPCO, EIAO-TM, TM-DSS	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S6.11	The following measures should be implemented by the Contractors to minimise the chance of emergency construction site discharge (due to failure of treatment facilities such as sand traps, silt traps, sedimentation basins, oil interceptors etc.): • Provide spare or standby treatment facilities of suitable capacities for emergency replacement in case damage or defect or malfunctioning of the duty treatment facilities is observed. • Conduct daily integrity checking of the construction site drainage and treatment facilities to inspect malfunctions, in particular before, during and after a storm event. • Carry out regular maintenance or desilting works to maintain effectiveness of the construction site drainage and treatment facilities in particular before, during and after a storm event.	To minimise impact from construction site discharges			WPCO, EIAO-TM, TM-DSS	Implemented
S6.11	An Emergency Response Plan (ERP) should be developed to minimise the potential impact from construction site discharges under failure of treatment facilities during emergency situations or inclement weather. The ERP should give the emergency contacts to mobilise retention facilities and stakeholders to be notified as well as the details of the proposed construction site drainage system and the design and operation of duty and standby treatment facilities. The ERP should also provide the procedures and guidelines for routine integrity checking and maintenance of the drainage system and treatment facilities as well as the emergency response and rectification procedures to restore normal operation of the treatment facilities in case of treatment failure during emergency situation or inclement weather. The Best Management Practices (BMPs) in controlling water pollution arising from the construction activities and an event and action plan with action and limit levels for water quality monitoring should be included in the ERP. The ERP should be submitted	To minimise impact from construction site discharges				Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	to the EPD for approval before commencement of the construction works.					
S6.11	Construction of the Project would involve diversion of the existing twin 800 mm diameter rising mains along Tin Ying Road. New sewerage facilities for receiving the diverted sewage flow from the existing rising mains should be constructed prior to the commencement of any demolition and construction works at the existing rising mains. All sewage flow running in the existing rising mains along Tin Ying Road should be diverted to the new sewerage system prior to any demolition and construction works at the existing rising mains. No discharge of sewage flow to the environment should be allowed during the sewerage diversion works.	To minimise impact from sewerage diversion works			WPCO, EIAO-TM	N/A
S6.11	All excavated materials generated from removal and diversion of watercourses, removal and construction works in ponds and wet areas as well as the proposed bridge pier construction works in watercourses should be collected and handled in compliance with the Waste Disposal Ordinance. Excavated sediment, if any, generated from the excavation activities in watercourses, ponds and wet areas should be tested and classified in accordance with the ETWB TCW No. 34/2002 for determining the disposal arrangement for the sediment. No direct disposal of the construction wastes or excavated materials into the stormwater drainage system and marine water should be allowed.	To manage the disposal of sediment			Waste Disposal Ordinance, ETWB TCW No. 34/2002	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
Waste Management						
S8.2	Good Site Practice The following good site practices are recommended during the construction phase: • Nomination of an approved person, such as a site manager, to be responsible for the implementation of good site practices, • Training of site personnel in proper waste management and chemical handling procedures. • Provision of sufficient waste disposal points and regular collection of waste. • Appropriate measures to minimize windblown litter and dust during handing, transportation and disposal of waste; and • Preparation of a WMP in accordance with the ETWB TCW No. 19/2005 Environmental Management on Construction Sites and submitted it to the Engineer for approval.	Minimise waste generation during construction	Contractor	Construction Phase	Waste Disposal Ordinance, Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK)	Implemented
S8.2	Waste Reduction Measures Waste reduction is best achieved by proper planning and design at the planning and design phases, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve waste reduction • Segregation and storage of different types of waste in different containers or skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. • Adopt proper storage and site practices to minimise the potential for damage to, and contamination of, construction materials; • Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated;				Waste Disposal Ordinance	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	• Sort out demolition debris and excavated materials from demolition works to recover reusable / recyclable portions (i.e. soil, rock, broken concrete, etc.); • Maximise the use of reusable steel formwork to reduce the amount of C&D materials; • Minimise over ordering concrete, mortars and cement grout by doing careful check before ordering; and • Adopt pre-cast construction method instead of cast-in-situ method for construction of concrete structures as far as possible.					
S8.2	<u>Storage of Waste</u> Storage of materials on site may induce adverse environmental impacts if not properly managed. The following recommendations should be implemented to minimise the impacts: • Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimising the potential of pollution; • Maintain and clean storage areas routinely; • Stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away; and • Different locations should be designated to stockpile each material to enhance reuse.	Minimise waste impacts during storage of waste			Waste Disposal Ordinance	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S8.2	Collection and Transportation of Waste Waste hauler with appropriate permits should be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets. The following recommendation should be implemented to minimise the impacts: • Remove waste in timely manner; • Employ the trucks with cover or enclosed containers for waste transportation; • Obtain relevant waste disposal permits from the appropriate authorities; and • Dispose of waste at licensed waste disposal facilities.	Minimise waste impacts during collection and transportation of waste			Waste Disposal Ordinance	Implemented
S8.2	Construction and Demolition (C&D) Materials Wherever practicable, C&D materials should be segregated from other waste to avoid contamination and ensure acceptability at the public filling areas or reclamation sites. The following mitigation measures should be implemented in handling the C&D materials: • Adopt "selective demolition" technique to demolish the existing structure and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; • Maintain the stockpile areas and reuse excavated fill material for backfilling; • Carry out on-site sorting to recover the inert C&D materials and reusable and recyclable materials prior to disposal off-site; • Make provisions in the contract documents to allow and promote the use of recycled aggregates where appropriate; and • Implement a trip-ticket system for each works contract in accordance with DEVB TC(W) No. 6/2010 Trip-ticket System for Disposal of Construction and Demolition	Minimise waste impacts from C&D materials			Waste Disposal Ordinance, Land (Miscellaneous Provisions) Ordinance, Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	Material to ensure that the disposal of C&D materials are properly documented and verified The Contractor should be responsible for devising a system to work for on-site sorting of C&D materials. It is recommended that the system should include the identification of the source of generation, estimated quantity of waste generated, arrangement for on-site sorting and/or collection, designated stockpiling areas, frequency of collection by recycling contractors and frequency of removal off-site.					
S8.2	<u>Asbestos Containing Materials</u> Due to the potential large amount of asbestos containing materials during the site clearance stage, asbestos investigation is required. However, as asbestos investigation will involve a large number of buildings and most premises will involve private access, which cannot be obtained at this stage, it is considered that an asbestos specialist shall be employed by the responsible parties during the construction stage to investigate this issue. Sufficient and reasonable lead time shall be allowed for preparation, vetting and implementation of Asbestos Investigation Report and Asbestos Abatement Plan in accordance with Air Pollution Control Ordinance before commencement of any demolition or site clearance work. Some key precautionary measures related to the handling and disposal of asbestos are listed as following: • Adoption of protection, such as full containment, mini containment, or segregation of work area; • Provision of decontamination facilities for cleaning of workings, equipment and bagged waste before leaving the work area; • Adoption of engineering control techniques to prevent fibre release from work area, such as use of negative pressure	Control the asbestos containing materials and ensure proper storage, handling and disposal			Code of Practice on Handling, Transportation and Disposal of Asbestos Waste ProPECC PN 2/97 Handling of Asbestos Containing Materials in Buildings	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	equipment with high efficiency particulate air (HEPA) filters to control air flow between the work area and the outside environment; • Wetting of asbestos containing materials before and during disturbance, minimising the breakage and dropping of asbestos containing materials, and packing of debris and waste immediately after it is produced; • Cleaning of work area by wet wiping and vacuuming with HEPA-filtered vacuum cleaner; • Coating on any surfaces previously in contact with or contained by asbestos with a sealant; • Proper bagging, safe storage and disposal of asbestos and asbestos-contaminated waste; • Pre-treatment of all effluent from the work area before discharged; and • Air monitoring strategy to check the leakage and clearance of the work area during and after the asbestos work.					
S8.2	<u>Chemical Waste</u> For those processes which generated chemical waste, it may be possible to find alternatives to eliminate the use of chemicals, to reduce the generation quantities or to select a chemical type of less impact on environment, health and safety as far as possible. If chemical waste is produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer. Chemical waste should be stored in appropriate containers and collected by a licensed chemical waste contractor. Chemical waste (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while chemical waste that cannot be recycled should be disposed of at either the CWTC, or another licensed facility.	Control the chemical waste and ensure proper storage, handling and disposal.			Waste Disposal (Chemical Waste) General) Regulation, Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S8.2	General Refuse General refuse should be stored in enclosed bins separately from construction and chemical waste. Recycling bins should also be placed to encourage recycling. Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean. A reputable waste collector should be employed to remove general refuse on a daily basis. It is expected that such arrangements would minimise potential environmental impacts.	Minimise production of general refuse and avoid odour, pest and litter impacts			Waste Disposal Ordinance	Implemented
	Excavated Sediment Since the amount of excavated sediment generated from the inland water removal / diversion works is expected to be small, all excavated sediment will be treated and reused on-site as backfilling materials for the Project. This approach avoids the need for off-site disposal that may result in impacts on the marine environment. In addition, all construction works near the watercourses should be undertaken within a dry zone and during dry season to avoid adverse impacts to the environment. The excavated sediment, if stockpiled on site, should be stored in enclosed containers and transported to the on-site treatment facilities as soon as practicable to minimise any potential odour impacts.	Proper handling of excavated sediment			Waste Disposal Ordinance	N/A
	Contaminated Soil It is considered unlikely that contaminated land issues, if any subject to site investigation, would be a concern during either the construction or the operational of the proposed development as remediation on contaminated area would be carried out prior to construction. However, as a precaution, it is recommended that standard good site practices should be implemented during the construction phase to minimise any potential exposure to contaminated soils or groundwater.	Proper handling of contaminated soil			Practice Guide for Investigation and Remediation of Contaminated Land	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
Land Contamination						
-	<u>Identified Potentially Contaminated Sites</u> Prior to development of these sites, the Project Proponent should appoint a consultant to re-appraise these sites to update the corresponding findings and sampling and testing requirements presented in the Contamination Assessment Plan (CAP). Supplementary CAP(s), incorporating the findings of the site re-appraisal and the updated sampling and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any site investigation (SI) works. SI works should then be carried out according to the supplementary CAP(s). Contamination Assessment Report (CAR(s)) and, if contaminated soil and/or groundwater identified, Remediation Action Plan (RAP(s)) should be prepared and submitted to EPD for approval.	Identify the presence, nature and extent of contamination and formulate the necessary remedial actions	CEDD/ Detailed Design Consultant / Contractor	After the land is resumed and handed over to the Project Proponent and prior to commencement of any remediation / construction works.	EIAO-TM, Guidance Manual for Use of Risk-Based Remediation Goals (RBRGs) for Contaminated Land Management, Guidance Notes for Contaminated Land Assessment and Remediation; and Practice Guide for Investigation and Remediation of Contaminated Land	N/A
-	<u>Remaining Non-Contaminated Sites</u> After the sites are handed over to the Project Proponent for development, the Project Proponent should appoint a consultant to revisit these sites to assess the latest land uses and site conditions. If any of these sites are found to have potential land contamination issues, the Project Proponents appointed consultant should prepare and submit supplementary CAP(s) to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the supplementary CAP(s). CAR(s) and, if contaminated soil and/or groundwater identified, RAP(s) should be prepared and submitted to EPD for approval					N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
-	Any contaminated soil and groundwater should be treated according to EPD's approved RAP(s) and RR(s) should be submitted to EPD for agreement after completion of the remediation works.	Remediate any contaminated soil and groundwater and demonstrate that the remediation works are adequate and is carried out in accordance with EPD's approved RAP(s).	Contractor	After the land is resumed and handed over to the PP and prior to commencement of any construction works.		N/A
Ecology						
S10.2.4	Scheduling the site formation and construction works at Sites 3-32, 3-33, 3-37, 3-39 and 3-40 outside the breeding season of ardeids	Minimise disturbance impacts to breeding ardeids in San Sang San Tsuen egretry	CEDD / Contractor	Construction phase	TM-EIAO	N/A
S10.2.5	Provision of screening (e.g. hoarding) at adjacent habitats within CA at northwest of San Sang San Tsuen.	Disturbance impacts (e.g. noise/vibration, visual) to adjacent habitats within the CA				N/A
S10.2.6	Hoarding around "Green Belt" zoning to mitigate construction disturbance impacts to the Crested Serpent Eagle habitat.	Minimise construction disturbance impacts to the Crested Serpent Eagle habitat				N/A
S10.2.7	Carefully design the construction methods and sequence of the proposed pier in the watercourses so that all piling and excavation works would be done within dry zone and physically separated from the watercourse downstream	Minimise potential water quality impacts to the habitats of the main channel and waterbird species				N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
S10.2.8	An ecologist with relevant experience should be consulted before the clearance of any bat roost.	Ensure no bat roost would be damaged due to the proposed development				N/A
S10.2.10	Provision of hoarding for proper delineation of works boundary.	Minimise construction disturbance impacts to existing mitigation ponds				Implemented
S10.2.11	General dust and noise control measures.	Mitigate disturbance impacts to the surrounding habitats and associated wildlife				Implemented
S10.2.12	Night-time lighting control.	Minimise glare disturbance to wildlife				Implemented
S10.2.13 – S10.2.15	Good site practices during the construction phase to avoid any pollution entering any nearby watercourses.	Minimise water quality impacts to nearby water bodies				Implemented
Fisheries						
S.13.4.8	Follow the mitigation measures proposed in the water quality assessment for construction and operational phase	To protect fisheries resources from potential indirect impacts arising from deterioration of water quality	Contractor	Construction phase	EIA, contractual requirments	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
Landscape and Visual						
CM1	<u>Minimised construction area and contractor's temporary works areas</u> The construction area and contractor's temporary works areas should be minimised. General Good Practice Measures - For areas unavoidably disturbed by the Project on a short-term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to	Minimise impacts on adjacent landscape	Government/ Developer/ Detailed Design Consultant/ Contractor	Prior to construction, construction stages. This should be implemented as soon as the areas become available, to achieve early establishment	-	Implemented
CM2	<u>Stripping and storing of topsoil</u> Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical. The Contract Specification shall include storage and reuse of topsoil as appropriate. On potentially contaminated sites (as per Section 8) where investigation results indicate soil contamination is present, the use of contaminated soils for planting is to be avoided where appropriate.	Minimise the loss of existing topsoil and reduce the need to provide imported material		Detailed design, construction stages	-	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
CM3	Protection of existing trees Tree Protection & Preservation – Exiting trees to be retained within the Project site should be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.	Protect and Preserve Trees			ETWB Technical Circular Works (TCW) No. 29/2004 and 3/2006	Implemented
CM4	Transplantation of existing trees where practical Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the Project programme. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be referred to.	Transplant Trees where suitable for transplantation		Prior to Construction, Construction Phase & Maintenance in Operation Phase	ETWB TCW 3/2006 and 2/2004 HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
CM5	Control of night-time lighting Control of night-time lighting and glare by hooding all lights. Construction day and night-time lighting should be controlled to minimise glare impact to adjacent VSRs during the Construction phase.	Minimise impact of night-time lighting and glare	Government/ Developer/ Contractor	Construction stage	-	Implemented
CM6	Construction of decorative hoarding around construction works Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publicly accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used.	To screen undesirable views of the works site.	Contractor	Construction stage	-	To be implemented
CM7	Reduction of construction period to practical minimum Reduction of construction period to practical minimum	Minimise length of exposure to construction works	Government/ Developer/ Detailed Design Consultant/ Contractor	Construction stage	-	Implemented
CM8	Prevention of run-off Limitation of / Ensuring no run-off into surrounding landscape and prohibit run-off from entering adjacent water bodies and waterways Refer to guidelines	Minimise / limit impacts on surrounding landscape and adjacent water sea areas		Construction stage	Guidelines for this include ETWB Technical Circular (Works) No. 5/2005 Protection of natural streams/rivers from adverse impacts arising from construction works; Building Department (BD) Practice Note for Authorised Persons and Registered Structural	Implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
					Engineers 295: Protection of natural streams/rivers from adverse impacts arising from construction works	
CM9	Phasing of construction stage Phasing of the construction stage to reduce visual impacts.	Minimise visual impacts during the construction phase		Construction stage	-	To be implemented
CM10	Advance screen planting Advance screen planting of fast-growing tree and shrub species to noise barriers and hoardings. Trees shall be capable of reaching a height >10m within 10 years.	Minimise length of exposure without long term mitigation measures		Detailed design, construction stages	ETWB TCW 3/2006 and 2/2004	To be implemented
CM11	Minimise disturbance footprints To minimise landscape and visual impacts, the footprint and elevation of such elements should be optimised to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimise landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside setting.	Reduce topographical changes and minimize land resumption		Detailed design, construction stages	GEO Publication No. 1/2011, Technical Guidelines on Landscape Treatment on Slopes	Implemented
CM12	Protection of existing water courses For all the natural rivers and streams inside the development area, consideration of protection measures should be made to minimise any impacts from the construction works.	Avoid direct impacts to watercourses	Detailed Design Consultant/ Contractor	Detailed design, construction stages	Guidelines for this include ETWB Technical Circular (Works) No.	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
	Avoid affecting Watercourses – In the detailed design, consideration should be made of watercourses, to minimise any impacts e.g. at new bridge crossings, viaducts, road alignment etc. Guidelines stated should be followed. Bridges and box culverts should also be used to minimise the necessity of watercourse modification and protect the watercourses where necessary.				5/2005 Protection of natural streams/rivers from adverse impacts arising from construction works; Building Department (BD) Practice Note for Authorised Persons and Registered Structural Engineers 295: Protection of natural streams/rivers from adverse impacts arising from construction works	
CM13	Hydroseeding on modified slopes Hydroseeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Government/ Developer/ Detailed Design Consultant/ Contractor	Prior to Construction, Construction Phase & Maintenance in Operation Phase	GEO publication (1999) – Use of Vegetation as Surface Protection on Slope; GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes	To be implemented

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
CM14	Integrate Open Space Network with existing nullah conditions For watercourses affected during construction, measures should be sought to minimise the impact with respect to the existing nullah conditions, existing shrubs and trees along the banks. Where natural streams are unavoidably affected along some of their length, they can be diverted to avoid the proposed new developments and retain the integrity of the whole stream. Detailed design of any stream diversion should follow the Guidelines in ETWB Technical Circular (Works) No. 5/2005 (Protection of natural streams/rivers from adverse impacts arising from construction works) and appropriate construction methods should be used.	Minimise / limit impacts on surrounding landscape and adjacent water sea areas			ETWB TCW No. 5/2005 – Protection of natural streams/rivers from adverse impacts arising from construction works; DSD Practice Note No.1/2005, Guidelines on Environmental Considerations for River Channel Design	N/A
Cultural Heritage Impact						
S13.1.1	The archaeological impact arising from the construction works should be assessed when the detailed design of the works is available. Preservation in situ is the top priority to safeguard the archaeological remains in the impacted area by amending the layout plans of the construction works. However, if the works cannot avoid disturbance to the archaeological deposit, depending on degree of direct impact, the following mitigation measures should be considered, such as archaeological surveys, archaeological watching brief, preservation by record and relocation of archaeological remains. The scope and programme of the archaeological fieldwork would be agreed with AMO.	Minimise impact to archaeology in SAIs	Contractor	Prior to construction phase commencement	Environmental Impact Assessment Ordinance EIAO (Cap.499) and Technical Memorandum (EIAO-TM) Guidance Note on Assessment of Impact on Sites of Culture Heritage in Environmental Impact Assessment Studies (GCH-EIA) Antiquities and Monuments Ordinance (A&MO)	N/A

EM&A Ref.	Mitigation Measures	Objective of the recommended measure & main concerns to address	Implement Agent	Implementation Timing	Requirements and / or Standards to be Achieved	Implementation status
					Hong Kong Planning Standards and Guidelines (HKPSG) Guidelines for Cultural Heritage Impact Assessment (GCHIA)	
S13.1.2	Further archaeological survey is required to be conducted at APA 1 and APA 2 to ascertain the extent of any archaeological remains within the APAs if any construction works will be carried out. Based on the findings of the survey, mitigation measures could be proposed, such as preservation in situ, preservation by record, or relocation of archaeological remains, in prior agreement with the AMO. Direct impact arising from the proposed development within APA 3 should be avoided as far as possible.	Minimise impact to archaeology in APAs.			EIAO-TM GCH-EIA A&MO HKPSG GCHIA	N/A
S13.1.5	Preservation by record (including cartographic and photographic record) prior to any construction works would be required for the directly impacted built heritage.	Minimise impact to built heritage			EIAO-TM GCH-EIA HKPSG GCHIA	N/A
-	A Conservation Management Plan should be proposed to implement future maintenance and management of the cultural heritage.	Maximise the public education, heritage and cultural tourism related opportunities in this area as heritage attractions.	CEDD		EIAO-TM GCH-EIA A&MO HKPSG GCHIA	N/A

Appendix D

Environmental Monitoring Schedule

Contract No. WD/02/2021
Environmental Team for Hung Shui Kiu/ Ha Tsuen New Development Area Stage 1 Works
- Site Formation and Engineering Infrastructure (Version 4.0)

Environmental Monitoring Schedule

December 2022

Sun	Mon	Tue	Wed	Thur	Fri	Sat
				1	2	3
4	5	6 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	7	8 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	9	10 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)
11	12	13 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	14	15 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	16	17 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)
18	19	20 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	21	22 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	23	24 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)
25	26 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	27	28 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	29	30 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	31

Water Quality Monitoring Station:
U1 - Upstream Station
U2 - Upstream Station
SW - Gradient station (downstream of U1 and the construction site of Road D1)
HT - Gradient station (downstream of U2 and the construction site of Road D1)
TKW1 - Gradient station (downstream of the construction site of Road D1)
TKW - Gradient station (downstream of the construction site of Road D1)

Issue Date: 19 December 2022

Contract No. WD/02/2021

Environmental Team for Hung Shui Kiu/ Ha Tsuen New Development Area Stage 1 Works

- Site Formation and Engineering Infrastructure

Tentative Environmental Monitoring Schedule

January 2023

Sun	Mon	Tue	Wed	Thur	Fri	Sat
1	2 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	3	4 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	5	6 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	7
8	9	10 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	11	12 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	13	14 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)
15	16	17 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	18	19 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	20	21 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)
22	23	24	25 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	26	27 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)	28
29	30	31 Water Quality Monitoring (U1, U2, SW, HT, TKW, TKW1)				

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

Water Quality Monitoring Station:
U1 - Upstream Station
U2 - Upstream Station
SW - Gradient station (downstream of U1 and the construction site of Road D1)
HT - Gradient station (downstream of U2 and the construction site of Road D1)
TKW1 - Gradient station (downstream of the construction site of Road D1)
TKW - Gradient station (downstream of the construction site of Road D1)

*Remark:
As confirmed by the Engineers, no construction works will be carried out during Chinese New Year (22 - 25 Jan 2023), thus no water quality monitoring will be carried out on 23 Jan 2023.

Issue Date: 2 January 2023

Appendix E

Calibration Certification

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB110035
Date of Issue : 17 November 2022

PART A - CUSTOMER INFORMATION

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

PART B - SAMPLE INFORMATION

Name of Equipment :	HORIBA U-53
Manufacturer :	HORIBA
Serial Number :	PPHNOMXY
Date of Received :	16 November 2022
Date of Calibration :	16 November 2022
Date of Next Calibration :	16 February 2023
Request No. :	D-BB110035

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H^+
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.15	0.15	Satisfactory
7.42	7.34	-0.08	Satisfactory
10.01	9.92	-0.09	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
14	15.45	1.45	Satisfactory
21	21.44	0.44	Satisfactory
34	34.68	0.68	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.61	-3.90	Satisfactory
20	21.04	5.20	Satisfactory
30	32.03	6.77	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

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AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB110035
Date of Issue : 17 November 2022

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.88	7.70	-0.18	Satisfactory
4.52	5.00	0.48	Satisfactory
1.43	1.00	-0.43	Satisfactory
0.00	0.03	0.03	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.00	--	Satisfactory
10	9.80	-2.0	Satisfactory
20	19.5	-2.5	Satisfactory
100	104	4.0	Satisfactory
800	811	1.4	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

Remark(s)

·The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

·The results relate only to the calibrated equipment as received

·The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

·"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

·The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

--- END OF REPORT ---

Appendix F

Water Quality Monitoring Results and Graphical Presentation

Service Contract No. WD/02/2021
Environmental Team for Hung Shui Kui/ Ha Tsuen
New Development Are Stage 1 Works - Site Formation and Engineering Infrastructure
Water Quality Monitoring Result

Water Quality Monitoring Location : TKW1

Date	Water depth (cm)	Temperature (°C)		pH		DO (mg/L)		DO (%)		Turbidity (NTU)		Suspended Solids (mg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6/12/2022	8	16.7	16.7	7.2	7.2	2.2	2.2	22.2	22.0	11.3	11.8	1.0	2.1
		16.7		7.2		2.1		21.7		12.3		3.1	
8/12/2022	7	18.7	18.7	7.6	7.6	2.9	2.9	30.8	30.9	14.4	14.6	1.5	1.7
		18.7		7.6		2.9		31.0		14.8		1.9	
10/12/2022	8	16.7	16.7	7.6	7.6	2.4	2.4	25.1	24.8	17.9	17.2	4.4	4.4
		16.7		7.6		2.4		24.5		16.5		4.4	
13/12/2022	6	13.6	13.6	7.3	7.3	2.1	2.1	20.7	20.0	7.0	7.0	3.4	3.2
		13.6		7.3		2.0		19.3		7.0		3.0	
15/12/2022	7	16.4	16.4	8.2	8.2	2.4	2.3	23.7	23.5	14.5	14.3	7.9	7.6
		16.4		8.1		2.3		23.2		14.0		7.2	
17/12/2022	10	16.5	16.6	7.6	7.6	2.6	2.5	26.6	26.1	10.5	10.2	2.2	2.1
		16.6		7.6		2.5		25.5		9.9		1.9	
20/12/2022	11	16.4	16.4	7.6	7.6	2.7	2.7	27.6	27.6	4.3	4.2	1.7	1.8
		16.4		7.6		2.7		27.6		4.2		1.8	
22/12/2022	13	17.6	17.6	7.7	7.7	2.7	2.7	28.6	28.7	7.0	7.0	3.3	3.4
		17.6		7.7		2.7		28.7		7.0		3.5	
24/12/2022	8	16.4	16.4	7.3	7.3	2.2	2.2	22.4	22.4	4.4	4.4	4.8	4.6
		16.4		7.3		2.2		22.3		4.4		4.4	
26/12/2022	9	20.0	20.0	7.2	7.2	3.5	3.5	38.5	38.5	2.5	2.5	<1	1.0
		20.0		7.2		3.5		38.5		2.5		1.0	
28/12/2022	12	12.0	12.0	7.3	7.3	3.8	3.9	35.3	35.8	4.5	4.6	2.2	2.3
		12.0		7.3		3.9		36.3		4.7		2.4	
30/12/2022	15	16.7	16.7	7.0	7.0	4.3	4.3	43.9	43.9	16.1	15.9	11.0	11.5
		16.7		7.0		4.3		43.9		15.7		12.0	

Water Quality Monitoring Location : TKW

Date	Water depth (cm)	Temperature (°C)		pH		DO (mg/L)		DO (%)		Turbidity (NTU)		Suspended Solids (mg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6/12/2022	19	16.2	16.2	7.2	7.2	4.1	4.0	42.2	41.2	26.2	26.5	7.1	6.4
		16.2		7.2		3.9		40.2		26.8		5.7	
8/12/2022	18	18.8	18.8	7.5	7.5	2.5	2.5	27.1	27.1	14.6	14.8	2.6	2.6
		18.8		7.5		2.5		27.1		15.0		2.5	
10/12/2022	19	17.2	17.2	7.6	7.6	2.4	2.4	24.7	25.2	19.8	19.1	4.3	4.3
		17.2		7.6		2.5		25.6		18.3		4.2	
13/12/2022	19	13.4	13.4	7.1	7.2	2.2	2.2	21.2	21.1	6.2	6.3	3.9	3.6
		13.4		7.2		2.2		21.0		6.3		3.2	
15/12/2022	21	15.4	15.4	8.1	8.1	2.8	2.8	28.3	28.3	25.1	25.1	5.3	5.2
		15.4		8.1		2.8		28.3		25.0		5.1	
17/12/2022	20	17.5	17.5	7.6	7.6	2.3	2.3	23.7	23.7	7.4	7.5	4.1	4.1
		17.5		7.6		2.3		23.7		7.6		4.1	
20/12/2022	18	16.5	16.5	7.6	7.6	2.5	2.5	25.5	25.5	5.0	4.9	2.8	2.9
		16.5		7.6		2.5		25.5		4.7		2.9	
22/12/2022	19	17.9	17.8	7.6	7.6	2.4	2.4	25.5	25.5	6.6	6.7	2.9	3.0
		17.8		7.6		2.4		25.4		6.8		3.0	
24/12/2022	17	16.5	16.4	7.3	7.2	2.5	2.5	25.4	25.9	9.1	9.0	3.1	3.0
		16.4		7.2		2.6		26.4		8.9		2.8	
26/12/2022	18	19.9	19.9	7.3	7.3	3.8	3.9	42.1	42.7	3.3	3.3	1.9	2.0
		19.9		7.3		3.9		43.2		3.3		2.0	
28/12/2022	18	11.2	11.2	7.2	7.2	3.5	3.5	31.7	31.8	4.6	4.6	3.1	3.2
		11.2		7.2		3.5		31.9		4.6		3.3	
30/12/2022	18	16.8	16.8	7.2	7.2	4.2	4.2	43.7	43.7	15.7	15.9	7.1	7.4
		16.8		7.2		4.2		43.7		16.1		7.6	

Water Quality Monitoring Location : U1

Date	Water depth (cm)	Temperature (°C)		pH		DO (mg/L)		DO (%)		Turbidity (NTU)		Suspended Solids (mg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6/12/2022	3	15.9	15.9	7.9	7.9	7.2	7.2	72.9	73.3	17.0	17.5	1.2	1.5
		15.9		7.9		7.3		73.6		17.9		1.7	
8/12/2022	4	17.2	14.7	8.0	8.0	7.2	7.3	75.0	75.5	21.0	20.7	8.9	8.2
		12.2		8.0		7.3		75.9		20.4		7.4	
10/12/2022	3	13.1	13.1	7.5	7.5	7.6	7.5	71.9	71.7	14.5	14.9	3.4	3.8
		13.1		7.5		7.5		71.4		15.2		4.1	
13/12/2022	3	12.9	13.0	7.2	7.2	4.4	4.3	41.4	41.0	10.0	10.1	98.0	87.5
		13.0		7.2		4.3		40.5		10.2		77.0	
15/12/2022	3	14.7	14.7	8.0	8.0	4.4	4.6	43.3	45.1	9.0	8.9	7.1	7.1
		14.7		8.0		4.8		46.9		8.8		7.1	
17/12/2022	5	12.3	12.3	8.1	8.4	3.0	3.1	28.2	28.7	12.6	12.9	5.2	4.5
		12.3		8.7		3.1		29.2		13.1		3.7	
20/12/2022	3	15.9	15.9	7.3	7.3	7.2	7.1	72.2	71.9	7.9	7.8	4.8	4.8
		15.9		7.3		7.1		71.5		7.8		4.7	
22/12/2022	4	17.2	17.2	8.0	8.0	7.5	7.5	78.3	78.3	5.1	5.1	5.1	5.0
		17.2		8.0		7.5		78.3		5.1		4.9	
24/12/2022	4	16.8	16.8	7.7	7.6	6.7	6.8	69.4	70.0	4.4	4.4	4.7	5.0
		16.8		7.6		6.8		70.5		4.4		5.2	
26/12/2022	3	17.9	17.9	7.4	7.4	5.6	11.0	58.9	59.6	4.5	4.4	3.3	3.4
		18.0		7.4		5.7		60.3		4.4		3.4	
28/12/2022	3	12.7	12.7	6.8	6.8	3.5	3.4	32.8	32.5	5.0	5.0	3.4	3.6
		12.7		6.8		3.4		32.1		5.0		3.7	
30/12/2022	3	16.3	16.3	7.8	7.8	5.2	5.2	53.4	52.8	16.1	10.1	2.2	2.3
		16.3		7.8		5.1		52.2		4.2		2.3	

Water Quality Monitoring Location : SW

Date	Water depth (cm)	Temperature (°C)		pH		DO (mg/L)		DO (%)		Turbidity (NTU)		Suspended Solids (mg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6/12/2022	8	16.5	9.9	7.2	7.2	3.7	3.7	37.6	37.6	13.9	13.1	16.0	13.5
		3.2		7.3		3.7		37.5		12.3		11.0	
8/12/2022	10	18.8	18.8	7.5	7.5	4.3	4.3	46.4	46.6	22.1	22.3	8.2	7.4
		18.8		7.5		4.3		46.7		22.4		6.5	
10/12/2022	9	17.2	17.2	7.8	7.8	2.2	2.3	23.3	23.9	20.5	20.9	4.0	4.4
		17.2		7.8		2.4		24.4		21.3		4.7	
13/12/2022	9	13.3	13.3	7.2	7.2	2.0	2.0	19.2	18.9	7.5	7.5	3.6	3.8
		13.3		7.2		1.9		18.6		7.5		3.9	
15/12/2022	12	15.8	15.8	8.2	8.2	3.6	3.6	36.4	36.4	15.6	15.8	8.6	8.7
		15.8		8.2		3.6		36.4		15.9		8.8	
17/12/2022	15	15.1	15.1	7.8	7.8	3.6	3.6	35.8	35.8	20.8	20.8	1.4	1.4
		15.1		7.8		3.6		35.8		20.8		1.3	
20/12/2022	10	16.2	16.2	7.6	7.6	3.2	3.3	32.7	33.4	2.8	2.9	2.9	2.7
		16.2		7.6		3.4		34.1		3.0		2.5	
22/12/2022	9	17.3	17.3	7.6	7.6	3.6	3.6	37.9	37.9	4.0	4.1	2.8	2.8
		17.3		7.6		3.6		37.9		4.1		2.7	
24/12/2022	9	16.7	16.7	7.2	7.2	3.6	3.6	37.0	37.1	4.3	4.3	3.0	2.9
		16.7		7.2		3.6		37.1		4.2		2.8	
26/12/2022	10	20.1	20.0	7.1	7.1	4.3	4.4	47.8	48.3	3.0	3.0	5.3	5.1
		20.0		7.1		4.4		48.8		3.0		4.9	
28/12/2022	11	9.5	9.5	7.4	7.3	4.9	4.9	43.1	42.7	5.8	5.9	5.9	5.9
		9.4		7.3		4.8		42.2		6.0		5.8	
30/12/2022	9	16.6	16.6	7.1	7.1	4.3	4.3	44.5	44.5	4.3	4.3	<1	1.0
		16.6		7.1		4.3		44.5		4.3		<1	

Water Quality Monitoring Location : U2

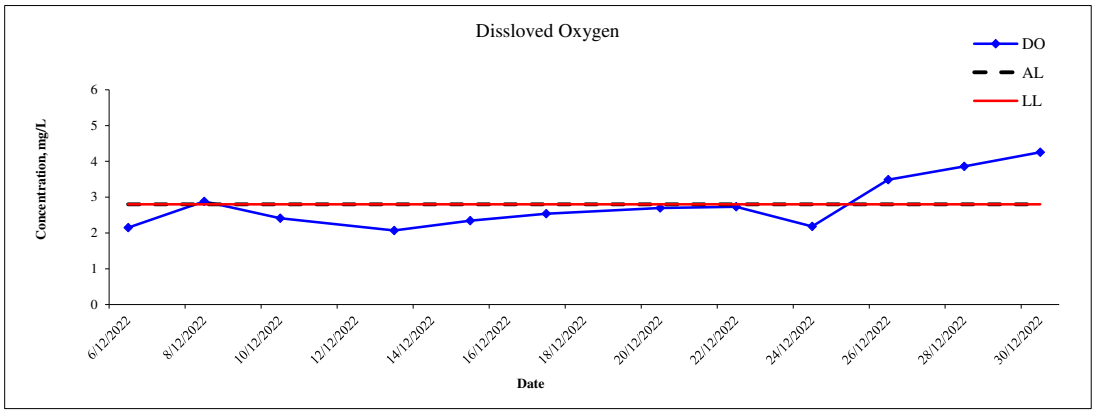
Date	Water depth (cm)	Temperature (°C)		pH		DO (mg/L)		DO (%)		Turbidity (NTU)		Suspended Solids (mg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6/12/2022	28	15.6	15.6	7.2	7.3	7.7	7.8	77.7	78.1	13.8	13.8	1.5	1.5
		15.5		7.3		7.8		78.4		13.7		1.4	
8/12/2022	33	16.8	16.8	7.6	7.5	5.8	5.8	59.8	59.5	18.7	18.4	3.2	3.0
		16.8		7.5		5.8		59.2		18.0		2.8	
10/12/2022	26	14.7	14.7	7.7	7.7	7.6	7.6	75.0	75.2	14.0	13.6	1.3	2.1
		14.7		7.7		7.7		75.4		13.1		2.9	
13/12/2022	28	13.6	13.5	6.9	6.9	2.5	2.5	24.3	23.9	5.7	5.7	3.4	3.5
		13.4		7.0		2.4		23.5		5.7		3.6	
15/12/2022	23	14.8	14.8	7.7	7.7	8.1	8.1	80.1	80.1	4.8	4.7	1.0	1.3
		14.8		7.7		8.1		80.1		4.6		1.6	
17/12/2022	32	14.3	14.3	7.5	7.5	5.7	5.7	55.9	56.1	3.9	3.9	1.0	1.1
		14.3		7.5		5.8		56.2		3.9		1.2	
20/12/2022	29	16.0	16.0	7.3	7.3	7.2	7.2	73.2	73.2	4.7	4.6	1.7	1.9
		16.0		7.3		7.2		73.1		4.6		2.0	
22/12/2022	30	16.3	16.3	7.3	7.3	7.3	7.3	74.6	74.6	3.8	3.8	1.9	1.9
		16.3		7.3		7.3		74.6		3.7		1.9	
24/12/2022	32	16.5	16.7	7.3	7.3	7.1	7.0	72.8	71.9	4.9	5.0	2.1	2.1
		16.9		7.3		7.0		71.0		5.1		2.0	
26/12/2022	30	17.8	17.8	6.9	6.9	6.1	6.1	64.6	64.6	6.8	6.7	4.2	4.2
		17.9		6.9		6.1		64.6		6.7		4.2	
28/12/2022	31	11.5	11.5	7.0	7.0	6.7	6.8	61.7	62.1	4.8	4.8	1.6	1.7
		11.5		7.0		6.8		62.5		4.7		1.7	
30/12/2022	28	16.5	16.5	7.2	7.2	6.7	6.7	68.2	68.7	4.0	3.9	1.9	1.8
		16.5		7.2		6.8		69.2		3.8		1.7	

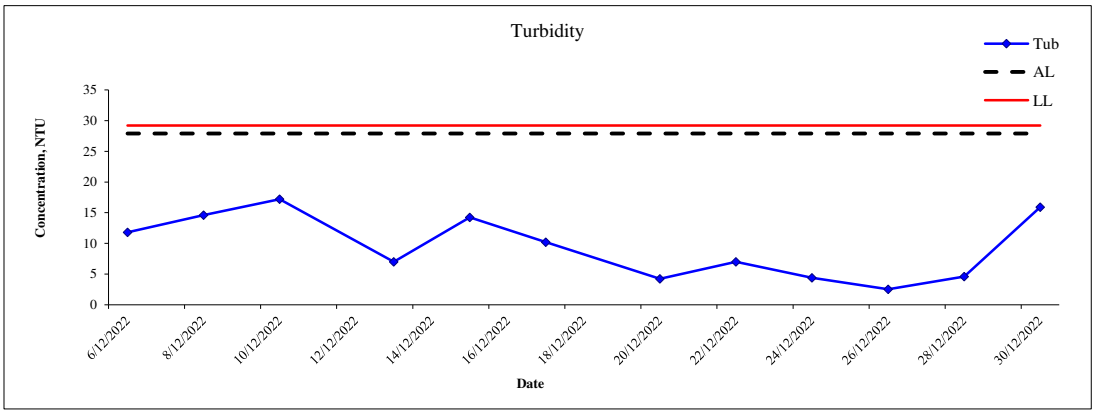
Water Quality Monitoring Location : HT

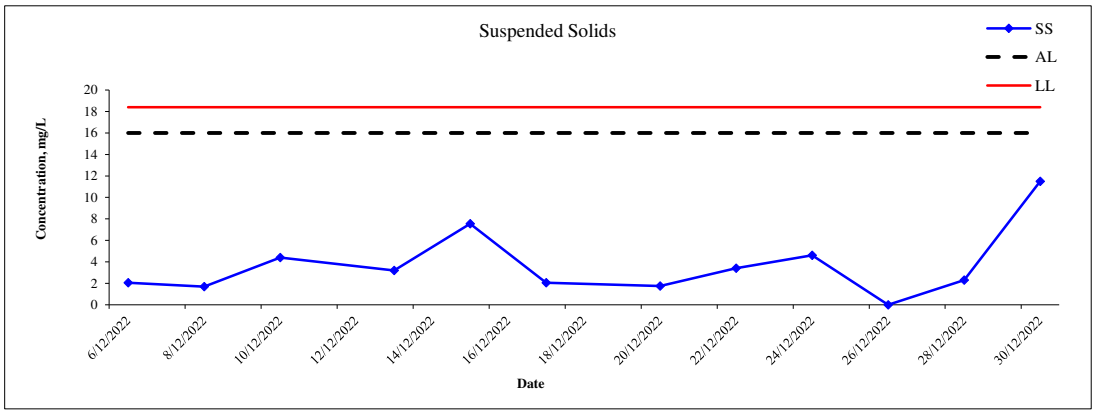
Date	Water depth (cm)	Temperature (°C)		pH		DO (mg/L)		DO (%)		Turbidity (NTU)		Suspended Solids (mg/L)	
		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
6/12/2022	5	16.4	16.4	7.3	7.3	2.2	2.2	22.1	22.8	13.0	12.5	3.5	3.4
		16.4		7.3		2.3		23.5		12.0		3.3	
8/12/2022	8	17.9	17.8	7.6	7.6	2.5	2.5	26.7	26.1	11.0	11.2	1.6	1.6
		17.8		7.6		2.4		25.5		11.4		1.6	
10/12/2022	6	17.2	17.2	7.8	7.8	2.2	2.3	23.3	23.8	20.5	19.5	1.5	1.3
		17.2		7.7		2.3		24.3		18.5		1.0	
13/12/2022	9	13.1	13.1	7.4	7.4	2.2	2.1	20.7	20.3	7.3	7.3	8.3	7.8
		13.1		7.4		2.1		19.9		7.4		7.3	
15/12/2022	8	16.0	16.0	8.0	8.0	2.4	2.4	23.9	23.9	31.6	31.4	8.3	8.0
		16.0		8.0		2.4		23.9		31.2		7.6	
17/12/2022	5	14.8	14.8	7.7	7.7	2.3	2.3	22.6	22.7	7.9	7.8	3.4	3.4
		14.8		7.7		2.3		22.7		7.7		3.3	
20/12/2022	4	16.4	16.4	7.7	7.7	2.3	2.3	23.7	23.7	2.5	2.5	2.1	2.3
		16.4		7.6		2.3		23.6		2.5		2.5	
22/12/2022	6	17.5	17.4	7.6	7.6	2.4	2.4	24.9	24.9	3.1	3.0	2.2	2.3
		17.4		7.6		2.4		24.9		3.0		2.3	
24/12/2022	6	17.0	17.0	7.5	7.5	2.4	2.4	24.4	24.5	10.1	10.2	2.2	2.5
		17.1		7.5		2.4		24.5		10.2		2.8	
26/12/2022	7	18.8	18.8	7.4	7.4	5.8	5.8	61.7	61.8	1.2	1.3	1.7	1.8
		18.8		7.4		5.8		61.9		1.3		1.9	
28/12/2022	5	11.9	11.9	7.2	7.2	3.9	3.9	35.9	35.9	4.3	4.3	4.1	4.0
		11.8		7.2		3.9		35.8		4.3		3.9	
30/12/2022	5	16.9	16.9	7.2	7.2	3.2	3.2	33.2	33.2	5.0	5.0	4.8	4.9
		16.9		7.2		3.2		33.2		5.1		5.0	

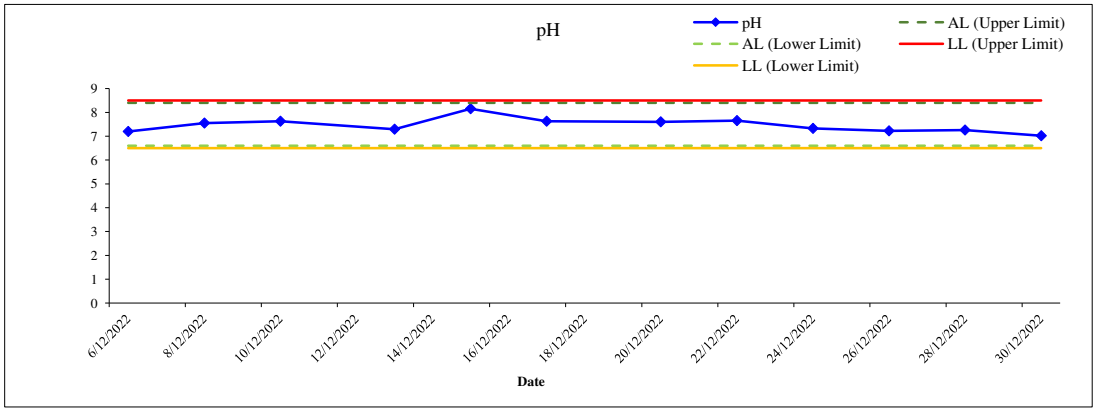
Service Contract No. WD/02/2021
Environmental Team for Hung Shui Kui/ Ha Tsuen
New Development Are Stage 1 Works - Site Formation and Engineering Infrastructure
Water Quality Monitoring Result

Monitoring Location: TKW1

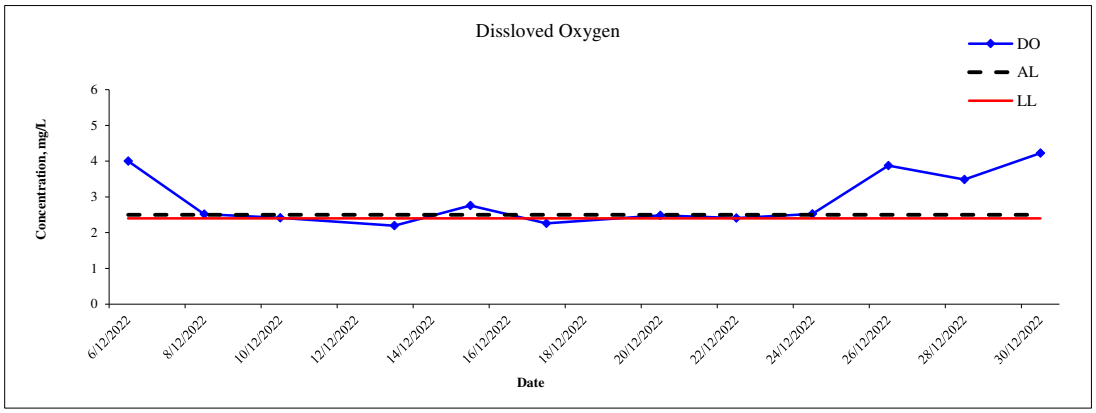


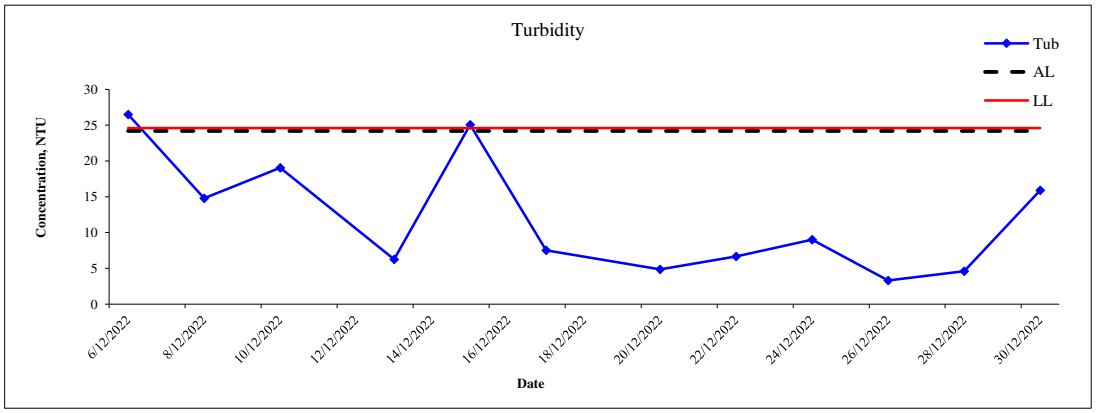


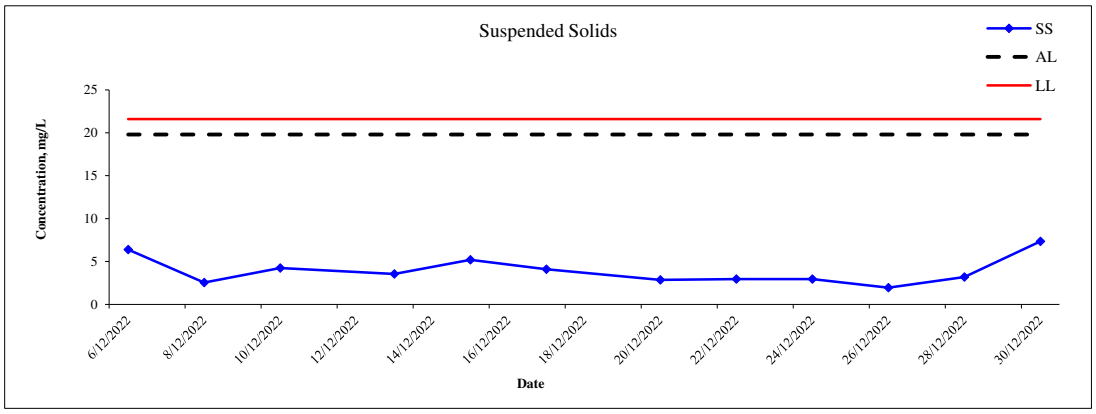


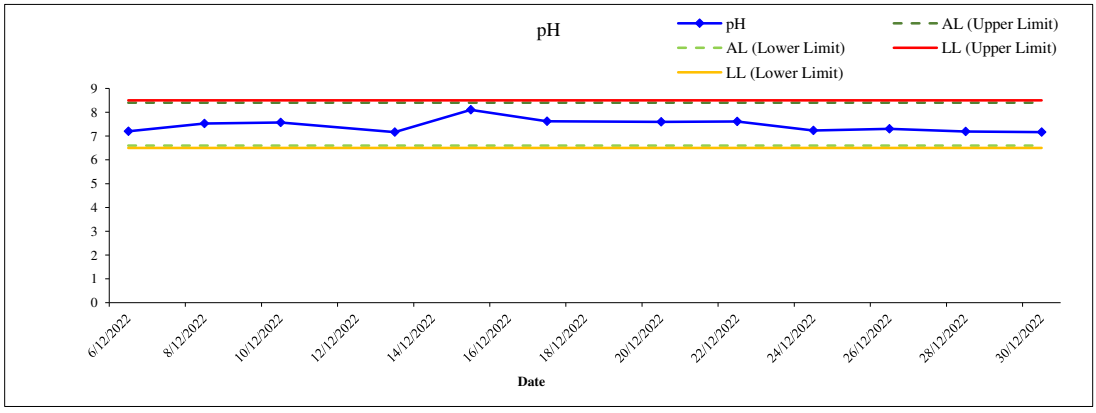


Monitoring Location: TKW

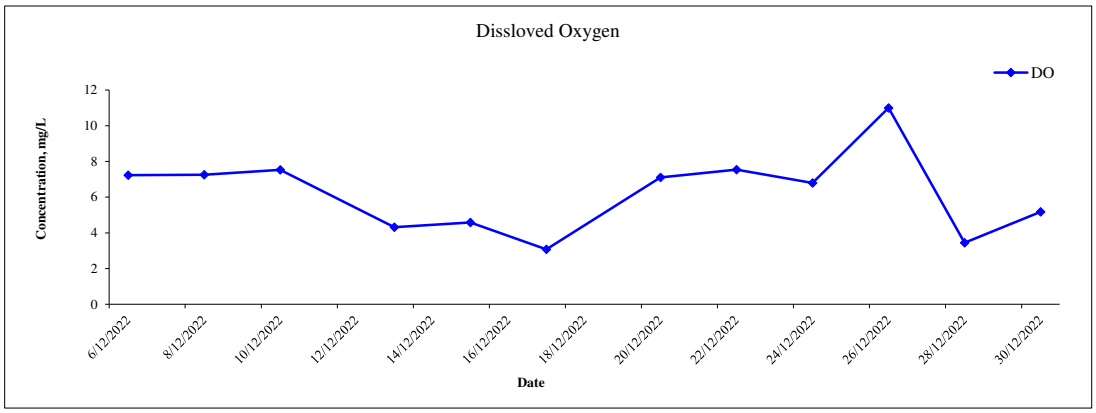


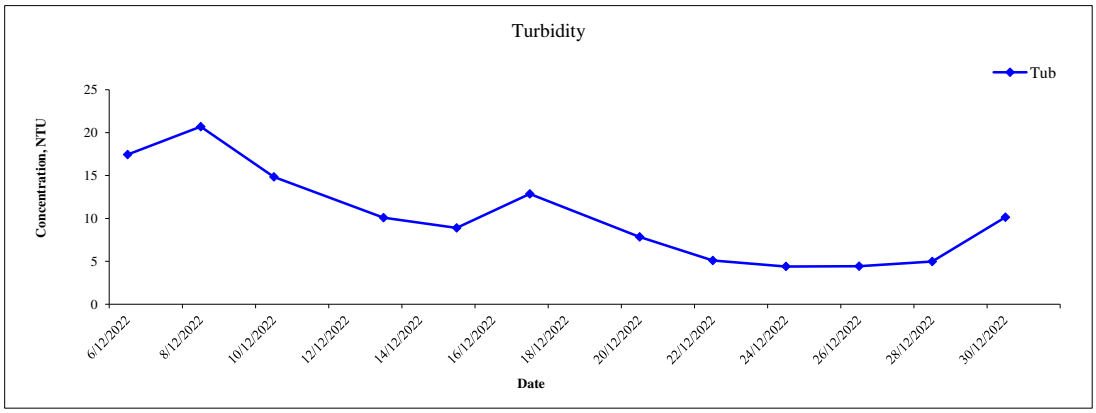


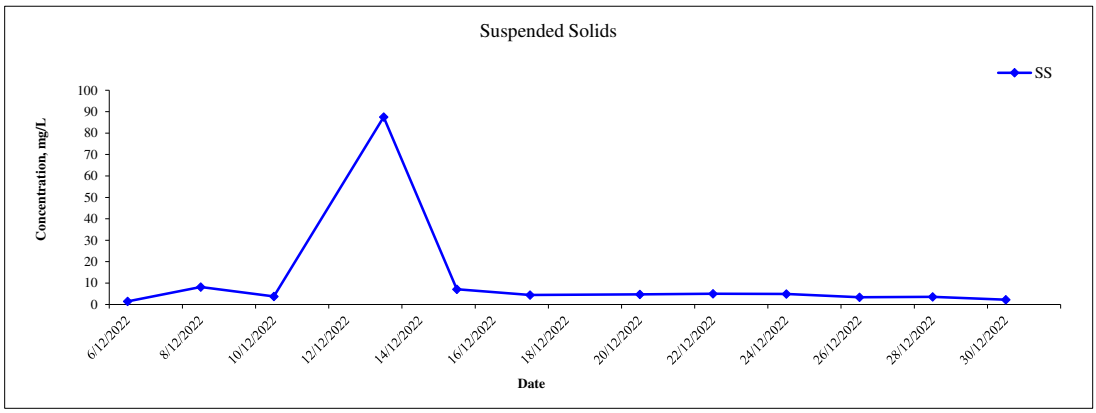


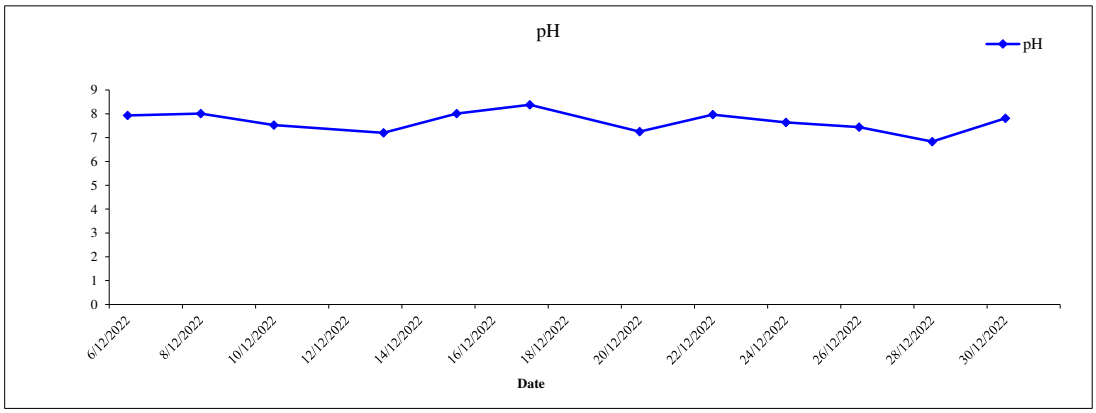


Monitoring Location: U1

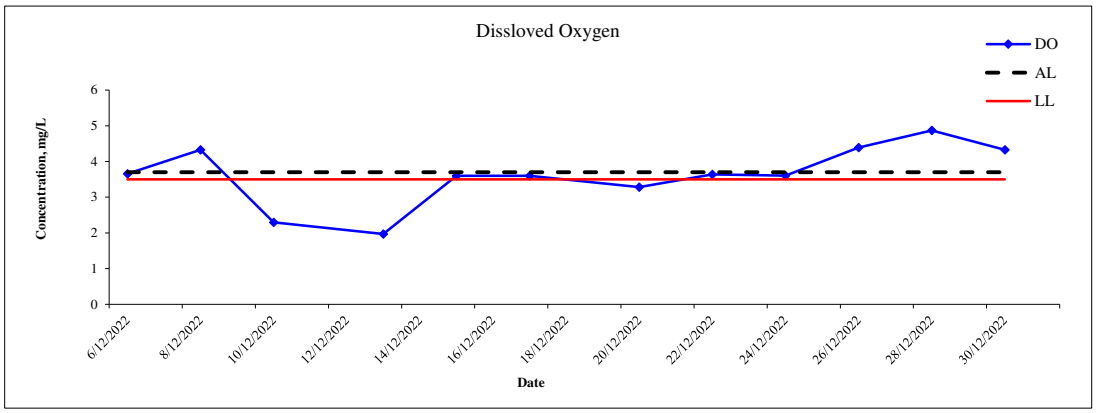


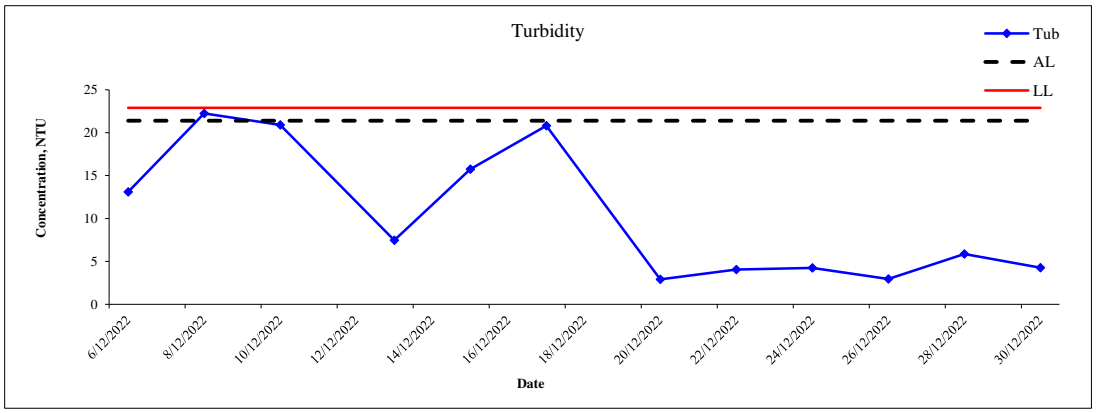


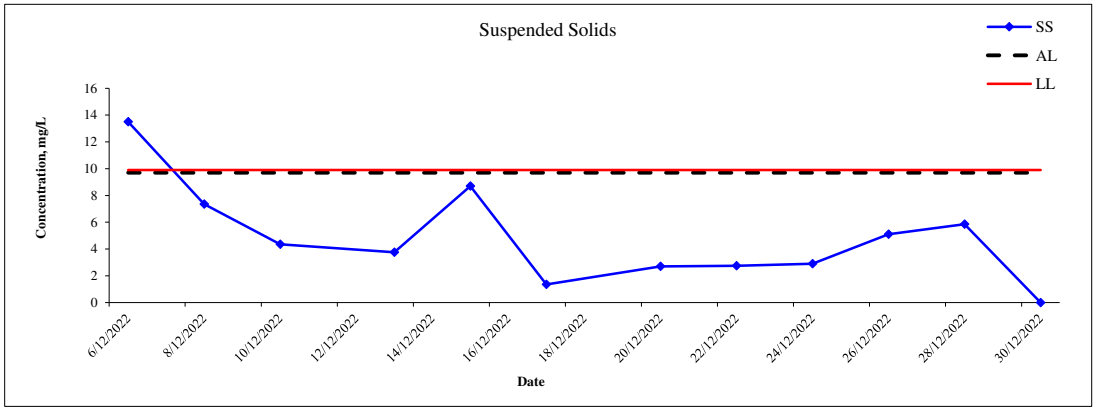


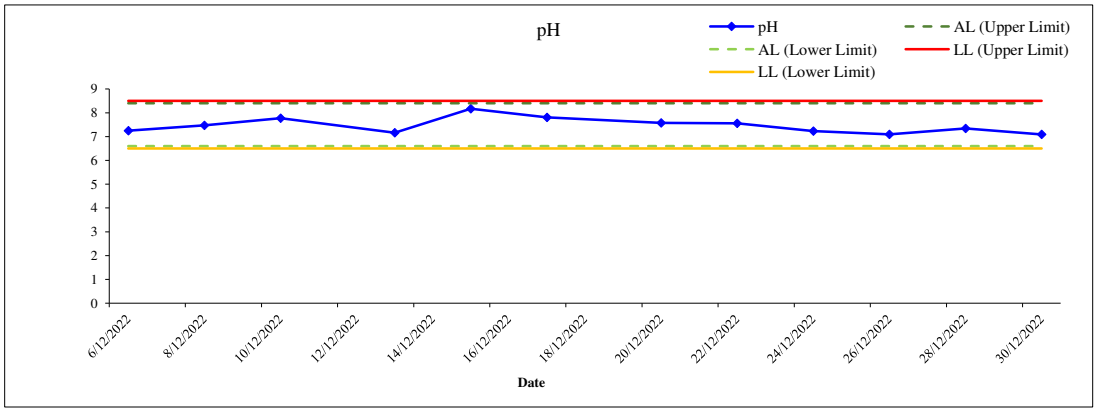


Monitoring Location: SW

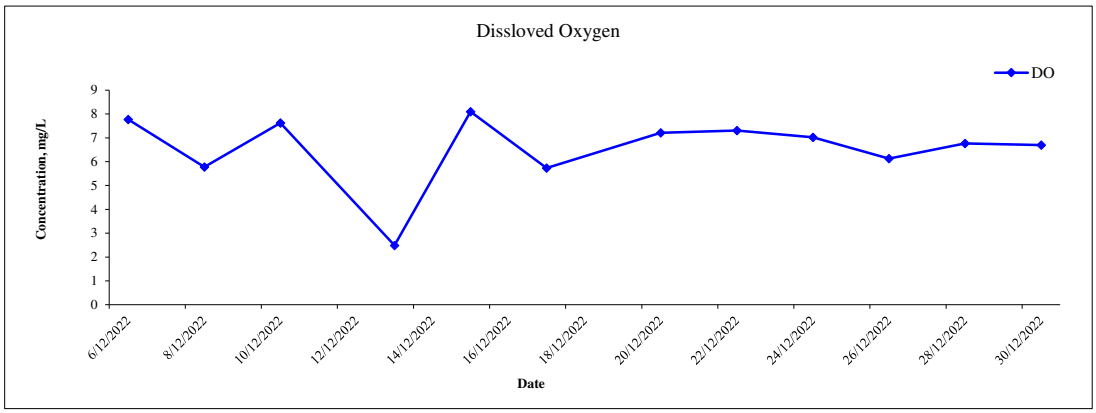


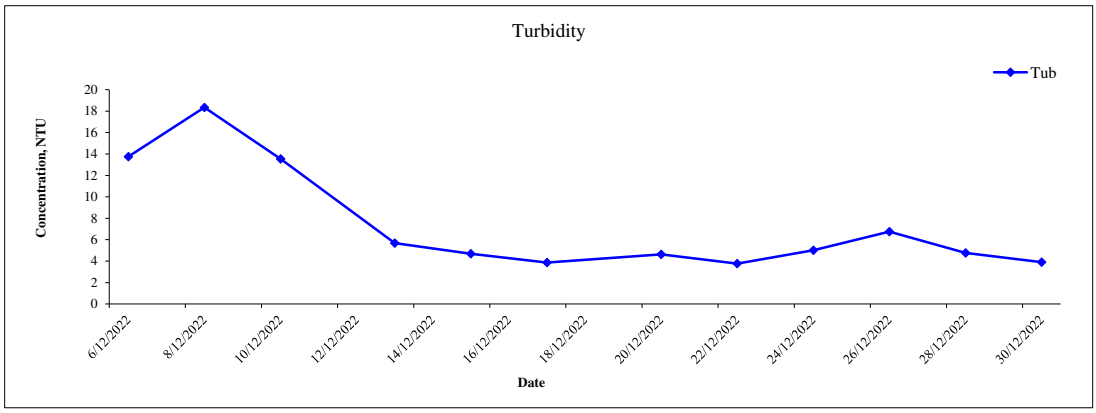


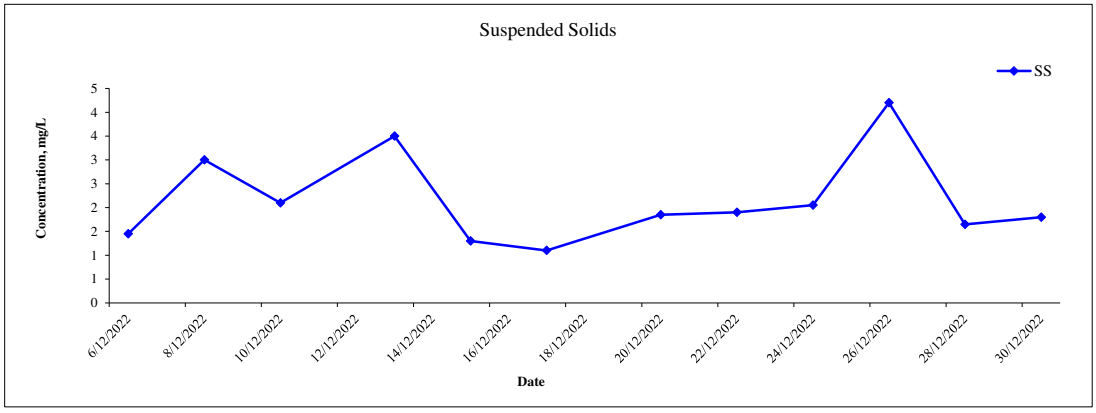


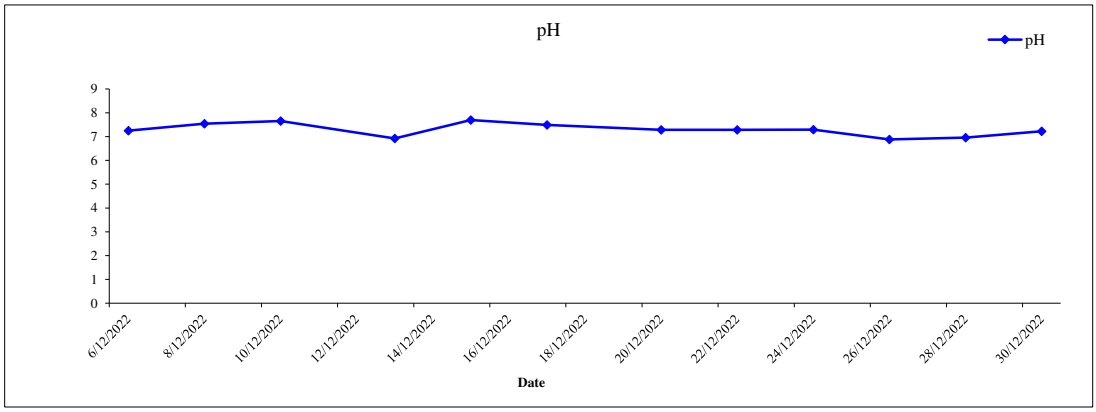


Monitoring Location: U2



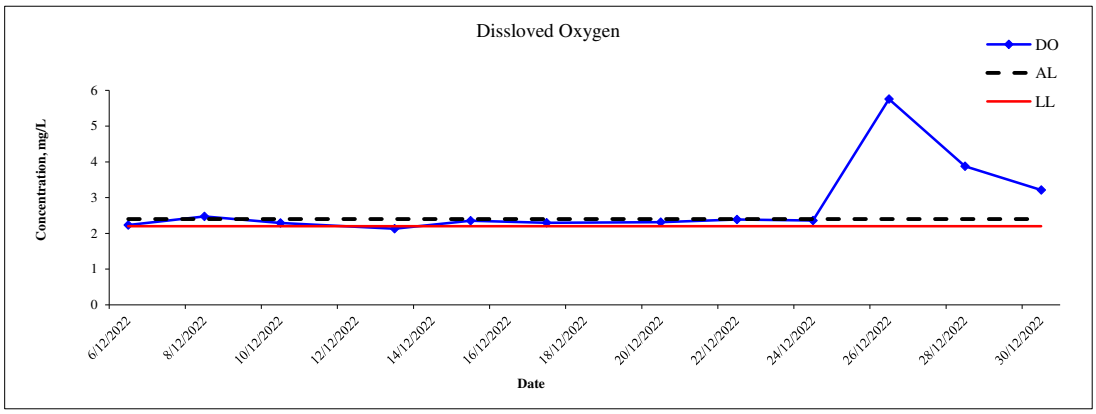


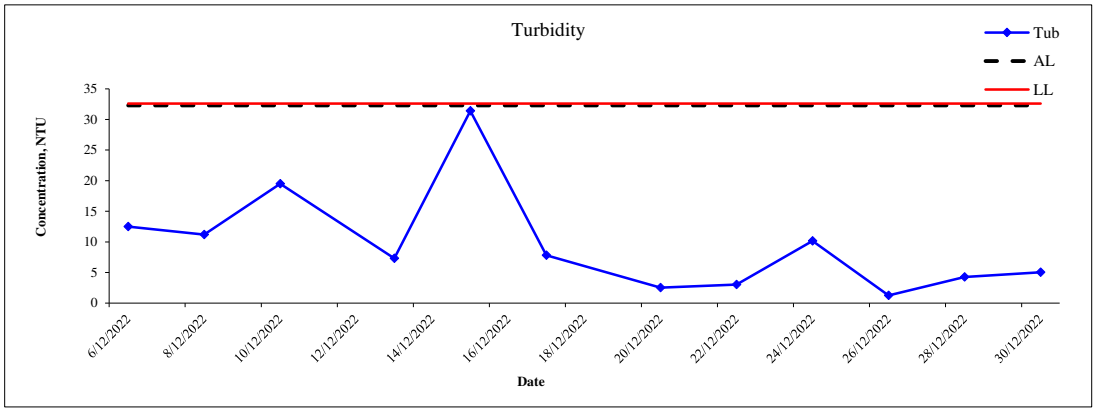


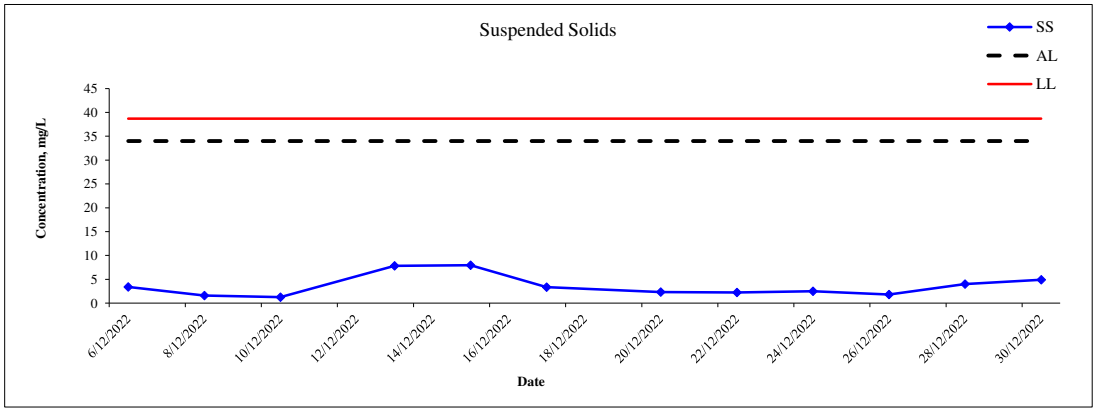


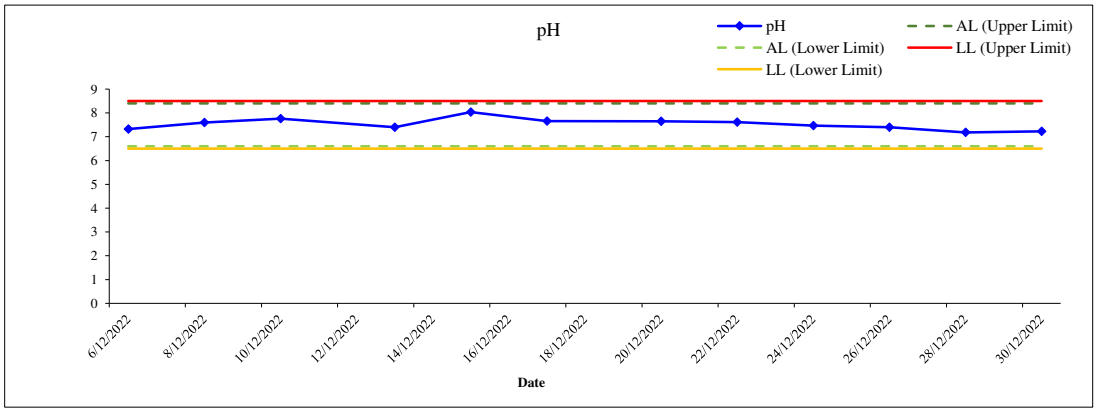
Service Contract No. WD/02/2021
Environmental Team for Hung Shui Kui/ Ha Tsuen
New Development Are Stage 1 Works - Site Formation and Engineering Infrastructure
Water Quality Monitoring Result

Monitoring Location: HT









Appendix G

Quality Control Report for Suspended Solids

Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

Appendix - Quality Control Summary Table

Project Name: Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works

		Method Blank Report		Duplicate Report			Sample Spike Report		Pass / Fail
		MDL	Result	Original Result	Duplicate Result	RPD	Spike concentration	Spike Recovery	
Sampling Date	Job No. / Unit	mg/L	mg/L	mg/L	mg/L	%	mg/L	%	/
06/12/2022	R221930	0.22	0.15	4.64	4.83	-4.0	10	94.2	Pass
08/12/2022	R221940	0.22	0.07	5.13	5.41	-5.3	10	94.9	Pass
10/12/2022	R221946	0.22	0.08	4.94	5.20	-5.1	10	94.9	Pass
13/12/2022	R221970	0.22	0.11	5.38	5.58	-3.6	10	96.6	Pass
15/12/2022	R221980	0.22	0.05	4.47	4.32	3.4	10	97.6	Pass
17/12/2022	R221981	0.22	0.09	5.34	5.69	-6.4	10	94.7	Pass
20/12/2022	R221999	0.22	0.10	4.98	4.72	5.4	10	94.6	Pass
22/12/2022	R222000	0.22	0.08	4.38	4.55	-3.8	10	95.8	Pass
24/12/2022	R222025	0.22	0.07	4.90	4.81	1.8	10	92.1	Pass
26/12/2022	R222076	0.22	0.05	4.67	4.53	3.0	10	97.0	Pass
28/12/2022	R222077	0.22	0.09	4.76	4.94	-3.7	10	96.0	Pass
30/12/2022	R222089	0.22	0.08	4.90	4.83	1.4	10	98.9	Pass

Appendix H

Event and Action Plan

Table H1 Event and Action Plan for Water Quality

Event	Action			
	ET Leader	IEC	ER	Contractor
Action Level				
Action level being exceeded by one sampling day	• Repeat in-situ measurement to confirm findings; • Identify source(s) of impact; • Inform IEC and Contractor; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC and Contractor; • Repeat measurement on next day of exceedance.	• Discuss with ET and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; • Assess the effectiveness of the implemented mitigation measures.	• Discuss with IEC on the proposed mitigation measures; • Make agreement on the mitigation measures to be implemented.	• Inform the ER and confirm notification of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET and IEC and propose mitigation measures to IEC and ER; • Implement the agreed mitigation measures.
Action Level being exceeded by more than one consecutive sampling days	• Repeat in-situ measurement to confirm findings; • Identify source(s) of impact; • Inform IEC and Contractor; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC and Contractor; • Ensure mitigation measures are implemented; • Prepare to increase the monitoring frequency to daily; • Repeat measurement on next day of exceedance.	• Discuss with ET and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; • Assess the effectiveness of the implemented mitigation measures.	• Discuss with IEC on the proposed mitigation measures; • Make agreement on the mitigation measures to be implemented; • Assess the effectiveness of the implemented mitigation measures	• Inform the Engineer and confirm notification of the noncompliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; • Implement the agreed mitigation measures.

Event	Action			
	ET Leader	IEC	ER	Contractor
Limit Level				
Limit level being exceeded by one sampling day	• Repeat in-situ measurement to confirm findings; • Identify source(s) of impact; • Inform IEC and Contractor; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC and Contractor; • Ensure mitigation measures are implemented; • Increase the monitoring frequency to daily until no exceedance of Limit Level.	• Discuss with ET and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; • Assess the effectiveness of the implemented mitigation measures.	• Discuss with IEC, ET and Contractor on the proposed mitigation measures; • Request Contractor to critically review the working methods; • Make agreement on the mitigation measures to be implemented; • Assess the effectiveness of the implemented mitigation measures.	• Inform the ER and confirm notification of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 3 working days; • Implement the agreed mitigation measures.
Limit level being exceeded by more than one consecutive sampling days	• Repeat in-situ measurement to confirm findings; • Identify source(s) of impact; • Inform IEC, Contractor and EPD; • Check monitoring data, all plant, equipment and Contractor's working methods; • Discuss mitigation measures with IEC, ER and Contractor; • Ensure mitigation measures are implemented; • Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days.	• Discuss with ET and Contractor on the mitigation measures; • Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; • Assess the effectiveness of the implemented mitigation measures.	• Discuss with IEC, ET and Contractor on the proposed mitigation measures; • Request Contractor to critically review the working methods; • Make agreement on the mitigation measures to be implemented; • Assess the effectiveness of the implemented mitigation measures. • Consider and instruct, if necessary the Contractor to slow down or to stop all or part of the marine work	• Inform the ER and confirm notification of the non-compliance in writing; • Rectify unacceptable practice; • Check all plant and equipment; • Consider changes of working methods; • Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 3 working days; • Implement the agreed mitigation measures.

Event	Action			
	ET Leader	IEC	ER	Contractor
			until no exceedance if Limit Level.	• As directed by the ER, to slow down or to stop all or part of the marine work or construction activities.

Table H2 Event/Action Plan for Landscape and Visual

Event	Action			
	ET	IEC	ER	Contractor
Design Check	1. Check final design conforms to the requirements of EP and prepare report.	1. Check report. 2. Recommend remedial design if necessary.	1. Undertake remedial design if necessary.	-
Nonconformity on one occasion	1. Inform the IEC, ER and the Contractor 2. Discuss remedial actions with IEC, ER and Contractor 3. Monitor remedial actions until rectification has been completed	1. Check inspection report. 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measures. 4. Advise ER on effective of proposed remedial measures. 5. Check implementation of remedial measures	1. Confirm receipt of notification of nonconformity in writing 2. Review and agree on the remedial measures proposed by the Contractor 3. Ensure remedial measures are properly implemented	1. Identify source and investigate the nonconformity 2. Amend working methods agreed with ER as appropriate 3. Rectify damage and undertake any necessary replacement
Repeated nonconformity	1. Identify sources 2. Inform the Contractor, IEC and ER 3. Discuss inspection frequency 4. Discuss remedial actions with IEC, ER and Contractor 5. Monitor remedial actions until rectification has been completed 6. If nonconformity stops, cease additional monitoring	1. Check inspection report 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measures 4. Advise ER on effectiveness of proposed remedial measures	1. Notify the Contractor 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented 3. Supervise implementation of remedial measures	1. Identify source and investigate the nonconformity 2. Amend working methods agreed with ER as appropriate 3. Rectify damage and undertake any necessary replacement. 4. Stop relevant portion of works as determined by ER until the nonconformity is abated.

Appendix I

Waste Generation in the Reporting Month

Monthly Summary Waste Flow Table for 2022 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete ^1	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics (see Note 3)	Chemical Waste	Others 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	0.000	0.000	0.000	0.000	0.000	0.000	9.400	0.000	0.000	0.000	0.047
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.026
Mar	0.076	0.000	0.000	0.000	0.076	0.000	0.000	0.000	0.000	0.000	0.002
Apr	0.081	0.000	0.000	0.000	0.081	0.000	0.000	0.000	0.000	0.000	0.012
May	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.028
Jun	0.000	0.000	0.000	0.000	0.000	0.277	1.240	0.000	0.000	0.000	0.015
SUB-TOTAL	0.185	0.000	0.000	0.000	0.157	0.277	10.640	0.000	0.000	0.000	0.130
Jul	0.000	0.000	0.000	0.000	0.000	0.448	0.000	0.000	0.000	0.000	0.006
Aug	0.000	0.000	0.000	0.000	0.000	0.246	0.000	0.000	0.000	0.000	0.006
Sep	0.027	0.000	0.000	0.000	0.027	2.328	0.000	0.000	0.000	0.000	0.010
Oct	0.000	0.000	0.000	0.000	0.000	11.630	0.000	0.000	0.000	0.000	0.013
Nov	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.045
Dec	0.000	0.000	0.000	0.000	0.000	0.070	0.000	0.080	0.000	0.000	0.027
TOTAL	0.212	0.000	0.000	0.000	0.184	15.010	10.640	0.080	0.000	0.000	0.237

Appendix J

Summary of Complaint, Notification of summons and Prosecution

Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
6 – 31 December 2022	0	0	N/A

Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Details
6 – 31 December 2022	0	0	N/A

Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Details
6 – 31 December 2022	0	0	N/A

Appendix K

Summary of Submission Status under Environmental Permit

Submission Status Under Environmental Permit EP-528/2017

EP Condition	Title of Submission	Submission Status
2.3	Management Organization of Main Construction Companies	Informed the Direct of EPD on 17 October 2022
2.4	Updated Environmental Monitoring and Audit Manual	23 April 2022 (1st Submission)
2.5	Location Plans	Submitted to the Supervisor for review.
2.6	Supplementary Contamination Assessment Plan (CAP)	25 Feb 2022 (1st Submission)
2.7	Landscape and Visual Mitigation Plan	To be submitted one month before the commencement of the corresponding parts of landscape and visual mitigation measures.

Appendix L

Laboratory Report for Suspended Solids

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Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221930
Job Number	:	R221930
Issue Date	:	08/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	06/12/2022
Date Samples Received	:	06/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221930/1 – 12
Test Period	:	06/12/2022 – 07/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of

Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

acumen

Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221930

Job Number : R221930

Issue Date : 08/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221930/1	06/12/2022	U2	1.5
R221930/2	06/12/2022	U2#	1.4
R221930/3	06/12/2022	U1	1.2
R221930/4	06/12/2022	U1#	1.7
R221930/5	06/12/2022	SW	16
R221930/6	06/12/2022	SW#	11
R221930/7	06/12/2022	HT	3.5
R221930/8	06/12/2022	HT#	3.3
R221930/9	06/12/2022	TKW1	<1
R221930/10	06/12/2022	TKW1#	3.1
R221930/11	06/12/2022	TKW	7.1
R221930/12	06/12/2022	TKW#	5.7

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Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221930
Job Number	:	R221930
Issue Date	:	08/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221940
Job Number	:	R221940
Issue Date	:	13/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	08/12/2022
Date Samples Received	:	08/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221940/1 – 12
Test Period	:	08/12/2022 – 09/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of

Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

acumen

Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221940

Job Number : R221940

Issue Date : 13/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221940/1	08/12/2022	U2	3.2
R221940/2	08/12/2022	U2#	2.8
R221940/3	08/12/2022	U1	8.9
R221940/4	08/12/2022	U1#	7.4
R221940/5	08/12/2022	SW	8.2
R221940/6	08/12/2022	SW#	6.5
R221940/7	08/12/2022	HT	1.6
R221940/8	08/12/2022	HT#	1.6
R221940/9	08/12/2022	TKW1	1.5
R221940/10	08/12/2022	TKW1#	1.9
R221940/11	08/12/2022	TKW	2.6
R221940/12	08/12/2022	TKW#	2.5

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221940
Job Number	:	R221940
Issue Date	:	13/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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Acumen Laboratory and Testing Limited

Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221946
Job Number	:	R221946
Issue Date	:	16/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	10/12/2022
Date Samples Received	:	10/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221946/1 – 12
Test Period	:	10/12/2022 – 11/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

acumen

Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221946

Job Number : R221946

Issue Date : 16/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221946/1	10/12/2022	U2	1.3
R221946/2	10/12/2022	U2#	2.9
R221946/3	10/12/2022	U1	3.4
R221946/4	10/12/2022	U1#	4.1
R221946/5	10/12/2022	SW	4.0
R221946/6	10/12/2022	SW#	4.7
R221946/7	10/12/2022	HT	1.5
R221946/8	10/12/2022	HT#	1.0
R221946/9	10/12/2022	TKW1	4.4
R221946/10	10/12/2022	TKW1#	4.4
R221946/11	10/12/2022	TKW	4.3
R221946/12	10/12/2022	TKW#	4.2

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Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221946
Job Number	:	R221946
Issue Date	:	16/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221970
Job Number	:	R221970
Issue Date	:	16/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	13/12/2022
Date Samples Received	:	13/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221970/1 – 12
Test Period	:	13/12/2022 – 14/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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Acumen Laboratory and Testing Limited

Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221970

Job Number : R221970

Issue Date : 16/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221970/1	13/12/2022	U2	3.4
R221970/2	13/12/2022	U2#	3.6
R221970/3	13/12/2022	U1	98
R221970/4	13/12/2022	U1#	77
R221970/5	13/12/2022	SW	3.6
R221970/6	13/12/2022	SW#	3.9
R221970/7	13/12/2022	HT	8.3
R221970/8	13/12/2022	HT#	7.3
R221970/9	13/12/2022	TKW1	3.4
R221970/10	13/12/2022	TKW1#	3.0
R221970/11	13/12/2022	TKW	3.9
R221970/12	13/12/2022	TKW#	3.2

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221970
Job Number	:	R221970
Issue Date	:	16/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221980
Job Number	:	R221980
Issue Date	:	20/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	15/12/2022
Date Samples Received	:	15/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221980/1 – 12
Test Period	:	15/12/2022 – 16/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221980

Job Number : R221980

Issue Date : 20/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221980/1	15/12/2022	U2	<1
R221980/2	15/12/2022	U2#	1.6
R221980/3	15/12/2022	U1	7.1
R221980/4	15/12/2022	U1#	7.1
R221980/5	15/12/2022	SW	8.6
R221980/6	15/12/2022	SW#	8.8
R221980/7	15/12/2022	HT	8.3
R221980/8	15/12/2022	HT#	7.6
R221980/9	15/12/2022	TKW1	7.9
R221980/10	15/12/2022	TKW1#	7.2
R221980/11	15/12/2022	TKW	5.3
R221980/12	15/12/2022	TKW#	5.1

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221980
Job Number	:	R221980
Issue Date	:	20/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221981
Job Number	:	R221981
Issue Date	:	20/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	17/12/2022
Date Samples Received	:	17/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221981/1 – 12
Test Period	:	17/12/2022 – 18/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221981

Job Number : R221981

Issue Date : 20/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221981/1	17/12/2022	U2	1.0
R221981/2	17/12/2022	U2#	1.2
R221981/3	17/12/2022	U1	5.2
R221981/4	17/12/2022	U1#	3.7
R221981/5	17/12/2022	SW	1.4
R221981/6	17/12/2022	SW#	1.3
R221981/7	17/12/2022	HT	3.4
R221981/8	17/12/2022	HT#	3.3
R221981/9	17/12/2022	TKW1	2.2
R221981/10	17/12/2022	TKW1#	1.9
R221981/11	17/12/2022	TKW	4.1
R221981/12	17/12/2022	TKW#	4.1

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221981
Job Number	:	R221981
Issue Date	:	20/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221999
Job Number	:	R221999
Issue Date	:	28/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	20/12/2022
Date Samples Received	:	20/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R221999/1 – 12
Test Period	:	20/12/2022 – 21/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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HOKLAS 241
TEST

Test Report

Report Number : Q220003aR221999

Job Number : R221999

Issue Date : 28/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R221999/1	20/12/2022	U2	1.7
R221999/2	20/12/2022	U2#	2.0
R221999/3	20/12/2022	U1	4.8
R221999/4	20/12/2022	U1#	4.7
R221999/5	20/12/2022	SW	2.9
R221999/6	20/12/2022	SW#	2.5
R221999/7	20/12/2022	HT	2.1
R221999/8	20/12/2022	HT#	2.5
R221999/9	20/12/2022	TKW1	1.7
R221999/10	20/12/2022	TKW1#	1.8
R221999/11	20/12/2022	TKW	2.8
R221999/12	20/12/2022	TKW#	2.9

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR221999
Job Number	:	R221999
Issue Date	:	28/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222000
Job Number	:	R222000
Issue Date	:	28/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	22/12/2022
Date Samples Received	:	22/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R222000/1 – 12
Test Period	:	22/12/2022 – 23/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of

Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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Acumen Laboratory and Testing Limited
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HOKLAS 241
TEST

Test Report

Report Number : Q220003aR222000

Job Number : R222000

Issue Date : 28/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R222000/1	22/12/2022	U2	1.9
R222000/2	22/12/2022	U2#	1.9
R222000/3	22/12/2022	U1	5.1
R222000/4	22/12/2022	U1#	4.9
R222000/5	22/12/2022	SW	2.8
R222000/6	22/12/2022	SW#	2.7
R222000/7	22/12/2022	HT	2.2
R222000/8	22/12/2022	HT#	2.3
R222000/9	22/12/2022	TKW1	3.3
R222000/10	22/12/2022	TKW1#	3.5
R222000/11	22/12/2022	TKW	2.9
R222000/12	22/12/2022	TKW#	3.0

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222000
Job Number	:	R222000
Issue Date	:	28/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222025
Job Number	:	R222025
Issue Date	:	29/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	24/12/2022
Date Samples Received	:	24/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R222025/1 – 12
Test Period	:	24/12/2022 – 26/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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HOKLAS 241
TEST

Test Report

Report Number : Q220003aR222025

Job Number : R222025

Issue Date : 29/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R222025/1	24/12/2022	U2	2.1
R222025/2	24/12/2022	U2#	2.0
R222025/3	24/12/2022	U1	4.7
R222025/4	24/12/2022	U1#	5.2
R222025/5	24/12/2022	SW	3.0
R222025/6	24/12/2022	SW#	2.8
R222025/7	24/12/2022	HT	2.2
R222025/8	24/12/2022	HT#	2.8
R222025/9	24/12/2022	TKW1	4.8
R222025/10	24/12/2022	TKW1#	4.4
R222025/11	24/12/2022	TKW	3.1
R222025/12	24/12/2022	TKW#	2.8

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222025
Job Number	:	R222025
Issue Date	:	29/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222076
Job Number	:	R222076
Issue Date	:	30/12/2022
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	26/12/2022
Date Samples Received	:	26/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R222076/1 – 12
Test Period	:	26/12/2022 – 27/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
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HOKLAS 241
TEST

Test Report

Report Number : Q220003aR222076

Job Number : R222076

Issue Date : 30/12/2022

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R222076/1	26/12/2022	U2	4.2
R222076/2	26/12/2022	U2#	4.2
R222076/3	26/12/2022	U1	3.3
R222076/4	26/12/2022	U1#	3.4
R222076/5	26/12/2022	SW	5.3
R222076/6	26/12/2022	SW#	4.9
R222076/7	26/12/2022	HT	1.7
R222076/8	26/12/2022	HT#	1.9
R222076/9	26/12/2022	TKW1	1.0
R222076/10	26/12/2022	TKW1#	<1
R222076/11	26/12/2022	TKW	1.9
R222076/12	26/12/2022	TKW#	2.0

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Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222076
Job Number	:	R222076
Issue Date	:	30/12/2022

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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Acumen Laboratory and Testing Limited
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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222077
Job Number	:	R222077
Issue Date	:	04/01/2023
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	28/12/2022
Date Samples Received	:	28/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R222077/1 – 12
Test Period	:	28/12/2022 – 29/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number : Q220003aR222077

Job Number : R222077

Issue Date : 04/01/2023

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R222077/1	28/12/2022	U2	1.6
R222077/2	28/12/2022	U2#	1.7
R222077/3	28/12/2022	U1	3.4
R222077/4	28/12/2022	U1#	3.7
R222077/5	28/12/2022	SW	5.9
R222077/6	28/12/2022	SW#	5.8
R222077/7	28/12/2022	HT	4.1
R222077/8	28/12/2022	HT#	3.9
R222077/9	28/12/2022	TKW1	2.2
R222077/10	28/12/2022	TKW1#	2.4
R222077/11	28/12/2022	TKW	3.1
R222077/12	28/12/2022	TKW#	3.3

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222077
Job Number	:	R222077
Issue Date	:	04/01/2023

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

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Acumen Laboratory and Testing Limited
Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Tel: (852) 2333 6823 Fax: (852) 2333 1316

HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222089
Job Number	:	R222089
Issue Date	:	09/01/2023
Applicant Name	:	Acuity Sustainability Consulting Limited
Applicant Address	:	Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
Project Name	:	Hung Shui Kiu/Ha Tsuen New Development Area Stage 1 Works
Test Required	:	Total Suspended Solids (TSS)
Sampling Date	:	30/12/2022
Date Samples Received	:	30/12/2022
Sample Nature	:	Wastewater
Number of Samples Received	:	12
Condition Received	:	Sample(s) arrived laboratory in chilled condition
Type of Container	:	HDPE Plastic Bottles
Laboratory ID	:	R222089/1 – 12
Test Period	:	30/12/2022 – 31/12/2022
Method Used	:	APHA 23ed 2540D for Total Suspended Solids
Test Result	:	Refer to the results on page 2 – 3.

For and on behalf of
Acumen Laboratory and Testing Limited

Authorized Signature :

Hui Wai Fung, Huntington
Laboratory Manager
Chemical and Microbiological Division

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HOKLAS 241
TEST

Test Report

Report Number : Q220003aR222089

Job Number : R222089

Issue Date : 09/01/2023

Test Result:

Lab ID	Sampling Date	Client Sample ID	Total Suspended Solids (TSS), mg/L
R222089/1	30/12/2022	U2	1.9
R222089/2	30/12/2022	U2#	1.7
R222089/3	30/12/2022	U1	2.2
R222089/4	30/12/2022	U1#	2.3
R222089/5	30/12/2022	SW	<1
R222089/6	30/12/2022	SW#	<1
R222089/7	30/12/2022	HT	4.8
R222089/8	30/12/2022	HT#	5.0
R222089/9	30/12/2022	TKW1	11
R222089/10	30/12/2022	TKW1#	12
R222089/11	30/12/2022	TKW	7.1
R222089/12	30/12/2022	TKW#	7.6

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HOKLAS 241
TEST

Test Report

Report Number	:	Q220003aR222089
Job Number	:	R222089
Issue Date	:	09/01/2023

Note:
1. mg/L indicates milligram per liter
2. < indicates less than.
3. Reporting limit is 2.5mg/L for 1L sample
4. Reporting limit is 1 mg/L for 2.5L sample
5. Applicant name, applicant address, project name, sampling date, sample ID and sample nature are provided by applicant.
6. The result(s) relate only to the item(s) tested.
7. The result(s) are applied only to the sample(s) received.

End of Report

Appendix M

Incident Report(s) for Water Quality Monitoring Exceedance

Investigation Report for Exceedances of Action Level and Limit Level of Water Quality Monitoring in December 2022

Investigation was carried out in response to exceedances of action/ limit levels during the water quality monitoring in December 2022. The following table summarized details of the exceedances and the results after investigation.

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure								
Date	**Station**	**Parameter (Unit)**	**Depth-averaged Measured Value**	**Action Level**	**Limit Level**	**Exceedance**		**Investigation Results**
						AL	**LL**	
6/12	TKW1	DO (mg/L)	2.2	2.8	2.8		✓	When exceedances of action level (AL) and/ or limit level (LL) of *in situ* water quality monitoring results were observed, the water sampling team had conducted repeat *in situ* measurements to confirm findings in accordance with the corresponding Event and Action Plan. After confirmation of exceedances, sampling team had taken photos of the sampling point and the surrounding environmental to identify sources of impact. No upstream sediment plume was observed. There was no evidence to demonstrate that the water quality monitoring exceedances were caused by the construction works from Road D1 construction site. Site investigations were carried out by the ET on 9, 16, 23 and 28 December 2022. During the meantime, the Contractor was applying effluent discharge license for the site. No direct effluent discharge from the site was allowed before the license was acquired. The ET did not identify any direct effluent discharge from the site during the site investigations.
	HT		2.2	2.4	2.2	✓		
	TKW	Turbidity (NTU)	26.5	24.2	24.6		✓	
	SW	SS (mg/L)	13.5	9.7	9.9		✓	
8/12	SW	Turbidity (NTU)	22.3	21.4	22.9	✓		
10/12	TKW1	DO (mg/L)	2.4	2.8	2.8		✓	
	TKW		2.4	2.5	2.4	✓		
	SW		2.3	3.7	3.5		✓	
	HT		2.3	2.4	2.2	✓		
13/12	TKW	DO (mg/L)	2.2	2.5	2.4		✓	
	SW		2.0	3.7	3.5		✓	
	HT		2.1	2.4	2.2		✓	
15/12	TKW1	DO (mg/L)	2.3	2.8	2.8		✓	
	SW		3.6	3.7	3.5	✓		
	HT		2.4	2.4	2.2	✓		
	TKW	Turbidity (NTU)	25.1	24.2	24.6		✓	

Environmental Team for Hung Shui Kui/ Ha Tsuen New Development Area Stage 1 Works – Site Formation and Engineering Infrastructure								
Date	**Station**	**Parameter (Unit)**	**Depth-averaged Measured Value**	**Action Level**	**Limit Level**	**Exceedance**		**Investigation Results**
						AL	**LL**	
17/12	TKW1	DO (mg/L)	2.5	2.8	2.8		✓	As there is no evidence to indicate that the water quality monitoring results between 6 and 24 December 2022 were affected by the site activities, it is considered that the Action/ Limit level exceedances recorded on 6, 8, 10, 13, 15, 17, 20, 22 and 24 December 2022 were due to other composite factors including surface runoff and effluent discharges from the workshops, open storages, warehouses, private toilet(s) and residential dwellings along the catchment downstream of the site, as well as natural variation of upstream water quality. In conclusion, all water quality monitoring exceedances recorded were considered non-project related.
	TKW		2.3	2.5	2.4		✓	
	SW		3.6	3.7	3.5	✓		
	HT		2.3	2.4	2.2	✓		
20/12	TKW1	DO (mg/L)	2.7	2.8	2.8		✓	
	TKW		2.5	2.5	2.4	✓		
	SW		3.3	3.7	3.5		✓	
	HT		2.3	2.4	2.2	✓		
22/12	TKW1	DO (mg/L)	2.7	2.8	2.8		✓	
	TKW		2.4	2.5	2.4	✓		
	SW		3.6	3.7	3.5	✓		
	HT		2.4	2.4	2.2	✓		
24/12	TKW1	DO (mg/L)	2.2	2.8	2.8		✓	
	SW		3.6	3.7	3.5	✓		
	HT		2.4	2.4	2.2	✓		

Construction activities carried out at Road D1 during the investigation period:

- Site clearance;
- Backfilling & rolling passes;
- Construction of box culvert; and
- Construction of u channel.

Photo Records of Site Investigation:

9 December 2022	
	
Backfilling was carried out at Site 3-8 near Road D1, no muddy surface runoff was observed during the site inspection.	Idle wastewater treatment facilities on site in December 2022.
16 December 2022	
	
Muddy surface runoff was diverted to sump pit. No discharge of wastewater offsite was observed during site investigation.	Wastewater was diverted to sump pit. No discharge of wastewater offsite was observed during site investigation.

23 December 2022	
	
All wastewater / surface runoff was collected and diverted to sump pit. Direct effluent discharge was not allowed to be discharged from the site. No discharge of wastewater was observed during site investigation.	Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.

28 December 2022	
	
All wastewater / surface runoff was collected and diverted to sump pit. Direct effluent discharge was not allowed to be discharged from the site. No discharge of wastewater was observed during site inspection.	Stockpile of dusty materials was covered properly to avoid generation of muddy runoff.

Prepared by:	Howard Chan	Certified by:	F. C. Tsang
Designation	Environmental Team Consultant	Designation:	Environmental Team Leader
Signature:		Signature:	
Date	18 January 2023	Date:	18 January 2023

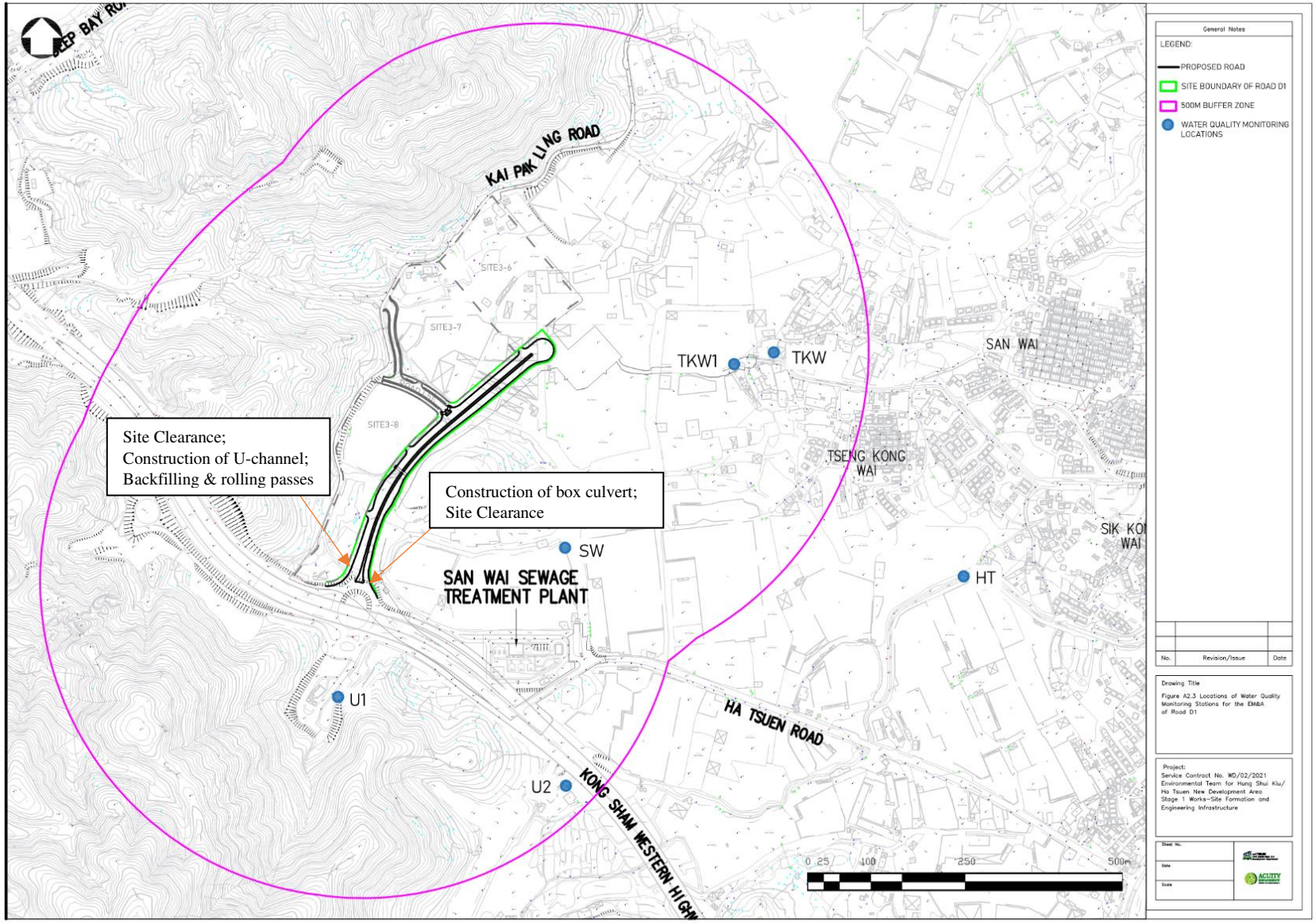

Figure 1 Location Plan of Impact Water Quality Monitoring Stations (Site activities held in December 2022 were reported in text boxes)