


Civil Engineering and Development Department

Trunk Road T2
Monthly Environmental Monitoring and Audit Report
(under EP-458/2013/C)
June 2024
(Version 1.0)

Approved By 
(Environmental Team Leader:
Mr. KS Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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10 July 2024

Hyder-Meinhardt Joint Venture
23/F, Two Harbour Square
180 Wai Yip Street, Kwun Tong
Kowloon, Hong Kong

By Post and Email

Attention: Mr. Edwin Ching

Dear Mr. Ching,

**Re: Agreement No. EDO 01/2019
Independent Environmental Checker for
Contract No. ED/2018/04 – Trunk Road T2 and Infrastructure Works for
Developments at the Former South Apron**

Monthly EM&A Report (June 2024) for EP-458/2013/C

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for June 2024 (Version 1.0) certified by the ET Leader and provided to us via email on 10 July 2024. We are pleased to inform you that we have no adverse comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 4.4 of EP-458/2013/C.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,
For and on behalf of
Ramboll Hong Kong Limited



Y H Hui
Independent Environmental Checker

c.c. CEDD
BTP
Cinotech

Attn.: Mr. Tommy Wong
Attn.: Mr. Ivan Chau
Attn.: Mr. K. S. Lee

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EXECUTIVE SUMMARY**Introduction**

1. This is the 50th Environmental Monitoring and Audit (EM&A) Report prepared by the Environmental Team (ET), Cinotech Consultants Ltd., for Contract No. ED/2018/04 “Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron”, and Contract No. ED/2020/03 “Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works”. This report summarized the monitoring results and audits findings of the EM&A programme under the issued Environmental Permit (EP) No. EP-458/2013/C and in accordance with the EM&A Manual (AEIAR-173/2013) during the reporting month of June 2024.

Summary of Main Works Undertaken and Key Measures Implemented

2. The main works undertaken during the reporting period are as follows:

Table I Summary of Key Construction Work in the Reporting Month

Contract No.	Project Title	Site Activities
ED/2018/04	Trunk Road T2 and Infrastructure Works for Developments at South Apron	<ul style="list-style-type: none"> • East Ventilation Building RC Structure • East Ventilation Building ABWF • East Ventilation Building E&M • East Bound – Wall & Crown • West Bound – OHVD • West Bound –Bulkhead Construction
ED/2020/03	Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works ⁽¹⁾	N/A

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

3. Implementation of the key mitigation measures during the reporting period are as follows:

Table II Summary of Key Mitigation Measures Implemented in the Reporting Month

Contract No. and Project Title	Key Mitigation Measures Implemented
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	<p><i>Construction Noise</i></p> <ul style="list-style-type: none"> • Construction activities were scheduled to minimize noise nuisance to the nearby sensitive receiver. • Use of Quality Powered Mechanical Equipment (QPME) on site. • Erected the noise barrier on site. <p><i>Air Quality</i></p>

	<ul style="list-style-type: none"> Regularly watering on site to avoid dust generation. <p><i>Landscape and Visual</i></p> <ul style="list-style-type: none"> Tree protection zones were fenced off to protect the existing trees on site.
ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works (1)	N/A

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

Environmental Monitoring Works

- Environmental monitoring for the Project was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/Audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- Summary of the non-compliance (exceedance) in the reporting month for the Project is tabulated in **Table I**.

Table III Non-compliance (exceedance) Record for the Project in the Reporting Month

Environmental Monitoring	No. of Non-compliance (Exceedance)		No. of Non-compliance (Exceedance) due to Construction Activities of this Project		Action Taken
	Action Level	Limit Level	Action Level	Limit Level	
Air Quality	0	0	0	0	N/A
Noise	0	0	0	0	N/A
Marine Water Quality	N/A	N/A	N/A	N/A	N/A
Groundwater Level Monitoring (Piezometer Monitoring)	N/A	N/A	N/A	N/A	N/A
Ecological	N/A	N/A	N/A	N/A	N/A
Cultural Heritage	N/A	N/A	N/A	N/A	N/A
Landfill Gas	N/A ⁽¹⁾	N/A	N/A ⁽¹⁾	N/A	N/A

Note: (1): No Action Level for Landfill Gas Monitoring.

Air Quality Monitoring

6. No Action/Limit Level exceedance for 1-hour TSP monitoring was recorded.
7. No Action Level exceedance and no Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.

Construction Noise Monitoring

8. No Action Level exceedance was recorded due to documented complaint in the reporting month. The Summary of Documented Complaints in the Reporting Month is tabulated in **Table IV**.
9. No Limit Level exceedance for day time construction noise monitoring were recorded in the reporting month. Detail shall refer to **Appendix N**.

Water Quality Monitoring

10. Groundwater quality monitoring had been suspended since October 2019 upon the agreement by EPD. Further details should be founded at **Section 4.1**.
11. No marine water quality monitoring is required as no marine works will be conducted at the Cha Kwo Ling and Lam Tin areas for this project.
12. As the construction activity is approximately 120m away from the piezometer gate, no piezometer monitoring is required.

Waste Management

13. Wastes generated from this Project include inert construction and demolition (C&D) materials, and non-inert C&D materials. Details of waste management data is presented in **Appendix H**.

Ecological Monitoring

14. No coral monitoring is required as no marine works will be conducted at the Cha Kwo Ling and Lam Tin areas for this project.

Fisheries Impact Monitoring

15. No specific fisheries monitoring programme is required during the construction phase.

Monitoring on Cultural Heritage

16. As the construction works of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building are located more than 100m away from the Cha Kwo Ling Tin Hau temple, no monitoring on cultural heritage is required.

Landscape and Visual Monitoring and Audit

17. The implementation of landscape and visual mitigation measures was checked by a registered landscape architect. Recommended follow-up actions have been discharged by the Contractor. Details of the audit findings and implementation status are presented in **Section 12**.

Landfill Gas Monitoring

18. Monitoring of landfill gases was commenced in December 2016. Since no excavation activity for this Project was carried out within the Sai Tso Wan Landfill Consultation Zone in the reporting month, no landfill gas monitoring is required

Hazard to Life Monitoring

19. No environmental monitoring and audit are required as no hazard assessment was conducted.

Environmental Site Inspection

20. Joint weekly site inspections were conducted by representatives of the Contractor, Engineer and Environmental Team. Details of the audit findings and implementation status are presented in **Section 12**.

Key Information in the Reporting Month

21. Summary of key information in the reporting month is tabulated in **Table II**.

Table IV Summary of Complaints, Notifications of Summons and Successful Prosecutions in the Reporting Month

Event	Event Details		Action Taken	Status
	Number	Nature		
Complaints Received	0	--	N/A	N/A
Notifications of any summons & prosecutions received	0	--	N/A	N/A

22. Summary of complaints received in the reporting month is tabulated in **Table III**.

Table V Summary of Complaints Details in Reporting Month

Complaint Type	Investigation Findings	Follow-up Action / Mitigation Measure
--	--	--

Reporting Changes

23. No reporting change is recorded in the reporting months.

Future Key Issues

24. The key works or activities will be anticipated in the next reporting period are as follows:

Table VI Summary Table for Site Activities in the next Reporting Period

Contract No. and Project Title	Site Activities (July 2024)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	<ul style="list-style-type: none"> • East Ventilation Building RC Structure • East Ventilation Building ABWF • East Ventilation Building E&M • East Bound – Wall & Crown • West Bound – OHVD • West Bound –Bulkhead Construction 	(A) / (B) / (C) / (D)
ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works ⁽¹⁾	N/A	

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

(A) Dust generation from haul road, stockpile of dusty materials, exposed site area, excavation works and rock breaking activities;

(B) Noisy construction activity such as rock-breaking activities and piling works

(C) Runoff from exposed slope or site area; and

(D) Wastewater and runoff discharge from site.

1. INTRODUCTION

Background

- 1.1 In 2009, Civil Engineering and Development Department (CEDD) commissioned a Kai Tak Development (KTD) – Trunk Road T2 and Infrastructure at South Apron Investigation. The assignment covers the provision of the Trunk Road T2 and its connections with the Central Kowloon Route (CKR) at the north apron area and the Tseung Kwan O – Lam Tin Tunnel (TKOLTT) to the south in the Cha Kwo Ling area.
- 1.2 The Trunk Road T2 Project is one of the designated Projects under Schedule 2 of the EIAO proposed in the KTD. CEDD submitted the Project Profile (No. PP-379/2009) on 24 March 2009 for application for an EIA study brief for the Trunk Road T2 Project under the EIAO. Accordingly, an EIA Study Brief (ESB-203/2009) for the Trunk Road T2 Project was issued on 30 April 2009. The Environmental Impact Assessment (EIA) Report for the Trunk Road T2 Project was approved under the Environmental Impact Assessment Ordinance (EIAO) on 19 September 2013. The corresponding Environmental Permit (EP) was issued on 19 September 2013 (EP no.: EP-451/2013).
- 1.3 The Contract No. ED/2018/04 is the main contract of Trunk Road T2 (“T2 Main Works”) which comprises mainly the design and construction of a dual two-lane trunk road of approximately 3.0km long with about 2.7km of the trunk road in form of tunnel; ventilation and administration buildings, environmental protection and mitigation works and etc. Moreover, the Contract No. ED/2020/03 is the other contract under Truck Road T2 Project which comprises mainly design and construction of the TCSS for this Project. The EM&A programme under the Contract ED/2018/04 and ED/2020/03 are governed by the two EPs (EP-451/2013 and EP-458/2013/C) and two EM&A Manuals (AEIAR-174/2013 and AEIAR-173/2013). The work areas of the T2 Main Works are shown in **Figure 1** and the works to be executed under these Contracts and corresponding EPs are summarized as follows:

Environmental Permit	Works Description
EP-451/2013 – Trunk Road T2	<u>ED/2018/04</u> <ul style="list-style-type: none"> ● Construction of highway and sub-sea tunnel connecting between Central Kowloon Route and Cha Kwo Ling Tunnel ● Western & Eastern Ventilation Buildings <u>ED/2020/03</u> Design and construction of TCSS for Trunk Road T2
EP-458/2013/C – Tseung Kwan O – Lam Tin Tunnel (TKOLTT) and Associated Works	<u>ED/2018/04</u> <ul style="list-style-type: none"> ● Construction of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building <u>ED/2020/03</u> <ul style="list-style-type: none"> ● Design and construction of TCSS for Trunk Road T2

Monitoring Works in Lam Tin under EP-458/2013/C

- 1.4 Under Agreement No. CE 59/2015 (EP) – Tseung Kwan O – Lam Tin Tunnel (TKOLLT) and Associated Works, the baseline monitoring works in Lam Tin under the EM&A Manual (AEIAR-173/2013) were conducted by the Environmental Team (ET) for the Agreement No. CE 59/2015 (EP) at the approved monitoring locations, namely AM1, AM2, AM3, AM4, AM4 (A) CM1, CM2, CM3, CM4 and CM5. Impact monitoring within the Lam Tin area shall be conducted by the ET of Contract No. ED/2018/04 upon cessation of Agreement No. CE 59/2015 (EP). The data obtained from the impact monitoring works completed by the ET of Agreement No. CE 59/2015 (EP) will be adopted in this report.
- 1.5 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the EM&A works for “Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron” (hereinafter called the “Project”).

Purpose of the Report

- 1.6 This is the 50th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in June 2024.

Project Organizations

- 1.7 Different Parties with different levels of involvement in the Project organization include:
- Permit Holder – Civil Engineering and Development Department (CEDD)
 - Supervisor Representative – Hyder-Meinhardt Joint Venture (HMJV)
 - Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
 - Independent Environmental Checker (IEC) – Ramboll Hong Kong Limited (Ramboll)
 - Contractor – Bouygues Travaux Publics (BTP) (For ED/2018/04) & GTECH Services (Hong Kong) Limited (For ED/2020/03)
- 1.8 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.
CEDD	Permit Holder	Mr. Wong Chi Wai, Tommy	3842 7111
HMJV	Supervisor Representative	Ms. Hazel Tang	2149 8524
Cinotech	Environmental Team	Mr. KS Lee (ETL)	2151 2091
		Ms. Karina Chan	2157 3880
Ramboll	Independent Environmental Checker	Mr. YH Hui	3465 2850
BTP	Contractor (ED/2018/04)	Mr. Roy Leung	6628 2685
GTECH	Contractor (ED/2020/03)	Mr. Deacon Choi	6038 3568

1.9 The Organizational Structure for Environmental Management is shown in **Figure 1.2**.

Construction Activities undertaken during the Reporting Month

1.10 The major site activities undertaken in the reporting month included:

Table 1.2 Summary of Key Construction Work in the Reporting Month

Contract No.	Project Title	Site Activities
ED/2018/04	Trunk Road T2 and Infrastructure Works for Developments at South Apron	<ul style="list-style-type: none"> • East Ventilation Building RC Structure • East Ventilation Building ABWF • East Ventilation Building E&M • East Bound – Wall & Crown • West Bound – OHVD • West Bound –Bulkhead Construction
ED/2020/03	Trunk Road T2 – Traffic Control And Surveillance System (TCSS) and Associated Works ⁽¹⁾	N/A

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

Summary of EM&A Requirements

1.11 The EM&A programme requires construction noise, air quality monitoring and environmental site audit, etc. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the Project EIA Report.

1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Section 12** of this report.

1.13 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the monitoring parameters of the required environmental monitoring works and audit works for the Project in June 2024.

Status of Environmental Licensing and Permitting

1.14 All permits/licenses obtained for the Project are summarized in **Table 1.3**.

Table 1.3 Summary of Environmental License and Permit

Permit / License No.	Valid Period		Status
	From	To	
Environmental Permit (EP)			
EP-451/2013	19 Sep 2013	N/A	Valid
EP-458/2013/C	20 Jan 2017	N/A	Valid
Notification pursuant to Air Pollution (Construction Dust) Regulation			
Ref. No.: 451120	20 Nov 2019	N/A	Valid
Billing Account for Construction Waste Disposal			
A/C No.: 7036016	09 Dec 2019	N/A	Valid
Construction Noise Permit			
CNP No. (For Portion T1): GW-RE0188-24	23 Feb 2024	18 Aug 2024	Valid
CNP No. (For Portion Q):GW-RE0309-24	21 Mar 2024	31 Aug 2024	Valid
CNP No. (For Portion U):GW-RE0314-24	1 Apr 2024	30 Sep 2024	Valid
Wastewater Discharge License			
WT00036699-2020	14 Jan 2021	31 Jan 2026	Valid
Chemical Waste Producer License			
WPN: 5213-286-B2557-03	09 Mar 2020	N/A	Valid

2. AIR QUALITY

Monitoring Requirement

- 2.1 According to Section 2.2.4 of the EM&A Manual (AEIAR-173/2013), 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring was conducted to monitor the air quality for this Project. For regular impact monitoring, a sampling frequency of at least once in every six days at all of the monitoring stations for 1-hour and 24-hour TSP monitoring. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

- 2.2 Five designated monitoring stations were selected for air quality monitoring programme. **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 2**.

Table 2.1 Air Quality Monitoring Locations

Monitoring Stations	Location	Location of Measurement
AM1	Tin Hau Temple	Ground Level
AM2	Sai Tso Wan Recreation Ground	Ground Level
AM3	Yau Lai Estate Bik Lai House	Rooftop (41/F)
AM4 ⁽¹⁾	Sitting-out Area at Cha Kwo Ling Village	Ground Level
AM4(B) ^{(2) (*) (**)}	Flat 103 Cha Kwo Ling Village	Ground Level

Remarks:

(1) For 1-hour TSP monitoring;

(2) For 24-hour TSP monitoring

(*) Air quality monitoring at designated station AM4 (24-hr TSP) was rejected by the premise owners.

Therefore, baseline and impact air quality monitoring works were carried out at alternative air quality monitoring stations AM4 (A) (24-hr TSP only)

(**) AM4(A) is not available for conducting monitoring due to the demolition of administrative office.

Monitoring Parameters and Frequency

- 2.3 **Table 2.2** summarizes the monitoring parameters, monitoring period and frequencies of impact air quality monitoring. The monitoring schedule is shown in **Appendix D**.

Table 2.2 Frequency and Parameters of Air Quality Monitoring

Monitoring Stations	Parameter	Period	Frequency
AM1, AM2, AM3, AM4	1-hour TSP	0700 – 1900	3 times per 6 days
AM1, AM2, AM3, AM4(B)	24-hour TSP	24 hours	Once every 6 days

Monitoring Equipment

- 2.4 High Volume Samplers (HVS) in compliance with the specification stipulated in the EM&A Manual (AEIAR-173/2013), Section 2.3.1, were used to carry out 24-hour TSP monitoring. Direct reading dust meter were also used to measure 1-hour average TSP levels. The 1-hour sampling was determined by HVS to check the validity and accuracy of the results measured by direct reading method.
- 2.5 Wind data monitoring equipment was set at rooftop (about 41/F) of Yau Lai Estate Bik Lai House for logging wind speed and wind direction such that the wind sensors are clear of obstructions or turbulence caused by building. The wind data monitoring equipment is re-calibrated at least once every six months and the wind directions are divided into 16 sectors of 22.5 degrees each. The location is shown in **Figure 2**. This weather information for the reporting month is summarized in **Appendix C**.
- 2.6 **Table 2.3** summarizes the equipment used for air quality monitoring by the ET for Contract No. CE 59/2015 (EP). Copies of calibration certificates are attached in **Appendix B**.

Table 2.3 Air Quality Monitoring Equipment

Equipment	Model	Quantity
1-hour TSP Dust Meter	Sibata Model No. LD-3B (Serial No.: 2Y6194) Sibata Model No. LD-5R (Serial No.: 972777, 972778, 972780, 8Y2374, 8Y2373)	6
HVS Sampler	GMW model: GS2310 (Serial No.: 1287, 10379, 10599)	3
	TE 5170 (Serial No.: 1956)	1
Calibrator	TISCH Model: TE-5025A (Serial No.: 3864)	1
Wind Anemometer	Davis Weather Monitor II, Model no. 7440 (Serial No.: MC01010A44)	1

Monitoring Methodology***1-hour TSP Monitoring***Measuring Procedures

- 2.7 The measuring procedures of the 1-hour dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

(Sibata Model No.: LD-5R)

- The 1-hour dust meter is placed at least 1.3 meters above ground.
- Set POWER to "ON" and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 minutes and then the cap of the air sampling inlet has been released.
- Push the knob at MEASURE position.

-
- Set time/mode setting to [BG] by pushing the time setting switch. Then, start the background measurement by pushing the start/stop switch once. It will take 6 sec. to complete the background measurement.
 - Push the time setting switch to change the time setting display to [MANUAL] at the bottom left of the liquid crystal display. Finally, push the start/stop switch to stop the measuring after 1 hour sampling.
 - Information such as sampling date, time, count value and site condition were recorded during the monitoring period.

Maintenance/Calibration

2.8 The following maintenance/calibration is required for the 1-hour dust meter:

- Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout all stages of the air quality monitoring.

24-hour TSP Monitoring

Instrumentation

2.9 High volume samplers (HVS) (TISCH Model: TE-5170 and GMW Model: GS2310) completed with appropriate sampling inlets were employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

2.10 The positioning of the HVS samplers are as follows:

- A horizontal platform with appropriate support to secure the samplers against gusty wind shall be provided;
- No two samplers shall be placed less than 2 meters apart;
- The distance between the sampler and an obstacle, such as buildings, must be at least twice the height that the obstacle protrudes above the sampler;
- A minimum of 2 metres of separation from walls, parapets and penthouses is required for rooftop samplers;
- A minimum of 2 metres of separation from any supporting structure, measured horizontally is required;
- No furnace or incinerator flue is nearby;
- Airflow around the sampler is unrestricted;
- The sampler is more than 20 metres from the dripline;
- Any wire fence and gate, to protect the sampler, shall not cause any obstruction during monitoring;
- Permission must be obtained to set up the samplers and to obtain access to the monitoring stations; and
- A secured supply of electricity is needed to operate the samplers.

Operating/analytical procedures for the operation of HVS

2.11 Operating/analytical procedures for the air quality monitoring are highlighted as follows:

- Prior to the commencement of the dust sampling, the flow rate of the high-volume sampler was properly set (between 0.6 m³/min. and 1.7 m³/min.) in accordance with the EM&A manual (AEIAR-173/2013). The flow rate shall be indicated on the flow rate chart.
- For TSP sampling, fiberglass filters with a collection efficiency of > 99% for particles of 0.3µm diameter were used.
- The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The shelter lid was closed and secured with the aluminium strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter was removed and sent to the HOKLAS laboratory (ALS Technichem (HK) Pty Ltd.) for weighing. The elapsed time was also recorded.
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

2.12 The following maintenance/calibration is required for the HVS:

- The high-volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.

High volume samplers were calibrated at bi-monthly intervals using TE-5025A Calibration Kit throughout all stages of the air quality monitoring.

Results and Observations

2.13 The impact monitoring works for air quality monitoring locations AM1, AM2, AM3 and AM4 are completed by the ET of Agreement No. CE 59/2015 (EP), and the data will be adopted in this report. As the proposal for relocation approved, the monitoring at AM4(A) will be conducted at AM4(B). For the time being, as the station CKL2 for the 24 hr TSP monitoring, carried out under EM&A works for Trunk Road T2 Project (EP- 451/2013), is located in close proximity to AM4(B); the results from CKL2 are adopted as reference for the 24 TSP monitoring at AM4(B), which has similar environment when compared with that for CKL2. The location of monitoring station CKL2 is shown in **Figure 2**.

- 2.14 The impact air quality monitoring was conducted at all five monitoring stations as scheduled. The monitoring schedule is shown in **Appendix D**.
- 2.15 No Action Level exceedance was recorded for 24-hour TSP monitoring in the reporting month and No Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.
- 2.16 No Action/Limit Level exceedance was recorded for 1-hour TSP monitoring in the reporting month.
- 2.17 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix E** and **Appendix F** respectively.
- 2.18 According to field observations by ET for Agreement No. CE 59/2015 (EP) in the reporting period, the major dust source identified at the designated air quality monitoring stations are as follows:

Table 2.4 Major Dust Source during Air Quality Monitoring

Monitoring Stations	Major Dust Source
AM1 – Tin Hau Temple	Road Traffic at Cha Kwo Ling Road, non-project related influence and the construction activity from other construction site (i.e underground utility work in TKOLTT project)
AM2 – Sai Tso Wan Recreation Ground	Road Traffic along Sin Fat Road
AM3 – Yau Lai Estate Bik Lai House	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, non-project related influence and the construction activity from other construction site (i.e road paving work in TKOLTT project)
AM4 - Sitting-out Area at Cha Kwo Ling Village	Road Traffic at Cha Kwo Ling Road
AM4(B) (**) - Flat 103 Cha Kwo Ling Village	Road Traffic at Cha Kwo Ling Road (*)

(*): Field observation observed at CKL2 during monitoring is presented. Detail refers to S2.13.

(**) AM4(A) is not available for conducting monitoring due to the demolition of administrative office.

Comparison of EM&A Result with EIA Prediction

- 2.19 The air monitoring data was compared with the predictions (with the assessment height of 1.5 mAG) in Table 3.17 of EIA Report, AEIAR-173/2013 (as approved in 2013) as summarised in **Table 2.5** and **Table 2.6**.

Table 2.5 Comparison of 1-hr TSP Monitoring Data with Predictions in EIA Report

Monitoring Stations	ASR ID	Predicted Maximum 1-hr TSP Concentration in EIA Report (AEIAR-173/2013), $\mu\text{g}/\text{m}^3$	Maximum 1-hr TSP Concentration in the Reporting Month (June 2024), $\mu\text{g}/\text{m}^3$
AM1 – Tin Hau Temple	CL1	707	66.5
AM2 – Sai Tso Wan Recreation Ground	CL6	266	73.6
AM3 – Yau Lai Estate Bik Lai House	CL9	507	89.3
AM4 - Sitting-out Area at Cha Kwo Ling Village	CL16	430	79.8

Table 2.6 Comparison of 24-hr TSP Monitoring Data with Predictions in EIA Report

Monitoring Stations	ASR ID	Predicted Maximum 24-hr TSP Concentration in EIA Report (AEIAR-173/2013), $\mu\text{g}/\text{m}^3$	Maximum 24-hr TSP Concentration in the Reporting Month (June 2024), $\mu\text{g}/\text{m}^3$
AM1 – Tin Hau Temple	CL1	199	84.4
AM2 – Sai Tso Wan Recreation Ground	CL6	109	22.8
AM3 – Yau Lai Estate Bik Lai House	CL9	123	17.1
AM4(B) – Flat 103 Cha Kwo Ling Village (*)	N/A ⁽¹⁾	N/A ⁽¹⁾	180.7 ^(**)

Remarks:

(1) No 24-hr TSP concentration was predicted in EIA Report (AEIAR-173/2013)

(*) Air quality monitoring at designated station AM4 (24-hr TSP) was rejected by the premise owners. Therefore, baseline and impact air quality monitoring works were carried out at alternative air quality monitoring stations AM4 (B) (24-hr TSP only)

(**): Monitoring results at CKL2 is presented. Detail refers to S2.13

2.20 In the reporting month, the 1-hour TSP concentrations at AM1, AM2, AM3 and AM4 were lower than the prediction in the EIA Report, AEIAR-173/2013 (as approved in 2013). No Action/Limit level exceedance was recorded in the reporting period.

- 2.21 In the reporting month, the 24-hour TSP concentrations at AM1, AM2 and AM3 were lower than the prediction in the EIA Report, AEIAR-173/2013 (as approved in 2013). No Action Level exceedance was recorded for 24-hour TSP monitoring in the reporting month and no Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.

3. NOISE

Monitoring Requirements

- 3.1 According to Section 3.2.1 of the EM&A Manual (AEIAR-173/2013), construction noise monitoring was conducted to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station shall be on a weekly basis and conduct one set of measurements between 0700 and 1900 hours on normal weekdays. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 3.2 Noise monitoring was conducted at five designated monitoring stations, namely CM1, CM2, CM3, CM4 and CM5 in the reporting period. **Table 3.1** and **Figure 2** show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Location	Location of Measurement
CM1	Nga Lai House, Yau Lai Estate Phase 1, Yau Tong	Rooftop (41/F)
CM2	Bik Lai House, Yau Lai Estate Phase 1, Yau Tong	Rooftop (41/F)
CM3	Block S, Yau Lai Estate Phase 5, Yau Tong	Rooftop (40/F)
CM4	Tin Hau Temple, Cha Kwo Ling	Ground Level
CM5	CCC Kei Faat Primary School, Yau Tong	Rooftop (6/F)

Monitoring Parameters, Frequency and Duration

- 3.3 **Table 3.2** summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 3.2 Frequency and Parameters of Noise Monitoring

Monitoring Stations	Time Period	Duration	Frequency	Parameter	Measurement
CM1	0700-1900 hrs on normal weekdays	30 minutes	Once per week	L ₁₀ (30 min.) dB(A)	Façade Measurement
CM2					Façade Measurement
CM3					Façade Measurement
CM4					Façade Measurement
CM5					Façade Measurement

Monitoring Equipment

- 3.4 Integrating Sound Level Meter was used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 3.3** summarizes the noise monitoring equipment being used by the ET for Agreement No. CE 59/2015 (EP) within the reporting period. Copies of calibration certificates are attached in **Appendix B**.

Table 3.3 Noise Monitoring Equipment

Equipment	Model	Quantity
Integrating Sound Level Meter	BSWA 308 (Serial No.: 580287, 570187, 570188, 570183) SVAN 957 (Serial No.: 23851) SVAN 979 (Serial No.: 27189)	6
Calibrator	AWA6021A (Serial No.: 1023253) ST-120 (Serial No.: 181001636) Type 4231 (Serial No.: 2326353)	3

Monitoring Methodology and QA/QC Procedure

- 3.5 The monitoring procedures are as follows:
- The monitoring station was normally be at a point 1m from the exterior of the sensitive receivers building façade and be at a position 1.2m above the ground.
 - For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
 - The battery condition was checked to ensure the correct functioning of the meter.
 - Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - Frequency weighting: A
 - Time weighting: Fast
 - Time measurement: 30 minutes
 - Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
 - The wind speed was frequently checked with the portable wind meter.
 - At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
 - Noise monitoring would be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. Supplementary monitoring would be provided to ensure sufficient data would be obtained.

Maintenance and Calibration

- 3.6 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.

- 3.7 The sound level meter and calibrator were checked and calibrated at yearly intervals.
- 3.8 Immediately prior to and following each noise measurement the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements were accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

Results and Observations

- 3.9 The data obtained from the impact monitoring works completed by the ET of Agreement No. CE 59/2015 (EP) will be adopted in this report.
- 3.10 No Action Level exceedance was recorded due to the documented complaint in the reporting month.
- 3.11 No Limit Level exceedance was recorded for day-time construction noise monitoring in the reporting month.
- 3.12 Noise monitoring results and graphical presentations are shown in **Appendix G**.
- 3.13 According to field observations by ET for Agreement No. CE 59/2015 (EP) in the reporting period, the major noise sources identified at the noise monitoring stations are shown in **Table 3.4**.

Table 3.4 Other Noise Source Identified during Noise Monitoring

Monitoring Stations	Major Noise Source
CM1	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, non-project related construction activities (i.e road paving work in TKOLTT project)
CM2	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, non-project related construction activities (i.e road paving work in TKOLTT project)
CM3	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza non-project related construction activities (i.e road paving work in TKOLTT project)
CM4	Road Traffic at Cha Kwo Ling Road, non-project related construction activities (i.e underground utility work in TKOLTT project)
CM5	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, Road Traffic at Yau Tong Road

Table 3.5 Baseline Noise Level and Noise Limit Level for Monitoring Stations

Monitoring Stations	Baseline Noise Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)	Noise Limit Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)
CM1	65.5	75
CM2	63.6	
CM3	65.6	
CM4	62.0	
CM5	68.2	70*

(*) Noise Limit Level is 65 dB(A) during school examination periods.

Comparison of EM&A Result with EIA Prediction

3.14 The noise monitoring data was compared with the predictions in Table 4.15 of EIA Report (AEIAR-173/2013) as summarised in **Table 3.6**.

Table 3.6 Maximum Predicted Mitigated Construction Noise Levels in EIA Report

Monitoring Stations	NSR ID	Maximum Predicted Mitigated Construction Noise Levels in EIA Report (AEIAR-173/2013), dB(A)	Maximum Construction Noise Levels in the Reporting Month (June 2024), Leq (30min) dB(A)
CM1 – Nga Lai House, Yau Lai Estate Phase 1, Yau Tong	N1102	73	67.0
CM2 – Bik Lai House, Yau Lai Estate Phase 1, Yau Tong	N1204	75	68.0
CM3 – Block S, Yau Lai Estate Phase 5, Yau Tong	N2105	75	65.0
CM4 – Tin Hau Temple, Cha Kwo Ling	N3101a	73	59.0
CM5 – CCC Kei Faat Primary School, Yau Tong	N4101	71	67.0

3.15 The results at CM1, CM2, CM3, CM4 and CM5 were lower than the maximum predicted mitigated construction noise level in EIA Report, AEIAR-173/2013 (as approved in 2013). No Limit level exceedance was recorded in the reporting period.

4. WATER QUALITY

Monitoring Requirement

Groundwater Quality

- 4.1 The existing groundwater quality monitoring programme has been suspended as the monitoring results had been deemed non-representative of the impact from the project justified by two major factors: (1) influence on the monitoring results from non-project related factors, such as anthropogenic activities and natural phenomenon; and (2) large separation between the monitoring stations and works area. In addition, as no alternative locations for the groundwater quality monitoring were available, the groundwater quality monitoring has been suspended since October 2019 upon the agreement by EPD.

Marine Water Quality

- 4.2 According to Section 4.4.3 of EM&A Manual (AEIAR-173/2013), marine water quality impact monitoring stations is carried out during marine construction for TKOLTT reclamation. Since the construction of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building does not involve reclamation, the marine water quality monitoring programme stated in Section 4.4 of the EM&A Manual (AEIAR-173/2013) is therefore not applicable to Contract No. ED/2018/04.

Groundwater Level Monitoring (Piezometer Monitoring)

- 4.3 According to Section 4.1.2 of EM&A Manual (AEIAR-173/2013), daily piezometer monitoring will be carried out on a daily basis when any tunnel construction activities are carried out within +/- 50m of the piezometer gate in plan. As the construction works of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building is approximately 120m away from the piezometer gate in plan, the piezometer monitoring programme stated in Section 4.2 of the EM&A Manual (AEIAR-173/2013) is therefore not applicable to Contract No. ED/2018/04.

5. WASTE MANGEMENT

- 5.1 According to Section 5.1.2 of the EM&A Manual (AEIAR-173/2013), Waste materials generated during construction activities, such as construction and demolition (C&D) materials and general refuse, are recommended to be audited at regular intervals (at least quarterly) to ensure that proper storage, transportation and disposal practices are being implemented by the Contractor. To fulfil this requirement, site audits are carried out on a weekly basis. The summaries of site audits are attached in **Appendix I**.
- 5.2 With reference to relevant handling records of this Project, the quantities of different types of waste generated in the reporting month are summarised and presented in **Appendix H**.

6. ECOLOGY

Post-Translocation Coral Monitoring

- 6.1 Post-translocation monitoring survey is recommended in Section 6.2.5 of the EM&A Manual (AEIAR-173/2013), to audit the success of coral translocation. Since the construction of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building does not involve any marine works in the concerned area mentioned in Section 6.1.2 of the EM&A Manual (AEIAR-173/2013), the post-translocation monitoring survey stated in Section 6.2.5 of the EM&A Manual (AEIAR-173/2013) is therefore not applicable to Contract No. ED/2018/04.

7. FISHERIES

- 7.1 According to Section 7.1.3 of EM&A Manual (AEIAR-173/2013), no specific fisheries monitoring programme is required during the construction phase.
- 7.2 The implementation of the mitigation measures stated in the Water Quality Impact Assessment (Refer to Section 5 of EIA Report (AEIAR-173/2013)) will be audited as part of the EM&A procedures during the construction period. The summaries of site audits are attached in **Appendix I**.

8. CULTURAL HERITAGE

- 8.1 According to Condition 3.7 of EP-458/2013/C and Section 8.2.1 of the EM&A Manual (AEIAR-173/2013), monitoring of vibration impacts was conducted when the construction works are less than 100m from the Built Heritage in close proximity of the worksite, namely the Cha Kwo Ling Tin Hau temple. Tilting and settlement monitoring should be applied on the Cha Kwo Ling Tin Hau Temple.
- 8.2 As the construction works of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building are located more than 100m away from the Cha Kwo Ling Tin Hau temple, the vibration impact monitoring stated in Section 8.3.1 of the EM&A Manual (AEIAR-173/2013) is not applicable to Contract No. ED/2018/04.

Mitigation Measures for Cultural Heritage

- 8.3 According to Condition 3.6 of EP-458/2013/C, to prevent damage to Cha Kwo Ling Tin Hau Temple and its Fung Shui rocks (Child-given rocks) during the construction phase, a temporarily fenced-off buffer zone (Rocks buffer zone is 5 m from the edge of Rocks and 15m from the edge of Rocks alter) with allowance for public access (minimum 1 m) around the temple and the Fung Shui rocks shall be provided. The open yard in front of the temple should be kept as usual for annual Tin Hau festival.
- 8.4 As there is a large buffer distance from the current works to Cha Kwo Ling Tin Hau Temple and the Fung Shui rocks (Child-given rocks), the temporarily fenced-off rocks buffer zone and from the edge of Rocks alter is not required. The fenced-off rocks buffer zone would be implemented when there are construction activities in vicinity of the cultural heritage.

9. LANDSCAPE AND VISUAL IMPACT

- 9.1 According to Section 9.3 of the EM&A Manual (AEIAR-173/2013), landscape and visual mitigation measures during the construction phase shall be checked to ensure that they are fully realized and implemented on site.
- 9.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measures listed in “Environmental Mitigation Implementation Schedule (EMIS)” (shown in **Appendix J**).
- 9.3 The implementation of landscape and visual mitigation measures was checked by a registered landscape architect. No non-compliance of the landscape and visual impact was recorded in the reporting month. Details of the audit findings and implementation status are presented in **Appendix I**.

10. LANDFILL GAS MONITORING

Monitoring Requirement

- 10.1 In accordance with Section 10.1.1 of the EM&A Manual (AEIAR-173/2013), monitoring of landfill gas is required for construction works within the Sai Tso Wan Landfill Consultation Zone during the construction phase. Since no excavation activity for this Project was carried out within the Sai Tso Wan Landfill Consultation Zone in the reporting month, no landfill gas monitoring is required.

11. HAZARD TO LIFE

- 11.1 According to Section 11.1.1 of EM&A Manual (AEIAR-173/2013), as no overnight storage of explosive on site is required for the construction of the Project, the hazard assessment is deemed not necessary. Thus, environmental monitoring and audit is not required.

12. ENVIRONMENTAL AUDIT**Site Audits**

- 12.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix I**.
- 12.2 Site audits were conducted on 06, 13, 20 & 27 June 2024 in the reporting month. Site inspection of the IEC was conducted on 27 June 2024. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

- 12.3 According to Environmental Permits, the approved EIA Reports (Register No.: AEIAR-174/2013 and AEIAR-173/2013), and the EM&A Manuals of the Project (AEIAR-174/2013 and AEIAR-173/2013), the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix J**.
- 12.4 The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Table 12.1**. Refer to **Appendix I** for the site inspection summary reports in the reporting month.

Table 12.1 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
<i>Air Quality</i>	N/A	N/A	N/A
<i>Noise</i>	N/A	N/A	N/A
<i>Water Quality</i>	N/A	N/A	N/A
<i>Ecology</i>	N/A	N/A	N/A
<i>Landscape and Visual</i>	N/A	N/A	N/A
<i>Waste/Chemical Management</i>	N/A	N/A	N/A
	N/A	N/A	N/A
<i>Permits /Licences</i>	N/A	N/A	N/A

Implementation Status of Event and Action Plans

12.5 The Event and Action Plans for air quality and construction noise monitoring, and the Limit Levels and Action Plan for landfill gas monitoring are presented in **Appendix L**.

Air Quality Monitoring

- No Action/Limit Level exceedance for 1-hour TSP monitoring was recorded in the reporting month.
- No Action Level exceedance for 24-hour TSP monitoring was recorded in the reporting month and no Limit Level exceedance for 24-hour TSP monitoring was recorded in the reporting month.

Construction Noise Monitoring

- No Action Level exceedance was recorded due to the documented complaint in the reporting month.
- No Limit Level exceedance for construction noise monitoring was recorded in the reporting month.

13. ENVIRONMENTAL NON-COMFORMANCE**Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution**

13.1 The summaries of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix M**.

Summary of Exceedance

13.2 The summary of exceedance record in the reporting month is shown in **Appendix N**.

14. FUTURE KEY ISSUES

14.1 Tentative construction programmes for the next three months are provided in **Appendix O**.

14.2 Major site activities undertaken for the coming months are summarized as follows:

Table 14.1 Site Activities and the Key Environmental Issues in the next Reporting Period

Contract No. and Project Title	Site Activities (July 2024)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	1) East Ventilation Building RC Structure 2) East Ventilation Building ABWF 3) East Ventilation Building E&M 4) East Bound – Wall & Crown 5) West Bound – OHVD 6) West Bound – Bulkhead Construction	<ul style="list-style-type: none"> • Wheel washing bay at site exits; • Temporary noise barriers for PMEs; • Sedimentation tank for settling muddy water; and • Make sure open stockpiles are covered during rainstorm.

Contract No. and Project Title	Site Activities (July 2024)	Key Environmental Issues
ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works ⁽¹⁾	N/A	

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

Monitoring Schedule

14.3 The tentative environmental monitoring schedule for the next month is shown in **Appendix D**.

15. CONCLUSION AND RECOMMENDATION

Conclusions

- 15.1 This is the 50th Monthly EM&A Report which presents the EM&A works undertaken during the reporting month in accordance with the EM&A Manual (AEIAR-173/2013) and the requirement under EP.

Air Quality Monitoring

- 15.2 No Action/Limit Level exceedance was recorded for 1-hour TSP monitoring in the reporting month.
- 15.3 No Action Level exceedance for 24-hour TSP monitoring was recorded in the reporting month and no Limit Level exceedance for 24-hour TSP monitoring was recorded in the reporting month.

Construction Noise Monitoring

- 15.4 No Action Level exceedance was recorded due to documented complaint in the reporting month.
- 15.5 No Limit Level exceedance for construction noise monitoring was recorded in the reporting month.

Site Audit

- 15.6 Four (4) ET joint weekly environmental site inspections were conducted for the Contract No. ED/2018/04 in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

- 15.7 No environmental complaint was received in the reporting period. No notifications of summons and successful prosecutions were received in the reporting month.

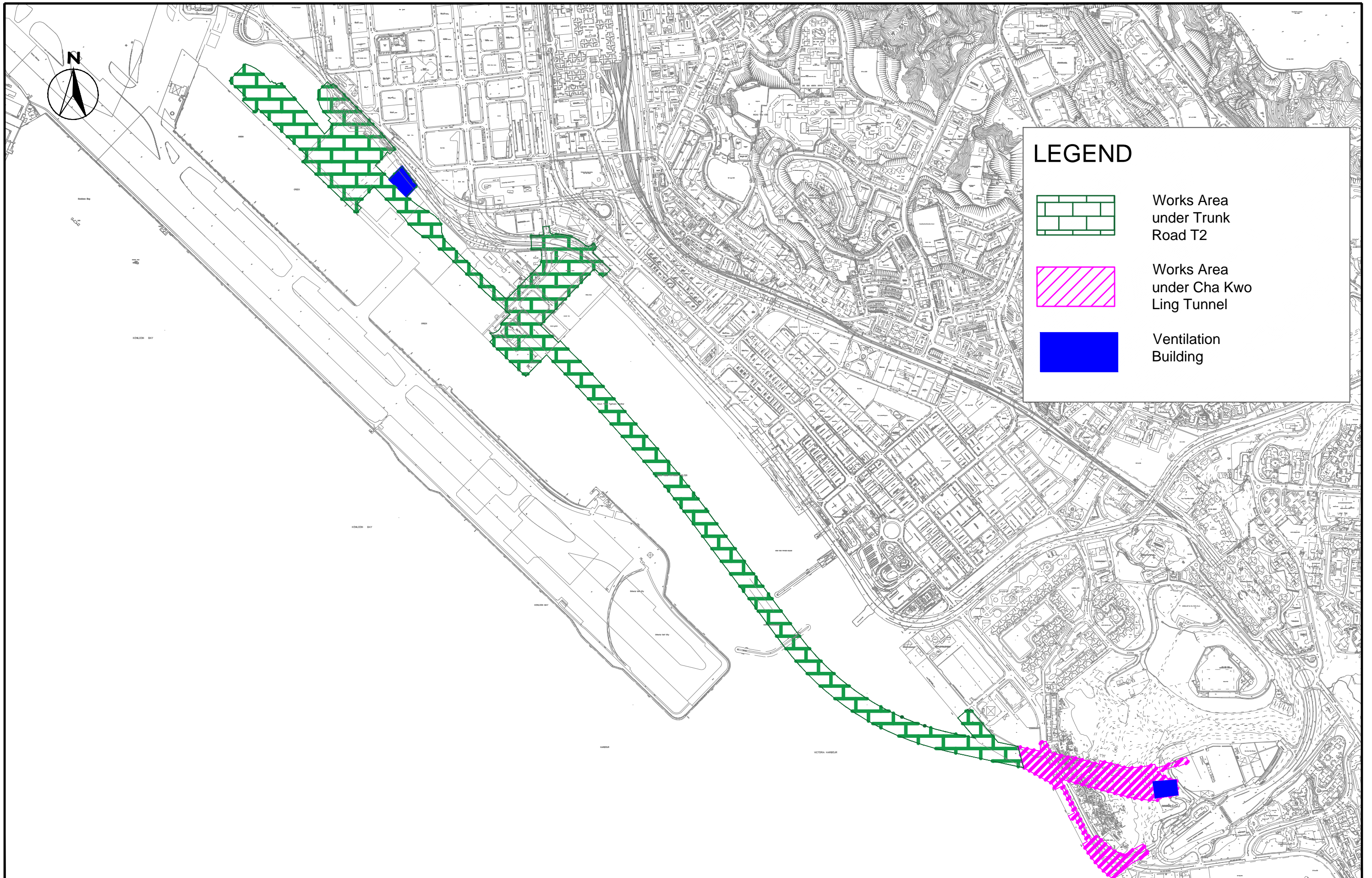
Recommendations

- 15.8 According to the environmental audit performed in the reporting month, the following recommendations were made:

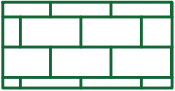


ED/2018/04

- N.A.

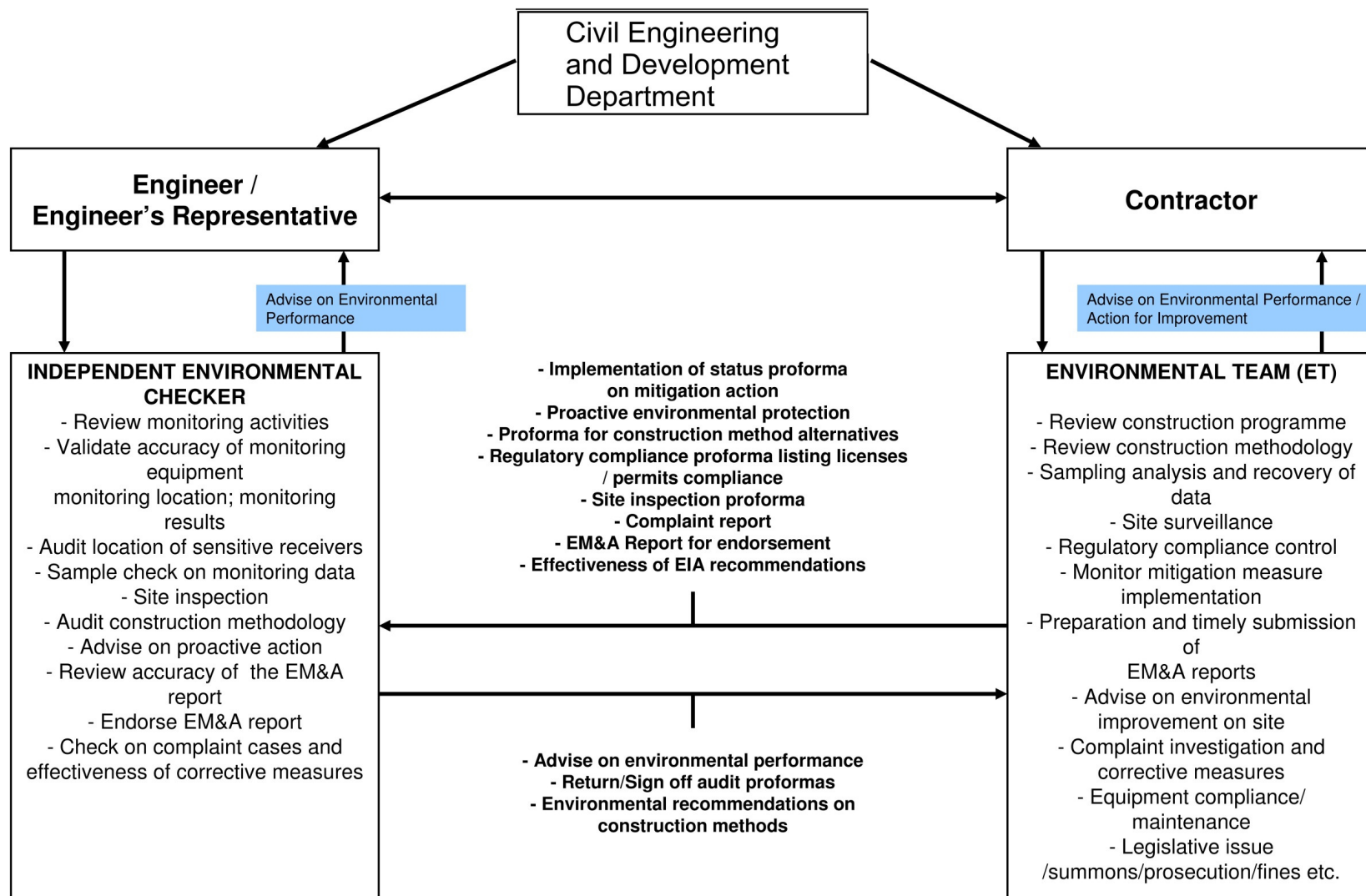
FIGURES



LEGEND

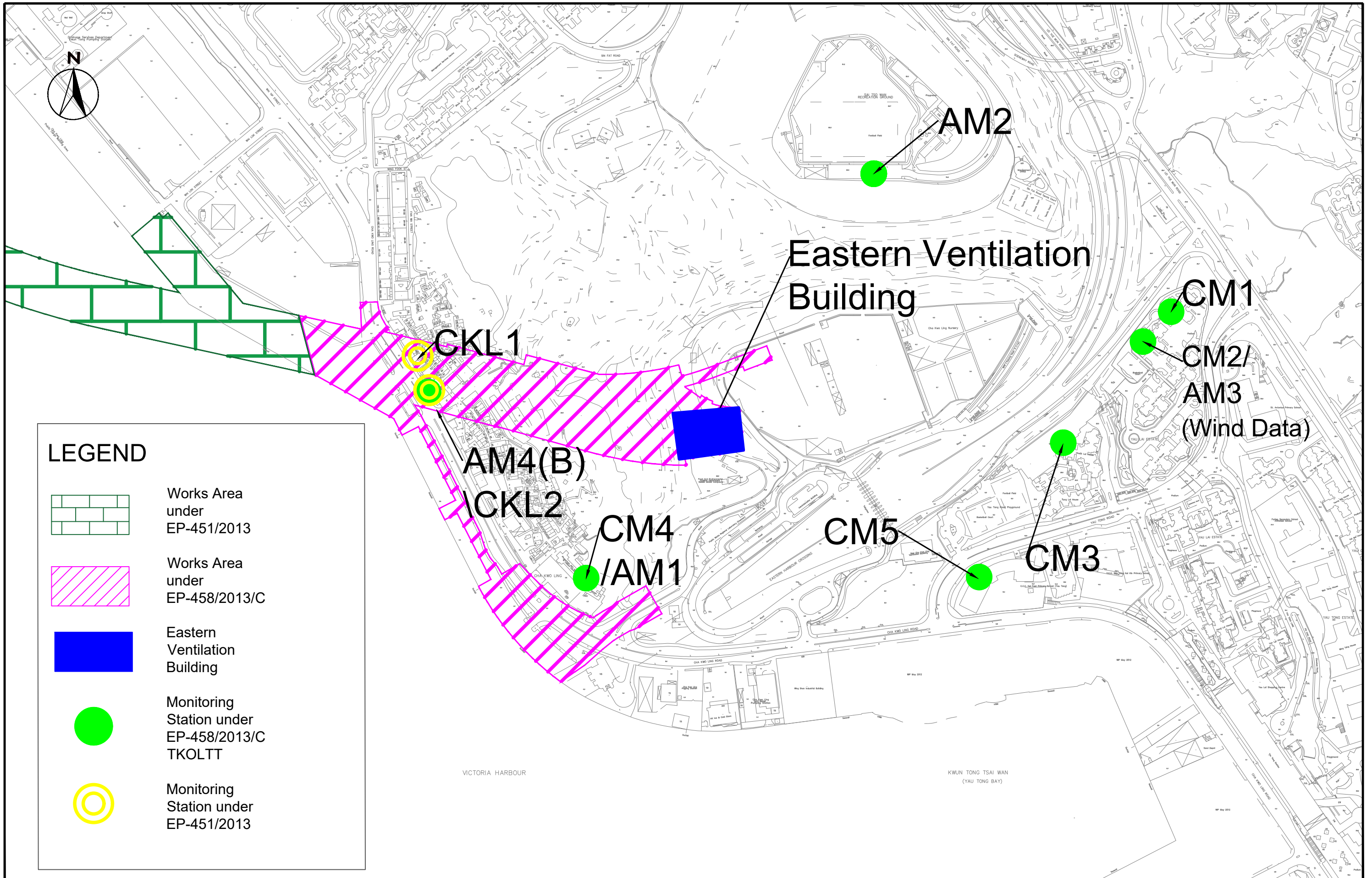
-  Works Area under Trunk Road T2
-  Works Area under Cha Kwo Ling Tunnel
-  Ventilation Building

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CHECK	KC	DRAWN	TL
JOB No.	MA20003	FIGURE No.	Fig 1
		REV	-



PLOT.DWG: K:\91164 Trunk Road T2\Cad Admin\A3_colour.plt
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Drawing title			Original Size	A3	Scale	N.T.S	Date	18/JAN/2013
PROJECT ORGANISATION AND LINES OF COMMUNICATION			© Copyright reserved		Drawing No.		FIGURE 1.2	
Rev.	Description	Date				Rev.		-



SCALE	1:4000@A3	DATE	Jul 22
CHECK	KC	DRAWN	TL
JOB No.	MA20003	FIGURE No.	Fig 2b
		REV	-

**APPENDIX A
ACTION AND LIMIT LEVELS**

APPENDIX A – Action and Limit Levels

Air Quality

1-hr TSP

Monitoring Stations	Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	Tin Hau Temple	275	500
AM2	Sai Tso Wan Recreation Ground	273	
AM3	Yau Lai Estate Bik Lai House	271	
AM4	Sitting-out Area at Cha Kwo Ling Village	278	

24-hr TSP

Monitoring Stations	Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	Tin Hau Temple	173	260
AM2	Sai Tso Wan Recreation Ground	192	
AM3	Yau Lai Estate Bik Lai House	167	
AM4(B)	Flat 103 Cha Kwo Ling Village	210	

Noise

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A) ⁽¹⁾

¹ 70 dB(A) for schools and 65 dB(A) for schools during examination period.

² Acceptable Noise Levels for Area Sensitivity Rating of A/B/C

³ If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

Landfill Gas Monitoring

Parameter	Limit Level
Oxygen	<19%
	<18%
Methane	>10% LEL (i.e. > 0.5% by volume)
	>20% LEL (i.e. > 1% by volume)
Carbon Dioxide	>0.5%
	>1.5%

**APPENDIX B
COPIES OF CALIBRATION
CERTIFICATES**

Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House
 Manufacturer: Davis Instruments
 Model No.: Davis7440
 Serial No.: MC01010A44
 Equipment No.: SA-03-04
 Date of Calibration: 18-Feb-2024
 Next Due Date: 18-Aug-2024

1. Performance check of Wind Speed

Wind Speed, m/s		Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	$D = V1 - V2$
0.0	0.0	0.0
1.5	1.7	-0.2
2.5	2.4	0.1
4.0	3.8	0.2

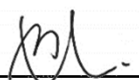
2. Performance check of Wind Direction

Wind Direction (°)		Difference D (°)
Wind Direction Reading (W1)	Marine Compass Value (W2)	$D = W1 - W2$
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

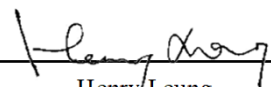
1. Performance Wind Speed Test - The wind meter was on-site calibrated against the anemometer
2. Performance Wind Direction Test - The wind meter was on-site calibrated against the marine compass at four direction

Calibrated by:



 Wong Shing Kwai

Approved by:



 Henry Leung

Certificate of Calibration

Calibration Certification Information			
Cal. Date: January 15, 2024	Rootsmeter S/N: 438320	Ta: 294	°K
Operator: Jim Tisch		Pa: 755.4	mm Hg
Calibration Model #: TE-5025A	Calibrator S/N: 3864		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4380	3.3	2.00
2	3	4	1	1.0270	6.4	4.00
3	5	6	1	0.9180	8.0	5.00
4	7	8	1	0.8750	8.9	5.50
5	9	10	1	0.7230	12.9	8.00

Data Tabulation					
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
1.0031	0.6975	1.4195	0.9956	0.6924	0.8823
0.9989	0.9727	2.0075	0.9915	0.9655	1.2477
0.9968	1.0858	2.2444	0.9894	1.0778	1.3950
0.9956	1.1378	2.3539	0.9882	1.1294	1.4631
0.9903	1.3697	2.8390	0.9829	1.3595	1.7645
QSTD	m=	2.11196	QA	m=	1.32248
	b=	-0.05043		b=	-0.03134
	r=	0.99998		r=	0.99998

Calculations			
Vstd=	$\Delta Vol \left(\frac{Pa - \Delta P}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$	Va=	$\Delta Vol \left(\frac{Pa - \Delta P}{Pa} \right)$
Qstd=	$Vstd / \Delta Time$	Qa=	$Va / \Delta Time$
For subsequent flow rate calculations:			
Qstd=	$1/m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right)$	Qa=	$1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg
Key	
ΔH: calibrator manometer reading (in H2O)	
ΔP: rootsmeter manometer reading (mm Hg)	
Ta: actual absolute temperature (°K)	
Pa: actual barometric pressure (mm Hg)	
b: intercept	
m: slope	

RECALIBRATION
US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0047

Project No. AM1 - Tin Hau Temple
 Date: 14-Apr-24 Next Due Date: 14-Jun-24 Operator: SK
 Equipment No.: A-01-05 Model No.: GS2310 Serial No. 10599

Ambient Condition			
Temperature, Ta (K)	300.7	Pressure, Pa (mmHg)	759.1

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05976	Intercept, bc	-0.05018
Last Calibration Date:	15-Jan-24	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	14-Jan-25	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	13.1	3.60	61.10	8.9	2.97
2	10.4	3.21	54.53	6.6	2.56
3	7.5	2.72	46.43	4.6	2.13
4	5.3	2.29	39.17	3.0	1.72
5	3.0	1.72	29.68	1.8	1.33

By Linear Regression of Y on X

Slope, $m_w =$ 0.0522 Intercept, $b_w =$ -0.2669

Correlation coefficient* = 0.9973

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation


From the TSP Field Calibration Curve, take Qstd = 43 CFM

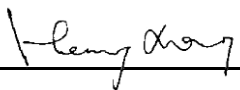
From the Regression Equation, the "Y" value according to

$$m_w \times Qstd + b_w = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (m_w \times Qstd + b_w)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.95

Remarks: _____

Conducted by: Wong Shing Kwai Signature:  Date: 14-Apr-24

Checked by: Henry Leung Signature:  Date: 14-Apr-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0048

Project No. AM1 - Tin Hau Temple
 Date: 14-Jun-24 Next Due Date: 14-Aug-24 Operator: SK
 Equipment No.: A-01-05 Model No.: GS2310 Serial No. 10599

Ambient Condition			
Temperature, Ta (K)	302.7	Pressure, Pa (mmHg)	753.1

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05976	Intercept, bc	-0.05018
Last Calibration Date:	15-Jan-24	$mc \times Q_{std} + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	14-Jan-25	$Q_{std} = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X-axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	13.3	3.60	61.11	8.8	2.93
2	10.5	3.20	54.40	6.5	2.52
3	7.6	2.72	46.40	4.5	2.10
4	5.4	2.30	39.25	2.9	1.68
5	3.2	1.77	30.41	1.7	1.29

By Linear Regression of Y on X

Slope, $m_w =$ 0.0537 Intercept, $b_w =$ -0.3839
 Correlation coefficient* = 0.9986

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation	
From the TSP Field Calibration Curve, take $Q_{std} = 43$ CFM	
From the Regression Equation, the "Y" value according to	
$m_w \times Q_{std} + b_w = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$	
Therefore, Set Point; $W = (m_w \times Q_{std} + b_w)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.80</u>	

Remarks: _____

Conducted by: Wong Shing Kwai Signature: Date: 14-Jun-24

Checked by: Henry Leung Signature: Date: 14-Jun-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0047

Project No. AM2 - Sai Tso Wan Recreation Ground
 Date: 14-Apr-24 Next Due Date: 14-Jun-24 Operator: SK
 Equipment No.: A-01-08 Model No.: GS2310 Serial No. 1287

Ambient Condition			
Temperature, Ta (K)	300.7	Pressure, Pa (mmHg)	759.1

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05976	Intercept, bc	-0.05018
Last Calibration Date:	15-Jan-24	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	14-Jan-25	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	13.2	3.61	61.33	8.7	2.93
2	10.2	3.18	54.01	6.4	2.52
3	7.5	2.72	46.43	4.5	2.11
4	5.2	2.27	38.80	2.9	1.69
5	3.0	1.72	29.68	1.5	1.22

By Linear Regression of Y on X

Slope, mw = 0.0542 Intercept, bw : -0.3992
 Correlation coefficient* = 0.9999

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation	
From the TSP Field Calibration Curve, take Qstd = 43 CFM	
From the Regression Equation, the "Y" value according to	
$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$	
Therefore, Set Point; W = (mw x Qstd + bw) ² x (760 / Pa) x (Ta / 298) =	<u>3.76</u>

Remarks: _____

Conducted by: Wong Shing Kwai Signature: Date: 14-Apr-24
 Checked by: Henry Leung Signature: Date: 14-Apr-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0048

Project No. AM2 - Sai Tso Wan Recreation Ground
 Date: 14-Jun-24 Next Due Date: 14-Aug-24 Operator: SK
 Equipment No.: A-01-08 Model No.: GS2310 Serial No. 1287

Ambient Condition			
Temperature, Ta (K)	<u>302.7</u>	Pressure, Pa (mmHg)	<u>753.1</u>

Orifice Transfer Standard Information					
Serial No.	<u>3864</u>	Slope, mc	<u>0.05976</u>	Intercept, bc	<u>-0.05018</u>
Last Calibration Date:	<u>15-Jan-24</u>	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	<u>14-Jan-25</u>	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X-axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	<u>13.4</u>	3.62	61.34	<u>8.5</u>	2.88
2	<u>10.3</u>	3.17	53.88	<u>6.3</u>	2.48
3	<u>7.6</u>	2.72	46.40	<u>4.4</u>	2.07
4	<u>5.3</u>	2.27	38.89	<u>2.8</u>	1.65
5	<u>3.0</u>	1.71	29.47	<u>1.5</u>	1.21

By Linear Regression of Y on X

Slope, mw = 0.0528 Intercept, bw : -0.3714

Correlation coefficient* = 0.9995

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.70

Remarks: _____

Conducted by: Wong Shing Kwai Signature: Date: 14-Jun-24

Checked by: Henry Leung Signature: Date: 14-Jun-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0047

Project No. AM3 - Yau Lai Estate, Bik Lai House
 Date: 14-Apr-24 Next Due Date: 14-Jun-24 Operator: SK
 Equipment No.: A-01-03 Model No.: GS2310 Serial No. 10379

Ambient Condition			
Temperature, Ta (K)	<u>300.7</u>	Pressure, Pa (mmHg)	<u>759.1</u>

Orifice Transfer Standard Information					
Serial No.	<u>3864</u>	Slope, mc	<u>0.05976</u>	Intercept, bc	<u>-0.05018</u>
Last Calibration Date:	<u>15-Jan-24</u>	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	<u>14-Jan-25</u>	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	<u>12.9</u>	3.57	60.64	<u>8.3</u>	2.87
2	<u>10.6</u>	3.24	55.04	<u>6.4</u>	2.52
3	<u>7.8</u>	2.78	47.34	<u>4.6</u>	2.13
4	<u>5.0</u>	2.22	38.07	<u>3.0</u>	1.72
5	<u>3.0</u>	1.72	29.68	<u>1.7</u>	1.30

By Linear Regression of Y on X

Slope, $m_w =$ 0.0496 Intercept, $b_w =$ -0.1829

Correlation coefficient* = 0.9987

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation


From the TSP Field Calibration Curve, take Qstd = 43 CFM

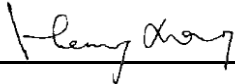
From the Regression Equation, the "Y" value according to

$$m_w \times Qstd + b_w = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (m_w \times Qstd + b_w)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.85

Remarks: _____

Conducted by: Wong Shing Kwai Signature:  Date: 14-Apr-24

Checked by: Henry Leung Signature:  Date: 14-Apr-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0048

Project No. AM3 - Yau Lai Estate, Bik Lai House
 Date: 14-Jun-24 Next Due Date: 14-Aug-24 Operator: SK
 Equipment No.: A-01-03 Model No.: GS2310 Serial No. 10379

Ambient Condition			
Temperature, Ta (K)	<u>302.7</u>	Pressure, Pa (mmHg)	<u>753.1</u>

Orifice Transfer Standard Information					
Serial No.	<u>3864</u>	Slope, mc	<u>0.05976</u>	Intercept, bc	<u>-0.05018</u>
Last Calibration Date:	<u>15-Jan-24</u>	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	<u>14-Jan-25</u>	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X-axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	<u>13.0</u>	3.56	60.43	<u>8.1</u>	2.81
2	<u>10.7</u>	3.23	54.90	<u>6.3</u>	2.48
3	<u>7.7</u>	2.74	46.70	<u>4.5</u>	2.10
4	<u>5.0</u>	2.21	37.80	<u>2.9</u>	1.68
5	<u>2.9</u>	1.68	28.99	<u>1.6</u>	1.25

By Linear Regression of Y on X

Slope, mw = 0.0489 Intercept, bw : -0.1727
 Correlation coefficient* = 0.9993

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.81

Remarks: _____

Conducted by: Wong Shing Kwai Signature: Date: 14-Jun-24

Checked by: Henry Leung Signature: Date: 14-Jun-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/026

Project No. CKL 2 - Flat 103 Cha Kwo Ling Village
 Date: 4-May-24 Next Due Date: 4-Jul-24 Operator: SK
 Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956

Ambient Condition			
Temperature, Ta (K)	297	Pressure, Pa (mmHg)	757

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05976	Intercept, bc	-0.05018
Last Calibration Date:	15-Jan-24	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	14-Jan-25	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	13.8	3.71	62.98	9.7	3.11
2	11.5	3.39	57.57	7.7	2.77
3	9.6	3.10	52.67	6.0	2.45
4	5.8	2.41	41.13	3.0	1.73
5	3.7	1.92	33.02	2.0	1.41

By Linear Regression of Y on X

Slope, mw = 0.0578 Intercept, bw : -0.5654
 Correlation coefficient* = 0.9965

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.70

Remarks: _____

Conducted by: Wong Shing Kwai Signature: [Signature] Date: 4-May-24

Checked by: Henry Leung Signature: [Signature] Date: 4-May-24

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	<u>Laser Dust Monitor</u>	Date of Calibration	<u>31-May-24</u>
Manufacturer:	<u>Sibata Scientific Technology LTD.</u>	Validity of Calibration Record	<u>31-Jul-24</u>
Model No.:	<u>LD-3B</u>		
Serial No.:	<u>2Y6194</u>		
Equipment No.:	<u>SA-01-02</u>	Sensitivity	<u>0.001 mg/m3</u>
High Volume Sampler No.:	<u>A-01-03</u>	Before Sensitivity Adjustment	<u>578</u>
Tisch Calibration Orifice No.:	<u>3864</u>	After Sensitivity Adjustment	<u>578</u>

Calibration of 1 hr TSP			
Calibration Point	Laser Dust Monitor		HVS
	Total Count	Count / Minute X-axis	Mass concentration (µg/m ³) Y-axis
1	4000	76.0	143.0
2	3600	66.0	122.0
3	3000	55.0	102.0
Average		65.7	122.3


By Linear Regression of Y on X
 Slope , mw = 1.9502 Intercept, bw = -5.7266
 Correlation coefficient* = 0.9991

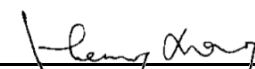
Set Correlation Factor , SCF
 SCF = [K=High Volume Sampler / Dust Meter, (µ g/m3)] 1.9

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by: 
 Technical Officer (Wong Shing Kwai)

Approved by: 
 Project Manager (Henry Leung)

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler


Description: Digital Dust Indicator Date of Calibration 31-May-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 31-Jul-24
 Model No.: LD-5R
 Serial No.: 8Y2374
 Equipment No.: SA-01-04 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 652
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 652

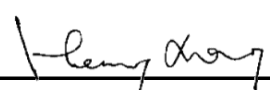
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	77.0	137.0
2	67.0	120.0
3	57.0	101.0
Average	67.0	119.3
By Linear Regression of Y on X Slope , mw = <u>1.8000</u> Intercept, bw = <u>-1.2667</u> Correlation coefficient* = <u>0.9995</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		119.3
Particulate Concentration by Dust Meter (µg/m ³)		67.0
Measureing time, (min)		60.0
Set Correlation Factor , SCF		
SCF = [K=High Volume Sampler / Dust Meter, (µg/m ³)]		<u>1.8</u>

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: 
 Technical Officer (Wong Shing Kwai)

Approved by: 
 Project Manager (Henry Leung)

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler


Description: Digital Dust Indicator Date of Calibration 31-May-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 31-Jul-24
 Model No.: LD-5R
 Serial No.: 8Y2373
 Equipment No.: SA-01-05 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 657
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 657

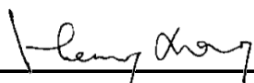
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	76.0	135.0
2	66.0	115.0
3	55.0	100.0
Average	65.7	116.7
By Linear Regression of Y on X Slope , mw = <u>1.6616</u> Intercept, bw = <u>7.5529</u> Correlation coefficient* = <u>0.9940</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		116.7
Particulate Concentration by Dust Meter (µg/m ³)		65.7
Measureing time, (min)		60.0
Set Correlation Factor , SCF		
SCF = [K=High Volume Sampler / Dust Meter, (µg/m ³)]		<u>1.8</u>

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: 
 Technical Officer (Wong Shing Kwai)

Approved by: 
 Project Manager (Henry Leung)

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler


Description: Digital Dust Indicator Date of Calibration 31-May-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 31-Jul-24
 Model No.: LD-5R
 Serial No.: 972777
 Equipment No.: SA-01-06 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 645
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 645

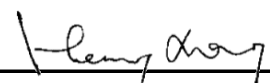
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	77.0	138.0
2	67.0	119.0
3	58.0	100.0
Average	67.3	119.0
By Linear Regression of Y on X Slope , mw = <u>1.9982</u> Intercept, bw = <u>-15.5424</u> Correlation coefficient* = <u>0.9995</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		119.0
Particulate Concentration by Dust Meter (µg/m ³)		67.3
Measureing time, (min)		60.0
Set Correlation Factor , SCF		
SCF = [K=High Volume Sampler / Dust Meter, (µg/m ³)]		<u>1.8</u>

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: 
 Technical Officer (Wong Shing Kwai)

Approved by: 
 Project Manager (Henry Leung)

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler


Description: Digital Dust Indicator Date of Calibration 31-May-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 31-Jul-24
 Model No.: LD-5R
 Serial No.: 972778
 Equipment No.: SA-01-07 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 735 CPM
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 735 CPM

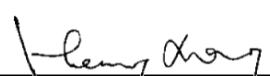
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	75.0	140.0
2	65.0	121.0
3	55.0	99.0
Average	65.0	120.0
By Linear Regression of Y on X Slope , mw = <u>2.0500</u> Intercept, bw = <u>-13.2500</u> Correlation coefficient* = <u>0.9991</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		120.0
Particulate Concentration by Dust Meter (µg/m ³)		65.0
Measureing time, (min)		60.0
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m ³)] <u>1.8</u>		

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: 
 Technical Officer (Wong Shing Kwai)

Approved by: 
 Project Manager (Henry Leung)

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler


Description: Digital Dust Indicator Date of Calibration 31-May-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 31-Jul-24
 Model No.: LD-5R
 Serial No.: 972780
 Equipment No.: SA-01-09 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 739 CPM
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 739 CPM

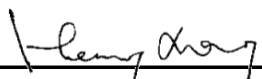
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	73.0	140.0
2	63.0	120.0
3	53.0	101.0
Average	63.0	120.3
By Linear Regression of Y on X Slope , mw = <u>1.9500</u> Intercept, bw = <u>-2.5167</u> Correlation coefficient* = <u>0.9999</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		120.3
Particulate Concentration by Dust Meter (µg/m ³)		63.0
Measureing time, (min)		60.0
Set Correlation Factor , SCF		
SCF = [K=High Volume Sampler / Dust Meter, (µg/m ³)]		<u>1.9</u>

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: 
 Technical Officer (Wong Shing Kwai)

Approved by: 
 Project Manager (Henry Leung)



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C241168

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC24-0305) Date of Receipt / 收件日期 : 21 February 2024

Description / 儀器名稱 : Acoustical Calibrator
Manufacturer / 製造商 : Brüel & Kjær
Model No. / 型號 : 4231
Serial No. / 編號 : 2326353
Supplied By / 委託者 : Cinotech Consultants Limited
Room 1710, Technology Park, 18 On Lai Street,
Shatin, N.T. Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

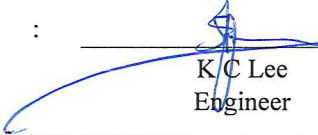
DATE OF TEST / 測試日期 : 3 March 2024

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By : 
測試 : H T Wong
Assistant Engineer

Certified By : 
核證 : K C Lee
Engineer

Date of Issue : 4 March 2024
簽發日期

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門興安里一號四樓

Tel/電話: (852) 2927 2606

Fax/傳真: (852) 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Certificate of Calibration

校正證書

Certificate No. : C241168

證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C233799
CL281	Multifunction Acoustic Calibrator	CDK2302738
TST150A	Measuring Amplifier	C221750

- Test procedure : MA100N.

- Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Limit (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.90	± 0.2	± 0.20
114 dB, 1 kHz	114.00		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Limit	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00396
Application No. : HP00278

Issue Date : 02 Aug 2023

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Sound Level Calibrator.

Equipment No.: : N-13-02

Manufacturer: : SOUNDTEK

Other information :

Model No.	ST-120
Serial No.	181001636

Date Received : 01 Aug 2023

Test Period : 01 Aug 2023 to 01 Aug 2023

Test Requested : Performance checking for Sound Level Calibrator

Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to read 'Lee Wai Kit', is written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00396
Application No. : HP00278

Issue Date : 02 Aug 2023

Certificate of Calibration

Measuring equipment :	Description	Sound Calibrator
	Manufacturer	Brüel & Kjær
	Model No.	TYPE 4231
	Serial No.	2326353
	Equipment No.	N-02-01
	Description	Sound Meter
	Manufacturer	SVANTEK
	Model No.	SVAN 977
	Serial No.	92677
	Microphone No.	10352
	Equipment No.	N-14-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 0.3
114.0	114.3	+ 0.3	± 0.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00389
Application No. : HP00262

Issue Date : 20 Jul 2023

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Sound Level Calibrator.

Equipment No.: : N-16-01

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information :

Model No.	AWA6021A
Serial No.	1023253

Date Received : 18 Jul 2023

Test Period : 19 Jul 2023 to 19 Jul 2023

Test Requested : Performance checking for Sound Level Calibrator

Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to read 'Lee Wai Kit', is written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00389
Application No. : HP00262

Issue Date : 20 Jul 2023

Certificate of Calibration

Measuring equipment :

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Description	Sound Meter
Manufacturer	BSWA Technology
Model No.	BSWA 308
Serial No.	570183
Microphone No.	570605
Equipment No.	N-12-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 0.3
114.0	114.2	+ 0.2	± 0.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00676
Application No. : HP00537

Issue Date : 03 May 2024

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : SN-01-01

Manufacturer: : SVANTEK

Other information :

Model No.	SVAN 979
Serial No.	27189
Microphone No.	25202

Date Received : 02 May 2024

Test Period : 02 May 2024 to 02 May 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to read 'Lee Wai Kit', is written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00676
Application No. : HP00537

Issue Date : 03 May 2024

Certificate of Calibration

Measuring equipment :

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	± 0.0	± 1.5
114.0	114.1	+ 0.1	± 1.5

- Note** : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
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Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00390
Application No. : HP00263

Issue Date : 24 Jul 2023

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-08-12

Manufacturer: : SVANTEK

Other information :

Model No.	SVAN 957
Serial No.	23851
Microphone No.	22391

Date Received : 18 Jul 2023

Test Period : 20 Jul 2023 to 20 Jul 2023

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to read 'Lee Wai Kit', is written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00390

Issue Date : 24 Jul 2023

Application No. : HP00263

Certificate of Calibration

Measuring equipment :	Description	Sound Calibrator
	Manufacturer	Brüel & Kjær
	Model No.	TYPE 4231
	Serial No.	2326353
	Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.9	- 0.1	± 1.5
114.0	114.1	+ 0.1	± 1.5

- Note** : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00647
Application No. : HP00514

Issue Date : 11 Apr 2024

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-01

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	570183
Microphone No.	590073

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to read 'Lee Wai Kit', is written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00647
Application No. : HP00514

Issue Date : 11 Apr 2024

Certificate of Calibration

Measuring equipment :

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.2	+ 0.2	± 1.5

- Note** : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00430
Application No. : HP00304

Issue Date : 08 Sep 2023

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-02

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	570187
Microphone No.	590079

Date Received : 06 Sep 2023

Test Period : 07 Sep 2023 to 07 Sep 2023

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to be 'Lee Wai Kit', written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00430
Application No. : HP00304

Issue Date : 08 Sep 2023

Certificate of Calibration

Measuring equipment :	Description	Sound Calibrator
	Manufacturer	Brüel & Kjær
	Model No.	TYPE 4231
	Serial No.	2326353
	Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 1.5
114.0	114.2	+ 0.2	± 1.5

- Note** : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00568
Application No. : HP00436

Issue Date : 14 Feb 2024

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-03

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	570188
Microphone No.	570608

Date Received : 05 Feb 2024

Test Period : 07 Feb 2024 to 07 Feb 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

A handwritten signature in black ink, appearing to read 'Lee Wai Kit', is written over a horizontal line.

Lee Wai Kit
Laboratory Manager

High Precision Chemical Testing Ltd.

Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: <https://www.hpct.com.hk>



Report No. : 00568
Application No. : HP00436

Issue Date : 14 Feb 2024

Certificate of Calibration

Measuring equipment :

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	± 0.0	± 1.5
114.0	113.9	- 0.1	± 1.5

- Note** : 1. “Instrument Readings” presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

High Precision Chemical Testing Ltd.

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Report No. : 00648
Application No. : HP00515

Issue Date : 11 Apr 2024

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-05

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580287
Microphone No.	570610

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : **1. Information of the sample description provided by the Applicant.**
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

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Report No. : 00648
Application No. : HP00515

Issue Date : 11 Apr 2024

Certificate of Calibration

Measuring equipment :

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.1	+ 0.1	± 1.5

- Note** : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

APPENDIX C
WEATHER INFORMATION

Appendix C - Weather Conditions During Impact Monitoring Period

Date	Mean Air Temperature (°C) ¹	Mean Relative Humidity (%) ²	Precipitation (mm) ³
1-Jun-24	27.1	88	54.2
2-Jun-24	28.0	84	3.2
3-Jun-24	25.3	91	8.6
4-Jun-24	24.1	86	2.9
5-Jun-24	24.4	90	8.5
6-Jun-24	26.5	88	Trace
7-Jun-24	25.6	92	1.6
8-Jun-24	26.3	90	6.8
9-Jun-24	26.6	93	33.5
10-Jun-24	28.5	85	0.2
11-Jun-24	29.1	84	0.6
12-Jun-24	29.5	83	8.3
13-Jun-24	29.9	83	4.9
14-Jun-24	29.7	82	32.0
15-Jun-24	28.2	86	28.3
16-Jun-24	28.8	86	17.5
17-Jun-24	30.1	80	Trace
18-Jun-24	29.9	81	4.6
19-Jun-24	30.0	80	9.4
20-Jun-24	30.0	82	5.0
21-Jun-24	30.8	76	0.0
22-Jun-24	31.2	75	0.0
23-Jun-24	30.5	78	4.7
24-Jun-24	30.8	77	0.3
25-Jun-24	30.1	79	19.0
26-Jun-24	30.4	79	0.0
27-Jun-24	30.7	79	1.4
28-Jun-24	31.0	75	1.6
29-Jun-24	29.2	82	15.5
30-Jun-24	30.3	79	8.7

(Reporting Month: June 2024)**Remarks:**

Source - Hong Kong Observatory

¹⁻³Retrieved from Manned Weather Station (Hong Kong Observatory) (22°18'07" N, 114°10'27" E)

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
1 Jun 2024	12:00 AM	WNW	3.7
1 Jun 2024	1:00 AM	W	3.8
1 Jun 2024	2:00 AM	W	2.6
1 Jun 2024	3:00 AM	W	3.2
1 Jun 2024	4:00 AM	SSW	1.7
1 Jun 2024	5:00 AM	SSE	0.8
1 Jun 2024	6:00 AM	SSW	1.4
1 Jun 2024	7:00 AM	WSW	1.9
1 Jun 2024	8:00 AM	SW	1.1
1 Jun 2024	9:00 AM	S	1.5
1 Jun 2024	10:00 AM	SSE	1.3
1 Jun 2024	11:00 AM	SSE	1.5
1 Jun 2024	12:00 PM	SSW	1.3
1 Jun 2024	1:00 PM	S	1.2
1 Jun 2024	2:00 PM	SSE	1.9
1 Jun 2024	3:00 PM	SSE	2.1
1 Jun 2024	4:00 PM	S	2.5
1 Jun 2024	5:00 PM	SSE	2.4
1 Jun 2024	6:00 PM	SSE	1.9
1 Jun 2024	7:00 PM	S	1.8
1 Jun 2024	8:00 PM	SSE	1.8
1 Jun 2024	9:00 PM	SSE	1.6
1 Jun 2024	10:00 PM	SSE	1.3
1 Jun 2024	11:00 PM	SSE	1.1
2 Jun 2024	12:00 AM	SE	1.0
2 Jun 2024	1:00 AM	SSE	1.2
2 Jun 2024	2:00 AM	SSE	1.0
2 Jun 2024	3:00 AM	SE	0.7
2 Jun 2024	4:00 AM	SE	0.4
2 Jun 2024	5:00 AM	SSE	0.9
2 Jun 2024	6:00 AM	SSE	0.5
2 Jun 2024	7:00 AM	SSE	0.4
2 Jun 2024	8:00 AM	S	0.6
2 Jun 2024	9:00 AM	SSE	1.1
2 Jun 2024	10:00 AM	SSE	0.7
2 Jun 2024	11:00 AM	SSE	1.1
2 Jun 2024	12:00 PM	SSE	0.9
2 Jun 2024	1:00 PM	SSE	1.0
2 Jun 2024	2:00 PM	SSW	0.8
2 Jun 2024	3:00 PM	SE	0.8
2 Jun 2024	4:00 PM	SSW	0.6
2 Jun 2024	5:00 PM	SW	0.8
2 Jun 2024	6:00 PM	SW	1.1
2 Jun 2024	7:00 PM	SE	0.8
2 Jun 2024	8:00 PM	SSE	0.7
2 Jun 2024	9:00 PM	S	0.4
2 Jun 2024	10:00 PM	S	0.0
2 Jun 2024	11:00 PM	S	0.0
3 Jun 2024	12:00 AM	S	0.2
3 Jun 2024	1:00 AM	S	0.1
3 Jun 2024	2:00 AM	S	0.2
3 Jun 2024	3:00 AM	S	0.0
3 Jun 2024	4:00 AM	S	0.3
3 Jun 2024	5:00 AM	SSW	0.4
3 Jun 2024	6:00 AM	SW	1.2
3 Jun 2024	7:00 AM	S	0.8
3 Jun 2024	8:00 AM	S	1.0

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
3 Jun 2024	9:00 AM	S	1.1
3 Jun 2024	10:00 AM	SSE	0.4
3 Jun 2024	11:00 AM	S	0.4
3 Jun 2024	12:00 PM	S	0.2
3 Jun 2024	1:00 PM	SE	0.3
3 Jun 2024	2:00 PM	SSW	0.6
3 Jun 2024	3:00 PM	SW	0.9
3 Jun 2024	4:00 PM	SW	1.3
3 Jun 2024	5:00 PM	WSW	1.3
3 Jun 2024	6:00 PM	WSW	1.4
3 Jun 2024	7:00 PM	W	1.6
3 Jun 2024	8:00 PM	W	1.6
3 Jun 2024	9:00 PM	W	2.2
3 Jun 2024	10:00 PM	WSW	1.0
3 Jun 2024	11:00 PM	WSW	1.1
4 Jun 2024	12:00 AM	SW	1.2
4 Jun 2024	1:00 AM	SW	1.5
4 Jun 2024	2:00 AM	WSW	1.8
4 Jun 2024	3:00 AM	SW	1.3
4 Jun 2024	4:00 AM	WSW	1.6
4 Jun 2024	5:00 AM	SW	0.9
4 Jun 2024	6:00 AM	WSW	1.5
4 Jun 2024	7:00 AM	SSW	0.9
4 Jun 2024	8:00 AM	SSW	1.5
4 Jun 2024	9:00 AM	S	1.4
4 Jun 2024	10:00 AM	SSW	1.5
4 Jun 2024	11:00 AM	WSW	2.0
4 Jun 2024	12:00 PM	SW	1.1
4 Jun 2024	1:00 PM	SSE	1.4
4 Jun 2024	2:00 PM	S	1.2
4 Jun 2024	3:00 PM	S	1.7
4 Jun 2024	4:00 PM	WSW	2.2
4 Jun 2024	5:00 PM	SSW	1.7
4 Jun 2024	6:00 PM	SW	0.9
4 Jun 2024	7:00 PM	SW	1.4
4 Jun 2024	8:00 PM	S	0.9
4 Jun 2024	9:00 PM	SW	1.0
4 Jun 2024	10:00 PM	W	1.7
4 Jun 2024	11:00 PM	SW	1.0
5 Jun 2024	12:00 AM	SW	1.4
5 Jun 2024	1:00 AM	SW	1.0
5 Jun 2024	2:00 AM	SSW	1.1
5 Jun 2024	3:00 AM	S	0.6
5 Jun 2024	4:00 AM	S	0.7
5 Jun 2024	5:00 AM	SSW	0.5
5 Jun 2024	6:00 AM	S	0.6
5 Jun 2024	7:00 AM	S	0.5
5 Jun 2024	8:00 AM	S	0.6
5 Jun 2024	9:00 AM	WSW	1.1
5 Jun 2024	10:00 AM	SSW	1.5
5 Jun 2024	11:00 AM	SW	1.5
5 Jun 2024	12:00 PM	SW	1.7
5 Jun 2024	1:00 PM	WSW	1.5
5 Jun 2024	2:00 PM	W	1.7
5 Jun 2024	3:00 PM	WSW	1.2
5 Jun 2024	4:00 PM	WSW	1.0
5 Jun 2024	5:00 PM	SW	0.8

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
5 Jun 2024	6:00 PM	W	1.2
5 Jun 2024	7:00 PM	SSE	0.6
5 Jun 2024	8:00 PM	SW	0.8
5 Jun 2024	9:00 PM	S	0.7
5 Jun 2024	10:00 PM	SSE	1.0
5 Jun 2024	11:00 PM	SSE	0.8
6 Jun 2024	12:00 AM	SSE	0.5
6 Jun 2024	1:00 AM	S	0.4
6 Jun 2024	2:00 AM	S	0.7
6 Jun 2024	3:00 AM	S	0.7
6 Jun 2024	4:00 AM	SSE	0.2
6 Jun 2024	5:00 AM	SSE	0.6
6 Jun 2024	6:00 AM	SSE	0.9
6 Jun 2024	7:00 AM	S	1.0
6 Jun 2024	8:00 AM	S	1.0
6 Jun 2024	9:00 AM	S	0.9
6 Jun 2024	10:00 AM	SSW	1.1
6 Jun 2024	11:00 AM	W	1.4
6 Jun 2024	12:00 PM	S	0.9
6 Jun 2024	1:00 PM	S	1.4
6 Jun 2024	2:00 PM	S	1.6
6 Jun 2024	3:00 PM	SSW	1.0
6 Jun 2024	4:00 PM	WSW	0.5
6 Jun 2024	5:00 PM	SSW	0.4
6 Jun 2024	6:00 PM	SW	0.7
6 Jun 2024	7:00 PM	SE	0.3
6 Jun 2024	8:00 PM	W	0.8
6 Jun 2024	9:00 PM	SW	0.6
6 Jun 2024	10:00 PM	SW	0.7
6 Jun 2024	11:00 PM	S	0.6
7 Jun 2024	12:00 AM	SSW	0.5
7 Jun 2024	1:00 AM	SW	0.3
7 Jun 2024	2:00 AM	SSW	0.3
7 Jun 2024	3:00 AM	S	0.3
7 Jun 2024	4:00 AM	SSE	0.3
7 Jun 2024	5:00 AM	SSE	0.6
7 Jun 2024	6:00 AM	SSW	1.2
7 Jun 2024	7:00 AM	SSW	1.1
7 Jun 2024	8:00 AM	SSW	1.4
7 Jun 2024	9:00 AM	SSW	1.6
7 Jun 2024	10:00 AM	S	1.6
7 Jun 2024	11:00 AM	SW	1.6
7 Jun 2024	12:00 PM	S	1.5
7 Jun 2024	1:00 PM	SSW	1.7
7 Jun 2024	2:00 PM	SSW	1.5
7 Jun 2024	3:00 PM	S	1.1
7 Jun 2024	4:00 PM	S	1.0
7 Jun 2024	5:00 PM	SSE	0.8
7 Jun 2024	6:00 PM	S	1.1
7 Jun 2024	7:00 PM	S	1.1
7 Jun 2024	8:00 PM	SSE	0.7
7 Jun 2024	9:00 PM	S	1.1
7 Jun 2024	10:00 PM	S	0.8
7 Jun 2024	11:00 PM	SSE	0.6
8 Jun 2024	12:00 AM	S	1.0
8 Jun 2024	1:00 AM	S	1.1
8 Jun 2024	2:00 AM	S	0.7

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
8 Jun 2024	3:00 AM	SE	0.4
8 Jun 2024	4:00 AM	S	0.5
8 Jun 2024	5:00 AM	SSE	0.2
8 Jun 2024	6:00 AM	S	0.3
8 Jun 2024	7:00 AM	SSE	0.4
8 Jun 2024	8:00 AM	SSW	0.5
8 Jun 2024	9:00 AM	SSW	0.7
8 Jun 2024	10:00 AM	SE	0.6
8 Jun 2024	11:00 AM	SE	0.7
8 Jun 2024	12:00 PM	S	0.9
8 Jun 2024	1:00 PM	SE	1.2
8 Jun 2024	2:00 PM	SSE	1.0
8 Jun 2024	3:00 PM	WSW	2.1
8 Jun 2024	4:00 PM	WSW	1.8
8 Jun 2024	5:00 PM	WSW	1.7
8 Jun 2024	6:00 PM	W	1.6
8 Jun 2024	7:00 PM	S	0.9
8 Jun 2024	8:00 PM	S	1.0
8 Jun 2024	9:00 PM	SE	0.4
8 Jun 2024	10:00 PM	S	0.4
8 Jun 2024	11:00 PM	S	0.6
9 Jun 2024	12:00 AM	W	1.2
9 Jun 2024	1:00 AM	S	0.6
9 Jun 2024	2:00 AM	S	0.8
9 Jun 2024	3:00 AM	SE	0.5
9 Jun 2024	4:00 AM	SSE	0.3
9 Jun 2024	5:00 AM	S	0.7
9 Jun 2024	6:00 AM	S	0.3
9 Jun 2024	7:00 AM	SE	1.1
9 Jun 2024	8:00 AM	SSW	0.7
9 Jun 2024	9:00 AM	S	0.7
9 Jun 2024	10:00 AM	SW	0.4
9 Jun 2024	11:00 AM	S	0.5
9 Jun 2024	12:00 PM	SSE	0.1
9 Jun 2024	1:00 PM	S	0.2
9 Jun 2024	2:00 PM	SSE	0.2
9 Jun 2024	3:00 PM	S	0.3
9 Jun 2024	4:00 PM	SSE	0.2
9 Jun 2024	5:00 PM	SSE	0.2
9 Jun 2024	6:00 PM	S	0.2
9 Jun 2024	7:00 PM	SE	0.1
9 Jun 2024	8:00 PM	S	0.0
9 Jun 2024	9:00 PM	SSE	0.0
9 Jun 2024	10:00 PM	S	0.1
9 Jun 2024	11:00 PM	S	0.1
10 Jun 2024	12:00 AM	SSE	0.0
10 Jun 2024	1:00 AM	SSW	0.0
10 Jun 2024	2:00 AM	ESE	0.0
10 Jun 2024	3:00 AM	SSE	0.0
10 Jun 2024	4:00 AM	S	0.4
10 Jun 2024	5:00 AM	SE	0.1
10 Jun 2024	6:00 AM	SSE	0.1
10 Jun 2024	7:00 AM	SSE	0.1
10 Jun 2024	8:00 AM	SW	0.8
10 Jun 2024	9:00 AM	WSW	1.0
10 Jun 2024	10:00 AM	W	1.2
10 Jun 2024	11:00 AM	SW	1.8

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
10 Jun 2024	12:00 PM	SW	1.5
10 Jun 2024	1:00 PM	SW	1.4
10 Jun 2024	2:00 PM	SW	1.2
10 Jun 2024	3:00 PM	S	0.9
10 Jun 2024	4:00 PM	SSE	0.9
10 Jun 2024	5:00 PM	WSW	1.2
10 Jun 2024	6:00 PM	WSW	1.3
10 Jun 2024	7:00 PM	SSW	0.8
10 Jun 2024	8:00 PM	S	0.4
10 Jun 2024	9:00 PM	SSE	0.4
10 Jun 2024	10:00 PM	S	0.3
10 Jun 2024	11:00 PM	SSE	0.3
11 Jun 2024	12:00 AM	SSE	0.4
11 Jun 2024	1:00 AM	SSE	0.4
11 Jun 2024	2:00 AM	SSE	0.3
11 Jun 2024	3:00 AM	S	0.2
11 Jun 2024	4:00 AM	S	0.2
11 Jun 2024	5:00 AM	S	0.1
11 Jun 2024	6:00 AM	SSW	0.2
11 Jun 2024	7:00 AM	SSW	0.5
11 Jun 2024	8:00 AM	S	0.8
11 Jun 2024	9:00 AM	S	1.0
11 Jun 2024	10:00 AM	SSE	1.3
11 Jun 2024	11:00 AM	SSE	1.6
11 Jun 2024	12:00 PM	SSW	1.9
11 Jun 2024	1:00 PM	SSE	1.3
11 Jun 2024	2:00 PM	SSE	1.5
11 Jun 2024	3:00 PM	SSE	1.5
11 Jun 2024	4:00 PM	SSE	0.9
11 Jun 2024	5:00 PM	SE	1.2
11 Jun 2024	6:00 PM	SE	1.2
11 Jun 2024	7:00 PM	SSE	0.8
11 Jun 2024	8:00 PM	SE	0.8
11 Jun 2024	9:00 PM	SW	0.7
11 Jun 2024	10:00 PM	S	0.5
11 Jun 2024	11:00 PM	S	0.7
12 Jun 2024	12:00 AM	SW	0.8
12 Jun 2024	1:00 AM	SW	0.7
12 Jun 2024	2:00 AM	SSW	0.5
12 Jun 2024	3:00 AM	SSW	0.8
12 Jun 2024	4:00 AM	SSW	0.7
12 Jun 2024	5:00 AM	W	1.0
12 Jun 2024	6:00 AM	SSW	1.0
12 Jun 2024	7:00 AM	SSW	1.1
12 Jun 2024	8:00 AM	S	1.1
12 Jun 2024	9:00 AM	SSE	1.3
12 Jun 2024	10:00 AM	SSE	1.5
12 Jun 2024	11:00 AM	SSE	1.5
12 Jun 2024	12:00 PM	SE	1.9
12 Jun 2024	1:00 PM	SSE	1.6
12 Jun 2024	2:00 PM	S	1.8
12 Jun 2024	3:00 PM	S	1.6
12 Jun 2024	4:00 PM	SSE	1.0
12 Jun 2024	5:00 PM	SSE	1.2
12 Jun 2024	6:00 PM	SSE	1.0
12 Jun 2024	7:00 PM	S	1.2
12 Jun 2024	8:00 PM	SSE	1.3

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
12 Jun 2024	9:00 PM	SE	1.1
12 Jun 2024	10:00 PM	SSE	1.1
12 Jun 2024	11:00 PM	SSE	1.0
13 Jun 2024	12:00 AM	S	1.0
13 Jun 2024	1:00 AM	S	0.7
13 Jun 2024	2:00 AM	S	0.7
13 Jun 2024	3:00 AM	SSE	1.2
13 Jun 2024	4:00 AM	S	1.0
13 Jun 2024	5:00 AM	SSE	1.0
13 Jun 2024	6:00 AM	S	0.9
13 Jun 2024	7:00 AM	S	0.8
13 Jun 2024	8:00 AM	SSE	1.2
13 Jun 2024	9:00 AM	S	1.4
13 Jun 2024	10:00 AM	SSE	1.6
13 Jun 2024	11:00 AM	SE	1.5
13 Jun 2024	12:00 PM	SE	1.5
13 Jun 2024	1:00 PM	SSE	1.6
13 Jun 2024	2:00 PM	SE	1.9
13 Jun 2024	3:00 PM	SSE	1.9
13 Jun 2024	4:00 PM	SSE	1.6
13 Jun 2024	5:00 PM	SSE	1.4
13 Jun 2024	6:00 PM	SSE	1.1
13 Jun 2024	7:00 PM	SSE	1.0
13 Jun 2024	8:00 PM	SSW	0.9
13 Jun 2024	9:00 PM	S	0.4
13 Jun 2024	10:00 PM	S	0.6
13 Jun 2024	11:00 PM	S	0.5
14 Jun 2024	12:00 AM	SW	0.5
14 Jun 2024	1:00 AM	W	1.1
14 Jun 2024	2:00 AM	SW	0.9
14 Jun 2024	3:00 AM	S	0.7
14 Jun 2024	4:00 AM	SSW	0.6
14 Jun 2024	5:00 AM	S	0.7
14 Jun 2024	6:00 AM	SSE	0.6
14 Jun 2024	7:00 AM	SSW	0.8
14 Jun 2024	8:00 AM	WSW	1.0
14 Jun 2024	9:00 AM	S	1.2
14 Jun 2024	10:00 AM	S	1.0
14 Jun 2024	11:00 AM	SW	0.9
14 Jun 2024	12:00 PM	S	0.6
14 Jun 2024	1:00 PM	S	0.6
14 Jun 2024	2:00 PM	S	1.2
14 Jun 2024	3:00 PM	S	1.0
14 Jun 2024	4:00 PM	SSE	0.9
14 Jun 2024	5:00 PM	SSE	0.9
14 Jun 2024	6:00 PM	S	0.7
14 Jun 2024	7:00 PM	SSE	0.7
14 Jun 2024	8:00 PM	SSE	0.4
14 Jun 2024	9:00 PM	SSE	0.4
14 Jun 2024	10:00 PM	SSW	0.3
14 Jun 2024	11:00 PM	S	0.3
15 Jun 2024	12:00 AM	S	0.3
15 Jun 2024	1:00 AM	S	0.4
15 Jun 2024	2:00 AM	S	0.4
15 Jun 2024	3:00 AM	S	0.6
15 Jun 2024	4:00 AM	SW	0.8
15 Jun 2024	5:00 AM	SSW	0.8

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
15 Jun 2024	6:00 AM	S	1.7
15 Jun 2024	7:00 AM	SSE	1.4
15 Jun 2024	8:00 AM	WSW	1.3
15 Jun 2024	9:00 AM	SW	0.7
15 Jun 2024	10:00 AM	SSE	0.6
15 Jun 2024	11:00 AM	SSW	0.6
15 Jun 2024	12:00 PM	SSW	0.9
15 Jun 2024	1:00 PM	SSE	0.7
15 Jun 2024	2:00 PM	S	1.0
15 Jun 2024	3:00 PM	SSE	1.5
15 Jun 2024	4:00 PM	SSW	0.7
15 Jun 2024	5:00 PM	SSW	0.6
15 Jun 2024	6:00 PM	S	1.7
15 Jun 2024	7:00 PM	S	0.4
15 Jun 2024	8:00 PM	SSE	0.8
15 Jun 2024	9:00 PM	S	0.7
15 Jun 2024	10:00 PM	S	0.5
15 Jun 2024	11:00 PM	SSE	0.2
16 Jun 2024	12:00 AM	SSE	0.1
16 Jun 2024	1:00 AM	S	0.2
16 Jun 2024	2:00 AM	S	0.0
16 Jun 2024	3:00 AM	S	0.0
16 Jun 2024	4:00 AM	SSE	0.2
16 Jun 2024	5:00 AM	S	0.2
16 Jun 2024	6:00 AM	SSE	0.1
16 Jun 2024	7:00 AM	SSE	0.2
16 Jun 2024	8:00 AM	SSW	0.3
16 Jun 2024	9:00 AM	S	0.4
16 Jun 2024	10:00 AM	SE	1.0
16 Jun 2024	11:00 AM	SSE	1.2
16 Jun 2024	12:00 PM	SE	0.7
16 Jun 2024	1:00 PM	SSE	0.9
16 Jun 2024	2:00 PM	SSE	1.2
16 Jun 2024	3:00 PM	S	1.5
16 Jun 2024	4:00 PM	S	1.5
16 Jun 2024	5:00 PM	SSE	1.3
16 Jun 2024	6:00 PM	SSE	1.1
16 Jun 2024	7:00 PM	SSE	0.8
16 Jun 2024	8:00 PM	S	0.8
16 Jun 2024	9:00 PM	SSW	0.9
16 Jun 2024	10:00 PM	SSW	0.7
16 Jun 2024	11:00 PM	SSE	0.7
17 Jun 2024	12:00 AM	S	0.6
17 Jun 2024	1:00 AM	SSE	0.5
17 Jun 2024	2:00 AM	SSW	0.5
17 Jun 2024	3:00 AM	SSE	0.3
17 Jun 2024	4:00 AM	S	0.5
17 Jun 2024	5:00 AM	S	0.3
17 Jun 2024	6:00 AM	SSE	0.3
17 Jun 2024	7:00 AM	SW	0.6
17 Jun 2024	8:00 AM	SW	1.2
17 Jun 2024	9:00 AM	SW	1.5
17 Jun 2024	10:00 AM	WSW	2.5
17 Jun 2024	11:00 AM	SW	1.6
17 Jun 2024	12:00 PM	SSW	1.5
17 Jun 2024	1:00 PM	SW	1.5
17 Jun 2024	2:00 PM	SSW	1.4

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
17 Jun 2024	3:00 PM	SW	1.6
17 Jun 2024	4:00 PM	WSW	2.1
17 Jun 2024	5:00 PM	SW	1.9
17 Jun 2024	6:00 PM	WSW	1.8
17 Jun 2024	7:00 PM	W	1.5
17 Jun 2024	8:00 PM	W	1.5
17 Jun 2024	9:00 PM	WSW	1.6
17 Jun 2024	10:00 PM	SW	1.8
17 Jun 2024	11:00 PM	SSW	1.2
18 Jun 2024	12:00 AM	SW	1.4
18 Jun 2024	1:00 AM	S	0.9
18 Jun 2024	2:00 AM	SSW	0.8
18 Jun 2024	3:00 AM	SSW	0.7
18 Jun 2024	4:00 AM	WSW	1.2
18 Jun 2024	5:00 AM	SW	0.8
18 Jun 2024	6:00 AM	SSW	0.4
18 Jun 2024	7:00 AM	S	0.7
18 Jun 2024	8:00 AM	WSW	1.7
18 Jun 2024	9:00 AM	SW	1.3
18 Jun 2024	10:00 AM	SW	1.3
18 Jun 2024	11:00 AM	SW	1.7
18 Jun 2024	12:00 PM	SSW	1.4
18 Jun 2024	1:00 PM	SW	1.6
18 Jun 2024	2:00 PM	SSW	1.3
18 Jun 2024	3:00 PM	S	1.4
18 Jun 2024	4:00 PM	W	1.7
18 Jun 2024	5:00 PM	W	1.8
18 Jun 2024	6:00 PM	NW	2.0
18 Jun 2024	7:00 PM	W	1.9
18 Jun 2024	8:00 PM	W	1.7
18 Jun 2024	9:00 PM	W	1.4
18 Jun 2024	10:00 PM	WSW	1.4
18 Jun 2024	11:00 PM	NW	1.5
19 Jun 2024	12:00 AM	W	1.1
19 Jun 2024	1:00 AM	SW	1.1
19 Jun 2024	2:00 AM	WNW	1.6
19 Jun 2024	3:00 AM	SW	0.9
19 Jun 2024	4:00 AM	SSW	0.7
19 Jun 2024	5:00 AM	SE	0.5
19 Jun 2024	6:00 AM	SSW	0.5
19 Jun 2024	7:00 AM	SSE	0.8
19 Jun 2024	8:00 AM	S	1.0
19 Jun 2024	9:00 AM	WSW	1.9
19 Jun 2024	10:00 AM	SW	1.6
19 Jun 2024	11:00 AM	SW	2.4
19 Jun 2024	12:00 PM	WSW	2.1
19 Jun 2024	1:00 PM	W	2.1
19 Jun 2024	2:00 PM	SW	1.7
19 Jun 2024	3:00 PM	WSW	2.2
19 Jun 2024	4:00 PM	W	2.4
19 Jun 2024	5:00 PM	WNW	2.3
19 Jun 2024	6:00 PM	W	2.2
19 Jun 2024	7:00 PM	W	1.7
19 Jun 2024	8:00 PM	WSW	1.7
19 Jun 2024	9:00 PM	WNW	2.7
19 Jun 2024	10:00 PM	SW	1.4
19 Jun 2024	11:00 PM	WNW	2.0

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
20 Jun 2024	12:00 AM	WSW	1.7
20 Jun 2024	1:00 AM	W	1.5
20 Jun 2024	2:00 AM	WNW	1.5
20 Jun 2024	3:00 AM	W	1.1
20 Jun 2024	4:00 AM	SW	0.8
20 Jun 2024	5:00 AM	S	0.4
20 Jun 2024	6:00 AM	SSW	0.4
20 Jun 2024	7:00 AM	SW	1.2
20 Jun 2024	8:00 AM	SW	1.4
20 Jun 2024	9:00 AM	SW	1.8
20 Jun 2024	10:00 AM	S	1.4
20 Jun 2024	11:00 AM	SW	1.7
20 Jun 2024	12:00 PM	S	1.6
20 Jun 2024	1:00 PM	SW	1.8
20 Jun 2024	2:00 PM	SSW	1.6
20 Jun 2024	3:00 PM	SW	1.6
20 Jun 2024	4:00 PM	SW	1.6
20 Jun 2024	5:00 PM	W	3.0
20 Jun 2024	6:00 PM	WNW	3.0
20 Jun 2024	7:00 PM	WNW	2.7
20 Jun 2024	8:00 PM	SW	1.6
20 Jun 2024	9:00 PM	SW	1.9
20 Jun 2024	10:00 PM	SW	1.2
20 Jun 2024	11:00 PM	WSW	2.0
21 Jun 2024	12:00 AM	W	2.3
21 Jun 2024	1:00 AM	W	1.4
21 Jun 2024	2:00 AM	WNW	1.0
21 Jun 2024	3:00 AM	SW	0.5
21 Jun 2024	4:00 AM	W	1.0
21 Jun 2024	5:00 AM	SSW	0.7
21 Jun 2024	6:00 AM	SW	0.6
21 Jun 2024	7:00 AM	SW	0.9
21 Jun 2024	8:00 AM	W	1.6
21 Jun 2024	9:00 AM	S	1.1
21 Jun 2024	10:00 AM	SW	1.6
21 Jun 2024	11:00 AM	W	2.3
21 Jun 2024	12:00 PM	SSW	2.0
21 Jun 2024	1:00 PM	SSW	1.8
21 Jun 2024	2:00 PM	WSW	2.1
21 Jun 2024	3:00 PM	S	1.8
21 Jun 2024	4:00 PM	SW	1.6
21 Jun 2024	5:00 PM	WSW	1.8
21 Jun 2024	6:00 PM	W	1.7
21 Jun 2024	7:00 PM	NW	2.1
21 Jun 2024	8:00 PM	WNW	1.9
21 Jun 2024	9:00 PM	WNW	2.3
21 Jun 2024	10:00 PM	W	2.0
21 Jun 2024	11:00 PM	WNW	2.8
22 Jun 2024	12:00 AM	WNW	2.5
22 Jun 2024	1:00 AM	W	1.9
22 Jun 2024	2:00 AM	W	2.4
22 Jun 2024	3:00 AM	NW	2.2
22 Jun 2024	4:00 AM	W	1.9
22 Jun 2024	5:00 AM	W	1.3
22 Jun 2024	6:00 AM	WSW	1.0
22 Jun 2024	7:00 AM	WSW	1.3
22 Jun 2024	8:00 AM	WSW	1.3

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
22 Jun 2024	9:00 AM	SW	1.8
22 Jun 2024	10:00 AM	SW	1.8
22 Jun 2024	11:00 AM	WSW	2.1
22 Jun 2024	12:00 PM	W	2.4
22 Jun 2024	1:00 PM	WSW	1.8
22 Jun 2024	2:00 PM	WSW	2.6
22 Jun 2024	3:00 PM	SW	1.9
22 Jun 2024	4:00 PM	WSW	2.0
22 Jun 2024	5:00 PM	W	2.6
22 Jun 2024	6:00 PM	WSW	1.8
22 Jun 2024	7:00 PM	WNW	2.0
22 Jun 2024	8:00 PM	WNW	2.1
22 Jun 2024	9:00 PM	W	1.8
22 Jun 2024	10:00 PM	WSW	1.4
22 Jun 2024	11:00 PM	WNW	1.7
23 Jun 2024	12:00 AM	W	1.6
23 Jun 2024	1:00 AM	SSW	1.3
23 Jun 2024	2:00 AM	SSW	0.6
23 Jun 2024	3:00 AM	SSE	0.6
23 Jun 2024	4:00 AM	S	0.8
23 Jun 2024	5:00 AM	SSE	0.4
23 Jun 2024	6:00 AM	SSE	0.7
23 Jun 2024	7:00 AM	W	1.5
23 Jun 2024	8:00 AM	WNW	2.5
23 Jun 2024	9:00 AM	W	2.4
23 Jun 2024	10:00 AM	SSW	1.6
23 Jun 2024	11:00 AM	SSW	1.8
23 Jun 2024	12:00 PM	SSW	1.9
23 Jun 2024	1:00 PM	S	1.7
23 Jun 2024	2:00 PM	SSW	1.6
23 Jun 2024	3:00 PM	SSW	1.6
23 Jun 2024	4:00 PM	S	1.7
23 Jun 2024	5:00 PM	SW	1.9
23 Jun 2024	6:00 PM	WSW	1.8
23 Jun 2024	7:00 PM	WSW	2.1
23 Jun 2024	8:00 PM	W	1.8
23 Jun 2024	9:00 PM	WSW	0.9
23 Jun 2024	10:00 PM	W	1.8
23 Jun 2024	11:00 PM	W	1.8
24 Jun 2024	12:00 AM	W	1.8
24 Jun 2024	1:00 AM	W	1.9
24 Jun 2024	2:00 AM	WNW	2.6
24 Jun 2024	3:00 AM	WNW	2.7
24 Jun 2024	4:00 AM	WSW	1.6
24 Jun 2024	5:00 AM	W	1.9
24 Jun 2024	6:00 AM	W	2.3
24 Jun 2024	7:00 AM	SW	1.4
24 Jun 2024	8:00 AM	WSW	1.9
24 Jun 2024	9:00 AM	SSW	1.7
24 Jun 2024	10:00 AM	SW	2.1
24 Jun 2024	11:00 AM	SSW	1.6
24 Jun 2024	12:00 PM	WSW	2.5
24 Jun 2024	1:00 PM	SW	2.0
24 Jun 2024	2:00 PM	W	2.3
24 Jun 2024	3:00 PM	SSW	1.8
24 Jun 2024	4:00 PM	SW	1.5
24 Jun 2024	5:00 PM	S	1.3

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
24 Jun 2024	6:00 PM	WNW	1.9
24 Jun 2024	7:00 PM	W	1.8
24 Jun 2024	8:00 PM	WNW	2.2
24 Jun 2024	9:00 PM	WNW	2.4
24 Jun 2024	10:00 PM	WNW	2.4
24 Jun 2024	11:00 PM	WNW	2.1
25 Jun 2024	12:00 AM	WNW	2.0
25 Jun 2024	1:00 AM	W	2.4
25 Jun 2024	2:00 AM	W	2.5
25 Jun 2024	3:00 AM	WNW	2.4
25 Jun 2024	4:00 AM	WSW	1.7
25 Jun 2024	5:00 AM	WNW	1.7
25 Jun 2024	6:00 AM	S	0.9
25 Jun 2024	7:00 AM	WSW	1.4
25 Jun 2024	8:00 AM	W	1.6
25 Jun 2024	9:00 AM	SW	1.6
25 Jun 2024	10:00 AM	SSW	2.1
25 Jun 2024	11:00 AM	SSW	1.9
25 Jun 2024	12:00 PM	SW	2.3
25 Jun 2024	1:00 PM	WSW	2.7
25 Jun 2024	2:00 PM	SSW	1.7
25 Jun 2024	3:00 PM	WSW	1.8
25 Jun 2024	4:00 PM	W	2.2
25 Jun 2024	5:00 PM	WNW	1.9
25 Jun 2024	6:00 PM	WSW	2.1
25 Jun 2024	7:00 PM	S	0.6
25 Jun 2024	8:00 PM	WSW	1.1
25 Jun 2024	9:00 PM	SW	1.2
25 Jun 2024	10:00 PM	S	0.8
25 Jun 2024	11:00 PM	S	0.6
26 Jun 2024	12:00 AM	SSE	0.7
26 Jun 2024	1:00 AM	S	0.6
26 Jun 2024	2:00 AM	S	0.6
26 Jun 2024	3:00 AM	S	0.9
26 Jun 2024	4:00 AM	S	0.6
26 Jun 2024	5:00 AM	S	0.5
26 Jun 2024	6:00 AM	SSE	0.5
26 Jun 2024	7:00 AM	S	1.0
26 Jun 2024	8:00 AM	SSW	1.3
26 Jun 2024	9:00 AM	W	2.2
26 Jun 2024	10:00 AM	W	2.4
26 Jun 2024	11:00 AM	WSW	2.8
26 Jun 2024	12:00 PM	SSW	1.7
26 Jun 2024	1:00 PM	WSW	2.4
26 Jun 2024	2:00 PM	S	1.3
26 Jun 2024	3:00 PM	WSW	1.7
26 Jun 2024	4:00 PM	WSW	1.4
26 Jun 2024	5:00 PM	WSW	1.7
26 Jun 2024	6:00 PM	WNW	2.0
26 Jun 2024	7:00 PM	WNW	1.7
26 Jun 2024	8:00 PM	SW	0.7
26 Jun 2024	9:00 PM	SSW	0.7
26 Jun 2024	10:00 PM	SSW	0.5
26 Jun 2024	11:00 PM	SSW	0.5
27 Jun 2024	12:00 AM	S	0.4
27 Jun 2024	1:00 AM	S	0.1
27 Jun 2024	2:00 AM	SSE	0.5

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
27 Jun 2024	3:00 AM	SSE	0.6
27 Jun 2024	4:00 AM	S	0.7
27 Jun 2024	5:00 AM	S	0.7
27 Jun 2024	6:00 AM	S	0.2
27 Jun 2024	7:00 AM	SSW	0.5
27 Jun 2024	8:00 AM	W	1.4
27 Jun 2024	9:00 AM	S	1.4
27 Jun 2024	10:00 AM	SSW	1.5
27 Jun 2024	11:00 AM	SSW	1.2
27 Jun 2024	12:00 PM	SSW	1.4
27 Jun 2024	1:00 PM	SSW	1.6
27 Jun 2024	2:00 PM	SW	1.7
27 Jun 2024	3:00 PM	S	1.5
27 Jun 2024	4:00 PM	SW	1.7
27 Jun 2024	5:00 PM	WSW	1.8
27 Jun 2024	6:00 PM	WNW	2.7
27 Jun 2024	7:00 PM	W	1.1
27 Jun 2024	8:00 PM	W	1.2
27 Jun 2024	9:00 PM	WNW	1.8
27 Jun 2024	10:00 PM	WNW	1.9
27 Jun 2024	11:00 PM	W	1.5
28 Jun 2024	12:00 AM	WNW	1.6
28 Jun 2024	1:00 AM	WNW	1.9
28 Jun 2024	2:00 AM	WNW	2.0
28 Jun 2024	3:00 AM	WNW	2.3
28 Jun 2024	4:00 AM	W	2.1
28 Jun 2024	5:00 AM	W	1.2
28 Jun 2024	6:00 AM	SW	0.5
28 Jun 2024	7:00 AM	WNW	1.2
28 Jun 2024	8:00 AM	W	1.6
28 Jun 2024	9:00 AM	SE	1.0
28 Jun 2024	10:00 AM	SW	1.7
28 Jun 2024	11:00 AM	SW	1.8
28 Jun 2024	12:00 PM	SW	2.0
28 Jun 2024	1:00 PM	SSW	2.3
28 Jun 2024	2:00 PM	SSW	1.7

Appendix C - Weather Conditions

June 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
28 Jun 2024	3:00 PM	SW	1.9
28 Jun 2024	4:00 PM	SW	1.8
28 Jun 2024	5:00 PM	SW	1.8
28 Jun 2024	6:00 PM	W	2.0
28 Jun 2024	7:00 PM	WNW	2.2
28 Jun 2024	8:00 PM	WNW	1.7
28 Jun 2024	9:00 PM	WNW	2.7
28 Jun 2024	10:00 PM	WNW	2.0
28 Jun 2024	11:00 PM	W	2.6
29 Jun 2024	12:00 AM	WNW	2.4
29 Jun 2024	1:00 AM	WNW	2.2
29 Jun 2024	2:00 AM	W	0.9
29 Jun 2024	3:00 AM	S	0.6
29 Jun 2024	4:00 AM	S	0.4
29 Jun 2024	5:00 AM	SSW	0.7
29 Jun 2024	6:00 AM	SSE	0.3
29 Jun 2024	7:00 AM	SW	0.7
29 Jun 2024	8:00 AM	SE	0.2
29 Jun 2024	9:00 AM	SSW	1.2
29 Jun 2024	10:00 AM	SSE	1.3
29 Jun 2024	11:00 AM	SSE	1.8
29 Jun 2024	12:00 PM	SSE	2.0
29 Jun 2024	1:00 PM	S	2.0
29 Jun 2024	2:00 PM	SSE	1.6
29 Jun 2024	3:00 PM	SE	1.5
29 Jun 2024	4:00 PM	SSE	1.7
29 Jun 2024	5:00 PM	SE	1.3
29 Jun 2024	6:00 PM	SSW	1.5
29 Jun 2024	7:00 PM	S	1.3
29 Jun 2024	8:00 PM	SSE	1.3
29 Jun 2024	9:00 PM	WSW	1.9
29 Jun 2024	10:00 PM	SSW	1.1
29 Jun 2024	11:00 PM	SSE	0.8
30 Jun 2024	12:00 AM	SSE	1.1
30 Jun 2024	1:00 AM	SSE	1.0
30 Jun 2024	2:00 AM	SSE	1.3
30 Jun 2024	3:00 AM	SE	1.3
30 Jun 2024	4:00 AM	SSE	1.3
30 Jun 2024	5:00 AM	S	1.0
30 Jun 2024	6:00 AM	S	1.0
30 Jun 2024	7:00 AM	SSE	1.1
30 Jun 2024	8:00 AM	SSE	1.1
30 Jun 2024	9:00 AM	S	1.2
30 Jun 2024	10:00 AM	SSE	1.7
30 Jun 2024	11:00 AM	SE	2.2
30 Jun 2024	12:00 PM	SSE	2.2
30 Jun 2024	1:00 PM	SSE	2.0
30 Jun 2024	2:00 PM	SSE	1.9
30 Jun 2024	3:00 PM	SSE	1.8
30 Jun 2024	4:00 PM	S	1.9
30 Jun 2024	5:00 PM	SSE	1.5
30 Jun 2024	6:00 PM	SSE	1.1
30 Jun 2024	7:00 PM	WSW	1.7
30 Jun 2024	8:00 PM	WSW	1.5
30 Jun 2024	9:00 PM	S	1.2
30 Jun 2024	10:00 PM	S	1.1
30 Jun 2024	11:00 PM	SSE	0.9

**APPENDIX D
ENVIRONMENTAL MONITORING
SCHEDULES**

Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Impact Air and Noise Monitoring Schedule (June 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Jun
2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun
			24-hrs TSP	1-hr TSP X3 Noise		
9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun
		24-hrs TSP	1-hr TSP X3 Noise			
16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun	29-Jun
	1-hr TSP X3 Noise			24-hrs TSP	1-hr TSP X3	
30-Jun						

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

- AM1 - Tin Hau Temple
- AM2 - Sai Tso Wan Recreation Ground
- AM3 - Yau Lai Estate Bik Lai House
- AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village
- AM4(B)₍₂₎ - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

- CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong
- CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong
- CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong
- CM4 - Tin Hau Temple, Cha Kwo Ling
- CM5 - CCC Kei Faat Primary School, Yau Tong

Notes: (1) For 1-hour TSP monitoring; (2) For 24-hours TSP monitoring;

Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Tentative Impact Air and Noise Monitoring Schedule (July 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul
			24-hrs TSP	1-hr TSP X3 Noise		
7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul
		24-hrs TSP	1-hr TSP X3 Noise			
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
	1-hr TSP X3 Noise				24-hrs TSP	1-hr TSP X3
28-Jul	29-Jul	30-Jul	31-Jul			

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

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)₍₂₎ - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

CM5 - CCC Kei Faat Primary School, Yau Tong

Notes: (1) For 1-hour TSP monitoring; (2) For 24-hours TSP monitoring;

Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Tentative Impact Air and Noise Monitoring Schedule (August 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Aug	2-Aug	3-Aug
				24-hrs TSP	1-hr TSP X3 Noise	
4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug
			24-hrs TSP	1-hr TSP X3 Noise		
11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
		24-hrs TSP	1-hr TSP X3 Noise			
18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
	1-hr TSP X3 Noise				24-hrs TSP	1-hr TSP X3

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

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)₍₂₎ - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

CM5 - CCC Kei Faat Primary School, Yau Tong

Notes: (1) For 1-hour TSP monitoring; (2) For 24-hours TSP monitoring;

Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Tentative Impact Air and Noise Monitoring Schedule (September 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep
				24-hrs TSP	1-hr TSP X3 Noise	
8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
			24-hrs TSP	1-hr TSP X3 Noise		
15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
	1-hr TSP X3 Noise				24-hrs TSP	1-hr TSP X3
29-Sep	30-Sep					

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

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)₍₂₎ - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

CM5 - CCC Kei Faat Primary School, Yau Tong

Notes: (1) For 1-hour TSP monitoring; (2) For 24-hours TSP monitoring;

APPENDIX E
1-HOUR TSP MONITORING RESULTS
AND GRAPHICAL PRESENTATIONS

Appendix E - 1-hour TSP Monitoring Results

Location AM1 - Tin Hau Temple			
Date	Time	Weather	Particulate Concentration ($\mu\text{g}/\text{m}^3$)
6-Jun-24	9:00	Cloudy	18.0
6-Jun-24	10:00	Cloudy	30.6
6-Jun-24	11:00	Cloudy	30.6
12-Jun-24	11:40	Cloudy	28.5
12-Jun-24	12:40	Cloudy	24.7
12-Jun-24	13:40	Cloudy	28.5
18-Jun-24	11:10	Fine	27.2
18-Jun-24	12:10	Fine	40.0
18-Jun-24	13:10	Fine	24.0
24-Jun-24	12:50	Fine	20.9
24-Jun-24	13:50	Fine	13.3
24-Jun-24	14:50	Fine	15.2
28-Jun-24	9:15	Fine	49.4
28-Jun-24	10:15	Fine	66.5
28-Jun-24	11:15	Fine	62.7
		Average	32.0
		Maximum	66.5
		Minimum	13.3

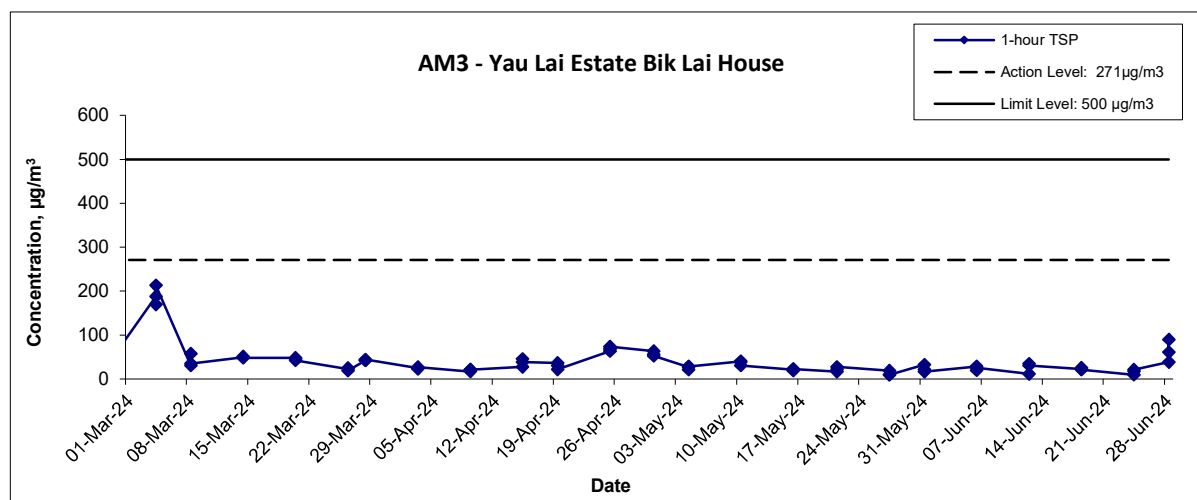
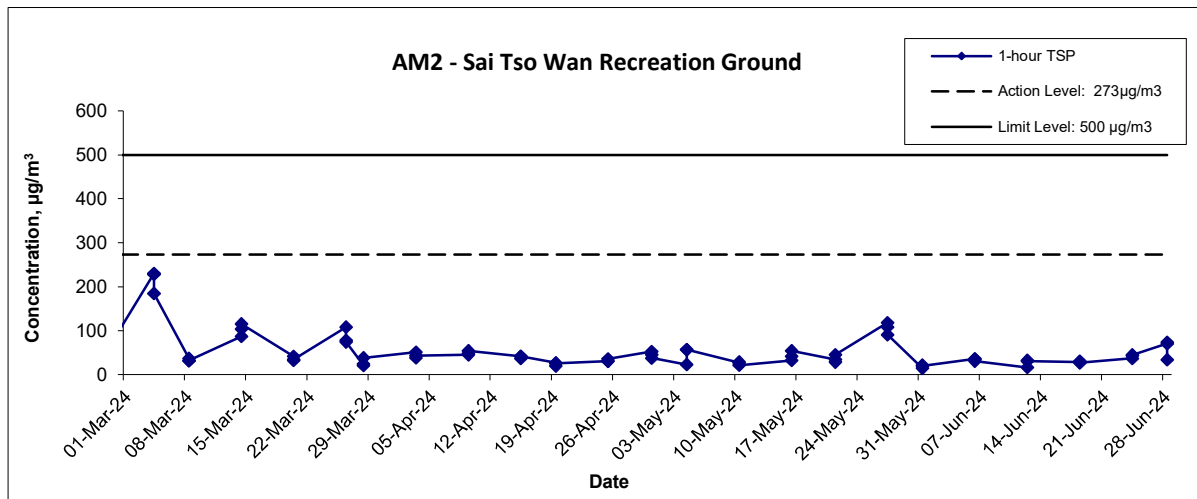
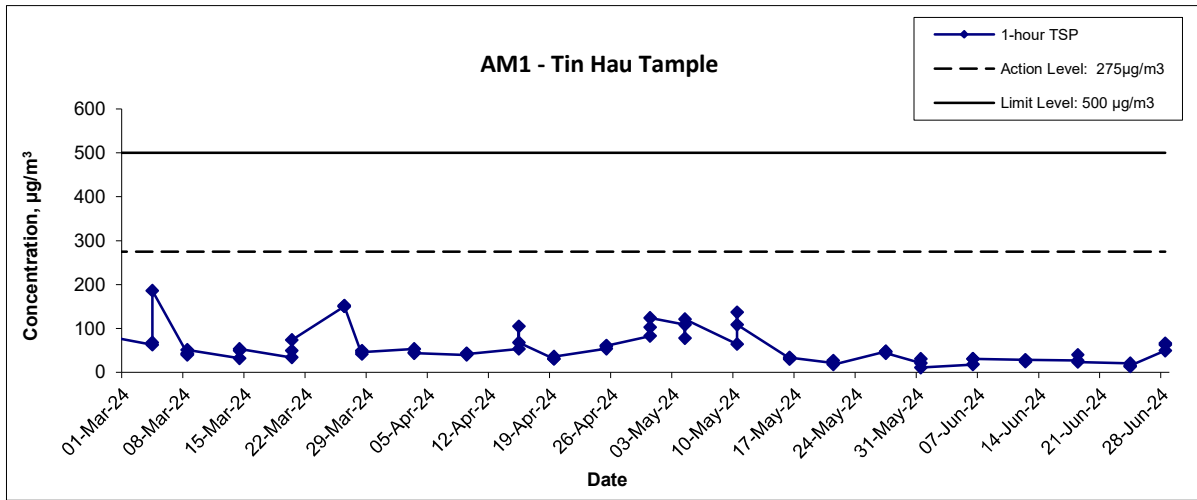
Location AM2 - Sai Tso Wan Recreation Ground			
Date	Time	Weather	Particulate Concentration ($\mu\text{g}/\text{m}^3$)
6-Jun-24	15:20	Cloudy	36.0
6-Jun-24	16:20	Cloudy	36.0
6-Jun-24	17:20	Cloudy	30.6
12-Jun-24	15:30	Fine	16.2
12-Jun-24	16:30	Fine	32.4
12-Jun-24	17:30	Fine	30.6
18-Jun-24	9:00	Fine	28.8
18-Jun-24	10:00	Fine	30.6
18-Jun-24	11:00	Fine	27.0
24-Jun-24	13:11	Fine	36.8
24-Jun-24	14:11	Fine	43.2
24-Jun-24	15:11	Fine	44.8
28-Jun-24	16:00	Fine	70.4
28-Jun-24	17:00	Fine	73.6
28-Jun-24	18:00	Fine	33.6
		Average	38.0
		Maximum	73.6
		Minimum	16.2


Appendix E - 1-hour TSP Monitoring Results

Location AM3 - Yau Lai Estate Bik Lai House			
Date	Time	Weather	<i>Particulate Concentration ($\mu\text{g}/\text{m}^3$)</i>
6-Jun-24	11:45	Rainy	28.8
6-Jun-24	12:45	Rainy	19.8
6-Jun-24	13:45	Rainy	25.2
12-Jun-24	15:25	Cloudy	11.4
12-Jun-24	16:25	Cloudy	34.2
12-Jun-24	17:25	Cloudy	30.4
18-Jun-24	14:25	Fine	22.4
18-Jun-24	15:25	Fine	25.6
18-Jun-24	16:25	Fine	20.8
24-Jun-24	16:00	Fine	9.5
24-Jun-24	17:00	Fine	17.1
24-Jun-24	18:00	Fine	20.9
28-Jun-24	13:00	Fine	38.0
28-Jun-24	14:00	Fine	89.3
28-Jun-24	15:00	Fine	60.8
Average			30.3
Maximum			89.3
Minimum			9.5

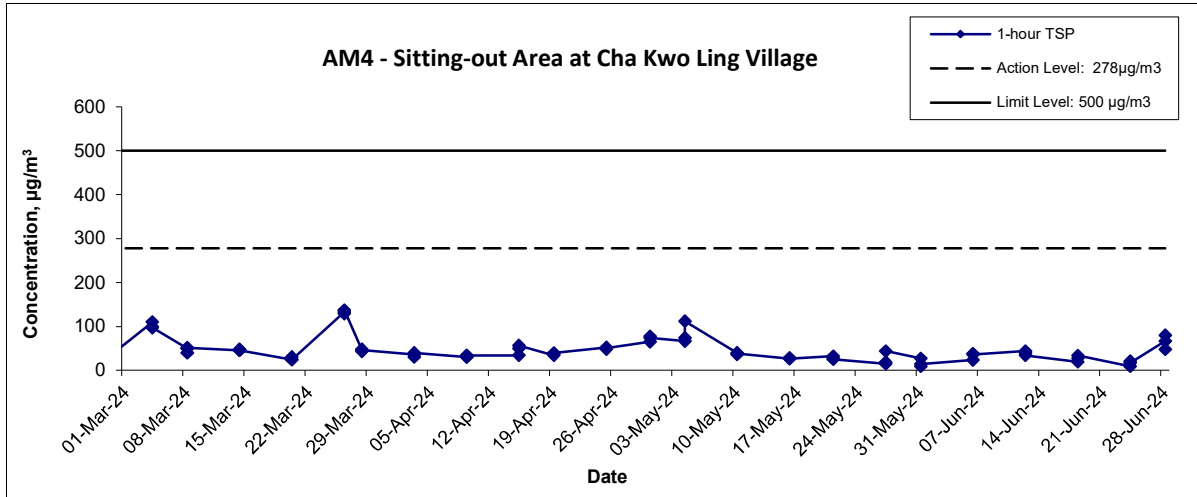
Location AM4 - Sitting-out Area at Cha Kwo Ling Village			
Date	Time	Weather	<i>Particulate Concentration ($\mu\text{g}/\text{m}^3$)</i>
6-Jun-24	15:30	Fine	23.4
6-Jun-24	16:30	Fine	37.8
6-Jun-24	17:30	Fine	36.0
12-Jun-24	9:00	Rainy	43.7
12-Jun-24	10:00	Rainy	39.9
12-Jun-24	11:00	Rainy	34.2
18-Jun-24	9:00	Cloudy	19.2
18-Jun-24	10:00	Cloudy	27.2
18-Jun-24	11:00	Cloudy	33.6
24-Jun-24	10:00	Fine	9.5
24-Jun-24	11:00	Fine	20.9
24-Jun-24	12:00	Fine	17.1
28-Jun-24	9:20	Fine	66.5
28-Jun-24	10:20	Fine	47.5
28-Jun-24	11:20	Fine	79.8
Average			35.8
Maximum			79.8
Minimum			9.5

1-hr TSP Concentration Levels



Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Graphical Presentation of 1-hour TSP Monitoring Results	Scale	Project No.	
	Date	Appendix	
	N.T.S	MA20003	E

1-hr TSP Concentration Levels



Notes:

1. The major activitie(s) being carried out on site during the reporting period is/are presented in Section 1.10
2. The weather conditions during the reporting month are presented in Appendix C.
3. Other factors which might affect the monitoring results are presented in Section 2.18.

Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Graphical Presentation of 1-hour TSP Monitoring Results	Scale	Project No.	CINOTECH
	Date	Appendix	
	N.T.S	MA20003	
	Jun-24	E	

**APPENDIX F
24-HOUR TSP MONITORING RESULTS
AND GRAPHICAL PRESENTATIONS**

Appendix F - 24-hour TSP Monitoring Results

Location AM1 - Tin Hau Temple

Start Date	Weather	Filter Weight (g)		Particulate	Elapse Time		Sampling	Flow Rate (m ³ /min.)		Av. flow	Total vol.	Conc.
	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m ³ /min)	(m ³)	(µg/m ³)
5-Jun-24	Fine	3.3709	3.4031	0.0322	13482.6	13506.6	24.0	1.22	1.22	1.22	1757.1	18.3
11-Jun-24	Cloudy	3.3430	3.3905	0.0475	13506.6	13530.6	24.0	1.21	1.21	1.21	1745.5	27.2
17-Jun-24	Sunny	3.3473	3.4202	0.0729	13530.6	13554.6	24.0	1.22	1.22	1.22	1754.2	41.6
22-Jun-24	Cloudy	3.3473	3.3610	0.0137	13554.6	13578.6	24.0	1.22	1.22	1.22	1752.4	7.8
27-Jun-24	Fine	3.3624	3.5105	0.1481	13578.6	13602.6	24.0	1.22	1.22	1.22	1754.8	84.4
											Min	7.8
											Max	84.4
											Average	35.9

Location AM2 - Sai Tso Wan Recreation Ground

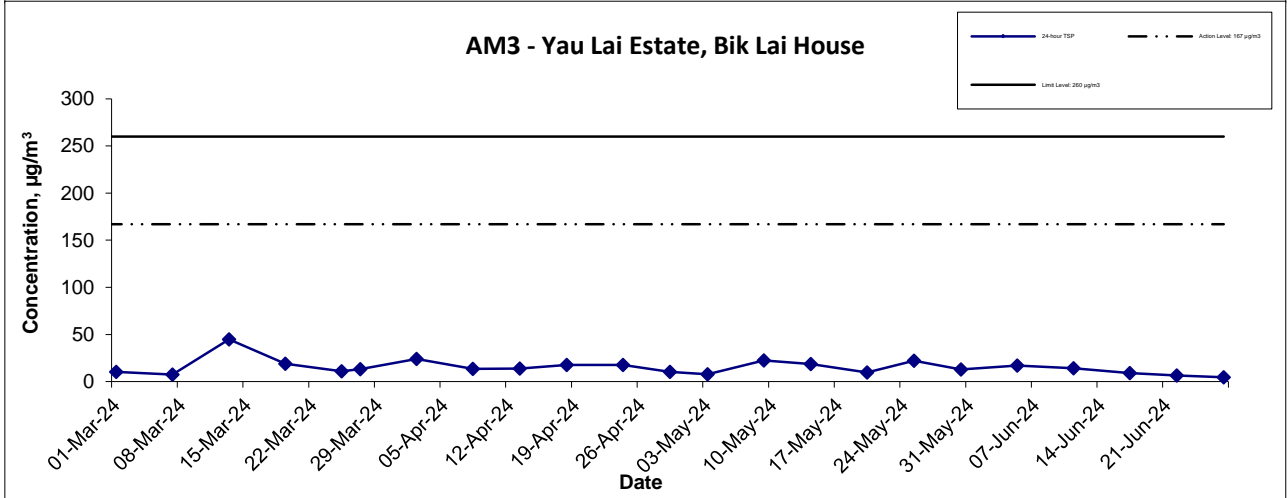
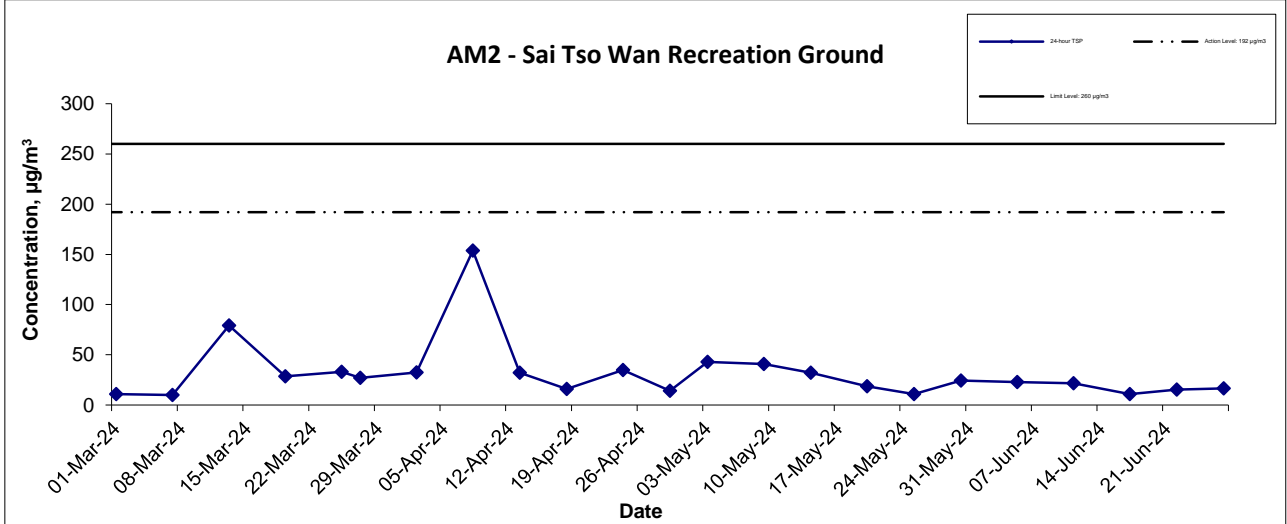
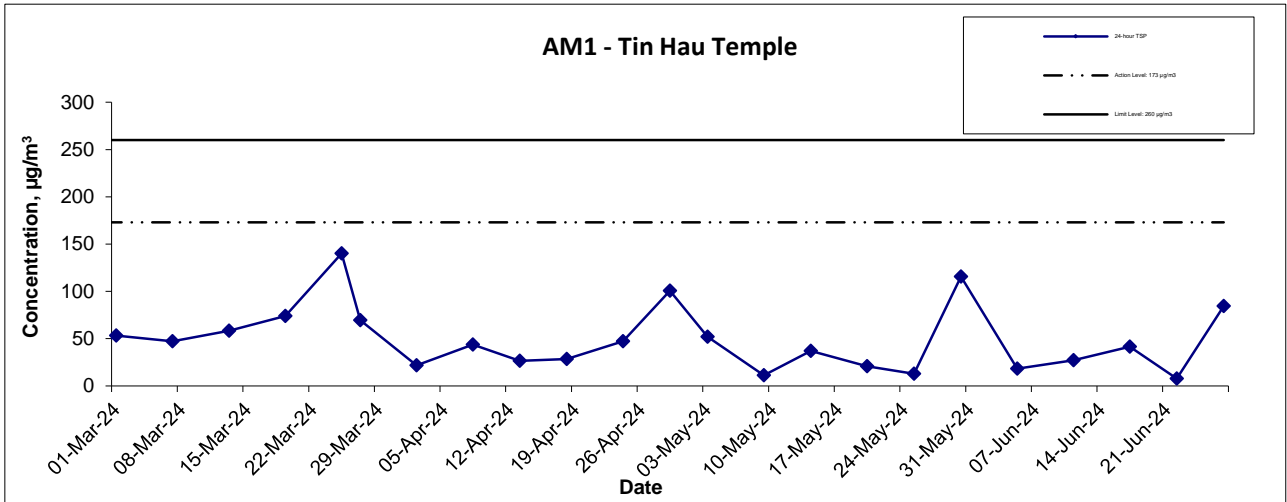
Start Date	Weather	Filter Weight (g)		Particulate	Elapse Time		Sampling	Flow Rate (m ³ /min.)		Av. flow	Total vol.	Conc.
	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m ³ /min)	(m ³)	(µg/m ³)
5-Jun-24	Fine	3.3200	3.3600	0.0400	34599.3	34623.3	24.0	1.22	1.22	1.22	1755.4	22.8
11-Jun-24	Cloudy	3.3680	3.4056	0.0376	34623.4	34647.4	24.0	1.21	1.21	1.21	1744.5	21.6
17-Jun-24	Sunny	3.3742	3.3933	0.0191	34647.4	34671.4	24.0	1.22	1.22	1.22	1754.8	10.9
22-Jun-24	Fine	3.3092	3.3361	0.0269	34671.4	34695.4	24.0	1.22	1.22	1.22	1753.0	15.3
27-Jun-24	Fine	3.3162	3.3453	0.0291	34695.4	34719.4	24.0	1.22	1.22	1.22	1755.4	16.6
											Min	10.9
											Max	22.8
											Average	17.4

Location AM3 - Yau Lai Estate, Bik Lai House

Start Date	Weather	Filter Weight (g)		Particulate	Elapse Time		Sampling	Flow Rate (m ³ /min.)		Av. flow	Total vol.	Conc.
	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m ³ /min)	(m ³)	(µg/m ³)
5-Jun-24	Fine	3.3100	3.3400	0.0300	8830.1	8854.1	24.0	1.22	1.22	1.22	1759.4	17.1
11-Jun-24	Fine	3.3625	3.3870	0.0245	8854.1	8878.1	24.0	1.21	1.21	1.21	1747.3	14.0
17-Jun-24	Fine	3.3491	3.3648	0.0157	8878.1	8902.1	24.0	1.22	1.22	1.22	1752.5	9.0
22-Jun-24	Cloudy	3.3388	3.3502	0.0114	8902.1	8926.1	24.0	1.21	1.22	1.22	1750.5	6.5
27-Jun-24	Fine	3.3519	3.3599	0.0080	8926.1	8950.1	24.0	1.22	1.22	1.22	1753.2	4.6
											Min	4.6
											Max	17.1
											Average	10.2

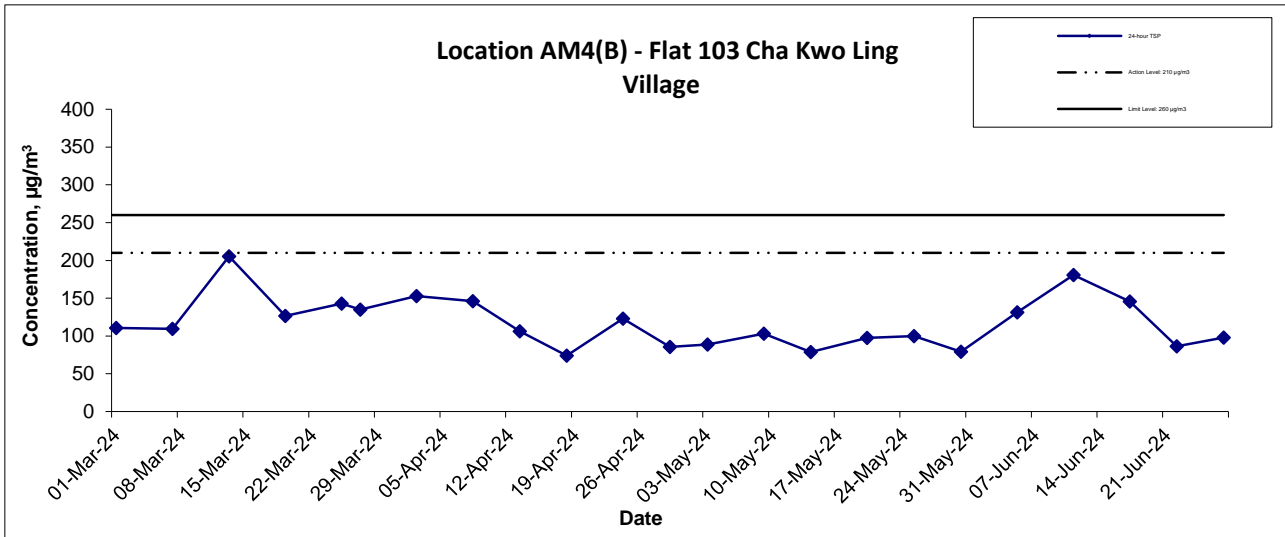
Location AM4(B) - Flat 103 Cha Kwo Ling Village

Start Date	Weather	Filter Weight (g)		Particulate	Elapse Time		Sampling	Flow Rate (m ³ /min.)		Av. flow	Total vol.	Conc.
	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m ³ /min)	(m ³)	(µg/m ³)
5-Jun-24	Fine	3.3400	3.5700	0.2300	20254.7	20278.7	24.0	1.22	1.22	1.22	1752.3	131.3
11-Jun-24	Fine	3.3262	3.6410	0.3148	20278.7	20302.7	24.0	1.21	1.21	1.21	1742.2	180.7
17-Jun-24	Fine	3.3535	3.6070	0.2535	20302.7	20326.7	24.0	1.21	1.21	1.21	1739.8	145.7
22-Jun-24	Cloudy	3.3197	3.4698	0.1501	20326.7	20350.7	24.0	1.21	1.21	1.21	1738.1	86.4
27-Jun-24	Fine	3.3745	3.5450	0.1705	20375.7	20399.7	24.0	1.21	1.21	1.21	1740.3	98.0
											Min	86.4
											Max	180.7
											Average	128.4



Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Graphical Presentation of 24-hour TSP Monitoring Results	Scale N.T.S	Project No. MA20003	CINOTECH
	Date Jun-24	Appendix F	

24-hr TSP Concentration Levels



Notes:

- 1) The major activitie(s) being carried out on site during the reporting period is/are presented in Section 1.10
- 2) The weather conditions during the reporting month are presented in Appendix C.
- 3) Other factors which might affect the monitoring results are presented in Section 2.18.

Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Graphical Presentation of 24-hour TSP Monitoring Results	Scale	N.T.S	Project No.	MA20003	
	Date	Jun-24	Appendix	F	

**APPENDIX G
NOISE MONITORING RESULTS AND
GRAPHICAL PRESENTATIONS**

Appendix G - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

Location CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
6 Jun 2024	11:44	Fine	69.4	70.6	67.9	65.5	67
12 Jun 2024	15:30	Cloudy	67.7	68.9	66.6	65.5	64
18 Jun 2024	16:03	Fine	69.1	70.3	67.6	65.5	67
24 Jun 2024	15:21	Fine	68.0	69.6	66.2	65.5	64

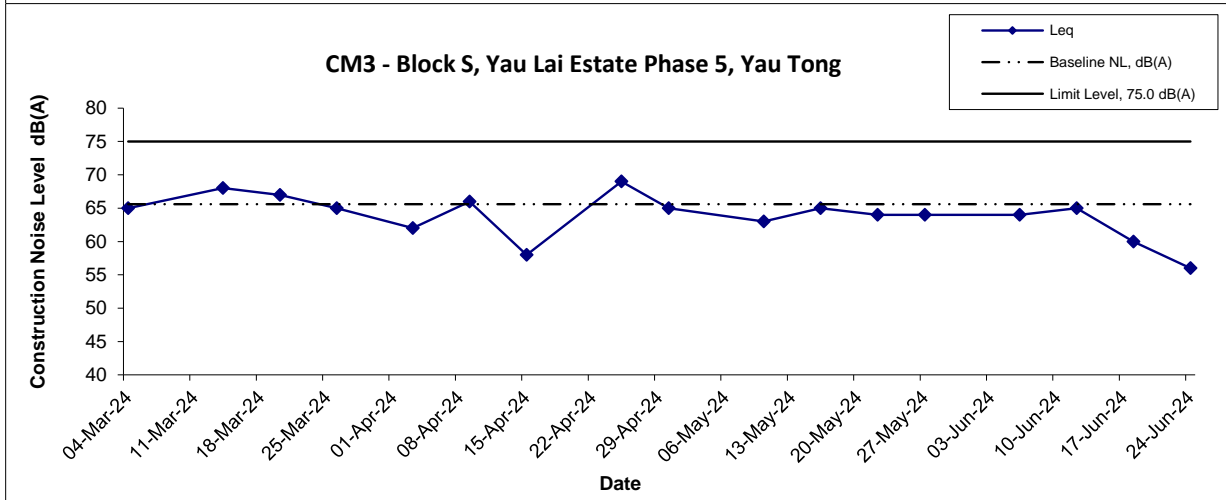
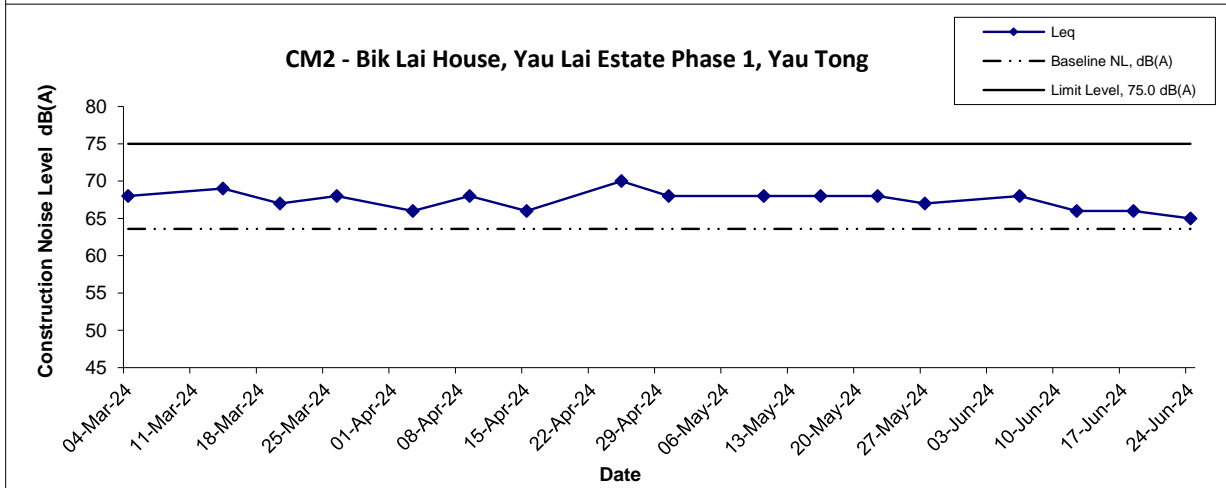
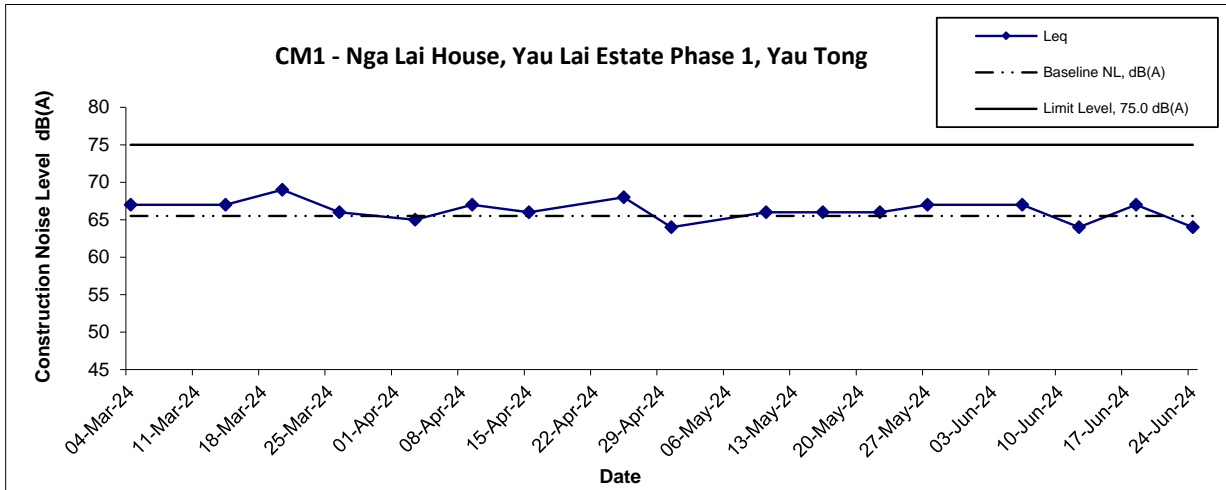
Location CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
6 Jun 2024	12:23	Fine	69.3	70.5	67.9	63.6	68
12 Jun 2024	14:32	Cloudy	68.0	69.1	66.7	63.6	66
18 Jun 2024	14:55	Fine	68.2	69.5	66.8	63.6	66
24 Jun 2024	14:33	Fine	67.2	68.6	65.6	63.6	65

Location CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
6 Jun 2024	13:12	Fine	64.0	64.5	62.5	65.6	64 Measured ≤ Baseline
12 Jun 2024	16:40	Cloudy	68.4	69.3	67.0	65.6	65
18 Jun 2024	14:05	Fine	66.7	67.9	65.4	65.6	60
24 Jun 2024	16:16	Fine	66.1	67.1	64.7	65.6	56

Location CM4 - Tin Hau Temple, Cha Kwo Ling							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
6 Jun 2024	10:48	Fine	59.4	61.7	54.7	62.0	59 Measured ≤ Baseline
12 Jun 2024	12:06	Cloudy	56.1	58.8	51.2	62.0	56 Measured ≤ Baseline
18 Jun 2024	12:31	Fine	58.4	61.0	53.9	62.0	58 Measured ≤ Baseline
24 Jun 2024	11:54	Fine	58.8	60.9	54.8	62.0	59 Measured ≤ Baseline

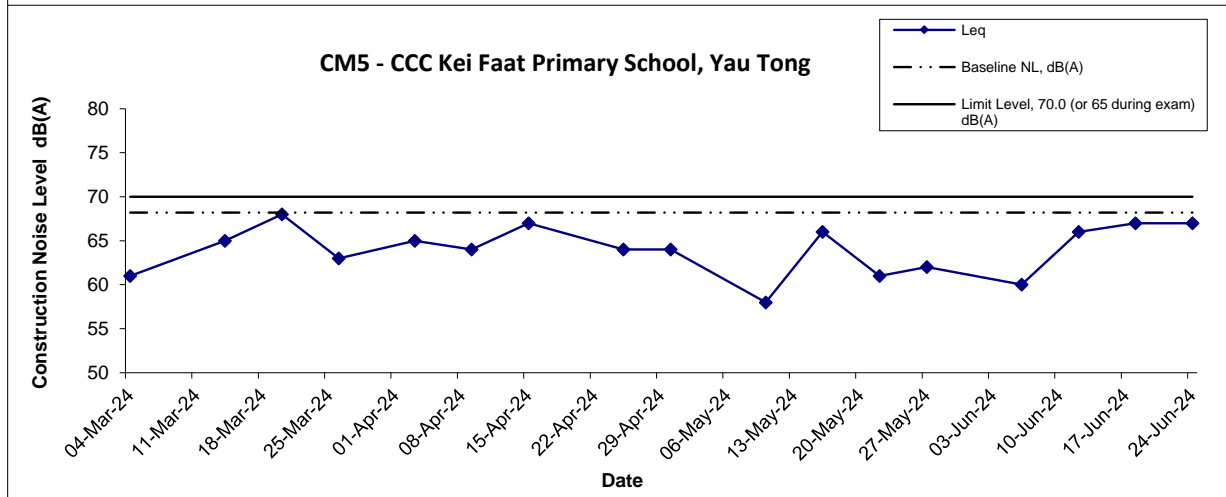
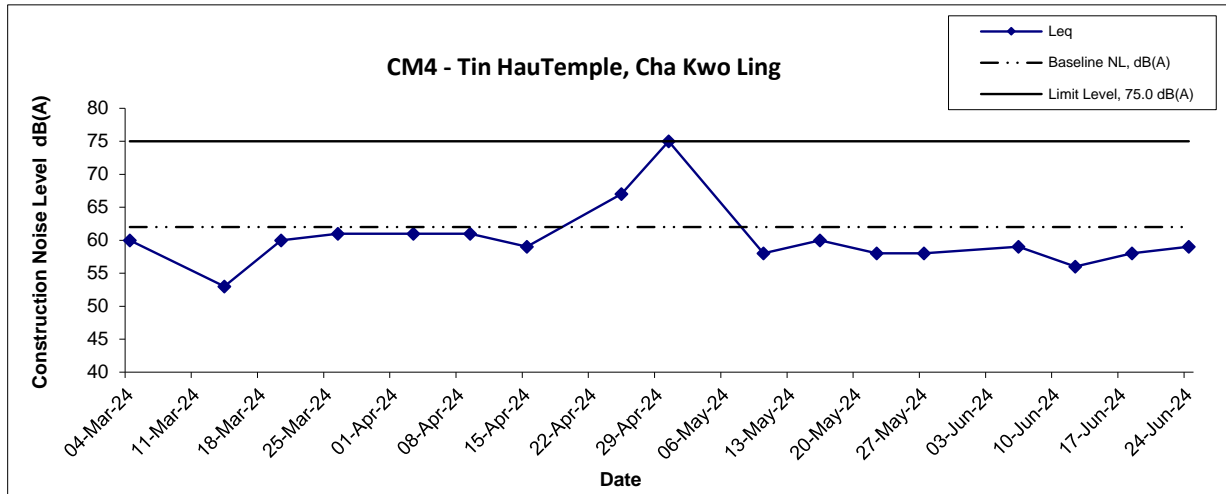
Location CM5 - CCC Kei Faat Primary School, Yau Tong							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
6 Jun 2024	13:58	Fine	68.8	71.3	65.2	68.2	60
12 Jun 2024	13:17	Cloudy	65.8	67.6	62.4	68.2	66 Measured ≤ Baseline
18 Jun 2024	13:22	Fine	67.4	69.6	63.9	68.2	67 Measured ≤ Baseline
24 Jun 2024	12:55	Fine	66.8	69.1	63.4	68.2	67 Measured ≤ Baseline

Noise Levels



Title Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S Date Jun 24	Project No. MA20003 Appendix G	
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Noise Levels



Notes:

- 1) The major activitie(s) being carried out on site during the reporting period is/are presented in Section 1.10
- 2) The weather conditions during the reporting month are presented in Appendix C.
- 3) Other factors which might affect the monitoring results are presented in Section 3.13.

Title Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Graphical Presentation of Construction Noise Monitoring Results	Scale	Project	
	N.T.S	No. MA20003	
	Date	Appendix	
	Jun 24	G	

**APPENDIX H
WASTE GENERATION IN THE
REPORTING MONTH**



Name of Department: CEDD

Monthly Summary Waste Flow Table for 2024 (CKL)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	a.Total Quantity Generated (a=c+d+e)	b. Hard Rock and Large Broken Concrete	c. Reused in the Contract	d. Reused in Other Projects	e. Disposed as Public Fill	f. Imported Fill	g. Metals	h. Paper / Cardboard Packaging	i. Plastics	j. Chemical Waste	k. 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)
January	2.027	0.187	0.000	0.000	2.027	0.000	0.000	0.000	0.000	19.000	0.054
February	5.666	0.197	0.000	0.000	5.666	0.000	0.000	0.000	0.000	0.000	0.039
March	4.705	0.198	0.000	0.000	4.705	0.000	0.000	0.000	0.000	0.000	0.032
April	8.647	0.560	0.000	0.000	8.647	0.000	0.000	0.000	0.000	0.000	0.050
May	14.492	0.121	0.086	0.000	14.406	0.000	0.000	0.000	0.000	0.000	0.039
June	8.403	0.805	1.963	0.000	6.441	0.000	0.000	0.000	0.000	0.000	0.046
Sub-total	43.941	2.067	2.049	0.000	41.892	0.000	0.000	0.000	0.000	19.000	0.260
July											
August											
September											
October											
November											
December											
Total	43.941	2.067	2.049	0.000	41.892	0.000	0.000	0.000	0.000	19.000	0.260

Monthly Summary Waste Flow Table

Notes:

- (1)The performance targets are given in ER Appendix 8I Clause 14 and the EM&A Manual(s).
- (2)The waste flow table shall also include C&D materials to be imported for use at the Site.
- (3)Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4)The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m3. (ER Part 8 Clause 8.8.5 (d) (ii) refers).

Monthly Summary Waste Flow Table For 2024

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Waste Generated Monthly							
	Total Quantity Generated	Broken Concrete (see Note 4)	Estimated Quantities (Broken Concrete)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Estimated Quantities (Metals)	Paper/ cardboard packaging	Estimated Quantities (Paper/ cardboard packaging)	Plastics (see Note 3)	Estimated Quantities (Plastics)	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 '000kg)	(in '000kg)	(in '000kg)	(tonne)
Jan-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-24														
Aug-24														
Sep-24														
Oct-24														
Nov-24														
Dec-24														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

- (1) The performance targets are given in PS Sub-clause 2(5) (c).
- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4) Broken concrete for recycling into aggregates.


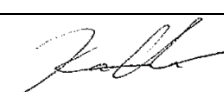
APPENDIX I
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240606
Date	06 June 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>D. Construction Noise Impact</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>F. Visual and Landscape</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>G. Permits/Licences</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>H. Marine Ecology</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>I. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in previous session (Ref No.: 240529) 	


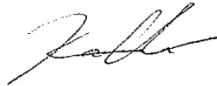
	Name	Signature	Date
Recorded by	Eric Hung		06 June 2024
Checked by	Karina Chan		07 June 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240613
Date	13 June 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>D. Construction Noise Impact</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>F. Visual and Landscape</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>G. Permits/Licences</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>H. Marine Ecology</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>I. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in previous session (Ref No.: 240606) 	


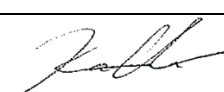
	Name	Signature	Date
Recorded by	Charles Fung		13 June 2024
Checked by	Karina Chan		14 June 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240620
Date	20 June 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>D. Construction Noise Impact</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>F. Visual and Landscape</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>G. Permits/Licences</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>H. Marine Ecology</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>I. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in previous session (Ref No.: 240613) 	


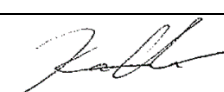
	Name	Signature	Date
Recorded by	Eric Hung		20 June 2024
Checked by	Karina Chan		21 June 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240627
Date	27 June 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>D. Construction Noise Impact</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>F. Visual and Landscape</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>G. Permits/Licences</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>H. Marine Ecology</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>I. Others</p> <ul style="list-style-type: none"> No environmental deficiency was identified in previous session (Ref No.: 240620) 	

	Name	Signature	Date
Recorded by	Eric Hung		27 June 2024
Checked by	Karina Chan		28 June 2024

**APPENDIX J
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)**

App J - ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

✓ Observation/reminder was made during site audit but improved/rectified by the contractor in the next site audit

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
Air Quality						
S3.8.1	Watering eight times a day on active works areas, exposed areas and paved haul roads	To minimize the dust impact	Contractor	All Active Work Sites	Construction phase	APCO
S3.8.1	Enclosing the unloading process at barging point by a 3-sided screen with top tipping hall / mixing area in Work Area A, provision of water spraying and flexible dust curtains	To minimize the dust impact	Contractor	Barging Points	Construction phase	APCO
S3.8.7	<p>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.</p> <ul style="list-style-type: none"> Use of frequent watering for particularly dusty construction areas and areas close to 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. 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. 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. Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise. <p>Stagnant water should be removed to avoid mosquitoes at EBV Basement.</p> <p>Stagnant water should be removed to avoid mosquitoes at EBV Basement.</p> <p>Stagnant water should be avoided.</p>	To minimize the dust impact	Contractor	All Construction Work Sites	Construction phase	APCO and Air Pollution Control (Construction Dust) Regulation
/	<p>Emission from Vehicles and Plants</p> <ul style="list-style-type: none"> All vehicles shall be shut down in intermittent use. Only well-maintained plant should be operated on-site and plant should be serviced regularly to avoid emission of black smoke. All diesel fuelled construction plant within the works areas shall be powered by ultra low sulphur diesel fuel (ULSD) 	Reduce air pollution emission from construction vehicles and plants	Contractor	All construction sites	Construction stage	APCO

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
	Valid No-road Mobile Machinery (NRMM) labels should be provided to regulated machines	Reduce air pollution emission from construction vehicles and plants	--			APCO
Noise Mitigation Plan	Use of Temporary Noise Barriers (i.e Acoustic box, SilentUp and etc.) or Full Enclosure for PME according to the approved Noise Mitigation Plan	To minimize construction noise impact arising from the Project at the affected NSRs	Contractor	Work Sites	Construction phase	EIAO-TM, NCO
Rubbish were observed at Portion U.	<p>Good Site Practice</p> <ul style="list-style-type: none"> Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program. Mobile plant, if any, should be sited as far away from NSRs as possible. Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum. Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities. 	To minimize construction noise impact arising from the Project at the affected NSRs	Project Proponent	Work sites	Construction Period	EIAO-TM, NCO
S4.9	Scheduling of Construction Works during School Examination Period	To minimize construction noise impact arising from the Project at the affected NSRs	Contractor	Work site near school	Construction phase	EIAO-TM, NCO
Water Quality Impact (Construction Phase)						
S5.6.24	The dry density of filling material for the TKO-LT Tunnel reclamation should be 1,900kg/m ³ , with fine content of 25% or less	Control potential impacts from filling activities	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
S5.8.1	Non-dredged method by constructing steel cellular caisson structure with stone column shall be adopted for construction of seawall foundation. During the stone column installation (also including the installation of steel cellular caisson), silt curtain shall be employed around the active stone column installation points.	Control potential impacts from filling activities	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
S5.8.2	Formation of seawall enclosing the reclamation for Road P2 (notwithstanding an opening of about 50m for marine access) shall be completed prior to the filling activities. The seawall opening of about 50m wide for marine access shall be selected at a location as indicatively shown in Appendix 5.10. No more than 3 filling barge trips per day shall be made with a maximum daily rate of 3,000m ³ (i.e. 1,000 m ³ per trip) for the filling operation at the reclamation area for Road P2. All filling works shall be carried out behind the seawall with the use of single silt curtain at the marine access.	Control potential impacts from filling activities	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
Silt Curtain Deployment Plan	<ul style="list-style-type: none"> Silt curtains should be deployed properly to surround the works area. Maintenance of silt curtain should be provided. Sufficient stock of silt curtain should be provided on site. 	Control potential impacts from marine works	Contractor	NE/2015/01	Construction stage	EIAO

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
S5.8.3	<p>Other good site practices should be undertaken during filling operations include:</p> <ul style="list-style-type: none"> all marine works should adopt the environmental friendly construction methods as far as practically possible including the use of cofferdams to cover the construction area to separate the construction works from the sea; floating single silt curtain shall be employed for all marine works; all vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; all hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; excess material shall be cleaned from the decks and exposed fittings of barges before the vessel is moved; adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; loading of barges and hoppers should be controlled to prevent splashing of filling material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes; construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds; and before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the silt curtain. 	Control potential impacts from filling activities and marine-based construction	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, Waste Disposal Ordinance (WDO)
S5.8.4	Site specific mitigation plan for reclamation areas using public fill materials should be submitted for EPD agreement before commencement of construction phase with due consideration of good site practices.	Control potential impacts from filling activities and marine based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
ERR S5.6.1	<p>To minimize water quality impact arising from the dredging and filling works for Reclamation for Road P2, the following mitigation measures shall be implemented:</p> <ul style="list-style-type: none"> Before carrying out any dredging and underwater filling works, a temporary barrier shall first be constructed to a height above the high water mark to completely enclose the works site (without any opening at the barrier wall) The temporary barrier fully enclosing the dredging and underwater filling works site shall not be removed before completion of all dredging and underwater filling works. Water quality sampling and testing shall be carried out to demonstrate that the water quality inside the enclosed barrier is comparable to the ambient or baseline levels prior to the removal of the fully enclosed barrier. Silt curtains shall be deployed for the installation and removal of the temporary barrier and at the double water gates marine access opening during its operation. 	Control potential impacts from dredging and filling works for Reclamation for Road P2	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.5	It is important that appropriate measures are implemented to control runoff and drainage and prevent high loading of SS from entering the marine environment. Proper site management is essential to minimise surface water runoff, soil erosion and sewage effluents.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.6	Any practical options for the diversion and realignment of drainage should comply with both engineering and environmental requirements in order to ensure adequate hydraulic capacity of all drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Design Stage and Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO, TM, DSS

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
S5.8.7	Construction site runoff and drainage should be prevented or minimised in accordance with the guidelines stipulated in the EPD's Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94). Good housekeeping and stormwater best management practices, as detailed in below, should be implemented to ensure that all construction runoff complies with WPCO standards and no unacceptable impact on the WSRs arises due to construction of the TKO-LT Tunnel. All discharges from the construction site should be controlled to comply with the standards for effluents discharged into the corresponding WCZ under the TM-DSS.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO, TM-DSS
S5.8.8	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include:	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.8	<ul style="list-style-type: none"> use of sediment traps; and 					
S5.8.8	<ul style="list-style-type: none"> adequate maintenance of drainage systems to prevent flooding and overflow. 					
S5.8.9	Construction site should be provided with adequately designed perimeter channel and pretreatment facilities and proper maintenance. The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.10	Ideally, construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.11	Sedimentation tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8m ³ capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.12	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.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.13	Measures should be taken to minimize 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 storm drains via silt removal facilities.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.14	Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50m ³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.15	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed 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.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.16	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
S5.8.17	Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.18	All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and located wheel washing bay should be provided at every site exit, and washwater should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheelwash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.19	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 ensure that these facilities are functioning properly at all times.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.20	It is recommended that on-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There shall be no direct discharge of effluent from the site into the sea.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.21	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.22	All fuel tanks and storage areas should be provided with locks and be located on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.23	Minimum distances of 100m shall be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes during construction and operational phases	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, TMDSS
S5.8.24	Under normal circumstances, groundwater pumped out of wells, etc. for the lowering of ground water level in basement or foundation construction, and groundwater seepage pumped out of tunnels or caverns under construction should be discharged into storm drains after the removal of silt in silt removal facilities.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.25 - S5.8.27 & Table 5.18	Grouting would be adopted as measure to reduce the groundwater inflow into the tunnel. During the tunnel excavation, the inflow rate of groundwater into the tunnel will be measured during the excavation. The groundwater levels above the tunnel will also be monitored by piezometers. If the inflow rate exceeds the pre-determined groundwater control criteria or the groundwater drawdown exceeds the required limit, pre-excavation grouting will be required to reduce the groundwater inflow. No significant change of groundwater levels would therefore be expected. Any chemicals/ foaming agents which would be entrained to the groundwater should be biodegradable and non-toxic throughout the tunnel construction. Potential groundwater quality impact would be minimal as the used material is non-toxic and biodegradable. No adverse groundwater quality would therefore be expected. Prescriptive measures in the form of an Action Plan with pre-emptive and re-active to preserve the groundwater levels at all times during the tunnel construction are set out in Table 5.18.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO, Buildings Ordinance
S5.8.28	Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be recirculated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Design Stage and Construction Phas	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.29 - S5.8.31	Wastewater generated from the washing down of mixing trucks and drum mixers and similar equipment should whenever practicable be recycled. The discharge of wastewater should be kept to a minimum. To prevent pollution from wastewater overflow, the pump sump of any water recycling system should be provided with an online standby pump of adequate capacity and with automatic alternating devices. Under normal circumstances, surplus wastewater may be discharged into foul sewers after treatment in silt removal and pH adjustment facilities (to within the pH range of 6 to 10). Disposal of wastewater into storm drains will require more elaborate treatment.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
S5.8.32	All vehicles and plant should be cleaned before they leave a construction site to ensure no earth, mud, debris and the like is deposited by them 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 storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.33	Bentonite slurries used in diaphragm wall and borepile construction should be reconditioned and reused wherever practicable. If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.34	If the used bentonite slurry is intended to be disposed of through the public drainage system, it should be treated to the respective effluent standards applicable to foul sewer, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.35	Water used in water testing to check leakage of structures and pipes should be reused for other purposes as far as practicable. Surplus unpolluted water could be discharged into storm drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.36	Sterilization is commonly accomplished by chlorination. Specific advice from EPD should be sought during the design stage of the works with regard to the disposal of the sterilizing water. The sterilizing water should be reused wherever practicable.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Design Stage and Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.37	Before commencing any demolition works, all sewer and drainage connections should be sealed to prevent building debris, soil, sand etc. from entering public sewers/drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.38	Wastewater generated from building construction activities including concreting, plastering, internal decoration, cleaning of works and similar activities should not be discharged into the stormwater drainage system. If the wastewater is to be discharged into foul sewers, it should undergo the removal of settleable solids in a silt removal facility, and pH adjustment as necessary	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.39	Acidic wastewater generated from acid cleaning, etching, pickling and similar activities should be neutralized to within the pH range of 6 to 10 before discharging into foul sewers. If there is no public foul sewer in the vicinity, the neutralized wastewater should be tinkered off site for disposal into foul sewers or treated to a standard acceptable to storm drains and the receiving waters	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO

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S5.8.40	Wastewater collected from canteen kitchens, including that from basins, sinks and floor drains, should be discharged into foul sewer via grease traps capable of providing at least 20 minutes retention during peak flow.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.41	Drainage serving an open oil filling point should be connected to storm drains via a petrol interceptor with peak storm bypass.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.42	Vehicle and plant servicing areas, vehicle wash bays and lubrication bays should as far as possible be located within roofed areas. The drainage in these covered areas should be connected to foul sewers via a petrol interceptor. Oil leakage or spillage should be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.43	Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.44	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.	Control potential impacts from accidental spillage of chemicals	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, WDO
S5.8.45	Any service shop 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.	Control potential impacts from accidental spillage of chemicals	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
S5.8.46	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: <ul style="list-style-type: none"> 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; and storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. 	Control potential impacts from accidental spillage of chemicals	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, WDO
S5.8.47	Collection and removal of floating refuse should be performed at regular intervals on a daily basis. The contractor should be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.	Control potential impacts from floating refuse and debris	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO,
Ecological Impact						
S6.8.4	<p>Measures to Minimize Disturbance</p> <ul style="list-style-type: none"> Use of Quiet Mechanical Plant during the construction phase should be adopted wherever possible. Hoarding or fencing should be erected around the works area boundaries during the construction phase. The hoarding would screen adjacent habitats from construction phase activities, reduce noise disturbance to these habitats and also to restrict access to habitats adjacent to works areas by site workers; Regular spraying of haul roads to minimize impacts of dust deposition on adjacent vegetation and habitats during the construction activities 	Minimize noise, human and traffic disturbance to terrestrial habitat and wildlife; and reduce dust generation	Design Team / Contractor	Land-based works are	Construction Phase	N/A

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S6.8.5	<p>Standard Good Site Practice</p> <ul style="list-style-type: none"> Placement of equipment or stockpile in designated works areas and access routes selected on existing disturbed land to minimise disturbance to natural habitats. Construction activities should be restricted to works areas that should be clearly demarcated. The works areas should be reinstated after completion of the works. Waste skips should be provided to collect general refuse and construction wastes. The wastes should be properly disposed off-site in a timely manner. General drainage arrangements should include sediment and oil traps to collect and control construction site run-off. Open burning on works sites is illegal, and should be strictly prohibited. Measures should also be put into place so that litter, fuel and solvents do not enter the nearby watercourses. 	Reduce disturbance to surrounding habitats	Contractor	Land-based works are	Construction Phase	N/A
S6.8.6	<p>Measure to Minimize Groundwater Inflow</p> <ul style="list-style-type: none"> The drained tunnel construction method with groundwater inflow control measures would generally be adopted. During the tunnel excavation, pre-excavation grouting could be adopted to reduce the groundwater inflow and ensure that the tunnel would meet the long term water tightness requirements. 	Minimize groundwater inflow	Contractor	Tunnel	Construction Phase	N/A
S6.8.8	<p>Measure to Minimize Impact on Corals</p> <p><u>Coral translocation</u></p> <ul style="list-style-type: none"> It is recommended to translocate the affected coral colonies, except the locally common <i>Oulastrea crispata</i>, within the reclamation area and bridge footprint to the other suitable locations as far as practicable. The coral translocation should be conducted during the winter months (November-March) in order to avoid disturbance during their spawning period (i.e. July to October). A detailed coral translocation plan with a description on the methodology for pretranslocation coral survey, translocation methodology, identification/proposal of coral recipient site, monitoring methodology for posttranslocation should be prepared during the detailed design stage. The coral translocation plan should be subject to approval by relevant authorities (e.g. EPD and AFCDD) before commencement of the coral translocation. All the translocation exercises should be conducted by experienced marine ecologist(s) who is/are approved by AFCDD prior to commencement of coral translocation. <p><u>Post translocation Monitoring</u></p> <ul style="list-style-type: none"> A coral monitoring programme is recommended to assess any adverse and unacceptable impacts to the translocated coral communities Information gathered during each posttranslocation monitoring survey should include observations on the presence, survival, health condition and growth of the translocated coral colonies. These parameters should then be compared with the baseline results collected from the pre-translocation survey. 	Minimize loss of coral	Design team, contractor, project operator	Within reclamation areas and pier footprint	Prior construction	N/A

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S6.8.9 S6.8.10	Measure to Control Water Quality Impact <ul style="list-style-type: none"> Deployment of silt curtains around the active stone column installation points, opening of newly installed seawall and marine works area. Diverting of the site runoff to silt trap facilities before discharging into storm drain; Proper waste and dumping management; and Standard good-site practice for land-based construction. 	Control water quality impact, especially on suspended solid level; minimize the contamination of wastewater discharge, accidental chemical spillage and construction site runoff to the receiving water bodies	Design Team, contractor	Marine and landbased works area	Construction phase	WQO
S6.8.11	Compensation for Vegetation Loss <ul style="list-style-type: none"> Felling of mature trees should be compensated by planting of standard or heavy standard trees within or in vicinity of the affected area as far as practicable. Such compensatory planting for trees should be provided with at least a 1:1 ratio. In addition, vegetation at the temporarily affected area should be reinstated with species similar to the existing condition. 	Compensate for the vegetation loss	Design Team, contractor	Land-based works area	Construction phase	N/A
Fisheries Impact						
S7.7.3	Measure to Control Water Quality Impact <ul style="list-style-type: none"> Deployment of silt curtains around the active stone column installation points, opening of newly installed seawall and marine works area. 	Control water quality impact, especially on suspended solid level	Design Team / Contractor	Marine work area	Construction phase	WQO
Waste Management (Construction Phase)						
S8.6.3	Good Site Practices and Waste Reduction Measures <ul style="list-style-type: none"> Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; Training of site personnel in site cleanliness, 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 transportation of waste by either covering trucks or by transporting wastes in enclosed containers; and Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors. 	To reduce waste management impacts	Contractor	All work sites	Construction Phase	Waste Disposal Ordinance (Cap. 354) Land (Miscellaneous Provisions) Ordinance (Cap. 28)
S8.6.4	Good Site Practices and Waste Reduction Measures (con't) <ul style="list-style-type: none"> Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; Encourage collection of aluminium cans by providing separate labelled bins to enable this waste to be segregated from other general refuse generated by the workforce; Proper storage and site practices to minimize the potential for damage or contamination of construction materials; and Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste. 	To achieve waste reduction	Contractor	All work sites	Construction Phase	Waste Disposal Ordinance (Cap. 354) Land (Miscellaneous Provisions) Ordinance (Cap. 28)
S8.6.5	Good Site Practices and Waste Reduction Measures (con't) The Contractor shall prepare and implement a WMP as part of the EMP in accordance with ETWB TCW No. 19/2005 which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities. Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The Contractor should implement the waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor.	To achieve waste reduction	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005

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S8.6.6	<p>Good Site Practices and Waste Reduction Measures (con't)</p> <ul style="list-style-type: none"> C&D materials would be reused in the project and other local concurrent projects as far as possible. 	To achieve waste reduction	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005
S8.6.7	<p>Storage, Collection and Transportation of Waste</p> <p>Should any temporary storage or stockpiling of waste is required, recommendations to minimize the impacts include:</p> <ul style="list-style-type: none"> Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing 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 wind-blown or being washed away; and Different locations should be designated to stockpile each material to enhance reuse. 	To minimize potential adverse environmental impacts arising from waste storage	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005
S8.6.8/ Waste Management Plan	<p>Storage, Collection and Transportation of Waste (con't)</p> <ul style="list-style-type: none"> Remove waste in timely manner; Waste collectors should only collect wastes prescribed by their permits; Impacts during transportation, such as dust and odour, should be mitigated by the use of covered trucks or in enclosed containers; Obtain relevant waste disposal permits from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28); Waste should be disposed of at licensed waste disposal facilities/ alternative disposal ground approved by RE and DEP; and Maintain records of quantities of waste generated, recycled and disposed. 	To minimize potential adverse environmental impacts arising from waste collection and disposal	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005
S8.6.9/ Waste Management Plan	<p>Storage, Collection and Transportation of Waste (con't)</p> <ul style="list-style-type: none"> Implementation of trip ticket system with reference to DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials, to monitor disposal of waste and to control fly-tipping at PFRFs or landfills. A recording system for the amount of waste generated, recycled and disposed (including disposal sites) should be proposed. 	To minimize potential adverse environmental impacts arising from waste collection and disposal	Contractor	All work sites	Construction Phase	DEVB TCW No. 6/2010
S8.6.11 - S8.6.13/ Waste Management Plan	<p>Sorting of C&D Materials</p> <ul style="list-style-type: none"> Sorting to be performed to recover the inert materials, reusable and recyclable materials before disposal off-site. Specific areas shall be provided by the Contractors for sorting and to provide temporary storage areas for the sorted materials. The C&D materials should at least be segregated into inert and non-inert materials, in which the inert portion could be reused and recycled in the reclamation as far as practicable before delivery to PFRFs. While opportunities for reusing the non-inert portion should be investigated before disposal of at designated landfills 	To minimize potential adverse environmental	Contractor	All work sites	Construction Phase	DEVB TCW No. 6/2010 ETWB TCW No. 33/2002 ETWB TCW No. 19/2005
S8.6.17 – S8.6.20	<p>Sediments (con't)</p> <ul style="list-style-type: none"> Requirements of the Air Pollution Control (Construction Dust) Regulation, where relevant, shall be adhered to during boring, excavation, transportation and disposal of sediments or cement stabilization of sediment. A treatment area should be confined for carrying out the cement stabilization mixing and temporary stockpile. The area should be designed to prevent leachate from entering the ground. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the potential odour / dust emissions during boring, excavation and transportation of the sediment, the excavated sediments should be kept wet during excavation/boring and should be properly covered when placed on barges/trucks. Loading of the excavated sediment to the barge should be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. In order to minimise the exposure to contaminated materials, workers should, when necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities should also be provided on site. 	To determine the best handling and treatment of sediment	Contractor	All works areas with sediments concern	Construction Phase	ETWB TCW No. 19/2005

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S8.6.24 - S8.6.28/ Waste Management Plan	<p>Sediments (con't)</p> <ul style="list-style-type: none"> The excavated sediments is expected to be loaded onto the barge and transported to the designated disposal sites allocated by the MFC. The excavated sediment would be disposed of according to its determined disposal options and ETWB TC(W) No. 34/2002. Stockpiling of contaminated sediments should be avoided as far as possible. If temporary stockpiling of contaminated sediments is necessary, the excavated sediment should be covered by tarpaulin and the area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The stockpiling areas should be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas should be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the potential odour / dust emissions during boring and transportation of the sediment, the excavated sediments should be kept wet during excavation/boring and should be properly covered when placed on barges. Loading of the excavated sediment to the barge should be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. The barge transporting the sediments to the designated disposal sites should be equipped with tight fitting seals to prevent leakage and should not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. In order to minimise the exposure to contaminated materials, workers should, when necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities should also be provided on site. Another possible arrangement for Type 3 disposal is by geosynthetic containment. A geosynthetic containment method is a method whereby the sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal. 	To ensure handling of sediments are in accordance to statutory requirements	Contractor	All works areas with sediments concern	Construction Phase	ETWB TC(W) No. 34/2002 & Dumping at Sea Ordinance
S8.6.26/ Waste Management Plan	<p>Chemical Wastes.</p> <ul style="list-style-type: none"> If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	To ensure proper management of chemical waste	Contractor	All works sites	Construction Phase	Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes Waste Disposal (Chemical Waste) (General) Regulation

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S8.6.27/ Waste Management Plan	<p>General Refuse</p> <ul style="list-style-type: none"> General refuse should be stored in enclosed bins or compaction units separate from C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material. 	To ensure proper management of general refuse	Contractor	All works sites	Construction Phase	Public Health and Municipal Services Ordinance (Cap. 132)
Impact on Cultural Heritage (Construction Phase)						
S9.6.4	<p>Dust and visual impacts</p> <ul style="list-style-type: none"> Temporarily fenced off buffer zone with allowance for public access (minimum 1 m) should be provided; The open yard in front of the temple should be kept as usual for annual Tin Hau festival; Monitoring of vibration impacts should be conducted when the construction works are less than 100m from the temple. 	To prevent dust and visual impacts	Contractors	Work areas	Construction Phase	EIAO; GCHIA; AMO
S9.6.4	<p>Indirect vibration impact</p> <ul style="list-style-type: none"> Vibration level is suggest to be controlled within a peak particle velocity (ppv) limit of 5mm/s measured inside the historical buildings; Monitoring of vibration should be carried out during construction phase. Tilting and settlement monitoring should will be applied on the Cha Kwo Ling Tin Hau Temple as well. A proposal with details for the mitigation measures and monitoring of impacts on built heritage shall be submitted to AMO for comments before commencement of work. 	To prevent indirect vibration impact	Contractors	Work areas	Construction Phase	Vibration Limits on Heritage Buildings by CEDD; GCHIA; AMO.
Built Heritage Mitigation Plan	<ul style="list-style-type: none"> Established Alert, Alarm and Action Level for the monitoring parameters. To increase the instrumentation monitoring and reporting frequency. To propose detailed action plan or contingency plan for the Engineer's approval when AAA Level is reached or exceeded. 	To prevent vibration impacts	NE/2015/01	Tin Hau Temple	Construction Phase	Vibration Limits on Heritage Buildings by CEDD; GCHIA; AMO.
Landscape and Visual Impact (Construction Phase)						
Table 10.8.1/ Landscape Mitigation Plan	CM1 - Construction area and contractor's temporary works areas to be minimised to avoid impacts on adjacent landscape.	Avoid impact on adjacent landscape areas	CEDD (via Contractor)	General	Construction planning and during construction period	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM2 - Reduction of construction period to practical minimum.	Minimise duration of impact	CEDD (via Contractor)	N/A	Construction planning	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM3 - Topsoil, where the soil material meets acceptable criteria and where practical, to be stripped and stored for re-use in the construction of the soft landscape works. The Contract Specification shall include storage and reuse of topsoil as appropriate.	To allow re-use of topsoil	CEDD (via Contractor)	General	Site clearance	As per the Particular Specification
Table 10.8.1/ Landscape Mitigation Plan	CM4 - Existing trees at boundary of site and retained trees within site boundary to be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification, under which 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. (Tree protection measures will be detailed at Tree Removal Application stage).	To minimize tree loss	CEDD (via Contractor)	As per approved Tree Removal Application(s)	Site clearance and throughout construction period	ETWB TC 3/2006 and as per tree protection measures in Particular Specification

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Table 10.8.1/ Landscape Mitigation Plan	CM5 - Trees unavoidably affected by the works shall be transplanted where practicable. Where possible, trees should be transplanted direct to permanent locations rather than temporary holding nurseries. A detailed tree transplanting specification shall be provided in the Contract Specification and sufficient time for preparation shall be allowed in the construction programme.	To maximize preservation of existing trees	CEDD (via Contractor)	As per approved Tree Removal Application(s)	Site clearance	ETWB TC 3/2006 and as per tree protection measures in Particular Specification
Table 10.8.1/ Landscape Mitigation Plan	CM6 - 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.	To maximize screening of the works	CEDD (via Contractor)	At Lam Tin Interchange and edge of Road P2 landscape deck, TKO	Beginning of construction period	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM7 - Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material	To reduce visual intrusion	CEDD (via Contractor)	General	Throughout construction period	As per Particular Specification
Table 10.8.1/ Landscape Mitigation Plan	CM8 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	To reduce visual intrusion	CEDD (via Contractor)	General	Throughout construction period	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM9 - Screening of works areas with hoardings with appropriate colours compatible with the surrounding area	Reduction of visual intrusion	CEDD (via Contractor)	Project site Boundary	Excretion of site hoarding	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM10 - Avoidance of excessive height and bulk of site buildings and structure	Reduction of visual intrusion and integration with environment	CEDD (via Contractor)	Built structures	Design and construction stage	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM11 - Limitation of run-off into freshwater streams, ponds and sea areas	Avoidance of contamination of water courses and water bodie	CEDD (via Contractor)	TKO reclamation, TKO tunnel portal, Cha Kwo Ling roadworks	Throughout construction period	N/A
Table 10.8.1	CM12 - Minimise area of reclamation and design the edges sensitively to tie in with adjacent coastline characte	Minimise loss of Junk Bay and integration with existing coastlin	CEDD (via Contractor)	Temporary reclamation for barging points at TKO and Lam Tin and permanent reclamation for TKO Interchange slip roads and Road P2	Construction planning and reclamation stages	N/A
Landfill Gas Hazard (Design and Construction Phase)						
S11.5.9	A Safety Officer, trained in the use of gas detection equipment and landfill gas-related hazards, should be present on site throughout the groundworks phase. The Safety Officer should be provided with an intrinsically safe portable instrument, which is appropriately calibrated and able to measure the following gases in the ranges indicated below: Methane 0-100% LEL and 0100% v/v Carbon dioxide 0-100% Oxygen 0-21%	Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
S11.5.10 S11.5.25	<p>Safety Measures</p> <ul style="list-style-type: none"> For staff who work in, or have responsibility for “at risk” area, such as all excavation workers, supervisors and engineers working within the Consultation Zone, should receive appropriate training on working in areas susceptible to landfill gas, fire and explosion hazards. An excavation procedure or code of practice to minimize landfill gas related risk should be devised and carried out. No worker should be allowed to work alone at any time in or near to any excavation. At least one other worker should be available to assist with a rescue if needed. Smoking, naked flames and all other sources of ignition should be prohibited within 15m of any excavation or ground-level confined space. “No smoking” and “No naked flame” notices should be posted prominently on the construction site and, if necessary, special areas should be designed for smoking. Welding, flame-cutting or other hot works should be confined to open areas at least 15m from any trench or excavation. Welding, flame-cutting or other hot works may only be carried out in trenches or confined spaces when controlled by a “permit to work” procedure, properly authorized by the Safety Officer (or, in the case of small developments, other appropriately qualified person). The permit to work procedure should set down clearly the requirements for continuous monitoring for methane, carbon dioxide and oxygen throughout the period during which the hot works are in progress. The procedure should also require the presence of an appropriately qualified person, in attendance outside the ‘confined area’, who should be responsible for reviewing the gas measurements as they are made, and who should have executive responsibility for suspending the work in the event of unacceptable or hazardous conditions. Only those workers who are appropriately trained and fully aware of the potentially hazardous conditions which may arise should be permitted to carry out hot works in confined areas. Where there are any temporary site offices, or any other buildings located within the Sai Tso Wan Landfill Consultation Zone which have enclosed spaces with the capacity to accumulate landfill gas, then they should either be located in an area which has been proven to be free of landfill gas (by survey using portable gas detectors); or be raised clear of the ground by a minimum of 500mm. This aims to create a clear void under the structure which is ventilated by natural air movement such that emission of gas from the ground are mixed and diluted by air. Any electrical equipment, such as motors and extension cords, should be intrinsically safe. During piping assembly or conduiting construction, all valves/seals should be closed immediately after installation. As construction progresses, all valves/seals should be closed to prevent the migration of gases through the pipeline/conduit. All piping /conduiting should be capped at the end of each working day. During construction, adequate fire extinguishing equipment, fire-resistant clothing and breathing apparatus (BA) sets should be made available on site. Fire drills should be organized at not less than six monthly intervals. 	Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD’s Landfill Gas Hazard Assessment Guidance Note Labour Department’s Code of Practice for Safety and Health at Work in Confined Space

EIA Ref. / EP Submission	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	What requirements or standards for the measures to achieve?
S11.5.10 S11.5.25	<ul style="list-style-type: none"> The contractor should formulate a health and safety policy, standards and instructions for site personnel to follow. All personnel who work on the site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of excavations. Safety notices (in Chinese and English) should be posted at prominent position around the site warning danger of the potential hazards. Service runs within the Consultation Zone should be designated as "special routes"; utilities companies should be informed of this and precautionary measures should be implemented. Precautionary measures should include ensuring that staff members are aware of the potential hazards of working in confined spaces such as manholes and service chambers, and that appropriate monitoring procedures are in place to prevent hazards due to asphyxiating atmospheres in confined spaces. Detailed guidance on entry into confined spaces is given in Code of Practice on Safety and Health at Work in Confined Spaces (Labour Department, Hong Kong). Periodically during ground-works construction within the 250m Consultation Zone, the works area should be monitored for methane, carbon dioxide and oxygen using appropriately calibrated portable gas detection equipment. The monitoring frequency and areas to be monitored should be set down prior to commencement of ground-works either by the Safety Officer or an approved and appropriately qualified person. 					
S11.5.26 - S11.5.31	<p>Monitoring</p> <ul style="list-style-type: none"> Routine monitoring should be carried out in all excavations, manholes, chambers, relocation of monitoring wells and any other confined spaces that may have been created. All measurements in excavations should be made with the extended monitoring tube located not more than 10 mm from the exposed ground surface. Monitoring should be performed properly to make sure that the area is free of landfill gas before any man enters into the area. For excavations deeper than 1m, measurements should be carried out: <ul style="list-style-type: none"> at the ground surface before excavation commences;- immediately before any worker enters the excavation; at the beginning of each working day for the entire period the excavation remains open; and periodically throughout the working day whilst workers are in the excavation. For excavations between 300mm and 1m deep, measurements should be carried out: <ul style="list-style-type: none"> directly after the excavation has been completed; and periodically whilst the excavation remains open. For excavations less than 300mm deep, monitoring may be omitted, at the discretion of the Safety Officer or other appropriately qualified person. Depending on the results of the measurements, actions required will vary and should be set down by the Safety Officer or other appropriately qualified person. The exact frequency of monitoring should be determined prior to the commencement of works, but should be at least once per day, and be carried out by a suitably qualified or qualified person before starting the work of the day. Measurements shall be recorded and kept as a record of safe working conditions with copies of the site diary and submitted to the Engineer for approval. The Contractor may elect to carry out monitoring via an automated monitoring system. 	Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note
S11.5.32	The hazards from landfill gas during the construction stage within the Sai Tso Wan Landfill Consultation Zone should be minimized by suitable precautionary measures recommended in Chapter 8 of the Landfill Gas Hazard Assessment Guidance Note.	<p>construction stage within the Sai Tso Wan</p> <p>Protect the workers from landfill gas hazards</p>	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note

Table II - Observation / Reminder / Non-compliance made during Site Audit

- Key:
- ✓ Observation/reminder was made during site audit but improved/rectified by the contractor in the next site audit
 - ✗ Observation/reminder was made during site audit but not yet improved/rectified by the contractor in the next site audit
 - # Follow up action will be reported in next reporting month
 - * Non-compliance of mitigation measure
 - Non-compliance but improved by the contractor

EIA Ref	Recommended Mitigation Measures	Details of Reminder/Observation	Recorded Date	Status
Air Quality				
--	--	--		
Construction Noise Impact				
--	--	--		
Water Quality Impact				
--	--	--		
Ecological Impact				
--	--	--		
Fisheries Impact				
--	--	--		
Waste Management				
--	--	--		
Landscape and Visual Impact				
--	--	--		
Landfill Gas Hazards				
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APPENDIX L
EVENT AND ACTION PLANS

Event and Action Plan for Air Quality (Dust)

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of complaint and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method. 	<ol style="list-style-type: none"> 1. Notify Contractor. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling	<ol style="list-style-type: none"> 1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for remedial actions to IEC within three working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

	<ol style="list-style-type: none"> 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring. 			
Limit level being exceeded by one sampling	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform Contractor ,IEC, ER, and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within three working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.
Limit level being exceeded by two or more consecutive sampling	<ol style="list-style-type: none"> 1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within three working days of notification; 3. Implement the agreed proposals;

	<ol style="list-style-type: none">5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;8. If exceedance stops, cease additional monitoring.	<ol style="list-style-type: none">3. Supervise the implementation of remedial measures.	<ol style="list-style-type: none">4. Ensure remedial measures properly implemented;5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	<ol style="list-style-type: none">4. Resubmit proposals if problem still not under control;5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.
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Event and Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level	<ol style="list-style-type: none"> 1. Notify IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Limit Levels and Action Plan for Landfill Gas

Parameter	Limit Level	Action
Oxygen	<19%	<ul style="list-style-type: none"> • Ventilate to restore oxygen to >19%
	<18%	<ul style="list-style-type: none"> • Stop works • Evacuate personnel/prohibit entry • Increase ventilation to restore oxygen to >19%
Methane	>10% LEL (i.e. > 0.5% by volume)	<ul style="list-style-type: none"> • Prohibit hot works • Ventilate to restore methane to <10% LEL
	>20% LEL (i.e. > 1% by volume)	<ul style="list-style-type: none"> • Stop works • Evacuate personnel / prohibit entry • Increase ventilation to restore methane to <10% LEL
Carbon Dioxide	>0.5%	<ul style="list-style-type: none"> • Ventilate to restore carbon dioxide to < 0.5%
	>1.5%	<ul style="list-style-type: none"> • Stop works • Evacuate personnel / prohibit entry • Increase ventilation to restore carbon dioxide to <0.5%

**APPENDIX M
SUMMARIES OF ENVIRONMENTAL
COMPLAINT, WARNING, SUMMON
AND NOTIFICATION OF SUCCESSFUL
PROSECUTION**

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Table M1 Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution Received in the Reporting Period

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
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Remarks: No environmental complaint were received in the reporting period, no warning/ summon and prosecution were received in the reporting period.

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Table M2 Cumulative Log for Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint #N02	Portion T1	10-Oct-2020	Resident of Yau Lai Estate complained that i) an excavator operated before 7 am on 9 and 10 October 2020; and, ii) the height of noise barriers are not sufficient for noise reduction.	Noise	<ul style="list-style-type: none"> Contractor was recommended to scheduled noisy works to less sensitive hours (e.g. normal weekdays between 08:00-19:00) to minimize noise nuisance. Since the complaint location stated in part II is situated out of the project boundary and within the other construction site, no investigation shall be conducted for non-project related complaint. 	Closed
Complaint #N04	Portion T1	9-Feb-2021	Resident of Cha Kwo Ling village revealed that some breaking noise was heard at his/her residence (near Cha kwo Ling Main Street) from the ground at about 20:00 on 08 Feb, 2021	Noise	<ul style="list-style-type: none"> The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side on the evening time and night-time of the date of complaint are considered as one of the potential noise source of the ground borne noise nuisance. 	Closed
		6 March 2021	The complainant informed that they continues to hear breaking noise during 3-4 a.m. and caused serious noise nuisance to the residents.			

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					<ul style="list-style-type: none">• A valid CNP was hold and the construction activities being taken were complied with the relevant CNP.• Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise• In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs.• Contractor is recommended to continue to strictly follow the requirements in the relevant CNP.• According to the condition 3.d point 5 of the CNP (GW-RE0071-21), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received.	

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint #N05	Portion T1	18 July 2021	Complainant informed that breaking noise was heard at his/her residence (near Cha Kwo Ling Main Road) from the ground during 3-4 a.m. on 17 Jul and 18 Jul 2021.	Noise	<ul style="list-style-type: none"> The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side on the evening time and night-time of the date of complaint are considered as one of the potential noise source of the ground borne noise nuisance. A valid CNP was hold and the construction activities being taken were complied with the relevant CNP. Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. Contractor is recommended to 	Closed
		27 July 2021	Complainant further informed that they continued to hear underground breaking noise during 3-5 a.m. on 27 July 2021.			

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					<p>continue to strictly follow the requirements in the relevant CNP.</p> <ul style="list-style-type: none"> According to the condition 3.d point 5 of the CNP (GW-RE0399-21), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received. 	
Complaint #N06	Portion T1	03-Nov-2021	<p>Complainant informed that underground breaking noise was heard at his/her residence (near Cha Kwo Ling Main Road) at about 10 p.m. on 03 Nov 2021. Also, the complainant further informed that recently they continued to hear underground breaking noise which had caused serious noise nuisance to the residents.</p>	Noise	<ul style="list-style-type: none"> No major construction noise related environmental deficiency was identified during ad-hoc inspection carried out by ET, RE and the Contractor representative on 12 November 2021. The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side on the evening time and night-time of the date of complaint are considered as one of the potential noise source of the ground borne noise nuisance. 	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint #N06	Portion T1	25-Nov-2021	<p>Follow up complaint from the same complainant which informed that there was still ground bound noise nuisance after 10 p.m occasionally.</p> <p>The complainant further requested if the relevant works that may contribute to ground bound noise nuisance could be stopped after 10 p.m.</p>	Noise	<ul style="list-style-type: none"> • A valid CNP was hold and the investigation is still undertaken in order to investigate the construction activities being taken were complied with the relevant CNP. • Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise • In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. • Contractor is recommended to continue to strictly follow the requirements in the relevant CNP. • According to the condition 3.d point 5 of the CNP (GW-RE1035-21), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received. 	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint #N07	Portion T1	17-Feb-22	Complainant informed that noise from drilling activities near Tin Hau Temple was perceived all day.	Noise	<ul style="list-style-type: none"> The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side are considered as one of the potential noise source of the ground borne noise nuisance. A valid CNP was hold and the construction activities being taken were complied with the relevant CNP. Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide 	Closed
		24-March-22	Follow up complaint from the same complainant was received and he/she informed that the day time ground-borne noise nuisance had deteriorated this week.			

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
		12-April-22	3 rd complaint from the same complainant was received again, he/ she complained that his/ her family were affected by the noise from construction site of T2 at the night-time period and felt no improvement on this issues.		<p>regularly maintenance for PMEs.</p> <ul style="list-style-type: none"> • Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. • According to the condition 3.d point 5 of the CNP (GW-RE1201-21, GW-RE0199-22), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received. 	
Complaint #N08	Portion T1	19-Oct-22	Complainant informed that the groundborne noise was heard at his/her residence (near Cha Kwo Ling Main Road) everyday, including the public holiday. Also, the complainant further informed that recently they continued to hear groundborne noise which had caused serious noise nuisance to the residents	Noise	<ul style="list-style-type: none"> • A valid CNP was hold and construction activities being taken were complied with the relevant CNP • Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise • In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide 	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					<p>regularly maintenance for PMEs.</p> <ul style="list-style-type: none">• Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP.• According to the condition 3.d point 5 of the CNP (GW-RE0997-22), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received	
Complaint #N09	Portion T1	28-Oct-22	Complainant informed that the underground breaking noise was heard at her residence (near Cha Kwo Ling Main Road) after the blasting work every day.	Noise	<ul style="list-style-type: none">• A valid CNP was hold and construction activities being taken were complied with the relevant CNP• Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise• In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs.	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					<ul style="list-style-type: none"> • Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. • According to the condition 3.d point 5 of the CNP (GW-RE0997-22), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received 	
Complaint #N11	Portion T1 & Portion V	11th August 2023	Complainant informed that there was a noise nuisance from construction work between 8 am and 7 pm, causing an impact on the residents. -	Noise	<ul style="list-style-type: none"> • A valid CNP was hold and construction activities being taken were complied with the relevant CNP • The contractor has taken steps to address noise concerns by implementing noise control measures such as erecting noise barriers and using a hydraulic breaker equipped with a noise muffler. • In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the 	Closed

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Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					less sensitive hours and provide regularly maintenance for PMEs. <ul style="list-style-type: none"> • Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. • According to the condition 3.d point 5 of the CNP (GW-RE0603-23), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received 	
		23rd August 2023	The complainant informed that there were vibrations caused by the works in CKL Tunnel on 21 August 2023. They stated that their units are temporary housing with certain risks involved and requested an explanation for the project as well as appropriate actions to be taken		<ul style="list-style-type: none"> • A valid CNP was hold and construction activities being taken were complied with the relevant CNP • The contractor has taken steps to address noise concerns by implementing noise control measures such as erecting noise barriers and using a hydraulic breaker equipped with a noise muffler. • In addition, the Contractor should 	Closed

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Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					<p>still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs.</p> <ul style="list-style-type: none"> • Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. • According to the condition 3.d point 5 of the CNP (GW-RE0603-23), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received 	
		6th September 2023	EPD received a complaint from a resident of Cha Kwo Ling Village regarding vibrations caused by the construction works of the T2 project on 5 September 2023. The complainant stated that these vibrations are affecting House No. 78 in the village.	Noise	<ul style="list-style-type: none"> • A valid CNP was hold and construction activities being taken were complied with the relevant CNP • The weekly noise monitoring and additional noise assessments have verified that the noise levels remain within the set limits. Moreover, the groundborne noise measurements 	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					<p>data suggests that the noise levels are well within the criteria outlined in the TM.</p> <ul style="list-style-type: none">• The contractor has taken steps to address noise concerns by implementing noise control measures such as erecting noise barriers and using a hydraulic breaker equipped with a noise muffler.• In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs.• Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP.• According to the condition 3.d point 5 of the CNP (GW-RE0973-23), the	

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: June 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received	

APPENDIX N
SUMMARY OF EXCEEDANCE

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix N – Summary of Exceedance

Reporting Period: June 2024

(A) Exceedance Report for Air Quality

No Action and no Limit Level exceedance of 24hr TSP monitoring was recorded in this reporting month.

No Action/ Limit Level exceedance of 1hr TSP monitoring was recorded in this reporting month.

(B) Exceedance Report for Construction Noise

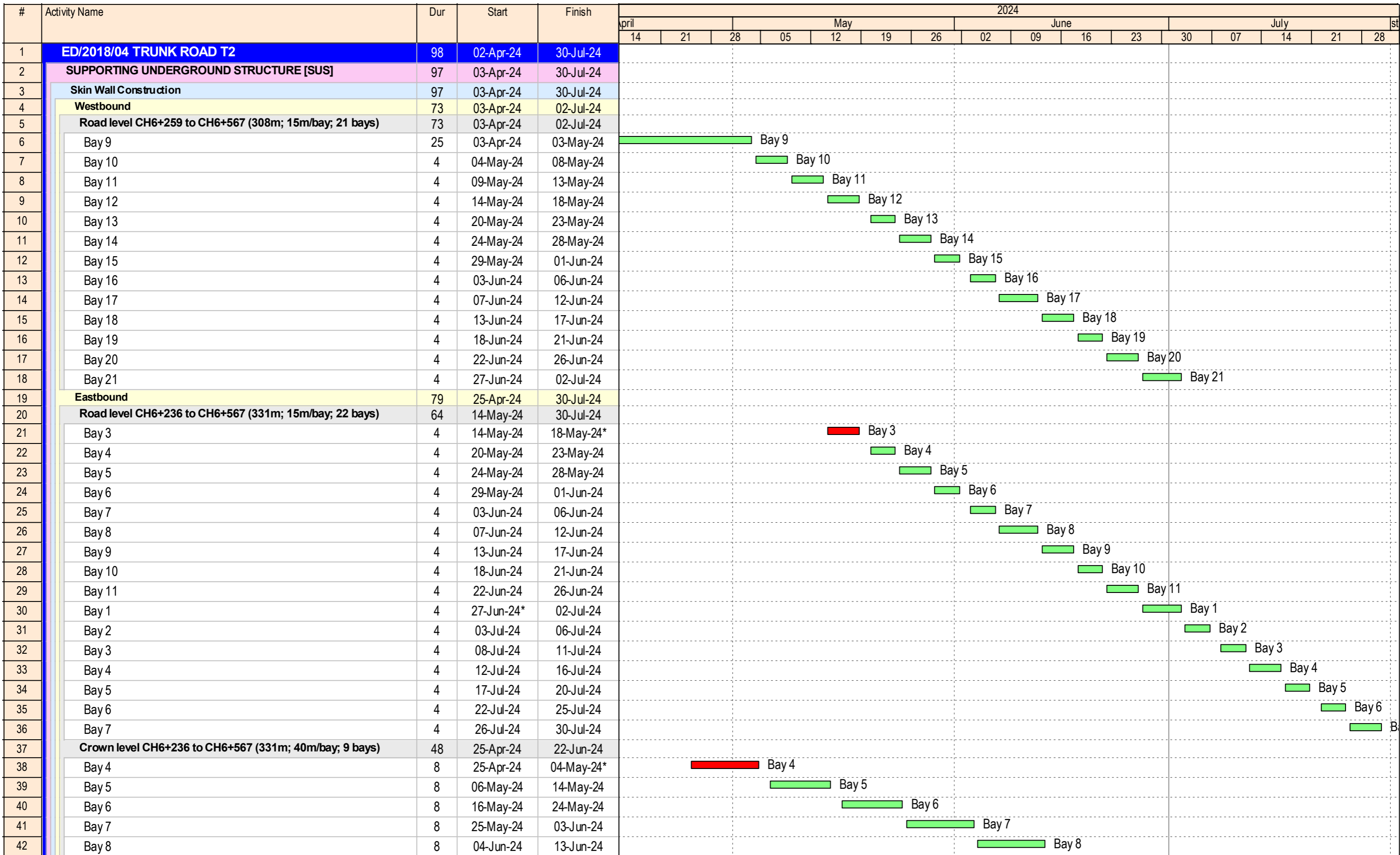
No Action Level exceedance was recorded due to the documented complaint in the reporting month.

No Limit Level exceedance for construction noise monitoring was recorded in the reporting month.

(C) Exceedance Report for Landfill Gas

(NIL in the reporting month).

**APPENDIX O
TENTATIVE CONSTRUCTION
PROGRAMME**



- ◆ Milestones
- ▬ Planned Bar
- ▬ Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
for Developments at South Apron

Three Months Rolling Programme (May24 - Jul24)



Date	Revision	Checked	Approved
31-Jan-24	Rev.A	SPa	

Appendix A

#	Activity Name	Dur	Start	Finish	2024																				
					April			May				June				July									
					14	21	28	05	12	19	26	02	09	16	23	30	07	14	21	28					
43	Bay 9	8	14-Jun-24	22-Jun-24																					Bay 9
44	Tunnel Internal Structure & Finishing	43	13-May-24	04-Jul-24																					
45	Westbound	32	13-May-24	20-Jun-24																					
46	CPS	32	13-May-24	20-Jun-24																					
47	SUS - WB CPS E&M Bracket 420m leadtime	32	13-May-24*	20-Jun-24																					SUS - WB CPS E&M Bracket 420m leadtime
48	SUS - WB CPS TCSS Access Date	0		20-Jun-24																					◆ SUS - WB CPS TCSS Access Date
49	Eastbound	32	27-May-24	04-Jul-24																					
50	CPS	32	27-May-24	04-Jul-24																					
51	SUS - EB CPS E&M Bracket 420m leadtime	32	27-May-24*	04-Jul-24																					SUS - EB CPS E&M Bracket 420m leadtime
52	SUS - EB CPS TCSS Access Date	0		04-Jul-24																					◆ SUS - EB CPS TCSS Access Date
53	WEST VENTILATION BUILDING [WVB]	74	02-May-24	30-Jul-24																					
54	WVB Construction	66	11-May-24	30-Jul-24																					
55	External Works / EVA	66	11-May-24	30-Jul-24																					
56	Access Road Construction	36	11-May-24	24-Jun-24																					Access Road Construction
57	Fire Hydrants confirmation from FSD for FSI inspection	0		09-Jul-24																					◆ Fire Hydrants confirmation from FSD
58	EVA Construction	24	25-Jun-24	23-Jul-24																					EVA Construction
59	Available CKR access for FSD inspection	36	18-Jun-24	30-Jul-24																					Available CKR access for FSD inspection
60	Essential Criteria for FSI	71	02-May-24	26-Jul-24																					
61	Power Energerization	45	13-May-24	06-Jul-24																					
62	CLP Installation	45	13-May-24*	06-Jul-24																					CLP Installation
63	CLP Tx Rm - Power On	0		06-Jul-24																					◆ CLP Tx Rm - Power On
64	Dangerous Goods Licenses	36	08-Jun-24	22-Jul-24																					
65	Receipt of report of compliance	0		17-Jun-24																					◆ Receipt of report of compliance
66	Submission of Application	7	08-Jun-24	17-Jun-24																					Submission of Application
67	DG Licenses Inspection (Vent) by FSD	0		25-Jun-24																					◆ DG Licenses Inspection (Vent) by FSD
68	DG Licenses Inspection (Layout) by FSD	0		15-Jul-24																					◆ DG Licenses Inspection (Layout) by FSD
69	Issuance of Certificate from FSD	0		22-Jul-24																					◆ Issuance of Certificate from FSD
70	Fireman Lift	36	02-May-24	14-Jun-24																					
71	T&C (by OTIS) & Issue WR1 / Submisison of LE5	24	02-May-24*	30-May-24																					T&C (by OTIS) & Issue WR1 / Submisison of LE5
72	EMSD Inspection	12	31-May-24	14-Jun-24																					EMSD Inspection
73	Issuance of Permit by EMSD	0		14-Jun-24																					◆ Issuance of Permit by EMSD
74	Water Supply	41	06-Jun-24	26-Jul-24																					
75	FS Water (Inside WVB)	37	06-Jun-24	22-Jul-24																					
76	Submission of WW046 Part IV for FS Water	0		06-Jun-24																					◆ Submission of WW046 Part IV for FS Water
77	Inspection for FS Water & Issuance of WW046 part V (a) by WSD	12	22-Jun-24	06-Jul-24																					Inspection for FS Water & Issuance of WW046 part V (a) by WSD
78	Pipe Sterilization & Water Sampling	6	08-Jul-24	13-Jul-24																					Pipe Sterilization & Water Sampling
79	Water Sample Testing	3	15-Jul-24	17-Jul-24																					Water Sample Testing
80	Issuance of WW046 Part V(b) from WSD	0		17-Jul-24																					◆ Issuance of WW046 Part V(b) from WSD
81	Issuance of WWO1005 Certificate for FS Water from WSD	0		22-Jul-24																					◆ Issuance of WWO1005 Certificate for FS Water from WSD
82	Connect pipe insde WVB to Master Meter Cabinet	4	18-Jul-24	22-Jul-24																					Connect pipe insde WVB to Master Meter Cabinet
83	FS Lead-in Watermain	22	29-Jun-24	26-Jul-24																					
84	Submission WW046 Part IV for water connection	0		29-Jun-24*																					◆ Submission WW046 Part IV for water connection
85	Inspection for FS Lead-in watermain & issuance of WW046 part V (i)	12	13-Jul-24	26-Jul-24																					Inspection for FS Lead-in watermain & issuance of WW046 part V (i)
86	Final T&C and FSI Inspection	0	23-Jul-24	23-Jul-24																					

- ◆ Milestones
- Planned Bar
- Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
for Developments at South Apron

Three Months Rolling Programme (May24 - Jul24)

Date	Revision	Checked	Approved
31-Jan-24	Rev.A	SPa	

#	Activity Name	Dur	Start	Finish	2024													
					April			May				June				July		
					14	21	28	05	12	19	26	02	09	16	23	30	07	14
87	Submit Application Form (FS501)	0		23-Jul-24														◆ Submit App
88	LAUNCHING SHAFT	62	02-Apr-24	17-Jun-24														
89	Cell 1 & 2	32	09-May-24	17-Jun-24														
90	OHVD & Top Slab	32	09-May-24	17-Jun-24														
91	Waterproofing + Backfilling stage 1 (-10.5 mPD)	32	09-May-24	17-Jun-24														Waterproofing + Backfilling stage 1 (-10.5 mPD)
92	Cut & Cover	60	02-Apr-24	14-Jun-24														
93	Roof Slab RC	30	02-Apr-24	08-May-24														Roof Slab RC
94	Roof Slab formworks dismantling + waterproofing	18	09-May-24	30-May-24														Roof Slab formworks dismantling + waterproofing
95	LSCC Manhole and Gully construction	12	31-May-24	14-Jun-24														LSCC Manhole and Gully construction
96	TBM TUNNELLING	78	15-Apr-24	18-Jul-24														
97	S1282 Eastbound	78	15-Apr-24	18-Jul-24														
98	CKL Seawall removal	43	30-May-24	11-Jul-24														
99	Bay 3b-4 seawall and spoil removal	43	30-May-24	11-Jul-24														Bay 3b-4 seawall and spoil re
100	Utilities Relocation	72	15-Apr-24	11-Jul-24														
101	EB Tunnel Slurry pipe relocation up to CP16 @ 1CP / week	30	15-Apr-24	21-May-24														EB Tunnel Slurry pipe relocation up to CP16 @ 1CP / week
102	EB Tunnel Slurry pipe relocation up to CP21 @ 1CP / week	42	22-May-24	11-Jul-24														EB Tunnel Slurry pipe relocati
103	TBM Excavation	49	31-May-24	18-Jul-24														
104	15 May 24 EB TBM re-start CH8632 R0900	0	31-May-24*															◆ 15 May 24 EB TBM re-start CH8632 R0900
105	CH 8632-8661 R0913 - Rock excavation 28.6m @ 1.4m/d	20	31-May-24	19-Jun-24														CH 8632-8661 R0913 - Rock excavation 28.6m @ 1.4m/d
106	CH 8661-8687 R0925 - Rock excavation 26.4m @ 1.4m/d	19	30-Jun-24	18-Jul-24														CH 8661-8687 R09
107	S1281 Westbound	0	31-May-24	31-May-24														
108	TBM Excavation	0	31-May-24	31-May-24														
109	31 May 24 WB TBM re-start CH8612 R0891	0	31-May-24															◆ 31 May 24 WB TBM re-start CH8612 R0891
110	INTERNAL STRUCTURES	41	31-May-24	19-Jul-24														
111	Service Gallery B	32	12-Jun-24	19-Jul-24														
112	Eastbound	32	12-Jun-24	19-Jul-24														
113	EB ISIG re-start at SG0820E	0	02-Jul-24															◆ EB ISIG re-start at SG0820E
114	EB SG0820 - SG0833 13 nos installation 28.6m	20	12-Jun-24	05-Jul-24														EB SG0820 - SG0833 13 nos installati
115	EB SG850 completion for CP2.2 installation	0	08-Jul-24															◆ EB SG850 completion for CP2.2 in
116	EB SG0833E - SG0845E 12 nos installation 26.4m	11	08-Jul-24	19-Jul-24														EB SG0833E - SC
117	Westbound	0	12-Jun-24	12-Jun-24														
118	WB ISIG re-start at SG0814W	0	12-Jun-24															◆ WB ISIG re-start at SG0814W
119	Thermal Barrier	40	31-May-24	18-Jul-24														
120	Crown	12	31-May-24	14-Jun-24														
121	Westbound @ 7.5 R/day	12	31-May-24	14-Jun-24														
122	EB Crown Fire Board transfer to WB	12	31-May-24	14-Jun-24														EB Crown Fire Board transfer to WB
123	Road Level	38	03-Jun-24	18-Jul-24														
124	Eastbound	38	03-Jun-24	18-Jul-24														
125	NCPS	38	03-Jun-24	18-Jul-24														
126	EB NCP Fire Board up to CP11 @ 13.2m/d	38	03-Jun-24*	18-Jul-24														EB NCP Fire Board
127	CHA KWO LING TUNNEL	95	06-Apr-24	30-Jul-24														
128	Eastbound	34	17-Apr-24	28-May-24														
129	Type A1/A2 Lining	8	20-May-24	28-May-24														
130	EB Type A1 to C1-C2 fwks adjustment 2nd stage	8	20-May-24*	28-May-24														EB Type A1 to C1-C2 fwks adjustment 2nd stage
131	Type C Wall & Crown	12	17-Apr-24	30-Apr-24														

- ◆ Milestones
- Planned Bar
- Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
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Three Months Rolling Programme (May24 - Jul24)

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#	Activity Name	Dur	Start	Finish	2024													
					April			May				June				July		
					14	21	28	05	12	19	26	02	09	16	23	30	07	14
132	EB Type C1 Crown (1 bay 8d/bay)	12	17-Apr-24	30-Apr-24	EB Type C1 Crown (1 bay 8d/bay)													
133	Westbound	69	11-Apr-24	04-Jul-24														
134	Type A	69	11-Apr-24	04-Jul-24														
135	WB Type A1 OHVD Slab	45	11-Apr-24	04-Jun-24	WB Type A1 OHVD Slab													
136	WB Pilot TBM bulkhead construction 2nd bulkhead (alap)	48	16-Apr-24	13-Jun-24	WB Pilot TBM bulkhead construction 2nd bulkhead (alap)													
137	WB Type A1 OHVD Slab fwk dismantling	24	05-Jun-24	04-Jul-24	WB Type A1 OHVD Slab fwk dismantling													
138	CKL Internal Structures	95	06-Apr-24	30-Jul-24														
139	Fire Board - Crown (TBC)	22	06-Apr-24	02-May-24														
140	EB Type A Fire Board (to be deleted)	22	06-Apr-24	02-May-24	EB Type A Fire Board (to be deleted)													
141	Fire Board - Road Level (TBC)	51	30-May-24	30-Jul-24														
142	Branch Tunnel Fire Board	22	30-May-24*	25-Jun-24	Branch Tunnel Fire Board													
143	EB Type A Fire Board	22	04-Jul-24	29-Jul-24	EB													
144	WB Type A Fire Board	22	05-Jul-24	30-Jul-24	W													
145	Footbridge - FB-03	72	26-Apr-24	23-Jul-24														
146	FT-03 - Bearing Manufacturing	72	26-Apr-24	23-Jul-24	FT-03 - Bea													
147	EAST VENTILATION BUILDING [EVB]	52	20-May-24	20-Jul-24														
148	EVB Construction	35	20-May-24	29-Jun-24														
149	E&M	24	20-May-24	17-Jun-24														
150	EVB - E&M works (LG2)	24	20-May-24*	17-Jun-24	EVB - E&M works (LG2)													
151	Footbridge FB03	30	25-May-24	29-Jun-24														
152	Installation of Structural Frames	30	25-May-24	29-Jun-24	Installation of Structural Frames													
153	Essential Criteria for FSI	31	14-Jun-24	20-Jul-24														
154	Power Engerization	18	14-Jun-24	05-Jul-24														
155	CLP Rm - ABWF works	18	14-Jun-24	05-Jul-24	CLP Rm - ABWF works													
156	Dangerous Goods Licenses	18	29-Jun-24	20-Jul-24														
157	Fuel Tank Room - ABWF works	18	29-Jun-24	20-Jul-24	Fuel Tank Room													
158	E&M INSTALLATION	73	29-Apr-24	26-Jul-24														
159	E&M	73	29-Apr-24	26-Jul-24														
160	1st section CH6703-7109 - (406m) WB CPS & NCPS + EB CPS	67	29-Apr-24	19-Jul-24														
161	E&M Installation (BYME)	67	29-Apr-24	19-Jul-24														
162	CP side	24	21-Jun-24	19-Jul-24														
163	2nd Fixing	24	21-Jun-24	19-Jul-24														
164	Cable Fixing - CPS	24	21-Jun-24	19-Jul-24	Cable Fixing - CP													
165	OHVD Soffit	39	29-Apr-24	15-Jun-24														
166	1st Fixing	39	29-Apr-24	15-Jun-24														
167	Black paint painting	11	29-Apr-24*	11-May-24	Black paint painting													
168	Linear Heat Detection Cable bracket, Containment Installation - O	28	13-May-24	15-Jun-24	Linear Heat Detection Cable bracket, Containment Installation - OHV													
169	Non CP side	24	21-Jun-24	19-Jul-24														
170	2nd Fixing	24	21-Jun-24	19-Jul-24														
171	Cable Laying - NCPS	10	21-Jun-24	03-Jul-24	Cable Laying - NCPS													
172	Cable Fixing - NCPS	14	04-Jul-24	19-Jul-24	Cable Fixing - NC													
173	2nd section CH7109-7607 - (498m) WB CPS & NCPS + EB CPS	62	13-May-24	26-Jul-24														
174	E&M Installation (BYME)	62	13-May-24	26-Jul-24														
175	CP side	34	17-Jun-24	26-Jul-24														

- ◆ Milestones
- ▬ Planned Bar
- ▬ Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
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#	Activity Name	Dur	Start	Finish	2024																	
					April			May				June				July						
					14	21	28	05	12	19	26	02	09	16	23	30	07	14	21	28		
176	2nd Fixing	34	17-Jun-24	26-Jul-24																		
177	Cable Laying - CPS	10	17-Jun-24*	27-Jun-24																		
178	Cable Fixing - CPS	24	28-Jun-24	26-Jul-24																		
179	OHVD Soffit	6	13-May-24	20-May-24																		
180	1st Fixing	6	13-May-24	20-May-24																		
181	Black paint painting	6	13-May-24	20-May-24																		
182	Non CP side	35	03-Jun-24	15-Jul-24																		
183	2nd Fixing	35	03-Jun-24	15-Jul-24																		
184	HV Cable Pulling - NCPS (Parapet location)	30	03-Jun-24*	09-Jul-24																		
185	Cable Laying - NCPS	10	04-Jul-24	15-Jul-24																		
186	3rd section CH7607-8107 - (500m) WB CPS & NCPS + EB CPS	56	21-May-24	26-Jul-24																		
187	E&M Installation (BYME)	56	21-May-24	26-Jul-24																		
188	CP side	10	28-Jun-24	10-Jul-24																		
189	2nd Fixing	10	28-Jun-24	10-Jul-24																		
190	Cable Laying - CPS	10	28-Jun-24	10-Jul-24																		
191	OHVD Soffit	36	21-May-24	03-Jul-24																		
192	1st Fixing	36	21-May-24	03-Jul-24																		
193	Black paint painting	6	21-May-24	27-May-24																		
194	Linear Heat Detection Cable bracket, Containment Installation - O	30	28-May-24	03-Jul-24																		
195	Non CP side	10	16-Jul-24	26-Jul-24																		
196	2nd Fixing	10	16-Jul-24	26-Jul-24																		
197	Cable Laying - NCPS	10	16-Jul-24	26-Jul-24																		
198	TCSS Access Date	24	28-Jun-24	27-Jul-24																		
199	CP7 - CP16	24	28-Jun-24	27-Jul-24																		
200	CPS	0	28-Jun-24	28-Jun-24																		
201	TCSS access date CPS	0	28-Jun-24																			
202	OHVD	0	27-Jul-24	27-Jul-24																		
203	TCSS access date OHVD soffit	0	27-Jul-24																			
204	NCPS	0	16-Jul-24	16-Jul-24																		
205	TCSS access date NCPS	0	16-Jul-24																			

- ◆ Milestones
- ▬ Planned Bar
- ▬ Critical Bar

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Appendix A

#	Activity Name	Dur	Start	Finish	2024											
					July					August				September		
					01	08	15	22	29	05	12	19	26	02	09	16
1	HKT2 P65 Rev. B 3-mth rolling (Jul24 - Sep24)	84	02-Jul-24	28-Sep-24												
2	SUPPORTING UNDERGROUND STRUCTURE [SUS]	71	05-Jul-24	17-Sep-24												
3	Skin Wall Construction	49	05-Jul-24	24-Aug-24												
4	Westbound	9	05-Jul-24	13-Jul-24												
5	Road level CH6+259 to CH6+567 (308m; 15m/bay; 21 bays)	9	05-Jul-24	13-Jul-24												
6	Bay 20	4	05-Jul-24	09-Jul-24	■ Bay 20											
7	Bay 21	4	10-Jul-24	13-Jul-24	■ Bay 21											
8	Eastbound	49	05-Jul-24	24-Aug-24												
9	Road level CH6+236 to CH6+567 (331m; 15m/bay; 22 bays)	49	05-Jul-24	24-Aug-24												
10	Bay 1	4	05-Jul-24*	09-Jul-24	■ Bay 1											
11	Bay 2	4	10-Jul-24	13-Jul-24	■ Bay 2											
12	Bay 3	4	15-Jul-24	18-Jul-24	■ Bay 3											
13	Bay 4	4	19-Jul-24	23-Jul-24	■ Bay 4											
14	Bay 5	4	24-Jul-24	27-Jul-24	■ Bay 5											
15	Bay 6	4	29-Jul-24	01-Aug-24	■ Bay 6											
16	Bay 7	4	02-Aug-24	06-Aug-24	■ Bay 7											
17	Bay 8	4	07-Aug-24	10-Aug-24	■ Bay 8											
18	Bay 9	4	12-Aug-24	15-Aug-24	■ Bay 9											
19	Bay 10	4	16-Aug-24	20-Aug-24	■ Bay 10											
20	Bay 11	4	21-Aug-24	24-Aug-24	■ Bay 11											
21	Tunnel Internal Structure & Finishing	66	10-Jul-24	17-Sep-24												
22	Westbound	2	10-Jul-24	12-Jul-24												
23	CPS	0	10-Jul-24	10-Jul-24												
24	SUS - WB CPS TCSS Access Date	0		10-Jul-24	◆ SUS - WB CPS TCSS Access Date											
25	NCPS	0	12-Jul-24	12-Jul-24												
26	SUS - WB NCPS TCSS Access Date	0		12-Jul-24	◆ SUS - WB NCPS TCSS Access Date											
27	Eastbound	52	24-Jul-24	17-Sep-24												
28	CPS	0	24-Jul-24	24-Jul-24												
29	SUS - EB CPS TCSS Access Date	0		24-Jul-24	◆ SUS - EB CPS TCSS Access Date											
30	NCPS	36	12-Aug-24	17-Sep-24												
31	SUS - EB NCPS Fire Board 420m @ 13.2m/d	36	12-Aug-24	17-Sep-24	■ SUS - EB NCPS Fire Board											
32	WEST VENTILATION BUILDING [WVB]	73	02-Jul-24	17-Sep-24												
33	WVB Construction	27	10-Jul-24	06-Aug-24												
34	External Works / EVA	27	10-Jul-24	06-Aug-24												
35	Fire Hydrants confirmation from FSD for FSI inspection	0		23-Jul-24	◆ Fire Hydrants confirmation from FSD for FSI inspection											
36	EVA Construction	27	10-Jul-24	06-Aug-24	■ EVA Construction											
37	Essential Criteria for FSI	33	02-Jul-24	06-Aug-24												
38	Power Enderization	0	06-Jul-24	06-Jul-24												
39	CLP Tx Rm - Power On	0		06-Jul-24	◆ CLP Tx Rm - Power On											
40	Dangerous Goods Licenses	32	02-Jul-24	05-Aug-24												
41	Receipt of report of compliance	0		02-Jul-24	◆ Receipt of report of compliance											
42	DG Licenses Inspection (Vent) by FSD	0		10-Jul-24	◆ DG Licenses Inspection (Vent) by FSD											

- ◆ Milestones
- Planned Bar
- Critical Bar

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Date	Revision	Checked	Approved
31-Jan-24	Rev.A	SPa	

#	Activity Name	Dur	Start	Finish	2024											
					July				August				September			
					01	08	15	22	29	05	12	19	26	02	09	16
43	DG Licenses Inspection (Layout) by FSD	0		29-Jul-24					◆ DG Licenses Inspection (Layout) by FSD							
44	Issuance of Certificate from FSD	0		05-Aug-24					◆ Issuance of Certificate from FSD							
45	Water Supply	29	08-Jul-24	06-Aug-24												
46	FS Water (Inside WVB)	28	08-Jul-24	05-Aug-24												
47	Inspection for FS Water & Issuance of WW046 part V (a) by WSD	13	08-Jul-24	20-Jul-24					Inspection for FS Water & Issuance of WW046 part V (a) by WSD							
48	Pipe Sterilization & Water Sampling	7	22-Jul-24	27-Jul-24					Pipe Sterilization & Water Sampling							
49	Water Sample Testing	3	29-Jul-24	31-Jul-24					Water Sample Testing							
50	Issuance of WW046 Part V(b) from WSD	0		31-Jul-24					◆ Issuance of WW046 Part V(b) from WSD							
51	Issuance of WWO1005 Certificate for FS Water from WSD	0		05-Aug-24					◆ Issuance of WWO1005 Certificate for FS Water from WSD							
52	Connect pipe inside WVB to Master Meter Cabinet	4	01-Aug-24	05-Aug-24					Connect pipe inside WVB to Master Meter Cabinet							
53	FS Lead-in Watermain	23	13-Jul-24	06-Aug-24												
54	Inspection for FS Lead-in watermain & issuance of WW046 part V (a) by WSD	13	13-Jul-24	26-Jul-24					Inspection for FS Lead-in watermain & issuance of WW046 part V (a) by WSD							
55	Pipe Sterilization & Water Sampling	7	27-Jul-24	02-Aug-24					Pipe Sterilization & Water Sampling							
56	Issuance of WW046 Part V(b) from WSD	0		06-Aug-24					◆ Issuance of WW046 Part V(b) from WSD							
57	Water Sample Testing	3	03-Aug-24	06-Aug-24					Water Sample Testing							
58	Final T&C and FSI Inspection	69	08-Jul-24	17-Sep-24												
59	Submit Application Form (FS501)	0		06-Aug-24					◆ Submit Application Form (FS501)							
60	WVB - Overall T&C	29	08-Jul-24	06-Aug-24					WVB - Overall T&C							
61	FSI Acceptance Inspection	27	21-Aug-24	17-Sep-24					FSI Acceptance Inspection							
62	Issuance of FS Certificate	0		17-Sep-24					◆ Issuance of FS Certificate							
63	SUB-SEA TUNNEL CROSS PASSAGE [CP]	31	27-Jul-24	28-Aug-24												
64	Tympanum Civil Works	31	27-Jul-24	28-Aug-24												
65	Westbound	31	27-Jul-24	28-Aug-24												
66	CP25 - WB - Tympanum Civil works CH8499	31	27-Jul-24	28-Aug-24					CP25 - WB - Tympanum Civil works CH8499							
67	INTERNAL STRUCTURES	42	19-Jul-24	31-Aug-24												
68	Thermal Barrier	42	19-Jul-24	31-Aug-24												
69	Road Level	42	19-Jul-24	31-Aug-24												
70	Eastbound	42	19-Jul-24	31-Aug-24												
71	NCPS	42	19-Jul-24	31-Aug-24												
72	EB NCP Fire Board up to CP16 @ 13.2m/d	42	19-Jul-24	31-Aug-24					EB NCP Fire Board up to CP16 @ 13.2m/d							
73	CHA KWO LING TUNNEL	56	02-Jul-24	28-Aug-24												
74	Eastbound	20	29-Jul-24	17-Aug-24												
75	Type C OHVD	20	29-Jul-24	17-Aug-24												
76	EB Type C1 & 2 OHVD slab fwks assembly	20	29-Jul-24	17-Aug-24					EB Type C1 & 2 OHVD slab fwks assembly							
77	CKL Internal Structures	56	02-Jul-24	28-Aug-24												
78	Fire Board - Crown (TBC)	27	02-Jul-24	29-Jul-24												
79	WB Type A Fire Board (to be deleted)	27	02-Jul-24	29-Jul-24					WB Type A Fire Board (to be deleted)							
80	Fire Board - Road Level (TBC)	56	02-Jul-24	28-Aug-24												
81	Branch Tunnel Fire Board (to be deleted)	24	02-Jul-24*	26-Jul-24					Branch Tunnel Fire Board (to be deleted)							
82	WB Type A Fire Board (to be deleted)	24	27-Jul-24	21-Aug-24					WB Type A Fire Board (to be deleted)							
83	EB Type A Fire Board (to be deleted)	24	03-Aug-24	28-Aug-24					EB Type A Fire Board (to be deleted)							
84	EAST VENTILATION BUILDING [EVB]	78	02-Jul-24	23-Sep-24												

- ◆ Milestones
- Planned Bar
- Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
for Developments at South Apron

Three Months Rolling Programme (Jul24 - Sep24)



Date	Revision	Checked	Approved
31-Jan-24	Rev.A	SPa	

#	Activity Name	Dur	Start	Finish	2024												
					July					August				September			
					01	08	15	22	29	05	12	19	26	02	09	16	23
85	EVB Construction	77	02-Jul-24	20-Sep-24													
86	E&M	72	02-Jul-24	14-Sep-24													
87	EVB - E&M works (LG1)	72	02-Jul-24	14-Sep-24	EVB - E&M works (LG1)												
88	Footbridge FB03	73	05-Jul-24	20-Sep-24													
89	Installation of Structural Frames	33	05-Jul-24	08-Aug-24	Installation of Structural Frames												
90	Bridge Deck Construction + Bearing Installation	40	09-Aug-24	20-Sep-24													
91	Essential Criteria for FSI	78	02-Jul-24	23-Sep-24													
92	Power Egerization	20	29-Aug-24	19-Sep-24													
93	CLP Rm - ABWF works	20	29-Aug-24	19-Sep-24													
94	Dangerous Goods Licenses	20	29-Aug-24	19-Sep-24													
95	Fuel Tank Room - ABWF works	20	29-Aug-24	19-Sep-24													
96	Water Supply	78	02-Jul-24	23-Sep-24													
97	FS Lead-in Watermain	78	02-Jul-24	23-Sep-24													
98	External Watermain (TBC)	53	02-Jul-24*	27-Aug-24	External Watermain (TBC)												
99	Submission WW046 Part IV for water connection	0		27-Aug-24													
100	Inspection for FS Lead-in watermain & issuance of WW046 part V(a)	13	07-Sep-24	23-Sep-24													
101	E&M INSTALLATION	84	02-Jul-24	28-Sep-24													
102	E&M	84	02-Jul-24	28-Sep-24													
103	1st section CH6703-7109 - (406m) WB CPS & NCPS + EB CPS	69	11-Jul-24	21-Sep-24													
104	E&M Installation (BYME)	69	11-Jul-24	21-Sep-24													
105	CP side	38	11-Jul-24	19-Aug-24													
106	2nd Fixing	38	11-Jul-24	19-Aug-24													
107	Cable Fixing - CPS	27	11-Jul-24	07-Aug-24	Cable Fixing - CPS												
108	Cable Joint works - CPS	22	27-Jul-24	19-Aug-24	Cable Joint works - CPS												
109	OHVD Soffit	42	08-Aug-24	21-Sep-24													
110	2nd Fixing	42	08-Aug-24	21-Sep-24													
111	Tunnel Damper Wiring Works - OHVD	33	08-Aug-24	11-Sep-24	Tunnel Damper Wiring Works - O												
112	Final Circuit Installation - OHVD	27	24-Aug-24	21-Sep-24	Final Circuit Ins												
113	Non CP side	64	11-Jul-24	16-Sep-24													
114	2nd Fixing	64	11-Jul-24	16-Sep-24													
115	Cable Laying - NCPS	11	11-Jul-24	22-Jul-24	Cable Laying - NCPS												
116	Cable Fixing - NCPS	16	23-Jul-24	07-Aug-24	Cable Fixing - NCPS												
117	Smartone / CSL / GOFs by others	27	08-Aug-24	04-Sep-24	Smartone / CSL / GOFs by others												
118	Cable Joint works - NCPS	22	24-Aug-24	16-Sep-24	Cable Joint works - NCP												
119	2nd section CH7109-7607 - (498m) WB CPS & NCPS + EB CPS	84	02-Jul-24	28-Sep-24													
120	E&M Installation (BYME)	78	02-Jul-24	21-Sep-24													
121	CP side	22	27-Jul-24	19-Aug-24													
122	2nd Fixing	22	27-Jul-24	19-Aug-24													
123	Cable Joint works - CPS	22	27-Jul-24	19-Aug-24	Cable Joint works - CPS												
124	OHVD Soffit	76	02-Jul-24	19-Sep-24													
125	1st Fixing	33	02-Jul-24	05-Aug-24													
126	Linear Heat Detection Cable bracket, Containment Installation - O	33	02-Jul-24*	05-Aug-24	Linear Heat Detection Cable bracket, Containment Installation - OHVD												

- ◆ Milestones
- ▬ Planned Bar
- ▬ Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
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Three Months Rolling Programme (Jul24 - Sep24)



Date	Revision	Checked	Approved
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#	Activity Name	Dur	Start	Finish	2024													
					July					August				September				
					01	08	15	22	29	05	12	19	26	02	09	16	23	30
127	2nd Fixing	42	06-Aug-24	19-Sep-24														
128	Tunnel Damper Wiring Works - OHVD	33	06-Aug-24	09-Sep-24														
129	Final Circuit Installation - OHVD	27	22-Aug-24	19-Sep-24														
130	Non CP side	58	23-Jul-24	21-Sep-24														
131	2nd Fixing	58	23-Jul-24	21-Sep-24														
132	Cable Laying - NCPS	11	23-Jul-24	02-Aug-24														
133	Cable Fixing - NCPS	16	08-Aug-24	23-Aug-24														
134	Cable Joint works - NCPS	22	24-Aug-24	16-Sep-24														
135	Smartone / CSL / GOFS by others	27	24-Aug-24	21-Sep-24														
136	TCSS (Gtech)	60	27-Jul-24	28-Sep-24														
137	OHVD Soffit	53	27-Jul-24	21-Sep-24														
138	TCSS installation OHVD soffit	53	27-Jul-24	21-Sep-24														
139	NCPS	53	03-Aug-24	28-Sep-24														
140	TCSS installation OHVD NCPS	53	03-Aug-24	28-Sep-24														
141	3rd section CH7607-8107 - (500m) WB CPS & NCPS + EB CPS	82	04-Jul-24	28-Sep-24														
142	E&M Installation (BYME)	76	11-Jul-24	28-Sep-24														
143	CP side	49	11-Jul-24	30-Aug-24														
144	2nd Fixing	49	11-Jul-24	30-Aug-24														
145	Cable Fixing - CPS	27	11-Jul-24	07-Aug-24														
146	Cable Joint works - CPS	22	08-Aug-24	30-Aug-24														
147	OHVD Soffit	42	08-Aug-24	21-Sep-24														
148	2nd Fixing	42	08-Aug-24	21-Sep-24														
149	Tunnel Damper Wiring Works - OHVD	33	08-Aug-24	11-Sep-24														
150	Final Circuit Installation - OHVD	27	24-Aug-24	21-Sep-24														
151	Non CP side	53	03-Aug-24	28-Sep-24														
152	2nd Fixing	53	03-Aug-24	28-Sep-24														
153	Cable Laying - NCPS	11	03-Aug-24	14-Aug-24														
154	Cable Fixing - NCPS	16	15-Aug-24	30-Aug-24														
155	Smartone / CSL / GOFS by others	27	31-Aug-24	28-Sep-24														
156	TCSS (Gtech)	60	04-Jul-24	04-Sep-24														
157	CPS	53	11-Jul-24	04-Sep-24														
158	TCSS installation CPS	53	11-Jul-24	04-Sep-24														
159	OHVD Soffit	53	04-Jul-24	28-Aug-24														
160	TCSS installation OHVD soffit	53	04-Jul-24	28-Aug-24														
161	Sub-sea Eastbound NCPS	53	19-Jul-24	12-Sep-24														
162	1st section CH6703-7109 - (406m)	53	19-Jul-24	12-Sep-24														
163	E&M Installation (BYME)	53	19-Jul-24	12-Sep-24														
164	Non CP side	53	19-Jul-24	12-Sep-24														
165	1st Fixing	27	19-Jul-24	15-Aug-24														
166	E&M Bracket	27	19-Jul-24	15-Aug-24														
167	2nd Fixing	27	16-Aug-24	12-Sep-24														
168	Cable Laying - NCPS	11	16-Aug-24	27-Aug-24														

- ◆ Milestones
- ▬ Planned Bar
- ▬ Critical Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works
for Developments at South Apron

Three Months Rolling Programme (Jul24 - Sep24)



Date	Revision	Checked	Approved
31-Jan-24	Rev.A	SPa	

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
Trunk Road T2 - Traffic Control & Surveillance System & Associated Works		466	01-Jul-24	20-Feb-25	03-Aug-23	20-Nov-26	01-Mar-23						
Access Dates		43	01-Jul-24	13-Aug-24	12-Jun-24	11-Nov-26							
AC1000	Portion 1 - South Apron Up to SUS	0	01-Jul-24		12-Jun-24								
AC1020	Portion 3 - CKL Branch Tunnel in TKO-LTT Site	0	01-Jul-24		11-Jan-25								
AC1030	Portion 4 - TKO-LTT (LT Interchange)	0	01-Jul-24		17-Aug-24								
AC1040	Underpass S21	0	01-Jul-24		26-Apr-25								
AC1050	Portion 2 - LS - CKL Tunnel CH 6+568 to CH 7+100	0	01-Jul-24		11-Nov-26								
AC1060	Portion 2 - LS - CKL Tunnel CH 7+100 to CH 7+600	0	01-Jul-24		29-Aug-24								
AC1070	Portion 2 - LS - CKL Tunnel CH 7+600 to CH 8+100	0	01-Jul-24		15-Oct-24								
AC1080	Portion 2 - LS - CKL Tunnel CH 8+100 to CH 8+750	0	13-Aug-24		04-Oct-24								
Summary by Cost Center		466	01-Jul-24	20-Feb-25	03-Aug-23	20-Nov-26	01-Mar-23						
Cost Center B - Central System		316	01-Jul-24	18-Nov-24	01-Nov-23	11-Apr-25	01-Aug-23						
SC1060	Configuration for Central System	76	01-Jul-24	11-Jul-24	30-Sep-24	30-Sep-24	01-Aug-23		EM1150: SS				
SC1050	FAT of Central System	59	02-Jul-24	11-Jul-24	01-Nov-23	30-Sep-24	31-Oct-23		EM1150: FS				
SC1070	SCT Plan Submission & Approval for Central System	84	19-Jul-24	28-Oct-24	02-Dec-24	14-Mar-25			DS2940: SS				
SC1080	Site Installation of Central System	87	26-Jul-24	07-Nov-24	23-Oct-24	17-Feb-25			SW1100: SS, SW1120: SS, SW1960: SS, SW1090: SS, SW1670: SS, SW1770: SS				
SC1090	SAT Plan Submission & Approval for Central System	78	16-Aug-24	18-Nov-24	07-Jan-25	11-Apr-25			DS3500: SS				
Cost Center C - Traffic Control Devices		378	01-Jul-24	12-Feb-25	30-Aug-24	07-May-25	31-Aug-23						
SC1150	Installation Drawing Preparation, Submission & Approval for Traffic Control Devices	72	02-Jul-24	26-Jul-24	30-Aug-24	30-Aug-24	31-Aug-23		DS5890: SS				
SC1190	Equipment Manufacturing & Delivery for Traffic Control Devices	135	01-Jul-24	30-Jul-24	30-Aug-24	30-Aug-24	16-Sep-23		EM1320: SS				
SC1200	SCT Plan Submission & Approval for Traffic Control Devices	84	31-Jul-24	08-Nov-24	12-Nov-24	22-Feb-25			DS2980: SS				
SC1210	Site Installation of Traffic Control Devices	144	20-Aug-24	12-Feb-25	31-Aug-24	07-May-25			SW1110: SS				
SC1220	SAT Plan Submission & Approval for Traffic Control Devices	84	28-Aug-24	06-Dec-24	30-Dec-24	11-Apr-25			DS3540: SS				
Cost Center D - Communication System		132	02-Jul-24	07-Nov-24	07-Oct-24	14-Mar-25	22-Apr-24						
SC1280	Installation Drawing Preparation, Submission & Approval for Communication System	60	02-Jul-24	26-Jul-24	07-Oct-24	07-Oct-24	22-Apr-24		DS5930: SS				
SC1340	SCT Plan Submission & Approval for Communication System	84	02-Jul-24	09-Oct-24	24-Oct-24	14-Mar-25			DS3020: SS				
SC1350	SAT Plan Submission & Approval for Communication System	80	16-Jul-24	19-Oct-24	07-Nov-24	13-Feb-25			DS3580: SS				
SC1330	Site Installation of Communication System	54	03-Sep-24	07-Nov-24	23-Oct-24	17-Feb-25			SW1100: SS, SW1120: SS, SW1960: SS				
Cost Center E - CCTV System		383	02-Jul-24	09-Jan-25	25-Sep-24	20-Nov-26	01-Mar-23						
SC1410	Installation Drawing Preparation, Submission & Approval for CCTV System	99	02-Jul-24	26-Jul-24	20-Nov-26	20-Nov-26	01-Mar-23		DS5970: SS				
SC1450	Equipment Manufacturing & Delivery for CCTV System	89					01-Aug-23	27-Jun-24	EM1050: SS				
SC1440	FAT of CCTV System	96					31-Oct-23	28-Jun-24	EM1050: FS				
SC1430	FAT Plan Submission & Approval for CCTV System	72	02-Jul-24	26-Jul-24	20-Nov-26	20-Nov-26	13-Dec-23		DS4050: SS				
SC1460	SCT Plan Submission & Approval for CCTV System	84	02-Jul-24	09-Oct-24	15-Oct-24	03-Feb-25			DS3060: SS				
SC1470	Site Installation of CCTV System	137	29-Jul-24	09-Jan-25	25-Sep-24	12-Mar-25			SW1060: SS, SW1940: SS				
SC1480	SAT Plan Submission & Approval for CCTV System	84	27-Aug-24	05-Dec-24	10-Dec-24	22-Mar-25			DS3620: SS				
Cost Center F - PABX System		389	02-Jul-24	16-Jan-25	08-Oct-24	15-May-25	27-Jul-23						
SC1560	Installation Drawing Preparation, Submission & Approval for PABX System	68	02-Jul-24	26-Jul-24	08-Oct-24	08-Oct-24	27-Jul-23		DS6010: SS				
SC1600	SCT Plan Submission & Approval for PABX System	84	02-Jul-24	09-Oct-24	06-Nov-24	31-Mar-25			DS3100: SS				
SC1590	Site Installation of PABX System	131	12-Aug-24	16-Jan-25	27-Nov-24	03-Mar-25			SW2380: SS				
SC1610	SAT Plan Submission & Approval for PABX System	84	25-Sep-24	04-Jan-25	04-Feb-25	15-May-25			DS3660: SS				
Cost Center G - ET System		215	02-Jul-24	16-Jan-25	08-Oct-24	31-Mar-25	26-Mar-24						

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
SC1690	Installation Drawing Preparation, Submission & Approval for ET System	72					26-Mar-24	11-Jun-24	DS6050: SS				
SC1730	SCT Plan Submission & Approval for ET System	84	02-Jul-24	09-Oct-24	08-Oct-24	03-Feb-25			DS3140: SS				
SC1720	Site Installation of ET System	129	14-Aug-24	16-Jan-25	17-Jan-25	10-Mar-25			SW2340: SS				
SC1740	SAT Plan Submission & Approval for ET System	84	10-Sep-24	19-Dec-24	18-Dec-24	31-Mar-25			DS3700: SS				
Cost Center H - PA System		156	02-Jul-24	04-Jan-25	23-Oct-24	29-Apr-25							
SC1850	SCT Plan Submission & Approval for PA System	84	02-Jul-24	09-Oct-24	23-Oct-24	03-Mar-25			DS3180: SS				
SC1860	Site Installation of PA System	131	29-Jul-24	02-Jan-25	13-Nov-24	17-Feb-25			SW2370: SS				
SC1870	SAT Plan Submission & Approval for PA System	84	25-Sep-24	04-Jan-25	17-Jan-25	29-Apr-25			DS3740: SS				
Cost Center I - Radio System		359	01-Jul-24	23-Jan-25	01-Feb-24	24-Mar-25	01-Aug-23						
SC1970	Equipment Manufacturing & Delivery for Radio System	119					01-Aug-23	28-Jun-24	EM1090: SS				
SC1960	FAT of Radio System	14	01-Jul-24	02-Jul-24	01-Feb-24	16-Oct-24	31-Jan-24		EM1090: FS				
SC1930	Installation Drawing Preparation, Submission & Approval for Radio System	60	02-Jul-24	09-Sep-24	12-Aug-24	23-Oct-24			DS6130: SS				
SC1980	SCT Plan Submission & Approval for Radio System	84	02-Jul-24	09-Oct-24	14-Sep-24	15-Mar-25			DS3220: SS				
SC1990	Site Installation of Radio System	112	10-Sep-24	23-Jan-25	26-Dec-24	15-Mar-25			SW2390: SS				
SC2000	SAT Plan Submission & Approval for Radio System	84	25-Sep-24	04-Jan-25	11-Dec-24	24-Mar-25			DS3780: SS				
Cost Center J - Detection System		364	01-Jul-24	23-Jan-25	01-Nov-23	20-Nov-26	24-May-23						
SC2060	Installation Drawing Preparation, Submission & Approval for Detection System	124	02-Jul-24	26-Jul-24	20-Nov-26	20-Nov-26	24-May-23		DS6170: SS				
SC2100	Equipment Manufacturing & Delivery for Detection System	90	01-Jul-24	01-Aug-24	09-Jan-25	09-Jan-25	01-Aug-23		EM1100: SS, EM1660: SS				
SC2090	FAT of Detection System	87	01-Jul-24	03-Aug-24	01-Nov-23	28-Aug-24	31-Oct-23		EM1100: FS, EM1660: FS				
SC2080	FAT Plan Submission & Approval for Detection System	66	02-Jul-24	01-Aug-24	09-Jan-25	09-Jan-25	19-Apr-24		DS4450: SS, DS8420: SS				
SC2110	SCT Plan Submission & Approval for Detection System	84	02-Jul-24	09-Oct-24	09-Sep-24	17-Jan-25			DS3260: SS				
SC2120	Site Installation of Detection System	137	12-Aug-24	23-Jan-25	05-Sep-24	12-Mar-25			SW1070: SS, SW1250: SS				
Cost Center K - Manual Fallback System		245	01-Jul-24	25-Nov-24	30-Sep-24	14-Mar-25	01-Aug-23						
SC2220	FAT of Manual Fallback System	60	01-Jul-24	11-Jul-24	30-Sep-24	30-Sep-24	01-Aug-23		EM1640: SS				
SC2190	Installation Drawing Preparation, Submission & Approval for Manual Fallback System	60	02-Jul-24	26-Jul-24	27-Jan-25	27-Jan-25	31-Aug-23		DS6210: SS				
SC2200	Post FAT Configuration for Manual Fallback System	90	12-Jul-24	09-Oct-24	01-Oct-24	27-Jan-25			EM1540: FS				
SC2250	SCT Plan Submission & Approval for Manual Fallback System	84	19-Jul-24	28-Oct-24	08-Oct-24	14-Mar-25			DS3300: SS				
SC2270	SAT Plan Submission & Approval for Manual Fallback System	84	16-Aug-24	25-Nov-24	06-Nov-24	17-Feb-25			DS3860: SS				
Cost Center L - Speed Enforcement System		178	02-Jul-24	03-Feb-25	30-Nov-24	07-May-25							
SC2340	Installation Drawing Preparation, Submission & Approval for Speed Enforcement System	60	02-Jul-24	09-Sep-24	17-Dec-24	01-Mar-25			DS6290: SS				
SC2370	SCT Plan Submission & Approval for Speed Enforcement System	84	02-Jul-24	09-Oct-24	30-Nov-24	22-Mar-25			DS3380: SS				
SC2380	Reliability Test Plan Submission & Approval for Speed Enforcement System	84	30-Jul-24	07-Nov-24	30-Dec-24	11-Apr-25			DS3940: SS				
SC2390	Site Installation of Speed Enforcement System	117	11-Sep-24	03-Feb-25	03-Mar-25	07-May-25			SW2330: SS				
Cost Center M - Power Distribution System		336	01-Jul-24	20-Feb-25	28-Sep-23	14-May-25	27-Sep-23						
SC2470	Equipment Manufacturing & Delivery for Power Distribution System	98	01-Jul-24	30-Jul-24	28-Sep-23	12-Aug-24	27-Sep-23		DS2592: FS				
SC2490	SCT Plan Submission & Approval for Power Distribution System	84	31-Jul-24	08-Nov-24	13-Aug-24	21-Nov-24			DS3420: SS				
SC2480	Site Installation of Power Distribution System	152	19-Aug-24	20-Feb-25	11-Mar-25	14-May-25			SW1920: SS, SW2250: SS				
Cost Center N - Government Optical Fibre System		382	01-Jul-24	08-Nov-24	03-Aug-23	28-Apr-25	02-Aug-23						
SC2560	Equipment Manufacturing & Delivery for Government Optical Fibre System	111	01-Jul-24	30-Jul-24	03-Aug-23	03-Dec-24	02-Aug-23		DS2650: FS 200				
SC2550	Installation Drawing Preparation, Submission & Approval for Government Optical Fibre System	60	02-Jul-24	26-Jul-24	20-Nov-24	20-Nov-24	22-Apr-24		DS6330: SS				
SC2580	SCT Plan Submission & Approval for Government Optical Fibre System	84	31-Jul-24	08-Nov-24	16-Jan-25	28-Apr-25			DS3460: SS				
Operation Facilities		210	01-Jul-24	28-Sep-24	29-Jun-24	11-Feb-25	01-Aug-23						
SC2660	FAT of Operation Facilities	78					01-Aug-23	28-Jun-24	EM1560: SS				
SC2650	FAT Plan Submission & Approval for Operation Facilities	81	02-Jul-24	19-Jul-24	29-Nov-24	29-Nov-24	13-Dec-23		DS4600: SS				
SC2670	Equipment Manufacturing & Delivery for Operation Facilities	90	01-Jul-24	28-Sep-24	29-Jun-24	29-Nov-24	28-Jun-24		EM1550: FS				

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
SC2630	Installation Drawing Preparation, Submission & Approval for Operation Facilities	60	02-Jul-24	09-Sep-24	28-Nov-24	11-Feb-25			DS6250: SS				
Design & Submissions		304	02-Jul-24	29-Jul-24	02-Nov-24	25-Jun-25	29-Aug-23						
FSP Submissions (42 Working Days after Commencement of FSP)		304	02-Jul-24	29-Jul-24	02-Nov-24	25-Jun-25	29-Aug-23						
FSP Batch 1 Submission		304	02-Jul-24	29-Jul-24	02-Nov-24	25-Jun-25	29-Aug-23						
Central System		304	02-Jul-24	29-Jul-24	02-Nov-24	25-Jun-25	29-Aug-23						
Traffic Plan Review & Combine		140	02-Jul-24	29-Jul-24	02-Nov-24	29-Nov-24	28-Dec-23						
DS7300	Traffic Plan Review & Combine Workshop	140	02-Jul-24	29-Jul-24	02-Nov-24	29-Nov-24	28-Dec-23		DS1830: FS 22				
IT Security Risk Assessment Plan		30	02-Jul-24	02-Jul-24	25-Jun-25	25-Jun-25	29-Aug-23						
DS7440	Approval on IT Security Risk Assessment Plan	30	02-Jul-24	02-Jul-24	25-Jun-25	25-Jun-25	29-Aug-23		DS7430: FS				
Interface Coordination & Integration with Other Parties		96	02-Jul-24	24-Oct-24	01-Jun-26	24-Oct-26							
Interfacing Coordination with CKR (KTE)		90	02-Jul-24	17-Oct-24	09-Jul-26	24-Oct-26							
Detail Interfacing Management Plan (DIMP)		90	02-Jul-24	17-Oct-24	09-Jul-26	24-Oct-26							
DS6610	Prepare & Submit DIMP with CKR (KTE)	73	02-Jul-24	25-Sep-24	09-Jul-26	03-Oct-26			DS6600: FS 96				
DS6620	Comment on DIMP with CKR (KTE)	17	26-Sep-24	17-Oct-24	05-Oct-26	24-Oct-26			DS6610: FS				
Interfacing Coordination with CKR (BEM)		90	02-Jul-24	17-Oct-24	09-Jul-26	24-Oct-26							
Detail Interfacing Management Plan (DIMP)		90	02-Jul-24	17-Oct-24	09-Jul-26	24-Oct-26							
DS6690	Prepare & Submit DIMP with CKR (BEM)	73	02-Jul-24	25-Sep-24	09-Jul-26	03-Oct-26			DS6600: FS 96				
DS6700	Comment on DIMP with CKR (BEM)	17	26-Sep-24	17-Oct-24	05-Oct-26	24-Oct-26			DS6690: FS				
Interfacing Coordination with TKO-LTT (Civil)		76	02-Jul-24	28-Sep-24	04-Jul-26	02-Oct-26							
Detail Interfacing Management Plan (DIMP)		76	02-Jul-24	28-Sep-24	04-Jul-26	02-Oct-26							
DS6770	Prepare & Submit DIMP with TKO-LTT (Civil)	76	02-Jul-24	28-Sep-24	04-Jul-26	02-Oct-26			DS6760: FS 96				
Interfacing Coordination with TKO-LTT (TCSS)		76	02-Jul-24	28-Sep-24	08-Jul-26	06-Oct-26							
Detail Interfacing Management Plan (DIMP)		76	02-Jul-24	28-Sep-24	08-Jul-26	06-Oct-26							
DS6850	Prepare & Submit DIMP with TKO-LTT (TCSS)	76	02-Jul-24	28-Sep-24	08-Jul-26	06-Oct-26			DS6840: FS 108				
Interfacing Coordination with T2		96	02-Jul-24	24-Oct-24	01-Jun-26	22-Sep-26							
Preliminary Interfacing Management Plan (PIMP)		72	02-Jul-24	24-Sep-24	01-Jun-26	25-Aug-26							
DS6890	Prepare & Submit PIMP with T2	24	02-Jul-24	29-Jul-24	01-Jun-26	29-Jun-26			DS2680: FS 211				
DS6900	Comment on PIMP with T2	24	30-Jul-24	26-Aug-24	30-Jun-26	28-Jul-26			DS6890: FS				
DS6910	Resubmit PIMP with T2	12	27-Aug-24	09-Sep-24	29-Jul-26	11-Aug-26			DS6900: FS				
DS6920	Approval of PIMP with T2	12	10-Sep-24	24-Sep-24	12-Aug-26	25-Aug-26			DS6910: FS				
Detail Interfacing Management Plan (DIMP)		24	25-Sep-24	24-Oct-24	26-Aug-26	22-Sep-26							
DS6930	Prepare & Submit DIMP with T2	24	25-Sep-24	24-Oct-24	26-Aug-26	22-Sep-26			DS6920: FS				
Drawing & Installation Method Statement Submissions		262	02-Jul-24	04-Oct-24	05-Aug-24	20-Nov-26	10-Aug-23						
Installation Drawing Submission		259	02-Jul-24	04-Oct-24	06-Aug-24	20-Nov-26	08-Sep-23						
DS2695	Prepare & Submit Schedule of Installation Drawing	30	02-Jul-24	05-Aug-24	17-Aug-26	19-Sep-26			DS1050: FS 103				
DS2705	Approval of Schedule of Installation Drawing	50	06-Aug-24	04-Oct-24	21-Sep-26	20-Nov-26			DS2695: FS				
Traffic Control Devices		199	02-Jul-24	26-Jul-24	06-Aug-24	30-Aug-24	04-May-24						
DS8240	Resubmit Installation Drawing for Traffic Control Devices	12	02-Jul-24	12-Jul-24	06-Aug-24	16-Aug-24	04-May-24		DS5920: FS				
DS8250	Approval of Installation Drawing for Traffic Control Devices	12	13-Jul-24	26-Jul-24	17-Aug-24	30-Aug-24			DS8240: FS, SC1150: FF				
Communication System		14	02-Jul-24	26-Jul-24	10-Sep-24	07-Oct-24	17-May-24						
DS5950	Resubmit Installation Drawing for Communication System	12	02-Jul-24	12-Jul-24	10-Sep-24	21-Sep-24	17-May-24		DS5940: FS				
DS5960	Approval of Installation Drawing for Communication System	12	13-Jul-24	26-Jul-24	23-Sep-24	07-Oct-24			DS5950: FS, SC1280: FF				
CCTV System		132	02-Jul-24	26-Jul-24	27-Oct-26	20-Nov-26	13-Dec-23						
DS8020	Resubmit Installation Drawing for CCTV System	26	02-Jul-24	12-Jul-24	27-Oct-26	06-Nov-26	13-Dec-23		DS8010: FS				
DS8030	Approval of Installation Drawing for CCTV System	12	13-Jul-24	26-Jul-24	07-Nov-26	20-Nov-26			DS8020: FS, SC1410: FF				
PABX System		201	02-Jul-24	26-Jul-24	11-Sep-24	08-Oct-24	08-Sep-23						
DS6030	Resubmit Installation Drawing for PABX System	12	02-Jul-24	12-Jul-24	11-Sep-24	23-Sep-24	08-Sep-23		DS6020: FS				
DS6040	Approval of Installation Drawing for PABX System	12	13-Jul-24	26-Jul-24	24-Sep-24	08-Oct-24			DS6030: FS, SC1560: FF				
ET System		12					11-May-24	11-Jun-24					
DS6080	Approval of Installation Drawing for ET System	12					11-May-24	11-Jun-24	DS6070: FS, SC1690: FF				
Radio System		60	02-Jul-24	09-Sep-24	12-Aug-24	23-Oct-24							
DS6130	Prepare & Submit Installation Drawing for Radio System	12	02-Jul-24	15-Jul-24	12-Aug-24	24-Aug-24			DS2154: FS				
DS6140	Comment on Installation Drawing for Radio System	24	16-Jul-24	12-Aug-24	26-Aug-24	23-Sep-24			DS6130: FS				



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										Jun 30	Jul 31	Aug 31	Sep 30
DS6150	Resubmit Installation Drawing for Radio System	12	13-Aug-24	26-Aug-24	24-Sep-24	08-Oct-24			DS6140: FS				
DS6160	Approval of Installation Drawing for Radio System	12	27-Aug-24	09-Sep-24	09-Oct-24	23-Oct-24			DS6150: FS, SC1930: FF				
Detection System		46	02-Jul-24	26-Jul-24	27-Oct-26	20-Nov-26	09-Dec-23						
DS8280	Resubmit Installation Drawing for Detection System	24	02-Jul-24	12-Jul-24	27-Oct-26	06-Nov-26	09-Dec-23		DS6200: FS				
DS8290	Approval of Installation Drawing for Detection System	12	13-Jul-24	26-Jul-24	07-Nov-26	20-Nov-26			DS8280: FS, SC2060: FF				
Manual Fallback Control System		45	02-Jul-24	26-Jul-24	02-Jan-25	27-Jan-25	04-May-24						
DS8300	Resubmit Installation Drawing for Manual Fallback Control System	12	02-Jul-24	12-Jul-24	02-Jan-25	13-Jan-25	04-May-24		DS6240: FS				
DS8310	Approval of Installation Drawing for Manual Fallback Control System	12	13-Jul-24	26-Jul-24	14-Jan-25	27-Jan-25			DS8300: FS, SC2190: FF				
Operation Facility		60	02-Jul-24	09-Sep-24	28-Nov-24	11-Feb-25							
DS6250	Prepare & Submit Installation Drawing for Operation Facility	12	02-Jul-24	15-Jul-24	28-Nov-24	11-Dec-24			DS2532: FS				
DS6260	Comment on Installation Drawing for Operation Facility	24	16-Jul-24	12-Aug-24	12-Dec-24	10-Jan-25			DS6250: FS				
DS6270	Resubmit Installation Drawing for Operation Facility	12	13-Aug-24	26-Aug-24	11-Jan-25	24-Jan-25			DS6260: FS				
DS6280	Approval of Installation Drawing for Operation Facility	12	27-Aug-24	09-Sep-24	25-Jan-25	11-Feb-25			DS6270: FS, SC2630: FF				
Speed Enforcement System		60	02-Jul-24	09-Sep-24	17-Dec-24	01-Mar-25							
DS6290	Prepare & Submit Installation Drawing for Speed Enforcement System	12	02-Jul-24	15-Jul-24	17-Dec-24	31-Dec-24			DS2472: FS				
DS6300	Comment on Installation Drawing for Speed Enforcement System	24	16-Jul-24	12-Aug-24	02-Jan-25	01-Feb-25			DS6290: FS				
DS6310	Resubmit Installation Drawing for Speed Enforcement System	12	13-Aug-24	26-Aug-24	03-Feb-25	15-Feb-25			DS6300: FS				
DS6320	Approval of Installation Drawing for Speed Enforcement System	12	27-Aug-24	09-Sep-24	17-Feb-25	01-Mar-25			DS6310: FS, SC2340: FF				
Government Optical Fibre System		14	02-Jul-24	26-Jul-24	26-Oct-24	20-Nov-24	17-May-24						
DS6350	Resubmit Installation Drawing for Government Optical Fibre System	12	02-Jul-24	12-Jul-24	26-Oct-24	06-Nov-24	17-May-24		DS6340: FS				
DS6360	Approval of Installation Drawing for Government Optical Fibre System	12	13-Jul-24	26-Jul-24	07-Nov-24	20-Nov-24			DS6350: FS, SC2550: FF				
Installation Method Statement Submission		234	02-Jul-24	29-Jul-24	05-Aug-24	01-Mar-25	10-Aug-23						
Traffic Control Devices		24	02-Jul-24	27-Jul-24	05-Aug-24	30-Aug-24	29-May-24						
DS2790	Comment on Installation Method Statement for Installation of TCSS Field Equipment	24					29-May-24	28-Jun-24	DS2780: FS				
DS2800	Resubmit Installation Method Statement for Installation of TCSS Field Equipment	12	02-Jul-24	13-Jul-24	05-Aug-24	16-Aug-24	29-Jun-24		DS2790: FS				
DS2810	Approval of Installation Method Statement for Installation of TCSS Field Equipment	12	15-Jul-24	27-Jul-24	17-Aug-24	30-Aug-24			DS2800: FS				
CCTV Camera & VD Camera		24	02-Jul-24	27-Jul-24	09-Aug-24	04-Sep-24	29-May-24						
DS6420	Comment on Installation Method Statement for CCTV Camera & VD Camera	24					29-May-24	28-Jun-24	DS6410: FS				
DS6430	Resubmit Installation Method Statement for CCTV Camera & VD Camera	12	02-Jul-24	13-Jul-24	09-Aug-24	21-Aug-24	29-Jun-24		DS6420: FS				
DS6440	Approval of Installation Method Statement for CCTV Camera & VD Camera	12	15-Jul-24	27-Jul-24	22-Aug-24	04-Sep-24			DS6430: FS				
PABX, ET & PA Systems		24	02-Jul-24	27-Jul-24	27-Aug-24	23-Sep-24	29-May-24						
DS6460	Comment on Installation Method Statement for PABX, ET & PA Systems	24					29-May-24	28-Jun-24	DS6450: FS				
DS6470	Resubmit Installation Method Statement for PABX, ET & PA Systems	12	02-Jul-24	13-Jul-24	27-Aug-24	07-Sep-24	29-Jun-24		DS6460: FS				
DS6480	Approval of Installation Method Statement for PABX, ET & PA Systems	12	15-Jul-24	27-Jul-24	09-Sep-24	23-Sep-24			DS6470: FS				
Radio System		29	02-Jul-24	27-Jul-24	25-Sep-24	23-Oct-24	29-May-24						
DS6500	Comment on Installation Method Statement for Radio System	24					29-May-24	28-Jun-24	DS6490: FS				
DS6510	Resubmit Installation Method Statement for Radio System	12	02-Jul-24	13-Jul-24	25-Sep-24	08-Oct-24	29-Jun-24		DS6500: FS				
DS6520	Approval of Installation Method Statement for Radio System	12	15-Jul-24	27-Jul-24	09-Oct-24	23-Oct-24			DS6510: FS				
Power Distribution System		173	02-Jul-24	26-Jul-24	25-Sep-24	22-Oct-24	10-Aug-23						
DS6550	Resubmit Installation Method Statement for Power Distribution System	6	02-Jul-24	12-Jul-24	25-Sep-24	07-Oct-24	10-Aug-23		DS6540: FS				



GTECH Services (Hong Kong) Limited

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										Jun 30	Jul 31	Aug 32	Sep 33
DS6560	Approval of Installation Method Statement for Power Distribution System	12	13-Jul-24	26-Jul-24	08-Oct-24	22-Oct-24			DS6550: FS				
SEC System		82	02-Jul-24	27-Jul-24	04-Feb-25	01-Mar-25	29-May-24						
DS7390	Comment on Installation Method Statement for SEC System	24					29-May-24	28-Jun-24	DS7380: FS				
DS7400	Resubmit Installation Method Statement for SEC System	12	02-Jul-24	13-Jul-24	04-Feb-25	15-Feb-25	29-Jun-24		DS7390: FS				
DS7410	Approval of Installation Method Statement for SEC System	12	15-Jul-24	27-Jul-24	17-Feb-25	01-Mar-25			DS7400: FS				
Detection System		24	02-Jul-24	29-Jul-24	08-Aug-24	04-Sep-24	29-May-24						
DS7480	Comment on Installation Method Statement for Detection System	24					29-May-24	28-Jun-24	DS7470: FS				
DS7490	Resubmit Installation Method Statement for Detection System	12	02-Jul-24	15-Jul-24	08-Aug-24	21-Aug-24	29-Jun-24		DS7480: FS				
DS7500	Approval of Installation Method Statement for Detection System	12	16-Jul-24	29-Jul-24	22-Aug-24	04-Sep-24			DS7490: FS				
FAT Plan Submissions, Equipment Procurement & Manufacturing		232	01-Jul-24	09-Oct-24	14-Jul-24	20-Nov-26	10-Oct-23						
CCTV System		27	02-Jul-24	26-Jul-24	04-Sep-24	20-Nov-26	23-May-24						
FAT Plan Submission		26	02-Jul-24	26-Jul-24	27-Oct-26	20-Nov-26	23-May-24						
DS8340	Resubmission of FAT Plan for CCTV System	12	02-Jul-24	12-Jul-24	27-Oct-26	06-Nov-26	23-May-24		DS8150: FS				
DS8350	Approval of FAT Plan for CCTV System	12	13-Jul-24	26-Jul-24	07-Nov-26	20-Nov-26			DS8340: FS, SC1430: FF				
Equipment FAT & Manufacturing		20	05-Jul-24	05-Jul-24	04-Sep-24	04-Sep-24	27-Jun-24						
EM1480	FAT of CCTV System	2					27-Jun-24	28-Jun-24	SC1440: FF, EM1050: FS, SC1450: FS, DS8350: FS				
DS4090	Submit CCTV System FAT Test Report	1	05-Jul-24	05-Jul-24	04-Sep-24	04-Sep-24			EM1480: FS 6				
Traffic Control Devices		117	01-Jul-24	30-Jul-24	01-Aug-24	30-Aug-24	10-Oct-23						
Equipment FAT & Manufacturing		117	01-Jul-24	30-Jul-24	01-Aug-24	30-Aug-24	10-Oct-23						
PVMS		85	01-Jul-24	30-Jul-24	01-Aug-24	30-Aug-24	10-Oct-23						
EM1030	Post-FAT Manufacturing & Delivery of Traffic Control Devices (PVMS)	85	01-Jul-24	30-Jul-24	01-Aug-24	30-Aug-24	10-Oct-23		DS4290: FF, SC1190: FF, EM1460: FS				
LED Signage		85	01-Jul-24	30-Jul-24	01-Aug-24	30-Aug-24	12-Mar-24						
EM1650	Post-FAT Manufacturing & Delivery of Traffic Control Devices (LED Signage)	85	01-Jul-24	30-Jul-24	01-Aug-24	30-Aug-24	12-Mar-24		EM1461: FS, SC1190: FF, DS4291: FS, DS8160: FS				
Central System		14	03-Jul-24	18-Jul-24	22-Sep-24	22-Oct-24							
Equipment FAT & Manufacturing		14	03-Jul-24	18-Jul-24	22-Sep-24	22-Oct-24							
EM1580	FAT of Central System	9	03-Jul-24	11-Jul-24	22-Sep-24	30-Sep-24			SC1050: FF, EM1150: FS, SC1060: FF, DS8130: FS, DS8230: FS 27				
DS4340	Submit Central System FAT Test Report	1	18-Jul-24	18-Jul-24	22-Oct-24	22-Oct-24			EM1580: FS 6				
Radio System		7	01-Jul-24	09-Jul-24	15-Oct-24	23-Oct-24	28-Jun-24						
Equipment FAT & Manufacturing		7	01-Jul-24	09-Jul-24	15-Oct-24	23-Oct-24	28-Jun-24						
EM1520	FAT of Radio Distribution Network	5	01-Jul-24	02-Jul-24	15-Oct-24	16-Oct-24	28-Jun-24		EM1090: FS, SC1970: FS, SC1960: FF, DS8210: FS				
EM1610	FAT of Radio O&M (Mobile & Portable)	5	01-Jul-24	02-Jul-24	15-Oct-24	16-Oct-24	28-Jun-24		EM1090: FS, SC1970: FS, SC1960: FF, DS8210: FS				
DS4390	Submit Radio System FAT Test Report	1	09-Jul-24	09-Jul-24	23-Oct-24	23-Oct-24			EM1610: FS 6, EM1520: FS 6				
Detection System		41	02-Jul-24	10-Aug-24	26-Jul-24	18-Jan-25	11-May-24						
FAT Plan Submission		33	02-Jul-24	01-Aug-24	26-Jul-24	09-Jan-25	11-May-24						
VD & HMD		33	02-Jul-24	01-Aug-24	26-Jul-24	26-Aug-24	11-May-24						
DS4460	Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion)	24					11-May-24	05-Jun-24	DS4450: FS				
DS4470	Resubmission of FAT Plan for Detection System	12	02-Jul-24	18-Jul-24	26-Jul-24	12-Aug-24	06-Jun-24		DS4460: FS				
DS4480	Approval of FAT Plan for Detection System	12	19-Jul-24	01-Aug-24	13-Aug-24	26-Aug-24			DS4470: FS, SC2080: FF				
OHVD		30	02-Jul-24	29-Jul-24	11-Dec-24	09-Jan-25	25-May-24						
DS8430	Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion)	24					25-May-24	18-Jun-24	DS8420: FS				
DS8440	Resubmission of FAT Plan for Detection System	12	02-Jul-24	15-Jul-24	11-Dec-24	24-Dec-24	19-Jun-24		DS8430: FS				
DS8450	Approval of FAT Plan for Detection System	12	16-Jul-24	29-Jul-24	26-Dec-24	09-Jan-25			DS8440: FS, SC2080: FF				
Equipment FAT & Manufacturing		11	30-Jul-24	10-Aug-24	27-Aug-24	18-Jan-25							



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
VD & HMD													
EM1530	FAT of Detection System - VD & HMD	2	02-Aug-24	03-Aug-24	27-Aug-24	04-Sep-24			DS4480: FS, SC2090: FF, EM1100: FS, SC2100: FS				
DS4490	Submit Detection System FAT Test Report	1	10-Aug-24	10-Aug-24	04-Sep-24	04-Sep-24			EM1530: FS 6				
OHVD													
EM1670	FAT of Detection System - OHVD	2	30-Jul-24	31-Jul-24	10-Jan-25	11-Jan-25			EM1660: FS, DS8450: FS, SC2090: SS, SC2100: FS				
DS8460	Submit Detection System FAT Test Report	1	07-Aug-24	07-Aug-24	18-Jan-25	18-Jan-25			EM1670: FS 6				
Power Distribution System													
Equipment Manufacturing													
EM1620	Manufacturing & Delivery of Power Distribution System Equipment	89	01-Jul-24	30-Jul-24	14-Jul-24	12-Aug-24	01-Dec-23		SC2470: FF, DS7650: FS, DS2592: FS				
Government Optical Fibre System													
Equipment Manufacturing													
EM1630	Manufacturing & Delivery of Government Optical Fibre System Equipment	105	01-Jul-24	30-Jul-24	04-Nov-24	03-Dec-24	01-Dec-23		DS2650: FS 200, SC2560: FF, DS7660: FS				
Operation Facilities													
FAT Plan Submission													
DS8400	Resubmission of FAT Plan for Operation Facility	12	02-Jul-24	05-Jul-24	12-Nov-24	15-Nov-24	23-May-24		DS8390: FS				
DS8410	Approval of FAT Plan for Operation Facility	12	06-Jul-24	19-Jul-24	16-Nov-24	29-Nov-24			DS8400: FS, SC2650: FF, DS4620: FS				
Equipment FAT & Manufacturing													
EM1550	FAT of Operation Facilities	2					27-Jun-24	28-Jun-24	DS4630: FS, SC2660: FF, DS7310: FS, EM1560: FS, DS7550: FS, DS7670: FS, DS8410: FS, DS8410: FF				
EM1120	Post-FAT Manufacturing & Delivery of Operation Facilities	90	01-Jul-24	28-Sep-24	01-Sep-24	29-Nov-24			EM1550: FS, DS4640: FF, SC2670: FF, DS2530: FS, DS2532: FS				
DS4640	Submit Operation Facilities FAT Test Report	1	05-Jul-24	05-Jul-24	29-Nov-24	29-Nov-24			EM1550: FS 6, DS7550: FS				
Speed Enforcement System													
FAT Plan Submission													
DS8360	Resubmission of SES Bench Test Plan	12					29-May-24	07-Jun-24	DS4720: FS				
DS8370	Approval of SES Bench Test Plan	12					08-Jun-24	25-Jun-24	DS8360: FS				
Equipment FAT & Manufacturing													
EM1600	SEC System Bench Test	2	01-Aug-24	02-Aug-24	06-Nov-26	07-Nov-26			EM1570: FS 60, DS8370: FS 30				
DS4740	Submit SEC System Bench Test Report	1	15-Aug-24	15-Aug-24	20-Nov-26	20-Nov-26			EM1600: FS 12				
Manual Fallback Control System													
Equipment FAT & Manufacturing													
EM1540	FAT of Manual Fallback Control System	9	03-Jul-24	11-Jul-24	22-Sep-24	30-Sep-24			DS4780: FS, SC2220: FF, EM1640: FS, DS7690: FS, EM1580: SS				
EM1110	Post-FAT Configuration of Manual Fallback Control System	90	12-Jul-24	09-Oct-24	30-Oct-24	27-Jan-25			EM1540: FS, DS4790: FF, SC2200: FF				
DS4790	Submit Manual Fallback Control System FAT Test Report	1	18-Jul-24	18-Jul-24	07-Oct-24	07-Oct-24			EM1540: FS 6				
SCT Plan Submissions													
Central System													
DS2940	Submission of Central System SCT Plan	24	19-Jul-24	15-Aug-24	02-Dec-24	30-Dec-24			DS4340: FS				
DS2950	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	16-Aug-24	12-Sep-24	31-Dec-24	28-Jan-25			DS2940: FS				
DS2960	Resubmission of SCT Plan for Central System	12	13-Sep-24	27-Sep-24	01-Feb-25	14-Feb-25			DS2950: FS				
DS2970	Approval of SCT Plan for Central System	24	28-Sep-24	28-Oct-24	15-Feb-25	14-Mar-25			DS2960: FS, SC1070: FF				
Traffic Control Devices													
DS2980	Submission of Traffic Control Devices SCT Plan	24	31-Jul-24	27-Aug-24	12-Nov-24	09-Dec-24			EM1030: FS, EM1650: FS				
DS2990	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	28-Aug-24	25-Sep-24	10-Dec-24	08-Jan-25			DS2980: FS				
DS3000	Resubmission of SCT Plan for Traffic Control Devices	12	26-Sep-24	10-Oct-24	09-Jan-25	22-Jan-25			DS2990: FS				

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
Communication System													
DS3020	Submission of Communication System SCT Plan	24	02-Jul-24	09-Oct-24	24-Oct-24	14-Mar-25			EM1040: FS				
DS3030	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	31-Dec-24	28-Jan-25			DS3020: FS				
DS3040	Resubmission of SCT Plan for Communication System	12	27-Aug-24	09-Sep-24	01-Feb-25	14-Feb-25			DS3030: FS				
DS3050	Approval of SCT Plan for Communication System	24	10-Sep-24	09-Oct-24	15-Feb-25	14-Mar-25			DS3040: FS, SC1340: FF				
CCTV System													
DS3060	Submission of CCTV System SCT Plan	24	02-Jul-24	29-Jul-24	15-Oct-24	03-Feb-25			EM1050: FS				
DS3070	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	20-Nov-24	17-Dec-24			DS3060: FS				
DS3080	Resubmission of SCT Plan for CCTV System	12	27-Aug-24	09-Sep-24	18-Dec-24	02-Jan-25			DS3070: FS				
DS3090	Approval of SCT Plan for CCTV System	24	10-Sep-24	09-Oct-24	03-Jan-25	03-Feb-25			DS3080: FS, SC1460: FF				
PABX System													
DS3100	Submission of PABX System SCT Plan	24	02-Jul-24	29-Jul-24	06-Nov-24	03-Dec-24			EM1060: FS				
DS3110	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	17-Jan-25	17-Feb-25			DS3100: FS				
DS3120	Resubmission of SCT Plan for PABX System	12	27-Aug-24	09-Sep-24	18-Feb-25	03-Mar-25			DS3110: FS				
DS3130	Approval of SCT Plan for PABX System	24	10-Sep-24	09-Oct-24	04-Mar-25	31-Mar-25			DS3120: FS, SC1600: FF				
ET System													
DS3140	Submission of ET System SCT Plan	24	02-Jul-24	29-Jul-24	08-Oct-24	05-Nov-24			EM1070: FS				
DS3150	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	20-Nov-24	17-Dec-24			DS3140: FS				
DS3160	Resubmission of SCT Plan for ET System	12	27-Aug-24	09-Sep-24	18-Dec-24	02-Jan-25			DS3150: FS				
DS3170	Approval of SCT Plan for ET System	24	10-Sep-24	09-Oct-24	03-Jan-25	03-Feb-25			DS3160: FS, SC1730: FF				
PA System													
DS3180	Submission of PA System SCT Plan	24	02-Jul-24	29-Jul-24	23-Oct-24	03-Mar-25			EM1080: FS				
DS3190	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	18-Dec-24	16-Jan-25			DS3180: FS				
DS3200	Resubmission of SCT Plan for PA System	12	27-Aug-24	09-Sep-24	17-Jan-25	03-Feb-25			DS3190: FS				
DS3210	Approval of SCT Plan for PA System	24	10-Sep-24	09-Oct-24	04-Feb-25	03-Mar-25			DS3200: FS, SC1850: FF				
Radio System													
DS3220	Submission of Radio System SCT Plan	24	02-Jul-24	29-Jul-24	14-Sep-24	15-Oct-24			EM1090: SS 30				
DS3230	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	02-Jan-25	01-Feb-25			DS3220: FS				
DS3240	Resubmission of SCT Plan for Radio System	12	27-Aug-24	09-Sep-24	03-Feb-25	15-Feb-25			DS3230: FS				
DS3250	Approval of SCT Plan for Radio System	24	10-Sep-24	09-Oct-24	17-Feb-25	15-Mar-25			DS3240: FS, SC1980: FF				
Detection System													
DS3260	Submission of Detection System SCT Plan	24	02-Jul-24	29-Jul-24	09-Sep-24	17-Jan-25			EM1100: FS, EM1660: FS				
DS3270	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	07-Nov-24	04-Dec-24			DS3260: FS				
DS3280	Resubmission of SCT Plan for Detection System	12	27-Aug-24	09-Sep-24	05-Dec-24	18-Dec-24			DS3270: FS				
DS3290	Approval of SCT Plan for Detection System	24	10-Sep-24	09-Oct-24	19-Dec-24	17-Jan-25			DS3280: FS, SC2110: FF				
Manual Fallback Control System													
DS3300	Submission of Manual Fallback Control System SCT Plan	24	19-Jul-24	28-Oct-24	08-Oct-24	14-Mar-25			DS4790: FS				
DS3310	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	16-Aug-24	12-Sep-24	31-Dec-24	28-Jan-25			DS3300: FS				
DS3320	Resubmission of SCT Plan for Manual Fallback Control System	12	13-Sep-24	27-Sep-24	01-Feb-25	14-Feb-25			DS3310: FS				
DS3330	Approval of SCT Plan for Manual Fallback Control System	24	28-Sep-24	28-Oct-24	15-Feb-25	14-Mar-25			DS3320: FS, SC2250: FF				
Speed Enforcement System													
DS3380	Submission of Speed Enforcement System SCT Plan	24	02-Jul-24	29-Jul-24	30-Nov-24	22-Mar-25			EM1130: FS				
DS3390	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Jul-24	26-Aug-24	09-Jan-25	08-Feb-25			DS3380: FS				
DS3400	Resubmission of SCT Plan for Speed Enforcement System	12	27-Aug-24	09-Sep-24	10-Feb-25	22-Feb-25			DS3390: FS				
DS3410	Approval of SCT Plan for Speed Enforcement System	24	10-Sep-24	09-Oct-24	24-Feb-25	22-Mar-25			DS3400: FS, SC2370: FF				
Power Distribution System													
DS3420	Submission of Power Distribution System SCT Plan	24	31-Jul-24	27-Aug-24	13-Aug-24	09-Sep-24			EM1620: FS, DS2592: FS				



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
DS3430	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	28-Aug-24	25-Sep-24	10-Sep-24	09-Oct-24			DS3420: FS				
DS3440	Resubmission of SCT Plan for Power Distribution System	12	26-Sep-24	10-Oct-24	10-Oct-24	24-Oct-24			DS3430: FS				
Government Optical Fibre System		60	31-Jul-24	10-Oct-24	16-Jan-25	29-Mar-25							
DS3460	Submission of Government Optical Fibre System SCT Plan	24	31-Jul-24	27-Aug-24	16-Jan-25	15-Feb-25			EM1630: FS				
DS3470	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	28-Aug-24	25-Sep-24	17-Feb-25	15-Mar-25			DS3460: FS				
DS3480	Resubmission of SCT Plan for Government Optical Fibre System	12	26-Sep-24	10-Oct-24	17-Mar-25	29-Mar-25			DS3470: FS				
SAT Plan Submissions		85	16-Jul-24	25-Oct-24	06-Nov-24	13-Mar-25							
Central System		42	16-Aug-24	05-Oct-24	07-Jan-25	27-Feb-25							
DS3500	Submission of Central System SAT Plan	18	16-Aug-24	05-Sep-24	07-Jan-25	27-Jan-25			DS2940: FS				
DS3510	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	06-Sep-24	05-Oct-24	28-Jan-25	27-Feb-25			DS3500: FS				
Traffic Control Devices		48	28-Aug-24	25-Oct-24	30-Dec-24	27-Feb-25							
DS3540	Submission of Traffic Control Devices System SAT Plan	24	28-Aug-24	25-Sep-24	30-Dec-24	27-Jan-25			DS2980: FS				
DS3550	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	26-Sep-24	25-Oct-24	28-Jan-25	27-Feb-25			DS3540: FS				
Communication System		80	16-Jul-24	19-Oct-24	07-Nov-24	13-Feb-25							
DS3580	Submission of Communication System SAT Plan	20	16-Jul-24	07-Aug-24	07-Nov-24	29-Nov-24			DS3020: SS 12				
DS3590	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	08-Aug-24	04-Sep-24	30-Nov-24	28-Dec-24			DS3580: FS				
DS3600	Resubmission of SAT Plan for Communication System	12	05-Sep-24	19-Sep-24	30-Dec-24	13-Jan-25			DS3590: FS				
DS3610	Approval of SAT Plan for Communication System	24	20-Sep-24	19-Oct-24	14-Jan-25	13-Feb-25			DS3600: FS, SC1350: FF				
CCTV System		48	27-Aug-24	24-Oct-24	10-Dec-24	08-Feb-25							
DS3620	Submission of CCTV System SAT Plan	24	27-Aug-24	24-Sep-24	10-Dec-24	08-Jan-25			DS3060: FS 24				
DS3630	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	25-Sep-24	24-Oct-24	09-Jan-25	08-Feb-25			DS3620: FS				
PABX System		24	25-Sep-24	24-Oct-24	04-Feb-25	03-Mar-25							
DS3660	Submission of PABX System SAT Plan	24	25-Sep-24	24-Oct-24	04-Feb-25	03-Mar-25			DS3100: FS 48				
ET System		24	10-Sep-24	09-Oct-24	18-Dec-24	16-Jan-25							
DS3700	Submission of ET System SAT Plan	24	10-Sep-24	09-Oct-24	18-Dec-24	16-Jan-25			DS3140: FS 36				
PA System		24	25-Sep-24	24-Oct-24	17-Jan-25	17-Feb-25							
DS3740	Submission of PA System SAT Plan	24	25-Sep-24	24-Oct-24	17-Jan-25	17-Feb-25			DS3180: FS 48				
Radio System		24	25-Sep-24	24-Oct-24	11-Dec-24	09-Jan-25							
DS3780	Submission of Radio System SAT Plan	24	25-Sep-24	24-Oct-24	11-Dec-24	09-Jan-25			DS3220: FS 48				
Manual Fallback Control System		48	16-Aug-24	14-Oct-24	06-Nov-24	02-Jan-25							
DS3860	Submission of Manual Fallback Control System SAT Plan	24	16-Aug-24	12-Sep-24	06-Nov-24	03-Dec-24			DS3300: FS				
DS3870	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	13-Sep-24	14-Oct-24	04-Dec-24	02-Jan-25			DS3860: FS				
Speed Enforcement System		60	30-Jul-24	09-Oct-24	30-Dec-24	13-Mar-25							
DS3940	Submission of Speed Enforcement System Reliability Test Plan	24	30-Jul-24	26-Aug-24	30-Dec-24	27-Jan-25			DS3380: FS				
DS3950	Comment on Reliability Test Plan/ Workshops (System Briefing & Comment Discussion)	24	27-Aug-24	24-Sep-24	28-Jan-25	27-Feb-25			DS3940: FS				
DS3960	Resubmission of Reliability Test Plan for Speed Enforcement System	12	25-Sep-24	09-Oct-24	28-Feb-25	13-Mar-25			DS3950: FS				
Training Document & O&M Manual Submission for T2/TKOLTT TCSS		65	20-Aug-24	06-Nov-24	24-May-25	09-Aug-25							
DS3980	Submit Document for System Description	6	20-Aug-24	26-Aug-24	24-May-25	30-May-25			DS3580: SS 30				
DS4010	Submit System Administration Manual	11	27-Aug-24	07-Sep-24	02-Jun-25	13-Jun-25			DS3980: FS				
DS4020	Submit Training Manual	48	09-Sep-24	06-Nov-24	14-Jun-25	09-Aug-25			DS4010: FS				
Site Installation and Testing & Commissioning		242	02-Jul-24	20-Feb-25	12-Jun-24	20-Nov-26	01-Apr-24						
Installation & Testing Related to Stage 2 of Works		193	02-Jul-24	20-Feb-25	13-Jul-24	20-Nov-26							
Installation		193	02-Jul-24	20-Feb-25	13-Jul-24	20-Nov-26							
Portion 4 - TKO-LTT (LT Interchange)		93	02-Jul-24	21-Oct-24	13-Jul-24	03-Feb-25							
SW1930	Install Cable Containments	48	02-Jul-24	26-Aug-24	13-Jul-24	06-Sep-24			DS6404: FS, DS6540: FS				



■ Remaining Work ◆ ◆ Milestone
■ Actual Work
■ Critical Activity

Date	Revision	Checked	Approved
30-Jun-24	Rev. 0	MY	

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
SW1940	Install CCTV Camera	36	29-Jul-24	07-Sep-24	18-Dec-24	03-Feb-25			SW1040: SS 12, SW1930: SS 12, DS4090: FS, DS6440: FS				
SW1950	Laying of Signal Cable - the 1st Section	48	23-Aug-24	21-Oct-24	08-Oct-24	03-Dec-24			SW1040: SS 22, SW1060: SS 10, SW1070: SS 10, SW1930: SS 22				
SW1960	Install Equipment in Kiosk C	12	03-Sep-24	16-Sep-24	20-Nov-24	03-Dec-24			SW1050: FS, DS4340: FS, DS4440: FS				
Portion 1 - South Apron Up to SJS		66	06-Aug-24	24-Oct-24	18-Jul-24	04-Oct-24							
SW2000	Install Cable Containments - the 1st Section	48	06-Aug-24	02-Oct-24	18-Jul-24	11-Sep-24			SW1220: FS, SC2480: FF, DS6404: FS, DS6540: FS				
SW2010	Install CCTV Camera	24	25-Sep-24	24-Oct-24	05-Sep-24	04-Oct-24			SW2000: SS 42, SC1470: FF, DS4090: FS, DS6440: FS				
Portion 2 - Tunnel Section, Service Gallery, WVB & EVB		193	02-Jul-24	20-Feb-25	09-Sep-24	20-Nov-26							
SW2080	Install Cable Containments	135	02-Jul-24	09-Dec-24	09-Sep-24	20-Nov-26			SW2300: SS, SW2400: SS, SW2510: SS, SW2600: SS, SW2720: SS				
SW2090	Install CCTV Camera	123	14-Aug-24	09-Jan-25	17-Oct-24	20-Nov-26			SW2310: SS, SW2430: SS, SW2550: SS, SW2640: SS, SW2760: SS				
SW2100	Install ET	129	14-Aug-24	16-Jan-25	17-Jan-25	20-Nov-26			SW2340: SS, SW2480: SS, SW2590: SS, SW2680: SS, SW2820: SS				
SW2110	Install Radio System in Service Gallery	112	10-Sep-24	23-Jan-25	24-Oct-24	20-Nov-26			SW2390: SS, SW2470: SS, SW2570: SS, SW2660: SS, SW2800: SS				
SW2120	Signal Cable Laying	124	21-Sep-24	20-Feb-25	13-Nov-24	20-Nov-26			SW2500: SS, SW2710: SS, SW2790: SS				
Portion 3 - CKL Branch Tunnel in TKO-LTT Site		73	13-Jul-24	08-Oct-24	07-Feb-25	22-Apr-25							
SW2230	Install Cable Containments	36	13-Jul-24	23-Aug-24	13-Feb-25	26-Mar-25			SW1860: FS, SC2480: FF, DS6404: FS, DS6540: FS				
SW2220	Install CCTV Camera	29	29-Jul-24	30-Aug-24	07-Feb-25	12-Mar-25			SW1860: SS 12, SC1470: FF, DS4090: FS, DS6440: FS				
SW2250	Signal Cable Laying	36	19-Aug-24	30-Sep-24	11-Mar-25	22-Apr-25			SW2230: SS 18, SW1900: FF, SW2220: SS 6, SW1880: SS 6				
SW2240	Laying of Leaky Cable	36	26-Aug-24	08-Oct-24	21-Feb-25	03-Apr-25			SW2230: SS 6, SW2220: SS 12, SW1880: SS 12, SW1900: FF 6, SW1870: SS 22				
Underpass S21		30	02-Jul-24	05-Aug-24	26-Apr-25	03-Jun-25							
SW2260	Install Cable Containment	14	02-Jul-24	17-Jul-24	26-Apr-25	14-May-25			AC1040: SS, SC2480: FF, DS6404: FS, DS6540: FS				
SW2280	Laying of Leaky Cable	30	02-Jul-24	05-Aug-24	26-Apr-25	03-Jun-25			SW2260: SS				
SW2290	Laying of Power Cable From TCCS Cabinet in T2 Area	14	10-Jul-24	25-Jul-24	17-May-25	03-Jun-25			SW2260: SS 7				
SW2270	Install YAGI Antenna	7	18-Jul-24	25-Jul-24	26-May-25	03-Jun-25			SW2260: FS				
Portion 4 - TKO-LTT (LT Interchange)		114	02-Jul-24	14-Nov-24	13-Jul-24	03-Feb-25							
SW1020	Inspect Civil Provisions & Submit Inspection Report	12	02-Jul-24	15-Jul-24	17-Aug-24	30-Aug-24			AC1030: SS, DS6600: FS, DS6680: FS, DS6760: FS, DS6840: FS				
SW1030	Rectify Civil Provision Defects by Others	18	16-Jul-24	05-Aug-24	31-Aug-24	21-Sep-24			SW1020: FS				
Installation Works		114	02-Jul-24	14-Nov-24	13-Jul-24	03-Feb-25							
SW1040	Install Cable Containments	48	02-Jul-24	26-Aug-24	13-Jul-24	06-Sep-24			DS6400: FS, DS6540: FS				
SW1060	Install CCTV Camera	36	29-Jul-24	07-Sep-24	25-Sep-24	07-Nov-24			SW1040: SS 12, SW1930: SS 12, DS4090: FS, DS6440: FS				
SW1050	Install Equipment Racks	24	06-Aug-24	02-Sep-24	23-Sep-24	22-Oct-24			SW1030: FS				
SW1070	Install Detection Camera	36	12-Aug-24	23-Sep-24	25-Sep-24	07-Nov-24			SW1040: SS 12, SW1930: SS 12, DS4490: FS, DS6440: FS, DS7500: FS				
SW1110	Install Traffic Control Devices	48	20-Aug-24	17-Oct-24	31-Aug-24	29-Oct-24			SW1040: SS 42, SW1930: SS 42, EM1030: FS, DS2810: FS, EM1650: FS, DS8250: FS				



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
SW1080	Laying of Signal Cable - the 1st Section	48	23-Aug-24	21-Oct-24	08-Oct-24	03-Dec-24			SW1040: SS 22, SW1060: SS 10, SW1070: SS 10, SW1930: SS 22, DS5960: FS				
SW1100	Install Server Equipment	36	03-Sep-24	17-Oct-24	23-Oct-24	03-Dec-24			SW1050: FS, DS4440: FS, DS4340: FS				
SW1120	Install Equipment in Kiosk C	12	03-Sep-24	16-Sep-24	20-Nov-24	03-Dec-24			SW1050: FS, DS4340: FS, DS4440: FS				
SW1130	Install VLSL on Gantry	24	17-Sep-24	17-Oct-24	08-Nov-24	05-Dec-24			SW1110: SS 24, SC1210: FF, EM1030: FS, DS2810: FS, EM1650: FS, DS8250: FS				
SW1140	Install PVMS on Gantry	48	17-Sep-24	14-Nov-24	04-Dec-24	03-Feb-25			SW1110: SS 24, SC1210: FF, EM1030: FS, DS2810: FS, EM1650: FS, DS8250: FS				
SW1090	Install Video Wall Equipment (Administration Building)	21	25-Sep-24	21-Oct-24	09-Nov-24	03-Dec-24			SW1040: FS 24, SW1930: SS 24, SC1330: FF, DS4440: FS, DS4340: FS, DS4440: FF				
Portion 1 - South Apron Up to SUS		96	02-Jul-24	24-Oct-24	12-Jun-24	04-Oct-24							
SW1210	Inspect Civil Provisions & Submit Inspection Report	12	02-Jul-24	15-Jul-24	12-Jun-24	25-Jun-24			AC1000: SS				
SW1220	Rectify Civil Provision Defects by Others	18	16-Jul-24	05-Aug-24	26-Jun-24	17-Jul-24			SW1210: FS				
Installation Works		66	06-Aug-24	24-Oct-24	18-Jul-24	04-Oct-24							
SW1230	Install Cable Containments - the 1st Section	48	06-Aug-24	02-Oct-24	18-Jul-24	11-Sep-24			SW1220: FS, SC2480: FF, DS6404: FS, DS6540: FS				
SW1250	Install Detection Cameras	24	20-Aug-24	16-Sep-24	05-Sep-24	04-Oct-24			SW1230: SS 12, SW2000: SS 12, DS4490: FS, DS6440: FS, DS7500: FS				
SW1240	Install CCTV Camera	24	25-Sep-24	24-Oct-24	05-Sep-24	04-Oct-24			SW1230: SS 42, SC1470: FF, DS4090: FS, DS6440: FS				
Portion 2 - Tunnel Section, Service Gallery, WVB & EVB		163	02-Jul-24	14-Nov-24	29-Aug-24	20-Nov-26	01-Apr-24						
Tunnel Section		114	02-Jul-24	14-Nov-24	29-Aug-24	20-Nov-26							
Tunnel Section - CH 6+568 to CH 7+100		84	02-Jul-24	09-Oct-24	25-Oct-24	20-Nov-26							
SW2860	Inspect Civil Provisions & Submit Inspection Report	3	02-Jul-24	04-Jul-24	11-Nov-26	13-Nov-26			AC1050: SS				
SW2870	Rectify Civil Provision Defects by Others	6	05-Jul-24	11-Jul-24	14-Nov-26	20-Nov-26			SW2860: FS				
Installation Works		84	02-Jul-24	09-Oct-24	25-Oct-24	22-Mar-25							
SW2300	Install Cable Containment	24	02-Jul-24	29-Jul-24	25-Oct-24	21-Nov-24			SC2480: FF, DS6540: FS				
SW2370	Install PA in Service Gallery	24	29-Jul-24	24-Aug-24	13-Nov-24	10-Dec-24			SW2300: SS 12, DS4240: FS, DS6404: FS, DS6540: FS				
SW2350	Install Traffic Control Devices	24	31-Jul-24	27-Aug-24	03-Jan-25	03-Feb-25			SW2300: FS, SC1210: FF, EM1030: FS, DS2810: FS, EM1650: FS, DS8250: FS				
SW2360	Install VLSL	18	31-Jul-24	20-Aug-24	28-Nov-24	18-Dec-24			SW2300: SS 18, SC1210: FF, EM1030: FS, DS2810: FS, EM1650: FS, DS8250: FS				
SW2380	Install PABX in Service Gallery	24	12-Aug-24	07-Sep-24	27-Nov-24	24-Dec-24			SW2370: SS 12, DS4140: FS, DS6040: FS, DS6480: FS				
SW2310	Install CCTV Camera	18	14-Aug-24	03-Sep-24	12-Dec-24	03-Jan-25			SW2360: SS 12, SC1470: FF, DS4090: FS, DS6440: FS				
SW2340	Install ET	12	14-Aug-24	27-Aug-24	17-Jan-25	03-Feb-25			SW2350: SS 12, DS4190: FS, DS6404: FS, DS6540: FS				
SW2320	Install Detection Camera	18	28-Aug-24	17-Sep-24	27-Dec-24	17-Jan-25			SW2310: SS 12, SC2120: FF, DS4404: FS, DS4390: FS, DS6160: FS				
SW2390	Install Radio System in Service Gallery	24	10-Sep-24	09-Oct-24	26-Dec-24	23-Jan-25			SW2380: FS, DS4390: FS, DS6160: FS				
SW2330	Install SEC Camera	18	11-Sep-24	03-Oct-24	03-Mar-25	22-Mar-25			SW2320: SS 12, DS6320: FS, EM1650: FS				
Tunnel Section - CH 7+100 to CH 7+600		84	02-Jul-24	09-Oct-24	29-Aug-24	03-Feb-25							
SW2880	Inspect Civil Provisions & Submit Inspection Report	3	02-Jul-24	04-Jul-24	29-Aug-24	31-Aug-24			AC1060: SS				
SW2890	Rectify Civil Provision Defects by Others	6	05-Jul-24	11-Jul-24	02-Sep-24	07-Sep-24			SW2880: FS				
Installation Works		75	12-Jul-24	09-Oct-24	09-Sep-24	03-Feb-25							

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
SW2400	Install Cable Containment	24	12-Jul-24	08-Aug-24	09-Sep-24	08-Oct-24			SC2480: FF, SW2890: FS, DS6404: FS, DS6540: FS				
SW2410	Install PA in Service Gallery	24	29-Jul-24	24-Aug-24	24-Sep-24	23-Oct-24			SW2400: SS 12, SC1860: FF, DS4240: FS, DS6480: FS, DS6120: FS				
SW2420	Install VLSL	18	02-Aug-24	22-Aug-24	02-Oct-24	23-Oct-24			SW2400: SS 18, SC1210: FF, EM10				
SW2460	Install Traffic Control Devices	24	02-Aug-24	29-Aug-24	18-Dec-24	16-Jan-25			SW2400: SS 18, SC1210: FF, EM10				
SW2440	Install PABX in Service Gallery	24	12-Aug-24	07-Sep-24	09-Oct-24	06-Nov-24			SW2410: SS 12, SC1590: FF, DS41				
SW2430	Install CCTV Camera	18	16-Aug-24	05-Sep-24	17-Oct-24	06-Nov-24			SW2420: SS 12, SC1470: FF, DS40				
SW2450	Install Detection Camera	18	30-Aug-24	20-Sep-24	31-Oct-24	20-Nov-24			SW2430: SS 12, SC2120: FF, DS4490: FS, DS6440: FS, DS7500: FS				
SW2480	Install ET	12	30-Aug-24	12-Sep-24	17-Jan-25	03-Feb-25			SW2460: FS, SC1720: FF, DS4190: FS, DS6080: FS, DS6480: FS				
SW2470	Install Radio System in Service Gallery	24	10-Sep-24	09-Oct-24	24-Oct-24	20-Nov-24			SW2440: SS 12, SC1990: FF, DS4390: FS, DS6160: FS, DS6520: FS				
Tunnel Section - CH 7+600 to CH 8+100		84	02-Jul-24	09-Oct-24	15-Oct-24	03-Feb-25							
SW2900	Inspect Civil Provisions & Submit Inspection Report	3	02-Jul-24	04-Jul-24	15-Oct-24	17-Oct-24			AC1070: SS				
SW2910	Rectify Civil Provision Defects by Others	6	05-Jul-24	11-Jul-24	18-Oct-24	24-Oct-24			SW2900: FS				
Installation Works		59	31-Jul-24	09-Oct-24	25-Oct-24	03-Feb-25							
SW2510	Install Cable Containment	24	31-Jul-24	27-Aug-24	25-Oct-24	21-Nov-24			SC2480: FF, EM1620: FS, SW2910: FS				
SW2520	Install VLSL	18	14-Aug-24	03-Sep-24	28-Nov-24	18-Dec-24			SW2510: SS 12, SC1210: FF, EM10				
SW2530	Install PA in Service Gallery	24	14-Aug-24	10-Sep-24	04-Dec-24	02-Jan-25			SW2510: SS 12, SC1860: FF, DS42				
SW2540	Install Traffic Control Devices	24	21-Aug-24	17-Sep-24	18-Dec-24	16-Jan-25			SW2510: SS 18, SC1210: FF, EM10				
SW2550	Install CCTV Camera	18	28-Aug-24	17-Sep-24	12-Dec-24	03-Jan-25			SW2520: SS 12, SC1470: FF, DS40				
SW2560	Install PABX in Service Gallery	24	28-Aug-24	25-Sep-24	18-Dec-24	16-Jan-25			SW2530: SS 12, SC1590: FF, DS41				
SW2570	Install Radio System in Service Gallery	24	10-Sep-24	09-Oct-24	26-Dec-24	23-Jan-25			SW2560: SS 6, SC1990: FF, DS439				
SW2580	Install Detection Camera	18	11-Sep-24	03-Oct-24	27-Dec-24	17-Jan-25			SW2550: SS 12, SC2120: FF, DS44				
SW2590	Install ET	12	19-Sep-24	03-Oct-24	17-Jan-25	03-Feb-25			SW2540: FS, SC1720: FF, DS4190: FS				
Tunnel Section - CH 8+100 to CH 8+750		78	13-Aug-24	14-Nov-24	04-Oct-24	28-Apr-25							
SW2920	Inspect Civil Provisions & Submit Inspection Report	3	13-Aug-24	15-Aug-24	04-Oct-24	07-Oct-24			AC1080: SS				
SW2930	Rectify Civil Provision Defects by Others	6	16-Aug-24	22-Aug-24	08-Oct-24	15-Oct-24			SW2920: FS				
Installation Works		69	23-Aug-24	14-Nov-24	16-Oct-24	28-Apr-25							
SW2600	Install Cable Containment	24	23-Aug-24	20-Sep-24	16-Oct-24	12-Nov-24			SC2480: FF, SW2930: FS, DS6404: FS				
SW2610	Install VLSL	18	06-Sep-24	27-Sep-24	28-Nov-24	18-Dec-24			SW2600: SS 12, SC1210: FF, EM10				
SW2620	Install PA in Service Gallery	24	06-Sep-24	05-Oct-24	04-Dec-24	02-Jan-25			SW2600: SS 12, SC1860: FF, DS42				
SW2630	Install Traffic Control Devices	24	13-Sep-24	14-Oct-24	18-Dec-24	16-Jan-25			SW2600: SS 18, SC1210: FF, EM10				
SW2640	Install CCTV Camera	18	21-Sep-24	14-Oct-24	12-Dec-24	03-Jan-25			SW2610: SS 12, SC1470: FF, DS40				
SW2650	Install PABX in Service Gallery	24	21-Sep-24	21-Oct-24	18-Dec-24	16-Jan-25			SW2620: SS 12, SC1590: FF, DS41				
SW2700	Install GOFS (CH 7+600 to CH 8+750)	45	21-Sep-24	14-Nov-24	06-Mar-25	28-Apr-25			SW2600: FS, SC2570: FF, DS6360: FS				
SW2710	Signal Cable Laying and Termination (CH 7+600 to CH 8+750)	45	21-Sep-24	14-Nov-24	13-Nov-24	06-Jan-25			SW2600: FS, SC2480: FF				
SW2660	Install Radio System in Service Gallery	24	28-Sep-24	28-Oct-24	26-Dec-24	23-Jan-25			SW2650: SS 6, SC1990: FF, DS439				
West Ventilation Building		133	02-Jul-24	09-Oct-24	25-Nov-24	20-Nov-26	01-Apr-24						
SW1360	Inspect Civil Provisions & Submit Inspection Report	12	02-Jul-24	15-Jul-24	16-Oct-26	30-Oct-26			AC1010: SS, KD1010: FS 359				
SW1370	Rectify Civil Provision Defects by Others	18	16-Jul-24	05-Aug-24	31-Oct-26	20-Nov-26			SW1360: FS				
Installation Works		133	02-Jul-24	09-Oct-24	25-Nov-24	11-Feb-25	01-Apr-24						
SW1650	Install Cable Containments	24	02-Jul-24	11-Jul-24	25-Nov-24	04-Dec-24	01-Apr-24		SC2480: FF, DS6400: FS, DS6540: FS				
SW1660	Position Equipment Rack	12	12-Jul-24	25-Jul-24	12-Dec-24	26-Dec-24			SW1650: FS				
SW1670	Install Network Equipment	36	26-Jul-24	05-Sep-24	27-Dec-24	11-Feb-25			SW1660: FS, SC1330: FF, DS4340: FS, DS4440: FS				
SW1690	Install PABX Equipment	20	29-Jul-24	20-Aug-24	25-Nov-24	17-Dec-24			SW1650: SS 18, SC1590: FF, DS4140: FS, DS6040: FS, DS6480: FS				



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Jun 30	Jul 31	Aug 32	Sep 33
SW1710	Install Radio Equipment	12	10-Sep-24	24-Sep-24	18-Dec-24	02-Jan-25			SW1690: FS, SC1990: FF, DS4390: FS, DS6160: FS, DS6520: FS				
SW1720	Install PA Equipment	12	25-Sep-24	09-Oct-24	03-Jan-25	16-Jan-25			SW1710: FS, SC1860: FF, DS4240: FS, DS6480: FS, DS6120: FS				
East Ventilation Building		84	02-Jul-24	09-Oct-24	04-Nov-24	20-Nov-26							
SW2960	Inspect Civil Provisions & Submit Inspection Report	12	02-Jul-24	15-Jul-24	16-Oct-26	30-Oct-26			AC1010: SS, KD1010: FS				
SW2970	Rectify Civil Provision Defects by Others	18	16-Jul-24	05-Aug-24	31-Oct-26	20-Nov-26			SW2960: FS				
Installation Works		84	02-Jul-24	09-Oct-24	04-Nov-24	11-Feb-25							
SW1750	Install Cable Containments	24	02-Jul-24	29-Jul-24	04-Nov-24	30-Nov-24			SC2480: FF, DS6400: FS, DS6540: FS				
SW1790	Install PABX Equipment	20	29-Jul-24	20-Aug-24	25-Nov-24	17-Dec-24			SW1750: SS 18, SC1590: FF, DS4140: FS, DS6040: FS, DS6480: FS				
SW1760	Position Equipment Rack	12	30-Jul-24	12-Aug-24	12-Dec-24	26-Dec-24			SW1750: FS				
SW1770	Install Network Equipment	36	13-Aug-24	24-Sep-24	27-Dec-24	11-Feb-25			SW1760: FS, SC1330: FF, DS4340: FS, DS4440: FS				
SW1810	Install Radio Equipment	12	10-Sep-24	24-Sep-24	18-Dec-24	02-Jan-25			SW1790: FS, SC1990: FF, DS4390: FS, DS6160: FS, DS6520: FS				
SW1820	Install PA Equipment	12	25-Sep-24	09-Oct-24	03-Jan-25	16-Jan-25			SW1810: FS, SC1860: FF, DS4240: FS, DS6480: FS, DS6120: FS				
Portion 3 - CKL Branch Tunnel in TKO-LTT Site		81	02-Jul-24	05-Oct-24	11-Jan-25	22-Apr-25							
SW1850	Inspect Civil Provisions & Submit Inspection Report	3	02-Jul-24	04-Jul-24	11-Jan-25	14-Jan-25			AC1020: SS				
SW1860	Rectify Civil Provision Defects by Others	7	05-Jul-24	12-Jul-24	15-Jan-25	22-Jan-25			SW1850: FS				
Installation Works		71	13-Jul-24	05-Oct-24	23-Jan-25	22-Apr-25							
SW1890	Install Cable Containments	36	13-Jul-24	23-Aug-24	01-Feb-25	14-Mar-25			SW1860: FS, SC2480: FF, DS6404: FS, DS6540: FS				
SW1870	Install CCTV Camera	29	29-Jul-24	30-Aug-24	23-Jan-25	28-Feb-25			SW1860: FS, SC1470: FF, DS4090: FS, DS6440: FS				
SW1880	Install Detection Camera	29	12-Aug-24	13-Sep-24	07-Feb-25	12-Mar-25			SW1860: FS, SC2120: FF, DS4490: FS, DS6440: FS, DS7500: FS				
SW1920	Signal Cable Laying	36	20-Aug-24	02-Oct-24	11-Mar-25	22-Apr-25			SW1890: SS 32, SW1900: FF, SW1870: SS 6, SW1880: SS 6				
SW1900	Install Traffic Control Devices	24	22-Aug-24	19-Sep-24	28-Feb-25	27-Mar-25			SW1870: SS 9, SW1880: SS 9, SW2220: SS 9, SC1210: FF, EM1030: FS, DS2810: FS, EM1650: FS, DS8250: FS				
SW1910	Laying of Leaky Cable	36	23-Aug-24	05-Oct-24	22-Feb-25	04-Apr-25			SW1890: SS 6, SW1870: SS 22, SW1880: SS, SW1900: FF 6				



■ Remaining Work ◆ ◆ Milestone
■ Actual Work
■ Critical Activity

Date	Revision	Checked	Approved
30-Jun-24	Rev. 0	MY	