

Civil Engineering and Development Department

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

April 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

CINOTECH CONSULTANTS LTD

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Tel: (852) 2151 2083 Fax: (852) 3107 1388

Email: info@cinotech.com.hk

Ref.: CEDKTD2EM00_0_0610L.24

9 May 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 (April 2024) for EP-458/2013/C

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for April 2024 (Version 1.0) certified by the ET Leader and provided to us via email on 8 May 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

By Fax: 2739 0076
By Email
By Fax: 3107 1388

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EXECUTIVE SUMMARY**Introduction**

1. This is the 48th 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 April 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 Bound – Wall & Crown • East Ventilation Building – RC Structure, ABWF, E&M • West Bound – Bulkhead Construction, OHVD
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	<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.

Developments at South Apron	<ul style="list-style-type: none"> 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	N/A	N/A	N/A	N/A	N/A

Heritage					
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 III**.
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 is 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 (May 2024)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	1) East Bound – Wall & Crown 2) East Ventilation Building – RC Structure, ABWF, E&M. 3) West Bound – Bulkhead Construction, OHVD	(A) / (B) / (C) / (D)
ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System	N/A	

(TCSS) and Associated Works ⁽¹⁾		
--	--	--

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 Trunk 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 48th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in April 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 Bound – Wall & Crown • East Ventilation Building – RC Structure, ABWF, E&M • West Bound – Bulkhead Construction, OHVD
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 April 2024.

Status of Environmental Licensing and Permitting

1.14 All permits/licenses obtained for the Project are summarized in **Table 1.2**.

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.: 972781, 972777, 972778, 972780, 8Y2374, 8Y2373)	7
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 meter 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 aluminum 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 refer 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 (April 2024), $\mu\text{g}/\text{m}^3$
AM1 – Tin Hau Temple	CL1	707	124.2
AM2 – Sai Tso Wan Recreation Ground	CL6	266	54.0
AM3 – Yau Lai Estate Bik Lai House	CL9	507	73.8
AM4 - Sitting-out Area at Cha Kwo Ling Village	CL16	430	77.4

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 (April 2024), $\mu\text{g}/\text{m}^3$
AM1 – Tin Hau Temple	CL1	199	100.6
AM2 – Sai Tso Wan Recreation Ground	CL6	109	153.6
AM3 – Yau Lai Estate Bik Lai House	CL9	123	24.0
AM4(B) – Flat 103 Cha Kwo Ling Village (*)	N/A ⁽¹⁾	N/A ⁽¹⁾	152.7 (**)

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 refer 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 and AM3 were lower than the prediction in the EIA Report, AEIAR-173/2013 (as approved in 2013). On the other hand, the 24-hour TSP concentrations at AM2 were higher than the prediction in the EIA Report, AEIAR-173/2013 (as approved in 2013), this may due to the traffic flow along the Lei Yue Mun Road and Sin Fat Road. 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) L ₉₀ (30 min.) dB(A) L _{eq} (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	SV 30A (Serial No.: 10965) ST-120 (Serial No.: 181001637) 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 (April 2024), Leq (30min) dB(A)
CM1 – Nga Lai House, Yau Lai Estate Phase 1, Yau Tong	N1102	73	68.0
CM2 – Bik Lai House, Yau Lai Estate Phase 1, Yau Tong	N1204	75	70.0
CM3 – Block S, Yau Lai Estate Phase 5, Yau Tong	N2105	75	69.0
CM4 – Tin Hau Temple, Cha Kwo Ling	N3101a	73	75.0
CM5 – CCC Kei Faat Primary School, Yau Tong	N4101	71	67.0

3.15 The results at CM1, CM2, CM3 and CM5 were lower than the maximum predicted mitigated construction noise level in EIA Report, AEIAR-173/2013 (as approved in 2013). However, the result at CM4 was higher than the maximum predicted mitigated construction noise level in EIA Report, AEIAR-173/2013 (as approved in 2013), this may due to the traffic flow along the Cha Kwo Ling Road. 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 is 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 03, 11, 18 & 25 April 2024 in the reporting month. Site inspection of the IEC was conducted on 25 April 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>	28 March 2024	NRMM label should be provided to PME.	The NRMM label had been replaced.
<i>Noise</i>	N/A	There was no observation in the reporting period.	N/A
<i>Water Quality</i>	3 Apr 2024	Stagnant water should be removed to avoid mosquitoes at EVB Basement.	Applying the larvicide to the water ponding.
	11 Apr 2024	Stagnant water should be removed to avoid mosquitoes at EVB Basement.	Stagnant water had been removed.
	18 Apr 2024	Stagnant water should be avoided.	The stagnant water had been removed.
<i>Ecology</i>	N/A	There was no observation in the reporting period.	N/A
<i>Landscape and Visual</i>	N/A	There was no observation in the reporting period.	N/A
<i>Waste/Chemical Management</i>	11 Apr 2024	Rubbish was observed near the site entrance.	The rubbish had been removed.
	25 Apr 2024	Rubbish were observed at Portion U.	To be reported in the next reporting month.
<i>Permits /Licences</i>	N/A	There was no observation in the reporting period.	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 Summary Table for Site Activities and the Key Environmental Issues in the next Reporting Period

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

Contract No. and Project Title	Site Activities (May 2024)	Key Environmental Issues
		<ul style="list-style-type: none"> • Make sure open stockpiles are covered during rainstorm.
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 48th 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 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

Air Quality

- The valid NRMM label should be displayed on the PMEs.

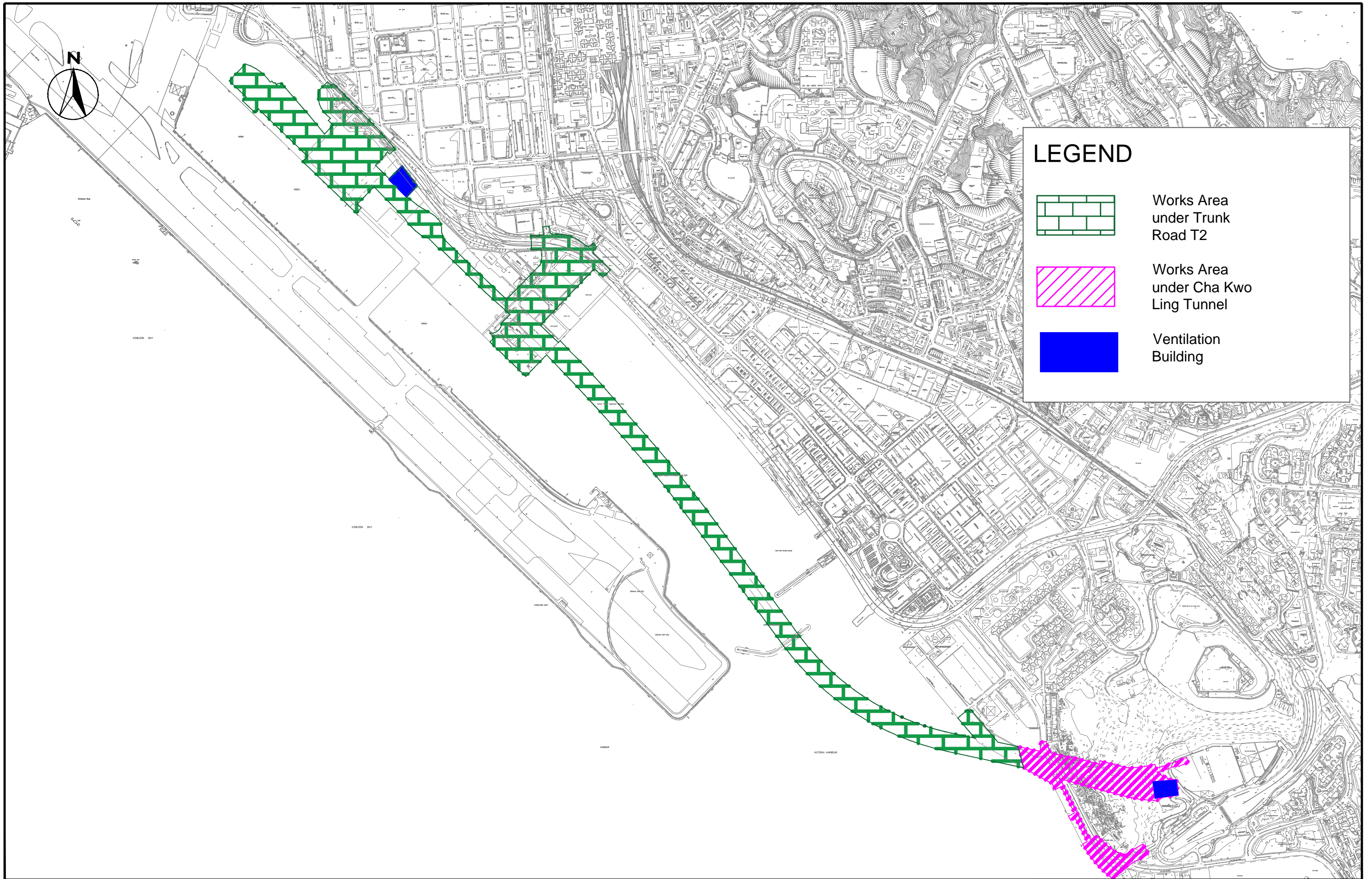
Water Quality

- Stagnant water should be removed regularly and avoid water ponding.


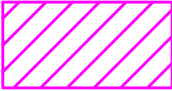

Waste/ Chemical Management.

- The site and surrounding should be kept tidy and litter free, remove the waste regularly.

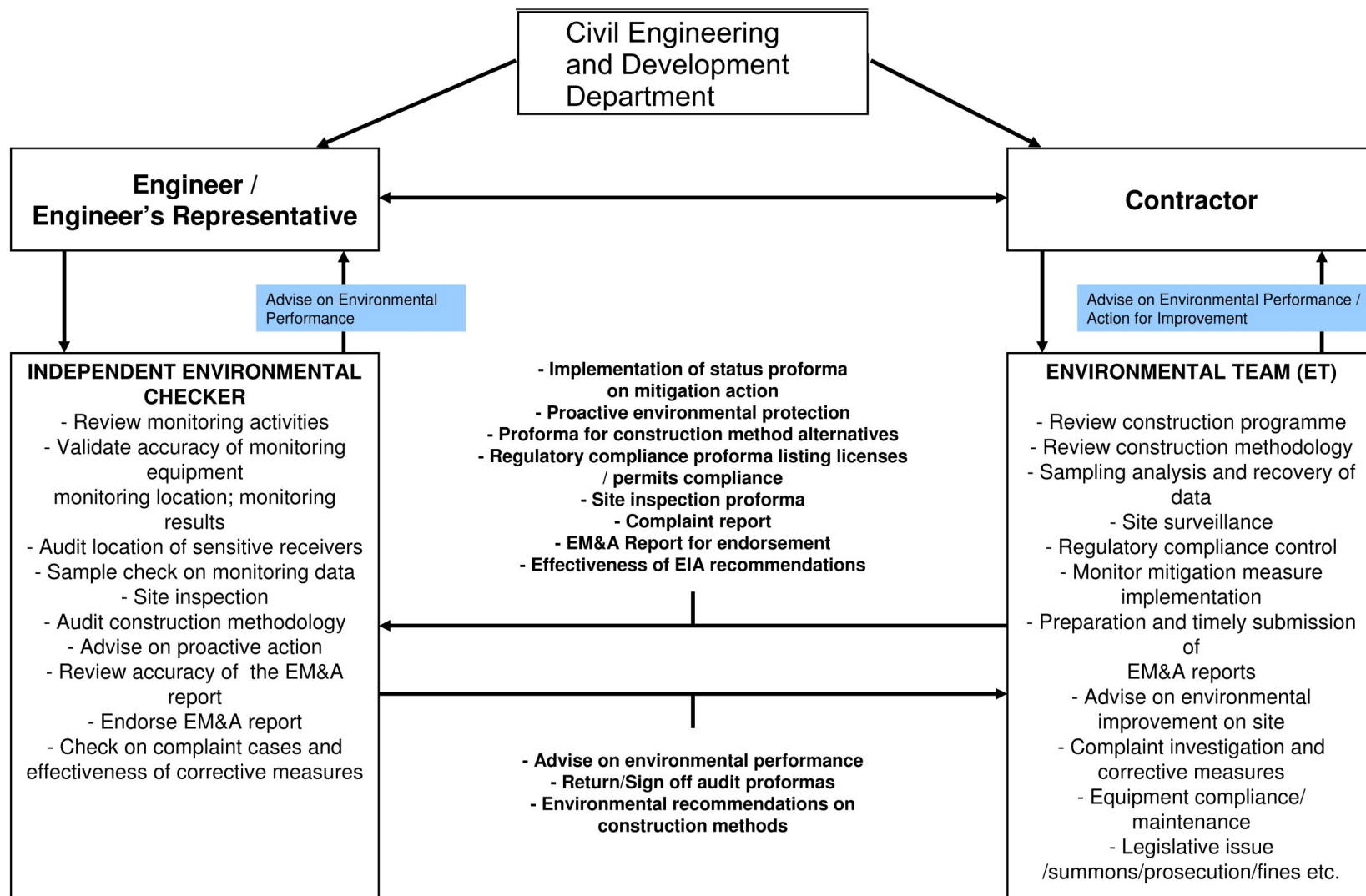
FIGURES



LEGEND

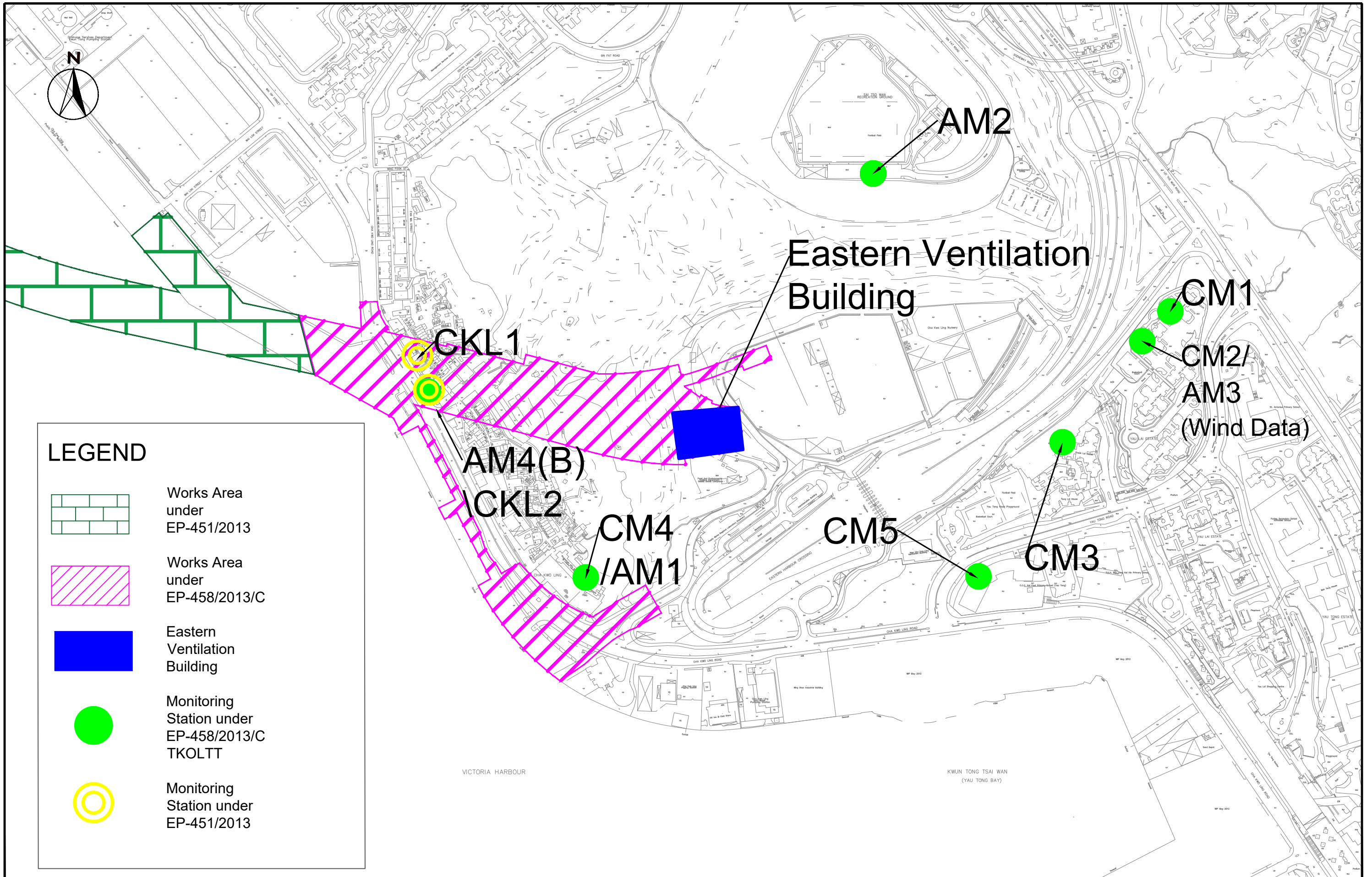
-  Works Area under Trunk Road T2
-  Works Area under Cha Kwo Ling Tunnel
-  Ventilation Building

SCALE	1:10000@A3	DATE	March 20
CHECK	KC	DRAWN	TL
JOB No.	MA20003	FIGURE No.	Fig 1
		REV	-

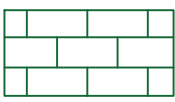
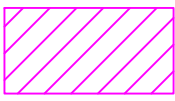





PLOT.DWG: K:\91164 Trunk Road T2\Cad Admin\A3_colour.plt
PRINTED BY: JACOB
1/17/2013 10:53:36 AM

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.		-



LEGEND

-  Works Area under EP-451/2013
-  Works Area under EP-458/2013/C
-  Eastern Ventilation Building
-  Monitoring Station under EP-458/2013/C TKOLTT
-  Monitoring Station under EP-451/2013

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**

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0046

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

Ambient Condition			
Temperature, Ta (K)	<u>294</u>	Pressure, Pa (mmHg)	<u>765.2</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>12.8</u>	3.61	61.32	<u>8.8</u>	3.00
2	<u>10.1</u>	3.21	54.56	<u>6.5</u>	2.58
3	<u>7.2</u>	2.71	46.20	<u>4.6</u>	2.17
4	<u>5.2</u>	2.30	39.39	<u>2.7</u>	1.66
5	<u>2.8</u>	1.69	29.13	<u>1.3</u>	1.15

By Linear Regression of Y on X

Slope, mw = 0.0577 Intercept, bw : -0.5513

Correlation coefficient* = 0.9982

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation


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

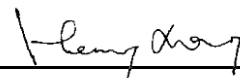
From the Regression Equation, the "Y" value according to

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

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.65

Remarks: _____

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

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

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)	<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>13.1</u>	3.60	61.10	<u>8.9</u>	2.97
2	<u>10.4</u>	3.21	54.53	<u>6.6</u>	2.56
3	<u>7.5</u>	2.72	46.43	<u>4.6</u>	2.13
4	<u>5.3</u>	2.29	39.17	<u>3.0</u>	1.72
5	<u>3.0</u>	1.72	29.68	<u>1.8</u>	1.33

By Linear Regression of Y on X

Slope, mw = 0.0522 Intercept, bw : -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

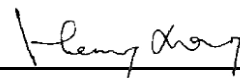
From the Regression Equation, the "Y" value according to

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

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

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. MA16034/08/0046

Project No. AM2 - Sai Tso Wan Recreation Ground

Date: 14-Feb-24 Next Due Date: 14-Apr-24 Operator: SK

Equipment No.: A-01-08 Model No.: GS2310 Serial No. 1287

Ambient Condition			
Temperature, Ta (K)	<u>294</u>	Pressure, Pa (mmHg)	<u>765.2</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>	3.64	61.79	<u>8.6</u>	2.96
2	<u>10.0</u>	3.19	54.30	<u>6.3</u>	2.54
3	<u>7.4</u>	2.75	46.83	<u>4.4</u>	2.12
4	<u>5.0</u>	2.26	38.64	<u>2.8</u>	1.69
5	<u>2.8</u>	1.69	29.13	<u>1.4</u>	1.20

By Linear Regression of Y on X

Slope, mw = 0.0540 Intercept, bw : -0.3919

Correlation coefficient* = 0.9998

*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>3.65</u>

Remarks: _____

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

Checked by: Henry Leung Signature: Date: 14-Feb-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)	<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>13.2</u>	3.61	61.33	<u>8.7</u>	2.93
2	<u>10.2</u>	3.18	54.01	<u>6.4</u>	2.52
3	<u>7.5</u>	2.72	46.43	<u>4.5</u>	2.11
4	<u>5.2</u>	2.27	38.80	<u>2.9</u>	1.69
5	<u>3.0</u>	1.72	29.68	<u>1.5</u>	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: [Signature] Date: 14-Apr-24
 Checked by: Henry Leung Signature: [Signature] Date: 14-Apr-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0046

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

Ambient Condition			
Temperature, Ta (K)	294	Pressure, Pa (mmHg)	765.2

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	12.8	3.61	61.32	8.4	2.93
2	10.5	3.27	55.62	6.4	2.56
3	7.7	2.80	47.75	4.5	2.14
4	4.9	2.24	38.26	2.8	1.69
5	3.0	1.75	30.12	1.6	1.28

By Linear Regression of Y on X

Slope, $m_w =$ 0.0520 Intercept, $b_w =$ -0.3053

Correlation coefficient* = 0.9987

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation


From the TSP Field Calibration Curve, take $Q_{std} = 43$ CFM

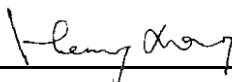
From the Regression Equation, the "Y" value according to

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

Therefore, Set Point; $W = (m_w \times Q_{std} + b_w)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.65

Remarks: _____

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

Checked by: Henry Leung Signature:  Date: 14-Feb-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)	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	12.9	3.57	60.64	8.3	2.87
2	10.6	3.24	55.04	6.4	2.52
3	7.8	2.78	47.34	4.6	2.13
4	5.0	2.22	38.07	3.0	1.72
5	3.0	1.72	29.68	1.7	1.30

By Linear Regression of Y on X

Slope, mw = 0.0496 Intercept, bw : -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

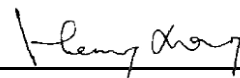
From the Regression Equation, the "Y" value according to

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

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

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. MA20003/55/025

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

Ambient Condition			
Temperature, Ta (K)	292.7	Pressure, Pa (mmHg)	759.3

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	13.7	3.73	63.31	9.8	3.16
2	11.4	3.41	57.82	7.8	2.82
3	9.5	3.11	52.86	6.1	2.49
4	5.7	2.41	41.13	3.1	1.78
5	3.6	1.91	32.86	2.0	1.43

By Linear Regression of Y on X

Slope, mw = 0.0577 Intercept, bw : -0.5305
 Correlation coefficient* = 0.9975

*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 = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.75

Remarks: _____

Conducted by: Wong Shing Kwai Signature: Date: 4-Mar-24

Checked by: Henry Leung Signature: Date: 4-Mar-24

Certificate of Calibration

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

Description: Laser Dust Monitor Date of Calibration 30-Mar-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-May-24
 Model No.: LD-3B
 Serial No.: 2Y6194
 Equipment No.: SA-01-02 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 578
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 578

Calibration of 1 hr TSP			
Calibration Point	Laser Dust Monitor		HVS
	Total Count	Count / Minute X-axis	Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis
1	4000	75.0	142.0
2	3600	65.0	124.0
3	3000	55.0	103.0
Average		65.0	123.0


By Linear Regression of Y on X
 Slope , mw = 1.9500 Intercept, bw = -3.7500
 Correlation coefficient* = 0.9990

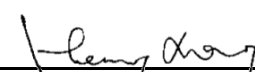
Set Correlation Factor , SCF
 SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] 1.9

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 30-Mar-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-May-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

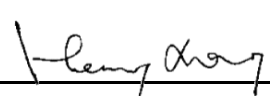
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	76.0	138.0
2	66.0	122.0
3	56.0	101.0
Average	66.0	120.3
By Linear Regression of Y on X Slope , mw = <u>1.8500</u> Intercept, bw = <u>-1.7667</u> Correlation coefficient* = <u>0.9970</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)	120.3	
Particulate Concentration by Dust Meter (µg/m ³)	66.0	
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 30-Mar-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-May-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

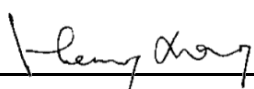
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	74.0	136.0
2	64.0	116.0
3	54.0	100.0
Average	64.0	117.3
By Linear Regression of Y on X Slope , mw = <u>1.8000</u> Intercept, bw = <u>2.1333</u> Correlation coefficient* = <u>0.9979</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)	117.3	
Particulate Concentration by Dust Meter (µg/m ³)	64.0	
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 30-Mar-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-May-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

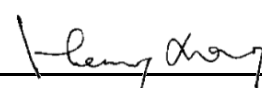
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	75.0	141.0
2	65.0	120.0
3	55.0	101.0
Average	65.0	120.7
By Linear Regression of Y on X Slope , mw = <u>2.0000</u> Intercept, bw = <u>-9.3333</u> Correlation coefficient* = <u>0.9996</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)	120.7	
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>1.9</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)

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 30-Mar-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-May-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

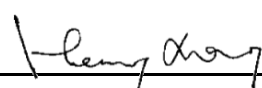
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	72.0	141.0
2	62.0	121.0
3	52.0	100.0
Average	62.0	120.7
By Linear Regression of Y on X Slope , mw = <u>2.0500</u> Intercept, bw = <u>-6.4333</u> Correlation coefficient* = <u>0.9999</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		120.7
Particulate Concentration by Dust Meter (µg/m ³)		62.0
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)

Certificate of Calibration

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

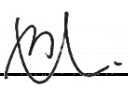
Description: Digital Dust Indicator Date of Calibration 30-Mar-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-May-24
 Model No.: LD-5R
 Serial No.: 972780
 Equipment No.: SA-01-09 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 739 CPM
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 739 CPM

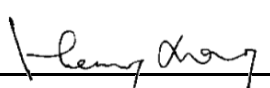
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	74.0	142.0
2	64.0	122.0
3	54.0	100.0
Average	64.0	121.3
By Linear Regression of Y on X Slope , mw = <u>2.1000</u> Intercept, bw = <u>-13.0667</u> Correlation coefficient* = <u>0.9996</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)		121.3
Particulate Concentration by Dust Meter (µg/m ³)		64.0
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)

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 30-Jan-24
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Mar-24
 Model No.: LD-5R
 Serial No.: 972781
 Equipment No.: SA-01-10 Sensitivity 0.001 mg/m3
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 734 CPM
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 734 CPM

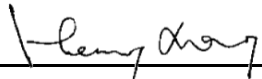
Calibration of 1 hr TSP		
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m ³) X-axis	Mass concentration (µg/m ³) Y-axis
1	80.0	133.0
2	70.0	115.0
3	61.0	100.0
Average	70.3	116.0
By Linear Regression of Y on X Slope , mw = <u>1.7380</u> Intercept, bw = <u>-6.2399</u> Correlation coefficient* = <u>0.9998</u>		
Set Correlation Factor		
Particulate Concentration by High Volume Sampler (µg/m ³)	116.0	
Particulate Concentration by Dust Meter (µg/m ³)	70.3	
Measureing time, (min)	60.0	
Set Correlation Factor , SCF		
SCF = [K=High Volume Sampler / Dust Meter, (µg/m ³)]	<u>1.6</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

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/ΔTime	Qa=	Va/ΔTime
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

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

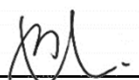
2. Performance check of Wind Direction

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:

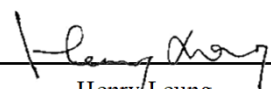
1. Performance Wind Speed Test - The wind meter was on-site calibrated against the anemometer
2. Performance Wind Direction Test - The wind meter was on-site calibrated against the marine compass at four direction

Calibrated by:



 Wong Shing Kwai

Approved by:



 Henry Leung

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
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 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. : 00390
Application No. : HP00263

Issue Date : 24 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

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. : 00373
Application No. : HP00247

Issue Date : 09 May 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-09-02

Manufacturer: : SVANTEK

Other information :

Model No.	SV 30A
Serial No.	10965

Date Received : 05 May 2023

Test Period : 08 May 2023 to 08 May 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. : 00373
Application No. : HP00247

Issue Date : 09 May 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.	590073
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	114.3	+ 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. : 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 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. : 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 -



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 : $(23 \pm 2)^{\circ}\text{C}$ Relative Humidity / 相對濕度 : $(50 \pm 25)\%$
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範


Calibration check

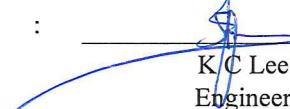
DATE OF TEST / 測試日期 : 3 March 2024

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. : 00380
Application No. : HP00252

Issue Date : 10 May 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-13-03

Manufacturer: : SOUNDTEK

Other information	Model No.	ST-120
	Serial No.	181001637

Date Received : 09 May 2023

Test Period : 09 May 2023 to 09 May 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***

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. : 00380

Issue Date : 10 May 2023

Application No. : HP00252

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	94.1	+ 0.1	± 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. : 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.

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

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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. : 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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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. : 00648

Issue Date : 11 Apr 2024

Application No. : HP00515

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 -

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. : 00370
Application No. : HP00242

Issue Date : 02 May 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.: : SN-01-01

Manufacturer: : SVANTEK

Other information :

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

Date Received : 02 May 2023

Test Period : 02 May 2023 to 02 May 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

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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. : 00370

Issue Date : 02 May 2023

Application No. : HP00242

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	114.0	± 0.0	± 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-Apr-24	27.3	81	Trace
2-Apr-24	27.0	80	0.0
3-Apr-24	27.3	80	Trace
4-Apr-24	27.2	81	Trace
5-Apr-24	26.5	81	0.3
6-Apr-24	24.4	89	2.7
7-Apr-24	25.4	88	0.9
8-Apr-24	25.1	87	0.0
9-Apr-24	22.9	78	Trace
10-Apr-24	23.7	68	0.0
11-Apr-24	24.5	77	0.0
12-Apr-24	25.8	78	0.0
13-Apr-24	26.9	77	0.0
14-Apr-24	27.7	78	0.0
15-Apr-24	27.7	79	0.0
16-Apr-24	27.9	77	0.0
17-Apr-24	28.4	78	0.0
18-Apr-24	26.9	80	8.6
19-Apr-24	27.6	80	2.2
20-Apr-24	27.4	81	42.2
21-Apr-24	23.9	90	81.6
22-Apr-24	25.2	90	13.2
23-Apr-24	25.4	91	40.0
24-Apr-24	25.9	88	Trace
25-Apr-24	26.6	86	5.7
26-Apr-24	27.3	88	25.0
27-Apr-24	28.8	85	0.8
28-Apr-24	25.4	90	12.2
29-Apr-24	27.7	85	0.0
30-Apr-24	28.6	81	21.7

(Reporting Month: April 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

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
1 Apr 2024	12:00 AM	SE	1.1
1 Apr 2024	1:00 AM	S	1.1
1 Apr 2024	2:00 AM	SE	0.4
1 Apr 2024	3:00 AM	S	0.5
1 Apr 2024	4:00 AM	S	0.6
1 Apr 2024	5:00 AM	S	0.6
1 Apr 2024	6:00 AM	S	0.5
1 Apr 2024	7:00 AM	SSW	0.9
1 Apr 2024	8:00 AM	SSE	1.1
1 Apr 2024	9:00 AM	S	0.9
1 Apr 2024	10:00 AM	SSE	1.4
1 Apr 2024	11:00 AM	SW	1.3
1 Apr 2024	12:00 PM	SE	1.1
1 Apr 2024	1:00 PM	SE	1.2
1 Apr 2024	2:00 PM	S	1.6
1 Apr 2024	3:00 PM	SSE	1.4
1 Apr 2024	4:00 PM	SE	1.5
1 Apr 2024	5:00 PM	SE	1.4
1 Apr 2024	6:00 PM	SW	1.5
1 Apr 2024	7:00 PM	S	2.0
1 Apr 2024	8:00 PM	WSW	2.1
1 Apr 2024	9:00 PM	WSW	2.8
1 Apr 2024	10:00 PM	SW	2.3
1 Apr 2024	11:00 PM	SSW	1.2
2 Apr 2024	12:00 AM	SSW	1.2
2 Apr 2024	1:00 AM	SSW	1.2
2 Apr 2024	2:00 AM	S	0.7
2 Apr 2024	3:00 AM	S	1.0
2 Apr 2024	4:00 AM	S	0.8
2 Apr 2024	5:00 AM	SW	0.9
2 Apr 2024	6:00 AM	W	1.7
2 Apr 2024	7:00 AM	WSW	2.0
2 Apr 2024	8:00 AM	S	1.5
2 Apr 2024	9:00 AM	SSE	1.4
2 Apr 2024	10:00 AM	SSW	1.7
2 Apr 2024	11:00 AM	S	1.7
2 Apr 2024	12:00 PM	SW	1.9
2 Apr 2024	1:00 PM	WSW	2.6
2 Apr 2024	2:00 PM	SSW	1.6
2 Apr 2024	3:00 PM	SSE	1.4
2 Apr 2024	4:00 PM	SE	1.6
2 Apr 2024	5:00 PM	SSE	1.8
2 Apr 2024	6:00 PM	S	1.1
2 Apr 2024	7:00 PM	ESE	0.6
2 Apr 2024	8:00 PM	S	0.9
2 Apr 2024	9:00 PM	SSE	0.8
2 Apr 2024	10:00 PM	SSW	1.2
2 Apr 2024	11:00 PM	SSE	0.9
3 Apr 2024	12:00 AM	SSE	0.6
3 Apr 2024	1:00 AM	SW	1.0
3 Apr 2024	2:00 AM	SW	0.7
3 Apr 2024	3:00 AM	SSE	0.8
3 Apr 2024	4:00 AM	SW	0.4
3 Apr 2024	5:00 AM	S	0.5
3 Apr 2024	6:00 AM	SSE	0.5
3 Apr 2024	7:00 AM	SE	0.6
3 Apr 2024	8:00 AM	SSW	1.0

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
3 Apr 2024	9:00 AM	SW	1.0
3 Apr 2024	10:00 AM	WSW	1.7
3 Apr 2024	11:00 AM	S	1.9
3 Apr 2024	12:00 PM	SSW	1.2
3 Apr 2024	1:00 PM	SSE	1.5
3 Apr 2024	2:00 PM	S	1.0
3 Apr 2024	3:00 PM	SSE	1.5
3 Apr 2024	4:00 PM	S	1.3
3 Apr 2024	5:00 PM	SSE	0.9
3 Apr 2024	6:00 PM	SW	1.0
3 Apr 2024	7:00 PM	SW	1.0
3 Apr 2024	8:00 PM	S	1.0
3 Apr 2024	9:00 PM	ESE	0.4
3 Apr 2024	10:00 PM	ESE	0.5
3 Apr 2024	11:00 PM	SSW	0.7
4 Apr 2024	12:00 AM	SSW	0.7
4 Apr 2024	1:00 AM	S	0.8
4 Apr 2024	2:00 AM	SSE	0.5
4 Apr 2024	3:00 AM	SSW	0.7
4 Apr 2024	4:00 AM	SE	0.6
4 Apr 2024	5:00 AM	SSW	0.8
4 Apr 2024	6:00 AM	SE	0.8
4 Apr 2024	7:00 AM	S	0.8
4 Apr 2024	8:00 AM	SW	1.1
4 Apr 2024	9:00 AM	SSE	0.9
4 Apr 2024	10:00 AM	SSW	1.0
4 Apr 2024	11:00 AM	SSW	1.3
4 Apr 2024	12:00 PM	SSE	1.7
4 Apr 2024	1:00 PM	SSW	1.8
4 Apr 2024	2:00 PM	SSE	1.4
4 Apr 2024	3:00 PM	SSE	1.3
4 Apr 2024	4:00 PM	SW	1.0
4 Apr 2024	5:00 PM	WNW	1.6
4 Apr 2024	6:00 PM	WSW	1.2
4 Apr 2024	7:00 PM	S	0.7
4 Apr 2024	8:00 PM	SW	0.9
4 Apr 2024	9:00 PM	NNW	1.2
4 Apr 2024	10:00 PM	W	1.2
4 Apr 2024	11:00 PM	W	1.4
5 Apr 2024	12:00 AM	WNW	1.9
5 Apr 2024	1:00 AM	SW	2.1
5 Apr 2024	2:00 AM	WNW	3.0
5 Apr 2024	3:00 AM	W	2.8
5 Apr 2024	4:00 AM	WNW	3.3
5 Apr 2024	5:00 AM	WNW	3.1
5 Apr 2024	6:00 AM	WNW	3.1
5 Apr 2024	7:00 AM	NW	3.1
5 Apr 2024	8:00 AM	W	3.2
5 Apr 2024	9:00 AM	SW	3.2
5 Apr 2024	10:00 AM	W	3.0
5 Apr 2024	11:00 AM	WSW	2.5
5 Apr 2024	12:00 PM	W	3.4
5 Apr 2024	1:00 PM	WSW	3.2
5 Apr 2024	2:00 PM	W	2.8
5 Apr 2024	3:00 PM	W	2.3
5 Apr 2024	4:00 PM	NW	3.0
5 Apr 2024	5:00 PM	NW	3.5

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
5 Apr 2024	6:00 PM	WNW	2.6
5 Apr 2024	7:00 PM	W	2.2
5 Apr 2024	8:00 PM	WSW	1.8
5 Apr 2024	9:00 PM	W	2.0
5 Apr 2024	10:00 PM	W	3.6
5 Apr 2024	11:00 PM	WNW	2.3
6 Apr 2024	12:00 AM	W	3.5
6 Apr 2024	1:00 AM	WNW	2.8
6 Apr 2024	2:00 AM	WSW	2.5
6 Apr 2024	3:00 AM	WSW	2.4
6 Apr 2024	4:00 AM	W	3.9
6 Apr 2024	5:00 AM	S	2.0
6 Apr 2024	6:00 AM	WSW	2.7
6 Apr 2024	7:00 AM	SSW	3.3
6 Apr 2024	8:00 AM	SW	2.4
6 Apr 2024	9:00 AM	WNW	2.4
6 Apr 2024	10:00 AM	WSW	3.0
6 Apr 2024	11:00 AM	S	1.6
6 Apr 2024	12:00 PM	SSW	1.4
6 Apr 2024	1:00 PM	S	1.8
6 Apr 2024	2:00 PM	SW	1.4
6 Apr 2024	3:00 PM	S	1.0
6 Apr 2024	4:00 PM	SSW	0.9
6 Apr 2024	5:00 PM	SE	0.5
6 Apr 2024	6:00 PM	ESE	0.6
6 Apr 2024	7:00 PM	SSW	0.8
6 Apr 2024	8:00 PM	SSW	2.0
6 Apr 2024	9:00 PM	WSW	1.3
6 Apr 2024	10:00 PM	SSW	2.0
6 Apr 2024	11:00 PM	S	1.5
7 Apr 2024	12:00 AM	SE	0.7
7 Apr 2024	1:00 AM	S	0.5
7 Apr 2024	2:00 AM	S	0.6
7 Apr 2024	3:00 AM	S	0.4
7 Apr 2024	4:00 AM	SSE	0.7
7 Apr 2024	5:00 AM	SSW	0.4
7 Apr 2024	6:00 AM	S	0.8
7 Apr 2024	7:00 AM	S	0.8
7 Apr 2024	8:00 AM	SSE	0.4
7 Apr 2024	9:00 AM	SW	1.2
7 Apr 2024	10:00 AM	SW	1.4
7 Apr 2024	11:00 AM	SSE	1.2
7 Apr 2024	12:00 PM	S	1.3
7 Apr 2024	1:00 PM	SSW	1.3
7 Apr 2024	2:00 PM	SSE	1.3
7 Apr 2024	3:00 PM	SSE	0.5
7 Apr 2024	4:00 PM	SW	0.7
7 Apr 2024	5:00 PM	S	0.3
7 Apr 2024	6:00 PM	SSW	0.5
7 Apr 2024	7:00 PM	SSE	0.2
7 Apr 2024	8:00 PM	SSE	0.2
7 Apr 2024	9:00 PM	SE	0.2
7 Apr 2024	10:00 PM	SSE	0.2
7 Apr 2024	11:00 PM	SE	0.5
8 Apr 2024	12:00 AM	SE	0.3
8 Apr 2024	1:00 AM	SSE	0.4
8 Apr 2024	2:00 AM	SSE	0.2

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
8 Apr 2024	3:00 AM	S	0.2
8 Apr 2024	4:00 AM	SE	0.3
8 Apr 2024	5:00 AM	SSE	0.3
8 Apr 2024	6:00 AM	S	0.3
8 Apr 2024	7:00 AM	S	0.3
8 Apr 2024	8:00 AM	SSE	1.0
8 Apr 2024	9:00 AM	SE	1.1
8 Apr 2024	10:00 AM	SSE	1.3
8 Apr 2024	11:00 AM	SE	1.0
8 Apr 2024	12:00 PM	SSW	0.9
8 Apr 2024	1:00 PM	SSE	1.0
8 Apr 2024	2:00 PM	S	0.8
8 Apr 2024	3:00 PM	S	0.9
8 Apr 2024	4:00 PM	S	1.0
8 Apr 2024	5:00 PM	SE	0.8
8 Apr 2024	6:00 PM	ESE	0.7
8 Apr 2024	7:00 PM	SSE	0.9
8 Apr 2024	8:00 PM	S	0.9
8 Apr 2024	9:00 PM	SSE	1.2
8 Apr 2024	10:00 PM	SSE	1.7
8 Apr 2024	11:00 PM	SSW	2.3
9 Apr 2024	12:00 AM	SSW	1.7
9 Apr 2024	1:00 AM	S	2.0
9 Apr 2024	2:00 AM	SSE	2.0
9 Apr 2024	3:00 AM	SSW	1.9
9 Apr 2024	4:00 AM	SSE	1.3
9 Apr 2024	5:00 AM	S	1.3
9 Apr 2024	6:00 AM	SSE	1.5
9 Apr 2024	7:00 AM	S	1.3
9 Apr 2024	8:00 AM	SSW	3.0
9 Apr 2024	9:00 AM	S	2.2
9 Apr 2024	10:00 AM	S	1.8
9 Apr 2024	11:00 AM	SSE	0.9
9 Apr 2024	12:00 PM	S	1.3
9 Apr 2024	1:00 PM	S	1.2
9 Apr 2024	2:00 PM	SW	1.5
9 Apr 2024	3:00 PM	SW	1.8
9 Apr 2024	4:00 PM	SSW	1.4
9 Apr 2024	5:00 PM	SSW	1.2
9 Apr 2024	6:00 PM	SSW	1.3
9 Apr 2024	7:00 PM	S	1.2
9 Apr 2024	8:00 PM	SSW	1.2
9 Apr 2024	9:00 PM	SSW	1.0
9 Apr 2024	10:00 PM	WSW	1.1
9 Apr 2024	11:00 PM	S	0.0
10 Apr 2024	12:00 AM	S	0.8
10 Apr 2024	1:00 AM	S	0.7
10 Apr 2024	2:00 AM	SSW	0.6
10 Apr 2024	3:00 AM	S	1.0
10 Apr 2024	4:00 AM	SW	1.0
10 Apr 2024	5:00 AM	SW	0.9
10 Apr 2024	6:00 AM	WSW	1.1
10 Apr 2024	7:00 AM	SW	0.7
10 Apr 2024	8:00 AM	SSW	0.9
10 Apr 2024	9:00 AM	SSW	1.1
10 Apr 2024	10:00 AM	WSW	2.4
10 Apr 2024	11:00 AM	W	2.7

Appendix C - Weather Conditions

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

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
12 Apr 2024	9:00 PM	SSE	0.5
12 Apr 2024	10:00 PM	S	0.4
12 Apr 2024	11:00 PM	S	0.2
13 Apr 2024	12:00 AM	S	0.2
13 Apr 2024	1:00 AM	SSE	0.3
13 Apr 2024	2:00 AM	S	0.2
13 Apr 2024	3:00 AM	SSE	0.3
13 Apr 2024	4:00 AM	S	0.5
13 Apr 2024	5:00 AM	SSE	0.1
13 Apr 2024	6:00 AM	S	0.4
13 Apr 2024	7:00 AM	S	0.1
13 Apr 2024	8:00 AM	SW	1.1
13 Apr 2024	9:00 AM	SW	1.9
13 Apr 2024	10:00 AM	W	1.6
13 Apr 2024	11:00 AM	SW	1.7
13 Apr 2024	12:00 PM	SSE	1.5
13 Apr 2024	1:00 PM	S	1.5
13 Apr 2024	2:00 PM	SSW	1.6
13 Apr 2024	3:00 PM	S	1.3
13 Apr 2024	4:00 PM	SSW	1.4
13 Apr 2024	5:00 PM	NW	2.3
13 Apr 2024	6:00 PM	WNW	2.8
13 Apr 2024	7:00 PM	WSW	1.6
13 Apr 2024	8:00 PM	W	1.0
13 Apr 2024	9:00 PM	WNW	1.7
13 Apr 2024	10:00 PM	W	0.9
13 Apr 2024	11:00 PM	W	1.9
14 Apr 2024	12:00 AM	SW	2.1
14 Apr 2024	1:00 AM	WNW	1.1
14 Apr 2024	2:00 AM	W	0.7
14 Apr 2024	3:00 AM	WNW	0.5
14 Apr 2024	4:00 AM	W	1.1
14 Apr 2024	5:00 AM	WSW	0.8
14 Apr 2024	6:00 AM	WNW	0.9
14 Apr 2024	7:00 AM	SSW	1.4
14 Apr 2024	8:00 AM	WNW	2.4
14 Apr 2024	9:00 AM	SSW	1.3
14 Apr 2024	10:00 AM	SSW	1.2
14 Apr 2024	11:00 AM	SW	1.4
14 Apr 2024	12:00 PM	SE	1.4
14 Apr 2024	1:00 PM	WSW	2.4
14 Apr 2024	2:00 PM	SSW	2.2
14 Apr 2024	3:00 PM	SSW	1.6
14 Apr 2024	4:00 PM	SW	1.3
14 Apr 2024	5:00 PM	W	1.3
14 Apr 2024	6:00 PM	SW	1.5
14 Apr 2024	7:00 PM	WNW	1.4
14 Apr 2024	8:00 PM	SW	0.7
14 Apr 2024	9:00 PM	SW	1.0
14 Apr 2024	10:00 PM	SSW	0.8
14 Apr 2024	11:00 PM	SSW	0.6
15 Apr 2024	12:00 AM	S	0.6
15 Apr 2024	1:00 AM	SW	0.6
15 Apr 2024	2:00 AM	S	0.4
15 Apr 2024	3:00 AM	SSW	0.2
15 Apr 2024	4:00 AM	SSW	0.3
15 Apr 2024	5:00 AM	S	0.3

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
15 Apr 2024	6:00 AM	SSE	0.5
15 Apr 2024	7:00 AM	SSE	0.6
15 Apr 2024	8:00 AM	S	0.7
15 Apr 2024	9:00 AM	SW	1.3
15 Apr 2024	10:00 AM	WSW	1.5
15 Apr 2024	11:00 AM	S	1.4
15 Apr 2024	12:00 PM	SSE	1.2
15 Apr 2024	1:00 PM	S	1.5
15 Apr 2024	2:00 PM	WSW	2.3
15 Apr 2024	3:00 PM	SW	1.4
15 Apr 2024	4:00 PM	S	1.3
15 Apr 2024	5:00 PM	SSW	1.3
15 Apr 2024	6:00 PM	W	1.4
15 Apr 2024	7:00 PM	SW	1.1
15 Apr 2024	8:00 PM	NW	2.0
15 Apr 2024	9:00 PM	S	0.4
15 Apr 2024	10:00 PM	S	0.4
15 Apr 2024	11:00 PM	S	0.5
16 Apr 2024	12:00 AM	S	0.6
16 Apr 2024	1:00 AM	SSE	0.3
16 Apr 2024	2:00 AM	S	0.1
16 Apr 2024	3:00 AM	S	0.1
16 Apr 2024	4:00 AM	S	0.3
16 Apr 2024	5:00 AM	S	0.0
16 Apr 2024	6:00 AM	S	0.1
16 Apr 2024	7:00 AM	SW	0.6
16 Apr 2024	8:00 AM	SSW	1.4
16 Apr 2024	9:00 AM	W	1.8
16 Apr 2024	10:00 AM	SSE	1.8
16 Apr 2024	11:00 AM	SE	1.6
16 Apr 2024	12:00 PM	SE	1.4
16 Apr 2024	1:00 PM	SSW	1.5
16 Apr 2024	2:00 PM	S	1.6
16 Apr 2024	3:00 PM	S	1.5
16 Apr 2024	4:00 PM	SE	1.2
16 Apr 2024	5:00 PM	SSW	1.0
16 Apr 2024	6:00 PM	SW	1.7
16 Apr 2024	7:00 PM	S	1.3
16 Apr 2024	8:00 PM	SE	0.9
16 Apr 2024	9:00 PM	WNW	1.8
16 Apr 2024	10:00 PM	SW	1.1
16 Apr 2024	11:00 PM	SSW	0.8
17 Apr 2024	12:00 AM	SW	0.5
17 Apr 2024	1:00 AM	SSE	0.9
17 Apr 2024	2:00 AM	S	0.7
17 Apr 2024	3:00 AM	SW	0.0
17 Apr 2024	4:00 AM	ENE	0.1
17 Apr 2024	5:00 AM	E	0.1
17 Apr 2024	6:00 AM	E	0.1
17 Apr 2024	7:00 AM	NE	0.1
17 Apr 2024	8:00 AM	NE	0.1
17 Apr 2024	9:00 AM	NE	0.1
17 Apr 2024	10:00 AM	NNE	0.1
17 Apr 2024	11:00 AM	ENE	0.1
17 Apr 2024	12:00 PM	NE	0.1
17 Apr 2024	1:00 PM	ENE	0.1
17 Apr 2024	2:00 PM	NNE	0.1

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
17 Apr 2024	3:00 PM	NE	0.1
17 Apr 2024	4:00 PM	E	0.1
17 Apr 2024	5:00 PM	ENE	0.2
17 Apr 2024	6:00 PM	NE	0.2
17 Apr 2024	7:00 PM	ENE	0.2
17 Apr 2024	8:00 PM	SW	0.3
17 Apr 2024	9:00 PM	S	0.3
17 Apr 2024	10:00 PM	SE	0.1
17 Apr 2024	11:00 PM	ESE	0.1
18 Apr 2024	12:00 AM	ESE	0.1
18 Apr 2024	1:00 AM	NE	0.1
18 Apr 2024	2:00 AM	NE	0.1
18 Apr 2024	3:00 AM	NE	0.1
18 Apr 2024	4:00 AM	ENE	0.1
18 Apr 2024	5:00 AM	ENE	0.1
18 Apr 2024	6:00 AM	ENE	0.1
18 Apr 2024	7:00 AM	ENE	0.1
18 Apr 2024	8:00 AM	ENE	0.1
18 Apr 2024	9:00 AM	ENE	0.1
18 Apr 2024	10:00 AM	NE	0.1
18 Apr 2024	11:00 AM	ENE	0.1
18 Apr 2024	12:00 PM	ENE	0.1
18 Apr 2024	1:00 PM	ENE	0.1
18 Apr 2024	2:00 PM	NE	0.1
18 Apr 2024	3:00 PM	ENE	0.1
18 Apr 2024	4:00 PM	WNW	0.1
18 Apr 2024	5:00 PM	W	0.1
18 Apr 2024	6:00 PM	SE	0.1
18 Apr 2024	7:00 PM	WSW	0.7
18 Apr 2024	8:00 PM	SW	0.3
18 Apr 2024	9:00 PM	SW	0.5
18 Apr 2024	10:00 PM	W	0.1
18 Apr 2024	11:00 PM	W	0.1
19 Apr 2024	12:00 AM	SW	0.1
19 Apr 2024	1:00 AM	SSW	0.1
19 Apr 2024	2:00 AM	E	0.1
19 Apr 2024	3:00 AM	WSW	0.1
19 Apr 2024	4:00 AM	SW	0.1
19 Apr 2024	5:00 AM	SW	0.1
19 Apr 2024	6:00 AM	NNE	0.1
19 Apr 2024	7:00 AM	NE	0.1
19 Apr 2024	8:00 AM	NE	0.1
19 Apr 2024	9:00 AM	NE	0.1
19 Apr 2024	10:00 AM	NE	0.1
19 Apr 2024	11:00 AM	N	0.1
19 Apr 2024	12:00 PM	E	0.1
19 Apr 2024	1:00 PM	NE	0.1
19 Apr 2024	2:00 PM	SSE	0.1
19 Apr 2024	3:00 PM	S	0.1
19 Apr 2024	4:00 PM	NE	0.1
19 Apr 2024	5:00 PM	ENE	0.2
19 Apr 2024	6:00 PM	ESE	0.3
19 Apr 2024	7:00 PM	SE	0.2
19 Apr 2024	8:00 PM	E	0.3
19 Apr 2024	9:00 PM	SE	0.2
19 Apr 2024	10:00 PM	SE	0.1
19 Apr 2024	11:00 PM	ENE	0.1

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
20 Apr 2024	12:00 AM	ENE	0.2
20 Apr 2024	1:00 AM	NE	0.1
20 Apr 2024	2:00 AM	ENE	0.1
20 Apr 2024	3:00 AM	NE	0.1
20 Apr 2024	4:00 AM	ENE	0.1
20 Apr 2024	5:00 AM	SSE	0.1
20 Apr 2024	6:00 AM	E	0.1
20 Apr 2024	7:00 AM	ENE	0.3
20 Apr 2024	8:00 AM	ENE	0.1
20 Apr 2024	9:00 AM	NE	0.1
20 Apr 2024	10:00 AM	ENE	0.1
20 Apr 2024	11:00 AM	NE	0.1
20 Apr 2024	12:00 PM	ENE	0.1
20 Apr 2024	1:00 PM	ENE	0.1
20 Apr 2024	2:00 PM	ENE	0.1
20 Apr 2024	3:00 PM	ENE	0.1
20 Apr 2024	4:00 PM	NE	0.1
20 Apr 2024	5:00 PM	E	0.1
20 Apr 2024	6:00 PM	E	0.1
20 Apr 2024	7:00 PM	NNE	0.1
20 Apr 2024	8:00 PM	ENE	0.1
20 Apr 2024	9:00 PM	NE	0.1
20 Apr 2024	10:00 PM	NE	0.1
20 Apr 2024	11:00 PM	NNE	0.3
21 Apr 2024	12:00 AM	ENE	0.2
21 Apr 2024	1:00 AM	NE	0.1
21 Apr 2024	2:00 AM	ENE	0.1
21 Apr 2024	3:00 AM	ENE	0.2
21 Apr 2024	4:00 AM	ENE	0.1
21 Apr 2024	5:00 AM	E	0.1
21 Apr 2024	6:00 AM	E	0.3
21 Apr 2024	7:00 AM	ENE	0.5
21 Apr 2024	8:00 AM	ENE	0.1
21 Apr 2024	9:00 AM	NE	0.1
21 Apr 2024	10:00 AM	NE	0.1
21 Apr 2024	11:00 AM	ENE	0.1
21 Apr 2024	12:00 PM	E	0.1
21 Apr 2024	1:00 PM	ESE	0.1
21 Apr 2024	2:00 PM	NE	0.1
21 Apr 2024	3:00 PM	ENE	0.4
21 Apr 2024	4:00 PM	ENE	0.6
21 Apr 2024	5:00 PM	NE	0.6
21 Apr 2024	6:00 PM	NE	0.4
21 Apr 2024	7:00 PM	NNE	0.5
21 Apr 2024	8:00 PM	ENE	0.7
21 Apr 2024	9:00 PM	E	0.8
21 Apr 2024	10:00 PM	ENE	0.9
21 Apr 2024	11:00 PM	E	0.8
22 Apr 2024	12:00 AM	ENE	1.2
22 Apr 2024	1:00 AM	NE	1.1
22 Apr 2024	2:00 AM	ESE	1.2
22 Apr 2024	3:00 AM	SE	1.3
22 Apr 2024	4:00 AM	NE	1.1
22 Apr 2024	5:00 AM	ENE	0.9
22 Apr 2024	6:00 AM	NE	1.1
22 Apr 2024	7:00 AM	NE	0.8
22 Apr 2024	8:00 AM	E	1.7

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
22 Apr 2024	9:00 AM	ESE	1.9
22 Apr 2024	10:00 AM	ENE	1.2
22 Apr 2024	11:00 AM	ENE	1.6
22 Apr 2024	12:00 PM	S	1.5
22 Apr 2024	1:00 PM	SE	0.3
22 Apr 2024	2:00 PM	ESE	0.5
22 Apr 2024	3:00 PM	SSE	0.8
22 Apr 2024	4:00 PM	ENE	0.3
22 Apr 2024	5:00 PM	ESE	0.3
22 Apr 2024	6:00 PM	ENE	0.3
22 Apr 2024	7:00 PM	E	0.4
22 Apr 2024	8:00 PM	NE	1.5
22 Apr 2024	9:00 PM	E	0.6
22 Apr 2024	10:00 PM	ESE	0.8
22 Apr 2024	11:00 PM	ENE	0.9
23 Apr 2024	12:00 AM	ESE	0.4
23 Apr 2024	1:00 AM	ENE	1.2
23 Apr 2024	2:00 AM	ENE	1.3
23 Apr 2024	3:00 AM	SE	1.5
23 Apr 2024	4:00 AM	E	0.5
23 Apr 2024	5:00 AM	ESE	1.3
23 Apr 2024	6:00 AM	NE	0.2
23 Apr 2024	7:00 AM	ENE	1.1
23 Apr 2024	8:00 AM	E	0.5
23 Apr 2024	9:00 AM	NNW	0.9
23 Apr 2024	10:00 AM	ENE	0.5
23 Apr 2024	11:00 AM	N	0.4
23 Apr 2024	12:00 PM	ENE	0.3
23 Apr 2024	1:00 PM	E	0.2
23 Apr 2024	2:00 PM	E	0.1
23 Apr 2024	3:00 PM	E	0.1
23 Apr 2024	4:00 PM	ENE	0.8
23 Apr 2024	5:00 PM	ENE	0.1
23 Apr 2024	6:00 PM	E	0.1
23 Apr 2024	7:00 PM	NNE	0.2
23 Apr 2024	8:00 PM	ENE	0.2
23 Apr 2024	9:00 PM	ENE	0.2
23 Apr 2024	10:00 PM	ENE	0.1
23 Apr 2024	11:00 PM	ESE	0.1
24 Apr 2024	12:00 AM	NE	0.4
24 Apr 2024	1:00 AM	E	1.5
24 Apr 2024	2:00 AM	NE	0.2
24 Apr 2024	3:00 AM	SSE	1.2
24 Apr 2024	4:00 AM	S	0.2
24 Apr 2024	5:00 AM	NE	0.1
24 Apr 2024	6:00 AM	ENE	0.2
24 Apr 2024	7:00 AM	ESE	0.1
24 Apr 2024	8:00 AM	SE	0.1
24 Apr 2024	9:00 AM	E	0.1
24 Apr 2024	10:00 AM	SE	0.1
24 Apr 2024	11:00 AM	SE	0.1
24 Apr 2024	12:00 PM	ENE	0.1
24 Apr 2024	1:00 PM	ENE	0.1
24 Apr 2024	2:00 PM	NE	0.1
24 Apr 2024	3:00 PM	ENE	0.1
24 Apr 2024	4:00 PM	ESE	0.1
24 Apr 2024	5:00 PM	ENE	0.1

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
24 Apr 2024	6:00 PM	ENE	0.1
24 Apr 2024	7:00 PM	ESE	0.2
24 Apr 2024	8:00 PM	E	0.1
24 Apr 2024	9:00 PM	ESE	0.2
24 Apr 2024	10:00 PM	SE	0.1
24 Apr 2024	11:00 PM	ENE	0.2
25 Apr 2024	12:00 AM	ESE	0.1
25 Apr 2024	1:00 AM	NNW	0.1
25 Apr 2024	2:00 AM	ENE	0.3
25 Apr 2024	3:00 AM	E	0.1
25 Apr 2024	4:00 AM	ENE	0.1
25 Apr 2024	5:00 AM	E	0.2
25 Apr 2024	6:00 AM	ENE	0.1
25 Apr 2024	7:00 AM	ENE	0.1
25 Apr 2024	8:00 AM	ESE	0.1
25 Apr 2024	9:00 AM	SE	0.1
25 Apr 2024	10:00 AM	E	0.1
25 Apr 2024	11:00 AM	ESE	0.1
25 Apr 2024	12:00 PM	ENE	0.1
25 Apr 2024	1:00 PM	NE	0.1
25 Apr 2024	2:00 PM	ENE	0.2
25 Apr 2024	3:00 PM	NE	0.4
25 Apr 2024	4:00 PM	NE	2.8
25 Apr 2024	5:00 PM	NE	0.5
25 Apr 2024	6:00 PM	NNE	0.1
25 Apr 2024	7:00 PM	NNE	0.1
25 Apr 2024	8:00 PM	NNE	0.1
25 Apr 2024	9:00 PM	E	0.4
25 Apr 2024	10:00 PM	NNE	0.2
25 Apr 2024	11:00 PM	NNE	0.6
26 Apr 2024	12:00 AM	E	0.1
26 Apr 2024	1:00 AM	NNE	0.2
26 Apr 2024	2:00 AM	NNW	0.2
26 Apr 2024	3:00 AM	NE	0.1
26 Apr 2024	4:00 AM	NE	0.1
26 Apr 2024	5:00 AM	WNW	0.1
26 Apr 2024	6:00 AM	NE	0.1
26 Apr 2024	7:00 AM	ENE	0.1
26 Apr 2024	8:00 AM	ENE	0.1
26 Apr 2024	9:00 AM	E	0.1
26 Apr 2024	10:00 AM	NE	0.1
26 Apr 2024	11:00 AM	NNE	0.6
26 Apr 2024	12:00 PM	N	0.2
26 Apr 2024	1:00 PM	ENE	0.2
26 Apr 2024	2:00 PM	NE	0.2
26 Apr 2024	3:00 PM	N	1.6
26 Apr 2024	4:00 PM	E	0.4
26 Apr 2024	5:00 PM	ENE	0.3
26 Apr 2024	6:00 PM	NE	0.4
26 Apr 2024	7:00 PM	E	0.3
26 Apr 2024	8:00 PM	NE	0.3
26 Apr 2024	9:00 PM	NE	0.2
26 Apr 2024	10:00 PM	ENE	0.1
26 Apr 2024	11:00 PM	NE	0.2
27 Apr 2024	12:00 AM	E	0.2
27 Apr 2024	1:00 AM	ENE	0.7
27 Apr 2024	2:00 AM	NNW	0.1

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
27 Apr 2024	3:00 AM	NE	0.2
27 Apr 2024	4:00 AM	NE	0.2
27 Apr 2024	5:00 AM	NNE	0.4
27 Apr 2024	6:00 AM	ENE	0.2
27 Apr 2024	7:00 AM	ENE	0.2
27 Apr 2024	8:00 AM	ESE	0.2
27 Apr 2024	9:00 AM	ENE	0.1
27 Apr 2024	10:00 AM	ESE	0.2
27 Apr 2024	11:00 AM	E	0.1
27 Apr 2024	12:00 PM	ENE	0.1
27 Apr 2024	1:00 PM	ENE	0.2
27 Apr 2024	2:00 PM	ENE	0.1
27 Apr 2024	3:00 PM	ESE	0.1
27 Apr 2024	4:00 PM	ESE	0.1
27 Apr 2024	5:00 PM	ENE	0.1
27 Apr 2024	6:00 PM	ENE	0.1
27 Apr 2024	7:00 PM	E	0.1
27 Apr 2024	8:00 PM	ENE	0.1
27 Apr 2024	9:00 PM	E	0.1
27 Apr 2024	10:00 PM	ENE	0.1
27 Apr 2024	11:00 PM	NE	0.2
28 Apr 2024	12:00 AM	E	0.1
28 Apr 2024	1:00 AM	NNE	0.1
28 Apr 2024	2:00 AM	NNE	0.1
28 Apr 2024	3:00 AM	E	0.2
28 Apr 2024	4:00 AM	ESE	0.1
28 Apr 2024	5:00 AM	ENE	0.1
28 Apr 2024	6:00 AM	ENE	0.1
28 Apr 2024	7:00 AM	NE	0.1
28 Apr 2024	8:00 AM	WSW	0.1
28 Apr 2024	9:00 AM	SE	0.1
28 Apr 2024	10:00 AM	ENE	0.1
28 Apr 2024	11:00 AM	ENE	0.2
28 Apr 2024	12:00 PM	ENE	0.1
28 Apr 2024	1:00 PM	E	0.1
28 Apr 2024	2:00 PM	E	0.2

Appendix C - Weather Conditions

April 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
28 Apr 2024	3:00 PM	ENE	0.1
28 Apr 2024	4:00 PM	SSE	0.1
28 Apr 2024	5:00 PM	ENE	0.1
28 Apr 2024	6:00 PM	ENE	0.1
28 Apr 2024	7:00 PM	SSE	0.1
28 Apr 2024	8:00 PM	ENE	0.2
28 Apr 2024	9:00 PM	E	0.1
28 Apr 2024	10:00 PM	NE	0.1
28 Apr 2024	11:00 PM	ENE	0.1
29 Apr 2024	12:00 AM	NE	0.1
29 Apr 2024	1:00 AM	ENE	0.1
29 Apr 2024	2:00 AM	NNE	0.1
29 Apr 2024	3:00 AM	ENE	0.1
29 Apr 2024	4:00 AM	NE	0.1
29 Apr 2024	5:00 AM	NE	0.1
29 Apr 2024	6:00 AM	ENE	0.1
29 Apr 2024	7:00 AM	ENE	0.1
29 Apr 2024	8:00 AM	E	0.1
29 Apr 2024	9:00 AM	N	0.1
29 Apr 2024	10:00 AM	E	0.3
29 Apr 2024	11:00 AM	ENE	0.1
29 Apr 2024	12:00 PM	ENE	0.1
29 Apr 2024	1:00 PM	ENE	0.1
29 Apr 2024	2:00 PM	ESE	0.1
29 Apr 2024	3:00 PM	E	0.1
29 Apr 2024	4:00 PM	ESE	0.1
29 Apr 2024	5:00 PM	NE	0.2
29 Apr 2024	6:00 PM	ENE	0.1
29 Apr 2024	7:00 PM	ENE	0.2
29 Apr 2024	8:00 PM	ENE	0.2
29 Apr 2024	9:00 PM	ENE	0.2
29 Apr 2024	10:00 PM	ENE	0.2
29 Apr 2024	11:00 PM	NE	0.2
30 Apr 2024	12:00 AM	NE	0.2
30 Apr 2024	1:00 AM	ENE	0.2
30 Apr 2024	2:00 AM	NE	0.2
30 Apr 2024	3:00 AM	E	0.3
30 Apr 2024	4:00 AM	ENE	0.2
30 Apr 2024	5:00 AM	E	0.2
30 Apr 2024	6:00 AM	NNE	0.2
30 Apr 2024	7:00 AM	E	0.2
30 Apr 2024	8:00 AM	WSW	0.3
30 Apr 2024	9:00 AM	NNE	0.6
30 Apr 2024	10:00 AM	NNE	0.2
30 Apr 2024	11:00 AM	ESE	0.3
30 Apr 2024	12:00 PM	ESE	0.2
30 Apr 2024	1:00 PM	E	0.4
30 Apr 2024	2:00 PM	E	0.2
30 Apr 2024	3:00 PM	NE	0.4
30 Apr 2024	4:00 PM	NE	0.1
30 Apr 2024	5:00 PM	ENE	0.1
30 Apr 2024	6:00 PM	NE	0.1
30 Apr 2024	7:00 PM	NE	0.1
30 Apr 2024	8:00 PM	ENE	0.1
30 Apr 2024	9:00 PM	E	0.1
30 Apr 2024	10:00 PM	NE	0.2
30 Apr 2024	11:00 PM	E	0.2

**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 (April 2024)

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

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 (May 2024)

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

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 (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			
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
28-Jul	29-Jul	30-Jul	31-Jul			
	1-hr TSP X3 Noise					

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 ($\mu\text{g}/\text{m}^3$)
3-Apr-24	15:19	Cloudy	53.2
3-Apr-24	16:19	Cloudy	45.6
3-Apr-24	17:19	Cloudy	43.7
9-Apr-24	10:52	Sunny	39.9
9-Apr-24	11:52	Sunny	43.7
9-Apr-24	12:52	Sunny	41.8
15-Apr-24	11:32	Sunny	53.2
15-Apr-24	12:32	Sunny	104.5
15-Apr-24	13:32	Sunny	68.4
19-Apr-24	10:00	Cloudy	30.6
19-Apr-24	11:00	Cloudy	30.6
19-Apr-24	12:00	Cloudy	36.0
25-Apr-24	13:00	Cloudy	54.0
25-Apr-24	14:00	Cloudy	59.4
25-Apr-24	15:00	Cloudy	61.2
30-Apr-24	12:40	Sunny	82.8
30-Apr-24	13:40	Sunny	102.6
30-Apr-24	14:40	Sunny	124.2
Average			59.7
Maximum			124.2
Minimum			30.6

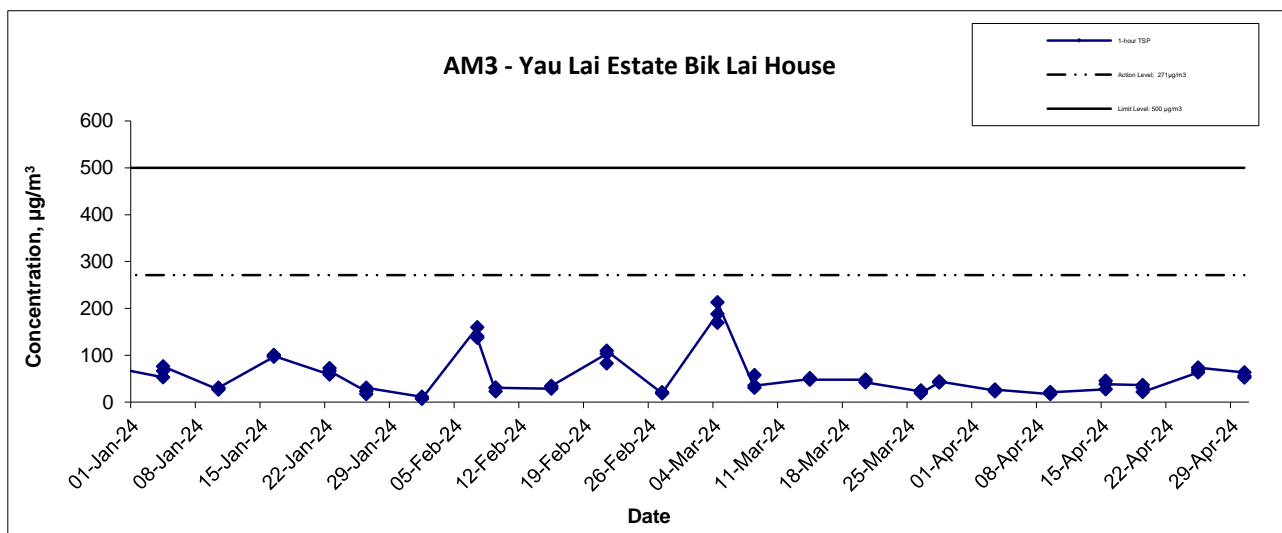
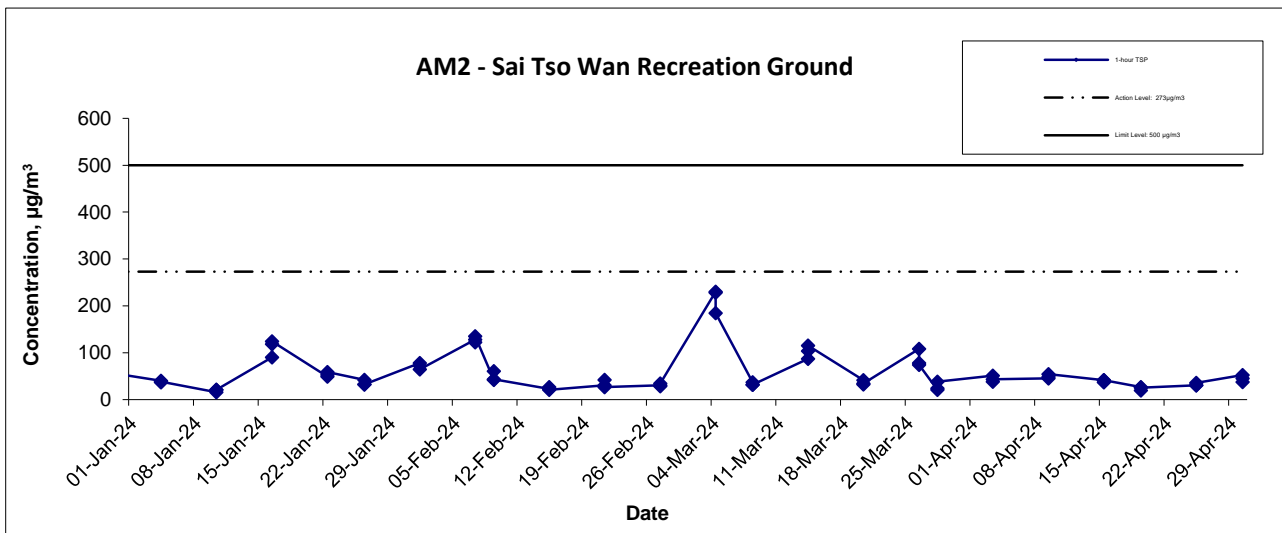
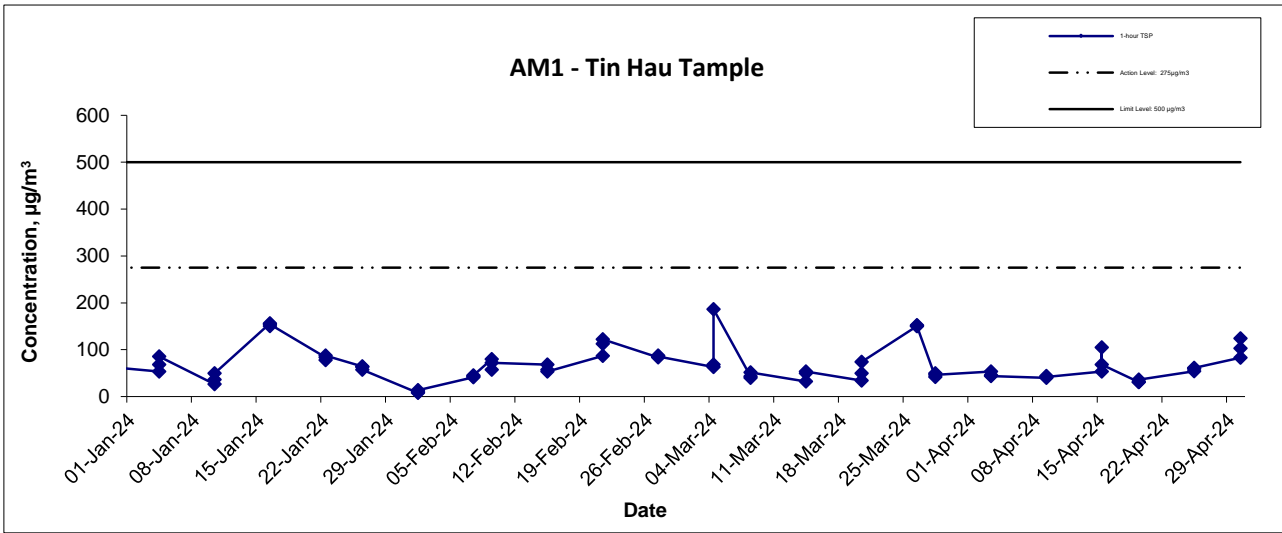
Location AM2 - Sai Tso Wan Recreation Ground			
Date	Time	Weather	<i>Particulate Concentration ($\mu\text{g}/\text{m}^3$)</i>
3-Apr-24	16:00	Fine	51.3
3-Apr-24	17:00	Fine	38.0
3-Apr-24	18:00	Fine	43.7
9-Apr-24	9:00	Sunny	45.0
9-Apr-24	10:00	Sunny	48.6
9-Apr-24	11:00	Sunny	54.0
15-Apr-24	16:00	Fine	41.4
15-Apr-24	17:00	Fine	36.8
15-Apr-24	18:00	Fine	41.4
19-Apr-24	13:45	Cloudy	27.0
19-Apr-24	14:45	Cloudy	19.8
19-Apr-24	15:45	Cloudy	25.2
25-Apr-24	15:15	Cloudy	30.6
25-Apr-24	16:15	Cloudy	30.6
25-Apr-24	17:15	Cloudy	36.0
30-Apr-24	9:00	Cloudy	52.2
30-Apr-24	10:00	Cloudy	45.0
30-Apr-24	11:00	Cloudy	37.8
Average			39.1
Maximum			54.0
Minimum			19.8

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>
3-Apr-24	12:59	Cloudy	24.7
3-Apr-24	13:59	Cloudy	22.8
3-Apr-24	14:59	Cloudy	26.6
9-Apr-24	12:34	Sunny	17.1
9-Apr-24	13:34	Sunny	20.9
9-Apr-24	14:34	Sunny	20.9
15-Apr-24	13:00	Fine	27.0
15-Apr-24	14:00	Fine	45.0
15-Apr-24	15:00	Fine	38.0
19-Apr-24	14:30	Cloudy	36.0
19-Apr-24	15:30	Cloudy	30.6
19-Apr-24	16:30	Cloudy	21.6
25-Apr-24	9:00	Cloudy	63.0
25-Apr-24	10:00	Cloudy	68.4
25-Apr-24	11:00	Cloudy	73.8
30-Apr-24	15:40	Sunny	63.0
30-Apr-24	16:40	Sunny	55.8
30-Apr-24	17:40	Sunny	52.2
		Average	39.3
		Maximum	73.8
		Minimum	17.1

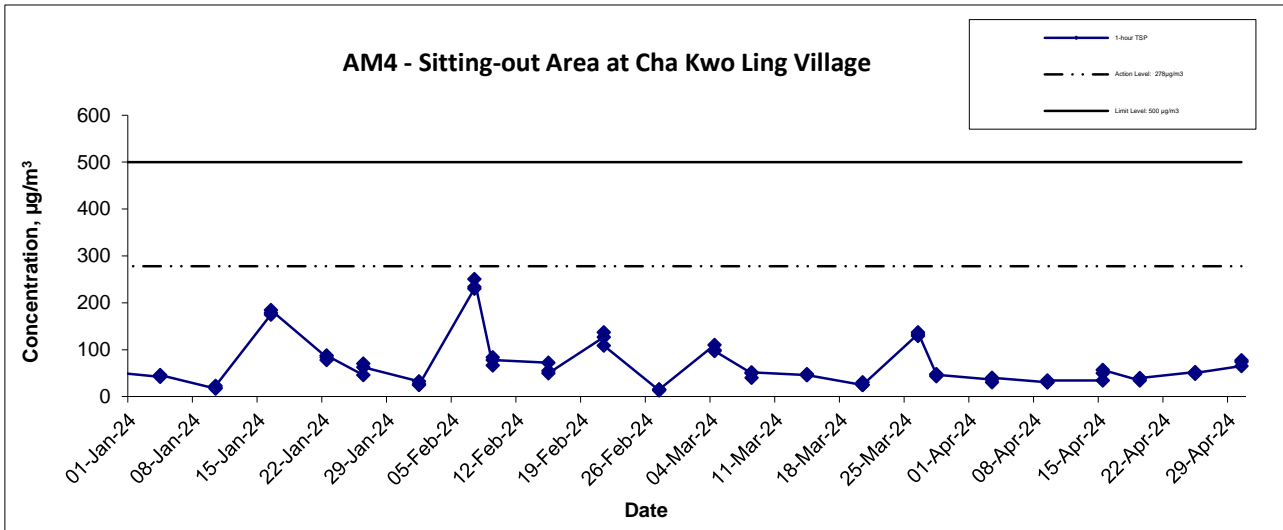
Location AM4 - Sitting-out Area at Cha Kwo Ling Village			
Date	Time	Weather	<i>Particulate Concentration ($\mu\text{g}/\text{m}^3$)</i>
3-Apr-24	9:01	Cloudy	36.1
3-Apr-24	10:01	Cloudy	30.4
3-Apr-24	11:01	Cloudy	39.9
9-Apr-24	14:13	Sunny	30.4
9-Apr-24	15:13	Sunny	30.4
9-Apr-24	16:13	Sunny	34.2
15-Apr-24	9:01	Sunny	34.2
15-Apr-24	10:01	Sunny	49.4
15-Apr-24	11:01	Sunny	57.0
19-Apr-24	16:00	Cloudy	34.2
19-Apr-24	17:00	Cloudy	37.8
19-Apr-24	18:00	Cloudy	39.6
25-Apr-24	16:00	Cloudy	52.2
25-Apr-24	17:00	Cloudy	48.6
25-Apr-24	18:00	Cloudy	50.4
30-Apr-24	9:20	Sunny	64.8
30-Apr-24	10:20	Sunny	77.4
30-Apr-24	11:20	Sunny	73.8
		Average	45.6
		Maximum	77.4
		Minimum	30.4

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	
	Apr-24	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 N.T.S	Project No. MA20003	CINOTECH
	Date Apr-24	Appendix 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)
2-Apr-24	Fine	3.3179	3.3558	0.0379	13194.6	13218.6	24.0	1.20	1.20	1.20	1732.3	21.9
8-Apr-24	Sunny	3.3257	3.4021	0.0764	13218.6	13242.6	24.0	1.21	1.21	1.21	1742.3	43.8
13-Apr-24	Fine	3.4013	3.4472	0.0459	13242.6	13266.6	24.0	1.20	1.20	1.20	1733.3	26.5
18-Apr-24	Rainy	3.3340	3.3840	0.0500	13266.6	13290.6	24.0	1.22	1.22	1.22	1751.5	28.5
24-Apr-24	Cloudy	3.3370	3.4196	0.0826	13290.6	13314.6	24.0	1.22	1.22	1.22	1753.7	47.1
29-Apr-24	Cloudy	3.3455	3.5214	0.1759	13314.6	13338.6	24.0	1.22	1.21	1.21	1747.8	100.6
											Min	21.9
											Max	100.6
											Average	44.7

Location AM2 - Sai Tso Wan Recreation Ground

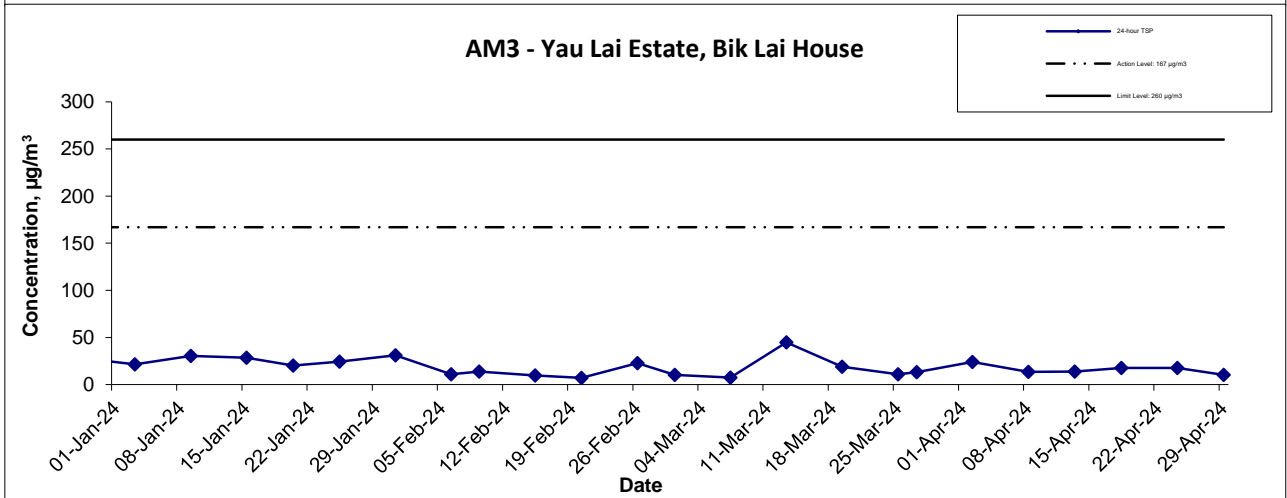
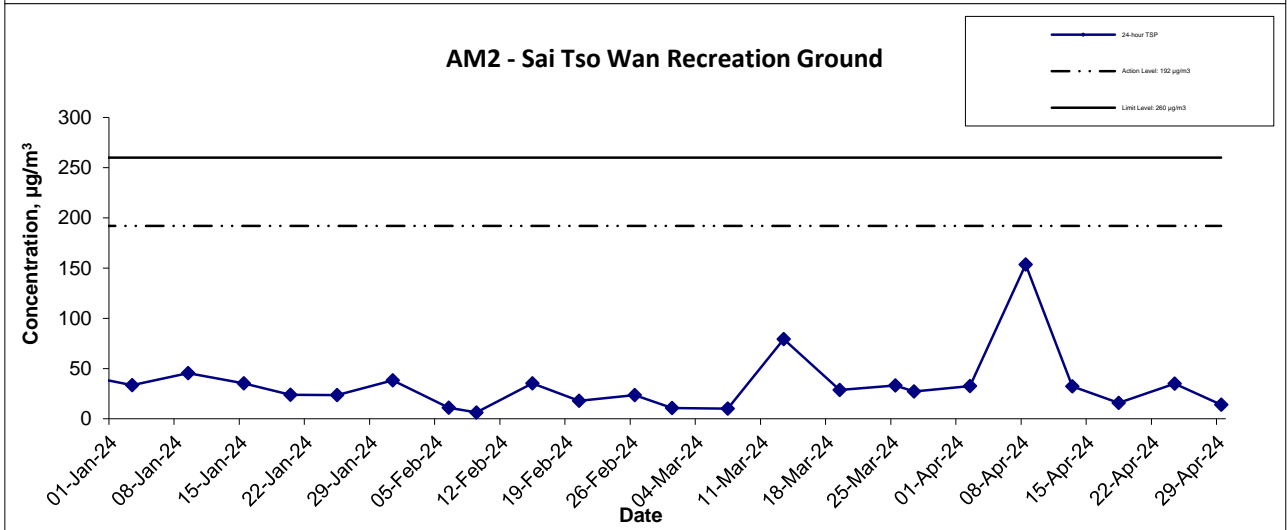
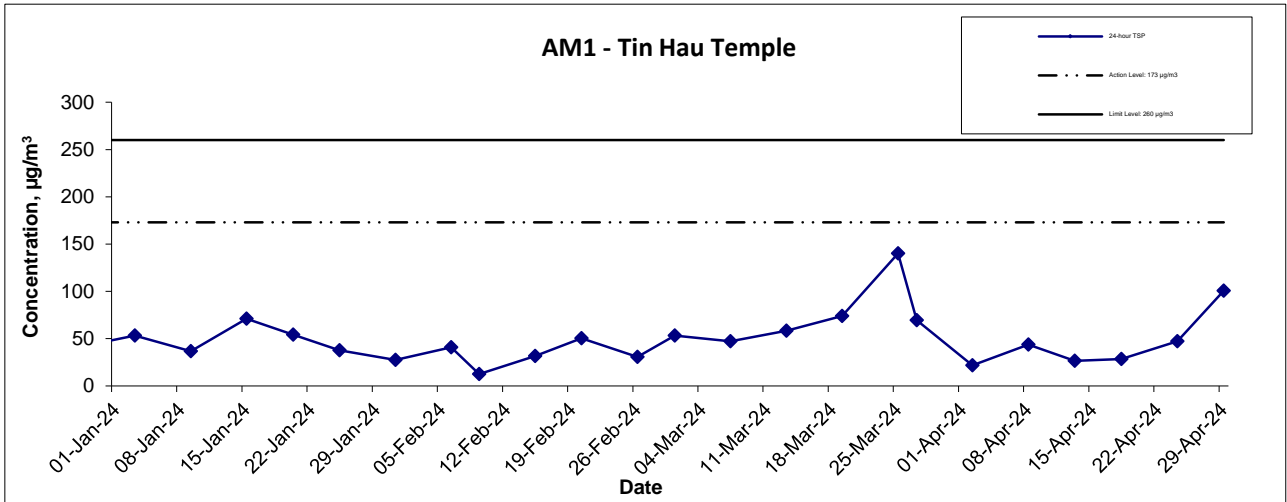
Start Date	Weather	Filter Weight (g)		Particulate	Elapse Time		Sampling	Flow Rate (m ³ /min.)		Av. flow	Total vol.	Conc.
	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m ³ /min)	(m ³)	(µg/m ³)
2-Apr-24	Sunny	3.3072	3.3635	0.0563	34311.3	34335.3	24.0	1.20	1.20	1.20	1730.7	32.5
8-Apr-24	Sunny	3.3758	3.6433	0.2675	34335.3	34359.3	24.0	1.21	1.21	1.21	1741.4	153.6
13-Apr-24	Fine	3.3088	3.3644	0.0556	34359.3	34383.3	24.0	1.20	1.20	1.20	1731.8	32.1
18-Apr-24	Fine	3.3348	3.3625	0.0277	34383.3	34407.3	24.0	1.22	1.21	1.22	1750.2	15.8
24-Apr-24	Rainy	3.3469	3.4080	0.0611	34407.3	34431.3	24.0	1.22	1.22	1.22	1752.2	34.9
29-Apr-24	Cloudy	3.3360	3.3606	0.0246	34431.3	34455.3	24.0	1.21	1.21	1.21	1746.7	14.1
											Min	14.1
											Max	153.6
											Average	47.2

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)
2-Apr-24	Fine	3.3145	3.3560	0.0415	8517.9	8541.9	24.0	1.20	1.20	1.20	1729.4	24.0
8-Apr-24	Sunny	3.3333	3.3565	0.0232	8541.9	8565.9	24.0	1.21	1.21	1.21	1740.5	13.3
13-Apr-24	Sunny	3.3499	3.3739	0.0240	8565.9	8589.9	24.0	1.20	1.20	1.20	1730.5	13.9
18-Apr-24	Fine	3.3459	3.3768	0.0309	8590.1	8614.1	24.0	1.22	1.22	1.22	1753.6	17.6
24-Apr-24	Fine	3.3258	3.3570	0.0312	8614.1	8638.1	24.0	1.22	1.22	1.22	1755.8	17.8
29-Apr-24	Cloudy	3.3692	3.3874	0.0182	8638.1	8662.1	24.0	1.22	1.21	1.22	1749.8	10.4
											Min	10.4
											Max	24.0
											Average	16.2

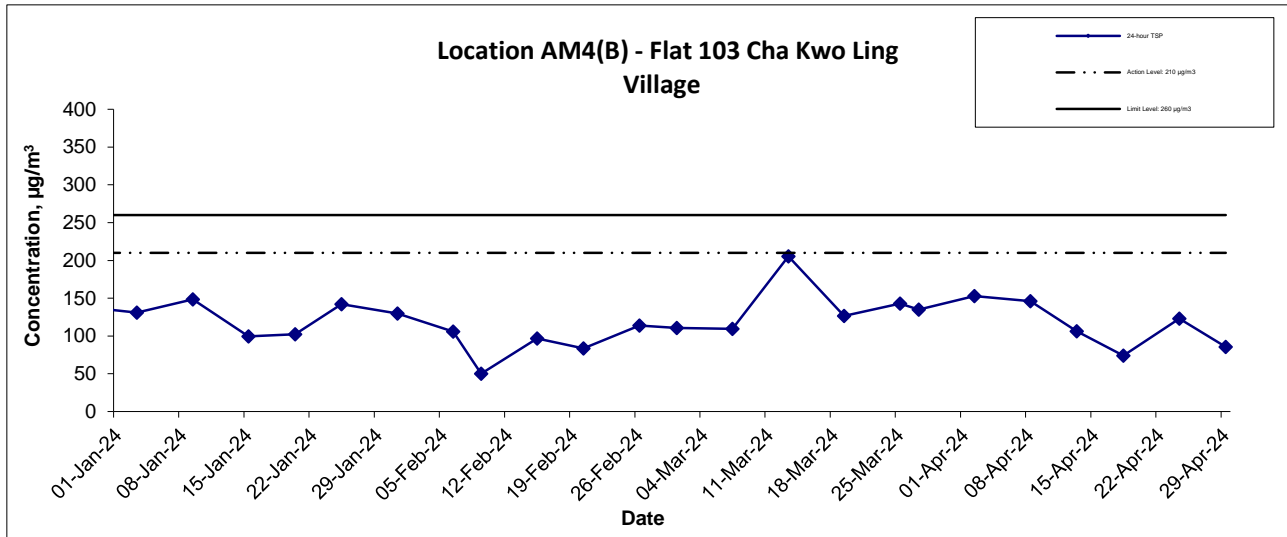
Location AM4(B) - Flat 103 Cha Kwo Ling Village

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)
2-Apr-24	Fine	3.3019	3.5669	0.2650	19966.6	19990.6	24.0	1.21	1.21	1.21	1735.9	152.7
8-Apr-24	Sunny	3.2742	3.5295	0.2553	19990.6	20014.6	24.0	1.21	1.22	1.21	1746.1	146.2
13-Apr-24	Fine	3.3501	3.5349	0.1848	20014.6	20038.6	24.0	1.21	1.21	1.21	1736.9	106.4
18-Apr-24	Rainy	3.3429	3.4713	0.1284	20038.6	20062.6	24.0	1.21	1.20	1.20	1734.9	74.0
24-Apr-24	Fine	3.3372	3.5511	0.2139	20062.6	20086.6	24.0	1.21	1.21	1.21	1736.8	123.2
29-Apr-24	Cloudy	3.3450	3.4929	0.1479	20086.6	20110.6	24.0	1.20	1.20	1.20	1731.7	85.4
											Min	74.0
											Max	152.7
											Average	114.6



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 Apr-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	CINOTECH
	Date	Apr-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}
3 Apr 2024	15:26	Cloudy	68.4	69.8	66.6	65.5	65
9 Apr 2024	11:52	Fine	69.2	70.5	67.5	65.5	67
15 Apr 2024	16:04	Sunny	68.9	70.1	67.4	65.5	66
25 Apr 2024	10:00	Cloudy	70.1	72.8	67.2	65.5	68
30 Apr 2024	13:30	Cloudy	68.0	69.4	66.3	65.5	64

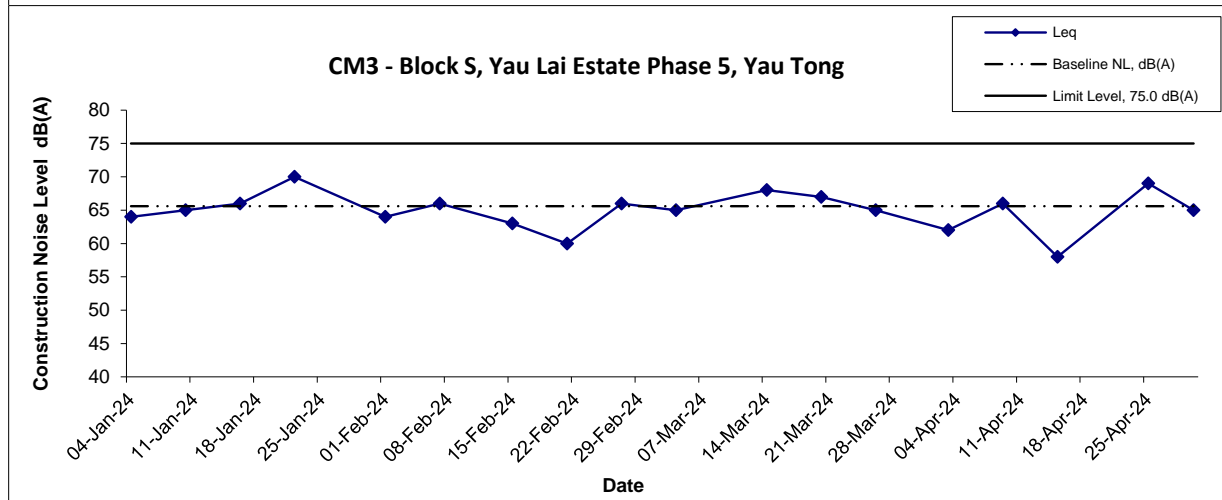
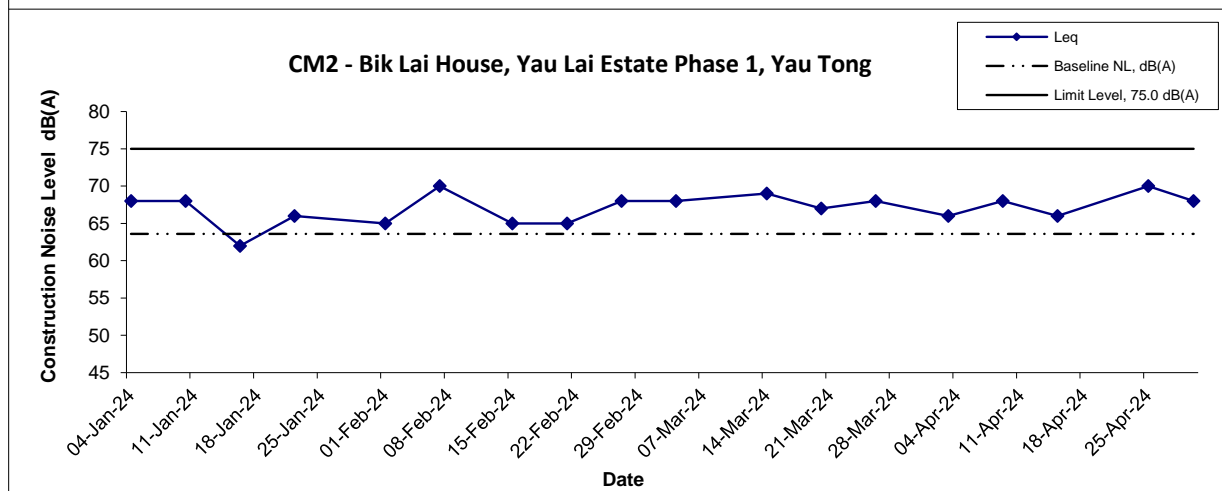
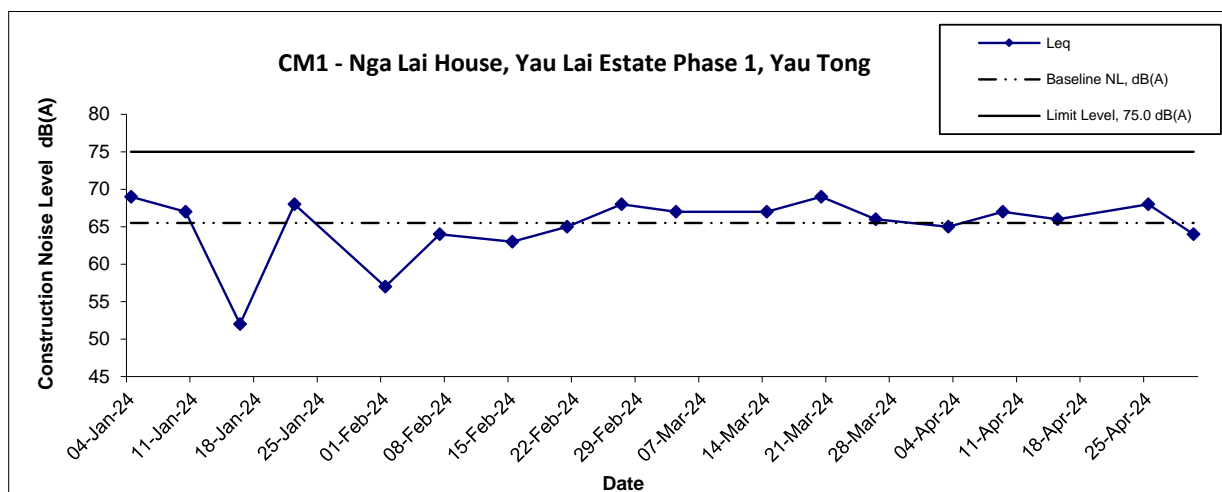
Location CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
3 Apr 2024	14:48	Fine	68.1	69.3	66.7	63.6	66
9 Apr 2024	12:36	Fine	69.0	70.3	67.6	63.6	68
15 Apr 2024	15:23	Sunny	67.7	68.9	66.1	63.6	66
25 Apr 2024	11:00	Cloudy	70.6	73.9	68.2	63.6	70
30 Apr 2024	14:16	Cloudy	69.0	70.4	67.4	63.6	68

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}
3 Apr 2024	14:06	Fine	67.2	68.5	65.7	65.6	62
9 Apr 2024	13:26	Fine	68.9	70.1	67.4	65.6	66
15 Apr 2024	14:27	Fine	66.3	67.5	65.1	65.6	58
25 Apr 2024	11:30	Cloudy	70.8	73.7	67.9	65.6	69
30 Apr 2024	15:00	Cloudy	68.1	69.8	66.1	65.6	65

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}
3 Apr 2024	12:23	Fine	60.7	61.8	54.0	62.0	61 Measured ≤ Baseline
9 Apr 2024	10:52	Fine	61.4	63.3	58.5	62.0	61 Measured ≤ Baseline
15 Apr 2024	12:27	Sunny	58.6	61.5	52.3	62.0	59 Measured ≤ Baseline
25 Apr 2024	14:00	Cloudy	67.9	71.6	65.5	62.0	67
30 Apr 2024	11:40	Cloudy	75.1	78.7	64.5	62.0	75

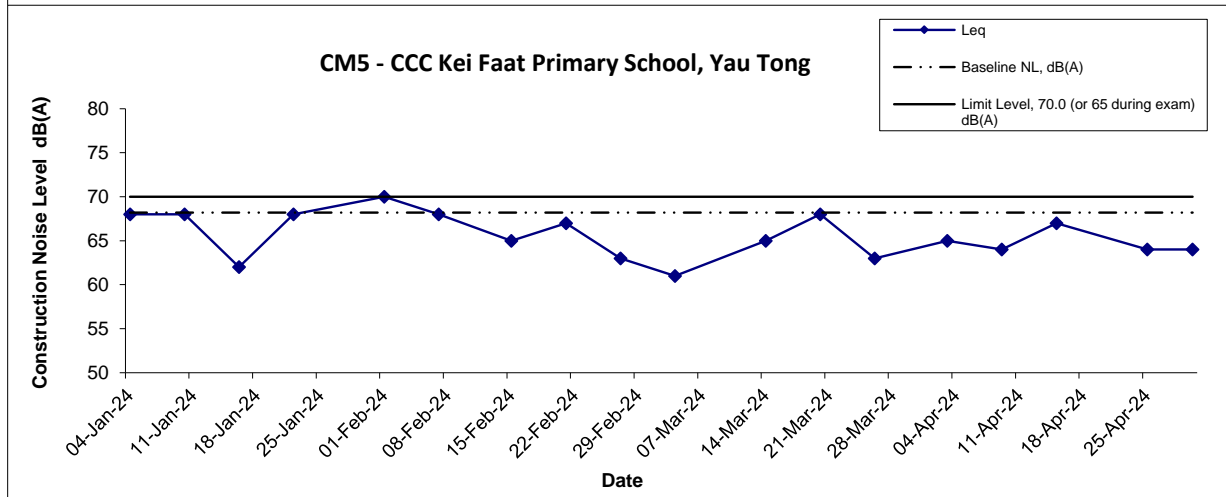
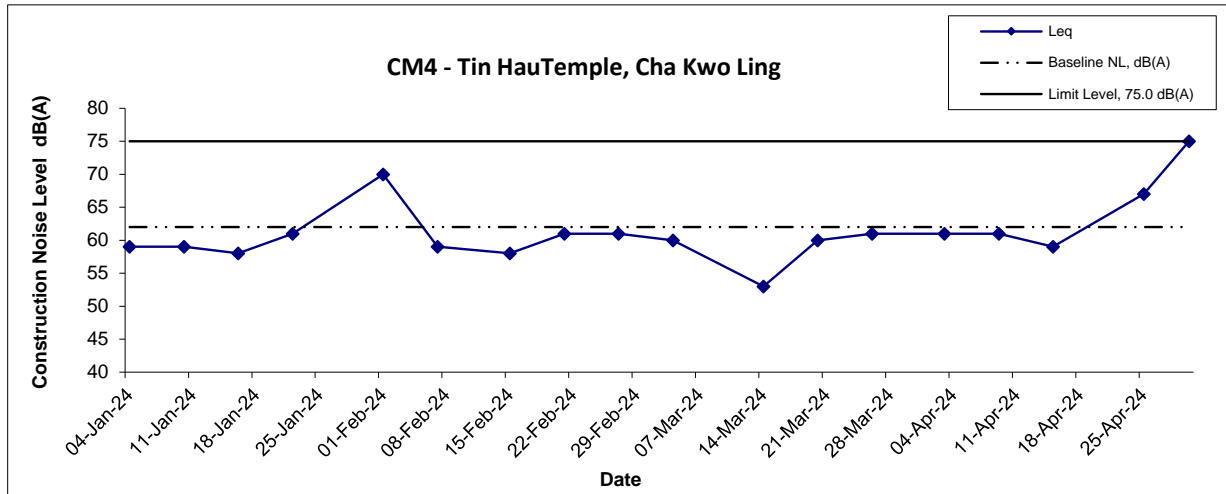
Location CM5 - CCC Kei Faat Primary School, Yau Tong							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
3 Apr 2024	13:22	Fine	69.9	73.3	57.9	68.2	65
9 Apr 2024	14:13	Sunny	69.5	71.6	65.9	68.2	64
15 Apr 2024	13:44	Fine	67.2	69.6	63.4	68.2	67 Measured ≤ Baseline
25 Apr 2024	13:00	Cloudy	69.7	72.1	65.4	68.2	64
30 Apr 2024	11:00	Cloudy	69.7	72.6	65.7	68.2	64

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	Project	CINOTECH
	Date	Appendix	
	N.T.S	No. MA20003	
	Apr 24	G	

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	
	Apr 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	0.000	0.000	0.000	2.027	0.000	0.000	0.000	0.000	19.000	0.054
February	5.666	0.135	0.000	0.000	5.666	0.000	0.000	0.000	0.000	0.000	0.039
March	4.706	0.413	0.000	0.000	4.706	0.000	0.000	0.000	0.000	0.000	0.032
April	7.502	0.176	0.000	0.000	7.502	0.000	0.000	0.000	0.000	0.000	0.042
May											
June											
Sub-total	19.900	0.724	0.000	0.000	19.900	0.000	0.000	0.000	0.000	19.000	0.167
July											
August											
September											
October											
November											
December											
Total	19.900	0.724	0.000	0.000	19.900	0.000	0.000	0.000	0.000	19.000	0.167

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)	(in '000m ³)
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														
Jun-24														
Sub-total														
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.


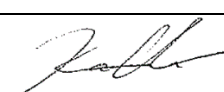
**APPENDIX I
SITE AUDIT SUMMARY**

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240403
Date	03 April 2024 (Wednesday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
240403-R1	<p>B. Water Quality</p> <ul style="list-style-type: none"> Stagnant water should be removed to avoid mosquitoes at EVB Basement. <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"> Follow up on the previous session (Ref No.:240328), all the items have been rectified. 	B9


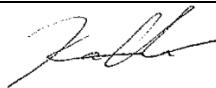
	Name	Signature	Date
Recorded by	Eric Hung		03 April 2024
Checked by	Karina Chan		04 April 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240411
Date	11 April 2024 (Wednesday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
240411-R1	<p>B. Water Quality</p> <ul style="list-style-type: none"> Stagnant water was observed on the tray near site entrance. 	B9
240411-R2	<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"> Rubbish was observed near the site entrance. <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"> Follow up on the previous session (Ref No.:240403), all the items have been rectified. 	E1iii


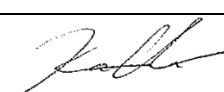
	Name	Signature	Date
Recorded by	Alex Ng		11 April 2024
Checked by	Karina Chan		12 April 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240418
Date	18 April 2024 (Thursday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
240418-R1	<p>B. Water Quality</p> <ul style="list-style-type: none"> Stagnant water should be avoided. <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"> Follow up on the previous session (Ref No.:240411), all the items have been rectified. 	B9


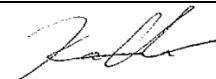
	Name	Signature	Date
Recorded by	Eric Hung		18 April 2024
Checked by	Karina Chan		19 April 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240425
Date	25 April 2024 (Thursday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
240425-R1	<p>B. Water Quality</p> <ul style="list-style-type: none"> Stagnant water should be avoided. <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"> Rubbish were observed at Portion U. <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"> Follow up on the previous session (Ref No.:240418), all the items have been rectified. 	E4ii

	Name	Signature	Date
Recorded by	Alex Ng		25 April 2024
Checked by	Karina Chan		26 April 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

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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

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?
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				
--	The valid NRMM label should be displayed onn the PMEs	The NRMM label was damaged.	28 Mar 2024	✓
Construction Noise Impact				
--	--	--		
Water Quality Impact				
S5.8.7	Stagnant water should be removed to avoid mosquitoes at EVB Basement.	Applying the larvicide to the water ponding.	3 Apr 2024	✓
S5.8.7	Stagnant water should be removed to avoid mosquitoes at EVB Basement.	Stagnant water had been removed.	11 Apr 2024	✓
S5.8.7	Stagnant water should be avoided.	The stagnant water had been removed.	18 Apr 2024	✓
Ecological Impact				
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Fisheries Impact				
--	--	--		
Waste Management				
S8.6.4	Rubbish was observed near the site entrance.	The rubbish had been removed.	11 Apr 2024	✓
S8.6.4	Rubbish were observed at Portion U.	The rubbish should be removed regularly.	25 Apr 2024	#
Landscape and Visual Impact				
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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: April 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: April 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: April 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: April 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: April 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: April 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: April 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: April 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.		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-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 groudborne 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: April 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: April 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

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: April 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

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: April 2024

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					still maintain good site practices, such as schedule noisy work to the 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	
		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: April 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: April 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: April 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**

#	Activity Name	Dur	Start	Finish	2024																											
					March				April				May				June				July				August							
					17	24	31	07	14	21	28	05	12	19	26	02	09	16	23	30	07	14	21	28	04	11	18	25				
111	LAUNCHING SHAFT	86	01-Mar-24	17-Jun-24																												
112	Cell 1 & 2	32	09-May-24	17-Jun-24																												
113	OHVD & Top Slab	32	09-May-24	17-Jun-24																												
114	Waterproofing + Backfilling stage 1 (-10.5 mPD)	32	09-May-24	17-Jun-24																												
115	Cut & Cover	84	01-Mar-24	14-Jun-24																												
116	Trimming Roof Slab	24	01-Mar-24	28-Mar-24																												
117	Roof Slab RC	30	02-Apr-24	08-May-24																												
118	Roof Slab formworks dismantling + waterproofing	18	09-May-24	30-May-24																												
119	LSCC Manhole and Gully construction	12	31-May-24	14-Jun-24																												
120	TBM TUNNELLING	172	31-Jan-24	30-Aug-24																												
121	S1282 Eastbound	163	12-Feb-24	30-Aug-24																												
122	CKL Seawall removal	151	12-Feb-24	11-Jul-24																												
123	Bay 1-3a seawall and spoil removal	108	12-Feb-24	29-May-24																												
124	Bay 3b-4 seawall and spoil removal	43	30-May-24	11-Jul-24																												
125	Utilities Relocation	102	06-Mar-24	11-Jul-24																												
126	EB Tunnel Slurry pipe relocation up to CP11 @ 1CP / week	30	06-Mar-24*	13-Apr-24																												
127	EB Tunnel Slurry pipe relocation up to CP16 @ 1CP / week	30	15-Apr-24	21-May-24																												
128	EB Tunnel Slurry pipe relocation up to CP21 @ 1CP / week	42	22-May-24	11-Jul-24																												
129	TBM Excavation	108	15-May-24	30-Aug-24																												
130	15 May 24 EB TBM re-start CH8632 R0900	0	15-May-24*																													
131	CH 8632-8661 R0913 - Rock excavation 28.6m @ 1.4m/d	20	15-May-24	03-Jun-24																												
132	CH 8661-8687 R0925 - Rock excavation 26.4m @ 1.4m/d	19	30-Jun-24	18-Jul-24																												
133	CH 8687-8709 R0935 - Rock excavation 22m @ 1.4m/d	15	19-Jul-24	02-Aug-24																												
134	CH 8709-8748 R0953 - Rock excavation 39m @ 1.4m/d	28	03-Aug-24	30-Aug-24																												
135	S1281 Westbound	210	31-Jan-24	27-Aug-24																												
136	WB TBM Main Drive repair	91	31-Jan-24	30-Apr-24																												
137	01 May 24 WB TBM re-start CH8612 R0891	0	01-May-24																													
138	CH 8612-8778 R0966 - Rock excavation 166m @ 1.4m/d	119	01-May-24	27-Aug-24																												
139	SUB-SEA TUNNEL CROSS PASSAGE [CP]	38	19-Jun-24	02-Aug-24																												
140	Tympanum Civil Works	38	19-Jun-24	02-Aug-24																												
141	Eastbound	24	06-Jul-24	02-Aug-24																												
142	CP25 - EB - Tympanum Civil works CH8489	24	06-Jul-24	02-Aug-24																												
143	Westbound	28	19-Jun-24	22-Jul-24																												
144	CP25 - WB - Tympanum Civil works CH8499	28	19-Jun-24	22-Jul-24																												
145	INTERNAL STRUCTURES	115	15-Apr-24	30-Aug-24																												
146	Service Gallery B	93	08-May-24	27-Aug-24																												
147	Eastbound	60	22-May-24	01-Aug-24																												
148	EB SG0820 - SG0833 13 nos installation 28.6m	20	22-May-24	14-Jun-24																												
149	EB ISIG re-start at SG0820E	0	02-Jul-24																													

- ◆ Milestone
- █ Planned Bar
- █ Critical Bar

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

Three Months Rolling Programme (Apr-24)



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

#	Activity Name	Dur	Start	Finish	2024																													
					March			April			May			June			July			August														
					17	24	31	07	14	21	05	12	19	02	09	16	23	30	07	14	21	28	04	11	18	25								
150	EB SG850 completion for CP2.2 installation	0	08-Jul-24																														◆ EB SG850 completion for CP2.2 installation	
151	EB SG0833E - SG0845E 12 nos installation 26.4m	11	08-Jul-24	19-Jul-24																													EB SG0833E - SG0845E 12 nos installati	
152	EB SG0845E - SG0855E 10 nos installation 22.0m	11	20-Jul-24	01-Aug-24																													EB SG0845E - SG0855E 10	
153	Westbound	93	08-May-24	27-Aug-24																														
154	WB ISIG re-start at SG0814W	0	08-May-24																														◆ WB ISIG re-start at SG0814W	
155	WB SG0814W - SG0889W 75 nos installation 165m	93	08-May-24	27-Aug-24																														
156	Corbel	89	17-May-24	30-Aug-24																														
157	Eastbound	56	30-May-24	05-Aug-24																														
158	EB Corbel re-start	0	30-May-24																														◆ EB Corbel re-start	
159	EB Corbel construction CH 8290-8319 28.6m	19	30-May-24	21-Jun-24																													EB Corbel construction CH 8290-8319 28.6m	
160	EB Corbel construction CH 8319-8345 26.4m	6	16-Jul-24	22-Jul-24																													EB Corbel construction CH 8319-8345	
161	EB Corbel construction CH 8345-8367 22m	12	23-Jul-24	05-Aug-24																													EB Corbel construction	
162	Westbound	89	17-May-24	30-Aug-24																														
163	WB Corbel re-start	0	17-May-24																														◆ WB Corbel re-start	
164	WB Corbel construction CH 8420-8585 165m	89	17-May-24	30-Aug-24																														
165	Thermal Barrier	114	15-Apr-24	29-Aug-24																														
166	Road Level	114	15-Apr-24	29-Aug-24																														
167	Eastbound	114	15-Apr-24	29-Aug-24																														
168	NCPS	114	15-Apr-24	29-Aug-24																														
169	EB NCP Fire Board up to CP11 @ 13.2m/d	38	15-Apr-24	30-May-24																														EB NCP Fire Board up to CP11 @ 13.2m/d
170	EB NCP Fire Board up to CP16 @ 13.2m/d	38	31-May-24	16-Jul-24																														EB NCP Fire Board up to CP16 @ 13.2m/d
171	EB NCP Fire Board up to CP21 @ 13.2m/d	38	17-Jul-24	29-Aug-24																														EB NCP Fire Board up to CP21 @ 13.2m/d
172	Parapet Installation	66	22-May-24	08-Aug-24																														
173	Eastbound	66	22-May-24	08-Aug-24																														
174	EB NCPS CH6640-8100 Parapet installation up to CP21 @ 10 Ring	66	22-May-24	08-Aug-24																														EB NCPS CH6640-8
175	CKL Pilot Tunnel	48	16-Apr-24	13-Jun-24																														
176	Westbound	48	16-Apr-24	13-Jun-24																														
177	WB Pilot TBM bulkhead construction 2nd bulkhead (alap)	48	16-Apr-24	13-Jun-24																														WB Pilot TBM bulkhead construction 2nd bulkhead (alap)
178	CHA KWO LING TUNNEL	121	09-Mar-24	06-Aug-24																														
179	Eastbound	101	25-Mar-24	29-Jul-24																														
180	Type A1/A2 Lining	32	25-Mar-24	06-May-24																														
181	EB Type A1 to C1-C2 fwks adjustment 1st stage	16	25-Mar-24	16-Apr-24																														EB Type A1 to C1-C2 fwks adjustment 1st stage
182	EB Type A1 to C1-C2 fwks adjustment 2nd stage	8	26-Apr-24	06-May-24																														EB Type A1 to C1-C2 fwks adjustment 2nd stage
183	Type C Wall & Crown	8	17-Apr-24	25-Apr-24																														
184	EB Type C1 Crown (1 bay 8d/bay)	8	17-Apr-24	25-Apr-24																														EB Type C1 Crown (1 bay 8d/bay)
185	Type C OHVD	18	09-Jul-24	29-Jul-24																														
186	EB Type C1 & 2 OHVD slab fwks assembly	18	09-Jul-24	29-Jul-24																														EB Type C1 & 2 OHVD slab fw
187	Westbound	93	09-Mar-24	04-Jul-24																														
188	Type A	93	09-Mar-24	04-Jul-24																														
189	WB Type A1 OHVD Fwk assembly	24	09-Mar-24	10-Apr-24																														WB Type A1 OHVD Fwk assembly

- ◆ Milestone
- █ Planned Bar
- █ Critical Bar

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

Three Months Rolling Programme (Apr-24)



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

#	Activity Name	Dur	Start	Finish	2024																											
					March				April				May				June				July				August							
					17	24	31	07	14	21	28	05	12	19	26	02	09	16	23	30	07	14	21	28	04	11	18	25				
190	WB Type A1 OHVD Slab	45	11-Apr-24	04-Jun-24																									WB Type A1 OHVD Slab			
191	WB Type A1 OHVD Slab fwk dismantling	24	05-Jun-24	04-Jul-24																									WB Type A1 OHVD Slab fwk dismantling			
192	CKL Internal Structures	97	06-Apr-24	01-Aug-24																												
193	Fire Board - Crown (TBC)	97	06-Apr-24	01-Aug-24																												
194	EB Type A Fire Board	22	06-Apr-24	02-May-24																									EB Type A Fire Board			
195	WB Type A Fire Board	24	05-Jul-24	01-Aug-24																									WB Type A Fire Board			
196	Fire Board - Road Level (TBC)	51	30-May-24	30-Jul-24																												
197	Branch Tunnel Fire Board	22	30-May-24*	25-Jun-24																									Branch Tunnel Fire Board			
198	EB Type A Fire Board	22	04-Jul-24	29-Jul-24																									EB Type A Fire Board			
199	WB Type A Fire Board	22	05-Jul-24	30-Jul-24																									WB Type A Fire Board			
200	Footbridge - FB-03	84	26-Apr-24	06-Aug-24																												
201	FT-03 - Bearing Manufacturing	72	26-Apr-24	23-Jul-24																									FT-03 - Bearing Manufacturing			
202	FT-03 - Installation of Structural Frames	30	03-Jul-24	06-Aug-24																									FT-03 - Installation of S			
203	FT-03 - Bearing Testing	12	24-Jul-24	06-Aug-24																									FT-03 - Bearing Testin			
204	EAST VENTILATION BUILDING [EVB]	138	14-Mar-24	30-Aug-24																												
205	EVB Construction	138	14-Mar-24	30-Aug-24																												
206	Building Structure	135	18-Mar-24	30-Aug-24																												
207	EVB - RC works (G/F Walls & Roof Slab)	84	18-Mar-24	02-Jul-24																									EVB - RC works (G/F Walls & Roof Slab)			
208	EVB - RC works (LG2 OHVD Slabs EB & WB)	60	24-May-24	03-Aug-24																									EVB - RC works (LG2 OH			
209	EVB - RC works (Roof Walls & Upper Roof)	58	08-Jun-24	16-Aug-24																									EVB - RC w			
210	EVB - Removal of Tower Crane	12	17-Aug-24	30-Aug-24																												
211	ABWF	138	14-Mar-24	30-Aug-24																												
212	EVB - ABWF works (LG2)	13	14-Mar-24	28-Mar-24																									EVB - ABWF works (LG2)			
213	EVB - ABWF works (LG1)	60	02-Apr-24	14-Jun-24																									EVB - ABWF works (LG1)			
214	EVB - ABWF works (G/F)	66	14-Jun-24	30-Aug-24																												
215	E&M	96	14-Mar-24	12-Jul-24																												
216	EVB - E&M works (LG2)	24	02-Apr-24	30-Apr-24																									EVB - E&M works (LG2)			
217	EVB - E&M works (LG3)	60	14-Mar-24	29-May-24																									EVB - E&M works (LG3)			
218	EVB - E&M works (LG1)	60	30-Apr-24	12-Jul-24																									EVB - E&M works (LG1)			
219	Footbridge FB03	66	25-May-24	12-Aug-24																												
220	Installation of Structural Frames	30	25-May-24	29-Jun-24																									Installation of Structural Frames			
221	Bridge Deck Construction + Bearing Installation	36	02-Jul-24	12-Aug-24																									Bridge Deck Cor			
222	EVA & UU	96	11-Apr-24	05-Aug-24																												
223	EVA Connection Deck Construction + UU	96	11-Apr-24	05-Aug-24																									EVA Connection Deck C			
224	Essential Criteria for FSI	62	14-Jun-24	27-Aug-24																												
225	Power Engerization	54	14-Jun-24	16-Aug-24																												
226	CLP Rm - ABWF works	18	14-Jun-24	05-Jul-24																									CLP Rm - ABWF works			
227	CLP Rm - E&M works & CLP Pre-inspection	36	06-Jul-24	16-Aug-24																									CLP Rm - E			

- ◆ Milestone
- Planned Bar
- Critical Bar

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

Three Months Rolling Programme (Apr-24)



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

#	Activity Name	Dur	Start	Finish	2024																												
					March	17	24	31	07	April	14	21	28	05	May	12	19	26	02	June	09	16	23	30	07	July	14	21	28	04	August	11	18
308	3rd section CH7607-8107 - (500m) WB CPS & NCPS + EB CPS	130	15-Mar-24	22-Aug-24																													
309	E&M Installation (BYME)	130	15-Mar-24	22-Aug-24																													
310	CP side	78	27-Mar-24	04-Jul-24																													
311	1st Fixing	24	27-Mar-24	27-Apr-24																													
312	E&M Bracket installation	24	27-Mar-24	27-Apr-24																													
313	2nd Fixing	54	29-Apr-24	04-Jul-24																													
314	Cable Laying - CPS	10	29-Apr-24	10-May-24																													
315	Cable Fixing - CPS	24	11-May-24	08-Jun-24																													
316	Cable Joint works - CPS	20	11-Jun-24	04-Jul-24																													
317	OHVD Soffit	130	15-Mar-24	22-Aug-24																													
318	1st Fixing	52	15-Mar-24	21-May-24																													
319	OHVD Soffit Fire Board completion (BTP)	0		15-Mar-24*																													
320	Black paint painting	6	08-Apr-24	13-Apr-24																													
321	Linear Heat Detection Cable bracket, Containment Installation - (30	15-Apr-24	21-May-24																													
322	2nd Fixing	38	11-Jun-24	25-Jul-24																													
323	Tunnel Damper Wiring Works - OHVD	30	11-Jun-24	16-Jul-24																													
324	Final Circuit Installation - OHVD	24	27-Jun-24	25-Jul-24																													
325	Final Fixing	24	26-Jul-24	22-Aug-24																													
326	Tunnel Lighting Installation - OHVD	24	26-Jul-24	22-Aug-24																													
327	Non CP side	60	30-May-24	09-Aug-24																													
328	1st Fixing	12	30-May-24	13-Jun-24																													
329	NCPS Fire Board completion	0		13-Jun-24																													
330	E&M Bracket	12	30-May-24	13-Jun-24																													
331	2nd Fixing	48	14-Jun-24	09-Aug-24																													
332	Cable Laying - NCPS	10	14-Jun-24	25-Jun-24																													
333	Cable Fixing - NCPS	14	26-Jun-24	12-Jul-24																													
334	Smartone / CSL / GOFS by others	24	13-Jul-24	09-Aug-24																													
335	5th section CH8550-8979 - (426m) WB & EB CPS + NCPS	24	14-Mar-24	15-Apr-24																													
336	E&M Installation (BYME)	24	14-Mar-24	15-Apr-24																													
337	Non CP side	24	14-Mar-24	15-Apr-24																													
338	1st Fixing	24	14-Mar-24	15-Apr-24																													
339	NCPS Fire Board completion	0		14-Mar-24*																													
340	E&M Bracket	24	14-Mar-24	15-Apr-24																													
341	Sub-sea Eastbound NCPS	72	31-May-24	24-Aug-24																													
342	1st section CH6703-7109 - (406m)	72	31-May-24	24-Aug-24																													
343	E&M Installation (BYME)	72	31-May-24	24-Aug-24																													
344	Non CP side	72	31-May-24	24-Aug-24																													
345	1st Fixing	24	31-May-24	28-Jun-24																													
346	E&M Bracket	24	31-May-24	28-Jun-24																													
347	2nd Fixing	48	29-Jun-24	24-Aug-24																													
348	Cable Laying - NCPS	10	29-Jun-24	11-Jul-24																													
349	Cable Fixing - NCPS	14	12-Jul-24	27-Jul-24																													

- ◆ Milestone
- Planned Bar
- Critical Bar

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

Three Months Rolling Programme (Apr-24)



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				
										Mar 27	Apr 28	May 29	Jun 30	
Trunk Road T2 - Traffic Control & Surveillance System & Associated Works														
Access Dates		57	01-Apr-24	28-May-24	23-May-24	24-Sep-26								
AC1000	Portion 1 - South Apron Up to SUS	0	01-Apr-24		27-May-24									
AC1010	Portion 2 - LSCC, WVB & Adit, EVB	0	01-Apr-24		24-Sep-26									
AC1020	Portion 3 - CKL Branch Tunnel in TKO-LTT Site	0	01-Apr-24		04-Jan-25									
AC1030	Portion 4 - TKO-LTT (LT Interchange)	0	01-Apr-24		23-May-24									
AC1050	Portion 2 - LS - CKL Tunnel CH 6+568 to CH 7+100	0	01-Apr-24		28-Sep-24									
AC1040	Underpass S21	0	04-Apr-24		26-Apr-25									
AC1060	Portion 2 - LS - CKL Tunnel CH 7+100 to CH 7+600	0	13-Apr-24		29-Aug-24									
AC1070	Portion 2 - LS - CKL Tunnel CH 7+600 to CH 8+100	0	28-May-24		15-Oct-24									
Summary by Cost Center		433	01-Apr-24	09-Jan-25	03-Aug-23	31-Oct-26	01-Mar-23							
Cost Center B - Central System		273	01-Apr-24	26-Sep-24	01-Nov-23	11-Apr-25	01-Aug-23							
SC1060	Configuration for Central System	76	01-Apr-24	20-Apr-24	31-Aug-24	31-Aug-24	01-Aug-23		EM1150: SS					
SC1050	FAT of Central System	59	01-Apr-24	20-May-24	01-Nov-23	30-Sep-24	31-Oct-23		EM1150: FS					
SC1070	SCT Plan Submission & Approval for Central System	84	28-May-24	04-Sep-24	02-Dec-24	14-Mar-25			DS2940: SS					
SC1080	Site Installation of Central System	64	28-May-24	12-Aug-24	08-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	26-Jun-24	26-Sep-24	07-Jan-25	11-Apr-25			DS3500: SS					
Cost Center C - Traffic Control Devices		111	01-Apr-24	30-Jun-24	16-Aug-24	16-Aug-24	31-Aug-23							
SC1150	Installation Drawing Preparation, Submission & Approval for Traffic Control Devices	72	01-Apr-24	26-Apr-24	16-Aug-24	16-Aug-24	31-Aug-23		DS5890: SS					
SC1190	Equipment Manufacturing & Delivery for Traffic Control Devices	135	01-Apr-24	30-Jun-24	16-Aug-24	16-Aug-24	16-Sep-23		EM1320: SS					
Cost Center D - Communication System		222	01-Apr-24	12-Aug-24	08-Oct-24	14-Mar-25	01-Oct-23							
SC1320	Equipment Manufacturing & Delivery for Communication System	104					01-Oct-23	07-Mar-24	EM1040: SS					
SC1310	FAT of Communication System	10					29-Feb-24	07-Mar-24	EM1040: FS					
SC1340	SCT Plan Submission & Approval for Communication System	84	01-Apr-24	12-Jul-24	24-Oct-24	14-Mar-25			DS3020: SS					
SC1350	SAT Plan Submission & Approval for Communication System	80	16-Apr-24	22-Jul-24	07-Nov-24	13-Feb-25			DS3580: SS					
SC1330	Site Installation of Communication System	56	06-Jun-24	12-Aug-24	08-Oct-24	17-Feb-25			SW1100: SS, SW1120: SS, SW1960: SS					
Cost Center E - CCTV System		383	01-Apr-24	09-Jan-25	01-Nov-23	31-Oct-26	01-Mar-23							
SC1410	Installation Drawing Preparation, Submission & Approval for CCTV System	99	01-Apr-24	26-Apr-24	31-Oct-26	31-Oct-26	01-Mar-23		DS5970: SS					
SC1450	Equipment Manufacturing & Delivery for CCTV System	89	01-Apr-24	24-Apr-24	11-Aug-24	11-Aug-24	01-Aug-23		EM1050: SS					
SC1440	FAT of CCTV System	96	01-Apr-24	26-Apr-24	01-Nov-23	13-Aug-24	31-Oct-23		EM1050: FS					
SC1430	FAT Plan Submission & Approval for CCTV System	72	01-Apr-24	24-Apr-24	10-Aug-24	10-Aug-24	13-Dec-23		DS4050: SS					
SC1460	SCT Plan Submission & Approval for CCTV System	84	01-Apr-24	12-Jul-24	03-Sep-24	09-Jan-25			DS3060: SS					
SC1480	SAT Plan Submission & Approval for CCTV System	84	30-May-24	06-Sep-24	01-Nov-24	12-Feb-25			DS3620: SS					
SC1470	Site Installation of CCTV System	162	28-Jun-24	09-Jan-25	10-Sep-24	05-Mar-25			SW1060: SS, SW1940: SS					
Cost Center F - PABX System		305	01-Apr-24	07-Oct-24	08-Oct-24	24-Apr-25	27-Jul-23							
SC1560	Installation Drawing Preparation, Submission & Approval for PABX System	68	01-Apr-24	26-Apr-24	08-Oct-24	08-Oct-24	27-Jul-23		DS6010: SS					
SC1580	Equipment Manufacturing & Delivery for PABX System	105					01-Aug-23	19-Mar-24	EM1060: SS					
SC1570	FAT of PABX System	10					18-Mar-24	19-Mar-24	EM1060: FS					
SC1600	SCT Plan Submission & Approval for PABX System	84	01-Apr-24	12-Jul-24	18-Oct-24	12-Mar-25			DS3100: SS					
SC1610	SAT Plan Submission & Approval for PABX System	84	28-Jun-24	07-Oct-24	13-Jan-25	24-Apr-25			DS3660: SS					
Cost Center G - ET System		200	01-Apr-24	21-Sep-24	22-Jun-24	12-Mar-25	01-Aug-23							
SC1710	Equipment Manufacturing & Delivery for ET System	105					01-Aug-23	12-Mar-24	EM1070: SS					
SC1700	FAT of ET System	10					11-Mar-24	12-Mar-24	EM1070: FS					

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	2024			
										Mar 27	Apr 28	May 29	Jun 30
SC1690	Installation Drawing Preparation, Submission & Approval for ET System	72	01-Apr-24	27-Jun-24	22-Jun-24	27-Dec-24			DS6050: SS				
SC1730	SCT Plan Submission & Approval for ET System	84	01-Apr-24	12-Jul-24	17-Sep-24	11-Jan-25			DS3140: SS				
SC1740	SAT Plan Submission & Approval for ET System	84	14-Jun-24	21-Sep-24	29-Nov-24	12-Mar-25			DS3700: SS				
Cost Center H - PA System		305	01-Apr-24	07-Oct-24	23-Sep-24	10-Apr-25	31-Aug-23						
SC1820	Installation Drawing Preparation, Submission & Approval for PA System	72	01-Apr-24	26-Apr-24	23-Sep-24	23-Sep-24	31-Aug-23		DS6090: SS				
SC1850	SCT Plan Submission & Approval for PA System	84	01-Apr-24	12-Jul-24	03-Oct-24	12-Feb-25			DS3180: SS				
SC1870	SAT Plan Submission & Approval for PA System	84	28-Jun-24	07-Oct-24	28-Dec-24	10-Apr-25			DS3740: SS				
Cost Center I - Radio System		269	01-Apr-24	07-Oct-24	01-Feb-24	08-Mar-25	01-Aug-23						
SC1970	Equipment Manufacturing & Delivery for Radio System	119	01-Apr-24	23-Apr-24	14-Oct-24	14-Oct-24	01-Aug-23		EM1090: SS				
SC1950	FAT Plan Submission & Approval for Radio System	60	01-Apr-24	23-Apr-24	14-Oct-24	14-Oct-24	28-Dec-23		DS4350: SS				
SC1960	FAT of Radio System	14	01-Apr-24	25-Apr-24	01-Feb-24	16-Oct-24	31-Jan-24		EM1090: FS				
SC1930	Installation Drawing Preparation, Submission & Approval for Radio System	60	01-Apr-24	13-Jun-24	22-Jul-24	23-Oct-24			DS6130: SS				
SC1980	SCT Plan Submission & Approval for Radio System	84	01-Apr-24	12-Jul-24	27-Aug-24	08-Mar-25			DS3220: SS				
SC2000	SAT Plan Submission & Approval for Radio System	84	28-Jun-24	07-Oct-24	22-Nov-24	05-Mar-25			DS3780: SS				
Cost Center J - Detection System		202	01-Apr-24	12-Jul-24	01-Nov-23	31-Oct-26	24-May-23						
SC2060	Installation Drawing Preparation, Submission & Approval for Detection System	124	01-Apr-24	12-Apr-24	31-Oct-26	31-Oct-26	24-May-23		DS6170: SS				
SC2100	Equipment Manufacturing & Delivery for Detection System	90	01-Apr-24	20-Jun-24	11-Aug-24	11-Aug-24	01-Aug-23		EM1100: SS				
SC2090	FAT of Detection System	87	01-Apr-24	22-Jun-24	01-Nov-23	13-Aug-24	31-Oct-23		EM1100: FS				
SC2080	FAT Plan Submission & Approval for Detection System	66	01-Apr-24	20-Jun-24	24-May-24	10-Aug-24			DS4450: SS				
SC2110	SCT Plan Submission & Approval for Detection System	84	01-Apr-24	12-Jul-24	09-Sep-24	17-Jan-25			DS3260: SS				
Cost Center K - Manual Fallback System		186	01-Apr-24	13-Sep-24	09-Sep-24	14-Mar-25	01-Aug-23						
SC2220	FAT of Manual Fallback System	60	01-Apr-24	30-Apr-24	09-Sep-24	09-Sep-24	01-Aug-23		EM1640: SS				
SC2190	Installation Drawing Preparation, Submission & Approval for Manual Fallback System	60	01-Apr-24	26-Apr-24	08-Jan-25	08-Jan-25	31-Aug-23		DS6210: SS				
SC2200	Post FAT Configuration for Manual Fallback System	90	01-May-24	29-Jul-24	10-Sep-24	08-Jan-25			EM1540: FS				
SC2250	SCT Plan Submission & Approval for Manual Fallback System	84	08-May-24	16-Aug-24	17-Sep-24	14-Mar-25			DS3300: SS				
SC2270	SAT Plan Submission & Approval for Manual Fallback System	84	06-Jun-24	13-Sep-24	18-Oct-24	25-Jan-25			DS3860: SS				
Cost Center L - Speed Enforcement System		108	01-Apr-24	09-Aug-24	23-Sep-24	11-Apr-25							
SC2340	Installation Drawing Preparation, Submission & Approval for Speed Enforcement System	60	01-Apr-24	13-Jun-24	23-Sep-24	01-Mar-25			DS6290: SS				
SC2370	SCT Plan Submission & Approval for Speed Enforcement System	84	01-Apr-24	12-Jul-24	30-Nov-24	22-Mar-25			DS3380: SS				
SC2380	Reliability Test Plan Submission & Approval for Speed Enforcement System	84	30-Apr-24	09-Aug-24	30-Dec-24	11-Apr-25			DS3940: SS				
Cost Center M - Power Distribution System		282	01-Apr-24	07-Sep-24	28-Sep-23	21-Nov-24	30-Aug-23						
SC2460	Installation Drawing Preparation, Submission & Approval for Power Distribution System	60	01-Apr-24	26-Apr-24	27-Jun-24	27-Jun-24	30-Aug-23		DS6370: SS				
SC2470	Equipment Manufacturing & Delivery for Power Distribution System	98	01-Apr-24	30-May-24	28-Sep-23	12-Aug-24	27-Sep-23		DS2592: FS				
SC2490	SCT Plan Submission & Approval for Power Distribution System	84	31-May-24	07-Sep-24	13-Aug-24	21-Nov-24			DS3420: SS				
Cost Center N - Government Optical Fibre System		332	01-Apr-24	07-Sep-24	03-Aug-23	28-Apr-25	02-Aug-23						
SC2560	Equipment Manufacturing & Delivery for Government Optical Fibre System	111	01-Apr-24	30-May-24	03-Aug-23	19-Nov-24	02-Aug-23		DS2650: FS 200				
SC2550	Installation Drawing Preparation, Submission & Approval for Government Optical Fibre System	60	01-Apr-24	13-Jun-24	07-Sep-24	19-Nov-24			DS6330: SS				
SC2580	SCT Plan Submission & Approval for Government Optical Fibre System	84	31-May-24	07-Sep-24	16-Jan-25	28-Apr-25			DS3460: SS				
Operation Facilities		125	01-Apr-24	14-Jul-24	22-May-24	20-Jan-25	01-Aug-23						
SC2660	FAT of Operation Facilities	78	01-Apr-24	14-Jul-24	31-Aug-24	31-Aug-24	01-Aug-23		EM1560: SS				
SC2630	Installation Drawing Preparation, Submission & Approval for Operation Facilities	60	01-Apr-24	13-Jun-24	09-Nov-24	20-Jan-25			DS6250: SS				
SC2650	FAT Plan Submission & Approval for Operation Facilities	81	01-Apr-24	09-Jul-24	22-May-24	26-Aug-24			DS4600: SS				
Design & Submissions		304	01-Apr-24	17-Jun-24	13-Jun-24	25-Jun-25	29-Aug-23						



GTECH Services (Hong Kong) Limited

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 ■ Critical Activity
 ◆ Milestone

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31-Mar-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			
										Mar 27	Apr 28	May 29	Jun 30
FSP Submissions (42 Working Days after Commencement of FSP)		304	01-Apr-24	17-Jun-24	13-Jun-24	25-Jun-25	29-Aug-23						
FSP Batch 1 Submission		304	01-Apr-24	17-Jun-24	13-Jun-24	25-Jun-25	29-Aug-23						
Central System		304	01-Apr-24	17-Jun-24	13-Jun-24	25-Jun-25	29-Aug-23						
Traffic Plan Review & Combine		140	01-Apr-24	17-Jun-24	13-Jun-24	26-Aug-24	28-Dec-23						
DS7300	Traffic Plan Review & Combine Workshop	140	01-Apr-24	17-Jun-24	13-Jun-24	26-Aug-24	28-Dec-23		DS1830: FS 22				
IT Security Risk Assessment Plan		30	01-Apr-24	01-Apr-24	25-Jun-25	25-Jun-25	29-Aug-23						
DS7440	Approval on IT Security Risk Assessment Plan	30	01-Apr-24	01-Apr-24	25-Jun-25	25-Jun-25	29-Aug-23		DS7430: FS				
Interface Coordination & Integration with Other Parties		96	01-Apr-24	26-Jul-24	11-May-26	03-Oct-26							
Interfacing Coordination with CKR (KTE)		90	01-Apr-24	19-Jul-24	17-Jun-26	03-Oct-26							
Detail Interfacing Management Plan (DIMP)		90	01-Apr-24	19-Jul-24	17-Jun-26	03-Oct-26							
DS6610	Prepare & Submit DIMP with CKR (KTE)	73	01-Apr-24	28-Jun-24	17-Jun-26	11-Sep-26			DS6600: FS 96				
DS6620	Comment on DIMP with CKR (KTE)	17	29-Jun-24	19-Jul-24	12-Sep-26	03-Oct-26			DS6610: FS				
Interfacing Coordination with CKR (BEM)		90	01-Apr-24	19-Jul-24	17-Jun-26	03-Oct-26							
Detail Interfacing Management Plan (DIMP)		90	01-Apr-24	19-Jul-24	17-Jun-26	03-Oct-26							
DS6690	Prepare & Submit DIMP with CKR (BEM)	73	01-Apr-24	28-Jun-24	17-Jun-26	11-Sep-26			DS6600: FS 96				
DS6700	Comment on DIMP with CKR (BEM)	17	29-Jun-24	19-Jul-24	12-Sep-26	03-Oct-26			DS6690: FS				
Interfacing Coordination with TKO-LTT (Civil)		76	01-Apr-24	03-Jul-24	12-Jun-26	10-Sep-26							
Detail Interfacing Management Plan (DIMP)		76	01-Apr-24	03-Jul-24	12-Jun-26	10-Sep-26							
DS6770	Prepare & Submit DIMP with TKO-LTT (Civil)	76	01-Apr-24	03-Jul-24	12-Jun-26	10-Sep-26			DS6760: FS 96				
Interfacing Coordination with TKO-LTT (TCSS)		76	01-Apr-24	03-Jul-24	16-Jun-26	14-Sep-26							
Detail Interfacing Management Plan (DIMP)		76	01-Apr-24	03-Jul-24	16-Jun-26	14-Sep-26							
DS6850	Prepare & Submit DIMP with TKO-LTT (TCSS)	76	01-Apr-24	03-Jul-24	16-Jun-26	14-Sep-26			DS6840: FS 108				
Interfacing Coordination with T2		96	01-Apr-24	26-Jul-24	11-May-26	02-Sep-26							
Preliminary Interfacing Management Plan (PIMP)		72	01-Apr-24	27-Jun-24	11-May-26	05-Aug-26							
DS6890	Prepare & Submit PIMP with T2	24	01-Apr-24	29-Apr-24	11-May-26	08-Jun-26			DS2680: FS 211				
DS6900	Comment on PIMP with T2	24	30-Apr-24	29-May-24	09-Jun-26	08-Jul-26			DS6890: FS				
DS6910	Resubmit PIMP with T2	12	30-May-24	13-Jun-24	09-Jul-26	22-Jul-26			DS6900: FS				
DS6920	Approval of PIMP with T2	12	14-Jun-24	27-Jun-24	23-Jul-26	05-Aug-26			DS6910: FS				
Detail Interfacing Management Plan (DIMP)		24	28-Jun-24	26-Jul-24	06-Aug-26	02-Sep-26							
DS6930	Prepare & Submit DIMP with T2	24	28-Jun-24	26-Jul-24	06-Aug-26	02-Sep-26			DS6920: FS				
Drawing & Installation Method Statement Submissions		188	01-Apr-24	11-Jul-24	06-Apr-24	31-Oct-26	10-Aug-23						
Installation Drawing Submission		185	01-Apr-24	08-Jul-24	06-Apr-24	31-Oct-26	08-Sep-23						
DS2695	Prepare & Submit Schedule of Installation Drawing	30	01-Apr-24	07-May-24	06-Apr-24	11-May-24			DS1050: FS 103				
DS2705	Approval of Schedule of Installation Drawing	50	08-May-24	08-Jul-24	13-May-24	12-Jul-24			DS2695: FS				
Traffic Control Devices		125	01-Apr-24	26-Apr-24	23-Jul-24	16-Aug-24	07-Oct-23						
DS5910	Resubmit Installation Drawing for Traffic Control Devices	12	01-Apr-24	12-Apr-24	23-Jul-24	02-Aug-24	07-Oct-23		DS5900: FS				
DS5920	Approval of Installation Drawing for Traffic Control Devices	12	13-Apr-24	26-Apr-24	03-Aug-24	16-Aug-24			DS5910: FS, SC1150: FF				
CCTV System		58	01-Apr-24	26-Apr-24	06-Oct-26	31-Oct-26	13-Dec-23						
DS8020	Resubmit Installation Drawing for CCTV System	26	01-Apr-24	12-Apr-24	06-Oct-26	16-Oct-26	13-Dec-23		DS8010: FS				
DS8030	Approval of Installation Drawing for CCTV System	12	13-Apr-24	26-Apr-24	17-Oct-26	31-Oct-26			DS8020: FS, SC1410: FF				
PABX System		127	01-Apr-24	26-Apr-24	11-Sep-24	08-Oct-24	08-Sep-23						
DS6030	Resubmit Installation Drawing for PABX System	12	01-Apr-24	12-Apr-24	11-Sep-24	23-Sep-24	08-Sep-23		DS6020: FS				
DS6040	Approval of Installation Drawing for PABX System	12	13-Apr-24	26-Apr-24	24-Sep-24	08-Oct-24			DS6030: FS, SC1560: FF				
ET System		72	01-Apr-24	27-Jun-24	22-Jun-24	27-Dec-24							
DS6050	Prepare & Submit Installation Drawing for ET System	24	01-Apr-24	29-Apr-24	22-Jun-24	20-Jul-24			DS2770: SS 19				
DS6060	Comment on Installation Drawing for ET System	24	30-Apr-24	29-May-24	01-Nov-24	28-Nov-24			DS6050: FS				
DS6070	Resubmit Installation Drawing for ET System	12	30-May-24	13-Jun-24	29-Nov-24	12-Dec-24			DS6060: FS				
DS6080	Approval of Installation Drawing for ET System	12	14-Jun-24	27-Jun-24	13-Dec-24	27-Dec-24			DS6070: FS, SC1690: FF				
PA System		125	01-Apr-24	26-Apr-24	28-Aug-24	23-Sep-24	12-Oct-23						
DS6110	Resubmit Installation Drawing for PA System	12	01-Apr-24	12-Apr-24	28-Aug-24	07-Sep-24	12-Oct-23		DS6100: FS				
DS6120	Approval of Installation Drawing for PA System	12	13-Apr-24	26-Apr-24	09-Sep-24	23-Sep-24			DS6110: FS, SC1820: FF				
Radio System		60	01-Apr-24	13-Jun-24	22-Jul-24	23-Oct-24							
DS6130	Prepare & Submit Installation Drawing for Radio System	12	01-Apr-24	15-Apr-24	22-Jul-24	03-Aug-24			DS2154: FS				
DS6140	Comment on Installation Drawing for Radio System	24	16-Apr-24	14-May-24	26-Aug-24	23-Sep-24			DS6130: FS				



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										Mar 27	Apr 28	May 29	Jun 30
DS6150	Resubmit Installation Drawing for Radio System	12	16-May-24	29-May-24	24-Sep-24	08-Oct-24			DS6140: FS				
DS6160	Approval of Installation Drawing for Radio System	12	30-May-24	13-Jun-24	09-Oct-24	23-Oct-24			DS6150: FS, SC1930: FF				
Detection System		12	01-Apr-24	12-Apr-24	21-Oct-26	31-Oct-26	26-Nov-23						
DS6200	Approval of Installation Drawing for Detection System	12	01-Apr-24	12-Apr-24	21-Oct-26	31-Oct-26	26-Nov-23		DS6190: FS, SC2060: FF				
Manual Fallback Control System		34	01-Apr-24	26-Apr-24	12-Dec-24	08-Jan-25	07-Oct-23						
DS6230	Resubmit Installation Drawing for Manual Fallback Control System	12	01-Apr-24	12-Apr-24	12-Dec-24	23-Dec-24	07-Oct-23		DS6220: FS				
DS6240	Approval of Installation Drawing for Manual Fallback Control System	12	13-Apr-24	26-Apr-24	24-Dec-24	08-Jan-25			DS6230: FS, SC2190: FF				
Operation Facility		60	01-Apr-24	13-Jun-24	09-Nov-24	20-Jan-25							
DS6250	Prepare & Submit Installation Drawing for Operation Facility	12	01-Apr-24	15-Apr-24	09-Nov-24	22-Nov-24			DS2532: FS				
DS6260	Comment on Installation Drawing for Operation Facility	24	16-Apr-24	14-May-24	23-Nov-24	20-Dec-24			DS6250: FS				
DS6270	Resubmit Installation Drawing for Operation Facility	12	16-May-24	29-May-24	21-Dec-24	06-Jan-25			DS6260: FS				
DS6280	Approval of Installation Drawing for Operation Facility	12	30-May-24	13-Jun-24	07-Jan-25	20-Jan-25			DS6270: FS, SC2630: FF				
Speed Enforcement System		60	01-Apr-24	13-Jun-24	23-Sep-24	01-Mar-25							
DS6290	Prepare & Submit Installation Drawing for Speed Enforcement System	12	01-Apr-24	15-Apr-24	23-Sep-24	07-Oct-24			DS2472: FS				
DS6300	Comment on Installation Drawing for Speed Enforcement System	24	16-Apr-24	14-May-24	02-Jan-25	01-Feb-25			DS6290: FS				
DS6310	Resubmit Installation Drawing for Speed Enforcement System	12	16-May-24	29-May-24	03-Feb-25	15-Feb-25			DS6300: FS				
DS6320	Approval of Installation Drawing for Speed Enforcement System	12	30-May-24	13-Jun-24	17-Feb-25	01-Mar-25			DS6310: FS, SC2340: FF				
Government Optical Fibre System		60	01-Apr-24	13-Jun-24	07-Sep-24	19-Nov-24							
DS6330	Prepare & Submit Installation Drawing for Government Optical Fibre System	12	01-Apr-24	15-Apr-24	07-Sep-24	21-Sep-24			DS2650: FS, DS2592: SS				
DS6340	Comment on Installation Drawing for Government Optical Fibre System	24	16-Apr-24	14-May-24	23-Sep-24	22-Oct-24			DS6330: FS				
DS6350	Resubmit Installation Drawing for Government Optical Fibre System	12	16-May-24	29-May-24	23-Oct-24	05-Nov-24			DS6340: FS				
DS6360	Approval of Installation Drawing for Government Optical Fibre System	12	30-May-24	13-Jun-24	06-Nov-24	19-Nov-24			DS6350: FS, SC2550: FF				
Power Distribution System		64	01-Apr-24	26-Apr-24	01-Jun-24	27-Jun-24	20-Jan-24						
DS6401	Resubmit Installation Drawing for Power Distribution System	12	01-Apr-24	12-Apr-24	01-Jun-24	13-Jun-24	20-Jan-24		DS6400: FS				
DS6402	Approval of Installation Drawing for Power Distribution System	12	13-Apr-24	26-Apr-24	14-Jun-24	27-Jun-24			DS6401: FS, SC2460: FF				
Installation Method Statement Submission		160	01-Apr-24	11-Jul-24	23-May-24	31-Dec-24	10-Aug-23						
Traffic Control Devices		72	01-Apr-24	27-Jun-24	23-May-24	16-Aug-24							
DS2780	Prepare & Submit Installation Method Statement for Installation of TCSS Field Equipment	24	01-Apr-24	29-Apr-24	23-May-24	20-Jun-24			DS5890: FS 2				
DS2790	Comment on Installation Method Statement for Installation of TCSS Field Equipment	24	30-Apr-24	29-May-24	21-Jun-24	19-Jul-24			DS2780: FS				
DS2800	Resubmit Installation Method Statement for Installation of TCSS Field Equipment	12	30-May-24	13-Jun-24	20-Jul-24	02-Aug-24			DS2790: FS				
DS2810	Approval of Installation Method Statement for Installation of TCSS Field Equipment	12	14-Jun-24	27-Jun-24	03-Aug-24	16-Aug-24			DS2800: FS				
CCTV Camera & VD Camera		72	01-Apr-24	27-Jun-24	27-May-24	20-Aug-24							
DS6410	Prepare & Submit Installation Method Statement for CCTV Camera & VD Camera	24	01-Apr-24	29-Apr-24	27-May-24	24-Jun-24			DS5990: FS, DS6190: FS 2				
DS6420	Comment on Installation Method Statement for CCTV Camera & VD Camera	24	30-Apr-24	29-May-24	25-Jun-24	23-Jul-24			DS6410: FS				
DS6430	Resubmit Installation Method Statement for CCTV Camera & VD Camera	12	30-May-24	13-Jun-24	24-Jul-24	06-Aug-24			DS6420: FS				
DS6440	Approval of Installation Method Statement for CCTV Camera & VD Camera	12	14-Jun-24	27-Jun-24	07-Aug-24	20-Aug-24			DS6430: FS				
PABX, ET & PA Systems		72	09-Apr-24	05-Jul-24	29-Jun-24	23-Sep-24							
DS6450	Prepare & Submit Installation Method Statement for PABX, ET & PA Systems	24	09-Apr-24	07-May-24	29-Jun-24	27-Jul-24			DS6010: FS, DS6050: SS 6, DS6090: FS				
DS6460	Comment on Installation Method Statement for PABX, ET & PA Systems	24	08-May-24	05-Jun-24	29-Jul-24	24-Aug-24			DS6450: FS				

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										Mar 27	Apr 28	May 29	Jun 30
DS6470	Resubmit Installation Method Statement for PABX, ET & PA Systems	12	06-Jun-24	20-Jun-24	26-Aug-24	07-Sep-24			DS6460: FS				
DS6480	Approval of Installation Method Statement for PABX, ET & PA Systems	12	21-Jun-24	05-Jul-24	09-Sep-24	23-Sep-24			DS6470: FS				
Radio System		72	09-Apr-24	05-Jul-24	29-Jul-24	23-Oct-24							
DS6490	Prepare & Submit Installation Method Statement for Radio System	24	09-Apr-24	07-May-24	29-Jul-24	24-Aug-24			DS6130: SS 6				
DS6500	Comment on Installation Method Statement for Radio System	24	08-May-24	05-Jun-24	26-Aug-24	23-Sep-24			DS6490: FS				
DS6510	Resubmit Installation Method Statement for Radio System	12	06-Jun-24	20-Jun-24	24-Sep-24	08-Oct-24			DS6500: FS				
DS6520	Approval of Installation Method Statement for Radio System	12	21-Jun-24	05-Jul-24	09-Oct-24	23-Oct-24			DS6510: FS				
Power Distribution System		99	01-Apr-24	26-Apr-24	01-Jun-24	27-Jun-24	10-Aug-23						
DS6550	Resubmit Installation Method Statement for Power Distribution System	6	01-Apr-24	12-Apr-24	01-Jun-24	13-Jun-24	10-Aug-23		DS6540: FS				
DS6560	Approval of Installation Method Statement for Power Distribution System	12	13-Apr-24	26-Apr-24	14-Jun-24	27-Jun-24			DS6550: FS				
SEC System		24	13-Jun-24	11-Jul-24	03-Dec-24	31-Dec-24							
DS7380	Prepare & Submit Installation Method Statement for SEC System	24	13-Jun-24	11-Jul-24	03-Dec-24	31-Dec-24			DS6290: FS 47				
Detection System		72	01-Apr-24	27-Jun-24	27-May-24	20-Aug-24							
DS7470	Prepare & Submit Installation Method Statement for Detection System	24	01-Apr-24	29-Apr-24	27-May-24	24-Jun-24			DS5990: FS, DS6190: FS 2				
DS7480	Comment on Installation Method Statement for Detection System	24	30-Apr-24	29-May-24	25-Jun-24	23-Jul-24			DS7470: FS				
DS7490	Resubmit Installation Method Statement for Detection System	12	30-May-24	13-Jun-24	24-Jul-24	06-Aug-24			DS7480: FS				
DS7500	Approval of Installation Method Statement for Detection System	12	14-Jun-24	27-Jun-24	07-Aug-24	20-Aug-24			DS7490: FS				
FAT Plan Submissions, Equipment Procurement & Manufacturing		216	01-Apr-24	29-Jul-24	18-May-24	31-Oct-26	01-Aug-23						
CCTV System		46	01-Apr-24	03-May-24	19-Jul-24	20-Aug-24	02-Feb-24						
FAT Plan Submission		41	01-Apr-24	24-Apr-24	19-Jul-24	10-Aug-24	02-Feb-24						
DS4070	Resubmission of FAT Plan for CCTV System	12					02-Feb-24	06-Mar-24	DS4060: FS				
DS4080	Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion)	12					07-Mar-24	26-Mar-24	DS4070: FS				
DS8140	Resubmission of FAT Plan for CCTV System	12	01-Apr-24	10-Apr-24	19-Jul-24	27-Jul-24	27-Mar-24		DS4080: FS				
DS8150	Approval of FAT Plan for CCTV System	12	11-Apr-24	24-Apr-24	29-Jul-24	10-Aug-24			DS8140: FS, SC1430: FF				
Equipment FAT & Manufacturing		7	25-Apr-24	03-May-24	12-Aug-24	20-Aug-24							
EM1480	FAT of CCTV System	2	25-Apr-24	26-Apr-24	12-Aug-24	13-Aug-24			SC1440: FF, EM1050: FS, SC1450: FS, DS8150: FS				
DS4090	Submit CCTV System FAT Test Report	1	03-May-24	03-May-24	20-Aug-24	20-Aug-24			EM1480: FS 6				
PABX System		141					01-Aug-23	21-Mar-24					
Equipment FAT & Manufacturing		141					01-Aug-23	21-Mar-24					
EM1060	Manufacturing & Delivery of PABX System	105					01-Aug-23	18-Mar-24	DS2750: FS, DS7570: FS				
EM1490	FAT of PABX System	10					19-Mar-24	19-Mar-24	DS4130: FS, SC1570: FF, EM1060: FS, SC1580: FS				
DS4140	Submit PABX System FAT Test Report	1					20-Mar-24	21-Mar-24	EM1490: FS 6				
ET System		85					01-Aug-23	15-Mar-24					
Equipment FAT & Manufacturing		85					01-Aug-23	15-Mar-24					
EM1070	Manufacturing & Delivery of ET System	105					01-Aug-23	11-Mar-24	DS2770: FS 118, DS7580: FS				
EM1500	FAT of ET System	10					12-Mar-24	12-Mar-24	DS4180: FS, SC1700: FF, EM1070: FS, SC1710: FS				
DS4190	Submit ET System FAT Test Report	1					15-Mar-24	15-Mar-24	EM1500: FS 6				
PA System		1					29-Feb-24	01-Mar-24					
Equipment FAT & Manufacturing		1					29-Feb-24	01-Mar-24					
DS4240	Submit PA System FAT Test Report	1					29-Feb-24	01-Mar-24	EM1510: FS 6				
Traffic Control Devices		96	01-Apr-24	30-Jun-24	18-May-24	16-Aug-24	10-Oct-23						
Equipment FAT & Manufacturing		96	01-Apr-24	30-Jun-24	18-May-24	16-Aug-24	10-Oct-23						
PVMS		85	01-Apr-24	30-Jun-24	18-May-24	16-Aug-24	10-Oct-23						



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										Mar 27	Apr 28	May 29	Jun 30
EM1030	Post-FAT Manufacturing & Delivery of Traffic Control Devices (PVMS)	85	01-Apr-24	30-Jun-24	18-May-24	16-Aug-24	10-Oct-23		DS4290: FF, SC1190: FF, EM1460: FS				
LED Signage		96	01-Apr-24	04-Jun-24	13-Jun-24	16-Aug-24	26-Feb-24						
EM1461	FAT of Traffic Control Devices (LED Signage)	13					26-Feb-24	01-Mar-24	EM1460: FS, EM1320: FS, SC1181: FS, DS8110: FS				
DS4291	Submit Traffic Control Devices FAT Test Report (LED Signage)	1					02-Mar-24	05-Mar-24	EM1461: FS				
DS8160	Resubmit Traffic Control Devices FAT Test Report (LED Signage)	1					06-Mar-24	11-Mar-24	DS4291: FS				
EM1650	Post-FAT Manufacturing & Delivery of Traffic Control Devices (LED Signage)	85	01-Apr-24	04-Jun-24	13-Jun-24	16-Aug-24	12-Mar-24		EM1461: FS, SC1190: FF, DS4291: FS, DS8160: FS				
Central System		55	01-Apr-24	27-May-24	13-Aug-24	07-Oct-24	20-Feb-24						
FAT Plan Submission		40	01-Apr-24	20-Apr-24	13-Aug-24	31-Aug-24	20-Feb-24						
DS8120	Resubmission of FAT Plan for Central System	12					20-Feb-24	26-Mar-24	DS4330: FS				
DS8130	Approval of FAT Plan for Central System	21	01-Apr-24	20-Apr-24	13-Aug-24	31-Aug-24	27-Mar-24		DS8120: FS				
Equipment FAT & Manufacturing		29	21-Apr-24	27-May-24	01-Sep-24	07-Oct-24							
EM1580	FAT of Central System	30	21-Apr-24	20-May-24	01-Sep-24	30-Sep-24			SC1050: FF, EM1150: FS, SC1060: FS, DS8130: FS				
DS4340	Submit Central System FAT Test Report	1	27-May-24	27-May-24	07-Oct-24	07-Oct-24			EM1580: FS 6				
Radio System		45	01-Apr-24	02-May-24	20-Sep-24	23-Oct-24	02-Feb-24						
FAT Plan Submission		38	01-Apr-24	23-Apr-24	20-Sep-24	14-Oct-24	02-Feb-24						
DS4370	Resubmission of FAT Plan for Radio System	12					02-Feb-24	29-Feb-24	DS4360: FS				
DS4380	Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion)	12					01-Mar-24	25-Mar-24	DS4370: FS				
DS8200	Resubmission of FAT Plan for Radio System	12	01-Apr-24	09-Apr-24	20-Sep-24	27-Sep-24	26-Mar-24		DS4380: FS				
DS8210	Approval of FAT Plan for Radio System	12	10-Apr-24	23-Apr-24	28-Sep-24	14-Oct-24			DS8200: FS, SC1950: FF				
Equipment FAT & Manufacturing		7	24-Apr-24	02-May-24	15-Oct-24	23-Oct-24							
EM1520	FAT of Radio Distribution Network	2	24-Apr-24	25-Apr-24	15-Oct-24	16-Oct-24			EM1090: FS, SC1970: FS, SC1960: FF, DS8210: FS				
EM1610	FAT of Radio O&M (Mobile & Portable)	2	24-Apr-24	25-Apr-24	15-Oct-24	16-Oct-24			EM1090: FS, SC1970: FS, SC1960: FF, DS8210: FS				
DS4390	Submit Radio System FAT Test Report	1	02-May-24	02-May-24	23-Oct-24	23-Oct-24			EM1610: FS 6, EM1520: FS 6				
Communication System		125	01-Apr-24	11-Apr-24	22-Oct-26	31-Oct-26	01-Oct-23						
Equipment FAT & Manufacturing		125	01-Apr-24	11-Apr-24	22-Oct-26	31-Oct-26	01-Oct-23						
EM1040	Manufacturing & Delivery of Communication System	104					01-Oct-23	29-Feb-24	DS2350: FS 144, DS7630: FS, DS2352: FS				
EM1470	FAT of Communication System	10					07-Mar-24	07-Mar-24	DS4430: FS, EM1040: FS, SC1310: FF, SC1320: FS				
DS4440	Submit Communication System FAT Test Report	1					08-Mar-24	19-Mar-24	EM1470: FS 6				
DS8170	Comment on FAT Report	12					20-Mar-24	25-Mar-24	DS4440: FS				
DS8180	Submit Communication System FAT Test Report	1					26-Mar-24	27-Mar-24	DS8170: FS				
DS8190	Approval of FAT Report for Communication System	12	01-Apr-24	11-Apr-24	22-Oct-26	31-Oct-26	28-Mar-24		DS8180: FS				
Detection System		74	01-Apr-24	29-Jun-24	24-May-24	20-Aug-24							
FAT Plan Submission		66	01-Apr-24	20-Jun-24	24-May-24	10-Aug-24							
DS4450	Submission of Detection System FAT Plan	18	01-Apr-24	22-Apr-24	24-May-24	14-Jun-24			DS2232: FS				
DS4460	Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion)	24	23-Apr-24	22-May-24	15-Jun-24	13-Jul-24			DS4450: FS				
DS4470	Resubmission of FAT Plan for Detection System	12	23-May-24	05-Jun-24	15-Jul-24	27-Jul-24			DS4460: FS				
DS4480	Approval of FAT Plan for Detection System	12	06-Jun-24	20-Jun-24	29-Jul-24	10-Aug-24			DS4470: FS, SC2080: FF				
Equipment FAT & Manufacturing		8	21-Jun-24	29-Jun-24	12-Aug-24	20-Aug-24							
EM1530	FAT of Detection System	2	21-Jun-24	22-Jun-24	12-Aug-24	13-Aug-24			DS4480: FS, SC2090: FF, EM1100: FS, SC2100: FS				
DS4490	Submit Detection System FAT Test Report	1	29-Jun-24	29-Jun-24	20-Aug-24	20-Aug-24			EM1530: FS 6				
Power Distribution System		89	01-Apr-24	30-May-24	14-Jun-24	12-Aug-24	01-Dec-23						
Equipment Manufacturing		89	01-Apr-24	30-May-24	14-Jun-24	12-Aug-24	01-Dec-23						
EM1620	Manufacturing & Delivery of Power Distribution System Equipment	89	01-Apr-24	30-May-24	14-Jun-24	12-Aug-24	01-Dec-23		SC2470: FF, DS7650: FS, DS2592: FS				



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										Mar 27	Apr 28	May 29	Jun 30
Government Optical Fibre System													
Equipment Manufacturing													
EM1630	Manufacturing & Delivery of Government Optical Fibre System Equipment	105	01-Apr-24	30-May-24	21-Sep-24	19-Nov-24	01-Dec-23		DS2650: FS 200, SC2560: FF, DS7660: FS				
Operation Facilities													
FAT Plan Submission													
DS4600	Submission of Operation Facility FAT Plan	24	01-Apr-24	29-Apr-24	22-May-24	19-Jun-24			DS2532: FS				
DS4610	Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	20-Jun-24	18-Jul-24			DS4600: FS				
DS4620	Resubmission of FAT Plan for Operation Facility	12	30-May-24	13-Jun-24	19-Jul-24	01-Aug-24			DS4610: FS				
DS4630	Approval of FAT Plan for Operation Facility	21	14-Jun-24	09-Jul-24	02-Aug-24	26-Aug-24			DS4620: FS, SC2650: FF				
Speed Enforcement System													
FAT Plan Submission													
DS4670	Submission of SES Bench Test Plan	24					21-Feb-24	19-Mar-24	DS4650: FS				
DS4690	Comment of SES Bench Test Plan/ Workshops (System Briefing & Comment Discussion)	24	01-Apr-24	17-Apr-24	01-Sep-26	16-Sep-26	20-Mar-24		DS4670: FS				
DS4710	Resubmission of SES Bench Test Plan	12	18-Apr-24	02-May-24	17-Sep-26	02-Oct-26			DS4690: FS				
DS4720	Approval of SES Bench Test Plan	12	03-May-24	17-May-24	03-Oct-26	16-Oct-26			DS4710: FS				
Equipment FAT & Manufacturing													
EM1600	SEC System Bench Test	2	18-May-24	19-May-24	17-Oct-26	18-Oct-26			EM1570: FS 60, DS4720: FS				
DS4740	Submit SEC System Bech Test Report	1	01-Jun-24	01-Jun-24	31-Oct-26	31-Oct-26			EM1600: FS 12				
Manual Fallback Control System													
Equipment FAT & Manufacturing													
EM1540	FAT of Manual Fallback Control System	30	01-Apr-24	30-Apr-24	11-Aug-24	09-Sep-24			DS4780: FS, SC2220: FF, EM1640: FS, DS7690: FS				
EM1110	Post-FAT Configuration of Manual Fallback Control System	90	01-May-24	29-Jul-24	11-Oct-24	08-Jan-25			EM1540: FS, DS4790: FF, SC2200: FF				
DS4790	Submit Manual Fallback Control System FAT Test Report	1	07-May-24	07-May-24	16-Sep-24	16-Sep-24			EM1540: FS 6				
SCT Plan Submissions													
Central System													
DS2940	Submission of Central System SCT Plan	24	28-May-24	25-Jun-24	02-Dec-24	30-Dec-24			DS4340: FS				
DS2950	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	26-Jun-24	24-Jul-24	31-Dec-24	28-Jan-25			DS2940: FS				
Communication System													
DS3020	Submission of Communication System SCT Plan	24	01-Apr-24	29-Apr-24	24-Oct-24	20-Nov-24			EM1040: FS				
DS3030	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	31-Dec-24	28-Jan-25			DS3020: FS				
DS3040	Resubmission of SCT Plan for Communication System	12	30-May-24	13-Jun-24	01-Feb-25	14-Feb-25			DS3030: FS				
DS3050	Approval of SCT Plan for Communication System	24	14-Jun-24	12-Jul-24	15-Feb-25	14-Mar-25			DS3040: FS, SC1340: FF				
CCTV System													
DS3060	Submission of CCTV System SCT Plan	24	01-Apr-24	29-Apr-24	03-Sep-24	02-Oct-24			EM1050: FS				
DS3070	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	30-Oct-24	26-Nov-24			DS3060: FS				
DS3080	Resubmission of SCT Plan for CCTV System	12	30-May-24	13-Jun-24	27-Nov-24	10-Dec-24			DS3070: FS				
DS3090	Approval of SCT Plan for CCTV System	24	14-Jun-24	12-Jul-24	11-Dec-24	09-Jan-25			DS3080: FS, SC1460: FF				
PABX System													
DS3100	Submission of PABX System SCT Plan	24	01-Apr-24	29-Apr-24	18-Oct-24	14-Nov-24			EM1060: FS				
DS3110	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	28-Dec-24	25-Jan-25			DS3100: FS				
DS3120	Resubmission of SCT Plan for PABX System	12	30-May-24	13-Jun-24	27-Jan-25	12-Feb-25			DS3110: FS				
DS3130	Approval of SCT Plan for PABX System	24	14-Jun-24	12-Jul-24	13-Feb-25	12-Mar-25			DS3120: FS, SC1600: FF				
ET System													
DS3140	Submission of ET System SCT Plan	24	01-Apr-24	29-Apr-24	17-Sep-24	17-Oct-24			EM1070: FS				
DS3150	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	01-Nov-24	28-Nov-24			DS3140: FS				
DS3160	Resubmission of SCT Plan for ET System	12	30-May-24	13-Jun-24	29-Nov-24	12-Dec-24			DS3150: FS				



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										Mar 27	Apr 28	May 29	Jun 30
DS3170	Approval of SCT Plan for ET System	24	14-Jun-24	12-Jul-24	13-Dec-24	11-Jan-25			DS3160: FS, SC1730: FF				
PA System		84	01-Apr-24	12-Jul-24	03-Oct-24	12-Feb-25							
DS3180	Submission of PA System SCT Plan	24	01-Apr-24	29-Apr-24	03-Oct-24	31-Oct-24			EM1080: FS				
DS3190	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	29-Nov-24	27-Dec-24			DS3180: FS				
DS3200	Resubmission of SCT Plan for PA System	12	30-May-24	13-Jun-24	28-Dec-24	11-Jan-25			DS3190: FS				
DS3210	Approval of SCT Plan for PA System	24	14-Jun-24	12-Jul-24	13-Jan-25	12-Feb-25			DS3200: FS, SC1850: FF				
Radio System		84	01-Apr-24	12-Jul-24	27-Aug-24	08-Mar-25							
DS3220	Submission of Radio System SCT Plan	24	01-Apr-24	29-Apr-24	27-Aug-24	24-Sep-24			EM1090: SS 30				
DS3230	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	24-Dec-24	22-Jan-25			DS3220: FS				
DS3240	Resubmission of SCT Plan for Radio System	12	30-May-24	13-Jun-24	23-Jan-25	08-Feb-25			DS3230: FS				
DS3250	Approval of SCT Plan for Radio System	24	14-Jun-24	12-Jul-24	10-Feb-25	08-Mar-25			DS3240: FS, SC1980: FF				
Detection System		84	01-Apr-24	12-Jul-24	09-Sep-24	17-Jan-25							
DS3260	Submission of Detection System SCT Plan	24	01-Apr-24	29-Apr-24	09-Sep-24	08-Oct-24			EM1100: FS				
DS3270	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	07-Nov-24	04-Dec-24			DS3260: FS				
DS3280	Resubmission of SCT Plan for Detection System	12	30-May-24	13-Jun-24	05-Dec-24	18-Dec-24			DS3270: FS				
DS3290	Approval of SCT Plan for Detection System	24	14-Jun-24	12-Jul-24	19-Dec-24	17-Jan-25			DS3280: FS, SC2110: FF				
Manual Fallback Control System		48	08-May-24	05-Jul-24	17-Sep-24	28-Jan-25							
DS3300	Submission of Manual Fallback Control System SCT Plan	24	08-May-24	05-Jun-24	17-Sep-24	17-Oct-24			DS4790: FS				
DS3310	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	06-Jun-24	05-Jul-24	31-Dec-24	28-Jan-25			DS3300: FS				
Speed Enforcement System		84	01-Apr-24	12-Jul-24	30-Nov-24	22-Mar-25							
DS3380	Submission of Speed Enforcement System SCT Plan	24	01-Apr-24	29-Apr-24	30-Nov-24	28-Dec-24			EM1130: FS				
DS3390	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	30-Apr-24	29-May-24	09-Jan-25	08-Feb-25			DS3380: FS				
DS3400	Resubmission of SCT Plan for Speed Enforcement System	12	30-May-24	13-Jun-24	10-Feb-25	22-Feb-25			DS3390: FS				
DS3410	Approval of SCT Plan for Speed Enforcement System	24	14-Jun-24	12-Jul-24	24-Feb-25	22-Mar-25			DS3400: FS, SC2370: FF				
Power Distribution System		48	31-May-24	27-Jul-24	13-Aug-24	09-Oct-24							
DS3420	Submission of Power Distribution System SCT Plan	24	31-May-24	28-Jun-24	13-Aug-24	09-Sep-24			EM1620: FS, DS2592: FS				
DS3430	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	29-Jun-24	27-Jul-24	10-Sep-24	09-Oct-24			DS3420: FS				
Government Optical Fibre System		48	31-May-24	27-Jul-24	16-Jan-25	15-Mar-25							
DS3460	Submission of Government Optical Fibre System SCT Plan	24	31-May-24	28-Jun-24	16-Jan-25	15-Feb-25			EM1630: FS				
DS3470	Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion)	24	29-Jun-24	27-Jul-24	17-Feb-25	15-Mar-25			DS3460: FS				
SAT Plan Submissions		84	16-Apr-24	26-Jul-24	18-Oct-24	13-Mar-25							
Central System		18	26-Jun-24	17-Jul-24	07-Jan-25	27-Jan-25							
DS3500	Submission of Central System SAT Plan	18	26-Jun-24	17-Jul-24	07-Jan-25	27-Jan-25			DS2940: FS				
Communication System		80	16-Apr-24	22-Jul-24	07-Nov-24	13-Feb-25							
DS3580	Submission of Communication System SAT Plan	20	16-Apr-24	09-May-24	07-Nov-24	29-Nov-24			DS3020: SS 12				
DS3590	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	10-May-24	07-Jun-24	30-Nov-24	28-Dec-24			DS3580: FS				
DS3600	Resubmission of SAT Plan for Communication System	12	08-Jun-24	22-Jun-24	30-Dec-24	13-Jan-25			DS3590: FS				
DS3610	Approval of SAT Plan for Communication System	24	24-Jun-24	22-Jul-24	14-Jan-25	13-Feb-25			DS3600: FS, SC1350: FF				
CCTV System		48	30-May-24	26-Jul-24	01-Nov-24	27-Dec-24							
DS3620	Submission of CCTV System SAT Plan	24	30-May-24	27-Jun-24	01-Nov-24	28-Nov-24			DS3060: FS 24				
DS3630	Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion)	24	28-Jun-24	26-Jul-24	29-Nov-24	27-Dec-24			DS3620: FS				
PABX System		24	28-Jun-24	26-Jul-24	13-Jan-25	12-Feb-25							
DS3660	Submission of PABX System SAT Plan	24	28-Jun-24	26-Jul-24	13-Jan-25	12-Feb-25			DS3100: FS 48				
ET System		24	14-Jun-24	12-Jul-24	29-Nov-24	27-Dec-24							
DS3700	Submission of ET System SAT Plan	24	14-Jun-24	12-Jul-24	29-Nov-24	27-Dec-24			DS3140: FS 36				
PA System		24	28-Jun-24	26-Jul-24	28-Dec-24	25-Jan-25							
DS3740	Submission of PA System SAT Plan	24	28-Jun-24	26-Jul-24	28-Dec-24	25-Jan-25			DS3180: FS 48				



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										Mar 27	Apr 28	May 29	Jun 30	
Radio System		24	28-Jun-24	26-Jul-24	22-Nov-24	19-Dec-24								
DS3780	Submission of Radio System SAT Plan	24	28-Jun-24	26-Jul-24	22-Nov-24	19-Dec-24			DS3220: FS 48					
Manual Fallback Control System		24	06-Jun-24	05-Jul-24	18-Oct-24	14-Nov-24								
DS3860	Submission of Manual Fallback Control System SAT Plan	24	06-Jun-24	05-Jul-24	18-Oct-24	14-Nov-24			DS3300: FS					
Speed Enforcement System		60	30-Apr-24	12-Jul-24	30-Dec-24	13-Mar-25								
DS3940	Submission of Speed Enforcement System Reliability Test Plan	24	30-Apr-24	29-May-24	30-Dec-24	27-Jan-25			DS3380: FS					
DS3950	Comment on Reliability Test Plan/ Workshops (System Briefing & Comment Discussion)	24	30-May-24	27-Jun-24	28-Jan-25	27-Feb-25			DS3940: FS					
DS3960	Resubmission of Reliability Test Plan for Speed Enforcement System	12	28-Jun-24	12-Jul-24	28-Feb-25	13-Mar-25			DS3950: FS					
Training Document & O&M Manual Submission for T2/TKOLTT TCSS		65	23-May-24	08-Aug-24	06-May-25	22-Jul-25								
DS3980	Submit Document for System Description	6	23-May-24	29-May-24	06-May-25	12-May-25			DS3580: SS 30					
DS4010	Submit System Administration Manual	11	30-May-24	12-Jun-24	13-May-25	24-May-25			DS3980: FS					
DS4020	Submit Training Manual	48	13-Jun-24	08-Aug-24	26-May-25	22-Jul-25			DS4010: FS					
Site Installation and Testing & Commissioning		209	01-Apr-24	09-Dec-24	23-May-24	31-Oct-26								
Installation & Testing Related to Stage 2 of Works		187	27-Apr-24	09-Dec-24	28-Jun-24	31-Oct-26								
Installation		187	27-Apr-24	09-Dec-24	28-Jun-24	31-Oct-26								
Portion 4 - TKO-LTT (LT Interchange)		78	08-May-24	09-Aug-24	28-Jun-24	16-Jan-25								
SW1930	Install Cable Containments	48	08-May-24	05-Jul-24	28-Jun-24	23-Aug-24			SW1030: FS, DS6560: FS, DS6402: FS					
SW1960	Install Equipment in Kiosk C	12	06-Jun-24	20-Jun-24	06-Nov-24	19-Nov-24			SW1050: FS, DS4340: FS, DS4440: FS					
SW1940	Install CCTV Camera	36	28-Jun-24	09-Aug-24	04-Dec-24	16-Jan-25			SW1040: SS 12, SW1930: SS 12, DS4090: FS, DS6440: FS					
Portion 1 - South Apron Up to SUS		66	08-May-24	26-Jul-24	03-Jul-24	17-Sep-24								
SW2000	Install Cable Containments - the 1st Section	48	08-May-24	05-Jul-24	03-Jul-24	27-Aug-24			SW1220: FS, SC2480: FF, DS6560: FS, DS6402: FS					
SW2010	Install CCTV Camera	24	28-Jun-24	26-Jul-24	21-Aug-24	17-Sep-24			SW2000: SS 42, SC1470: FF, DS4090: FS, DS6440: FS					
Portion 2 - Tunnel Section, Service Gallery, WVB & EVB		187	27-Apr-24	09-Dec-24	09-Sep-24	31-Oct-26								
SW2080	Install Cable Containments	187	27-Apr-24	09-Dec-24	09-Sep-24	31-Oct-26			SW2300: SS, SW2400: SS, SW2510: SS, SW2600: SS, SW2720: SS					
Portion 3 - CKL Branch Tunnel in TKO-LTT Site		79	27-Apr-24	01-Aug-24	28-Jan-25	20-Mar-25								
SW2230	Install Cable Containments	36	27-Apr-24	11-Jun-24	07-Feb-25	20-Mar-25			SW1860: FS, SC2480: FF, DS6560: FS, DS6402: FS					
SW2220	Install CCTV Camera	29	28-Jun-24	01-Aug-24	28-Jan-25	05-Mar-25			SW1860: SS 12, SC1470: FF, DS4090: FS, DS6440: FS					
Underpass S21		30	27-Apr-24	03-Jun-24	26-Apr-25	03-Jun-25								
SW2260	Install Cable Containment	14	27-Apr-24	14-May-24	26-Apr-25	14-May-25			AC1040: SS, SC2480: FF, DS6560: FS, DS6402: FS					
SW2280	Laying of Leaky Cable	30	27-Apr-24	03-Jun-24	26-Apr-25	03-Jun-25			SW2260: SS					
SW2290	Laying of Power Cable From TCSS Cabinet in T2 Area	14	07-May-24	23-May-24	17-May-25	03-Jun-25			SW2260: SS 7					
SW2270	Install YAGI Antenna	7	16-May-24	23-May-24	26-May-25	03-Jun-25			SW2260: FS					
Portion 4 - TKO-LTT (LT Interchange)		108	01-Apr-24	09-Aug-24	23-May-24	19-Nov-24								
SW1020	Inspect Civil Provisions & Submit Inspection Report	12	01-Apr-24	15-Apr-24	23-May-24	05-Jun-24			AC1030: SS, DS6600: FS, DS6680: FS, DS6760: FS, DS6840: FS					
SW1030	Rectify Civil Provision Defects by Others	18	16-Apr-24	07-May-24	06-Jun-24	27-Jun-24			SW1020: FS					
Installation Works		108	01-Apr-24	09-Aug-24	28-Jun-24	19-Nov-24								
SW1040	Install Cable Containments	48	01-Apr-24	29-May-24	28-Jun-24	23-Aug-24			DS6400: FS, DS6540: FS					
SW1050	Install Equipment Racks	24	08-May-24	05-Jun-24	07-Sep-24	07-Oct-24			SW1030: FS					
SW1100	Install Server Equipment	36	06-Jun-24	19-Jul-24	08-Oct-24	19-Nov-24			SW1050: FS, DS4440: FS, DS4340: FS					
SW1120	Install Equipment in Kiosk C	12	06-Jun-24	20-Jun-24	06-Nov-24	19-Nov-24			SW1050: FS, DS4340: FS, DS4440: FS					



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										Mar 27	Apr 28	May 29	Jun 30
SW1060	Install CCTV Camera	36	28-Jun-24	09-Aug-24	10-Sep-24	24-Oct-24			SW1040: SS 12, SW1930: SS 12, DS4090: FS, DS6440: FS				
SW1090	Install Video Wall Equipment (Administration Building)	21	28-Jun-24	23-Jul-24	26-Oct-24	19-Nov-24			SW1040: FS 24, SW1930: SS 24, SC1330: FF, DS4440: FS, DS4340: FS, DS4440: FF				
Portion 1 - South Apron Up to SUS		96	01-Apr-24	26-Jul-24	27-May-24	17-Sep-24							
SW1210	Inspect Civil Provisions & Submit Inspection Report	12	01-Apr-24	15-Apr-24	27-May-24	08-Jun-24			AC1000: SS				
SW1220	Rectify Civil Provision Defects by Others	18	16-Apr-24	07-May-24	11-Jun-24	02-Jul-24			SW1210: FS				
Installation Works		66	08-May-24	26-Jul-24	03-Jul-24	17-Sep-24							
SW1230	Install Cable Containments - the 1st Section	48	08-May-24	05-Jul-24	03-Jul-24	27-Aug-24			SW1220: FS, SC2480: FF, DS6560: FS, DS6402: FS				
SW1240	Install CCTV Camera	24	28-Jun-24	26-Jul-24	21-Aug-24	17-Sep-24			SW1230: SS 42, SC1470: FF, DS4090: FS, DS6440: FS				
Portion 2 - Tunnel Section, Service Gallery, WVB & EVB		82	01-Apr-24	10-Jul-24	29-Aug-24	31-Oct-26							
Tunnel Section		79	01-Apr-24	06-Jul-24	29-Aug-24	21-Nov-24							
Tunnel Section - CH 6+568 to CH 7+100		46	01-Apr-24	27-May-24	28-Sep-24	07-Nov-24							
SW2860	Inspect Civil Provisions & Submit Inspection Report	3	01-Apr-24	03-Apr-24	28-Sep-24	02-Oct-24			AC1050: SS				
SW2870	Rectify Civil Provision Defects by Others	6	05-Apr-24	11-Apr-24	03-Oct-24	09-Oct-24			SW2860: FS				
Installation Works		24	27-Apr-24	27-May-24	10-Oct-24	07-Nov-24							
SW2300	Install Cable Containment	24	27-Apr-24	27-May-24	10-Oct-24	07-Nov-24			SC2480: FF, SW2870: FS, DS6560: FS, DS6402: FS				
Tunnel Section - CH 7+100 to CH 7+600		36	13-Apr-24	27-May-24	29-Aug-24	08-Oct-24							
SW2880	Inspect Civil Provisions & Submit Inspection Report	3	13-Apr-24	16-Apr-24	29-Aug-24	31-Aug-24			AC1060: SS				
SW2890	Rectify Civil Provision Defects by Others	6	17-Apr-24	23-Apr-24	02-Sep-24	07-Sep-24			SW2880: FS				
Installation Works		24	27-Apr-24	27-May-24	09-Sep-24	08-Oct-24							
SW2400	Install Cable Containment	24	27-Apr-24	27-May-24	09-Sep-24	08-Oct-24			SC2480: FF, SW2890: FS, DS6560: FS, DS6402: FS				
Tunnel Section - CH 7+600 to CH 8+100		33	28-May-24	06-Jul-24	15-Oct-24	21-Nov-24							
SW2900	Inspect Civil Provisions & Submit Inspection Report	3	28-May-24	30-May-24	15-Oct-24	17-Oct-24			AC1070: SS				
SW2910	Rectify Civil Provision Defects by Others	6	31-May-24	06-Jun-24	18-Oct-24	24-Oct-24			SW2900: FS				
Installation Works		24	07-Jun-24	06-Jul-24	25-Oct-24	21-Nov-24							
SW2510	Install Cable Containment	24	07-Jun-24	06-Jul-24	25-Oct-24	21-Nov-24			SC2480: FF, EM1620: FS, SW2910: FS, DS6560: FS, DS6402: FS				
West Ventilation Building		82	01-Apr-24	10-Jul-24	16-Oct-24	31-Oct-26							
SW1360	Inspect Civil Provisions & Submit Inspection Report	12	01-Apr-24	15-Apr-24	24-Sep-26	09-Oct-26			AC1010: SS, KD1010: FS 359				
SW1370	Rectify Civil Provision Defects by Others	18	16-Apr-24	07-May-24	10-Oct-26	31-Oct-26			SW1360: FS				
Installation Works		82	01-Apr-24	10-Jul-24	16-Oct-24	20-Jan-25							
SW1650	Install Cable Containments	24	01-Apr-24	29-Apr-24	16-Oct-24	12-Nov-24			SC2480: FF, DS6400: FS, DS6540: FS				
SW1660	Position Equipment Rack	12	30-Apr-24	14-May-24	23-Nov-24	06-Dec-24			SW1650: FS				
SW1670	Install Network Equipment	36	28-May-24	10-Jul-24	07-Dec-24	20-Jan-25			SW1660: FS, SC1330: FF, DS4340: FS, DS4440: FS				
East Ventilation Building		82	01-Apr-24	10-Jul-24	16-Oct-24	31-Oct-26							
SW2960	Inspect Civil Provisions & Submit Inspection Report	12	01-Apr-24	15-Apr-24	24-Sep-26	09-Oct-26			AC1010: SS, KD1010: FS				
SW2970	Rectify Civil Provision Defects by Others	18	16-Apr-24	07-May-24	10-Oct-26	31-Oct-26			SW2960: FS				
Installation Works		82	01-Apr-24	10-Jul-24	16-Oct-24	20-Jan-25							
SW1750	Install Cable Containments	24	01-Apr-24	29-Apr-24	16-Oct-24	12-Nov-24			SC2480: FF, DS6400: FS, DS6540: FS				
SW1760	Position Equipment Rack	12	30-Apr-24	14-May-24	23-Nov-24	06-Dec-24			SW1750: FS				
SW1770	Install Network Equipment	36	28-May-24	10-Jul-24	07-Dec-24	20-Jan-25			SW1760: FS, SC1330: FF, DS4340: FS, DS4440: FS				
Portion 3 - CKL Branch Tunnel in TKO-LTT Site		101	01-Apr-24	01-Aug-24	04-Jan-25	14-Mar-25							
SW1850	Inspect Civil Provisions & Submit Inspection Report	3	01-Apr-24	03-Apr-24	04-Jan-25	07-Jan-25			AC1020: SS				
SW1860	Rectify Civil Provision Defects by Others	7	05-Apr-24	12-Apr-24	08-Jan-25	15-Jan-25			SW1850: FS				
Installation Works		79	27-Apr-24	01-Aug-24	16-Jan-25	14-Mar-25							



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										Mar 27	Apr 28	May 29	Jun 30
SW1890	Install Cable Containments	36	27-Apr-24	11-Jun-24	01-Feb-25	14-Mar-25			SW1860: FS, SC2480: FF, DS6560: FS, DS6402: FS				
SW1870	Install CCTV Camera	29	28-Jun-24	01-Aug-24	16-Jan-25	21-Feb-25			SW1860: FS, SC1470: FF, DS4090: FS, DS6440: FS				

