Vol. 1 of 5

EP-457/2013/D

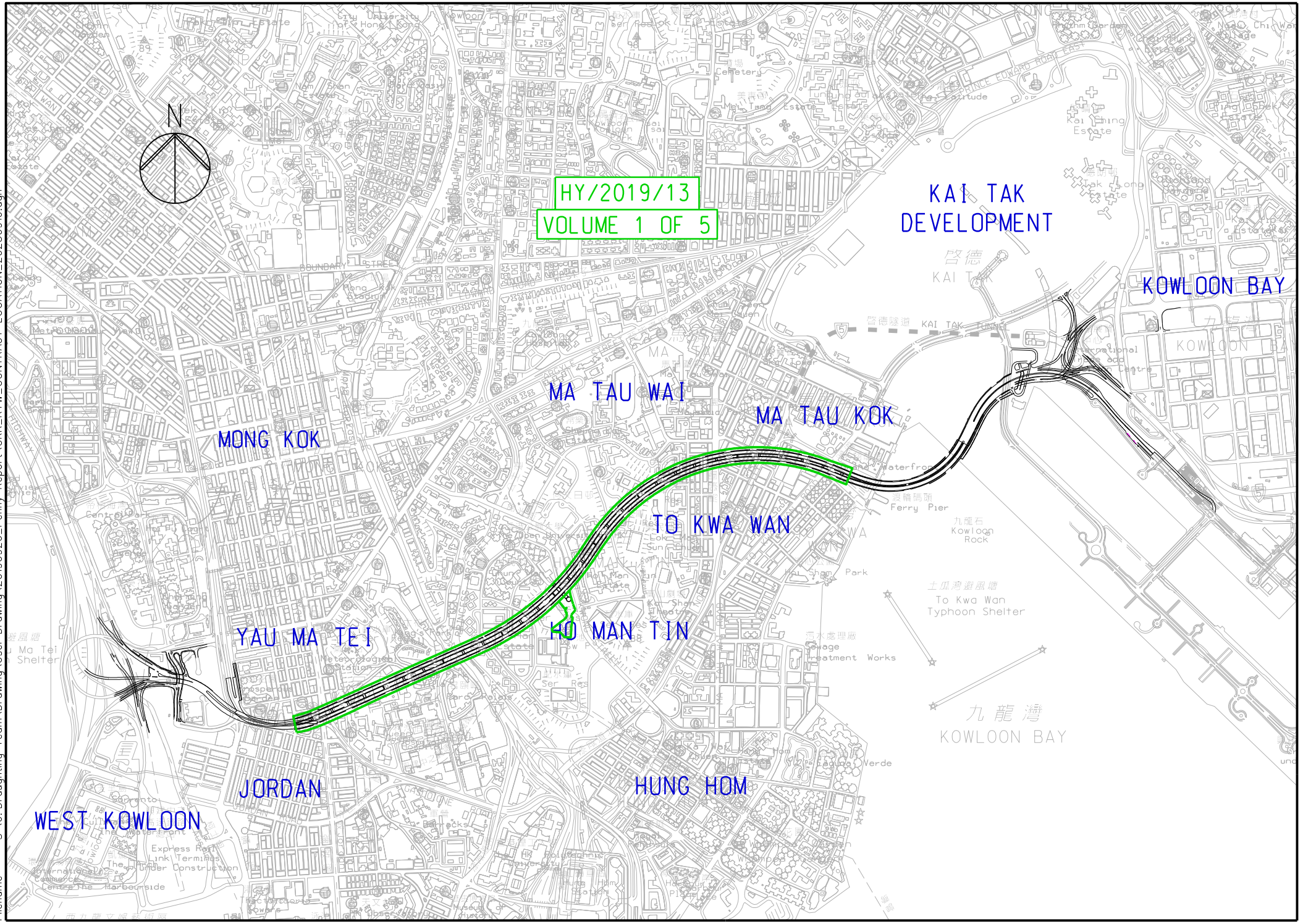
Central Kowloon Route

Buildings, Electrical and Mechanical Works

Contract No. HY/2019/13

(Ho Man Tin area)

October 2025



Printed on : 16-Sep-25 16:13:43 by carmen.lin
Filename : S:\6. Draughting Team\Drawing\User Drawing\20190926_Penny Report\CKR_KTW_CONTRACT LOCATION_20250916.dgn

Gammon Construction Limited

Contract No. HY/2019/13
Central Kowloon Route – Buildings, Electrical and Mechanical Works
(Ho Man Tin Area)

Monthly EM&A Report No. 22
(October 2025)

Version 1.1

Date of Report: 12 November 2025

Certified By	
	(Environmental Team Leader: Ms. Betty Choi)

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

路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

ERM

Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract:	**Buildings, Electrical and Mechanical Works (HY/2019/13)**

Reference Document/Plan

Document/~~Plan~~ to be ~~Certified~~/ Verified:	Monthly EM&A Report No.22 (Version 1.1) for Ho Man Tin Area
Date of Report:	12 November 2025
Date received by IEC:	12 November 2025

Reference EP Condition

Environmental Permit Condition: 3.4

Submission of Monthly EM&A Report of the Project

3.4 Four hard copies and one electronic copy of monthly EM&A Report shall be submitted to the Director within 2 weeks after the end of each reporting month throughout the entire construction period. The EM&A Reports shall include a summary of all non-compliance. The submissions shall be certified by the ET Leader and verified by the IEC as complying with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the submission shall be provided to the Director upon request by the Director.

IEC Verification

I hereby verify that the above referenced document/~~plan~~ complies with the above referenced condition of EP-457/2013/D.

Ms Mandy To

Date: 12 November 2025

Independent Environmental Checker

Our ref: 0436942_IEC Verification Cert_BEM_Monthly EM&A Rpt (HMT) No.22_20251112.docx

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

EXECUTIVE SUMMARY

Introduction

1. This is the 22nd Monthly Environmental Monitoring and Audit (EM&A) Report prepared by the Environmental Team (ET), Cinotech Consultants Ltd., for Contract No. HY/2019/13 "Central Kowloon Route – Buildings, Electrical and Mechanical Works". This report summarises the monitoring results and audit findings of the EM&A programme under the issued EP No. EP-457/2013/D, and in accordance with the EM&A programme in the Ho Man Tin area during the reporting period from 1 October 2025 – 31 October 2025.

2. The major site activities undertaken in the reporting month included:
   - ABWF works

Environmental Monitoring Works

3. Environmental monitoring for the Project was performed in accordance with the EM&A Manual, and the monitoring results were checked and reviewed. Joint weekly site inspections with the representative of ET, the Engineer Representative and the Contractor for Contract No. HY/2019/13 were conducted on 6, 14, 21 & 28 October 2025, whereas a joint site inspection with the representative of IEC was conducted on 14 October 2025. The implementation of the environmental mitigation measures, Event and Action Plans and environmental complaint handling procedures was also checked.

4. A summary of the non-compliance (exceedance) during the reporting month (October 2025) and the investigation results and/or follow-up actions is provided below:

Air Quality Monitoring
- No Action/Limit Level exceedance for 1-hour TSP was recorded.
- No Action/Limit Level exceedance for 24-hour TSP was recorded.

Noise Monitoring
- No Action Level exceedance for construction noise was recorded.
- No Limit Level exceedance for construction noise was recorded.

Landscape and Visual Monitoring
- No non-conformity for landscape and visual was recorded.

Complaint Handling, Prosecution and Public Engagement

5. Summary of complaint/summons/prosecution in the reporting month is tabulated in **Table I**.

Table I Summary of Complaint/Summons/Prosecution in the Reporting Month

Event	Event Details		Follow-up/ Remedial Actions	Status/ Remarks
	Number	Brief Description		
Complaints Received	0	-	-	-
Notification of Summons and Prosecutions Received	0	-	-	-

Reporting Changes

6. There were no reporting changes during the reporting month.

Future Key Issues

7. The key works or activities will be anticipated in the coming two months are as follows:
   - ABWF works

1 INTRODUCTION

Background

1.1 Central Kowloon Route (CKR) is a 4.7km long dual 3-lane trunk road across Central Kowloon linking Yau Ma Tei Interchange in West Kowloon and the road network at Kai Tak Development and Kowloon Bay in East Kowloon. The underground tunnel section will be about 3.9km long. In particular, an underground tunnel of about 370m long in Kowloon Bay to the north of To Kwa Wan Typhoon Shelter will be constructed.

1.2 The Environmental Impact Assessment Report for Central Kowloon Route – Design and Construction (Register No.: AEIAR-171/2013) was approved under the Environmental Impact Assessment Ordinance (EIAO) on 11 July 2013. An Environmental Permit (EP No.: EP-457/2013) was issued on 9 August 2013. Variations of Environmental Permit (VEP) was subsequently applied and an EP (EP No. EP-457/2013/C) was issued on 16 January 2017. The latest EP (EP No. EP-457/2013/D) was issued by Environmental Protection Department (EPD) on 15 June 2021.

1.3 The construction of the CKR had been divided into different sections. This Contract No. HY/2019/13 – Central Kowloon Route – Buildings, Electrical and Mechanical Works ("The Project") will include the architectural, civil and structural construction works of Yau Ma Tei Ventilation Building (YVB), Ho Man Tin Ventilation Building (HVB), Kai Tak Ventilation Building (KVB) and Central Kowloon Route Administration Building (ADB) for the CKR. The landscaping and electrical and mechanical (E&M) works within the building sites will be involved as well.

1.4 Cinotech Consultants Limited was assigned as the Environmental Team (ET) to undertake the EM&A works for the Project. The construction of this Contract was commenced on 12th December 2020.

1.5 The construction work on the Ho Man Tin area under Contract no. HY/2018/08 Central Kowloon Route – Central Tunnel was completed on 31 December 2023. Contract no. HY/2019/13 Central Kowloon Route – Buildings, Electrical and Mechanical Works in Ho Man Tin area was then commenced on 1 January 2024 and took over the site of Ho Man Tin area.

1.6 The baseline report for environmental monitoring was used the same as the HY/2018/08 on the Ho Man Tin area. The baseline air quality and noise monitoring were conducted in January 2018. The baseline monitoring results are presented in the Approved Baseline Monitoring Reports in accordance with EP-457/2013/C Condition 3.3 under Contract no. HY/2014/09 Central Kowloon Route – Ho Man Tin Access Shaft.

1.7 This is the 22nd Monthly EM&A Report, which summarises the impact monitoring results and audit findings for the EM&A programme in the Ho Man Tin area during the reporting period from 1 October 2025 – 31 October 2025. The Ho Man Tin area site layout plan for the Project is shown in **Figure 1**.

Project Organizations

1.8 Different Parties with different levels of involvement in the project organisation include:

- Project Proponent – Highways Department (HyD)
- Engineer Representative (ER) – Arup – Mott MacDonald Joint Venture (AMMJV)
- Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
- Independent Environmental Checker (IEC) – Environmental Resources Management – Hong Kong Limited (ERM)
- Contractor – Gammon Construction Limited (GCL)

1.9 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.
AMMJV	Engineer Representative	Mr. Tommy Wong	3695 0419
Cinotech	Environmental Team	Ms. Betty Choi	2151 2072
ERM	Independent Environmental Checker	Ms. Mandy To	2271 3113
GCL	Contractor	Mr. William Chan	5408 3045

1.10 The Organisational Structure for Environmental Management is shown in **Figure 2**.

Construction Activities undertaken during the Reporting Month

1.11 The construction programme is presented in **Appendix M**.

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

- ABWF works

Summary of EM&A Requirements

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

- Environmental requirements and mitigation measures, as recommended in the EM&A Manual under the EP.

1.14 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarised in Section 6 of this report.

Statutes of Environmental Licensing and Permitting

1.15 All permits/licenses obtained for the Project are summarised in **Table 1.2**.

Table 1.2 Summary of Environmental Licensing and Permit Status

Permit / License No.	Valid Period		Status
	From	To	
Environmental Permit (EP)			
EP-457/2013/D	15 Jun 2021	N/A	Valid
Notification of Construction Works under Air Pollution Control Ordinance (APCO)			
457345	19 Jun 2020	End of Project	Valid
Billing Account for Construction Waste Disposal			
7037679	26 Jun 2020	N/A	Valid
Registration of Chemical Waste Producer – Ho Man Tin			
5213-236-G2347-61	28 Nov 2023	N/A	Valid
Wastewater Discharge Licence - Ho Man Tin			
WT10002215-2023	2 Feb 2024	31 Jan 2029	Valid
Construction Noise Permit - Ho Man Tin			
GW-RE0352-25	14 Apr 2025	13 Oct 2025	Valid until 13 Oct 2025, and superseded by GW-RE1234-25
GW-RE1234-25	14 Oct 2025	13 Apr 2026	Valid

2 AIR QUALITY

Monitoring Requirements

2.1 According to the EM&A Manual under the EP, 1-hour and 24-hour TSP monitoring were conducted to monitor the air quality for this Project. For regular impact monitoring, a sampling frequency of at least once every six days is required at all of the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six days shall be undertaken when the highest dust impact occurs. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

2.2 Only one designated monitoring station was selected for the 1-hour and 24-hour TSP impact dust monitoring programme. Both dust monitoring stations were conducted at the designated monitoring station (M-A3).

2.3 **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 3**.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Stations	Locations	Location of Measurement
M-A3	S.K.H. Tsoi Kung Po Secondary School	Rooftop (above 3/F) Area

Monitoring Equipment

2.4 **Table 2.2** summarises the equipment used in the impact air monitoring programme. Copies of calibration certificates are attached in **Appendix B**.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Serial No.	Quantity
Calibrator	TISCH TE-5025A	3864	1
1-hour TSP Dust Meter	Dust Monitor System OC-9200	OC20210316224101	1
High Volume Sampler	TE-5170 c/w of TSP sampling inlet	2204	1
Wind Anemometer	C-OC-9200-wind	OC20210316224101	1

Monitoring Parameters, Frequency and Duration

2.5 **Table 2.3** summarises the monitoring parameters and frequencies of impact dust monitoring for the whole construction period. The air quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hour TSP	Three times / 6 days
24-hour TSP	Once / 6 days

Monitoring Methodology and QA/QC Procedure

1-hour TSP Monitoring

Measuring Procedures

2.6 The measuring procedures of the 1-hour dust meters were in accordance with the Manufacturer's Instruction Manual as follows: *(OC-9200 Dust Monitoring System)*

- 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

2.7 The following maintenance/calibration was required for the direct dust meters:

- 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

2.8 High volume (HVS) samplers (Model TE-5170), 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). Moreover, the HVS also met all the requirements in section 2.5 of the updated EM&A Manual.

2.9 The positioning of the HVS samplers are as follows:

- A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
- No two samplers were placed less than 2 meters apart.
- The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
- A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
- A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
- No furnaces or incineration flues were nearby.
- Airflow around the sampler was unrestricted.
- The sampler was more than 20 meters from the drip line.
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.

Operating/analytical procedures for the operation of HVS

2.10 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 1.1 m3/min. and 1.4 m3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- For TSP sampling, fiberglass filters have 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 centred with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The shelter lid was closed and secured with the aluminium strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found by using the filter number).
- After sampling, the filter was removed and sent to the HOKLAS laboratory (High Precision Chemical Testing 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

2.11 The following maintenance/calibration was 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 through\hout all stages of the air quality monitoring.

Results and Observations

2.12 All 1-hour TSP monitoring was conducted as scheduled in the reporting month.

2.13 No Action/Limit Level exceedance of the 1-hour TSP monitoring was recorded.

2.14 All 24-hr TSP monitoring was conducted as scheduled in the reporting month. The monitoring schedule for the reporting month is shown in **Appendix D**.

2.15 No Action/Limit Level exceedance of the 24-hour TSP monitoring was recorded.

2.16 The weather information for the reporting month is summarised in **Appendix C**.

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 No exceedance was recorded for the air quality monitoring. The summary of the exceedance record in the reporting month is shown in **Appendix H**.

2.19 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of air quality mitigation measures within the site boundaries of this Project. The summary of site audits is shown in **Table 6.1** of this report.

2.20 According to our field observations during the monitoring, the major dust sources identified at the designated air quality monitoring stations are road traffic dust, exposed site area and open stockpiles, excavation works and site vehicle movements.

3 NOISE

Monitoring Requirements

3.1 According to EM&A Manuals under the EP, 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 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 Only one designated monitoring station was selected for the noise monitoring programme. Noise monitoring was conducted at the designated monitoring station (M-N3).

3.3 **Table 3.1** describes the noise monitoring locations, which are also depicted in **Figure 3**.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Locations	Location of Measurement
M-N3	S.K.H. Tsoi Kung Po Secondary School	Rooftop (above 3/F) Area

Monitoring Equipment

3.4 **Table 3.2** summarises the noise monitoring equipment. Copies of calibration certificates are provided in **Appendix B**.

Table 3.2 Noise Monitoring Equipment

Equipment	Model and Make	Serial No.	Quantity
Sound Calibrator	Hangzhou Aihua Instruments Co., Ltd. AWA6021A	1023064	1
Integrating Sound Level Meter	BSWA Technology BSWA 308	570188, 580238	2

Monitoring Parameters, Frequency and Duration

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

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency	Measurement
M-N3	L_{10}(30 min.) dB(A) L_{90}(30 min.) dB(A) L_{eq}(30 min.) dB(A)	0700-1900 hrs on normal weekdays	Once per week	Façade

Monitoring Methodology and QA/QC Procedure

3.6 The procedures for noise monitoring were as follows:

- The Sound Level Meter was set on a tripod at a height of 1.2 m above the ground.
- 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 measurement was paused temporarily during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was 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.

Maintenance and Calibration

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

3.8 The sound level meter and calibrator were checked and calibrated at yearly intervals.

3.9 Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

Results and Observations

3.10 All construction noise monitoring was conducted as scheduled in the reporting month. The monitoring schedule for the reporting month is shown in **Appendix D**.

3.11 The Baseline Noise Level and the Noise Limit Level at the designated noise monitoring station are presented in **Table 3.4**.

Table 3.4 Baseline Noise Level and Noise Limit Level for Monitoring Stations

Monitoring Stations	Baseline Noise Level, dB (A)	Noise Limit Level, dB (A)
M-N3	67.7(1) (at 0700 – 1900 hrs on normal weekdays)	70(*) (at 0700 – 1900 hrs on normal weekdays)

(*) Noise Limit Level is 65 dB(A) during school examination periods.
Note (1): The noise level due to the construction work (CNL) was calculated by the following formula:

CNL = 10 log (10MNL/10 – 10BNL/10)

Remarks: MNL = Measured Noise Level, BNL = Baseline Noise Level

3.12 No Action Level and Limit Level exceedance was recorded. The summary of the exceedance record in the reporting month is shown in **Appendix H**.

3.13 Noise monitoring results and graphical presentations are shown in **Appendix G**.

3.14 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of construction noise mitigation measures within the site boundaries of this Project. The summary of site audits is shown in **Table 6.1** of this report.

3.15 According to our field observations during the monitoring, the major noise sources identified at the designated noise monitoring stations are road traffic noise, site vehicle movement, excavation works and daily school activities.

4 WASTE MANAGEMENT

Monitoring Requirements

4.1 Waste generated from this Project includes inert construction and demolition (C&D) materials and non-inert C&D materials. Inert C&D waste includes soil, broken rock, broken concrete and building debris, while non-inert C&D materials are made up of C&D waste which cannot be reused or recycled and has to be disposed of at the designated landfill sites.

Results and Observations

4.2 The quantities of different types of waste generated in the reporting month are summarised in **Table 4.1**. Details of the amount of waste generated by the major site activities of this Project during the reporting month are shown in **Appendix L**.

Table 4.1 Quantities of Waste Generated from the Project

Quantity							
	Inert C&D Materials		Non-inert C&D Materials				
Reporting Period	Total Quantity Generated (in '000m^3)	Disposed as Public Fill (in '000m^3)	Others, e.g. general refuse (in '000m^3)	Metals (in '000kg)	Paper/cardboard Packaging (in '000kg)	Plastics (in '000kg)	Chemical waste (in '000kg)
Oct 2025	0.190	0.000	0.067	0	0	0	0

4.3 Site audits were carried out on a weekly basis to monitor and audit to ensure that proper storage, transportation, and disposal practices of waste materials generated during construction activities, such as construction and demolition (C&D) materials and general refuse, are being implemented. The summary of site audits is shown in **Table 6.1** of this report**.** The implementation status of the waste/chemical management measures in the reporting period is summarised in **Appendix J**.

5 LANDSCAPE AND VISUAL

Monitoring Requirements

5.1 According to the EM&A Manual, site audits would be undertaken during the construction phase of the Project to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. Site inspections of the implementation of landscape and visual mitigation measures would be undertaken at least once every two weeks during the construction period.

Results and Observations

5.2 Bi-weekly inspection of the implementation of landscape and visual mitigation measures within the site boundaries of this Project was conducted on 14, & 28 October 2025. The implementation status of the landscape and visual mitigation measures in the reporting period is summarised in **Appendix J**. The summary of observations and recommendations made for landscape and visual mitigation measures during site audits is shown in **Table 6.1** of this report.

5.3 No non-compliance with the landscape and visual impact was recorded in the reporting month.

5.4 Should non-compliance of the landscape and visual impact occur, action in accordance with the action plan presented in **Appendix I** shall be performed.

6 ENVIRONMENTAL AUDIT

Site Audits

6.1 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.

6.2 Site audits for Contract No. HY/2019/13 were conducted on 6, 14, 21 & 28 October 2025 in the reporting month. Joint site inspection with the representative of IEC was conducted on 14 October 2025. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

6.3 According to the Environmental Permit, the approved EIA Report (Register No.: AEIAR-171/2013), and the EM&A Manual of the Project, 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**.

6.4 The ET weekly site inspections were carried out during the reporting month, and the observations and follow-up actions in the Ho Man Tin Area are summarised in **Table 6.1**.

Table 6.1 Observations and Recommendations of Site Inspections

Parameters	Date	Observations	Follow-up Actions
Water Quality	N/A	No environmental deficiency was identified in the reporting period.	N/A
Air Quality	N/A	No environmental deficiency was identified in the reporting period.	N/A
Noise	N/A	No environmental deficiency was identified in the reporting period.	N/A
Waste / Chemical Management	N/A	No environmental deficiency was identified in the reporting period.	N/A
Land Contamination	14 Oct 2025	Drip tray should be provided for chemical.	Chemical has been removed.
Landscape and Visual	N/A	No environmental deficiency was identified in the reporting period.	N/A
Permits /Licences	N/A	No environmental deficiency was identified in the reporting period.	N/A

Implementation Status of Event and Action Plans

6.5 The Event Action Plans for air quality, noise and landscape and visual are presented in **Appendix I**.

Air Quality Monitoring

- No Action/Limit Level exceedance for 1-hour TSP was recorded.
- No Action/Limit Level exceedance for 24-hour TSP was recorded.

Noise Monitoring

- No Action Level exceedance for noise was recorded.
- No Limit Level exceedance for noise was recorded.

Landscape and Visual Monitoring

- No non-conformity for landscape and visual was recorded.

Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution

6.6 No environmental complaint and environmental warnings, notifications of summons and successful prosecutions were received in the reporting month.

6.7 The summary of environmental complaint, warning, summons and notification of successful prosecution for the Project is presented in **Appendix K**.

6.8 Status of required submission under EP-457/2013/D during the reporting period is summarised in **Table 6.2**.

Table 6.2 Status of Required Submission under Environmental Permit

EP Condition (EP-457/2013/D)	Submission	Submission Date
Condition 3.4	Monthly EM&A Report (September 2025)	10 October 2025

7 FUTURE KEY ISSUES

7.1 Major site activities undertaken for the coming two months include:

- ABWF works

7.2 Key environmental issues in the coming two months include:

- Stockpile accumulation on-site;
- Water spraying for dust generating activities and on haul road;
- Wastewater and runoff discharge from site;
- Coverage of open manholes to avoid dirty runoff to drainage system;
- Noise from operation of the equipment, especially for excavation works and machinery onsite;
- Accumulation of general refuse and construction waste on-site;
- Proper storage of construction materials on-site; and
- Storage of chemicals/fuel and chemical waste/waste oil on-site.

Monitoring Schedule for Next Month

7.3 The tentative environmental monitoring schedules for next month are shown in **Appendix D**.

8 CONCLUSIONS

8.1 This is the 22nd Monthly EM&A Report, which presents the EM&A works undertaken in the Ho Man Tin area during the reporting month from 1 October 2025 – 31 October 2025 in accordance with the EM&A Manual and the requirements under the EP.

Air Quality Monitoring

8.2 All 1-hr TSP monitoring was conducted as scheduled in the reporting month.

8.3 No Action/Limit Level exceedance was recorded for all 1-hour TSP monitoring in the reporting month.

8.4 All 24-hr TSP monitoring was conducted as scheduled in the reporting month.

8.5 No Action/Limit Level exceedance was recorded for all 24-hour TSP monitoring in the reporting month.

Construction Noise Monitoring

8.6 All construction noise monitoring was conducted as scheduled in the reporting month.

8.7 No Action Level and Limit Level exceedance was recorded.

Landscape and visual

8.8 No non-compliance was recorded in the reporting month.

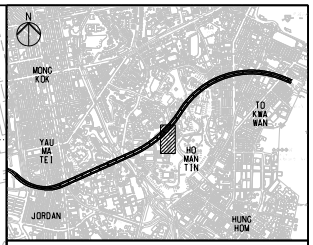
Site Audit

8.9 4 ET joint weekly environmental site inspections were conducted in the reporting month. Joint weekly site inspections with the representative of ET, the Engineer Representative and the Contractor for Contract No. HY/2019/13 were conducted on 6, 14, 21 & 28 October 2025, whereas a joint site inspection with the representative of IEC was conducted on 14 October 2025. All environmental deficiencies observed during site inspections were rectified by the Contractor.

Complaint, Notification of Summons and Successful Prosecution

8.10 No environmental complaint, notifications of summons and successful prosecutions were received in the reporting month.

FIGURES



KEY PLAN

NOTES:

1. FOR NOTES AND LEGEND, REFER TO DRAWING NO. CKR/BEM/01/0011.

LEGEND:

BOUNDARIES OF THE SITE

BUILDING SITE BOUNDARY

SETTING OUT TABLE

SETTING OUT POINT	COORDINATES	
	EASTING	NORTHING
HMT-VB-1	836721.312	819484.176
HMT-VB-2	836760.139	819437.827
HMT-VB-3	836722.349	819406.371

Rev. 修訂	Description 內容摘要	By 設計	Date 日期
01	TENDER ADDENDUM NO. 3	ML	12/19
00	ISSUE FOR TENDER	ML	09/19

ARUP MOTT MACDONALD

Arup-Mott MacDonald Joint Venture

Project title 工程名稱

Contract No. HY/2019/13

Central Kowloon Route -
Buildings, Electrical and Mechanical

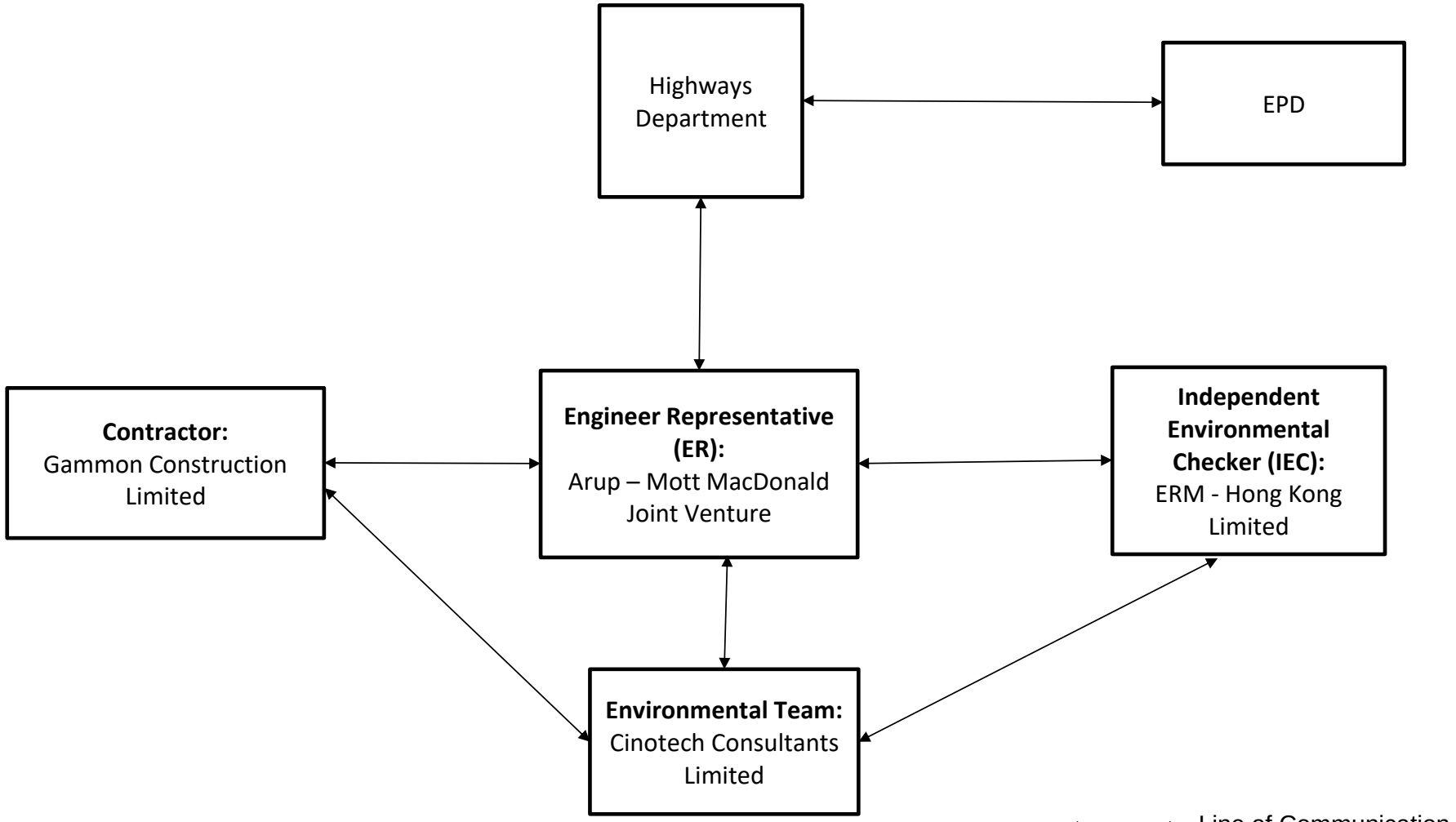
Drawing title 圖紙名稱

GENERAL LAYOUT PLAN
HO MAN TIN VENTILATION
BUILDING

Drawing no. 圖紙編號	1	Rev. 修訂	01
Drawn By 繪圖	ML	Checked By 核對	AC
Approved By 批准人	RC		
Scale 比例	1:500 @ A1	Status 現況	TENDER

路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

Printed by : 12/23/2019
Filename : J:\287786-CKR\TENDER ADDENDUM\BEM\TENDER ADDENDUM NO.3\01\E-CKR_BEM_01_0032_DRG-01.dgn

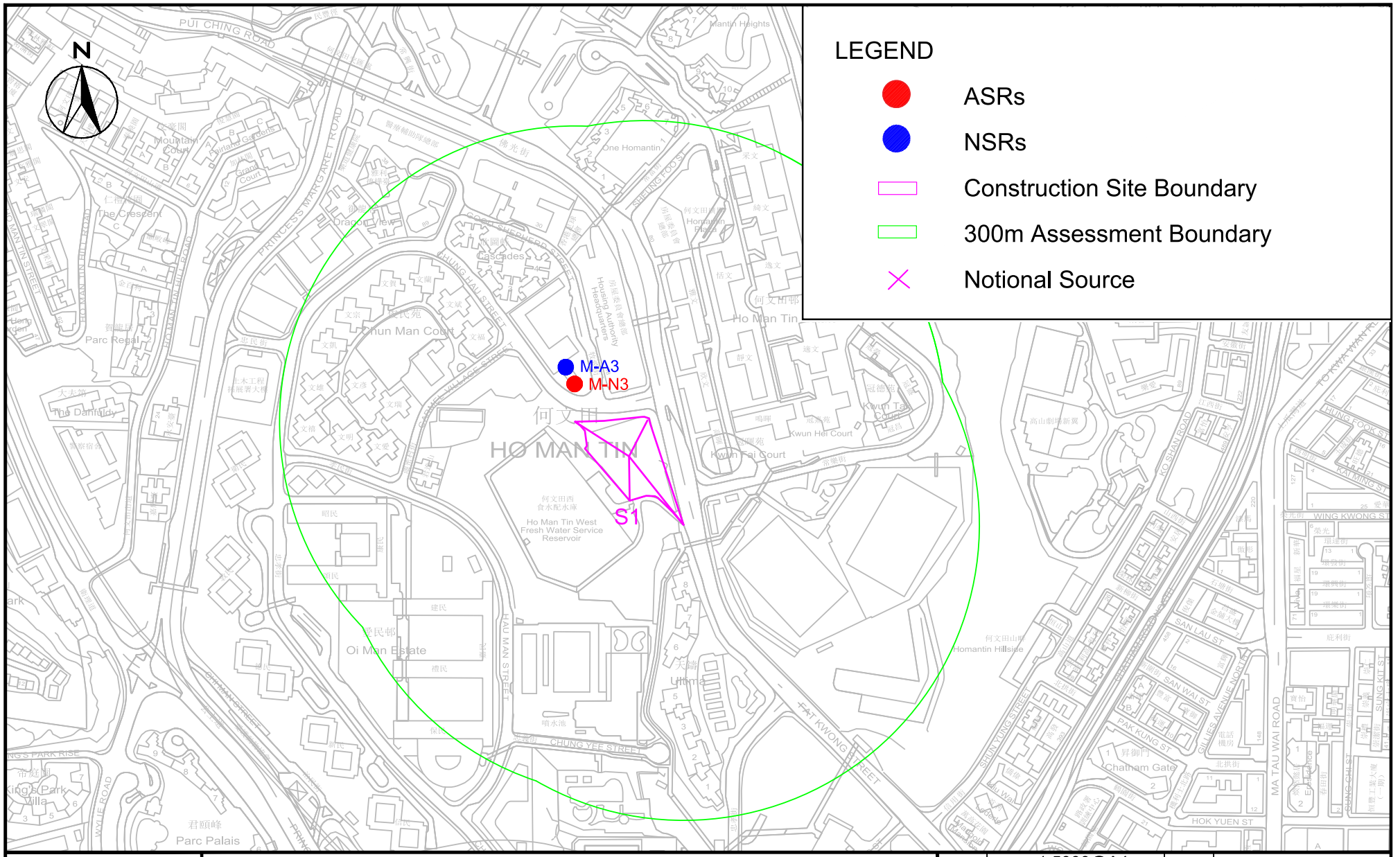


CINOTECH

Contract No. HY/2019/13
Central Kowloon Route – Buildings, Electrical and Mechanical Works

Project Organisation For Environmental Monitoring and Audit

SCALE	N.T.S.	**DATE**	Nov 2020
CHECK	BC	**DRAWN**	EH
JOB NO.	MA20024	**FIGURE NO.**	2



CINOTECH
Cinotech Consultants Limited

Contract No. HY/2019/13
Central Kowloon Route - Buildings, Electrical and Mechanical Works

Site Plan with Monitoring Locations - Ho Man Tin Area

SCALE	1:5000@A4	DATE	DEC 2023
CHECK	KC	DRAWN	DC
JOB No.	MA20024	FIGURE NO. 3	REV -

APPENDIX A
ACTION AND LIMIT LEVELS FOR AIR QUALITY AND NOISE

Appendix A – Action and Limit Levels

Table A-1 Action and Limit Levels for 1-Hour TSP

Monitoring Stations	Action Level, µg/m^3	Limit Level, µg/m^3
M-A3	333	500

Table A-2 Action and Limit Levels for 24-Hour TSP

Monitoring Stations	Action Level, µg/m^3	Limit Level, µg/m^3
M-A3	153	260

Table A-3 Action and Limit Levels for Construction Noise

Monitoring Stations	Action Level	Limit Level
M-N3	When one documented complaint is received	For Schools: 70dB(A) during normal teaching period and 65 dB(A) during examination periods

APPENDIX B
COPIES OF CALIBRATION CERTIFICATES

CERTIFICATE OF CALIBRATION

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler, hereinafter ("HVS")

Equipment Calibrated:		**Standard Equipment:**	
Type:	Dust Monitor System	Type:	High Volume Sampler
Model:	OC-9200	Model:	TE 5170
Equipment No.:	A-06-03	Equipment No.:	A-01-75
Serial No.:	OC20210316224101	Serial No.:	3499
Sensitivity.:	0.001mg/m3	Tisch Calibration Orifice No.:	3864

Date of Calibration:	21-Aug-25
Validity of Calibration Record:	21-Oct-25

Calibration

Calibration Points:	Time	High Volume Sampler	Dust Monitor System
	Minutes	Mass concetration [µg/m^3]	Mass concetration [µg/m^3]
		y Axis	**x Axis**
0	60	0	0
1	60	215.0	75.0
2	60	130.0	48.0
3	60	94.0	36.0
Average	60	109.8	39.8

With the aid of the mathematical model of Simple Linear Regression, the following values are calculated as:

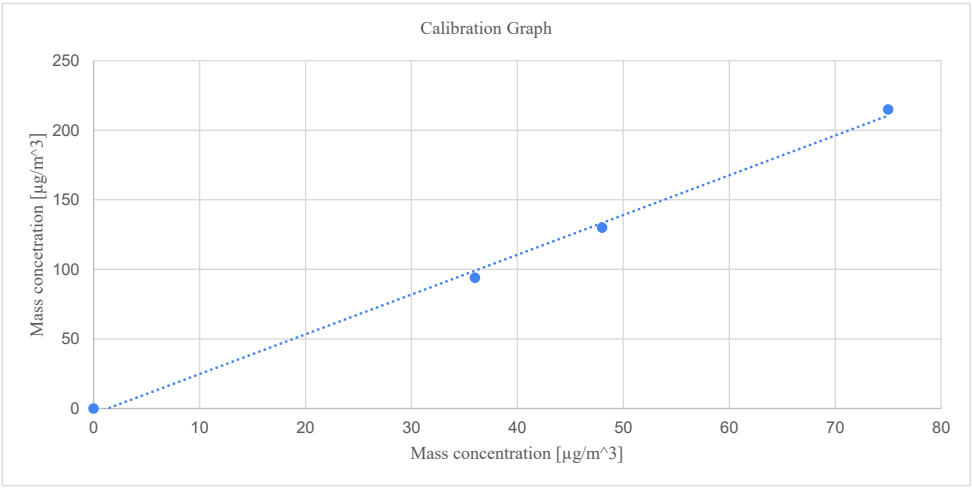
Slope:	2.85695843
Intercept:	-3.81409760
Correlation Coefficient:	0.99849416

If the correlation coefficient is green (ie larger than 0.90), then no recalibration is required

Scale factor (K):	**2.9**	(to one decimal point)

Equation of line:

y(HVS)=3.6x(OC-9200)



In-house method in according to the instruction manual:
The OC-9200 was compared with a calibrated HVS; the result has been used to calculate the scale factor and correlation coefficient between the two equipment.
The filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Recorded by:	Signature:	Date:
Technical Officer (Wong Shing Kwai)		21-Aug-25
Checked by:	Signature:	Date:
Project Manager (Henry Leung)		21-Aug-25

CERTIFICATE OF CALIBRATION

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler, hereinafter ("HVS")

Equipment Calibrated:		**Standard Equipment:**	
Type:	Dust Monitor System	Type:	High Volume Sampler
Model:	OC-9200	Model:	TE 5170
Equipment No.:	A-06-03	Equipment No.:	A-01-75
Serial No.:	OC20210316224101	Serial No.:	3499
Sensitivity.:	0.001mg/m3	Tisch Calibration Orifice No.:	3864

Date of Calibration:	21-Oct-25
Validity of Calibration Record:	21-Dec-25

Calibration

Calibration Points:	Time	High Volume Sampler	Dust Monitor System
	Minutes	Mass concetration [µg/m^3]	Mass concetration [µg/m^3]
		y Axis	**x Axis**
0	60	0	0
1	60	94.0	36.0
2	60	131.0	47.0
3	60	212.0	72.0
Average	60	109.3	38.8

With the aid of the mathematical model of Simple Linear Regression, the following values are calculated as:

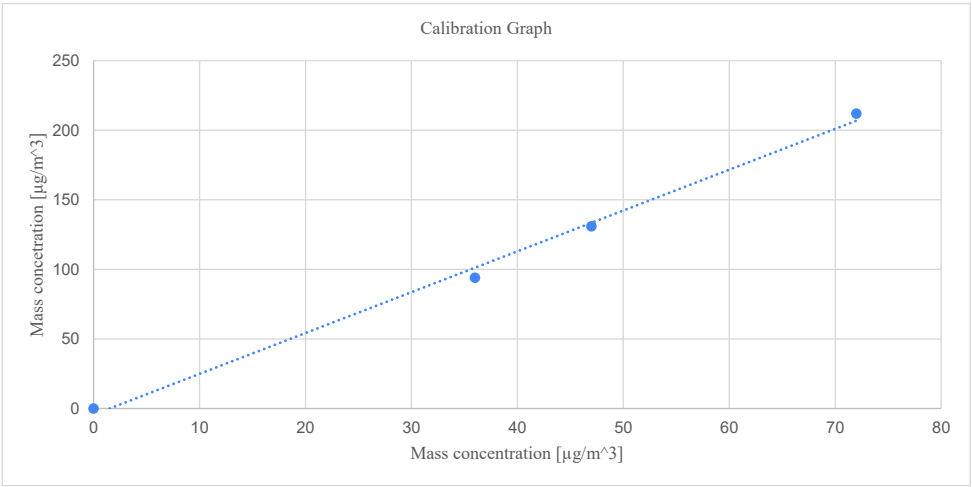
Slope:	2.93402292
Intercept:	-4.44338831
Correlation Coefficient:	0.99774903

If the correlation coefficient is green (ie larger than 0.90), then no recalibration is required

Scale factor (K):	**2.9**	(to one decimal point)

Equation of line:

y(HVS)=3.6x(OC-9200)



In-house method in according to the instruction manual:
The OC-9200 was compared with a calibrated HVS; the result has been used to calculate the scale factor and correlation coefficient between the two equipment.
The filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Recorded by:	Signature:	Date:
Technical Officer (Wong Shing Kwai)		21-Oct-25
Checked by:	Signature:	Date:
Project Manager (Henry Leung)		21-Oct-25

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20024/74/0011

Location. M-A3 - S.K.H Tsoi Kung Po Secondary School

Date: 8-Aug-25 Next Due Date: 8-Oct-25 Operator: SK

Equipment No.: A-01-74 Model No.: TE-5170 Serial No. 2204

Ambient Condition			
Temperature, Ta (K)	302.8	Pressure, Pa (mmHg)	756.6

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377
Last Calibration Date:	7-Jan-25	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-26	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

.

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	15.7	3.92	66.72	9.5	3.05
2	12.5	3.50	59.58	8.0	2.80
3	9.5	3.05	51.99	6.4	2.50
4	5.8	2.38	40.71	3.6	1.88
5	3.3	1.80	30.81	1.9	1.36

By Linear Regression of Y on X

Slope , mw = **0.0477** **Intercept, bw =** **-0.0661**

Correlation coefficient* = **0.9962**

*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 x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.03**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 8-Aug-25

Checked by: Henry Leung Signature: Date: 8-Aug-25

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20024/74/0012

Location. M-A3 - S.K.H Tsoi Kung Po Secondary School

Date: 8-Oct-25 Next Due Date: 8-Dec-25 Operator: SK

Equipment No.: A-01-74 Model No.: TE-5170 Serial No. 2204

Ambient Condition			
Temperature, Ta (K)	303	Pressure, Pa (mmHg)	759.6

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377
Last Calibration Date:	7-Jan-25	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-26	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

.

Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	15.6	3.92	66.62	9.4	3.04
2	12.3	3.48	59.20	8.2	2.84
3	9.4	3.04	51.80	6.5	2.53
4	5.6	2.35	40.07	3.5	1.85
5	3.2	1.77	30.39	1.7	1.29

By Linear Regression of Y on X

Slope , mw = **0.0495** **Intercept, bw =** **-0.1430**

Correlation coefficient* = **0.9923**

*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 x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.00**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 8-Oct-25

Checked by: Henry Leung Signature: Date: 8-Oct-25

TISCH Environmental

RECALIBRATION DUE DATE:
January 7, 2026

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 7, 2025	**Rootsmeter S/N:** 438320	**Ta:** 293	°K
Operator:	Jim Tisch		**Pa:** 759.0	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	1.4590	3.2	2.00
2	3	4	1	1.0360	6.4	4.00
3	5	6	1	0.9160	8.0	5.00
4	7	8	1	0.8800	8.8	5.50
5	9	10	1	0.7270	12.7	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)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
1.0114	0.6932	1.4252	0.9958	0.6825	0.8787
1.0071	0.9721	2.0156	0.9916	0.9571	1.2427
1.0050	1.0971	2.2535	0.9895	1.0802	1.3893
1.0039	1.1408	2.3635	0.9884	1.1232	1.4572
0.9987	1.3737	2.8505	0.9833	1.3525	1.7574
QSTD	**m=**	**2.08969**	**QA**	**m=**	**1.30853**
	b=	**-0.02374**		**b=**	**-0.01464**
	r=	**0.99985**		**r=**	**0.99985**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
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= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

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

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

Certificate of Calibration - Wind Monitoring Station

Description: M-A3 - S.K.H Tsoi Kung Po Secondary School

Model No.: C-OC-9200-wind

Serial No.: OC20210316224101

Equipment No.: A-06-03

Date of Calibration 20-Jun-2025

Next Due Date 20-Dec-2025

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
2.0	2.2	-0.2
3.0	3.2	-0.2
4.0	4.2	-0.2

2. Performance check of Wind Direction

Wind Direction (^{o})		Difference D (^{o})
Wind Direction Reading (W1)	Marine Compass Value (W1)	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. : 01074 Issue Date : 19 Mar 2025
Application No. : HP00912

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 : 17 Mar 2025

Test Period : 18 Mar 2025 to 18 Mar 2025

Test Requested : Performance checking for Sound Level Meter

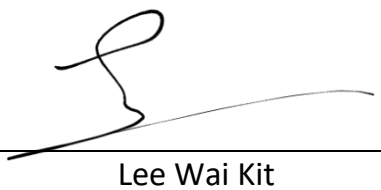
Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

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



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. : 01074 Issue Date : 19 Mar 2025
Application No. : HP00912

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 -

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. : 01075 Issue Date : 19 Mar 2025
Application No. : HP00913

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-12-04

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580238
Microphone No.	570605

Date Received : 17 Mar 2025

Test Period : 18 Mar 2025 to 18 Mar 2025

Test Requested : Performance checking for Sound Level Meter

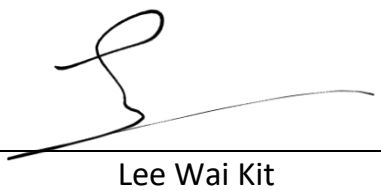
Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

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



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. : 01075 Issue Date : 19 Mar 2025
Application No. : HP00913

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	114.1	+ 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. : 01015 Issue Date : 04 Feb 2025
Application No. : HP00868

Certificate of Calibration

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

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

Equipment No.: : N-16-02

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information :

Model No.	AWA6021A
Serial No.	1023064

Date Received : 28 Jan 2025

Test Period : 03 Feb 2025 to 04 Feb 2025

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. : 01015 Issue Date : 04 Feb 2025
Application No. : HP00868

Certificate of Calibration

Measuring equipment :

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

Description	Sound Meter
Manufacturer	SVANTEK
Model No.	SVAN 977
Serial No.	92677
Microphone No.	10352
Equipment No.	N-14-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 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 -

APPENDIX C
WEATHER INFORMATION

October 2025			
Date	**Mean Air Temperature (°C)[1]**	**Mean Relative Humidity (%)[2]**	**Precipitation (mm)[3]**
1-Oct-25	29.8	73	0.0
2-Oct-25	29.5	76	Trace
3-Oct-25	29.7	73	0.0
4-Oct-25	29.6	70	0.6
5-Oct-25	28.8	81	1.0
6-Oct-25	28.6	81	0.6
7-Oct-25	29.3	72	0.0
8-Oct-25	30.0	71	0.0
9-Oct-25	29.8	73	Trace
10-Oct-25	29.2	75	0.1
11-Oct-25	29.5	75	0.0
12-Oct-25	28.3	85	15.7
13-Oct-25	28.7	84	3.8
14-Oct-25	29.1	80	5.5
15-Oct-25	29.7	73	0.0
16-Oct-25	29.6	72	0.0
17-Oct-25	29.6	72	0.0
18-Oct-25	29.9	74	0.0
19-Oct-25	30.1	67	0.0
20-Oct-25	26.8	66	Trace
21-Oct-25	22.4	70	0.1
22-Oct-25	19.2	76	3.3
23-Oct-25	20.8	65	0.0
24-Oct-25	23.3	60	Trace
25-Oct-25	25.6	60	Trace
26-Oct-25	26.5	57	0.0
27-Oct-25	24.6	63	Trace
28-Oct-25	23.4	73	0.5
29-Oct-25	24.4	73	Trace
30-Oct-25	26.3	70	Trace
31-Oct-25	26.6	68	0.0

(Reporting Month: Oct 2025)

Remarks:

***** Meterological data from Hong Kong Observatory Manned Weather Station was adopted.

Source - Hong Kong Observatory

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

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
1 Oct 2025	12:00 AM	SW	0.2
1 Oct 2025	1:00 AM	S	0.3
1 Oct 2025	2:00 AM	WSW	0.2
1 Oct 2025	3:00 AM	WSW	0.0
1 Oct 2025	4:00 AM	SW	0.3
1 Oct 2025	5:00 AM	SSE	0.3
1 Oct 2025	6:00 AM	SSE	0.1
1 Oct 2025	7:00 AM	SW	0.1
1 Oct 2025	8:00 AM	WSW	0.2
1 Oct 2025	9:00 AM	S	0.3
1 Oct 2025	10:00 AM	SE	0.4
1 Oct 2025	11:00 AM	S	0.2
1 Oct 2025	12:00 PM	SSW	0.6
1 Oct 2025	1:00 PM	SW	1.0
1 Oct 2025	2:00 PM	SW	1.0
1 Oct 2025	3:00 PM	WSW	0.9
1 Oct 2025	4:00 PM	WSW	1.0
1 Oct 2025	5:00 PM	SW	0.7
1 Oct 2025	6:00 PM	SW	0.7
1 Oct 2025	7:00 PM	SW	0.5
1 Oct 2025	8:00 PM	SW	0.4
1 Oct 2025	9:00 PM	W	0.5
1 Oct 2025	10:00 PM	WSW	0.4
1 Oct 2025	11:00 PM	SW	0.4
2 Oct 2025	12:00 AM	WSW	0.5
2 Oct 2025	1:00 AM	WSW	0.3
2 Oct 2025	2:00 AM	WSW	0.3
2 Oct 2025	3:00 AM	W	0.3
2 Oct 2025	4:00 AM	SW	0.3
2 Oct 2025	5:00 AM	WSW	0.3
2 Oct 2025	6:00 AM	SW	0.2
2 Oct 2025	7:00 AM	WSW	0.4
2 Oct 2025	8:00 AM	WSW	0.5
2 Oct 2025	9:00 AM	W	0.7
2 Oct 2025	10:00 AM	W	0.9
2 Oct 2025	11:00 AM	W	1.1
2 Oct 2025	12:00 PM	W	0.9
2 Oct 2025	1:00 PM	W	1.0
2 Oct 2025	2:00 PM	WNW	0.9
2 Oct 2025	3:00 PM	W	0.8
2 Oct 2025	4:00 PM	WSW	0.9

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
2 Oct 2025	5:00 PM	SW	0.6
2 Oct 2025	6:00 PM	SW	0.5
2 Oct 2025	7:00 PM	WSW	0.6
2 Oct 2025	8:00 PM	S	0.6
2 Oct 2025	9:00 PM	WSW	0.3
2 Oct 2025	10:00 PM	WSW	0.3
2 Oct 2025	11:00 PM	SW	0.3
3 Oct 2025	12:00 AM	SW	0.3
3 Oct 2025	1:00 AM	WSW	0.3
3 Oct 2025	2:00 AM	WSW	0.2
3 Oct 2025	3:00 AM	WSW	0.2
3 Oct 2025	4:00 AM	W	0.2
3 Oct 2025	5:00 AM	W	0.1
3 Oct 2025	6:00 AM	SW	0.2
3 Oct 2025	7:00 AM	S	0.1
3 Oct 2025	8:00 AM	SSW	0.2
3 Oct 2025	9:00 AM	SSW	0.4
3 Oct 2025	10:00 AM	SSW	0.2
3 Oct 2025	11:00 AM	WSW	0.7
3 Oct 2025	12:00 PM	WSW	0.8
3 Oct 2025	1:00 PM	WSW	0.4
3 Oct 2025	2:00 PM	S	0.5
3 Oct 2025	3:00 PM	SSW	0.5
3 Oct 2025	4:00 PM	WSW	0.3
3 Oct 2025	5:00 PM	SSW	0.3
3 Oct 2025	6:00 PM	SSE	0.1
3 Oct 2025	7:00 PM	WSW	0.0
3 Oct 2025	8:00 PM	WSW	0.0
3 Oct 2025	9:00 PM	NW	0.0
3 Oct 2025	10:00 PM	WSW	0.1
3 Oct 2025	11:00 PM	WSW	0.2
4 Oct 2025	12:00 AM	S	0.1
4 Oct 2025	1:00 AM	WSW	0.0
4 Oct 2025	2:00 AM	W	0.2
4 Oct 2025	3:00 AM	W	0.1
4 Oct 2025	4:00 AM	W	0.2
4 Oct 2025	5:00 AM	W	0.1
4 Oct 2025	6:00 AM	WSW	0.2
4 Oct 2025	7:00 AM	WSW	0.1
4 Oct 2025	8:00 AM	SW	0.3
4 Oct 2025	9:00 AM	S	0.5

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
4 Oct 2025	10:00 AM	SSW	0.7
4 Oct 2025	11:00 AM	S	0.8
4 Oct 2025	12:00 PM	S	0.8
4 Oct 2025	1:00 PM	SSW	1.0
4 Oct 2025	2:00 PM	S	0.9
4 Oct 2025	3:00 PM	S	1.2
4 Oct 2025	4:00 PM	SSW	0.6
4 Oct 2025	5:00 PM	SW	0.6
4 Oct 2025	6:00 PM	S	0.8
4 Oct 2025	7:00 PM	SSW	1.0
4 Oct 2025	8:00 PM	S	1.0
4 Oct 2025	9:00 PM	SW	0.9
4 Oct 2025	10:00 PM	SSW	1.1
4 Oct 2025	11:00 PM	SW	1.0
5 Oct 2025	12:00 AM	SW	1.1
5 Oct 2025	1:00 AM	S	1.1
5 Oct 2025	2:00 AM	SSW	1.3
5 Oct 2025	3:00 AM	SSW	1.3
5 Oct 2025	4:00 AM	SSW	1.4
5 Oct 2025	5:00 AM	SSW	1.2
5 Oct 2025	6:00 AM	SW	1.2
5 Oct 2025	7:00 AM	SSW	1.2
5 Oct 2025	8:00 AM	SSW	1.6
5 Oct 2025	9:00 AM	SW	1.5
5 Oct 2025	10:00 AM	SW	1.4
5 Oct 2025	11:00 AM	SSW	1.3
5 Oct 2025	12:00 PM	SW	1.2
5 Oct 2025	1:00 PM	SW	1.0
5 Oct 2025	2:00 PM	SSW	1.0
5 Oct 2025	3:00 PM	SSW	1.1
5 Oct 2025	4:00 PM	SSW	1.2
5 Oct 2025	5:00 PM	SSW	0.9
5 Oct 2025	6:00 PM	SSW	0.9
5 Oct 2025	7:00 PM	SW	0.9
5 Oct 2025	8:00 PM	WSW	0.8
5 Oct 2025	9:00 PM	W	0.6
5 Oct 2025	10:00 PM	WSW	0.6
5 Oct 2025	11:00 PM	WSW	0.7
6 Oct 2025	12:00 AM	SSW	0.7
6 Oct 2025	1:00 AM	SSW	0.5
6 Oct 2025	2:00 AM	SW	0.6

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
6 Oct 2025	3:00 AM	W	0.6
6 Oct 2025	4:00 AM	SW	0.7
6 Oct 2025	5:00 AM	SW	0.4
6 Oct 2025	6:00 AM	WSW	0.3
6 Oct 2025	7:00 AM	S	0.3
6 Oct 2025	8:00 AM	SW	0.4
6 Oct 2025	9:00 AM	SW	0.7
6 Oct 2025	10:00 AM	WSW	0.8
6 Oct 2025	11:00 AM	WNW	0.8
6 Oct 2025	12:00 PM	WSW	1.0
6 Oct 2025	1:00 PM	WNW	0.7
6 Oct 2025	2:00 PM	W	0.7
6 Oct 2025	3:00 PM	SW	0.8
6 Oct 2025	4:00 PM	WNW	0.6
6 Oct 2025	5:00 PM	SW	0.4
6 Oct 2025	6:00 PM	SW	0.4
6 Oct 2025	7:00 PM	SSW	0.3
6 Oct 2025	8:00 PM	WSW	0.2
6 Oct 2025	9:00 PM	SW	0.0
6 Oct 2025	10:00 PM	WNW	0.2
6 Oct 2025	11:00 PM	WNW	0.1
7 Oct 2025	12:00 AM	NNW	0.1
7 Oct 2025	1:00 AM	N	0.0
7 Oct 2025	2:00 AM	N	0.0
7 Oct 2025	3:00 AM	NNW	0.0
7 Oct 2025	4:00 AM	NNW	0.0
7 Oct 2025	5:00 AM	NNW	0.0
7 Oct 2025	6:00 AM	NNW	0.0
7 Oct 2025	7:00 AM	NNW	0.1
7 Oct 2025	8:00 AM	W	0.1
7 Oct 2025	9:00 AM	S	0.2
7 Oct 2025	10:00 AM	NW	0.3
7 Oct 2025	11:00 AM	WSW	0.3
7 Oct 2025	12:00 PM	SSW	0.3
7 Oct 2025	1:00 PM	S	0.5
7 Oct 2025	2:00 PM	SW	0.2
7 Oct 2025	3:00 PM	SW	0.2
7 Oct 2025	4:00 PM	WSW	0.2
7 Oct 2025	5:00 PM	W	0.4
7 Oct 2025	6:00 PM	SW	0.2
7 Oct 2025	7:00 PM	S	0.2

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
7 Oct 2025	8:00 PM	S	0.1
7 Oct 2025	9:00 PM	WSW	0.1
7 Oct 2025	10:00 PM	WNW	0.1
7 Oct 2025	11:00 PM	NW	0.1
8 Oct 2025	12:00 AM	SSW	0.2
8 Oct 2025	1:00 AM	WNW	0.4
8 Oct 2025	2:00 AM	WNW	0.2
8 Oct 2025	3:00 AM	WNW	0.1
8 Oct 2025	4:00 AM	WNW	0.1
8 Oct 2025	5:00 AM	WSW	0.1
8 Oct 2025	6:00 AM	ESE	0.1
8 Oct 2025	7:00 AM	SW	0.3
8 Oct 2025	8:00 AM	SSW	0.3
8 Oct 2025	9:00 AM	SW	0.5
8 Oct 2025	10:00 AM	W	0.5
8 Oct 2025	11:00 AM	SSW	0.8
8 Oct 2025	12:00 PM	SSW	0.7
8 Oct 2025	1:00 PM	SW	0.8
8 Oct 2025	2:00 PM	SW	0.7
8 Oct 2025	3:00 PM	SW	0.8
8 Oct 2025	4:00 PM	SSW	0.6
8 Oct 2025	5:00 PM	SSW	0.6
8 Oct 2025	6:00 PM	W	0.7
8 Oct 2025	7:00 PM	WSW	0.6
8 Oct 2025	8:00 PM	WSW	0.7
8 Oct 2025	9:00 PM	WNW	0.6
8 Oct 2025	10:00 PM	WSW	0.5
8 Oct 2025	11:00 PM	WSW	0.5
9 Oct 2025	12:00 AM	WSW	0.2
9 Oct 2025	1:00 AM	SSW	0.3
9 Oct 2025	2:00 AM	SSW	0.2
9 Oct 2025	3:00 AM	SW	0.2
9 Oct 2025	4:00 AM	SSW	0.3
9 Oct 2025	5:00 AM	SW	0.2
9 Oct 2025	6:00 AM	SSW	0.1
9 Oct 2025	7:00 AM	S	0.3
9 Oct 2025	8:00 AM	S	0.4
9 Oct 2025	9:00 AM	SW	0.6
9 Oct 2025	10:00 AM	S	0.9
9 Oct 2025	11:00 AM	SSW	1.1
9 Oct 2025	12:00 PM	S	1.1

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
9 Oct 2025	1:00 PM	SSW	1.1
9 Oct 2025	2:00 PM	SW	0.9
9 Oct 2025	3:00 PM	SSW	0.9
9 Oct 2025	4:00 PM	S	0.8
9 Oct 2025	5:00 PM	SSW	0.6
9 Oct 2025	6:00 PM	WSW	0.6
9 Oct 2025	7:00 PM	W	0.6
9 Oct 2025	8:00 PM	WSW	0.5
9 Oct 2025	9:00 PM	W	0.6
9 Oct 2025	10:00 PM	NW	0.5
9 Oct 2025	11:00 PM	WSW	0.4
10 Oct 2025	12:00 AM	WSW	0.3
10 Oct 2025	1:00 AM	WSW	0.3
10 Oct 2025	2:00 AM	SE	0.2
10 Oct 2025	3:00 AM	W	0.2
10 Oct 2025	4:00 AM	W	0.1
10 Oct 2025	5:00 AM	W	0.2
10 Oct 2025	6:00 AM	ESE	0.2
10 Oct 2025	7:00 AM	WSW	0.2
10 Oct 2025	8:00 AM	S	0.3
10 Oct 2025	9:00 AM	SW	0.2
10 Oct 2025	10:00 AM	NW	0.5
10 Oct 2025	11:00 AM	SW	0.7
10 Oct 2025	12:00 PM	SW	0.8
10 Oct 2025	1:00 PM	SW	0.7
10 Oct 2025	2:00 PM	SW	0.7
10 Oct 2025	3:00 PM	SW	0.7
10 Oct 2025	4:00 PM	SSW	0.5
10 Oct 2025	5:00 PM	W	0.6
10 Oct 2025	6:00 PM	SW	0.4
10 Oct 2025	7:00 PM	SW	0.3
10 Oct 2025	8:00 PM	SW	0.3
10 Oct 2025	9:00 PM	SSW	0.3
10 Oct 2025	10:00 PM	SW	0.3
10 Oct 2025	11:00 PM	SW	0.3
11 Oct 2025	12:00 AM	SW	0.1
11 Oct 2025	1:00 AM	WNW	0.2
11 Oct 2025	2:00 AM	SW	0.1
11 Oct 2025	3:00 AM	WSW	0.2
11 Oct 2025	4:00 AM	WSW	0.1
11 Oct 2025	5:00 AM	W	0.0

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
11 Oct 2025	6:00 AM	WSW	0.1
11 Oct 2025	7:00 AM	S	0.1
11 Oct 2025	8:00 AM	SW	0.3
11 Oct 2025	9:00 AM	S	0.5
11 Oct 2025	10:00 AM	SSW	0.5
11 Oct 2025	11:00 AM	S	0.7
11 Oct 2025	12:00 PM	SW	0.8
11 Oct 2025	1:00 PM	SW	1.1
11 Oct 2025	2:00 PM	SSW	0.8
11 Oct 2025	3:00 PM	WSW	0.8
11 Oct 2025	4:00 PM	WSW	0.6
11 Oct 2025	5:00 PM	SW	0.3
11 Oct 2025	6:00 PM	SW	0.3
11 Oct 2025	7:00 PM	SSW	0.6
11 Oct 2025	8:00 PM	WSW	0.5
11 Oct 2025	9:00 PM	W	0.5
11 Oct 2025	10:00 PM	SSW	0.4
11 Oct 2025	11:00 PM	SW	0.4
12 Oct 2025	12:00 AM	SW	0.4
12 Oct 2025	1:00 AM	SW	0.5
12 Oct 2025	2:00 AM	SW	0.4
12 Oct 2025	3:00 AM	WSW	0.4
12 Oct 2025	4:00 AM	SW	0.4
12 Oct 2025	5:00 AM	SW	0.3
12 Oct 2025	6:00 AM	SW	0.1
12 Oct 2025	7:00 AM	WSW	0.4
12 Oct 2025	8:00 AM	SW	0.6
12 Oct 2025	9:00 AM	WSW	0.4
12 Oct 2025	10:00 AM	W	0.3
12 Oct 2025	11:00 AM	SSW	0.3
12 Oct 2025	12:00 PM	ESE	0.2
12 Oct 2025	1:00 PM	SW	0.4
12 Oct 2025	2:00 PM	SW	0.6
12 Oct 2025	3:00 PM	SSW	0.6
12 Oct 2025	4:00 PM	SE	0.2
12 Oct 2025	5:00 PM	SW	0.2
12 Oct 2025	6:00 PM	NW	0.3
12 Oct 2025	7:00 PM	SW	0.3
12 Oct 2025	8:00 PM	SSW	0.3
12 Oct 2025	9:00 PM	SSW	0.2
12 Oct 2025	10:00 PM	SSW	0.3

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
12 Oct 2025	11:00 PM	SW	0.2
13 Oct 2025	12:00 AM	WNW	0.2
13 Oct 2025	1:00 AM	SW	0.2
13 Oct 2025	2:00 AM	WSW	0.1
13 Oct 2025	3:00 AM	WSW	0.1
13 Oct 2025	4:00 AM	WSW	0.1
13 Oct 2025	5:00 AM	WSW	0.1
13 Oct 2025	6:00 AM	SSW	0.1
13 Oct 2025	7:00 AM	SSW	0.1
13 Oct 2025	8:00 AM	SW	0.4
13 Oct 2025	9:00 AM	WSW	0.5
13 Oct 2025	10:00 AM	SW	0.6
13 Oct 2025	11:00 AM	SW	0.7
13 Oct 2025	12:00 PM	WSW	0.7
13 Oct 2025	1:00 PM	WSW	0.9
13 Oct 2025	2:00 PM	SW	0.8
13 Oct 2025	3:00 PM	W	0.6
13 Oct 2025	4:00 PM	WNW	0.8
13 Oct 2025	5:00 PM	WSW	0.5
13 Oct 2025	6:00 PM	SW	0.4
13 Oct 2025	7:00 PM	W	0.3
13 Oct 2025	8:00 PM	W	0.4
13 Oct 2025	9:00 PM	WSW	0.3
13 Oct 2025	10:00 PM	S	0.2
13 Oct 2025	11:00 PM	SSW	0.3
14 Oct 2025	12:00 AM	W	0.2
14 Oct 2025	1:00 AM	W	0.1
14 Oct 2025	2:00 AM	S	0.2
14 Oct 2025	3:00 AM	E	0.1
14 Oct 2025	4:00 AM	SE	0.0
14 Oct 2025	5:00 AM	SW	0.1
14 Oct 2025	6:00 AM	WNW	0.2
14 Oct 2025	7:00 AM	NW	0.1
14 Oct 2025	8:00 AM	NNW	0.3
14 Oct 2025	9:00 AM	W	0.5
14 Oct 2025	10:00 AM	WSW	0.8
14 Oct 2025	11:00 AM	W	0.9
14 Oct 2025	12:00 PM	WSW	0.9
14 Oct 2025	1:00 PM	WNW	0.9
14 Oct 2025	2:00 PM	WSW	0.8
14 Oct 2025	3:00 PM	W	0.6

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
14 Oct 2025	4:00 PM	WSW	0.5
14 Oct 2025	5:00 PM	WNW	0.6
14 Oct 2025	6:00 PM	NW	0.6
14 Oct 2025	7:00 PM	WNW	0.4
14 Oct 2025	8:00 PM	NW	0.4
14 Oct 2025	9:00 PM	W	0.4
14 Oct 2025	10:00 PM	NW	0.3
14 Oct 2025	11:00 PM	NNW	0.4
15 Oct 2025	12:00 AM	WNW	0.2
15 Oct 2025	1:00 AM	W	0.3
15 Oct 2025	2:00 AM	WNW	0.1
15 Oct 2025	3:00 AM	WSW	0.1
15 Oct 2025	4:00 AM	NW	0.0
15 Oct 2025	5:00 AM	NNW	0.1
15 Oct 2025	6:00 AM	NNW	0.1
15 Oct 2025	7:00 AM	NNW	0.1
15 Oct 2025	8:00 AM	SW	0.5
15 Oct 2025	9:00 AM	NW	0.6
15 Oct 2025	10:00 AM	WNW	0.7
15 Oct 2025	11:00 AM	WNW	0.7
15 Oct 2025	12:00 PM	W	0.7
15 Oct 2025	1:00 PM	WNW	0.7
15 Oct 2025	2:00 PM	WNW	0.6
15 Oct 2025	3:00 PM	WNW	0.6
15 Oct 2025	4:00 PM	NW	0.6
15 Oct 2025	5:00 PM	NW	0.5
15 Oct 2025	6:00 PM	WNW	0.3
15 Oct 2025	7:00 PM	WNW	0.2
15 Oct 2025	8:00 PM	WNW	0.2
15 Oct 2025	9:00 PM	W	0.2
15 Oct 2025	10:00 PM	NW	0.1
15 Oct 2025	11:00 PM	SSE	0.1
16 Oct 2025	12:00 AM	ESE	0.1
16 Oct 2025	1:00 AM	WSW	0.2
16 Oct 2025	2:00 AM	W	0.2
16 Oct 2025	3:00 AM	WSW	0.1
16 Oct 2025	4:00 AM	WSW	0.1
16 Oct 2025	5:00 AM	WNW	1.0
16 Oct 2025	6:00 AM	WNW	0.7
16 Oct 2025	7:00 AM	W	0.7
16 Oct 2025	8:00 AM	WNW	0.4

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
16 Oct 2025	9:00 AM	W	0.1
16 Oct 2025	10:00 AM	WNW	0.1
16 Oct 2025	11:00 AM	SSW	0.2
16 Oct 2025	12:00 PM	W	0.4
16 Oct 2025	1:00 PM	NW	0.2
16 Oct 2025	2:00 PM	WSW	0.3
16 Oct 2025	3:00 PM	ESE	0.1
16 Oct 2025	4:00 PM	SE	0.0
16 Oct 2025	5:00 PM	NNW	0.1
16 Oct 2025	6:00 PM	W	0.1
16 Oct 2025	7:00 PM	WSW	0.2
16 Oct 2025	8:00 PM	WSW	0.2
16 Oct 2025	9:00 PM	NW	0.1
16 Oct 2025	10:00 PM	NNW	0.2
16 Oct 2025	11:00 PM	WSW	0.3
17 Oct 2025	12:00 AM	WSW	0.6
17 Oct 2025	1:00 AM	W	0.7
17 Oct 2025	2:00 AM	SW	1.1
17 Oct 2025	3:00 AM	W	1.0
17 Oct 2025	4:00 AM	W	0.9
17 Oct 2025	5:00 AM	WNW	0.7
17 Oct 2025	6:00 AM	W	0.5
17 Oct 2025	7:00 AM	NW	0.4
17 Oct 2025	8:00 AM	NW	0.4
17 Oct 2025	9:00 AM	NW	0.5
17 Oct 2025	10:00 AM	WNW	0.4
17 Oct 2025	11:00 AM	NW	0.3
17 Oct 2025	12:00 PM	NW	0.2
17 Oct 2025	1:00 PM	NE	0.4
17 Oct 2025	2:00 PM	ENE	0.1
17 Oct 2025	3:00 PM	ENE	0.1
17 Oct 2025	4:00 PM	NE	0.1
17 Oct 2025	5:00 PM	NE	0.1
17 Oct 2025	6:00 PM	ENE	0.2
17 Oct 2025	7:00 PM	NNW	0.1
17 Oct 2025	8:00 PM	NNW	0.1
17 Oct 2025	9:00 PM	NNW	0.1
17 Oct 2025	10:00 PM	NNW	0.3
17 Oct 2025	11:00 PM	WNW	0.5
18 Oct 2025	12:00 AM	W	0.5
18 Oct 2025	1:00 AM	WNW	0.4

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
18 Oct 2025	2:00 AM	SSW	0.6
18 Oct 2025	3:00 AM	SSW	0.5
18 Oct 2025	4:00 AM	WSW	0.6
18 Oct 2025	5:00 AM	NW	0.6
18 Oct 2025	6:00 AM	WNW	0.6
18 Oct 2025	7:00 AM	W	0.6
18 Oct 2025	8:00 AM	NW	0.4
18 Oct 2025	9:00 AM	S	0.3
18 Oct 2025	10:00 AM	WSW	0.3
18 Oct 2025	11:00 AM	WSW	0.2
18 Oct 2025	12:00 PM	WNW	0.6
18 Oct 2025	1:00 PM	NW	0.5
18 Oct 2025	2:00 PM	NW	0.6
18 Oct 2025	3:00 PM	NW	0.3
18 Oct 2025	4:00 PM	NW	0.3
18 Oct 2025	5:00 PM	NNW	0.3
18 Oct 2025	6:00 PM	ESE	0.2
18 Oct 2025	7:00 PM	NE	0.2
18 Oct 2025	8:00 PM	ESE	0.3
18 Oct 2025	9:00 PM	SE	0.4
18 Oct 2025	10:00 PM	S	0.4
18 Oct 2025	11:00 PM	WSW	0.5
19 Oct 2025	12:00 AM	S	0.6
19 Oct 2025	1:00 AM	S	0.7
19 Oct 2025	2:00 AM	S	0.6
19 Oct 2025	3:00 AM	SSE	0.6
19 Oct 2025	4:00 AM	S	0.5
19 Oct 2025	5:00 AM	SW	0.7
19 Oct 2025	6:00 AM	SSW	0.6
19 Oct 2025	7:00 AM	WNW	0.6
19 Oct 2025	8:00 AM	W	0.4
19 Oct 2025	9:00 AM	NE	0.3
19 Oct 2025	10:00 AM	N	0.4
19 Oct 2025	11:00 AM	SSE	0.4
19 Oct 2025	12:00 PM	SSE	0.7
19 Oct 2025	1:00 PM	ESE	1.1
19 Oct 2025	2:00 PM	ESE	0.8
19 Oct 2025	3:00 PM	SSE	0.9
19 Oct 2025	4:00 PM	S	0.9
19 Oct 2025	5:00 PM	SW	1.0
19 Oct 2025	6:00 PM	S	0.8

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
19 Oct 2025	7:00 PM	SE	1.1
19 Oct 2025	8:00 PM	SE	0.9
19 Oct 2025	9:00 PM	SSE	1.2
19 Oct 2025	10:00 PM	SSE	0.9
19 Oct 2025	11:00 PM	SSE	1.1
20 Oct 2025	12:00 AM	S	1.2
20 Oct 2025	1:00 AM	SE	1.2
20 Oct 2025	2:00 AM	SSE	1.2
20 Oct 2025	3:00 AM	SSE	1.0
20 Oct 2025	4:00 AM	S	1.1
20 Oct 2025	5:00 AM	SSW	1.2
20 Oct 2025	6:00 AM	SSE	1.1
20 Oct 2025	7:00 AM	S	1.1
20 Oct 2025	8:00 AM	SE	1.2
20 Oct 2025	9:00 AM	S	1.1
20 Oct 2025	10:00 AM	SSE	1.0
20 Oct 2025	11:00 AM	SSE	1.1
20 Oct 2025	12:00 PM	S	1.0
20 Oct 2025	1:00 PM	S	1.1
20 Oct 2025	2:00 PM	SSE	1.2
20 Oct 2025	3:00 PM	SSE	1.2
20 Oct 2025	4:00 PM	SSE	1.4
20 Oct 2025	5:00 PM	SSE	1.2
20 Oct 2025	6:00 PM	SE	1.1
20 Oct 2025	7:00 PM	S	1.0
20 Oct 2025	8:00 PM	SSE	1.3
20 Oct 2025	9:00 PM	S	1.1
20 Oct 2025	10:00 PM	S	1.2
20 Oct 2025	11:00 PM	SE	1.1
21 Oct 2025	12:00 AM	ESE	0.9
21 Oct 2025	1:00 AM	SSW	0.9
21 Oct 2025	2:00 AM	SSE	1.0
21 Oct 2025	3:00 AM	SSE	1.3
21 Oct 2025	4:00 AM	SSE	1.3
21 Oct 2025	5:00 AM	S	1.3
21 Oct 2025	6:00 AM	SSE	1.3
21 Oct 2025	7:00 AM	SE	0.9
21 Oct 2025	8:00 AM	S	1.1
21 Oct 2025	9:00 AM	SSE	0.9
21 Oct 2025	10:00 AM	S	0.8
21 Oct 2025	11:00 AM	SSE	0.7

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
21 Oct 2025	12:00 PM	S	1.2
21 Oct 2025	1:00 PM	S	0.8
21 Oct 2025	2:00 PM	SSE	1.0
21 Oct 2025	3:00 PM	SE	1.4
21 Oct 2025	4:00 PM	SSE	0.7
21 Oct 2025	5:00 PM	SSE	0.7
21 Oct 2025	6:00 PM	SSE	0.9
21 Oct 2025	7:00 PM	S	0.7
21 Oct 2025	8:00 PM	SSE	0.8
21 Oct 2025	9:00 PM	SSE	0.6
21 Oct 2025	10:00 PM	SSE	0.8
21 Oct 2025	11:00 PM	SE	0.7
22 Oct 2025	12:00 AM	SSE	0.7
22 Oct 2025	1:00 AM	SSW	0.7
22 Oct 2025	2:00 AM	E	0.8
22 Oct 2025	3:00 AM	S	0.8
22 Oct 2025	4:00 AM	SSE	0.6
22 Oct 2025	5:00 AM	S	0.6
22 Oct 2025	6:00 AM	S	1.3
22 Oct 2025	7:00 AM	SE	1.3
22 Oct 2025	8:00 AM	SSE	1.0
22 Oct 2025	9:00 AM	SSE	1.1
22 Oct 2025	10:00 AM	SSE	0.6
22 Oct 2025	11:00 AM	SW	0.5
22 Oct 2025	12:00 PM	S	0.6
22 Oct 2025	1:00 PM	SE	0.5
22 Oct 2025	2:00 PM	S	0.4
22 Oct 2025	3:00 PM	S	0.7
22 Oct 2025	4:00 PM	SSE	0.5
22 Oct 2025	5:00 PM	S	0.5
22 Oct 2025	6:00 PM	SE	0.8
22 Oct 2025	7:00 PM	SSE	0.7
22 Oct 2025	8:00 PM	SSW	0.7
22 Oct 2025	9:00 PM	S	0.6
22 Oct 2025	10:00 PM	SSE	0.9
22 Oct 2025	11:00 PM	SSE	0.9
23 Oct 2025	12:00 AM	S	0.5
23 Oct 2025	1:00 AM	SSW	0.7
23 Oct 2025	2:00 AM	SSE	0.6
23 Oct 2025	3:00 AM	SSE	0.6
23 Oct 2025	4:00 AM	SE	0.7

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
23 Oct 2025	5:00 AM	SSE	0.6
23 Oct 2025	6:00 AM	SSE	0.3
23 Oct 2025	7:00 AM	SSE	0.4
23 Oct 2025	8:00 AM	SSE	0.9
23 Oct 2025	9:00 AM	SSW	0.8
23 Oct 2025	10:00 AM	S	0.8
23 Oct 2025	11:00 AM	SSW	0.6
23 Oct 2025	12:00 PM	SSE	0.8
23 Oct 2025	1:00 PM	SE	0.6
23 Oct 2025	2:00 PM	S	1.0
23 Oct 2025	3:00 PM	S	1.0
23 Oct 2025	4:00 PM	SSE	0.6
23 Oct 2025	5:00 PM	S	0.7
23 Oct 2025	6:00 PM	S	0.5
23 Oct 2025	7:00 PM	SE	0.8
23 Oct 2025	8:00 PM	SSE	1.0
23 Oct 2025	9:00 PM	SSE	1.0
23 Oct 2025	10:00 PM	SSE	0.8
23 Oct 2025	11:00 PM	SSE	1.0
24 Oct 2025	12:00 AM	S	0.8
24 Oct 2025	1:00 AM	SE	0.8
24 Oct 2025	2:00 AM	S	0.8
24 Oct 2025	3:00 AM	SSW	0.6
24 Oct 2025	4:00 AM	SSE	0.6
24 Oct 2025	5:00 AM	S	0.6
24 Oct 2025	6:00 AM	S	0.7
24 Oct 2025	7:00 AM	SSE	0.5
24 Oct 2025	8:00 AM	S	0.6
24 Oct 2025	9:00 AM	SSW	0.5
24 Oct 2025	10:00 AM	E	0.2
24 Oct 2025	11:00 AM	ESE	0.5
24 Oct 2025	12:00 PM	S	0.7
24 Oct 2025	1:00 PM	SSW	0.6
24 Oct 2025	2:00 PM	SSE	0.5
24 Oct 2025	3:00 PM	SSE	0.5
24 Oct 2025	4:00 PM	SSE	0.3
24 Oct 2025	5:00 PM	SSE	0.5
24 Oct 2025	6:00 PM	S	0.4
24 Oct 2025	7:00 PM	SSE	0.5
24 Oct 2025	8:00 PM	SSE	0.7
24 Oct 2025	9:00 PM	SSW	0.5

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
24 Oct 2025	10:00 PM	SSE	0.8
24 Oct 2025	11:00 PM	SSW	0.5
25 Oct 2025	12:00 AM	S	0.7
25 Oct 2025	1:00 AM	SSW	0.6
25 Oct 2025	2:00 AM	SSW	0.5
25 Oct 2025	3:00 AM	SSE	0.7
25 Oct 2025	4:00 AM	SE	0.7
25 Oct 2025	5:00 AM	SSW	0.4
25 Oct 2025	6:00 AM	S	0.4
25 Oct 2025	7:00 AM	SSW	0.4
25 Oct 2025	8:00 AM	S	0.4
25 Oct 2025	9:00 AM	WSW	0.5
25 Oct 2025	10:00 AM	SSE	0.6
25 Oct 2025	11:00 AM	WSW	0.2
25 Oct 2025	12:00 PM	S	0.2
25 Oct 2025	1:00 PM	SW	0.3
25 Oct 2025	2:00 PM	WSW	0.4
25 Oct 2025	3:00 PM	SSE	0.5
25 Oct 2025	4:00 PM	S	0.4
25 Oct 2025	5:00 PM	SSW	0.6
25 Oct 2025	6:00 PM	SSE	0.7
25 Oct 2025	7:00 PM	SSW	0.7
25 Oct 2025	8:00 PM	ESE	0.7
25 Oct 2025	9:00 PM	S	0.4
25 Oct 2025	10:00 PM	SE	0.3
25 Oct 2025	11:00 PM	SSE	0.7
26 Oct 2025	12:00 AM	S	0.6
26 Oct 2025	1:00 AM	SSE	0.7
26 Oct 2025	2:00 AM	SW	0.6
26 Oct 2025	3:00 AM	S	0.7
26 Oct 2025	4:00 AM	S	0.7
26 Oct 2025	5:00 AM	SSE	0.4
26 Oct 2025	6:00 AM	E	0.3
26 Oct 2025	7:00 AM	SE	0.4
26 Oct 2025	8:00 AM	SE	0.5
26 Oct 2025	9:00 AM	S	0.5
26 Oct 2025	10:00 AM	S	0.5
26 Oct 2025	11:00 AM	SSE	0.5
26 Oct 2025	12:00 PM	SE	0.6
26 Oct 2025	1:00 PM	SSE	0.4
26 Oct 2025	2:00 PM	SSW	0.2

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
26 Oct 2025	3:00 PM	SSE	0.7
26 Oct 2025	4:00 PM	SSE	0.8
26 Oct 2025	5:00 PM	SSW	0.7
26 Oct 2025	6:00 PM	SW	0.8
26 Oct 2025	7:00 PM	SSW	0.4
26 Oct 2025	8:00 PM	SSW	0.5
26 Oct 2025	9:00 PM	S	0.9
26 Oct 2025	10:00 PM	SSE	0.8
26 Oct 2025	11:00 PM	S	0.8
27 Oct 2025	12:00 AM	SSE	0.5
27 Oct 2025	1:00 AM	SSE	0.6
27 Oct 2025	2:00 AM	S	0.5
27 Oct 2025	3:00 AM	S	0.3
27 Oct 2025	4:00 AM	SSE	0.4
27 Oct 2025	5:00 AM	S	0.4
27 Oct 2025	6:00 AM	SSW	0.5
27 Oct 2025	7:00 AM	SSE	0.6
27 Oct 2025	8:00 AM	ESE	0.8
27 Oct 2025	9:00 AM	SSE	0.4
27 Oct 2025	10:00 AM	SSE	0.4
27 Oct 2025	11:00 AM	SE	0.4
27 Oct 2025	12:00 PM	S	0.4
27 Oct 2025	1:00 PM	S	0.4
27 Oct 2025	2:00 PM	SSW	0.6
27 Oct 2025	3:00 PM	WSW	0.5
27 Oct 2025	4:00 PM	SE	0.8
27 Oct 2025	5:00 PM	NE	0.5
27 Oct 2025	6:00 PM	E	0.7
27 Oct 2025	7:00 PM	SE	0.4
27 Oct 2025	8:00 PM	SSW	0.6
27 Oct 2025	9:00 PM	E	0.6
27 Oct 2025	10:00 PM	SSE	0.5
27 Oct 2025	11:00 PM	ESE	0.5
28 Oct 2025	12:00 AM	SSE	0.5
28 Oct 2025	1:00 AM	SSE	0.8
28 Oct 2025	2:00 AM	SE	0.6
28 Oct 2025	3:00 AM	SE	0.6
28 Oct 2025	4:00 AM	NE	0.6
28 Oct 2025	5:00 AM	E	0.7
28 Oct 2025	6:00 AM	SE	0.7
28 Oct 2025	7:00 AM	SE	0.6

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
28 Oct 2025	8:00 AM	E	0.6
28 Oct 2025	9:00 AM	W	0.3
28 Oct 2025	10:00 AM	WSW	0.5
28 Oct 2025	11:00 AM	WSW	0.4
28 Oct 2025	12:00 PM	WNW	0.3
28 Oct 2025	1:00 PM	WNW	0.3
28 Oct 2025	2:00 PM	WSW	0.3
28 Oct 2025	3:00 PM	SSW	0.4
28 Oct 2025	4:00 PM	WSW	0.2
28 Oct 2025	5:00 PM	SW	0.2
28 Oct 2025	6:00 PM	S	0.2
28 Oct 2025	7:00 PM	S	0.2
28 Oct 2025	8:00 PM	W	0.2
28 Oct 2025	9:00 PM	WNW	0.3
28 Oct 2025	10:00 PM	SW	0.2
28 Oct 2025	11:00 PM	SSW	0.3
29 Oct 2025	12:00 AM	S	0.5
29 Oct 2025	1:00 AM	SSW	0.7
29 Oct 2025	2:00 AM	SSW	0.6
29 Oct 2025	3:00 AM	SSW	0.8
29 Oct 2025	4:00 AM	SSW	0.4
29 Oct 2025	5:00 AM	WSW	0.4
29 Oct 2025	6:00 AM	SSW	0.3
29 Oct 2025	7:00 AM	SW	0.1
29 Oct 2025	8:00 AM	W	0.0
29 Oct 2025	9:00 AM	WNW	0.1
29 Oct 2025	10:00 AM	WNW	0.4
29 Oct 2025	11:00 AM	SW	0.5
29 Oct 2025	12:00 PM	SW	0.5
29 Oct 2025	1:00 PM	SSW	0.4
29 Oct 2025	2:00 PM	S	0.4
29 Oct 2025	3:00 PM	SSW	0.4
29 Oct 2025	4:00 PM	WSW	0.3
29 Oct 2025	5:00 PM	WNW	0.2
29 Oct 2025	6:00 PM	WNW	0.1
29 Oct 2025	7:00 PM	WNW	0.1
29 Oct 2025	8:00 PM	WNW	0.2
29 Oct 2025	9:00 PM	SW	0.3
29 Oct 2025	10:00 PM	WSW	0.3
29 Oct 2025	11:00 PM	SSW	0.5
30 Oct 2025	12:00 AM	S	0.4

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
30 Oct 2025	1:00 AM	SSW	0.3
30 Oct 2025	2:00 AM	SSE	0.5
30 Oct 2025	3:00 AM	ESE	0.4
30 Oct 2025	4:00 AM	SSE	0.2
30 Oct 2025	5:00 AM	SSE	0.4
30 Oct 2025	6:00 AM	SE	0.1
30 Oct 2025	7:00 AM	S	0.1
30 Oct 2025	8:00 AM	S	0.0
30 Oct 2025	9:00 AM	SSW	0.2
30 Oct 2025	10:00 AM	WSW	0.1
30 Oct 2025	11:00 AM	SE	0.0
30 Oct 2025	12:00 PM	NE	0.1
30 Oct 2025	1:00 PM	E	0.0
30 Oct 2025	2:00 PM	SE	0.0
30 Oct 2025	3:00 PM	SSW	0.1
30 Oct 2025	4:00 PM	E	0.2
30 Oct 2025	5:00 PM	SSE	0.1
30 Oct 2025	6:00 PM	ESE	0.0
30 Oct 2025	7:00 PM	SSE	0.2
30 Oct 2025	8:00 PM	SSE	0.1
30 Oct 2025	9:00 PM	SE	0.2
30 Oct 2025	10:00 PM	SE	0.1
30 Oct 2025	11:00 PM	NE	0.2

October 2025			
Wind Speed and Directions			
Date	**Time**	**Direction**	**Wind Speed m-s**
31 Oct 2025	12:00 AM	E	0.3
31 Oct 2025	1:00 AM	SE	0.4
31 Oct 2025	2:00 AM	SSE	0.4
31 Oct 2025	3:00 AM	WSW	0.6
31 Oct 2025	4:00 AM	S	0.6
31 Oct 2025	5:00 AM	SW	0.7
31 Oct 2025	6:00 AM	WSW	0.7
31 Oct 2025	7:00 AM	SSE	0.6
31 Oct 2025	8:00 AM	SSE	0.6
31 Oct 2025	9:00 AM	SE	0.7
31 Oct 2025	10:00 AM	SSE	0.7
31 Oct 2025	11:00 AM	SE	0.3
31 Oct 2025	12:00 PM	SE	0.3
31 Oct 2025	1:00 PM	NE	0.4
31 Oct 2025	2:00 PM	E	0.4
31 Oct 2025	3:00 PM	SSE	0.6
31 Oct 2025	4:00 PM	SSE	0.6
31 Oct 2025	5:00 PM	S	0.7
31 Oct 2025	6:00 PM	S	0.7
31 Oct 2025	7:00 PM	SSE	0.3
31 Oct 2025	8:00 PM	S	0.5
31 Oct 2025	9:00 PM	SSW	0.7
31 Oct 2025	10:00 PM	SSE	0.6
31 Oct 2025	11:00 PM	ESE	0.8

APPENDIX D
ENVIRONMENTAL MONITORING SCHEDULES

Contract No. HY/2019/13
Environmental Monitoring Works for Contract No. HY/2019/13
Central Kowloon Route-Buildings, Electrical and Mechanical Works (Ho Man Tin Area)
Impact Air and Noise Monitoring Schedule for October 2025

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

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)
* The noise level limit is 65dB(A) during the exam period.
# The 24-hr TSP samples are collected on the next working day following the monitoring day.

Air Quality Monitoring Station
M-A3 - S.K.H. Tsoi Kung Po Secondary School

Noise Monitoring Station
M-N3 - S.K.H. Tsoi Kung Po Secondary School

Contract No. HY/2019/13
Environmental Monitoring Works for Contract No. HY/2019/13
Central Kowloon Route-Buildings, Electrical and Mechanical Works (Ho Man Tin Area)
Tentative Impact Air and Noise Monitoring Schedule for November 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Nov
						24-hr TSP #
2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov
	1-hr TSP x 3 Noise	**HVB_Fixed Plant Noise Impact Monitoring (Daytime & Nighttime) @**		**24-hr TSP #**	**1-hr TSP x 3**	
9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov
			24-hr TSP #	**1-hr TSP x 3 Noise**		
16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov
		24-hr TSP #	**1-hr TSP x 3 Noise**			
23-Nov	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov
	24-hr TSP #	**1-hr TSP x 3 Noise**				**24-hr TSP #**
30-Nov						

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)
* The noise level limit is 65dB(A) during the exam period.
# The 24-hr TSP samples are collected on the next working day following the monitoring day.
@ The Fixed Plant Noise Impact Monitoring for HVB will be conducted on 4/11/2025. The nighttime measurement will be set overnight and operated automatically.

Air Quality Monitoring Station
M-A3 - S.K.H. Tsoi Kung Po Secondary School

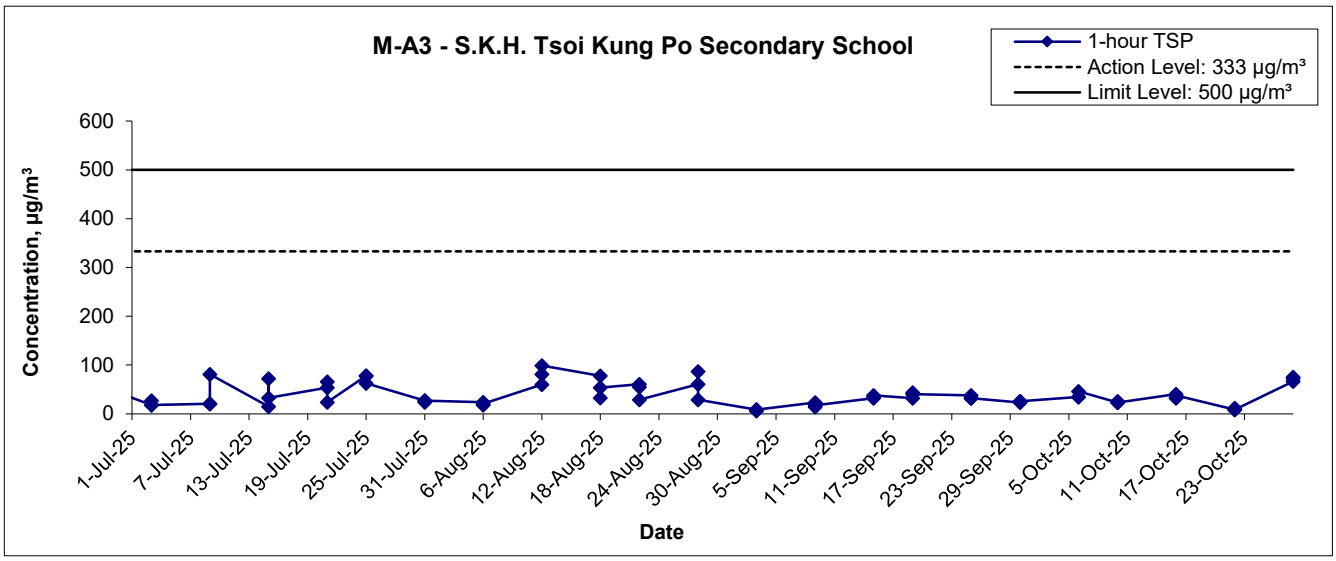
Noise Monitoring Station
M-N3 - S.K.H. Tsoi Kung Po Secondary School

APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix E - 1-hour TSP Monitoring Results

Location M-A3 - S.K.H. Tsoi Kung Po Secondary School			
Date	Time	Weather	Particulate Concentration (μg/m^3)
6-Oct-25	15:00	Sunny	34.8
6-Oct-25	16:00	Sunny	34.8
6-Oct-25	17:00	Sunny	46.4
10-Oct-25	15:00	Sunny	23.2
10-Oct-25	16:00	Sunny	26.1
10-Oct-25	17:00	Sunny	23.2
16-Oct-25	15:00	Sunny	40.6
16-Oct-25	16:00	Sunny	31.9
16-Oct-25	17:00	Sunny	37.7
22-Oct-25	15:00	Sunny	8.7
22-Oct-25	16:00	Sunny	11.6
22-Oct-25	17:00	Sunny	8.7
28-Oct-25	9:00	Cloudy	66.7
28-Oct-25	10:00	Cloudy	72.5
28-Oct-25	11:00	Cloudy	75.4
		Average	36.2
		Maximum	75.4
		Minimum	8.7
		Action Level	333.0
		Limit Level	**500.0**

1-hr TSP Concentration Levels



Title	Contract No. HY/2019/13 Central Kowloon Route – Buildings, Electrical and Mechanical Works Graphical Presentation of 1-hour TSP Monitoring Results	Scale N.T.S	Project No. MA20024	CINOTECH
		Date Oct 25	Appendix E	

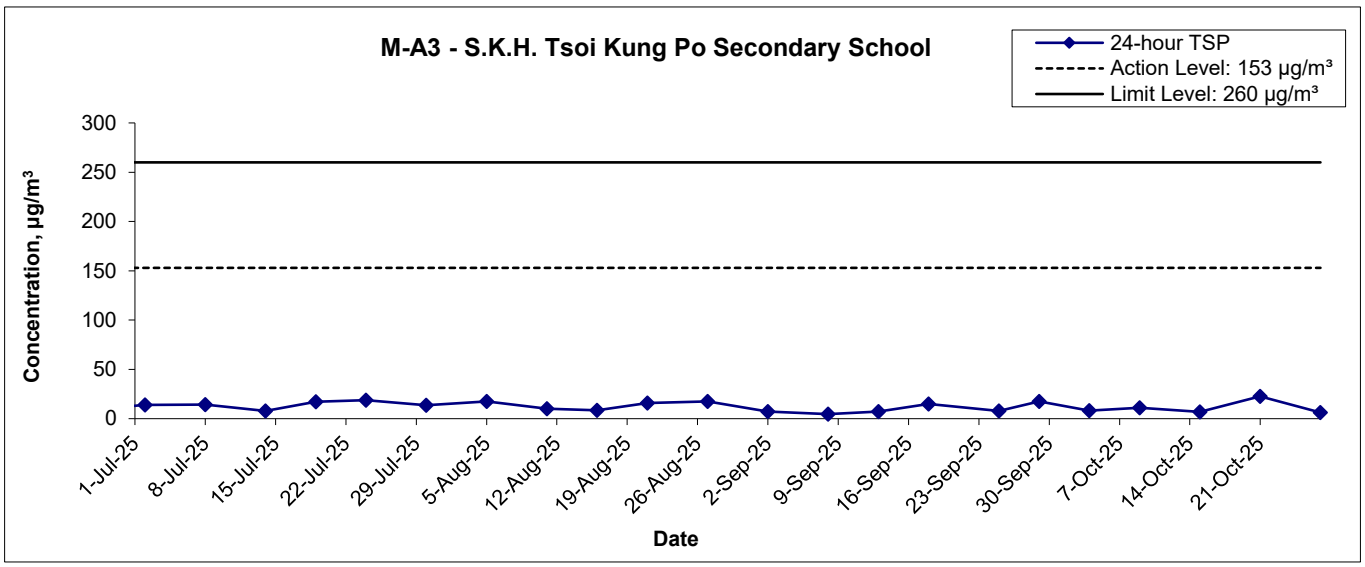
APPENDIX F
24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix F - 24-hour TSP Monitoring Results

Location M-A3 - S.K.H. Tsoi Kung Po Secondary School

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (μg/m^3)	Action Level (μg/m3)	Limit Level (μg/m4)
				Initial	Final		Initial	Final		Initial	Final					
4-Oct-25	Sunny	302.2	759.0	2.8067	2.8210	0.0143	14013.6	14037.6	24.0	1.22	1.22	1.22	1758.5	8.1	153.0	**260.0**
9-Oct-25	Sunny	302.5	760.2	2.7726	2.7923	0.0197	14037.6	14061.6	24.0	1.22	1.22	1.22	1752.2	11.2		
15-Oct-25	Sunny	302.7	761.2	2.8261	2.8381	0.0120	14061.6	14085.6	24.0	1.22	1.22	1.22	1752.9	6.8		
21-Oct-25	Rainy	293.8	762.6	2.8014	2.8418	0.0404	14085.6	14109.6	24.0	1.23	1.24	1.24	1778.8	22.7		
27-Oct-25	Cloudy	297.0	763.8	2.9337	2.9447	0.0110	14109.6	14133.6	24.0	1.23	1.23	1.23	1771.1	6.2		
													Min	6.2		
													Max	22.7		
													Average	11.0		

24-hr TSP Concentration Levels



Remark:(1) Due the Super Tropical Cyclone signal Number 10 was hoisted on 24/09/2025 the Air Quality Monitoring on that day was cancelled.

Title: Contract No. HY/2019/13 Central Kowloon Route – Buildings, Electrical and Mechanical Works Graphical Presentation of 24-hour TSP Monitoring Results	Scale: N.T.S Date: Oct 25	Project No. MA20024 Appendix: F	CINOTECH

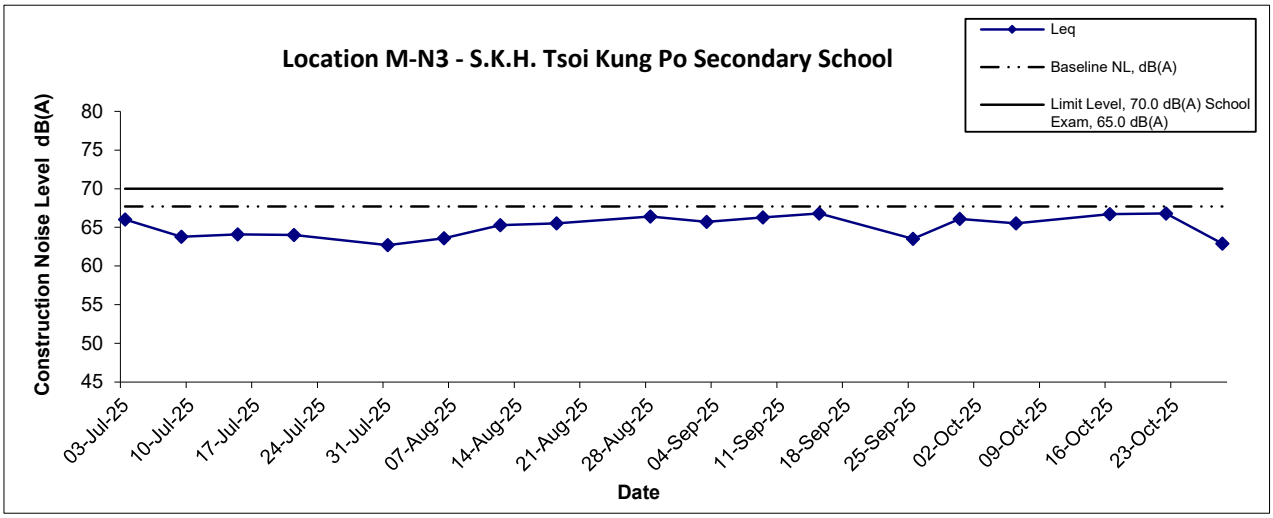
APPENDIX G
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix G - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)
Limit Level - 70.0 dB(A) / School Exam - 65.0 dB(A)

Location M-N3 - S.K.H. Tsoi Kung Po Secondary School							
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}
06-Oct-25	11:00	Sunny	65.5	68.9	54.9	67.7	65.5 Measured ≦ Baseline
16-Oct-25	16:51	Sunny	66.7	69.0	59.2	67.7	66.7 Measured ≦ Baseline
22-Oct-25	16:57	Cloudy	66.8	69.8	58.1	67.7	66.8 Measured ≦ Baseline
28-Oct-25	16:50	Sunny	62.9	65.8	55.6	67.7	62.9 Measured ≦ Baseline

Noise Levels



Title: Contract No. HY/2019/13 Central Kowloon Route – Buildings, Electrical and Mechanical Works Graphical Presentation of Construction Noise Monitoring Results	Scale: N.T.S Date: Oct-25	Project No.: MA20024 Appendix: G	CINOTECH

APPENDIX H
SUMMARY OF EXCEEDANCE

Appendix H – Summary of Exceedance

Exceedance Record for Contract No. HY/2019/13
Reporting Month: October 2025

(A) Exceedance Record for Air Quality:
(NIL in the reporting month)

(B) Exceedance Record for Construction Noise:
(NIL in the reporting month)

(C) Exceedance Record for Landscape and Visual:
(NIL in the reporting month)

APPENDIX I
EVENT ACTION PLANS

5.10 Event and Action Plan

5.8.1 Should non-compliance of the air quality criteria occur, actions in accordance with the Action Plan in **Table 5.3** shall be carried out.

Table 5.3 Event / Action Plan for Air Quality

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	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; 7. If exceedance continues, arrange meeting with IEC and ER;	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.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
	8. If exceedance stops, cease additional monitoring.			
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor 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.	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.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; 4. Amend proposal if appropriate.
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and	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; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the	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

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
	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.		work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	works as determined by the ER until the exceedance is abated.

Note:
ET – Environmental Team
IEC – Independent Environmental Checker
ER – Engineer's Representative

Table 6.4 Event / Action Plan for Construction Noise

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Action Level	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Notify IEC and Contractor; 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.	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.	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	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	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	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.	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	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

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
	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.		instruct the Contractor to stop that portion of work until the exceedance is abated.	abated.

Note:
ET – Environmental Team
IEC – Independent Environmental Checker
ER – Engineer's Representative

Table 11.2 Event / Action Plan for Landscape and Visual during construction phase

Action Level	ET	IEC	ER	Contractor
Non-conformity on one occasion	1. Identify source(s) 2. Inform the Contractor, IEC and ER 3. Discuss remedial actions and preventive measures with IEC, ER and Contractor 4. Monitor remedial action(s) and preventive measures until rectification has been completed	1. Check inspection report 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measure(s) and preventive measure(s) 4. Advise ER on effectiveness of proposed remedial measure(s) and preventive measure(s) 5. Check implementation of proposed remedial measure(s) and preventive measure(s)	1. Confirm receipt of notification of non-conformity in writing 2. Notify the Contractor 3. Review and agree on the remedial measure(s) and preventive measures proposed by the Contractor 4. Check implementation of remedial measure(s) and preventive measures	1. Identify source and investigate the non-conformity 2. Implement remedial measure(s) and preventive measure(s) 3. Amend working methods agreed with ER as appropriate 4. Rectify damage and undertake any necessary replacement
Repeated Non-conformity	1. Identify source(s) 2. Inform Contractor, IEC and ER 3. Discuss inspection frequency 4. Discuss remedial action(s) and preventive measures with IEC, ER and Contractor 5. Monitor remedial action(s) and preventive measure(s) until rectification has been completed 6. If non-conformity stops, cease any	1. Check inspection report 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measure(s) and preventive measure(s) 4. Advise ER on effectiveness of proposed remedial measure(s) and preventive measures 5. Supervise implementation of proposed remedial measure(s) and preventive measure(s)	1. Notify the Contractor 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measure(s) and preventive measure(s) to be implemented 3. Supervise implementation of remedial measure(s) and preventive measure(s)	1. Identify source and investigate the non-conformity 2. Implement remedial measure(s) and preventive measure(s) 3. Amend working methods agreed with ER as appropriate 4. Rectify damage and undertake any necessary replacement. Stop relevant portion of works as determined by ER until the non-conformity is abated.

Action Level	ET	IEC	ER	Contractor
	additional monitoring			

Note:
ET – Environmental Team
IEC – Independent Environmental Checker
ER – Engineer's Representative

APPENDIX J
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
Construction Dust Impact								
S4.3.10	D1	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	- APCO - To control the dust impact to meet HKAQO and TM-EIA criteria	^
S4.3.10	D2	Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road should be conducted to achieve dust removal efficiencies of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.3 L/m2 to achieve the dust removal efficiency.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	- APCO - To control the dust impact to meet HKAQO and TM-EIA criteria	^
S4.3.10	D3	Proper watering at exposed spoil should be undertaken throughout the construction phase.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	- APCO - To control the dust impact to meet HKAQO and TM-EIA criteria	^
		Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading.						^
		Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads.						^
		A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones.						^
		The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.						^
		Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.						^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided and properly maintained as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.						^
		The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials.						^
		Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously.						^
		Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet						^
		Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding.						N/A
		Any skip hoist for material transport should be totally enclosed by impervious sheeting.						^
		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						^
		Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed.						N/A
		Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.						N/A
S4.3.10	D6	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected rep. dust monitoring station	Construction stage	- TM-EIA	^
Construction Noise (Airborne)								
S5.4.1	N1	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.	Control construction airborne noise	Contractor	All construction sites	Construction stage	- Annex 5, TM-EIAO	^
		Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.						^
		Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs.						^
		Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works.						^
		Mobile plant should be sited as far away from NSRs as possible and practicable.						^
		Material stockpiles, mobile container site office and other structures should be effectively utilized, where practicable, to screen noise from on-site construction activities.						N/A
S5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening	Contractor	All construction sites	Construction stage	- Annex 5, TM-EIAO	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S5.4.1	N3	Install movable noise barriers (typical design is wooden framed barrier with a small-cantilevered on a skid footing with 25mm thick internal sound absorptive lining), acoustic mat or full enclosure, screen the noisy plants including air compressors, generators and handheld breakers, etc.	Sreen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction stage	- Annex 5, TM-EIAO	N/A
S5.4.1	N4	Use 'Quiet plants'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	- Annex 5, TM-EIAO	^
S5.4.1	N5	Loading/ unloading activities should be carried out inside the full enclosure of mucking out points.	Reduce the noise levels of loading/ unloading activities	Contractor	Mucking out locations	Construction stage	- Annex 5, TM-EIAO	^
S5.4.1	N6	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	- Annex 5, TM-EIAO	^
S5.4.1	N7	Implement a noise monitoring programme under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected rep. noise monitoring station	Construction stage	- TM-EIAO	N/A
Water Quality (Construction Phase)								
S6.9.1.1	W1	Construction Runoff At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction.	To minimize water quality impact from the construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	- Water Pollution Control Ordinance - ProPECC PN 1/94 - TM-EIAO - TM-DSS	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/ sediment trap. The sediment/ silt traps should be incorporated in the permanent drainage channels 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, which states that the retention time for silt/ sand traps should be 5 minutes under maximum flow conditions. Sizes may vary depending upon the flow rate, but for a flow rate of 0.1 m3/s a sedimentation basin of 30 m3 would be required and for a flow rate of 0.5 m3/s the basin would be 150 m3. The detailed design of the sand/ silt traps shall be undertaken by the contractor prior to the commencement of construction.						^
		All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. Exposed slope surfaces should be covered by tarpaulin or other means.						N/A
		The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows.						N/A
		All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.						^
		Measures should be taken to minimize the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.						^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m3 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.						^
		Manholes 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.						^
		Precautions be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized 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.						^
		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 site wheel washing facilities should be provided at every construction site exit where practicable. Wash-water 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 wheel wash 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.						^
		Oil interceptors should be provided in the drainage system downstream of any oil/ fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain.						^
		Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.						^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		All fuel tanks and storage areas should be provided with locks and sited 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 water sensitive receivers nearby.						^
		Adopt best management practices.						^
		All earth works should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable.						^
S6.9.1.2	W2	<u>Tunneling Works and Underground Works</u> Cut-&-cover tunneling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable.	To minimize construction water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	- Water Pollution Control Ordinance - ProPECC PN 1/94 - TM-EIAO - TM-DSS	N/A
		Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge.						N/A
		The wastewater with a high concentration of SS should be treated (e.g. by sedimentation tanks with sufficient retention time) before discharge. Oil interceptors would also be required to remove the oil, lubricants and grease from the wastewater.						N/A
		Direct discharge of the bentonite slurry (as a result of D-wall) is not allowed. It should be reconditioned and reused wherever practicable. Temporary storage locations (typically a properly closed warehouse) should be provided on site for any unused bentonite that needs to be transported away after all the related construction activities area completed. The requirements in ProPECC PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.						N/A
S6.9.1.3	W3	<u>Sewage Effluent</u> Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	To minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction stage	- Water Pollution Control Ordinance - TM-DSS	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S6.9.1.5	W4	Groundwater from Potential Contaminated Area: No direct discharge of groundwater from contaminated areas should be adopted.	To minimize groundwater quality impact from contaminated area	Contractor	Excavation areas where contamination is found	Construction stage	- Water Pollution Control Ordinance - TM-EIAO - TM-DSS	^
		A discharge license under the WPCO through the Regional Office of EPD for groundwater discharge should be applied. Prior to the excavation works within these potentially contaminated areas, the groundwater quality should be reviewed during the process of discharge license application. The compliance to the Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters (TM-DSS) and the existence of prohibited substance should be confirmed. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, the contaminated groundwater should be either properly treated in compliance with the requirements of the TM-DSS or properly recharged into the ground.						^
		If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (e.g. TPH) to undetectable range. All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be discharged into the foul sewers.						^
		If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S6.9.1.6	W6	Accidental Spillage All the tanks, containers, storage area should be bunded and the locations should be locked as far as possible from the sensitive watercourse and stormwater drains.	To minimize water quality impact from accidental spillage	Contractor	All construction site where practicable	Construction stage	- Water Pollution Control Ordinance - ProPECC PN 1/94 - TM-EIAO - TM-DSS	^
		The Contractor should register as a chemical waste producer if chemical wastes would be generated. Storage of chemical waste arising from the construction activities should be stored with suitable labels and warnings.						^
		Disposal of chemical wastes should be conducted in compliance with the requirements as stated in the Waste Disposal (Chemical Waste) (General) Regulation.						^
Waste Management (Construction Waste)								
S7.4.1	WM1	On-site sorting of C&D material Geological assessment should be carried out by competent persons on site during excavation to identify materials which are not suitable to use as aggregate in structural concrete (e.g. volcanic rock, Aplite dyke rock, etc.). Volcanic rock and Aplite dyke rock should be separated at the source sites as far as practicable and stored at designated stockpile area preventing them from delivering to crushing facilities. The crushing plant operator should also be reminded to set up measures to prevent unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use. Details regarding control measures at source site and crushing facilities should be submitted by the Contractor for the Engineer to review and agree. In addition, site records should also be kept for the types of rock materials excavated and the traceability of delivery will be ensured with the implementation of Trip Ticket System and enforced by site supervisory staff as stipulated under DEVB TC(W) No. 6/2010 for tracking of the correct delivery to the rock crushing facilities for processing into aggregates. Alternative disposal option for the reuse of volcanic rock and Aplite Dyke rock, etc. should be explored.	Separation of unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use	Contractor	All construction sites	Construction stage	· DEVB (W) No. 6/2010	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S7.5.1	WM2	<u>Construction and Demolition Material</u> Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement.	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	· Land (Miscellaneous Provisions) Ordinance · Waste Disposal Ordinance · ETWB TCW No. 19/2005	^
		Carry out on-site sorting.						^
		Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate						^
		Adopt 'selective demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible.						N/A
		Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.						^
		Implement an enhanced Waste Management Plan similar to ETWBTC (Works) No. 19/2005 – "Environmental Management on Construction Sites" to encourage on-site sorting of C&D materials and to minimize their generation during the course of construction.						^
S7.5.1	WM3	<u>C&D Waste</u> Standard formwork or pre-fabrication should be used as far as practicable in order to minimize the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage.	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	· Land (Miscellaneous Provisions) Ordinance · Waste Disposal Ordinance · ETWB TCW No. 19/2005	^
		The Contractor should recycle as much of the C&D materials as possible on-site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S7.5.1	WM4	Excavated Contaminated Soils Details of the mitigation measures on handling of the contaminated soil shall be referred to Section on Land Contamination below.	The contaminated soil will be excavated for on-site reuse	Contractor	PBH4	Prior to commencement of construction works within the contaminated area	· Practice Guide (PG) for Investigation and Remediation of Contaminated Land · GN/GM for land contamination	^
S7.5.1	WM5	Land-based and Marine-based Sediment All construction plant and equipment shall be designed and maintained to minimize the risk of silt, sediments, contaminants or other pollutants being released into the water column or deposited in the locations other than designated location.	To control pollution due to marine sediment	Contractor	Along CKR alignment	Construction stage	· ETWB TCW No. 34/2002	^
		All vessels shall be sized such that adequate draft is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.						N/A
		Before moving the vessels which are used for transporting dredged material, excess material shall be cleaned from the decks and exposed fittings of vessels and the excess materials shall never be dumped into the sea except at the approved locations.						N/A
		Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.						N/A
		The Contractors shall monitor all vessels transporting material to ensure that no dumping outside the approved location takes place. The Contractor shall keep and produce logs and other records to demonstrate compliance and that journeys are consistent with designated locations and copies of such records shall be submitted to the engineers.						N/A
		The Contractors shall comply with the conditions in the dumping licence.						^
		All bottom dumping vessels (Hopper barges) shall be fitted with tight fittings seals to their bottom openings to prevent leakage of material.						N/A
		The material shall be placed into the disposal pit by bottom dumping.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		Contaminated marine mud shall be transported by spit barge of not less than 750m3 capacity and capable of rapid opening and discharge at the disposal site.						N/A
		Discharge shall be undertaken rapidly and the hoppers shall be closed immediately. Material adhering to the sides of the hopper shall not be washed out of the hopper and the hopper shall remain closed until the barge returns to the disposal site.						N/A
		For Type 3 special disposal treatment, sealing of contaminant with geosynthetic containment before dropping designated mud pit would be a possible arrangement. A geosynthetic containment method is a method whereby the sediments are sealed in geosynthetic containers and, 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 at the disposal site, thereby fulfilling the requirements for fully confined mud disposal.						N/A
S7.5.1	WM6	Chemical Waste Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	All construction sites	Construction stage	· Waste Disposal (Chemical Waste) (General) Regulation · Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	*
		Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed, have a capacity of less than 450 L unless the specification has been approved by EPD, and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation.						^
		The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste, enclosed on at least 3 sides, have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest, have adequate ventilation, covered to prevent rainfall entering, and arranged so that incompatible materials are adequately separated.						^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		Disposal of chemical waste should be via a licensed waste collector, be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers, or be to a reuser of the waste, under approval from EPD.						^
S7.5.1	WM7	General Refuse General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes.	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	· Waste Disposal Ordinance	^
		A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law.						^
		Aluminum cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible.						^
		Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor.						^
Land Contamination								
S8.9 & Appendix 8.4	LC2	Excavation of the Contaminated Soil Prior to commencement of the excavation works at the contamination zone, the zone should be clearly marked out on site and the surface levels recorded. Excavation of contaminated material should be undertaken using dedicated earth-moving plant.	The contaminated soil will be excavated for on-site reuse	Contractor	PBH4	Prior to commencement of construction works within the contaminated area	· Practice Guide (PG) for Investigation and Remediation of Contaminated Land - Guidance Notes for Contaminated Land Assessment and Remediation · Guidance Manual for Use of Risk-Based Remediation Goals (RBRGs) for Contaminated Land Management	N/A
		The excavated contaminated soils would be stockpiled at designated area on site and covered by sheet to prevent dispersion of contamination during stockpiling.						N/A
		The Contractor should pay attention to the selection of suitable groundwater lowering schemes and discharge points if the groundwater table is higher than the contaminated soils during excavation. The Contractor should also obtain a valid Water Pollution Control Ordinance (WPCO) discharge licence from EPD where applicable.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
Hazard to Life								
S9.18	H8	The driver and his assistant should be physically healthy, experienced and have good safe driving records. The driver should hold a proper driving licence for the approved transport truck. Dedicated training programme and regular road safety briefing sessions/ workshops should be provided to enhance their safe driving attitude and practice. Smoking should be strictly prohibited.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	/	^
S9.18	H9	Emergency response plans in case of road accident should be prepared and implemented. The driver and his assistant should be familiar with the emergency procedures including evacuation, and proper communication/ fire-fighting equipment should be provided to the driver and his assistant.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	/	^
Landscape and Visual								
S10.10.1 Table 10.11	LV3	<u>Good Site Management</u> Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance.	Minimize visual impact	Contractor	Within Project site	Construction Phase	/	^
		Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.						^
S10.10.1 Table 10.11	LV4	<u>Screen Hoarding</u> Decorative screen hoarding should be erected to screen the public from the construction area. It should be designed to be compatible with the existing urban context.	Minimize visual impact	Contractor	Within Project site	Construction Phase	/	^
S10.10.1 Table 10.11	LV5	<u>Lighting Control during Construction</u> All lighting in the construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residencies and GIC. The Contractor shall consider other security measures, which shall minimize the visual impacts.	Minimize visual impact	Contractor	Within Project site	Construction Phase	/	^
S10.10.1 Table 10.11	LV6	<u>Erosion Control</u> The potential for soil erosion shall be reduced by minimizing the extent of vegetation disturbance on site and by providing a protective cover over newly exposed soil.	Minimize landscape impact	Contractor	Within Project site	Construction Phase	/	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S10.10.1 Table 10.11	LV7	Tree Protection & Preservation Carefully protected during construction. Tree protection measures will be detailed at the Tree Removal Application stage and plans submitted to the relevant Government Department for approval in due course in accordance with ETWB TC no. 3/2006.	Minimize landscape and visual impact	Contractor	Within Project site	Construction Phase	· 'Guidelines for Tree Risk Management and Assessment Arrangement on an Area Basis and on a Tree Basis', Greening, Landscape and Tree Management (GLTM) Section, DEVB · Latest recommended horticultural practices from GLTM Section,	N/A
S10.10.1 Table 10.11	LV8	Tree Transplantation For trees unavoidably affected by the Project that have to be removed, where practical transplantation will be chosen as the top priority method of removal. If this is not possible or practical compensatory planting will be provided for trees unavoidably felled (See LV10). For trees unavoidably affected by the Project works that are transplanted, transplantation must be carried out in accordance with ETWB TCW 2/2004 and 3/2006.	Minimize landscape and visual impact	Contractor	Within Project site and designated off-site locations	Prior to Construction Phase	· ETWB TCW 3/2006 · Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB · ETWB TCW 2/2004	N/A
S10.10.1 Table 10.11	LV9	Compensatory Planting For trees unavoidably affected by the Project that have to be removed, where practical transportation will be chosen as the top priority method of removal but if this is not possible or practical compensatory planting will be provided for trees unavoidably felled. All felled trees shall be compensated for by planting trees to the satisfaction of relevant Government projects. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006.	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction Phase	· ETWB TCW 3/2006 · Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB · ETWB TCW 2/2004	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S10.10.1 Table 10.11	LV10	Screen Planting Tall screen/buffer trees, shrubs and climbers should be planted, in so far as is possible, to soften and screen proposed structures such as roads and central strip, vertical edges and buildings and to enhance streetscape greening effect where appropriate. Indiscriminate use of trees for screening must be avoided and the principle of 'right tree for the right place' must be followed. This detail will be provided at the Detailed Design stage. This measure may additionally form part of the compensatory planting and will improve and create a pleasant pedestrian environment.	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction Phase	· Guidelines on Greening of Noise Barriers, issued April 2012, GLTMS, DevB · ETWB TCW 2/2004	N/A
S10.10.1 Table 10.11	LV11	Green Roof Roof greening will be established on ventilation and administration buildings to reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels.	Minimize landscape and visual impact	Contractor	Within Project site	Construction Phase	/	N/A
S10.10.1 Table 10.11	LV12	Reinstatement All works areas, excavated areas and disturbed areas for tunnel construction and temporary road diversion or any other proposed works shall be reinstated to former conditions or better, with reasonable landscape treatment and to the satisfaction of the relevant Government departments. (Specific mitigation for disturbance to public open space is detailed separately under LV14)	Minimize landscape impact	Contractor	Within Project site	Construction Phase	/	N/A
S10.10.1 Table 10.11	LV13	Reprovising of Public Open Space All areas of public open space affected by the Project will be reprovisioned either at the same location following the completion of temporary works, or at a separate site, as agreed with relevant Government departments. Open space should be re-provisioned in an enhanced manner.	Minimize landscape impact	Contractor	Within Project site	Construction Phase	Open space should be re-provided in an enhanced manner.	N/A
Cultural Heritage Impact (Construction Phase)								
S11.4.4	CH1	The contractor should be alerted during the construction on the possibility of locating archaeological remains and as a precautionary measure, AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject sites.	To preserve any cultural heritage items which may be removed and damaged by the excavation	Contractor	During construction works for cut and cover tunnels	During the Construction Phase	· AMOs requirements	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
EM&A Project								
S13.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Control EM&A Performance	Highways Department	All construction sites	Construction stage	· EIAO Guidance Note No. 4/2010 · TM-EIAO	^
S13.2-13.4	EM2	An Environmental Team needs to be employed as per the EM&A Manual.	Perform environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	· EIAO Guidance Note No. 4/2010 · TM-EIAO	^
		Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures;						^
		An environmental impact monitoring needs to be implemented by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with.						^

Remarks: EM&A Programme under EP-457/2013/D	
^	Compliance of mitigation measure;
N/A N/A(1)	Not applicable at this stage; Not observed;
*	Recommendation was made during site audit but improved/retified by the contractor;
#	Recommendation was made during site audit but not yet improved/retified by the contractor;
X	Non-compliance of mitigation measure;
●	Non-compliance but rectified by the contractor.

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

Complaint Log on Reporting Month (October 2025)

Log Ref.	Location	Received Date	Details of Complaint/warning/ summon and prosecution	Investigation/ Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A	N/A

Remarks: No environmental warning/summon and prosecution were received in the reporting period.

Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions and Public Engagement Activities

Reporting Period	Site Location	Frequency	Cumulative	Details
October 2025	Kai Tak East	Environmental Complaint Statistics		
		0	3	N/A
		Environmental Non-compliance Statistic		
		0	0	N/A
		Environmental Summon and Prosecution Statistic		
		0	0	N/A
	Yau Ma Tei West	Environmental Complaint Statistics		
		0	0	N/A
		Environmental Non-compliance Statistic		
		0	0	N/A
		Environmental Summon and Prosecution Statistic		
		0	0	N/A
	Ho Man Tin	Environmental Complaint Statistics		
		0	7	N/A
		Environmental Non-compliance Statistic		
		0	0	N/A
		Environmental Summon and Prosecution Statistic		
		0	0	N/A

APPENDIX L
SUMMARY OF WASTE GENERATION AND DISPOSAL RECORDS

Monthly Summary Waste Flow Table

[PS Clauses 25.24(11)S & 25.34(16)(a)] Annex 4 to Appendix C

Name of Department: HyD Contract No.: HY/2019/13

Central Kowloon Route - Buildings, Electrical and Mechanical Works

Ho Man Tin Site Area

Monthly Summary Waste Flow Table for 2025 (year)

	Actual Quantites of Inert C&D Materials Generated Monthly						Actual Quantites of C&D Waste Generated Monthly					
Month	Total Quantity Generated (in '000m3)	Hard Rock and Large Broken Concrete (see Note 5) (in '000m3)	Reused in the Contract (see Note 5) (in '000m3)	Reused in other Projects (see Note 5) (in '000m3)	Disposed as Public Fill (see Note 5) (in '000m3)	Imported Fill (see Note 5) (in '000m3)	Metals (in '000kg)	Paper / cardboard packaging (in '000kg)	Plastics (see Note 3) (in '000kg)	Chemical Waste (see Note 5) (in '000kg)	Marine Sediment (see Note 7) (in '000m3)	Others, e.g. general refuse (see Note 5) (in '000m3)
Jan	0.069	0.000	0.000	0.000	0.069	0.000	0.000	0.000	0.000	0.000	0.000	0.382
Feb	0.125	0.000	0.000	0.000	0.125	0.000	0.000	0.000	0.000	0.000	0.000	0.134
Mar	0.140	0.000	0.000	0.000	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.215
Apr	0.233	0.000	0.000	0.000	0.233	0.000	0.000	0.000	0.000	0.000	0.000	0.129
May	0.112	0.000	0.000	0.000	0.112	0.000	0.000	0.000	0.000	0.000	0.000	0.100
Jun	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.104
Sub-Total	**0.679**	**0.000**	**0.000**	**0.000**	**0.679**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**1.064**
Jul	0.033	0.000	0.000	0.000	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.035
Aug	0.122	0.000	0.000	0.000	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.097
Sep	0.028	0.000	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.082
Oct	0.190	0.000	0.000	0.000	0.190	0.000	0.000	0.000	0.000	0.000	0.000	0.067
Nov	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total (2025)	**1.052**	**0.000**	**0.000**	**0.000**	**1.052**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**1.346**
Total (whole)	**3.189**	**0.000**	**0.000**	**0.000**	**3.189**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**7.445**

Note:

(1) The performance targets are given in PS Clause 25.24

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

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials, and water barriers

(4) The summary table shall be submitted to the Project Manager monthly together with the Waste Flow Table for review and monitoring in accordance with the PS Clause 25.24

(5) Density values and Bulk Factors adopted:

Hard Rock and Large Broken Concrete:	2.4 T/m3 (in-situ)	Bulk Factor:	1.25
Soil / Fill:	2.0 T/m3 (in-situ)	Bulk Factor:	1.1
Marine Sediment:	1.7 T/m3 (in-situ)	Bulk Factor:	1.3
General Refuse:	400 kg/m3		
Chemical Waste (mainly used lubricant):	900 kg/m3		
Tree Trunk / Tree Stump:	850 kg/m3 (in-situ)	Bulk Factor:	1.1

(6) The reported and forecast volume figures are in "bulk" volume, with Bulk Factor applied as per Note (5)

(7) This figure refers to marine sediment disposed via dumping at sea. Treated Sediment for Reuse on-site will be categorized into "Reused in the Contract"

APPENDIX M
CONSTRUCTION PROGRAMME

Gammon

Ref. Detailed Programme (Dec-2022)

Contract No. HY/2019/13
Central Kowloon Route – Buildings, Electrical and Mechanical Works
Summary Programme

HIGHWAYS DEPARTMENT
MAJOR WORKS PROJECT MANAGEMENT OFFICE