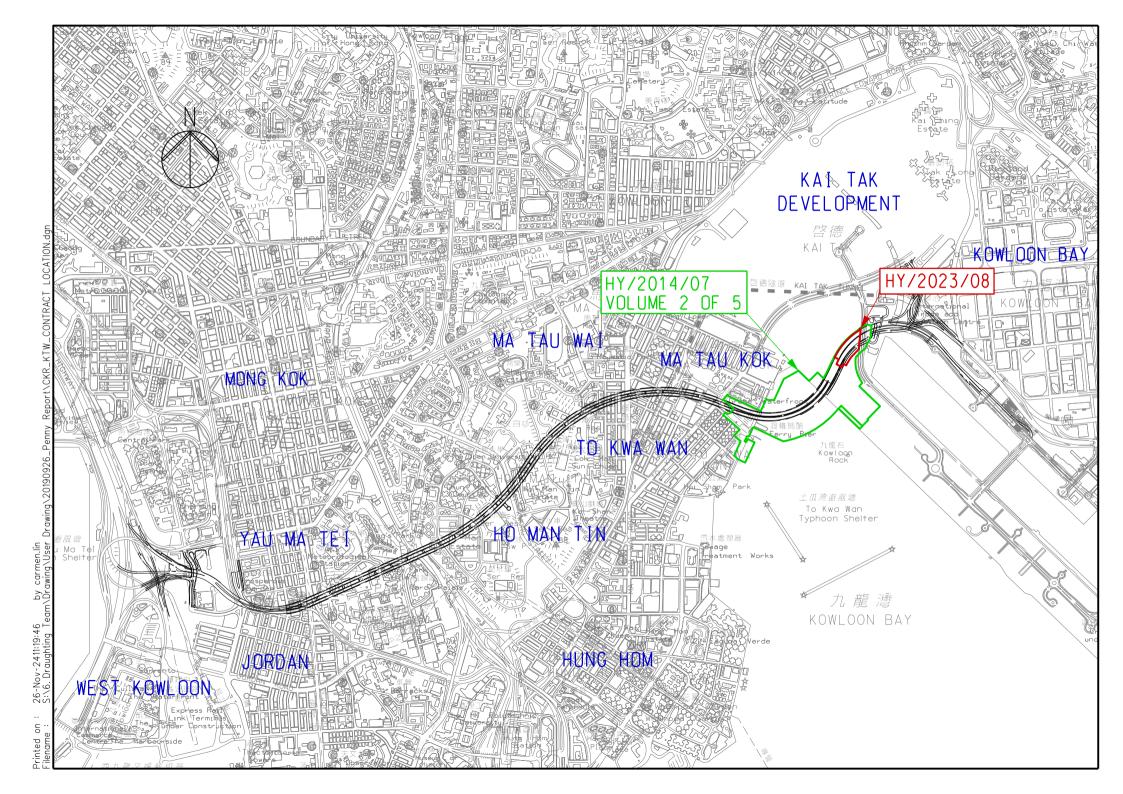
Vol. 2 of 5
FEP-01/457/2013/C
Central Kowloon Route
Kai Tak West
Contract No. HY/2014/07

EP-457/2013/D
Remaining Works
Contract No. HY/2023/08
(Kai Tak West Area)
September 2025



Central Kowloon Route Kai Tak West Contract No. HY/2014/07



Gammon Construction Limited

Central Kowloon Route

Works Contract HY/2014/07 – Central Kowloon Route – Kai Tak West

Monthly EM&A Report for September 2025

[October 2025]

	Name	Signature
Prepared & Checked:	Ho Pui Yin Kevin	Kr
Reviewed, Approved & Certified:	Y. W. Fung	y

Version: 0	Date: 09 October 2025

Disclaimer

This Environmental Monitoring and Audit Report is prepared for Gammon Construction Limited and is given for its sole benefit in relation to and pursuant to Contract HY/2014/07 and may not be disclosed to, quoted to or relied upon by any person other than Gammon Construction Limited without our prior written consent. No person (other than Gammon Construction Limited into whose possession a copy of this report comes may rely on this plan without our express written consent and Gammon Construction Limited may not rely on it for any purpose other than as described above.





Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Reference Document/Plan	
Document/ Plan to be Certified / Verified:	Monthly EM&A Report No.90 (September 2025)
Date of Report:	09 October 2025
Date received by IEC:	09 October 2025

Kai Tak West (HY/2014/07)

Reference EP Condition

Works Contract:

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/ $\frac{1}{plan}$ complies with the above referenced condition of EP-457/2013/D and FEP-01/457/2013/C.

Ms Mandy To

Mondy 20.

Date: 09 October 2025

Independent Environmental Checker

Our ref: 0436942 IEC Verification Cert KTW Monthly EM&A Rpt No.90.docx

Table	of Contents	Page
EXEC	UTIVE SUMMARY	3
1	INTRODUCTION	5
1.1	Purpose of the Report	5
1.2	Report Structure	
2	PROJECT INFORMATION	6
2.1	Background	6
2.2	Site Description	6
2.3	Construction Programme and Activities	
2.4	Project Organization	
2.5	Status of Environmental Licences, Notification and Permits	
3	ENVIRONMENTAL MONITORING REQUIREMENTS	10
3.1	Construction Dust Monitoring	10
3.2	Construction Noise Monitoring	
3.3	Landscape and Visual	
4	IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES	15
5	MONITORING RESULTS	16
5.1	Construction Dust Monitoring	16
5.2	Regular Construction Noise Monitoring	
5.3	Waste Management	
5.4	Landscape and Visual	
6	ENVIRONMENTAL SITE INSPECTION AND AUDIT	18
7	ENVIRONMENTAL NON-CONFORMANCE	19
7.1	Summary of Monitoring Exceedances	19
7.2	Summary of Environmental Non-Compliance	
7.3	Summary of Environmental Complaints	
7.4	Summary of Environmental Summon and Successful Prosecutions	
8	FUTURE KEY ISSUES	20
8.1	Construction Programme for the Next Three Months	20
8.2	Key Issues for the Coming Month	
8.3	Monitoring Schedule for the Coming Month	20
9	CONCLUSIONS AND RECOMMENDATIONS	21
9.1	Conclusions	21
9.2	Recommendations	
J.2	1.0001111101144110113	4 1

List of Tables

Table 2.1	Construction Activities in the reporting month	7
Table 2.2	Contact Information of Key Personnel	
Table 2.3	Status of Environmental Licenses, Notifications and Permits	
Table 3.1	Air Quality Monitoring Equipment	
Table 3.2	Location of Construction Dust Monitoring Station	10
Table 3.3	Noise Monitoring Parameters, Frequency and Duration	13
Table 3.4	Noise Monitoring Equipment for Regular Noise Monitoring	
Table 3.5	Noise Monitoring Stations during Construction Phase	
Table 3.6	Noise Monitoring Parameters, Frequency and Duration	14
Table 4.1	Status of Required Submission under Environmental Permit	
Table 5.1	Summary of 24-hour TSP Monitoring Result in the Reporting Period	16
Table 5.2	Summary of 1-hour TSP Monitoring Result in the Reporting Period	
Table 5.3	Summary of Construction Noise Monitoring Results in the Reporting Period	
Table 6.1	Observations and Recommendations of Site Audit	
Table 8.1	Construction Activities in the coming three months	20

List of Figures

Figure 1.1	Site Layout Plan
Figure 3.1	Location of Air Quality Monitoring Station
Figure 3.2	Locations of Noise Monitoring Station

List of Appendices

Appendix A	Construction Programme
Appendix B	Project Organization Structure
Appendix C	Implementation Schedule of Environmental Mitigation Measures
Appendix D	Summary of Action and Limit Levels
Appendix E	Calibration Certificates of Equipment
Appendix F	EM&A Monitoring Schedules
Appendix G	Air Quality Monitoring Results and their Graphical Presentations
Appendix H	Noise Monitoring Results and their Graphical Presentations
Appendix I	Event and Action Plan
Appendix J	Cumulative Statistics on Complaints, Notification of Summons and Successful
	Prosecutions
Appendix K	Monthly Summary Waste Flow Table

AECOM Asia Co. Ltd. 2 October 2025

EXECUTIVE SUMMARY

Central Kowloon Route – Kai Tak West (CKR-KTW; Contract No. HY/2014/07) (hereafter called "the Project") covers part of the construction of the Central Kowloon Route (CKR).

The Project comprises the follow works:

- 50x30m access shaft with noise enclosure at Ma Tau Kok (MTK);
- 100m long cut-and-cover (C&C) tunnel at MTK;
- Demolition and re-provisioning of MTK Public Pier;
- 160m long underwater tunnel (UWT) (Stage 1);
- 210m long UWT (Stage 2);
- 60m long C&C tunnel at Kai Tak;
- 130m long depressed road and 200m long underpass at Kai Tak;
- 390m long underground tunnel ventilation audit at Kai Tak;
- Seawall demolition and construction of new landing steps; and
- · Barging Point enclosure and conveyor system.

All construction works of Contract No. HY/2014/07 Central Kowloon Route – Kai Tak West (FEP-01/457/2013/C) are substantially completed in September 2025. The proposal of termination of the EM&A Programme under FEP-01/457/2013/C will be submitted in mid-October 2025 for approval.

The EM&A programme commenced on 4 April 2018. The impact EM&A for the Project includes air quality and noise monitoring. The EM&A monitoring, including both construction dust monitoring (monitoring station E-A14a) and construction noise monitoring (monitoring station E-N12a and E-N21a) will be conducted by Contract No. HY/2023/08 Central Kowloon Route – Remaining Works under EP-457/2013/D from 1 October 2025.

This is the 90th monthly EM&A Report presenting the EM&A works carried out during the period between 1 and 30 September 2025. As informed by the Contractor, major activities in the reporting period were:

Locations	Site Activities
Kai Tak	- Defect rectification works at depressed road;
Ma Tau Kok	- TTM implementation; - Road marking at MTK C&C Tunnel; - Concrete pavement and road kerb construction for Public Transport Interchange
Kowloon Bay	Road marking at Stage 2 UWT;Piling remoal at Stage 2 Marine Platform;Fender installation at MTK Public Pier.

AECOM Asia Co. Ltd. 3 October 2025

Breaches of Action and Limit Levels for Air Quality

All 24-hour TSP result was below the Action and Limit Levels at all monitoring locations in the reporting month.

All 1-hour TSP result was below the Action and Limit Levels at all monitoring locations in the reporting month.

Breaches of Action and Limit Levels for Noise

Regular Noise Monitoring

No exceedance of Action and Limit level of noise was recorded in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

No environmental related complaints, notification of summons and successful prosecution were received in the reporting month.

Reporting Changes

No report changes in the reporting period.

Future Key Issues

Key issues to be considered in the next month included:

Locations	Site Activities
Kai Tak	- Defect rectification works at depressed road;
Ma Tau Kok	- TTM implementation; - Road stud installation at MTK C&C Tunnel.
Kowloon Bay	- Road stud installation at underwater tunnel.

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

AECOM Asia Co. Ltd. 4 October 2025

1 INTRODUCTION

Gammon Construction Limited was commissioned by the Highways Department as the Civil Contractor for Works Contract HY/2014/07. AECOM Asia Company Limited (AECOM) was appointed by Gammon Construction Limited as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme during construction phase of the Project.

1.1 Purpose of the Report

1.1.1 This is the 90th monthly EM&A Report which summaries the impact monitoring results and audit findings for the Project during the reporting period between 1 and 30 September 2025.

1.2 Report Structure

- 1.2.1 This monthly EM&A Report is organized as follows:
 - Section 1: Introduction
 - Section 2: Project Information
 - Section 3: Environmental Monitoring Requirement
 - Section 4: Implementation Status of Environmental Mitigation Measures
 - Section 5: Monitoring Results
 - Section 6: Environmental Site Inspection and Audit
 - Section 7: Environmental Non-conformance
 - Section 8: Future Key Issues
 - Section 9: Conclusions and Recommendations

AECOM Asia Co. Ltd. 5 October 2025

2 PROJECT INFORMATION

2.1 Background

- 2.1.1 CKR is a dual 3-lane trunk road across central Kowloon linking the West Kowloon in the west and the Kai Tak Development (KTD) in the east. The CKR will be about 4.7 km long with an underground tunnel section of about 3.9 km long, in particular, there will be an underwater tunnel of about 370 m long in Kowloon Bay to the north of the To Kwa Wan Typhoon Shelter. It will connect the West Kowloon Highway at Yau Ma Tei Interchange with the road network at Kowloon Bay and the future Trunk Road T2 at KTD which will connect to the future Tseung Kwan O Lam Tin Tunnel (TKO-LTT) and Cross Bay Link (CBL). CKR, Trunk Road T2 and TKO-LTT will form a strategic highway link, namely Route 6, connecting West Kowloon and Tseung Kwan O. In addition, 3 ventilation buildings, which will be located in Ya Ma Tei, Ho Man Tin and ex-Kai Tak airport area, are proposed to ensure acceptable air quality within the tunnel.
- 2.1.2 The Environmental Impact Assessment (EIA) Report for Central Kowloon Route (Register No.: AEIAR-171/2013) was approved on 11 July 2013 under the Environmental Impact Assessment Ordinance (EIAO). Following the approval of the EIA Report, an Environmental Permit (EP) for CKR was granted on 9 August 2013 (EP No.: EP- 457/2013) for the construction and operation. Variation of EP (VEP) was subsequently applied and the latest EP (EP No. EP-457/2013/D) was issued by the Director of Environmental Protection (DEP) on 15 June 2021. Further Environmental Permit (EP No. FEP-01/457/2013/C) for CKR Kai Tak West was issued on 28 February 2018.
- 2.1.3 The construction of the CKR had been divided into different sections. This Work Contract HY/2014/07 Kai Tak West (KTW) ("The Project") will include a road which is a trunk road, including new roads, and major extensions or improvements to existing roads; a road fully enclosed by decking above and by structure on the sides for more than 100 m; and reclamation works (including associated dredging works) more than 1 ha in size and a boundary of which is less than 100 m from an existing residential area.
- 2.1.4 The site layout plan of the Project is shown in **Figure 1.1**.

2.2 Site Description

- 2.2.1 The major construction activities under this Project include:
 - (a) construction of approximately 160m long cut-and-cover tunnel and 370m long underwater tunnel between the tunnel section at Ma Tau Kok and the depressed road of the CKR within Kai Tak Development;
 - (b) reconstruction of the seawall at Ma Tau Kok public pier, and the sloping seawall at the Former Kai Tak Airport Runway;
 - (c) construction of approximately 125m long depressed road and 200m long underpass of the CKR within Kai Tak Development;
 - (d) construction of approximately 360m long underground tunnel ventilation adit of the CKR;
 - (e) reconstruction of Kowloon City Ferry Pier Public Transport Interchange; and
 - (f) other associated works.

AECOM Asia Co. Ltd. 6 October 2025

2.3 Construction Programme and Activities

2.3.1 The major construction activities undertaken in the reporting month are summarized in **Table 2.1**.

Table 2.1 Construction Activities in the reporting month

Locations	Site Activities		
Kai Tak	- Defect rectification works at depressed road;		
Ma Tau Kok	- TTM implementation; - Road marking at MTK C&C Tunnel; - Concrete pavement and road kerb construction for Public Transport Interchange		
Kowloon Bay	Road marking at Stage 2 UWT;Piling remoal at Stage 2 Marine Platform;Fender installation at MTK Public Pier.		

2.3.2 The construction programme is presented in **Appendix A**.

AECOM Asia Co. Ltd. 7 October 2025

2.4 Project Organization

2.4.1 The project organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarized in **Table 2.2**.

Table 2.2 Contact Information of Key Personnel

Party	Role	Position	Name	Telephone	Fax
Arup-Mott MacDonald Joint Venture	Residential Engineer (ER)	Engineer's Representative	Mr. Patrick Lo	36195901	2268 3954
ERM	Independent Environmental Checker (IEC)	Independent Environmental Checker	Ms. Mandy To	2271 3113	3015 8052
		Contracts Manager	Mr. Kin Fai Tam	2516 8823	2516 6260
Gammon	Contractor	Environmental Manager	Ms. Michelle Tang	9267 8866	2516 6260
AECOM	Contractor's Environmental Team (ET)	ET Leader	Mr. Y. W. Fung	3856 5681	2317 7609

AECOM Asia Co. Ltd. 8 October 2025

2.5 Status of Environmental Licences, Notification and Permits

2.5.1 Relevant environmental licenses, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarized in **Table 2.3**.

Table 2.3 Status of Environmental Licenses, Notifications and Permits

Permit / License No. /	Valid Period		04.4	B I .		
Notification/ Reference No.	From	То	Status	Remarks		
Further Environmental Permit						
FEP-01/457/2013/C	28 Feb 2018	End of Project	Valid			
Wastewater Discharge Lic	ense					
WT00043692-2023	1 Apr 2023	31 Mar 2028	Valid	Ma Tau Kok		
WT00043881-2023	30 Jun 2023	30 Jun 2028	Valid	Underwater Tunnel Stage 2		
WT00044013-2023	7 May 2025	30 Apr 2028	Valid	Kai Tak and Underwater Tunnel Stage 1		
Construction Noise Permit	t .					
GW-RE0157-25	7 Mar 2025	6 Sep 2025	No further renewal by KTW	General Works at Ma Tau Kok		
GW-RE0631-25	15 Jun 2025	14 Dec 2025	Valid	General Works at Kai Tak		
GW-RE0418-25	30 Apr 2025	29 Oct 2025	Valid	General Works at Stage 1 Underwater Tunnel		
GW-RE0581-25	7 Jun 2025	6 Nov 2025	Valid	General Works at Stage 2 Underwater Tunnel		
GW-RE0233-25	19 Mar 2025	18 Sep 2025	No further renewal by KTW	Kai Tak Access Road		
Chemical Waste Producer	Registration					
5118-247-G2347-47	30 Jan 2018	End of Project	Valid			
5118-247-G2347-48	30 Jan 2018	End of Project	Valid			
Marine Dumping Permit						
Billing Account for Construction Waste Disposal						
7029909	22 Jan 2018	End of Project	Account Active	ount Active		
Notification Under Air Pollution Control (Construction Dust) Regulation						
429442	5 Jan 2018	End of Project	Notified			

AECOM Asia Co. Ltd. 9 October 2025

3 ENVIRONMENTAL MONITORING REQUIREMENTS

3.1 Construction Dust Monitoring

Monitoring Requirements

3.1.1 In accordance with the approved EM&A Manual, measurement of 24-hour and 1-hour Total Suspended Particulates (TSP) level at the designated air quality monitoring station is required. Impact 24-hour TSP monitoring should be carried out for at least once every 6 days, and 1-hour TSP monitoring should be done at least 3 times every 6 days while the highest dust impact is expected. The Action and Limit Levels of the air quality monitoring is provided in **Appendix D**.

Monitoring Equipment

- 3.1.2 24-hour TSP air quality monitoring was performed using High Volume Sampler (HVS) located at the designated monitoring station. The HVS meets all the requirements of the EM&A Manual.
- 3.1.3 A portable direct reading dust meter was used to carry out the 1-hour TSP monitoring.
- 3.1.4 Brand and model of the equipment is given in **Table 3.1.**

Table 3.1 Air Quality Monitoring Equipment

Equipment	Brand and Model
High Volume Sampler (24-hour TSP)	Tisch Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler (Model No. TE-5170)
Calibration Kit (24-hour TSP)	TISCH Environmental Orifice (Model TE-5025A)
Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-3 & LD-3B)

Monitoring Locations

3.1.5 The monitoring station for construction dust monitoring pertinent to the Project has been identified based on the approved EM&A Manual for the Project. The location of the construction dust monitoring station is summarized in **Table 3.2** and shown in **Figure 3.1**.

Table 3.2 Location of Construction Dust Monitoring Station

Location	Monitoring Station	Description
E-A14a ^[1]	Block B of Merit Industrial Centre	Rooftop (13/F)

Note:

Monitoring Methodology

- 3.1.6 24-hour TSP Monitoring
 - (a) The HVS was installed in the vicinity of the air sensitive receivers. The following criteria were considered in the installation of the HVS as far as practicable: -
 - (i) A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
 - (ii) Two samplers should not be placed less than 2m apart from each other;
 - (iii) The distance between the HVS and any obstacles, such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
 - (iv) A minimum of 2 meters separation from walls, parapets and penthouse for rooftop sampler.

AECOM Asia Co. Ltd. 10 October 2025

^[1] The air monitoring station proposed in the EM&A Manual (i.e. Wyler Gardens with ID: E-A14) was not available for impact dust monitoring, therefore impact monitoring was conducted at E-A14a as an alternative which was agreed by the ER, IEC and EPD.

- (v) A minimum of 2 meters separation from any supporting structure, measured horizontally is required.
- (vi) No furnace or incinerator flues nearby.
- (vii) Airflow around the sampler was unrestricted.
- (viii) The sampler was located more than 20 meters from any dripline.
- (ix) Any wire fence and gate, required to protect the sampler, did not obstruct the monitoring process.
- (x) Permission was obtained to set up the samplers and access to the monitoring station.
- (xi) A secured supply of electricity was obtained to operate the sampler.

(b) Preparation of Filter Papers

- (i) Glass fibre filters, G810 were labelled and sufficient filters that were clean and without pinholes were selected.
- (ii) All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ±3 °C; the relative humidity (RH) was < 50% and not variable by more than ±5%. A convenient working RH was 40%.
- (iii) All filter papers were prepared and analysed by ALS Technichem (HK) Pty Ltd., which is a HOKLAS accredited laboratory and has comprehensive quality assurance and quality control programmes.

(c) Field Monitoring

- (i) The power supply was checked to ensure the HVS works properly.
- (ii) The filter holder and the area surrounding the filter were cleaned.
- (iii) The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
- (iv) The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
- (v) The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied was sufficient to avoid air leakage at the edges.
- (vi) Then the shelter lid was closed and was secured with the aluminium strip.
- (vii) The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
- (viii) A new flow rate record sheet was set into the flow recorder.
- On site temperature and atmospheric pressure readings were taken and the flow rate of the HVS was checked and adjusted at around 1.3 m³/min, and complied with the range specified in the EM&A Manual (i.e. 0.6-1.7 m³/min).
- (x) The programmable digital timer was set for a sampling period of 24 hrs, and the starting time, weather condition and the filter number were recorded.
- (xi) The initial elapsed time was recorded.
- (xii) At the end of sampling, on site temperature and atmospheric pressure readings were taken and the final flow rate of the HVS was checked and recorded.
- (xiii) The final elapsed time was recorded.
- (xiv) The sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact.
- (xv) It was then placed in a clean envelope and sealed.
- (xvi) All monitoring information was recorded on a standard data sheet.
- (xvii) Filters were then sent to ALS Technichem (HK) Pty Ltd. for analysis.

(d) Maintenance and Calibration

- (i) The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- (ii) HVSs were calibrated using TE-5025A Calibration Kit upon installation and thereafter at bi-monthly intervals.
- (iii) Calibration certificate of the TE-5025A Calibration Kit and the HVSs are provided in **Appendix E**.

AECOM Asia Co. Ltd. 11 October 2025

3.1.7 1-hour TSP Monitoring

(a) Measuring Procedures

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

- (i) Turn the power on.
- (ii) Close the air collecting opening cover.
- (iii) Push the "TIME SETTING" switch to [BG]
- (iv) Push "START/STOP" switch to perform background measurement for 6 seconds.
- (v) Turn the knob at SENSI ADJ position to insert the light scattering plate.
- (vi) Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
- (vii) Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
- (viii) Pull out the knob and return it to MEASURE position.
- (ix) Push the "TIME SETTING" switch the time set in the display to 3 hours.
- (x) Lower down the air collection opening cover.
- (xi) Push "START/STOP" switch to start measurement.

(b) Maintenance and Calibration

(i) The 1-hour TSP meter was calibrated at 1-year intervals against a High Volume Samplers. Calibration certificates of the Laser Dust Monitors are provided in **Appendix E**.

Monitoring Schedule for the Reporting Month

3.1.8 The schedule for environmental monitoring in September 2025 is provided in Appendix F.

AECOM Asia Co. Ltd. 12 October 2025

3.2 Construction Noise Monitoring

Monitoring Requirements

3.2.1 In accordance with the EM&A Manual, impact noise monitoring should be conducted for at least once a week during the construction phase of the Project. **Table 3.3** summarizes the monitoring parameters, frequency and duration of impact noise monitoring. The Action and Limit Levels of the noise monitoring is provided in **Appendix D**.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Parameter and Duration	Frequency
30-mins measurement at each monitoring station between 0700 and 1900 on normal weekdays. L_{eq} , L_{10} and L_{90} would be recorded.	At least once per week

Monitoring Equipment

3.2.2 Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in **Table 3.4**.

Table 3.4 Noise Monitoring Equipment for Regular Noise Monitoring

Equipment	Brand and Model
Integrated Sound Level Meter	B&K (Model No. 2250, 2250L& 2270) Nti (Model No. XL2)
Acoustic Calibrator	MVI (Model No. CAL21) Rion (Model No. NC-74) B&K (Model No. 4231)

Monitoring Locations

3.2.3 The monitoring stations for construction noise monitoring pertinent to the Project have been identified based on the approved EM&A Manual for the Project. Locations of the noise monitoring stations are summarized in **Table 3.5** and shown in **Figure 3.2**.

Table 3.5 Noise Monitoring Stations during Construction Phase

Location	Monitoring Station	Description	Measurement
E-N12a [1]	19 Hing Yan Street	Rooftop (9/F)	Façade
E-N21a [1]	Block B of Merit Industrial Centre	Rooftop (13/F)	Free field ^[2]

Notes:

Monitoring Parameters, Frequency and Duration

3.2.4 **Table 3.6** summarizes the monitoring parameters, frequency and duration of impact noise monitoring.

AECOM Asia Co. Ltd. 13 October 2025

^[1] The noise monitoring stations proposed in the EM&A Manual (i.e. Grand Waterfront Tower 3 with ID: E-N12 and Hang Chien Court Block J with ID: E-N21) were not available for impact noise monitoring, therefore impact monitoring was conducted at E-N12a and E-N21a as an alternative which was agreed by the ER, IEC and EPD.

^[2] A correction of +3 dB(A) was made to the free field measurements.

Table 3.6 Noise Monitoring Parameters, Frequency and Duration

Location	Parameter and Duration	Frequency
E-N12a and E-N21a	30-mins measurement at each monitoring station between 0700 and 1900 on normal weekdays. Leq, L ₁₀ and L ₉₀ would be recorded.	At least once per week

Monitoring Methodology

3.2.5 Monitoring Procedure

- (a) The sound level meter was set on a tripod at a height of 1.2 m above the ground.
- (b) Façade measurement was made at E-N12a.
- (c) Free field measurements was made at monitoring location E-N21a. A correction of +3 dB(A) shall be made to the free field measurements.
- (d) The battery condition was checked to ensure the correct functioning of the meter.
- (e) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - (i) frequency weighting
 - (ii) time weighting: Fast
 - (iii) time measurement: L_{eq(30-minutes)} during non-restricted hours i.e. 0700 1900 on normal weekdays.
- (f) Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94 dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- (g) During the monitoring period, the L_{eq} , L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- (h) Noise measurement was paused during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible. Observations were recorded when intrusive noise was unavoidable.
- (i) Noise monitoring was cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind with gusts exceeding 10m/s.

3.2.6 Maintenance and Calibration

- (a) The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- (b) The meter and calibrator were sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
- (c) Calibration certificates of the sound level meters and acoustic calibrators are provided in **Appendix E**.

Monitoring Schedule for the Reporting Month

3.2.7 The schedule for environmental monitoring in September 2025 is provided in Appendix F.

3.3 Landscape and Visual

3.3.1 As per the EM&A Manuals, the landscape and visual mitigation measures shall be implemented and site inspections should be undertaken once every two weeks during the construction period. A summary of the implementation status is presented in **Section 6**.

AECOM Asia Co. Ltd. 14 October 2025

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

4.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Reports, the EP and EM&A Manuals. The implementation status of the environmental mitigation measures during the reporting period is summarized in **Appendix C.** Status of required submissions under the EP during the reporting period is summarised in **Table 4.1**.

Table 4.1 Status of Required Submission under Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.4 of EP-457/2013/D and Condition 3.4 of FEP-01/457/2013/C	Monthly EM&A Report for August 2025	12 September 2025

AECOM Asia Co. Ltd. 15 October 2025

5 MONITORING RESULTS

5.1 Construction Dust Monitoring

5.1.1 The monitoring results for 24-hour TSP and 1-hour TSP are summarized in **Table 5.1** and **Table 5.2** respectively. Detailed air quality monitoring results and daily extract of meteorological observations are presented in **Appendix G**.

Table 5.1 Summary of 24-hour TSP Monitoring Result in the Reporting Period

ID	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
E-A14a	29.0	15.9 - 47.9	197.3	260

Table 5.2 Summary of 1-hour TSP Monitoring Result in the Reporting Period

ID	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
E-A14a	59.9	56.9 – 66.6	302.4	500

- 5.1.2 No Action and Limit Level exceedance was recorded for 24-hour TSP monitoring at the monitoring location in the reporting month.
- 5.1.3 No Action and Limit Level exceedance was recorded for 1-hour TSP monitoring at the monitoring location in the reporting month.
- 5.1.4 The event and action plan are annexed in **Appendix I**.
- 5.1.5 Major dust sources during the monitoring included construction dust and nearby traffic emission.

5.2 Regular Construction Noise Monitoring

5.2.1 The monitoring results for noise are summarized in **Table 5.3** and the monitoring data is provided in **Appendix H**.

Table 5.3 Summary of Construction Noise Monitoring Results in the Reporting Period

ID	Range, dB(A), L _{eq (30 mins)}	Limit Level, dB(A), L _{eq (30 mins)}
E-N12a	62.3 – 63.7	75
E-N21a	60.9 – 62.1	75

- 5.2.2 No exceedance of Action and Limit level of noise was recorded in the reporting month.
- 5.2.3 The event and action plan are annexed in **Appendix I**.
- 5.2.4 Major noise sources during the monitoring included construction noise from the Project site and nearby traffic noise.

AECOM Asia Co. Ltd. 16 October 2025

5.3 Waste Management

- 5.3.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 5.3.2 As advised by the Contractor, 12,143 m³ of C&D material were generated and 12,143 m³ C&D material was disposed to public fill. No inert C&D were reused in the contract in the reporting month. 87,980 kg of general refuse was generated and sent to NENT Landfill in the reporting month. 361,950 kg of metal, no paper/cardboard packaging and no plastics were collected by recycle contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting month. No Type 1, Type 2 and Type 3 Marine sediment were disposed at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table is annexed in **Appendix K**.
- 5.3.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 5.3.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

5.4 Landscape and Visual

5.4.1 Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted on 3 and 17 September 2025. A summary of the site inspection is provided in **Appendix C**. The observations and recommendations made during the site inspections are presented in **Table 6.1**.

AECOM Asia Co. Ltd. 17 October 2025

6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

- 6.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the mitigation measures implementation schedule is provided in **Appendix C**.
- 6.1.2 In the reporting month, 4 site inspections were carried out on 3, 10, 17 and 25 September 2025. Joint inspections with the IEC, ER, the Contractor and ET were conducted on 17 September 2025. No non-compliance was recorded during the site inspection. Details of observations recorded during the site inspections are presented in **Table 6.1**.

Table 6.1 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	Nil	Nil	Nil
Noise	Nil	Nil	Nil
Water Quality	10 September 2025	Reminder: The contractor was reminded to absorb the oil stain on the sea at Stage 2 marine platform.	The item was rectified by the Contractor on 12 September 2025.
Waste/ Chemical	3 September 2025	Reminder: The contractor was reminded to provide container to collect waste.	The item was rectified by the Contractor on 4 September 2025.
Management	3 September 2025	Reminder: The contractor was reminded to provide tarpaulin sheet for the breaker head to prevent oil leakage to the ground.	The item was rectified by the Contractor on 4 September 2025.
Landscape & Visual	Nil	Nil	Nil
Permits/ Licenses	Nil	Nil	Nil

^{*}The item was under rectification on last reporting month.

6.1.3 All follow-up actions requested by Contractor's ET during the site inspection were undertaken as reported by the Contractor and confirmed in the following weekly site inspection conducted during the reporting period.

AECOM Asia Co. Ltd. 18 October 2025

7 ENVIRONMENTAL NON-CONFORMANCE

7.1 Summary of Monitoring Exceedances

- 7.1.1 All 24-hour TSP result was below the Action and Limit Levels at all monitoring locations in the reporting month.
- 7.1.2 All 1-hour TSP result was below the Action and Limit Levels at all monitoring locations in the reporting month.
- 7.1.3 No exceedance of Action and Limit level of noise was recorded in the reporting month.

7.2 Summary of Environmental Non-Compliance

7.2.1 No environmental non-compliance was recorded in the reporting month.

7.3 Summary of Environmental Complaints

7.3.1 No environmental related complaints, notification of summons and successful prosecution were received in the reporting month. Cumulative statistics on environmental complaint is provided in **Appendix J.**

7.4 Summary of Environmental Summon and Successful Prosecutions

7.4.1 No environmental related prosecution or notification of summons was received in the reporting month. Cumulative statistics on notification of summons and successful prosecutions is provided in **Appendix J**.

AECOM Asia Co. Ltd. 19 October 2025

8 FUTURE KEY ISSUES

8.1 Construction Programme for the Next Three Months

8.1.1 The major construction works in October 2025 is provided in **Table 8.1**. All construction works of Contract No. HY/2014/07 Central Kowloon Route – Kai Tak West (FEP-01/457/2013/C) are substantially completed in September 2025. The proposal of termination of the EM&A Programme under FEP-01/457/2013/C will be submitted in mid-October 2025 for approval.

Table 8.1 Construction Activities in the coming month

Locations	Site Activities	
Kai Tak	- Defect rectification works at depressed road;	
Ma Tau Kok	- TTM implementation;	
Ma Tau Nok	- Road stud installation at MTK C&C Tunnel.	
Kowloon Bay	- Road stud installation at underwater tunnel.	

8.2 Key Issues for the Coming Month

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

8.3 Monitoring Schedule for the Coming Month

8.3.1 EM&A monitoring, including both construction dust monitoring (monitoring station E-A14a) and construction noise monitoring (monitoring station E-N12a and E-N21a) will be conducted by Contract No. HY/2023/08 Central Kowloon Route – Remaining Works under EP-457/2013/D from 1 October 2025.

AECOM Asia Co. Ltd. 20 October 2025

9 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

- 9.1.1 1-hour TSP, 24-hour TSP and noise monitoring were carried out in the reporting month.
- 9.1.2 All 24-hour TSP monitoring results complied with the Action / Limit Level at in the reporting month.
- 9.1.3 All 1-hour TSP result was below the Action and Limit Levels at all monitoring locations in the reporting month.
- 9.1.4 No exceedance of Action and Limit level of noise was recorded in the reporting month.
- 9.1.5 4 nos. of environmental site inspections were carried out in August 2025. Recommendations on remedial actions were given by ET and IEC to the Contractor for the deficiencies identified during the site audit.
- 9.1.6 No environmental related complaints, notification of summons and successful prosecution were received in the reporting month.
- 9.1.7 No environmental related notification of summons and successful prosecution were received in the reporting month.

9.2 Recommendations

9.2.1 According to the environmental site inspections performed in the reporting month, the following recommendations were provided:

Air Quality Impact

No specific observation was identified in the reporting month.

Construction Noise Impact

• No specific observation was identified in the reporting month.

Water Quality Impact

• The contractor was reminded to absorb the oil stain on the sea at Stage 2 marine platform.

Chemical and Waste Management

- The contractor was reminded to provide container to collect waste.
- The contractor was reminded to provide tarpaulin sheet for the breaker head to prevent oil leakage to the ground.

Landscape & Visual Impact

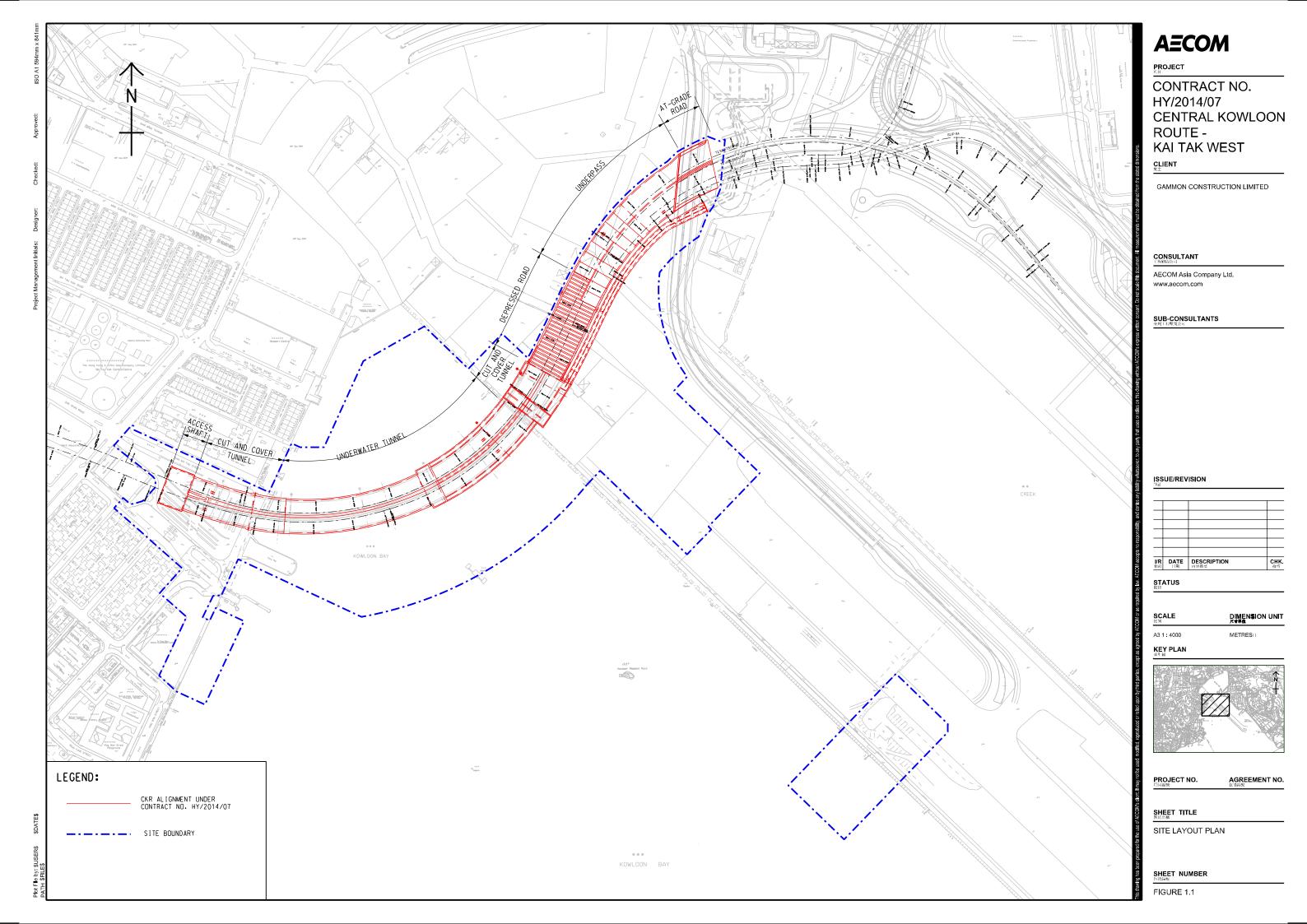
· No specific observation was identified in the reporting month.

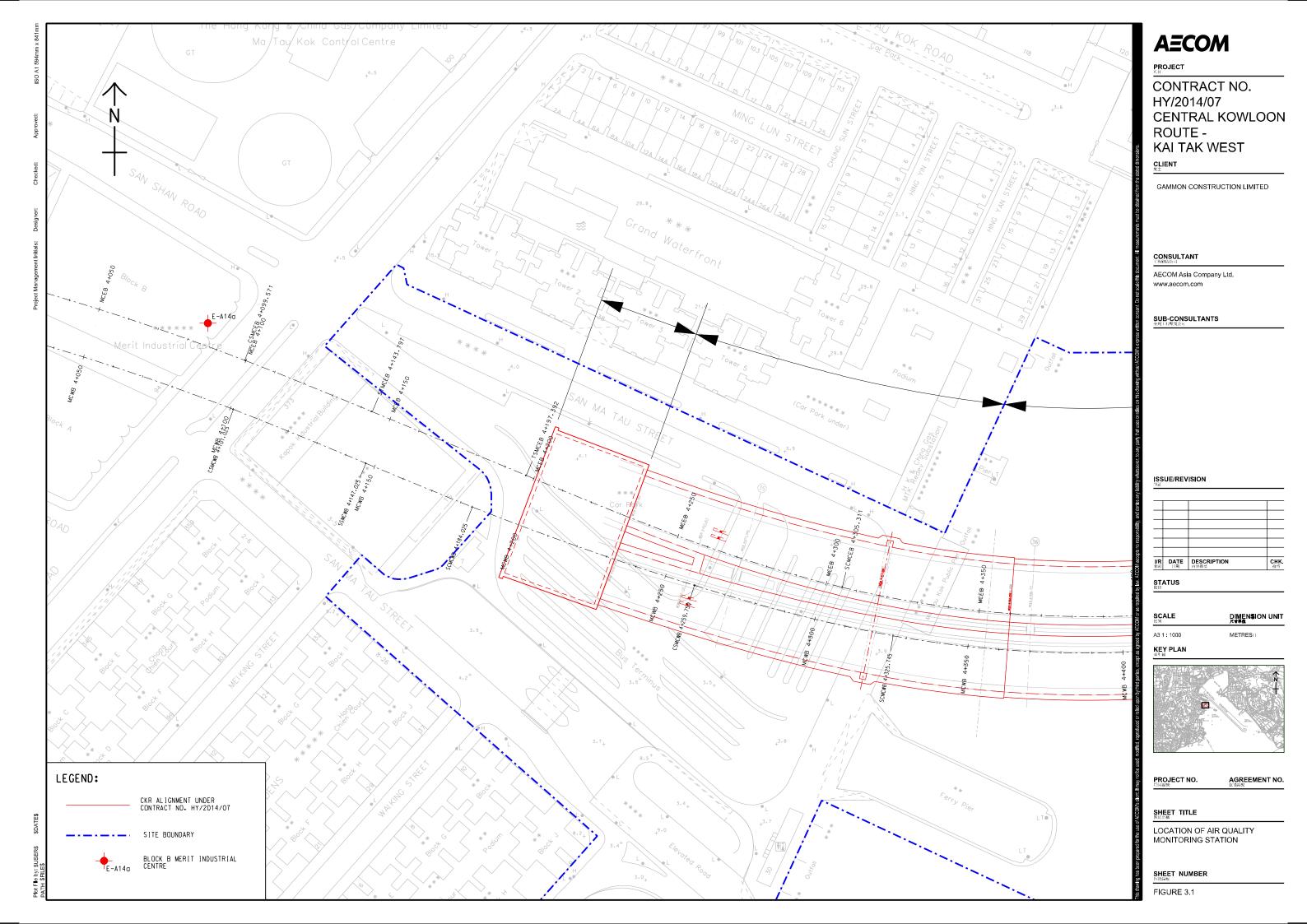
Permits/licenses

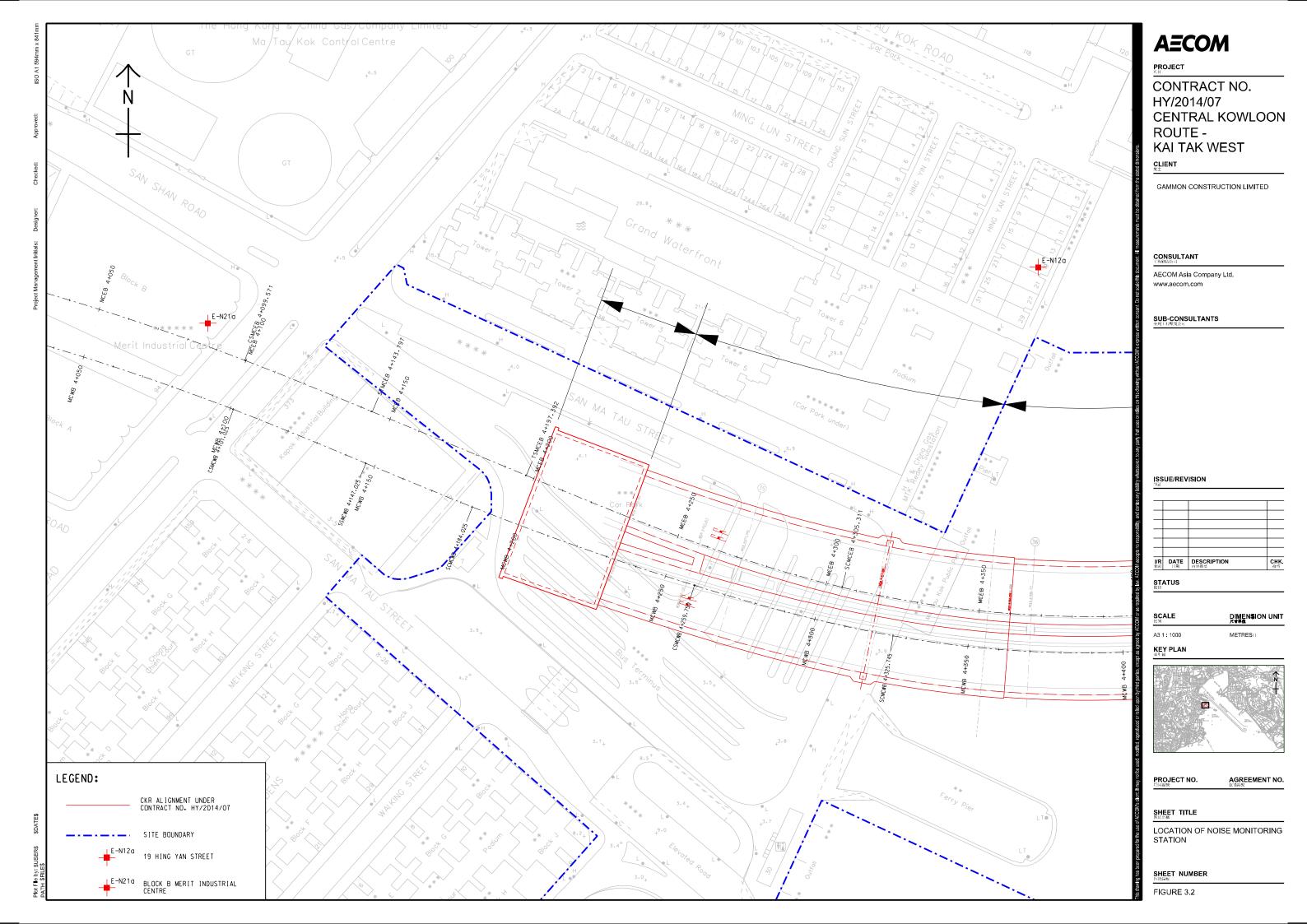
No specific observation was identified in the reporting month.

AECOM Asia Co. Ltd. 21 October 2025



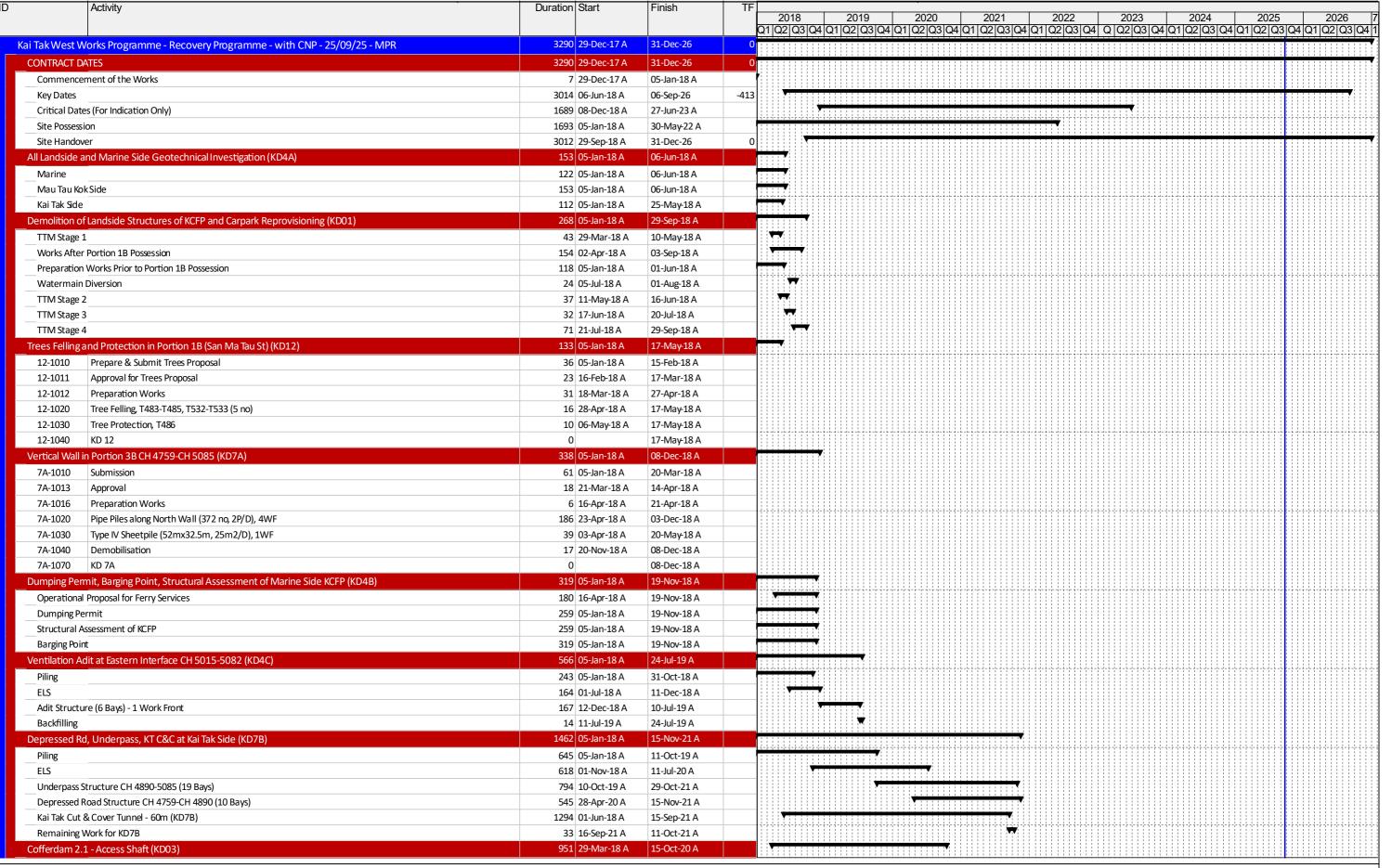






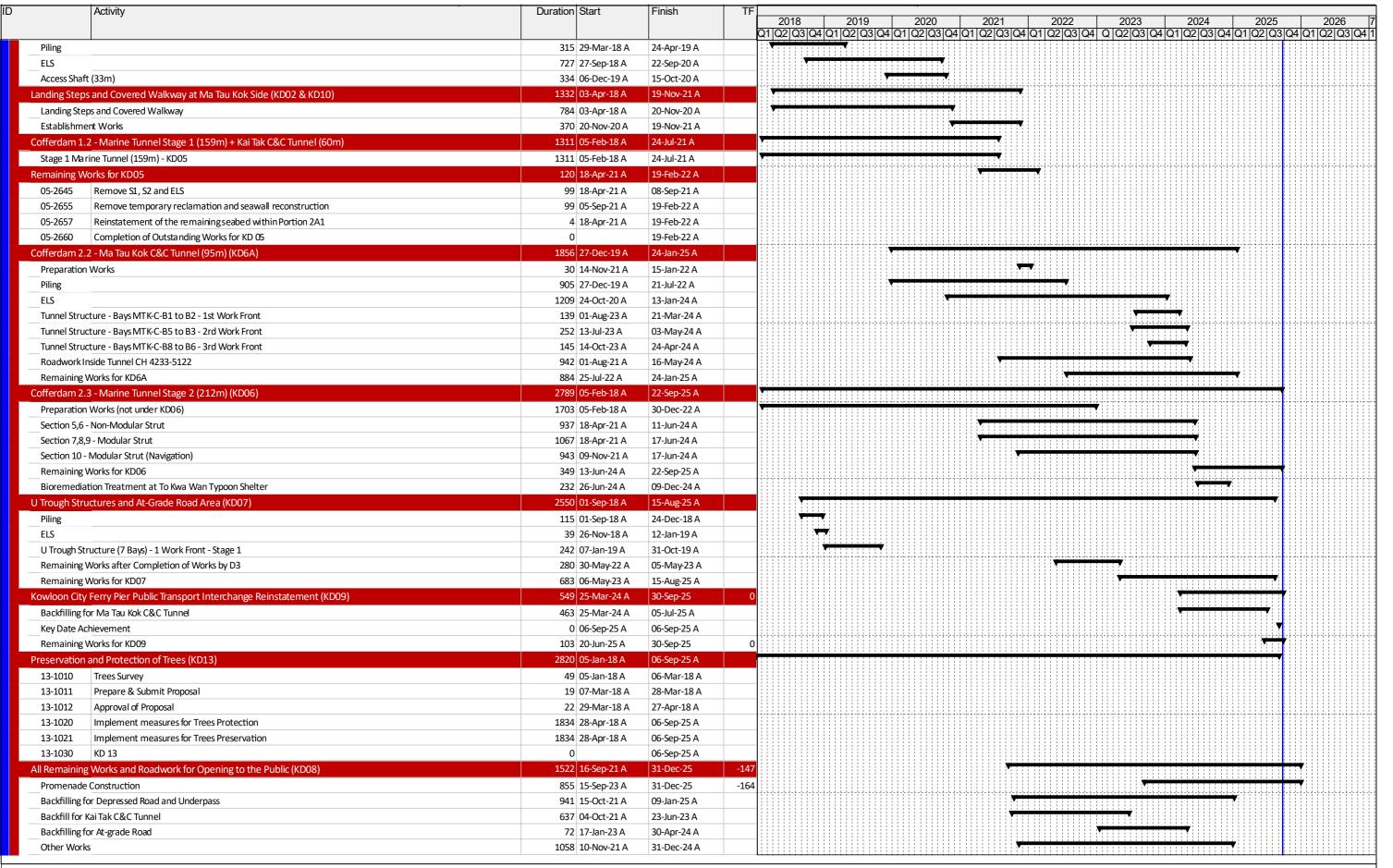
APPENDIX A

Construction Programme



Summary

CONTRACT NO. HY2014/07 CENTRAL KOWLOON ROUTE - KAI TAK WEST EXECUTIVE SUMMARY PROGRAMME - SEP 2025



Summary

CONTRACT NO. HY2014/07 CENTRAL KOWLOON ROUTE - KAI TAK WEST EXECUTIVE SUMMARY PROGRAMME - SEP 2025

D	Activity	Duration Start	t Fir	nish	TF				•								
	,				[2018		2019	2020	202	1	2022	2023	2024	2025	5	2026 7
						Q1 Q2 Q3 Q	Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q3 C	4 Q1 Q2 C)3 Q4	Q1 Q2 Q3 Q4	Q Q2 Q3 Q4	Q1 Q2 Q3 Q4	1 Q1 Q2 Q	3 Q4 Q1	Q2 Q3 Q4 1
Key Date Achievement		0 17-Ja	an-25 A 17-	'-Jan-25 A											▼ : : : : : :		
Remaining Works for KD08		998 16-Se	ep-21 A 18-	3-Nov-25	-104						V						
Establishment Works (KD11)		409 07-Se	ep-25 A 06-	S-Sep-26	-413												7
11-1010	Establishment Works (Except in Portion 1E) Period	365 07-Se	ep-25 A 06-	5-Sep-26	-413												
11-1020	KD 11	0	06-	i-Sep-26	-413												

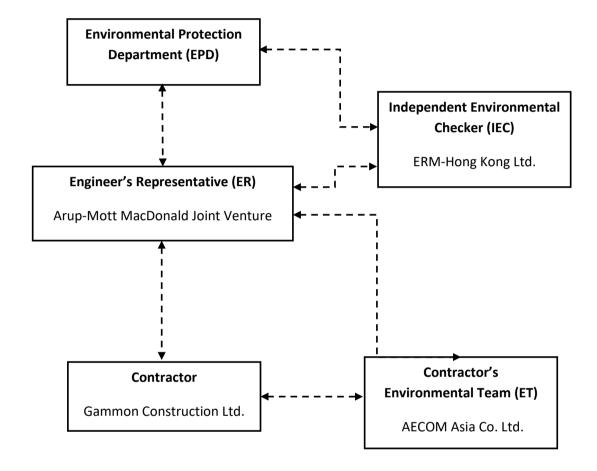
Summary

P 3

APPENDIX B

Project Organization Structure

Appendix B Project Organization Structure



Appendix B AECOM

APPENDIX C

Implementation Schedule of Environmental Mitigation Measures

Appendix C – Environmental Mitigation Implementation Schedule

	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
Air Quality	(Constructi	on Phase)	T	1		T	
S4.3.10	D1	The contractor shall follow the procedures and requirements given in the Air Pollution	Minimize dust	Contractor	All construction	Construction	V
		Control (Construction Dust) Regulation	impact at the nearby		sites	stage	
			sensitive receivers				
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	V
S4.3.10	D3	 Proper watering of exposed spoil should be undertaken throughout the construction phase: 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; 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	V
		Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;					V
		 A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones. The load of dusty materials on a vehicle leaving a construction site should be covered 					V
		entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;					V
		 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 					V

AECOM Asia Co. Ltd.

EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
	point should be paved with concrete, bituminous materials or hardcores; 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;					V
	 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; 					V
	 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; 					V
	 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; 					V
	 Any skip hoist for material transport should be totally enclosed by impervious sheeting; 					V
	 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; 					V
	 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; 					V
	• 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; and					V
	 Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after the last construction activity on the 					V
	construction site or part of the construction site where the exposed earth lies.					

	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
S4.3.10	D5	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected representative dust monitoring station	Construction stage	V
Construction	n Noise (Airb	orne)					
S5.4.1	N1	 Implement the following good site practices: only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; machines and plant (such as trucks, 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 	Control construction airborne noise	Contractor	All construction sites	Construction stage	v v
		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 utilised, where practicable, to screen noise from on-site construction activities.					v v v
S5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of the 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	V
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	Screen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction stage	V
S5.4.1	N4	Use "Quiet plants"	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	V
S5.4.1	N5	Loading/unloading activities should be carried out inside the full enclosure of mucking out	Reduce the noise	Contractor	Mucking out	Construction	V

	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		points	levels of loading/unloading activities		locations	stage	
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	V
S5.4.1	N7	Implement a noise monitoring under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected representative noise monitoring station	Construction stage	V
S5.5.2	N8	Install temporary noise barriers along the works area at temporary Kowloon City Ferry Pier Public Transport Interchange	Reduce temporary PTI noise	Contractor	Kowloon City Ferry Pier	Different construction stages	V

_	EM&A .og Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
Water Quality ((Construc	tion Phase)					
S6.9.1.1	W1	In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN1/94), construction phase mitigation measures shall include the following: Construction Runoff At the start of site establishment (including the barging facilities), 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. 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 site/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 30m³ 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. The overall slope of the site should be kept to a minimum to reduce the erosive p	quality impact from construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	V V V

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
			Concern to Address				
		and the reduction of surface sheet flows. • All drainage facilities and erosion and sediment control structures should be	7.000				V
		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 					V
		 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 still as debris into any designed system. 					V
		 materials, soil, silt or debris into any drainage system. Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers. 					V
		 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 funneling 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. 					V
		 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 sited wheel washing facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and 					V
		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					v

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		 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. 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 the earth works involving 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. 					V V @ V
S6.9.1.2	W2	 Tunnelling Works and Underground Works 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. Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge 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. Direct discharge of the bentonite slurry (as a result of D-wall and bored tunneling construction) 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 are completed. The requirements in ProPECC PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	V V V
S6.9.1.3	W3	Sewage Effluent Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should		Contractor	All construction sites where practicable	Construction stage	V

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		be employed to provide appropriate and adequate portable toilets and be	effluent				
		responsible for appropriate disposal and maintenance.					
S6.9.1.5	W4	Groundwater from Potential Contaminated Area:	To minimize	Contractor	Excavation areas	Construction	
		No direct discharge of groundwater from contaminated areas should be adopted.	groundwater		where	stage	V
		A discharge license under the WPCO through the Regional Office of EPD for	quality impact		contamination is		V
		groundwater results indicated that the groundwater to be generated from the	from		found.		
		excavation discharge should be applied. Prior to the excavation works within these	contaminated				
		potentially contaminated areas, the groundwater quality should be reviewed during	area				
		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 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 					V
		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.					V
		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					
	<u> </u>	the petrol interceptor.					

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
S6.7.2.1	W5	 Temporary Reclamation During temporary reclamation, regular litter / rubbish clearance and avoidance of illegal discharges within the embayed marine water should be undertaken. During temporary reclamation, the perimeter silt curtain should be deployed. 	To minimize water quality impact from temporary reclamation	Contractor	Temporary Reclamation	Construction stage	V
\$6.9.1.6	W6	 Accidental spillage In order to prevent accidental spillage of chemicals, the following is recommended: 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. 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. 	accidental spillage	Contractor	All construction sites where practicable	Construction stage	V V
S6.9.2.2	W7	 Dredging Works The following good practice shall apply for the dredging works: Install efficient silt curtains, i.e. at least 75% SS reduction, at the point of seawall dredging to control the dispersion of SS; Implement water quality monitoring to ensure effective control of water pollution and recommend additional mitigation measures required; The decent speed of grabs should be controlled to minimize the seabed impact and to reduce the volume of over-dredging; All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; The dredging rates by closed grab dredgers for temporary marine channel outside pipepile wall shall be less than 1,500 m³/day and 125 m³/hour (without concurrent dredging with T2 in dry season only) or 750 m³/day and 62.5 m³/hour for other 			Kai Tak Barging Point during dredging works	Dredging period	N/A N/A N/A N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		 conditions respectively. Dredging works shall be only for the provision marine channel. No dredging work is required for temporary reclamation; and The workfront of temporary reclamation shall be surrounded by cofferdams and the associated excavation and backfilling works for temporary reclamation shall have no contact with seawater. 					N/A N/A
S6.9.2.2	W8	 In dry season, the dredging rate shall be less than 1500m³/day if no concurrent projects. 	sediment suspension during dredging if the District Cooling System for Kai Tak Development would be operated in the same period	Contractor	Kai Tak Barging Point during dredging works	Dredging period	N/A V V V N/A
S6.9.2	W9	Barges or hoppers should not be filled to a level that will cause overflow of materials	disturbance during dredged sediment handling/barging operation	Contractor	All land- based site and proposed Kwai Chung barging point	Construction stage	N/A V V

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref		Recommended	implement the	measure	implement the	Status
			Measures & Main	measures?		measures?	
			Concern to				
			Address				
		Mitigation measures for land-based activities as outlined above should be applied					N/A
		to minimise water quality impacts from site runoff and open stockpile spoils at the					
		proposed barging facilities where appropriate.					
S6.9	W10	Implement a marine water quality monitoring programme	Monitor marine	Contractor	At identified	Prior to and	N/A
			water quality prior		monitoring	during dredging	
			to and during		location	period	
			dredging period				

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
	· ·	Construction Waste)	lo	I		la , ,,	1
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 areas preventing them from delivering to crushing facilities. The crushing plant operator should also be reminded to set up measures to prevent unsuitable rock from ended 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 Contractors 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 also be explored. 	concrete batching plants and be turned into concrete for structural use	Contractor	All construction sites	Construction stage	V
S7.5.1	WM2	 Construction and Demolition Material Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement; Carry out on-site sorting; Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; 	generation and recycle the C&D materials as far as practicable so as to reduce the amount for	Contractor	All construction sites	Construction stage	V V V
		 Adopt 'Selective Demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; Implement a trip-ticket system for each works contract to ensure that the disposal of C&E materials are properly documented and verified; and 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. 					V V V
S7.5.1	WM3	C&D Waste ■ Standard formwork or pre-fabrication should be used as far as practicable in order to	Good site practice to minimize the waste	Contractor	All construction	Construction stage	V

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		minimise 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. 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.	the C&D materials as far as practicable so as to reduce the amount for final disposal		sites		V
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; 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; 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; Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action. 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; 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; The material shall be placed into the disposal pit by bottom dumping; 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; 		Contractor	Along CKR alignment	Construction Stage	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		 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. For Type 3 special disposal treatment, sealing of contaminant with geosynthetic containment before dropping into 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. 					
S7.5.1		 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. 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 liters unless the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions 	proper storage, handling and disposal.	Contractor	All construction sites	Construction stage	V
		 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. Disposal of chemical waste should be via a licensed waste collector; be to a facility 					V
		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 the EPD.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of	When to	Implementation
	Log Ref		Recommended	implement	the measure	implement the	Status
			Measures & Main	the		measures?	
			Concern to Address	measures?			
S7.5.1	WM7	General Refuse	Minimize production of the	Contractor	All	Construction	
		General refuse generated on-site should be stored in enclosed bins or compaction units	general refuse and avoid		construction	stage	@
		separately from construction and chemical wastes.	odour, pest and litter		sites		
		A reputable waste collector should be employed by the Contractor to remove general	impacts				V
		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.					
		Aluminium cans are often recovered from the waste stream by individual collectors if they					V
		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					V
		to warrant collection. Participation in a local collection scheme should be considered by					
		the Contractor.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the		Implementation
	Log Ref		Recommended	implement the	measure	implement the	Status
			Measures & Main	measures?		measures?	
			Concern to Address				
Land Conta	mination						
S8.10,	LC1	Land contamination investigation works (including field works and laboratory testing at the	Minimize the	Contractor	EBH1, EBH2	Commencement	
S8.12 &		Kowloon City Ferry Pier Public Transport Interchange (KCFP-PTI) and the To Kwa Wan	potentially adverse		and EBH3	of construction	
Appendi		Vehicle Examination Centre (TKW-VEC) were carried out from 14 April 2018 to 2 January	environmental			works at the	
x 8.4		2019. In order to minimise the potentially adverse environmental impacts arising from the	impacts arising from			Kowloon City	
		handling of potentially contaminated materials, the following environmental mitigation	the handling			Ferry Pier Public	
		measures are proposed during the course of soil excavation, stockpiling and backfilling works:	of potentially			Transport	
		Excavation profiles must be properly designed and executed.	contaminated			Interchange (PTI)	V
		Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall	materials			(for EBH1 &	V
		be fully covered by impermeable sheeting to reduce dust emission.				EBH2) and the	
		• Excavation and stockpiling should be carried out during dry season as far as possible to				works area	V
		minimise potentially contaminated runoffs from the Concerned Soil.				adjacent to the	
		The truck transferring Concerned Soil shall be covered entirely by impervious sheeting to				To Kwa Wan	V
		ensure that the dusty materials do not leak from the truck.				Vehicle	
		• Temporary fencing or warning ribbons will be provided to the boundary of excavation,				Examination	V
		slope crest and temporarily stockpiled areas. Where necessary, the exposed areas should				Centre (for	
		be temporarily covered with impermeable sheeting during heavy rainstorm.				EBH3)	

EIA Ref.	EM&A Log Ref		Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
Landscape				T	T	T		Г
S10.10.1 Table 10.11	LV3	•	Good Site Management 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. Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.		Contractor	Within Project Site	Construction Phase	V
S10.10.1 Table 10.11	LV4	•	Screen Hoarding 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	V
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.		Contractor	Within Project Site	Construction Phase	V
S10.10.1 Table 10.11	LV6	•	Erosion Control 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	V
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.		Contractor	Within Project Site	Design and Construction Phase	V
S10.10.1 Table 10.11	LV9	•	Compensatory Planting 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 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 departments. 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. Compensatory tree planting may be incorporated into public open spaces and along roadside amenity areas affected by the construction works and therefore be part of the bigger wider planting plans. Onsite compensation planting is preferred but if necessary,	·	Contractor	Within Project Site and designated off-site locations	Construction Phase	N/A

AECOM Asia Co. Ltd.

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
		additional receptor sites outside the Works Area shall be agreed separately with Government during the Tree Felling Application process.					
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.	landscape.	Contractor	Within Project Site	Construction Phase	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. 	•	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) 	·	Contractor	Within Project Site	Construction Phase	N/A
S10.10.1 Table 10.11	LV14	 Landscape enhancement Implement a comprehensive landscape plan to maximize the greening opportunity and create a unique landscape for the project to blend in with the surrounding, including in reprovisioned areas. In particular: landscape enhancement of re-provisioned Public Transport Interchange; landscape deck on tunnel portals; viaduct planters for trailer planting; vertical greening of piers and walls with climbers or trailer planting; roadside planting i.e. planting along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, and vertical greening may be considered part of Screen Planting). Purpose-built maintenance access without temporary traffic arrangement must be 		Contractor	Along tunnel alignment	Construction phase	N/A

AECOM Asia Co. Ltd.

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of	When to	Implementation
	Log Ref		Recommended	implement the	the measure	implement the	Status
			Measures & Main	measures?		measures?	
			Concern to Address				
		provided and detailed design of landscape decks and planting, including details of					
		maintenance access locations, will be sent to maintenance and management parties for					
		endorsement and ensures these mitigation measures are feasible.					

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
S11.4.4	ritage Impac 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.	heritage items which may	Contractor	During construction works for cut and cover tunnels	During the construction phase	N/A
S11.6 para 3	CH2	 The dredging contractor should be alerted during the construction on the possibility of locating archaeological remains, such as cannon and AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject areas. 	heritage items which may	Contractor	During construction of underwater tunnel (north of To Kwa Wan Typhoon Shelter)	During the construction phase	N/A
S12.6.1, Table 12.2	CH8	 A monitoring system for settlement, vibration and tilting will be determined and implemented pending determination of the future grading. A monitoring proposal will be submitted to AMO before commencement of work if a historic building grade is accorded. 	from damage from	Contractor	Kowloon City Ferry Pier (CKR-13)	During the construction phase	N/A
S12.6.1, Table 12.2	CH9	 No mitigation is required at present. If the public pier is granted Grade 1, Grade 2 or Grade 3 status, the mitigation will be revised to adhere to the requirements for protective measures for Graded Historic Buildings 		Contractor	Ma Tau Kok Public Pier (CKR-16)	During the construction phase	N/A
S12.6.1, Table 12.2	CH10	 A monitoring system for settlement, vibration and tilting will be determined and implemented pending determination of the future grading. A monitoring proposal will be submitted to AMO before commencement of work if a historic building grade is accorded. 	from damage from	Contractor	The Kowloon City Vehicular Ferry Pier (CKR-17)	During the construction phase	N/A

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of	When to implement the	Implementation
	Log Ref		Recommended	implement	the measure	measures?	Status
			Measures & Main	the			
			Concern to Address	measures?			
EM&A Pro	ject						
S13.2	EM1	An Independent Environmental Checker needs to be	Control EM&A	Highways	All	Construction stage	V
		employed as per the EM&A Manual.	Performance	Department	construction		
					sites		
S13.2	EM2	1) An Environmental Team needs to be employed as per the	Perform environmental	Highways	All	Construction stage	V
-13.4		EM&A Manual.	monitoring & auditing	Department /	construction		
		2) Prepare a systematic Environmental Management		Contractor	sites		V
		Plan to ensure effective implementation of the mitigation					
		measures.					
		3) An environmental impact monitoring needs to be					V
		implementing by the Environmental Team to ensure all					
		the requirements given in the EM&A Manual are fully					
		complied with.					

Legends:

V = implemented;

X = not implemented;

@ = partially implemented;

N/A = not applicable

APPENDIX D

Summary of Action and Limit Levels

Appendix D - Summary of Action and Limit Levels

Table 1 Action and Limit Levels for 24-hour TSP

ID	Location	Action Level	Limit Level
E-A14a	Block B of Merit Industrial Centre	197.3 μg/m³	260 μg/m³

Table 2 Action and Limit Levels for 1-hour TSP

ID	Location	Action Level	Limit Level
E-A14a	Block B of Merit Industrial Centre	302.4 μg/m³	500 μg/m³

Table 3 Action and Limit Levels for Construction Noise (0700 – 1900 hrs of normal weekdays)

ID	ID Location Action Level		Limit Level
E-N12a	19 Hing Yan Street	When one documented complaint is received	75 dB(A)
E-N21a	E-N21a Block B of Merit Industrial Centre When one documented complaint is received		75 dB(A)

Appendix D AECOM

Table 4 Derived Action and Limit Levels for Water Quality

Parameters	Action Level	Limit Level	
Dissolved Oxygen (DO) in mg/L ⁽¹⁾	Surface & Middle: 4.03 (5th percentile of baseline data for surface and middle layer) Bottom: 3.94 (5th percentile of baseline data for bottom layer)	Surface & Middle: 3.88 (1st percentile of baseline data for surface and middle layer) Bottom: 2.00	
Suspended Solids (SS) in mg/L ⁽²⁾	13.80 (95th percentile of baseline data) or 120% of upstream control station's SS at the same tide of the same day	18.70 (99th percentile of baseline data) or 130% of upstream control station's SS at the same tide of the same day	
Turbidity in NTU ⁽²⁾	7.00 (95th percentile of baseline data) or 120% of upstream control station's Turbidity at the same tide of the same day	8.40 (99th percentile of baseline data or 130% of upstream control station's Turbidity at the same tide of the same day	
Turbidity at the same tide of the same 2.00 (95th percentile of baseline day or 120% of upstream control static nutrient level at the same tide of the		3.00 (99th percentile of baseline data) or 130% of upstream control station's nutrient level at the same tide of the same day or whichever is the less	
Total PAH in μg/L ⁽²⁾	1.60 (95th percentile of baseline data) or 120% of upstream control station's nutrient level at the same tide of the same day	1.60 (99th percentile of baseline data) or 130% of upstream control station's nutrient level at the same tide of the same day or whichever is the less	

Note: 1. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

Appendix D AECOM

^{2.} For turbidity, SS, Copper and Total PAH, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

APPENDIX E

Calibration Certificates of Equipments

AECOM Asia Company Limited Tisch TSP Mass Flow Controlled High Volume Air Sampler Field Calibration Report

Station	Block B, Merit Industrial Centre (E-A14a)			Operator:	Shum K	am Yuen	
Cal. Date:	22/8/2025			Next Due Date:	22/10/2025		
Model No.:	TE-5170			Serial No.	10280		•
Equipment No.:	A-001-15T	_		•			•
			Ambient (Condition			
Temperatur	re, Ta (K)	303.0	Pressure, F	Pa (mmHg)		766.1	
			Orifice Transfer Sta	T			
Serial		843	Slope, mc	2.00	0986	Intercept, bc	-0.0218
Last Calibra	+	7-Jan-25	1	mc x Qstd + bo	c = [H x (Pa/760) x	(298/Ta)] ^{1/2}	
Next Calibra	tion Date:	7-Jan-26		•		·	
			Calibratian of	TCD Commission			
			Calibration of Orfice	13P Sampler	шv	S Flow Recorder	
			Office	1	пу	3 Flow Recorder	
Resistance Plate No.	DH (orifice), in. of water	[DH x (Pa/760) x (298/Ta)] ^{1/2}		Qstd (m³/min) X - axis	Flow Recorder Reading (CFM)	Continuous Flow Reading IC (CFI	
18	7.4		2.71	1.36	47.0	46.80	
13	6.4		2.52	1.26	42.0	41.82	
10	5.2		2.27	1.14	36.0	35.84	
7	4.3		2.06	1.04	32.0	31.86	
5	3.3		1.81	0.91	25.0	24.89	
By Linear Regress	sion of Y on X 47.9722	_		Intercept, bw =	-18.	5610	
Correlation Coeffi	cient* =	0	.9989	_			
*If Correlation Coef	fficient < 0.990, ch	eck and recalib	rate.	_			
			Set Point C	alculation			
From the TSP Field							
From the Regression	on Equation, the "	Y" value accordi	ng to				
			0.41.1	[(D. /700)	· 1/2		
		mw	x Qstd + bw = IC x	[(Pa//60) x (298/1	a)]		
Therefore, Set Poir	nt; IC = (mw x Qs	td + bw) x [(760	0 / Pa) x (Ta / 298)] ^{1/2} =		43.99	-
Remarks:							
QC Reviewer:	WS CHAN		Signature:	21	Date:	22/8/2025	_





RECALIBRATION DUE DATE:

January 7, 2026

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 7, 2025

Rootsmeter S/N: 438320

Ta: 293 Pa: 759.0 °K

Operator: Jim Tisch

mm Hg

Calibration Model #: TE-5025A

Calibrator S/N: 0843

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4050	3.2	2.00
2	3	4	1.	0.9940	6.4	4.00
3	5	6	1	0.8870	7.9	5.00
4	7	8	1	0.8460	8.7	5.50
5	9	10	1	0.6990	12.7	8.00

Data Tabulation							
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	$\sqrt{\Delta H \left(\text{Ta/Pa} \right)}$		
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(γ-axis)		
1.0114	0.7198	1.4252	0.9958	0.7087	0.8787		
1.0071	1.0132	2.0156	0.9916	0.9976	1.2427		
1.0051	1.1331	2.2535	0.9896	1.1157	1.3893		
1.0040	1.1868	2.3635	0.9885	1.1685	1.4572		
0.9987	1.4287	2.8505	0.9833	1.4067	1.7574		
	m=	2.00986		m=	1.25854		
QSTD	b=	-0.02180	QA	b=	-0.01344		
	r=	1.00000		r=	1.00000		

	Calculation	S		
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)	
Qstd=	Vstd/ΔTime	Qa= Va/ΔTime		
	For subsequent flow rat	e calculatio	ns:	
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							
	or manometer reading (in H2O)							
	ter manometer reading (mm Hg)							
	solute temperature (°K)							
L	rometric 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

EQUIPMENT CALIBRATION RECORD

Type:			Laser Dus	t Monitor	·		_
	Manufacturer/Brand: SIBATA						1
Model No			LD-3				
Equipmen	t No.:		A.005.11a				•
	Adjustment Sca	le Setting:	799 CPM		•		
Jensierrie,	, lajastinent sea	ie dettiiig.	733 6. 111				•
Operator:			WS CHAN				-
Standard	Equimment						
Equipmen	t:		High Volu	me Samp	ler		
Venue:			Ma Wan (Chung Vill	age		•
Model No	.:		TE-5170				•
Serial No.:			5008				
Last Calibi	ation Date:		24-Feb-25	5			•
							•
Calibratio	n Result						
Sensitivity	Adjustment Sca	le Setting (Refo	ro Calihrati	on).		799	СРМ
-	Adjustment Sca Adjustment Sca					799	CPM
Sensitivity	Aujustinent sca	ie setting (Arter	Calibration	11).		799	CFIVI
Hour	Date	Time	Ambient	Condition	Concentration 1	Total Count 2	Count/
	(dd/mm/yy)		Temp (°C)	R.H.(%)	(mg/m3)		Minute(3)
				, ,	Y-axis		X-axis
1	07/08/25	9:00-10:00	31.0	57	0.0687	2610	43.50
2	07/08/25	10:21-11:21	31.0	57	0.0441	1761	29.35
3	07/08/25	13:00-14:00	31.0	57	0.0415	1732	28.87
Note:	 	data was measu	red by Hig	h Volume	Sampler	!	l.
	~	was logged by L			•		
	_	ite was calculate			0)		
Bv Linear	Regression of Y o	on X					
-,	Slope (K-factor)		0.0015				
	Correlation coe		0.9985				
Validity of	Calibration Reco	ord:	7-Au	g-26			
				0 -	•		
Remarks:							
					14		
OC.	Reviewer:	Y.W. Fung	5	Signature:		Date:	7-Aug-25
			_	5		•	

EQUIPMENT CALIBRATION RECORD

Type: Laser Dust Monitor					_			
Manufactu	ırer/Brand:		SIBATA					
Model No.	:		LD-3B	•				
Equipment	t No.:		A.005.13a					
Sensitivity	Adjustment Scal	e Setting:	643 CPM					
Operator:			WS CHAN					
Standard E	quimment							
Familiana	L.		11:-b 1/-b.	CI				
Equipment	l:		High Volu				-	
Venue:			Ma Wan (nung villa	age		-	
Model No.	:		TE-5170				-	
Serial No.:			5008	_			-	
Last Calibra	ation Date:		24-Feb-25	5			=	
Calibration	n Result							
			.					
	Adjustment Scal					643	CPM	
Sensitivity	Adjustment Scal	e Setting (After	Calibration	1):		643	СРМ	
Hour	Date	Time	Ambient (Condition	Concentration 1	Total Count 2	Count/	
	(dd/mm/yy)		Temp (°C)	R.H.(%)	(mg/m3)		Minute(3)	
			, , ,	` ,	Y-axis		X-axis	
1	07/08/25	9:00-10:00	31.0	57	0.0687	2640	44.00	
2	07/08/25	10:21-11:21	31.0	57	0.0441	1785	29.75	
3	07/08/25	13:00-14:00	31.0	57	0.0415	1744	29.07	
Note:	1 Monitoring	data was measu	red by High	o Volume :	Sampler	•	•	
	(2) Total Count							
	=	te was calculate)			
By Linear F	Regression of Y o		0.0045					
	Slope (K-factor):		0.0015		ı			
	Correlation coef	ficient:	0.9986					
Validity of Calibration Record:			7-Aug-26					
Remarks:								
					9/			
QC I	Reviewer:	Y.W. Fung	_ S	ignature:	/	Date:	7-Aug-25	

EQUIPMENT CALIBRATION RECORD

Type:			Laser Dus	<u>t M</u> onitor			_
	Manufacturer/Brand: SIBATA						•
Model No			LD-3B				
Equipmen			A.005.16a				-
	Adjustment Sca	le Setting:	521 CPM		•		
Schisterity	Adjustinent sea	ic setting.	321 01 101				<u>-</u>
Operator:			WS CHAN				-
Standard (Equimment						
Equipmen	t:		High Volu	me Samp	ler		
Venue:	-		Ma Wan (-
Model No			TE-5170		-8-		•
Serial No.:			5008				-
	ation Date:		24-Feb-25				
							-
Calibration	n Result						
Canbration	i Nesult						
Sensitivity	Adjustment Sca	le Setting (Befor	re Calibrati	on):		521	СРМ
-	Adjustment Sca					521	CPM
Schisterity	Aujustinent sea	ic setting (Arter	Calibration	17.			CITIVI
Hour	Date	Time	Ambient (Condition	Concentration 1	Total Count 2	Count/
	(dd/mm/yy)		Temp (°C)	R.H.(%)	(mg/m3)		Minute(3)
			, , ,		Y-axis		X-axis
1	07/08/25	9:00-10:00	31.0	57	0.0687	2574	42.90
2	07/08/25	10:21-11:21	31.0	57	0.0441	1740	29.00
3	07/08/25	13:00-14:00	31.0	57	0.0415	1708	28.47
Note:	1 Monitoring	data was measu	red by Hig	h Volume	Sampler		•
	~	was logged by L			•		
	_	ite was calculate))		
D. III	Dames de la CM	V					
Ry Linear I	Regression of Y o Slope (K-factor)		0.0015				
	Correlation coe		0.9985		•		
	COLLEIGHOU COE	muent.	0.9985				
Validity of	Calibration Reco	ord:	7-Au	g-26			
Remarks:							
					4/		
QC	Reviewer:	Y.W. Fung	_ s	ignature:		Date:	7-Aug-25



香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com



CERTIFICATE OF CALIBRATION

Certificate No.:

24CA1031 03-04

Page:

of.

2

Item tested

Description:

Acoustical Calibrator (Class 1)

Manufacturer:

MVI

Type/Model No.:

CAL21

Serial/Equipment No.:

34113610(2011) / N.004.11

Adaptors used:

Yes (BAC21)

Item submitted by

Curstomer:

AECOM ASIA CO., LTD.

Address of Customer: Request No.:

-

Date of receipt:

31-Oct-2024

Date of test:

06-Nov-2024

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	3257888	30-Jul-2025	SCL
Preamplifier	B&K 2673	3353200	29-Jun-2025	CEPREI
Measuring amplifier	B&K 2610	2346941	27-Jun-2025	CEPREI
Signal generator	DS 360	33873	06-Mar-2025	CEPREI
Digital multi-meter	34401A	US36087050	20-Jun-2025	CEPREI
Audio analyzer	8903B	GB41300350	19-Jun-2025	CEPREI
Universal counter	53132A	MY40003662	26-Jun-2025	CEPREI

Ambient conditions

Temperature:

21 ± 1 °C

Relative humidity:

55 ± 10 %

Air pressure:

1005 ± 5 hPa

Test specifications

- The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- 3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

Feng

Approved Signatory:

Date:

07-Nov-2024

Company Chop:

SENGIMECALLS STORY STOR

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd

Form No.CARP156-1/Issue 1/Rev.D/01/03/2007



香港新界葵涌永基路22-24號好爸爸創科大厦 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com



2



CERTIFICATE OF CALIBRATION

Certificate No.:

25CA0408 03-03

Page:

Item tested

Description:

Acoustical Calibrator (Class 1)

Manufacturer: Type/Model No.: Rion Co., Ltd. NC-74

Serial/Equipment No.:

34246490

Adaptors used:

Item submitted by

Curstomer:

AECOM

Address of Customer:

Request No .: Date of receipt:

08-Apr-2025

Date of test:

10-Apr-2025

Reference equipment used in the calibration

Description: Lab standard microphone Preamplifier Measuring amplifier Signal generator Digital multi-meter	Model: B&K 4180 B&K 2673 B&K 2610 DS 360 34401A	Serial No. 3257888 3353200 2346941 61227 US36087050	Expiry Date: 30-Jul-2025 29-Jun-2025 27-Jun-2025 24-Feb-2026 20-Jun-2025	Traceable to: SCL CEPREI CEPREI CEPREI CEPREI
Audio analyzer Universal counter	8903B	GB41300350	19-Jun-2025	CEPREI
	53132A	MY40003662	26-Jun-2025	CEPREI

Ambient conditions

Temperature:

(20.8~21.3) °C

Relative humidity:

 $(55 \pm 10) \%$

Air pressure:

(1010 ± 5) hPa

Test specifications

- The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B 1, and the lab calibration procedure SMTP004-CA-156.
- The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique. 2,
- The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference 3. pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

Feng Jungi

Approved Signatory:

Date:

11-Apr-2025

Company Chop:

ENGINA

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

Soils & Materials Engineering Co., Ltd.

Form No.CARP156-1/Issue 1/Rev.D/01/03/2007



香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com



CERTIFICATE OF CALIBRATION

Certificate No.:

25CA0416 02-02

Page:

of

2

Item tested

Description: Manufacturer: Acoustical Calibrator (Class 1) B & K

Type/Model No.: Serial/Equipment No.:

4231 3006428

Adaptors used:

_

Item submitted by

Curstomer:

AECOM

Address of Customer:

-

Request No.:

_

Date of receipt:

16-Apr-2025

Date of test:

30-Apr-2025

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	3257888	30-Jul-2025	SCL
Preamplifier	B&K 2673	3353200	29-Jun-2025	CEPREI
Measuring amplifier	B&K 2610	2346941	27-Jun-2025	CEPREI
Signal generator	DS 360	61227	24-Feb-2026	CEPREI
Digital multi-meter	34401A	US36087050	22-Apr-2026	CEPREI
Audio analyzer	8903B	GB41300350	19-Jun-2025	CEPREI
Universal counter	53132A	MY40003662	26-Jun-2025	CEPREI

Ambient conditions

Temperature: Relative humidity:

Air pressure:

(20.7~20.9)°C (56.6~57.2)%RH (1010 ± 5) hPa

Test specifications

- The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- 3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

Fena

Approved Signatory:

Date:

02-May-2025

Company Chop:

宗合試験 宗合試験 有限公司 MOMPA の MOMPA の MOMPA MOMP

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

© Soils & Materials Engineering Co., Ltd.

Form No.CARP156-1/Issue 1/Rev.D/01/03/2007



香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com





CERTIFICATE OF CALIBRATION

Certificate No.:

24CA1031 03-01

Page

2

Item tested

Description: Manufacturer: Sound Level Meter (Class 1) **B&K**

Microphone **B&K** 4189

Preamp **B&K** ZC0032

of

Type/Model No.: Serial/Equipment No.: Adaptors used:

2250

3001291/N011.05

3005374

31351

Item submitted by

Customer Name:

AECOM ASIA CO LIMITED

Address of Customer:

Request No .: Date of receipt:

31-Oct-2024

Date of test:

06-Nov-2024

Reference equipment used in the calibration

Description:

Multi function sound calibrator

Model:

Serial No.

Expiry Date: 28-Aug-2025

Traceable to: CIGISMEC

Signal generator

B&K 4226 DS 360

2288444 33873

06-Mar-2025

CEPREI

Ambient conditions

Temperature:

21 ± 1 °C

Relative humidity: Air pressure:

55 ± 10 % 1005 ± 5 hPa

Test specifications

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 1. and the lab calibration procedure SMTP004-CA-152.

The electrical tests were performed using an electrical signal substituted for the microphone which was removed and 2. replaced by an equivalent capacitance within a tolerance of ±20%.

The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference 3. between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

D

Feng

Approved Signatory:

07-Nov-2024

Company Chop:

The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

Soils & Materials Engineering Co., Ltd

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007

FNGINE



香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com



2



CERTIFICATE OF CALIBRATION

Certificate No.:

24CA1031 03-02

Page

of

Item tested

Description: Manufacturer: Sound Level Meter (Class 1) **B&K**

Microphone **B&K**

Preamp B&K ZC0032

Type/Model No.: Serial/Equipment No .:

Adaptors used:

2270 3007965 4189 2846461

17965

Item submitted by

Customer Name:

AECOM ASIA CO LIMITED

Address of Customer:

Request No.:

Date of receipt:

31-Oct-2024

Date of test:

06-Nov-2024

Reference equipment used in the calibration

Description:

B&K 4226

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator

Model: DS 360

2288444 33873

28-Aug-2025

CIGISMEC CEPREL

06-Mar-2025

Ambient conditions

Temperature:

21 ± 1 °C 55 ± 10 %

Relative humidity: Air pressure:

1005 ± 5 hPa

Test specifications

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 1, and the lab calibration procedure SMTP004-CA-152.

The electrical tests were performed using an electrical signal substituted for the microphone which was removed and 2, replaced by an equivalent capacitance within a tolerance of ±20%.

The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference 3, between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test

Details of the performed measurements are presented on page 2 of this certificate.

Fena Junai

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

07-Nov-2024

Company Chop:

ENGINE

The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

Soils & Materials Engineering Co., Ltd.

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



綜合試驗有限公司 SOILS & MATERIALS ENGINEERING CO., LTD.

香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com





CERTIFICATE OF CALIBRATION

Certificate No.:

24CA1031 03-03

Page

of

2

Item tested

Description:

Sound Level Meter (Class 1) B & K

Microphone B & K Preamp B & K

Manufacturer: Type/Model No.: Serial/Equipment No.:

2270 2644597

4189 2879980 ZC0032 29398

Adaptors used:

_

287998

29398

Item submitted by

Customer Name:

AECOM ASIA CO LIMITED

Address of Customer:

Request No.: Date of receipt:

31-Oct-2024

Date of test:

06-Nov-2024

Reference equipment used in the calibration

Description:

Model:

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator B&K 4226 DS 360 2288444 33873 28-Aug-2025 06-Mar-2025 CIGISMEC CEPREI

Ambient conditions

Temperature:

21 ± 1 °C

Relative humidity:

55 ± 10 %

Air pressure:

1005 ± 5 hPa

Test specifications

 The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

 The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Feng Junqi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

07-Nov-2024

Company Chop:

综合試驗 SONOS ※ OLL SONOS * OLL

ENGINE

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



綜 合 試 驗 有 限 公 司 SOILS & MATERIALS ENGINEERING CO., LTD.

香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com



CERTIFICATE OF CALIBRATION

Certificate No.:

25CA0408 03-01

Page

of

2

Item tested

Description:

Sound Level Meter (Type 1)

Microphone

Preamp

Manufacturer:

Nti

Nti Andio MC230A

Nti Andio MA220

Type/Model No.: Serial/Equipment No.: XL2 A2A-17788-EO

A24645

9087

Adaptors used:

Item submitted by

Customer Name:

AECOM

Address of Customer:

Request No .: Date of receipt:

08-Apr-2025

Date of test:

09-Арг-2025

Reference equipment used in the calibration

Description:

Model:

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator

B&K 4226 DS 360

2288444 61227

28-Aug-2025 24-Feb-2026

CIGISMEC CEPREI

Ambient conditions

Temperature:

(21.3~21.8) °C

Relative humidity:

 $(55 \pm 10) \%$

Air pressure:

(1005 ± 5) hPa

Test specifications

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 1, and the lab calibration procedure SMTP004-CA-152.

The electrical tests were performed using an electrical signal substituted for the microphone which was removed and 2, replaced by an equivalent capacitance within a tolerance of ±20%.

The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference 3. between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Fend Jungi

Approved Signatory:

Date:

10-Apr-2025

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

C Soils & Materials Engineering Co., Ltd.

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



綜合試驗有限公司 SOILS & MATERIALS ENGINEERING CO., LTD.

香港新界葵涌永基路22-24號好爸爸創科大廈 Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com



2



CERTIFICATE OF CALIBRATION

Certificate No.:

25CA0408 03-02

Page

of

Item tested

Description: Manufacturer:

Adaptors used:

Sound Level Meter (Class 1) B & K

Microphone B & K Preamp B & K

Type/Model No.: Serial/Equipment No.: 2250-L 2681366 4950 2665582 ZC0032 17190

Item submitted by

Customer Name:

AECOM

Address of Customer:

-

Request No.: Date of receipt:

08-Apr-2025

Date of test:

10-Apr-2025

Reference equipment used in the calibration

Description:

Model: Seria

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator B&K 4226 DS 360 2288444 61227 28-Aug-2025 24-Feb-2026 CIGISMEC CEPREI

Ambient conditions

Temperature:

(20.8~21.3) °C

Relative humidity:

 $(55 \pm 10) \%$

Air pressure: $(1010 \pm 5) \text{ hPa}$

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Feng Junqi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

11-Apr-2025

Company Chop:

SENGINEERIES COM 综合試驗 COM 有限公司 第7008 ** OLT

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007

APPENDIX F

EM&A Monitoring Schedules

Central Kowloon Route – Kai Tak West Impact Environmental Monitoring Schedule for September 2025

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

Air Quality Monitoring Station

E-A14a: Block B of Merit Industrial Centre

Noise Monitoring Stations

E-N12a: 19 Hing Yan Street

E-N21a: Block B of Merit Industrial Centre

Monitoring Frequency

24-hour TSP: Once every 6 days

Monitoring Frequency

Once per week

1-hour TSP: 3 times every 6 days (as required in case of complaints)

* Remarks: The EM&A monitoring on 8 September 2025 was re-scheduled to 9 September 2025 due to the Typhoon signal 8 was conducted.

APPENDIX G

Air Quality Monitoring Results and their Graphical Presentations

Appendix G Air Quality Monitoring Results

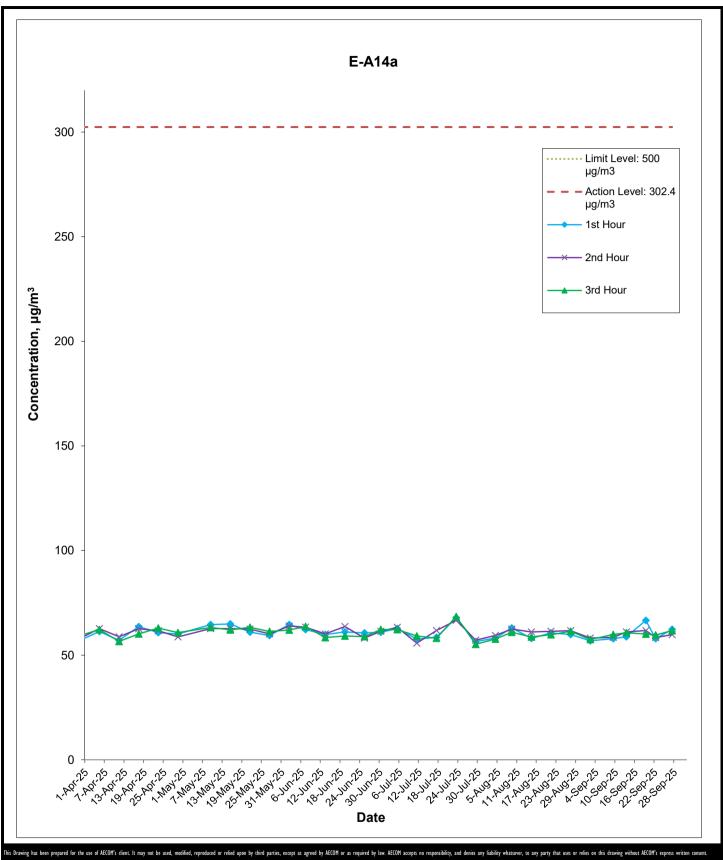
24-hour TSP Monitoring Results at Station E-A14a (Block B, Merit Industrial Centre)

	Weather	Air	Atmospheric	Flow Rate	Flow Rate (m³/min.) Av		Av. flow Total vol. Filte		Filter Weight (g)		Elapse Time		Sampling	Conc.
Date	Condition	Temp. (°C)	Pressure (hPa)	Initial	Final	(m³/min)	(m ³)	Initial	Final	weight(g)	Initial	Final	Time(hrs.)	(µg/m³)
2-Sep-25	Sunny	30.3	1008.2	1.304	1.304	1.30	1877.8	2.7678	2.8442	0.0764	17820.06	17844.06	24.00	40.7
9-Sep-25	Cloudy	28.7	1010.3	1.304	1.304	1.30	1877.8	2.7757	2.8055	0.0298	17844.06	17868.06	24.00	15.9
13-Sep-25	Fine	30.1	1011.7	1.304	1.304	1.30	1877.8	2.7782	2.8318	0.0536	17868.06	17892.06	24.00	28.5
19-Sep-25	Sunny	28.5	1005.9	1.304	1.304	1.30	1877.8	2.6636	2.7027	0.0391	17892.06	17916.06	24.00	20.8
22-Sep-25	Sunny	29.3	1006.3	1.304	1.304	1.30	1877.8	2.7753	2.8134	0.0381	17916.06	17940.06	24.00	20.3
27-Sep-25	Fine	30.0	1012.9	1.304	1.304	1.30	1877.8	2.7892	2.8792	0.0900	17940.06	17964.06	24.00	47.9
													Average	29.0
													Minimum	15.9
													Maximum	47.9

Appendix G Air Quality Monitoring Results

1-hour TSP Monitoring Results at Station E-A14a (Block B, Merit Industrial Centre)

	Start		1st Hour	2nd Hour	3rd Hour
	Time	Weather	Conc.	Conc.	Conc.
Date			(µg/m³)	(µg/m³)	(µg/m³)
2-Sep-25	11:00	Sunny	56.9	58.2	57.5
9-Sep-25	13:05	Cloudy	57.9	58.5	59.9
13-Sep-25	13:35	Fine	58.8	61.1	60.7
19-Sep-25	11:05	Sunny	66.6	61.8	60.1
22-Sep-25	10:00	Sunny	57.9	58.4	59.6
27-Sep-25	9:40	Fine	62.3	59.8	61.7
				Average	59.9
				Min	56.9
				Max	66.6

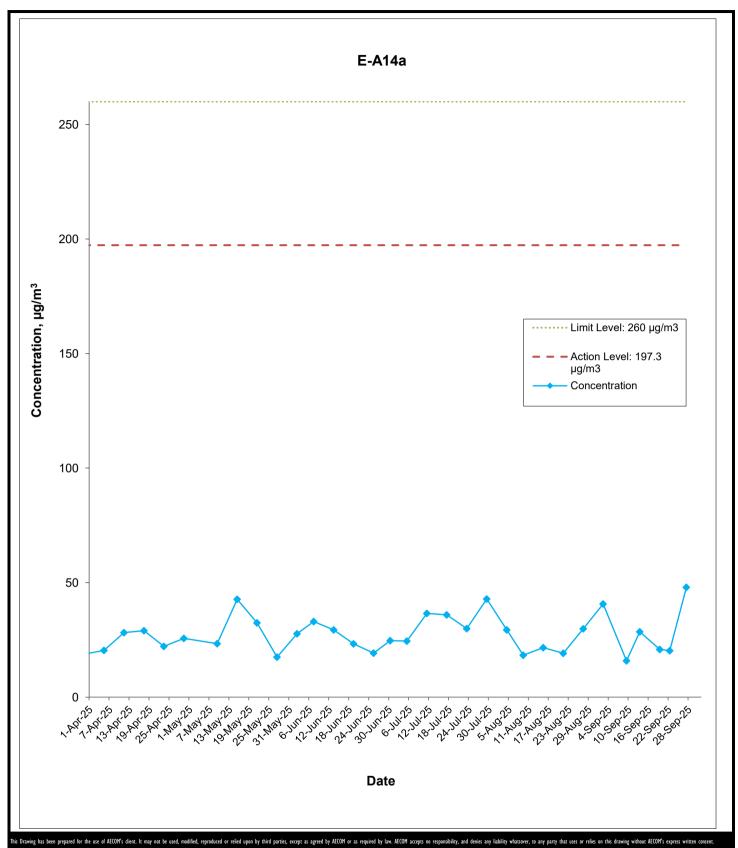


Central Kowloon Route - Kai Tak West (Contract No. HY/2014/07)

AECOM

Graphical Presentation of Impact 1-hour TSP Monitoring Results

Date: October 2025 Appendix G



Central Kowloon Route - Kai Tak West (Contract No. HY/2014/07)

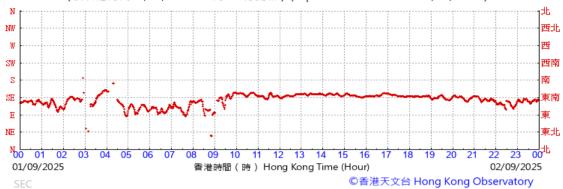
AECOM

Graphical Presentation of Impact 24-hour TSP Monitoring Results

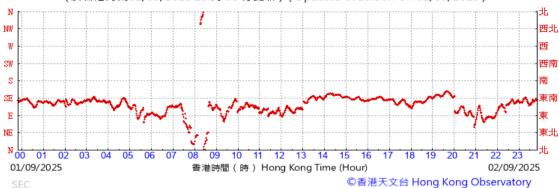
Date: October 2025 Appendix G

Data of Wind Direction Extracted from Kai Tak Wind Station of the Hong Kong Observatory September 2025

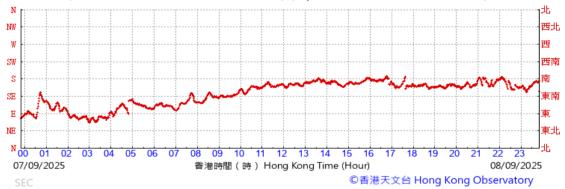
(於香港時間02/09/2025 00 時 00 分更新) (Updated at 00:00H on 02/09/2025)



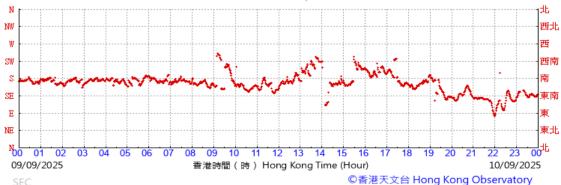
(於香港時間02/09/2025 23 時 50 分更新) (Updated at 23:50H on 02/09/2025)



(於香港時間08/09/2025 23 時 50 分更新) (Updated at 23:50H on 08/09/2025)

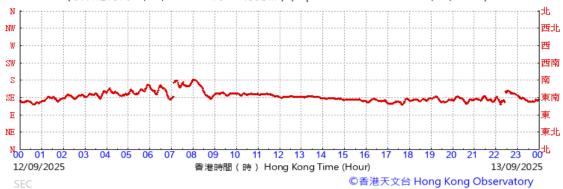


(於香港時間10/09/2025 00 時 00 分更新) (Updated at 00:00H on 10/09/2025)

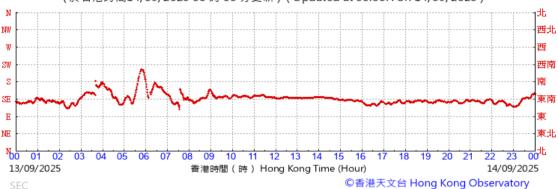


Data of Wind Direction Extracted from Kai Tak Wind Station of the Hong Kong Observatory September 2025

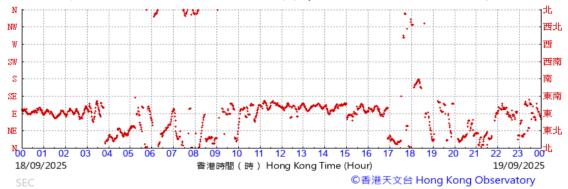
(於香港時間13/09/2025 00 時 00 分更新) (Updated at 00:00H on 13/09/2025)



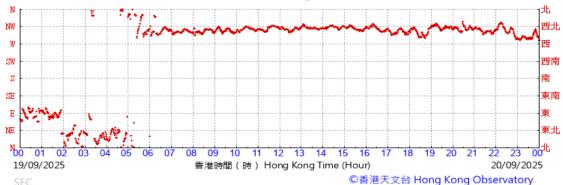
(於香港時間14/09/2025 00 時 00 分更新) (Updated at 00:00H on 14/09/2025)



(於香港時間19/09/2025 00 時 00 分更新) (Updated at 00:00H on 19/09/2025)

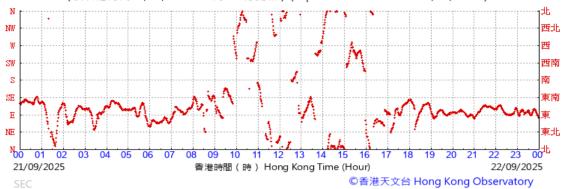


(於香港時間20/09/2025 00 時 00 分更新) (Updated at 00:00H on 20/09/2025)

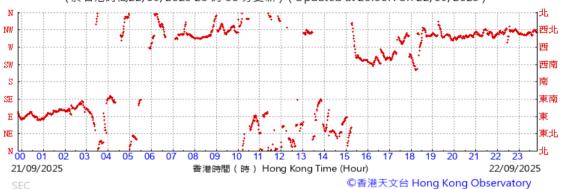


Data of Wind Direction Extracted from Kai Tak Wind Station of the Hong Kong Observatory September 2025

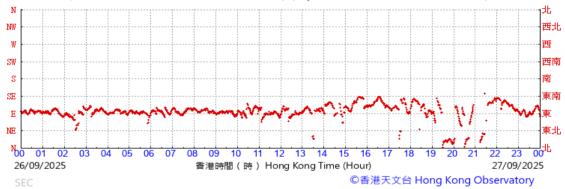
(於香港時間22/09/2025 00 時 00 分更新) (Updated at 00:00H on 22/09/2025)



(於香港時間22/09/2025 23 時 50 分更新) (Updated at 23:50H on 22/09/2025)



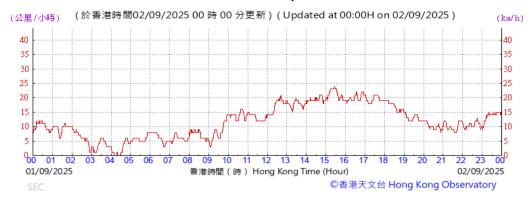
(於香港時間27/09/2025 00 時 00 分更新) (Updated at 00:00H on 27/09/2025)



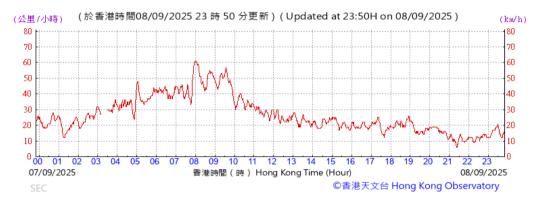
(於香港時間27/09/2025 23 時 50 分更新) (Updated at 23:50H on 27/09/2025)



Data of Wind Speed Extracted from Kai Tak Wind Station of the Hong Kong Observatory September 2025

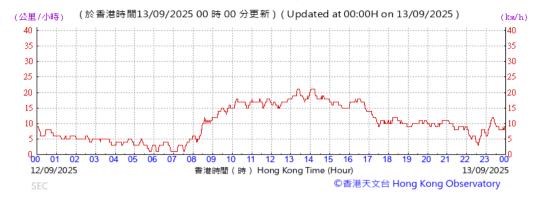


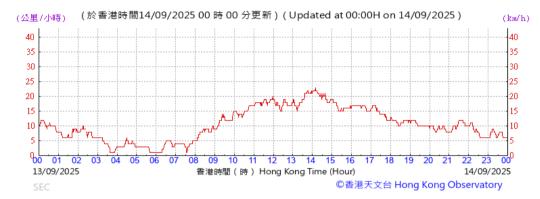






Data of Wind Speed Extracted from Kai Tak Wind Station of the Hong Kong Observatory September 2025



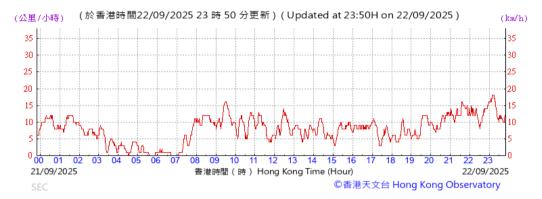


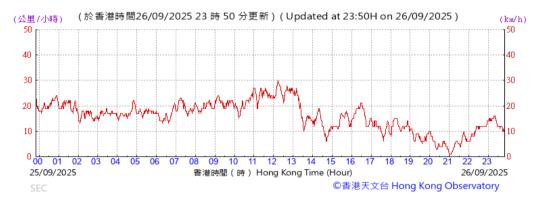




Data of Wind Speed Extracted from Kai Tak Wind Station of the Hong Kong Observatory September 2025









APPENDIX H

Noise Monitoring Results and their Graphical Presentations

Appendix H Regular Construction Noise Monitoring Results

Daytime Noise Monitoring Results at Station E-N12a (19 Hing Yan Street)

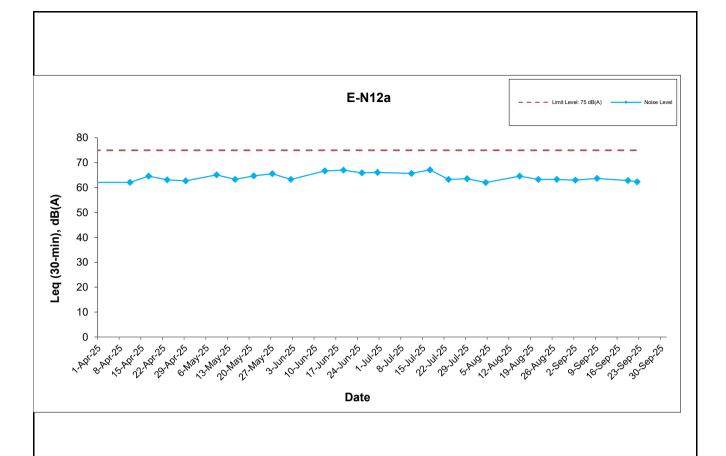
Date	Weather	Nois	e Level for	30-min, d	Limit Level,	Exceedance	
Date	Condition	Time	L90	L10	Leq	dB(A)	(Y/N)
2-Sep-25	Sunny	13:05	61.1	64.1	63.0	75	N
9-Sep-25	Cloudy	14:00	60.8	64.2	63.7	75	N
19-Sep-25	Sunny	13:05	59.0	64.0	62.8	75	N
22-Sep-25	Sunny	11:05	60.0	63.2	62.3	75	N

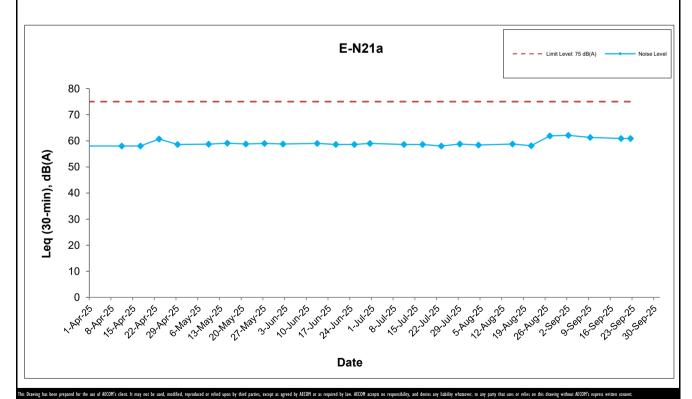
Daytime Noise Monitoring Results at Station E-N21a (Block B of Merit Industrial Centre)

	Weather	Nois	e Level for	[.] 30-min, d	Limit Level,	Exceedance	
Date	Condition	Time	L90	L10	Leq	dB(A)	(Y/N)
2-Sep-25	Sunny	10:56	60.6	63.2	62.1	75	N
9-Sep-25	Cloudy	13:05	55.8	62.1	61.3	75	N
19-Sep-25	Sunny	11:10	56.8	61.4	60.9	75	N
22-Sep-25	Sunny	10:00	56.2	61.7	60.9	75	N

⁺ - Façade measurement.

^{# -} A correction of +3dB(A) was made to the free field measurement.





Central Kowloon Route - Kai Tak West (Contract No. HY/2014/07)

AECOM

Graphical Presentation of Impact Noise Monitoring Results

Date: October 2025 Appendix H

APPENDIX I

Event and Action Plan

Appendix I Event Action Plan

Event / Action Plan for Construction Dust Monitoring

EVENT		AC	TION	
EVENT	ET	IEC	ER	Contractor
ACTION LEVEL				
Exceedance for one sample	 Inform the Contractor, IEC and ER; Discuss with the Contractor and IEC on the remedial measures required; Repeat measurement to confirm findings; Increase monitoring frequency 	Check monitoring data submitted by the ET; Check Contractor's working method; Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	Confirm receipt of notification of exceedance in writing.	Identify source(s), investigate the causes of exceedance and propose remedial measures; Implement remedial measures; Amend working methods agreed with the ER as appropriate.
Exceedance for two or more consecutive samples	 Inform the Contractor, IEC and ER; Discuss with the ER, IEC and Contractor on the remedial measures required; Repeat measurements to confirm findings; Increase monitoring frequency to daily; If exceedance continues, arrange meeting with the IEC, ER and Contractor; If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by the ET; Check Contractor's working method; Review and advise the ET and ER on the effectiveness of the proposed remedial measures. 	 Confirm receipt of notification of exceedance in writing; Review and agree on the remedial measures proposed by the Contractor; Supervise Implementation of remedial measures. 	 Identify source and investigate the causes of exceedance; Submit proposals for remedial measures to the ER with a copy to ET and IEC within three working days of notification; Implement the agreed proposals; Amend proposal as appropriate.

Gammon Construction Limited Central Kowloon Route – Kai Tak West

Appendix I Event Action Plan

Appendix I	Event Action Plan												
EVENT	ACTION												
EVENT	ET	IEC	ER	Contractor									
LIMIT LEVEL Exceedance for one sample	Inform the Contractor, IEC, EPD and ER; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Discuss with the ER, IEC and contractor on the remedial measures and assess the effectiveness.	Check monitoring data submitted by the ET; Check the Contractor's working method; Discuss with the ET, ER and Contractor on possible remedial measures; Review and advise the ER and ET on the effectiveness of Contractor's remedial measures.	Confirm receipt of notification of exceedance in writing; Review and agree on the remedial measures proposed by the Contractor; Supervise implementation of remedial measures.	Identify source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to ER with a copy to ET and IEC within three working days of notification; Implement the agreed proposals; Amend proposal if appropriate.									
Exceedance for two or more consecutive samples	 Notify Contractor, IEC, EPD and ER; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of the Contractor's working procedures with the ER to determine possible mitigation to be implemented; Arrange meeting with the IEC and ER to discuss the remedial measures to be taken; Review the effectiveness of the Contractor's remedial measures and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by the ET; Check the Contractor's working method; Discuss with ET, ER, and Contractor on the potential remedial measures; Review and advise the ER and ET on the effectiveness of Contractor's remedial measures. 	 Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	 Identify source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to the ER with a copy to the IEC and ET within three working days of notification; Implement the agreed proposals; Revise and resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated. 									

Appendix I Event Action Plan

Event and Action Plan for Construction Noise Monitoring

FMENT		ACT	ΓΙΟΝ	
EVENT	ET	IEC	ER	Contractor
Exceedance of Action Level	 Notify the Contractor, IEC and ER; Discuss with the ER, IEC and Contractor on the remedial measures required; and Increase monitoring frequency to check mitigation effectiveness. 	 Review the investigation results submitted by the contractor; and Review and advise the ET and ER on the effectiveness of the remedial measures proposed by the Contractor. 	 Confirm receipt of notification of complaint in writing; Review and agree on the remedial measures proposed by the Contractor; and Supervise implementation of remedial measures. 	 Investigate the complaint and propose remedial measures; Report the results of investigation to the IEC, ET and ER; Submit noise mitigation proposals to the ER with copy to the IEC and ET within 3 working days of notification; and Implement noise mitigation proposals.
Exceedance of Limit Level	 Notify the Contractor, IEC, EPD and ER; Repeat measurement to confirm findings; Increase monitoring frequency; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with the IEC and ER to discuss the remedial measures to be taken; Inform IEC, ER and EPD the causes and actions taken for the exceedances; Review the effectiveness of Contractor's remedial measures and keep IEC, EPD and ER informed of the results; and If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by the ET; Check the Contractor's working method; Discuss with the ER, ET and Contractor on the potential remedial measures; and Review and advise the ET and ER on the effectiveness of the remedial measures proposed by the Contractor. 	 Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures; and If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	 Identify source and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to the ER with copy to the IEC and ET within 3 working days of notification; Implement the agreed proposals; Revise and resubmit proposals if problem still not under control; and Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix I Event Action Plan

Event and Action Plan for Continuous Noise Monitoring

		ACTI	ON	
EVENT	ET	IEC	ER	CONTRACTOR
Action/Limit Level	1. Identify source; 2. Repeat measurement. If two consecutive measurements exceed Action/Limit Level, the exceedance is then confirmed; 3. If exceedance is confirmed, notify IEC, ER and Contractor; 4. Investigate the cause of exceedance and ckeck Contractor's working procedures to determine possible mitigation to be implemented; 5. Discuss jointly with the IEC, ER and Contractor and formulate remedial measures; and 6. Assess effectiveness of Contractor's remedial actions and keep IEC and ER informed of the results.	 Check monitoring data submitted by the Works Contract 1123 ET; Check the Contractor's working method; Discuss with the ER, Works Contract 1123 ET and Contractor on the potential remedial measures; and Review and advise the Works Contract 1123 ET and ER on the effectiveness of the remedial measures proposed by the Contractor. 	1. Confirm receipt of notification of exceedance in writing; 2. In consultation with the Works Contract 1123 ET and IEC, agree with the Contractor on the remedial measures to be implemented; 3. Ensure the proper implementation of remedial measures; and 4. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	 Identify source with the Works Contract 1123 ET; If exceedance is confirmed, investigation the cause of exceedance and take immediate action to avoid further exceedance; Submit proposals for remedial measures to the ER with copy to the IEC and ET of notification; Implement the agreed proposals; Liaise with ER to optimize the effectiveness of the agreed mitigation; Revise and resubmit proposals if problem still not under control; and Stop the relevant portion of works as determined by the ER until the exceedance is abated.

APPENDIX J

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

Appendix J

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

Environmental complaints — — — — — — — — — — — — — — — — — — —
Environmental 0 78
0 78
Notification of summons 0 0
Successful
prosecutions 0 0

Appendix J AECOM

APPENDIX K

Monthly Summary Waste Flow Table

Contract No. : HY/2014/07 Central Kowloon Route - Kai Tak West Gammon Construction Limited

Monthly Summary Waste Flow Table for 2025 (Year)



		Actual Quantities of Inert C&D Materials Generated Monthly (Note 1)											Actual Quantities of Non-inert C&D Materials (i.e. C&D Wastes) Generated Monthly				Actual Quantities of Contaminated Soil Monthly		Actual Quantities of Land- based Sediment Monthly		Actual Quantities of Marine-based sediment Monthly			
Month			Generated				Disp	osed			Reused			Recycled		Disp	osed	Reused	Reused	Disp	oosed	Disposed		
WOTH	Fill Material	Art	ificial Mater	ial	Total	Disposed	Disposed	Disposed	Total		Davisad in	Total		Paper/			Canaral		Reused in the Contract		t Designated site	Dispos	ed at Designat	ed Site
	Soil and Rock	Broken Concrete	Asphalt	Building Derbis	Quantity Generated	as Public Fills at TKO137	as Public Fills at TM38	as Capping at East Sha Chau (Alluvium)	Quantity Disposal	Reused in the Contract	Reused in Other Projects	Quantity Reused	Metals	cardboard packaging (Note 3)	Plastics	Chemical Waste	General Refuse (Note 2)	Reused in the Contract	Type 1 (Cat. L)	Type 1 (Cat. M _p)	Type 2 (Cat. M _f , Cat. H)	Type 1 (Cat. L, Cat. M _p)	Type 2 (Cat. M _f , Cat. H, Cat. H _p)	Type 3 (Cat. H _f)
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000kg)	('000Kg)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)
Jan	0.266	0.000	0.000	0.000	0.266	0.000	0.000	0.000	0.000	0.000	0.266	0.266	1083.070	0.000	0.000	0.000	138.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Feb	0.705	0.000	0.000	0.000	0.705	0.535	0.000	0.000	0.535	0.170	0.000	0.170	1157.430	0.368	2.855	0.000	108.820	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar	13.330	0.000	0.000	0.000	13.330	0.127	10.960	0.000	11.087	2.243	0.000	2.243	1680.400	0.307	1.980	0.000	93.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Apr	14.507	0.000	0.000	0.000	14.507	0.000	14.507	0.000	14.507	0.000	0.000	0.000	1129.930	0.000	0.000	0.000	78.820	0.000	0.000	0.000	0.000	0.000	0.000	0.000
May	12.782	0.000	0.000	0.000	12.782	0.000	12.782	0.000	12.782	0.000	0.000	0.000	1355.680	0.000	0.000	0.000	63.700	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jun	6.706	0.000	0.000	0.000	6.706	0.108	6.598	0.000	6.706	0.000	0.000	0.000	1023.680	0.000	0.000	0.000	46.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SOB-	48.297	0.000	0.000	0.000	48.297	0.769	44.848	0.000	45.617	2.414	0.266	2.679	7430.190	0.675	4.835	0.000	529.160	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jul	4.055	0.000	0.000	0.000	4.055	0.090	3.965	0.000	4.055	0.000	0.000	0.000	845.670	0.175	0.000	0.000	124.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aug	3.485	0.000	0.000	0.000	3.485	0.844	2.641	0.000	3.485	0.000	0.000	0.000	717.910	0.000	0.000	0.000	31.720	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sep	12.143	0.000	0.000	0.000	12.143	12.143	0.000	0.000	12.143	0.000	0.000	0.000	361.950	0.000	0.000	0.000	87.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oct	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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	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	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	67.979	0.000	0.000	0.000	67.979	13.846	51.454	0.000	65.300	2.414	0.266	2.679	9355.720	0.850	4.835	0.000	772.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note:

- 1. Assume the density of fill is 2 ton/m3.
- 2. Refuse disposed to NENT landfill.
- 3 The latest update shall prevail.

Central Kowloon Route Remaining Works Contract No. HY/2023/08





Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract:	Remaining Works (HY/2023/08)

Reference Document/Plan

Document/Plan to be Certified/ Verified: Monthly EM&A Report No.11 (Kai Tak Phase 2B

Landscaped Deck)

08 October 2025 Date of Report:

Date received by IEC: 08 October 2025

Reference EP Condition

Environmental Permit Condition: 3.4

Submission of Monthly EM&A Report of the Project

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

Mondy 20.

Date: 08 October 2025

Independent Environmental Checker

Our ref: 0436942_IEC Verification Cert_RMW_Monthly EM&A Rpt No.11(KT)_20251008.docx

Contract No.: HY/2023/08 Central Kowloon Route – Remaining Works

Monthly Environmental Monitoring and Audit – Kai Tak Phase 2B Landscaped Deck – Report No. 11 (Period from 1st to 30th September 2025)

Build King – Tung Lee Joint Venture

Reference: P528199

Revision: 1 **2025-10-08**



Document control record

Document prepared by:

Aurecon Hong Kong Limited

Unit 1608, 16/F, Tower B, Manulife Financial Centre 223 -231 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong.

T 3664 6888

F 3664 6999

E hongkong@aurecongroup.com

W www.aurecongroup.com

A person using Aurecon documents or data accepts the risk of:

- a) Using the documents or data in electronic form without requesting and checking them for accuracy
- b) Using the documents or data for any purpose not agreed to in writing by Aurecon.
- c) against the original hard copy version.

Document control		aurecon					
Report title		Monthly Environmental Monitoring and Audit – Kai Tak Phase 2B Landscaped Deck – Report No. 11 (Period from 1st to 30th September 2025)					
Document code			Project number		P528199		
File path							
Client		Build King – Tung Lee Joint Venture					
Client contact			Client refer	Client reference			
Rev	Date	Revision details/status	Author	Reviewer	Verifier (if required)	Approver	
0	2025-10-06	First issue	Kisten Ma	F.C. Tsang		F.C. Tsang	
1	2025-10-08	Second issue	Kisten Ma	F.C. Tsang		F.C. Tsang	
Curre	ent revision	1					

Approval	proval					
Author signature	Kmer	Approver signature	Tour Failbearg			
Name	Kisten Ma	Name	F.C. Tsang			
Title	Senior Consultant	Title	Environmental Team Leader			



Contents

Ex	ecutive Summary	1
1	Introduction	3
2	Environmental Status	6
3	Air Quality and Noise Monitoring	7
	Waste Management	
5	Landscape and Visual	10
	Summary of Complaints, Notification of Summons and Prosecutions	
7	EM&A Site Inspection	13
	Future Key Issues	
	Conclusion and Recommendations	

Appendices

Appendix A	Alignment and Works Site in Kai Tak West Area for Contract No. HY/2023/08
Appendix B	Construction Programme
Appendix C	Project Organization Chart
Appendix D	Event and Action Plan (EAP) (Air Quality Monitoring)
Appendix E	Event and Action Plan (EAP) (Noise Monitoring)
Appendix F	Environmental Mitigation Implementation Schedule (EMIS)
Appendix G	Waste Flow Table
Appendix H	Statistics on Complaint, Notifications of Summons and Successful Prosecutions

Executive Summary

- 1.1.1 Build King Tung Lee Joint Venture ("Contractor") commenced the construction works of Highway Department (HyD) Central Kowloon Route Contract No. HY/2023/08 Central Kowloon Route Remaining Works at Kai Tak West Area ("The Project") on 11 November 2024. This is the 11th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out in the Kai Tak West Area during the period from 1 September 2025 to 30 September 2025.
- 1.1.2 A summary of major construction activities informed by the Contractor for the Project during the reporting period is presented below.

Construction Activities Undertaken in Kai Tak West Area

- Planter wall construction at Kai Tak Phase 2B Landscaped Deck
- Backfilling, drainage layer and waterproofing works at Kai Tak Phase 2B Landscaped Deck
- Ramp construction at Kai Tak Phase 2B Landscaped Deck
- Planter soil laying at Kai Tak Phase 2B Landscaped Deck
- Drainage system and installation of irrigation pipe and ducting for cabling works at Kai Tak Phase 2B Landscaped Deck

Environmental Monitoring and Audit Works

- 1.1.3 Regular construction air quality monitoring (24-hour TSP and 1-hour TSP) and noise monitoring works in Kai Tak West Area are currently covered under the Contract No. HY/2014/07 Central Kowloon Route Kai Tak West. The details of the monitoring works could be referred to Sections 3 and 5 of the corresponding Monthly EM&A Report for Contract No. HY/2014/07.
- Joint weekly site inspections were conducted by representatives of the Environmental team (ET), the Contractor and the Engineer on 5, 12, 19 and 26 September2025. A joint site inspection with the Independent Environmental Checker (IEC) was undertaken on 12 September 2025. Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted by the ET on 5 and 19 September 2025. Details of the audit findings and implementation status are presented in Section 7. Details of waste management are presented in Section 4.



- 1.1.5 A summary of the non-compliance (exceedance) during the reporting period 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 / Limit Level exceedance for construction noise was recorded.

Complaints, Notification of Summons and Successful Prosecution

1.1.6 No environmental related complaints, notification of summons and successful prosecution were received in the reporting period.

Reporting Changes

1.1.7 There were no reporting changes during the reporting period.

Future Key Issues

1.1.8 A summary of construction activities informed by the Contractor for the next reporting period are listed below:

Construction Activities To be Undertaken in Kai Tak West Area

- Backfilling works (soil and aggregate) at Kai Tak Phase 2B Landscaped Deck
- Ramp construction at Kai Tak Phase 2B Landscaped Deck
- Planter soil laying at Kai Tak Phase 2B Landscaped Deck
- Drainage system and installation of irrigation pipe and ducting for cabling works at Kai Tak Phase 2B Landscaped Deck



1 Introduction

1.1 Basic Project Information

- 1.1.1 Central Kowloon Route (CKR) is a 4.7 km long dual 3-lane trunk road in Central Kowloon linking Yau Ma Tei Interchange in West Kowloon with the road network on Kai Tak Development and Kowloon Bay in East Kowloon.
- 1.1.2 The Central Kowloon Route Design and Construction Environmental Impact Assessment Report (Register No.: AEIAR-171/2013) was approved with conditions by the Environmental Protection Department (EPD) on 11 July 2013. An Environmental Permit (EP-457/2013) was issued on 9 August 2013. Variations of EP (VEP) was subsequently applied for and the latest EP (EP-457/2013/D) was issued by EPD on 15 June 2021.
- 1.1.3 The construction of the CKR had been divided into different sections. Contract No. HY/2023/08 Central Kowloon Route Remaining Works covers part of the construction activities located at Kai Tak West Area and Yau Ma Tei Area under the EP, including:
 - design and construction of landscaping works at Yau Ma Tei Landscaped Deck, Yau Ma Tei Rest Gardens, North Tree Park and Kai Tak Phase 2B Landscaped Deck;
 - improvement of a section of Kai Fuk Road of approximately 300 metres in length;
 - planting of compensatory trees; and
 - associated civil works, electrical and mechanical works, road and drainage works, lighting works and establishment works.
- 1.1.4 The works site at Kai Tak West Area for the Contract No. HY/2023/08 are shown in **Appendix A**.

1.2 Purpose of the Report

1.2.1 This is the 11th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out for the Project in the Kai Tak West Area during the period from 1 September 2025 to 30 September 2025.



1.3 Construction Activities Undertaken During the Reporting Period

1.3.1 A summary of major construction activities carried out during the reporting period are presented in **Table 1.1**. The construction programme is presented in **Appendix B**.

Table 1.1 Summary of Construction Activities during the Reporting Period

Со	nstruction Activities Undertaken in Kai Tak West Area	Progress
•	Planter Wall construction at Kai Tak Phase 2B Landscaped Deck	100%
•	Backfilling, drainage layer and waterproofing works at Kai Tak Phase 2B Landscaped Deck	95%
•	Ramp construction at Kai Tak Phase 2B Landscaped Deck	75%
•	Planter soil laying at Kai Tak Phase 2B Landscaped Deck	50%
•	Drainage system and installation of irrigation pipe and ducting for cabling works at Kai Tak Phase 2B Landscaped Deck	60%

1.4 Project Organisation

1.4.1 The project organization structure is shown in **Appendix C**. The key personnel contact names and numbers for the Project are summarized in **Table 1.2**.

Table 1.2 Contact Information of Key Personnel

Party	Role	Position	Name	Contact No.
Arup – Mott MacDonald Joint Venture	Engineer's Representative ("ER")	Resident Engineer (Environmental)	Ms. Jim Li	9120 1157
ERM – Hong Kong Limited	Independent Environmental Checker ("IEC")	IEC	Ms. Mandy To	2271 3313
Aurecon Hong Kong Limited	Environmental Team ("ET")	ET Leader	Mr. F. C. Tsang	3664 6801
Build King – Tung Lee Joint Venture	Contractor	Environmental Officer	Mr. Samuel Pang	9876 9121

1.5 Status of Environmental Licences, Notification and Permit

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

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

Permit/	Valid P	eriod	Status	Remark
License/ Notification / Reference No.	From	То		
Environmental P	ermit			
EP-457/2013/D	15 June 2021		Valid	
Wastewater Disc	harge License			
WT00046473- 2025	9 May 2025	End of Project	Valid	
Notification of Co Dust Regulation)	onstruction Works	Under the Air Po	Ilution Cont	rol (Construction
10007346	25 July 2024	End of Project	Notified	
Chemical Waste	Producer Registra	ation		
5213-286- B2767-02	19 March 2025		Valid	
Billing Account f	or Disposal of Co	nstruction Waste		
7051793	6 August 2024		Valid	
Y-Park Members	hip			
C0280	12 August 2024		Valid	
Construction No	ise Permit			
GW-RE0844-25	1 August 2025	31 January 2026	Valid	General Activities at Kai Tak Phase 2B Landscaped Deck
Collection of Pub	olic Fill at Public F	ill Reception Faci	lity	
TKO137- HY/2023/08-02	1 July 2025	31 December 2025	Valid	

2 Environmental Status

2.1 Environmental Permit (EP) Submission Status

2.2 Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (EP-457/2013/D) during the reporting period for the Project are summarised in **Table 2.1**.

Table 2.1 Summary of Status of Required Submission for EP-457/2013/D for the Project

EP Condition (EP-457/2013/D)	Submission	Submission Date
3.4	Monthly EM&A Report – Kai Tak Phase 2B Landscape Deck (August 2025)	12 September 2025



3 Air Quality and Noise Monitoring

3.1 Air Quality

Monitoring Requirements and Results

3.1.1 The air quality (24-hour TSP, 1-hour TSP) monitoring works in Kai Tak West Area are currently covered under Contract No. HY/2014/07 – Central Kowloon Route – Kai Tak West. Details of the corresponding monitoring parameters, equipment, methodology, monitoring schedule wind data, results and the established Action and Limit Levels could be referred to Sections 3 and 5 of the corresponding Monthly EM&A Report for Contract No. HY/2014/07.

Observations

- 3.1.2 No Action/ Limit Level exceedance was recorded for all 1-hour TSP and 24-hour TSP monitoring in the reporting period.
- 3.1.3 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. A summary of observation during the site audits is shown in **Table 7.1** of this report.

3.2 Noise

Monitoring Requirements and Results

3.2.1 The construction noise monitoring works in Kai Tak West Area are currently covered under Contract No. HY/2014/07 – Central Kowloon Route – Kai Tak West. Details of the corresponding monitoring parameters, equipment, methodology, results and the established Action and Limit Levels could be referred to Sections 3 and 5 of the corresponding Monthly EM&A Report for Contract No. HY/2014/07.

Observations

3.2.2 No Action/ Limit Level exceedance was recorded for construction noise monitoring in the reporting period.



3.2.3 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of noise mitigation measures within the site boundaries of this Project. A summary of observations during the site audits is shown in **Table 7.1** of this report.



4 Waste Management

- 4.1.1 Waste generated from this Project includes inert C&D materials and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/ cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. As advised by the Contractor, only general refuse was generated and disposed of during this reporting period.
- 4.1.2 With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting period are summarised in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix G**.

Table 4.1 Quantities of Waste Generated from the Project in the Reporting Period

			Quantit	у				
D			No	n-inert C&D N	Materials			
Reporting period	Inert C&D	Chemical	Others, e.g. General	R	Recycled materials			
ponou	Materials (in '000 kg)	Waste (in 'kg)	Refuse disposed of at Landfill (in '000kg)	Paper/ cardboard (in '000kg)	Plastics (in '000 kg)	Metals (in '000 kg)		
September 2025	0.00	0.00	34.67	0.00	0.00	0.00		

5 Landscape and Visual

- 5.1.1 As per the EM&A Manuals, the landscape and visual mitigation measures shall be implemented, and site inspections should be undertaken once every two weeks during the construction period.
- 5.1.2 Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted on 5 and 19 September 2025. The observations and recommendations made during the site inspections are presented in **Table 7.1**. A summary of the implementation status is presented in **Appendix F**.



6 Summary of Complaints, Notification of Summons and Prosecutions

6.1.1 The environmental Complaints Handling Procedures is shown below.

Complaint Received	d via Project Hotline	Complaint Received via government departments						
Contractor notify	ER, ET and IEC	ER notify Contract	tor, ET and IEC					
Contractor log compla		nto the complaint database stigation of complaint	e. Contractor, ER and					
If complaint is cor	nsidered not valid	If complaint is	s found valid					
ET or ER to reply to neces	•	Contractor to identify ar measures in consultation ER.						
		The ER, ET and IEC to re of the Contractor's reme updated situation; ET to monitoring and audit to necessary and overse leading to the complain conduct further inspection	edial measures and the o undertake additional overify the situation if e that circumstances at do not recur. ER to					
If the complaint is referred by the EPD, the Contractor to prepare interim report on the status of the complaint investigation and follow-up actions stipulated above, including the details of the remedial measures and additional monitoring identified or already taken, for submission to EPD within the timeframe assigned by the EPD								
The ET to record the	details of the complaint	results of the investigation	subsequent actions					
The ET to record the details of the complaint, results of the investigation, subsequent actions taken to address the complaint and updated situation including the effectiveness of the remedial measures, supported by regular and additional monitoring results in the monthly EM&A reports								

- 6.1.2 Should non-compliance of the criteria occur, action in accordance with the Event and Action Plan in **Appendix D** and **Appendix E** shall be carried out.
- 6.1.3 No exceedance of the Action and Limit Levels of air quality (1-hour TSP and 24-hour TSP) monitoring and noise monitoring was recorded in the reporting period.
- 6.1.4 No complaint was received in the reporting period.
- 6.1.5 No non-compliance was received in the reporting period.
- 6.1.6 No notification of summons and successful prosecution was received in the reporting period.
- 6.1.7 Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix H.**



7 EM&A Site Inspection

- 7.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, 4 site inspections were carried out by the representative of ET, Contractor and Engineer on 5, 12, 19 and 26 September 2025, along with bi-weekly inspection of the implementation of landscape and visual mitigation measures conducted on 5 and 19 September 2025.
- 7.1.2 One joint site inspection with the IEC was also undertaken on 12 September 2025. Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized in **Table 7.1**.

Table 7.1 Summary of Site Observation

Date	Environmental Observations	Follow-up Status
5 September 2025	A fuel tank was observed without drip tray, drip tray should be provided to avoid spillage.	The fuel tank was removed. (Rectified on 11 September 2025).
12 September 2025	Drip tray(s) should be provided to the fuel tanks to avoid leakage.	The fuel tank was removed. (Rectified on 11 September 2025).
19 September 2025	Chemical containers were observed without drip tray(s), drip tray(s) should be provided to avoid leakage.	Chemical containers in concern were removed (Rectified on 25 September 2025).
26 September 2025	1. Chemical containers on the Landscape Deck were observed without drip tray(s), drip tray(s) should be provided to avoid leakage of chemical.	Chemical containers in concern were removed (Rectified on 2 October 2025).

- 7.1.3 The Contractor has rectified all observation identified during environmental site inspection.
- 7.1.4 According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents had been implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix F**.

8 Future Key Issues

8.1.1 The construction activities to be undertaken in the next reporting period are listed below:

Construction Activities To be Undertaken in Kai Tak West Area

- Backfilling works (soil and aggregate) at Kai Tak Phase 2B Landscaped Deck
- Ramp construction at Kai Tak Phase 2B Landscaped Deck
- Planter soil laying at Kai Tak Phase 2B Landscaped Deck
- Drainage system and installation of irrigation pipe and ducting for cabling works at Kai Tak Phase 2B Landscaped Deck
- 8.1.2 Potential environmental impacts arising from the above construction activities are mainly associated with dust and waste management.
- 8.1.3 The tentative schedule of air quality (1-hour TSP and 24-hour TSP) monitoring and noise monitoring in the next reporting period is presented in Appendix F of the corresponding Monthly EM&A Report for Contract No. HY/2014/07.
- 8.1.4 The construction programme for the Project for the next reporting period is presented in **Appendix B**.

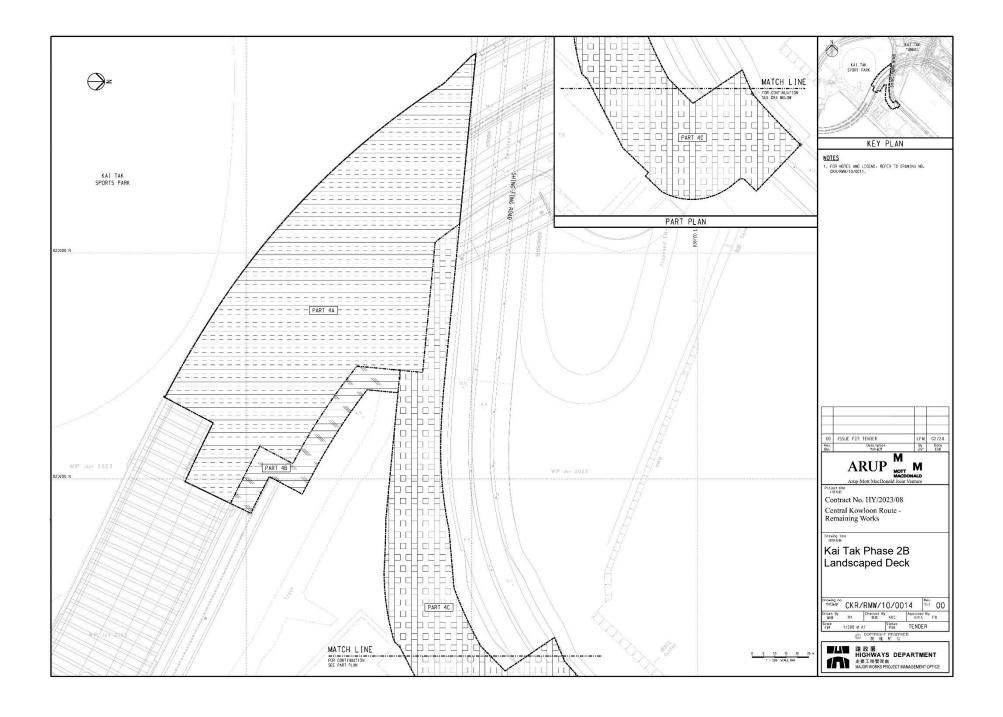


9 Conclusion and Recommendations

- 9.1.1 This is the 11th monthly EM&A Report presenting the EM&A works undertaken in Kai Tak West Area during the period from 1 September 2025 to 30 September 2025 in accordance with the EM&A Manual and the requirement under EP-457/2013/D.
- 9.1.2 Air quality monitoring (including 1-hour TSP and 24-hour TSP) and noise monitoring were carried out in the reporting period under Contract No. HY/2014/07. No exceedance of the Action or Limit Level was recorded for air quality monitoring and noise during the reporting period.
- 9.1.3 Weekly environmental site inspections by representatives of the ET, the Contractor and the Engineer were conducted during the reporting period. One joint site inspection with the IEC was carried out on 12 September 2025. Minor deficiencies were observed during site inspection and was rectified within specified deadlines. The environmental performance of the Project was therefore considered satisfactory.
- 9.1.4 No complaint was received in the reporting period.
- 9.1.5 No non-compliance situation was received in the reporting period.
- 9.1.6 No notification of summons or prosecution was received since commencement of the Contract.
- 9.1.7 The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.



Appendix A
Alignment and Works Site in Kai Tak West Area for
Contract No. HY/2023/08

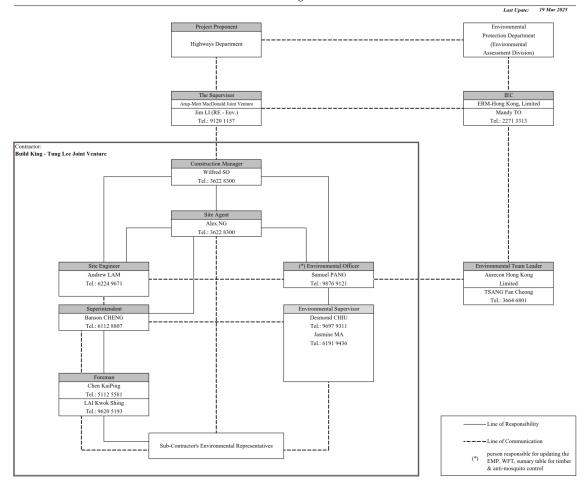


Appendix B
Construction Programme

					Jul A S	OND	J F M	A M J	ASO	N D J F	M A	A M. L N	S O N	DJF	M A M	M A S O N	D J F M	A M J	A S O	N D
entral Kowloon Ro	ute - Remaining Works	1517			V														V	T
onstruction Works		1517	15-Jul-24 A	08-Sep-28	▼						+		+				-		~	
reliminary Submissions		148	15-Jul-24 A	04-Dec-24 A	~	_														
Key Date A and Section 1 - Ya	au Ma Tei Landscaped Deck	1387	29-Jul-24 A	15-May-28	V-						_		+-	+	+		-	~		
Preliminaries		663	29-Jul-24 A	22-May-26	~						+	▼					'			
TTA Application and Impleme	entation	297	04-Oct-25	27-Jul-26					·					1	1					
Site Works		788	20-Aug-24 A	16-Oct-26	~			-	_	_	+	+	~				'			
Completion and Establishme	ent Works	807	28-Feb-26	15-May-28							- 	-	+	+	+	\vdash	+	~		
S1.YMTLD.9000 Plan	nned Completion for Key Date A	0		28-Feb-26							♦ 28-F	b-26					'			
S1.YMTLD.9010 Cor	ntract Completion for Key Date A	0		28-Feb-26*	1						♦ 28-F	b-26*								
S1.YMTLD.9020 Plan	nned Completion for Section 1 of the Works	0		16-Oct-26	 	†							♦ 16 -	Oct-26	†****			tt		
S1.YMTLD.9030 Cor	ntract Completion for Section 1 of the Works (407 days after access date of Part 1D)	0		15-Nov-26*	1								• 1	15-Nov-2	26*		'			
	nned Completion for Section 1A of the Works	0		15-Apr-28														◆ 15-Apı	-28	
	ntract Completion for Section 1A of the Works (547 days - Establishment Works of Section 1)	0		15-May-28*	1												'	◆ 15-I	1ay-28*	
Section 2 - Yau Ma Tei Rest G		1333	15-Jan-25 A	_			v	-	-	_	+	+	+	+-	+-		+-	+ +	~	
Preliminaries		240		12-Aug-26	<u> </u>	†				V				+	†		+	++		
TTA Application and Impleme	entation		15-Jan-25 A	01-Jun-26			v-	-		_	+	-								
Site Works			26-Sep-25	11-Mar-27					-	_	-	-	+-	+	7					
Completion and Establishme	ent Works	663		08-Sep-28									<u></u>	1	-	-	+	-		
	nned Completion for Section 2 of the Works	003	.0-1101-20	11-Mar-27										1.	11-Mar	27				
	ntract Completion for Section 2 of the Works (489 days after access date of Parts 2A and 407 days after 2B & 2C)	0		15-Nov-26*	 	 							• 1	15-Nov-				 		
	nned Completion for Section 2.6 at the Works	0		08-Sep-28	-									1					◆ 08-	-Sen-
	ntract Completion for Section 2A of the Works thract Completion for Section 2A of the Works (547 days - Establishment Works of Section 2)	0		15-May-28*	-													+ 15-l		оср
Section 3 - North Tree Park	indact Completion for Section 2A of the Works (34/ days - Establishment Works of Section 2)	-	20-May-25 A	-	ll .			-			_			-				- "		
Preliminaries			24-May-25 A					_			_	~								
TTA Application and Impleme	entation			01-Jun-26	ļ	ļ						<u>-</u>			-			 		
Site Works	GIII GIII GIII GIII GIII GIII GIII GII		26-Sep-25 20-May-25 A									`								
Completion and Establishme	ant Waste							`											,	
		558	04-Jan-27	15-Jul-28										[,, ,	i Jain-27					
	nned Completion for Section 3 of the Works	0		04-Jan-27											Jan-27*		'			
	ntract Completion for Section 3 of the Works (488 days after access date of Parts 3A and 3B)	0		15-Jan-27*	ļ	ļ								¥ 13-	Jan-21			ļ <u>Ļ</u>		
	nned Completion for Section 3A of the Works	0		04-Jul-28													'		04-Jul-2 15-Jul-	
	ntract Completion for Section 3A of the Works (547 days - Establishment Works of Section 3)	0		15-Jul-28*													'		15-Jul-	28"
Section 4 - Kai Tak Phase 2B	Landscaped Deck		01-Nov-24 A													~				
Preliminaries			12-Dec-24 A	21-Jan-26		_											'			
TTA Application and Impleme	entation		01-Sep-25 A		ļ						!				<u> </u>			ļļ.		
Site Works			01-Nov-24 A	18-Jul-26		_						T*								
Completion and Establishme		369	18-Jul-26	22-Jul-27								V				7	'			
	nned Completion for Section 4 of the Works	0		18-Jul-26									-Jul-26				'			
	ntract Completion for Section 4 of the Works (488 days after access date of Parts 4A)	0		22-Jul-26*								◆ 2 2	-Jul-26*							
S4.KTLD.9020 Plan	nned Completion for Section 4A of the Works	0		18-Jul-27	<u> </u>										<u> </u>	♦ 18-Jul-27		<u> </u>		
	ntract Completion for Section 4A of the Works (365 days - Establishment Works of Section 4)	0		22-Jul-27*												◆ 22-Jul-27*				
	rices of Yaumatei Maternal and Child Health Centre	913	20-Nov-25	20-May-28						V	\neg						\top			
Maintenance Services		913	20-Nov-25	20-May-28						<u> </u>	\neg	_	\top	1			\top	_		
Completion		0	20-May-28	20-May-28														▽		
S6.YMCHC.9000 Pla	nned Completion for Section 6 of the Works	0		20-May-28	l		L											: :	May-28	
S6.YMCHC.9010 Cor	ntract Completion for Section 6 of the Works (912 days after access date of Parts 6)	0		20-May-28*										1	T		1	◆ 20 -	May-28*	
Section 7 - Yau Ma Tei Jade H	lawker Bazaar	961	25-Oct-24 A	12-Jun-27		∇				\rightarrow	+		+	1	_					
Preliminaries		180	12-Oct-25	09-Apr-26					▽-		_									
TTA Application and Impleme	entation	589	25-Oct-24 A	05-Jun-26		∨		-		_	+	-⊽								
Site Works		679	20-Jun-25 A	29-Apr-27				V		_	+	+	+	+	 					
Completion			29-Apr-27	12-Jun-27	İ	İ								+	~~		1	$t^{}t$		
S7.YMTJHB.9000 Plan	nned Completion for Section 7	0		29-Apr-27											◆ 29 -	Apr-27				
	ntract Completion for Section 7 of the Works (651 days after access date of Parts 7)	0		12-Jun-27*	1											12-Jun-27*	1			

Appendix C Project Organisation Chart

Contract No.: HY/2023/08 Central Kowloon Route - Remaining Works Environmental Organization Chart





EVENT	ACTION			
	ENVIRONMENTAL TEAM (ET)	INDEPENDENT ENVIRONMENTAL CHECKER (IEC)	ENGINEER'S REPRESENTATIVE (ER)	CONTRACTOR
ACTION LEVI	EL			
Exceedance for one sample	Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC and ER;	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	Rectify any unacceptable practice; Amend working methods if appropriate.
	Repeat measurement to confirm finding;			
	Increase monitoring frequency to daily.			
Exceedance for two or	Identify source; Inform IEC and ER;	Check monitoring data submitted by ET;	Confirm receipt of notification of failure in writing;	Submit proposals for remedial actions to ER within 3 working days of
more	3. Advise the ER on the	2. Check Contractor's working method;	2. Notify Contractor;	notification;
consecutive samples	effectiveness of the proposed remedial measures;	Discuss with ET and Contractor on possible remedial measures;	Ensure remedial measures properly implemented.	2. Implement the agreed proposals;3. Amend proposal if appropriate.
	 Repeat measurements to confirm findings; 	4. Advise the ET on the effectiveness of the proposed remedial measures;		
	Increase monitoring frequency to daily;	Supervise implementation of remedial measures.		
	Discuss with IEC and Contractor on remedial actions required;			
	7. If exceedance continues, arrange meeting with IEC and ER;			
	8. If exceedance stops, cease additional monitoring.			

EVENT	ACTION			
	ENVIRONMENTAL TEAM (ET)	INDEPENDENT ENVIRONMENTAL CHECKER (IEC)	ENGINEER'S REPRESENTATIVE (ER)	CONTRACTOR
LIMIT LEVEL				
Exceedance for one sample	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
Exceedance for two or more consecutive samples	 Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. 	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.	 Confirm receipt of notification of failure in writing; Notify Contractor; In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix E
Event and Action Plan (EAP) (Noise Monitoring)

EVENT		ACTION		
	ENVIRONMENTAL TEAM (ET)	INDEPENDENT ENVIRONMENTAL CHECKER (IEC)	ENGINEER'S REPRESENTATIVE ER	CONTRACTOR
Action Level	 Identify source, investigate the causes of exceedance and propose remedial measures; Notify IEC and Contractor; Report the results of investigation to the IEC, ER and Contractor; Discuss with the Contractor and formulate remedial measures; Increase monitoring frequency to check mitigation effectiveness. 	 Review the analysed results submitted by the ET; Review the proposed remedial measures by the Contractor and advise the ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures are properly implemented 	 Submit noise mitigation proposals to IEC; Implement noise mitigation proposals.

Appendix F
Environmental Mitigation Implementation Schedule (EMIS)

Environmental Mitigation Implementation Schedule

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			Construction	on Dust Impact				
S4.3.10	D1			Contractor	All construction sites	Construction stage	APCO To control the dust impact to meet HKAQO and TM-EIA criteria	Implemented.
S4.3.10	D2	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/m ² to achieve the dust removal efficiency.	receivers	Contractor	All construction sites	Construction stage	APCO To control the dust impact to meet HKAQO and TM-EIA criteria	Implemented.
S4.3.10	D3	 Proper watering at exposed spoil should be undertaken throughout the construction phase; 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 	impact at the	Contractor	All construction sites	Construction stage	APCO To control the dust impact to meet HKAQO and TM-EIA criteria	Implemented, rectified after reminder for 1st bullet. Implemented for the 2nd to 4th bullet. N/A for other bullets.

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		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; • 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; • 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; • 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						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns 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. 						
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	Implemented
			Construction	n Noise (Airborne	·)			
S5.4.1	N1	 Implement the following good site practices: Only well-maintained plant should be operated on-site, and plant should be serviced regularly during the construction programme; Machines and plant (such as trucks, 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. 	Control construction airborne noise	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	Implemented for the 1 st , 2 nd , 5 th bullets, N/A for other bullets
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	Contractor	All construction sites	Construction stage	Annex 5, TM- EIAO	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			through partial screening					
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.	Screen 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 plant'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	Annex 5, TM- EIAO	Implemented
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	N/A
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	N/A
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	Implemented
			Water Quality	(Construction Pha	ase)			
S6.9.1.1	W1	In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 2023 (ProPECC PN 2/23), construction phase mitigation measures shall include the following:	To minimize water quality impact from the construction site runoff and general	Contractor	All construction sites where practicable	Construction stage	Water Pollution Control Ordinance ProPECC PN 2/23	Implemented for the 1 st , 3 rd , 6 th to 10 th , 13 th , 14 th , 16 th to 17 th bullets

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 Construction Runoff At the start of site establishment, perimeter cutoff 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 sandbag 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; 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 2/23, 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; 	construction activities				• TM-EIAO • TM-DSS	N/A for other bullets

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 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; 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; 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 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 2/23. 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. Washwater should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the 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; 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. 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S6.9.1.2	W2	 Tunnelling Works and Underground Works Cut-&-cover tunnelling 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. Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge; 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 oil, lubricants and grease from the wastewater; 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 2/23 should be adhered to in the handling and disposal of bentonite slurries. 	To minimize construction water quality impact from tunnelling works	Contractor	All tunnelling portion	Construction stage	Water Pollution Control Ordinance ProPECC PN 2/23 TM-DSS TM-EIAO	N/A
S6.9.1.3	W3	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	Implemented
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-DSS	N/A

EM& EIA Ref. Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
	 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 					• TM-EIAO	

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		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.						
S6.9.1.6	W6	 Accidental Spillage In order to prevent accidental spillage of chemicals, the following is recommended: 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; 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. 	To minimize water quality impact from accidental spillage	Contractor	All construction site where practicable	Construction stage	Water Pollution Control Ordinance ProPECC PN 2/23 TM-EIAO TM-DSS	Implemented, rectified after observation for 1st bullet. Implemented for others bullet.
			Waste Manageme	ent (Construction W	/aste)			
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	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	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		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.						
S7.5.1	WM2	 Construction and Demolition Material Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement; 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; Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials is properly documented and verified; and 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. 	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	Implemented for the 1 st , 2 nd , 3 rd , 5 th , 6 th bullets N/A for other bullets

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S7.5.1	WM3	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; 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.	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	N/A
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	N/A
S7.5.1	WM5	Land-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	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 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; 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; Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action. 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; The Contractors shall comply with the conditions in the dumping license. All bottom dumping vessels (Hopper barges) shall be fitted with tight fittings seals to their bottom openings to prevent leakage of material; The material shall be placed into the disposal pit by spit barge of not less than 750m³ capacity and capable of rapid opening and discharge at the disposal site; 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. 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 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. 						
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; 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; 	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	Implemented for the 2 nd and 3 rd bullet. N/A for other bullet.

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns 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; 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. Aluminium 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. 	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	Waste Disposal Ordinance	Implemented.
		,		ard to Life			1	
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	-	N/A
S9.18	H9	Emergency response plans in case of road accident should be prepared and implemented.	To reduce the risk during	Contractor	Works areas at which	Construction stage	-	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		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.	explosives transport		explosives would be used			
			Landso	ape & Visual				
S10.10.1 Table 10.11	LV3	Good Site Management 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. Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented for the 2 nd bullet N/A for another bullet
S10.10.1 Table 10.11	LV4	Screen Hoarding 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 stage	-	N/A
S10.10.1 Table 10.11	LV5	Lighting Control during Construction • 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 stage	-	N/A
S10.10.1 Table 10.11	LV6	Erosion Control 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 stage	1	N/A
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 stage	'Guidelines for Tree Risk Management and Assessment Arrangement on an Area	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
							Basis and on a Tree Basis', Greening, Landscape and Tree Management (GLTM) Section, DEVB Latest recommended horticultural practices from GLTM Section, DEVB	
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 stage	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	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction stage	ETWB TCW 3/2006 Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 Tree Felling Application process under ETWB TC 3/2006. Compensatory tree planting may be incorporated into public open spaces and along roadside amenity areas affected by the construction works and therefore be part of the bigger wider planting plans. Onsite compensation planting is preferred but, if necessary, additional receptor sites outside the Works Area shall be agreed separately with the Government during the Tree Felling Application process. 					• ETWB TCW 2/2004	
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	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	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		Cul	tural Heritage Im	pact (Constructio	n 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.		Contractor	During construction works for cut and cover tunnels	Construction stage	AMOs requirements	N/A
			EN	/I&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	Implemented
S13.2- 13.4	EM2	 An Environmental Team needs to be employed as per the EM&A Manual; 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. 	environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	EIAO Guidance Note No. 4/2010 TM-EIAO	Implemented

Appendix G Waste Flow Table

Contract No: HY/2023/08

Central Kowloon Route - Remaining Works

Name of Department: Highways Department Contract No./ Work Order No.: HY/2023/08

Contract Name: Central Kowloon Route - Remaining Works

Contractor: Build King - Tung Lee Joint Venture

Trip Ticket Account (Main Account): 7051793

Monthly Summary Waste Flow Table for 2025 (in Weight) - Kai Tak Phase 2B Landscaped Deck

(All quantities shall be rounded off to 3 decimal places) updated on: 04-Oct-2025 record as at: 23-Sep-2025

(All quantities	snaii be rounded on	to 3 decimal place	S)							record as at:	23-Sep-2025
Actual Quantities of Inert C&D Materials Generated / Imported (in '000 kg)							Actual Quantities o	f Other C&D Materials	/ Wastes Generated		
Month	Total Quantities Generated	Broken Concrete (including rock for recycling into aggregates)	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported C&D Material	Metal	Paper/ Cardboard Packaging (f)	Plastic (g) (bottles/containers, plastic sheets/ fourus from package material)	Chemical Waste (h)	Others (i) (e.g. General Refuse etc.)
	[a+b+c+d+e+f+g+h+i)	(a)	(b)	(c)	(d)		(e) (in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan-2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Feb-2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mar-2025	450.0400	0.0000	0.0000	0.0000	450.0400	205.5100	0.0000	0.0000	0.0000	0.0000	0.0000
Apr-2025	0.0000	0.0000	0.0000	0.0000	0.0000	481.3200	0.0000	0.0000	0.0000	0.0000	0.0000
May-2025	86.8900	0.0000	0.0000	0.0000	86.8900	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Jun-2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Half-year total	536.9300	0.0000	0.0000	0.0000	536.9300	686.8300	0.0000	0.0000	0.0000	0.0000	0.0000
Jul-2025	134.3700	0.0000	0.0000	0.0000	134.3700	114.2000	0.0000	0.0000	0.0000	0.0000	0.0000
Aug-2025	18.8400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	18.8400
Sep-2025	34.6700	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	34.6700
Oct-2025	0.0000										
Nov-2025	0.0000										
Dec-2025	0.0000										
Yearly Total	724.8100	0.0000	0.0000	0.0000	671.3000	801.0300	0.0000	0.0000	0.0000	0.0000	53.5100

(All quantities shall be rounded off to 3 decimal places)

(All quantities	shall be rounded of	to 3 decimal place	S)								
	Actual Quantities of Inert C&D Materials Generated / Imported (in '000 kg)							Actual Quantities o	f Other C&D Materials	/ Wastes Generated	
Year	Total Quantities Generated	Broken Concrete (including rock for recycling into aggregates)	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported C&D Material	Metal	Paper/ Cardboard Packaging	Plastic (bottles/containers, plastic sheets/ fourus from puckage material)	Chemical Waste	Others (e.g. General Refuse etc.)
	[a+b+c+d+e+f+g+h+i)	(a)	(b)	(c)	(d)		(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
2024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2025	1525.8400	0.0000	0.0000	0.0000	671.3000	801.0300	0.0000	0.0000	0.0000	0.0000	53.5100
2026	0.0000										
2027	0.0000										
2028	0.0000										
2029	0.0000										
2030	0.0000										
Total	1525.8400	0.0000	0.0000	0.0000	671.3000	801.0300	0.0000	0.0000	0.0000	0.0000	53.5100

Remark

1) Density of C&D material to be 2 metric ton/m3 3) Density of Chemical Waste to be 0.88 metric ton/m3

Density of General Refuse to be
 1.6 metric ton/m3

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

- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (3) 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 25.20(8)
- (4) The figure for imported fill might require minor adjustments due to the availability of late records
- (5) Further review of the EPD's records, the quantity of Other (e.g. General Refuse) for August 2025 is confirmed to be 18.84 tonnes.

Appendix H
Statistics on Complaint, Notifications of Summons and
Successful Prosecution

Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics					
Reporting Period	Frequency	Cumulative	Complaint Nature			
1 September 2025 - 30 September 2025	0	0	N/A			

Statistical Summary of Environmental Non-compliance

Reporting Period	Environmental Non-compliance Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 September 2025		_					
	0	0	N/A				
30 September 2025							

Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 September 2025 - 30 September 2025	0	0	N/A				

Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Details
1 September 2025 - 30 September 2025	0	0	N/A

Document prepared by

Aurecon Hong Kong Limited

Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223 – 231 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong.

T 3664 6888

F 3664 6999

E hongkong@aurecongroup.com

W www.aurecongroup.com

