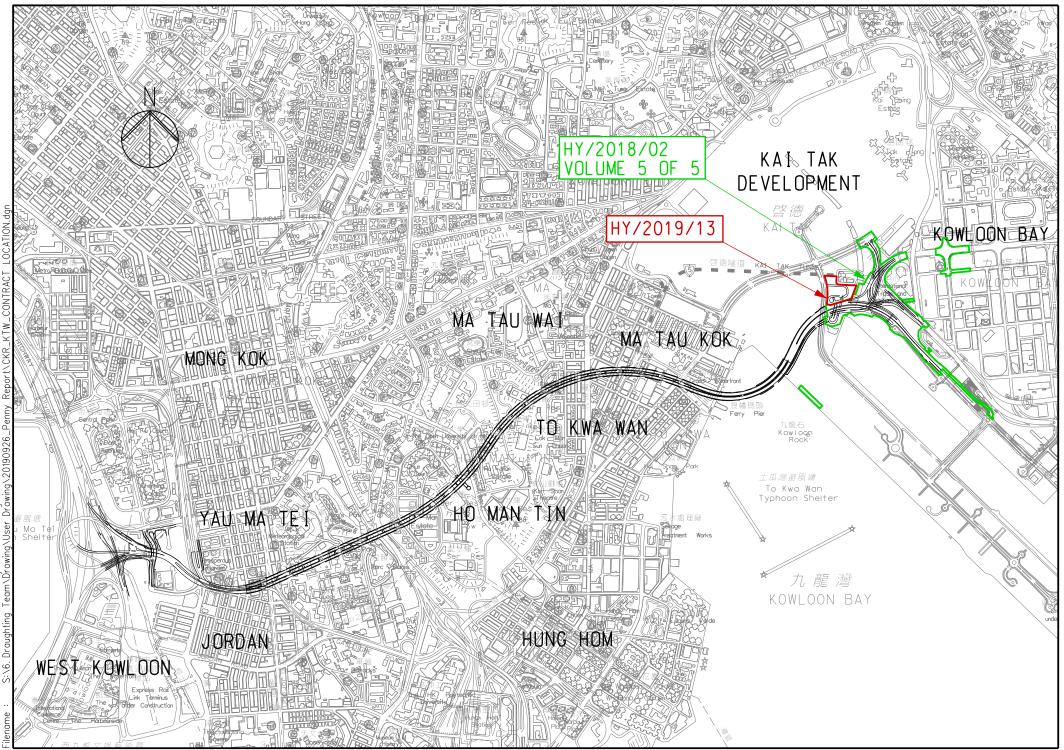
Vol. 5 of 5

EP-457/2013/D Central Kowloon Route Kai Tak East Contract No. HY/2018/02 &

Buildings, Electrical and Mechanical Works Contract No. HY/2019/13 (Kai Tak East Area) August 2022



Central Kowloon Route Kai Tak East Contract No. HY/2018/02





Alchmex – Paul Y Joint Venture

Central Kowloon Route Contract HY/2018/02

Section of Kai Tak East

Monthly EM&A Report No. 36

(Period from 1 to 31 August 2022)

Rev. 1 (8 September 2022)

		Name	Signature
Prepared by		Howard Chan (Environmental Consultant)	Howard
Checked Reviewed by	&	Tandy Tse (Senior Environmental Consultant)	hulder
Approved Certified by	&	Kevin W. M. Li (Environmental Team Leader)	Ki





Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract:	Kai Tak East (HY/2018/02)

Reference Document/Plan

Document/ Plan to be Certified/ Verified:	Monthly EM&A Report No.36 (August 2022)		
Date of Report:	13 September 2022 (Rev. 1)		
Date received by IEC:	13 September 2022		

Reference EP Condition

Environmental Permit Condition:

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.

3.4

IEC Verification

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

Mandy 20.

Ms Mandy To Independent Environmental Checker Date:

13 September 2022

Our ref: 0436942_IEC Verification Cert_KTE_Monthly EM&A Rpt No.36.docx

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- B. Construction Programme
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- M. Statistics on Complaint, Notifications of Summons and Successful Prosecutions
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EXECUTIVE SUMMARY

- A.1 Alchmex Paul Y Joint Venture ("Contractor") commenced the construction works of Highway Department (HyD) Central Kowloon Route Contract No. HY/2018/02 – Section of Kai Tak East ("The Project") on 9 September 2019. This report is the 36th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 August 2022 to 31 August 2022.
- A.2 A summary of major Construction activities provided by Contractor for the Project during the reporting month is listed below.

Construction Activities undertaken

- Pile Cap Construction at U Turn, Portion 1A, Portion 3B & Portion 2B.
- S1, S4, S9 Bridge construction
- Retaining Wall Construction at U-Turn & Portion 2B.
- Sheet piling work at Portion 3B.
- A.3 A summary of regular construction dust monitoring activities in this reporting period is listed below:

Construction dust (24-hour TSP) monitoring	
E-A1	5 times
Construction dust (1-hour TSP) monitoring	
E-A1	15 times

- A.4 Joint weekly site inspections were conducted by representatives of Environmental team (ET), Contractor and Engineer on 3, 10, 17, 24 and 31 August 2022. A joint site inspection with Independent Environmental Checker (IEC) was undertaken on 10 August 2022. Details of the audit findings and implementation status are presented in Section 5.
- A.5 Bi-weekly inspection of the implementation of landscape and visual mitigation measures by ET was conducted on 3, 17 and 31 August 2022. Details of the audit findings and implementation status are presented in Section 5.
- A.6 Details of waste management are presented in Section 4.
- A.7 No exceedance of the Action and Limit Levels of 24-hour TSP and 1-hour TSP monitoring were recorded during the reporting month.
- A.8 No complaint or non-compliance was received in the reporting month.
- A.9 No notification of summons and prosecution was received in the reporting period.

A.10 A summary of construction activities provided by the Contractor in next reporting month is listed below:

Construction Activities to be undertaken

- Pile Cap Construction at U-Turn, Portion 1A, Portion 3B & Portion 2B.
- S1, S4, S9 Bridge Construction.
- Retaining Wall Construction at U-Turn & Portion 2B.
- Sheet piling work at Portion 3B.

1. BASIC PROJECT INFORMATION

- 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.
- 1.2. 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.
- 1.3. The construction of the CKR had been divided into different sections. This Contract No. HY/2018/02 Section of Kai Tak East (KTE) covers part of the construction activities located at Kai Tak under the EP which includes:
 - Section of Kai Tak East
 - i. construction of an approximately 700m long dual 2-lane Central Kowloon Route mainline at Kai Tak, including at-grade roads and bridges;
 - ii. construction of Kai Tak Interchange, including bridges, underpass, and associated at-grade slip roads, connecting the Central Kowloon Route with the existing road network;
 - iii. construction of a footbridge, and demolition/backfill of an existing subway across Kai Fuk Road;
 - iv. realignment of existing Kai Fuk Road, Kai Cheung Road and Kai Cheung Road/Kai Fuk Road loop road;
 - v. reconstruction of an approximately 30m long existing multi-cell box culvert;
 - vi. construction of an approximately 130m long underground ventilation and E&M audit;
 - vii. construction of Ring Road Underpass, connecting Central Kowloon Route mainline and Central Kowloon Route Administration Building;
 - viii. junction improvement works at existing Wang Kwong Road/Kai Cheung Road and Wang Kwong Road/Lam Hing Street junctions;
 - ix. arrangement and implementation of cross boundary disposal of construction and demolition materials; and
 - x. associated roadworks, drainage, waterworks, landscaping works, geotechnical works, and electrical and mechanical works.
- 1.4. The alignment and works area for the Contract No. HY/2018/02 are shown in Appendix A.

1.5. A summary of major construction activities provided by the Contractor in this reporting period is shown in **Table 1.1**. The construction programme is presented in **Appendix B**.

 Table 1.1
 Summary of Construction Activities during the Reporting Month

Construction Activities undertaken

- Pile Cap Construction at U-Turn, Portion 1A, Portion 3B & Portion 2B.
- S1, S4, S9 Bridge construction.
- Retaining Wall Construction at U-Turn & Portion 2B.
- Sheet piling work at Portion 3B.
- 1.6. The project organisational chart specifying management structure and contact details are shown in **Appendix C**.
- 1.7. A summary of the valid permits, licences, and /or notifications on environmental protection for this Project is presented in **Table 1.2**.

Table 1.2 Summary of the Status of Valid Environmental Licence, Notification, Permit and Documentations

Documentations					
Permit/ Licences/	Notification				
Notification			Status	Remark	
/Reference No.	From	То			
Environmental Permit					
EP-457/2013/D	15-Jun-21	End of Project	Valid	-	
Wastewater Discharge L	icense				
WT00035029-2019	17-Dec-19	31-Dec-24	Valid	-	
Notification of Construct	tion Works und	er the Air Pollut	ion Control (O	Construction Dust)	
Regulation					
445001	Apr-19	Dec-23	Notified	-	
Chemical Waste Produce	er Registration				
WPN5113-247-A2940-	17 May 10	End of Duciest	Valid		
01	17-May-19	End of Project	vanu	-	
Billing Account for Disp	osal of Constru	ction Waste			
7034073	15-Jun-19	End of Project	Valid	-	
Construction Noise Permit					
GW-RE0201-22	22-Mar-22	11-Sep-22	Valid	Portion 2B	
GW-RE0231-22	8-Mar-22	16-Sep-22	Valid	General Work for Area A	
GW-RE0234-22	8-Mar-22	16-Sep-22	Valid	General Work at Area B and Site Office	
GW-RE0620-22	30-Jun-22	29-Sep-22	Valid	Kai Cheung U Turns	
GW-RE0807-22	16-Aug-22	19-Sep-22	Valid	Central Divider Removal	
GW-RE0807-22	6-Aug-22	9-Sep-22	Valid	Portal Erection	

2. ENVIRONMENTAL STATUS

2.1. 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) as of the reporting period for the Project are summarised in **Table 2.1**.

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

EP Condition (EP-457/2013/D)	Submission	Submission date	
Condition 3.4	Monthly EM&A Report (July 2022)	12 August 2022	

2.2. The drawing showing the project layout and the location of the monitoring station and environmental sensitive receivers are attached in **Appendix A** and **Appendix J**. Co-ordinates of the monitoring location is shown in below:

Table 2.2	Summary for the location of monitoring station
-----------	--

Monitoring Location	Location ID	Latitude	Longitude
Hong Kong International Trade and Exhibition Centre	E-A1	22.323912	114.203512

3. AIR QUALITY MONITORING RESULTS

Monitoring Parameters

- 3.1. The impact monitoring had been carried out in accordance with section 5.8 of the approved EM&A Manual to determine the 1-hour and 24-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting month.
- 3.2. The sampling frequency of at least once in every 6 days, shall be strictly observed at the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least 3 times in every 6 days should be undertaken when the highest dust impact occurs.
- 3.3. General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.

Monitoring Equipment

- 3.4. 1-hour TSP levels and 24-hour TSP had been measured with direct reading dust meter and High-Volume Samplers respectively. It has been demonstrated its capability in achieving comparable results with high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50).
- 3.5. The 1-hour TSP meter was calibrated by the manufacturer prior to purchasing. Zero response of the instrument was checked before and after each monitoring event. Operation of the 1-hour TSP meter followed manufacturer's Operation and Service Manual. The 24-hour TSP meter was calibrated against firmware 80570-8100-V1.0.4, annually. Operation of the 24-hour TSP meter followed manufacturer's Operation and Service Manual. Valid calibration certificate of dust monitoring equipment is attached in **Appendix H**.
- 3.6. A summary of the equipment that was deployed for the 24- hour averaged monitoring is shown in **Table 3.1**. The TSP monitoring was conducted as per the schedule presented in **Appendix G**.
- 3.7. The equipment used for 1-hour TSP and 24-hour TSP measurement and calibration are summarised in **Table 3.1**.

Monitoring Parameter	Monitoring Equipment	Serial Number	Date of Calibration
1-hour TSP	LD-5R Digital Dust Indicator	761173	1 Jul 2021
			26 July 2022
24-hour TSP	TE-5170X High Volume Sampler	1049	8 August 2022
			20 August 2022
	TE-5028A Calibration Kit	3702	3 Aug 2021

T 1 1 2 1	a :	D . M	•, •	
Table 3.1	Construction	Dust Mo	onitoring	Equipment

Monitoring Methodology and QA/QC results

- 3.8. The 1-hour TSP monitor, portable dust meters (Sibata Digital Dust Indicator Model LD-5R) was used for the impact monitoring. The 1-hour TSP meters provides a real time 1-hour TSP measurement based on 90° light scattering. Three 1-hour TSP level were logged per every six days.
- 3.9. The 24-hour TSP monitor, High Volume Samplers (Tisch TE-5170x High Volume Air Sampler) were used for the impact monitoring. The 24-hour TSP monitoring consists of the following:
 - The HVS was set at the monitoring location, with electricity supply connected and secured;
 - HVS was calibrated before commencing the 1st measurement;
 - ◆ The filter paper was weight and provided by HOKLAS lab (Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Ltd) before and after the sampling. Certificate of HOKLAS accredited laboratory can be referred to **Appendix I**;
 - The airflow over time during sampling process was recorded by the HVS.
- 3.10. HVSs were free-standing with no obstruction. The following criteria were considered in the installation of the HVS:
 - Appropriate support to secure the samples against gusty wind needed to be provided the monitoring station;
 - A minimum of 2m separation from walls, parapets and penthouses was required for rooftop samplers;
 - No furnace or incinerator flues was nearby;
 - Airflow around the sampler was unrestricted; and
 - Permission could be obtained to set up the samplers and gain access to the monitoring station.
 - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring
 - A secured supply of electricity is needed to operate the samplers.
- 3.11. Preparation of Filter Papers:
 - Glass fiber filters were labelled and sufficient filters that were clean and without pinholes were selected;
 - ♦ All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25°C and not varied by more than ±3°C; the relative humidity (RH)was 40%; and
 - Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Limited, as HOKLAS accredited laboratory, implemented comprehensive quality assurance and quality control programmes on the filters.

3.12. Field Monitoring:

- The power supply was checked to ensure that the HVS was working properly;
- The filter holder and area surrounding the filter were cleaned;
- The filter holder was removed by loosening the foul bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully;
- The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter;
- The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges;
- The shelter lid was closed and secured with an aluminum strip;
- The HVS was warmed- up for about 5 minutes to establish run- temperature conditions;
- A new flow rate record sheet was inserted into the flow recorder;
- The flow rates of the HVS was checked and adjusted to between 1.13-1.19 m3min-1, which was within the range specified in the EM&A Manual (i.e. 0.6- 1.7 m3min-1);
- The programmable timer was set for a sampling period of 24 hours ±hour, and the starting time, weather condition and filter number were recorded;
- The initial elapsed time was recorded;
- At the end of sampling, the sampled filter was removed carefully and folded in half so that only surfaces with collected particulate matter were in contact;
- The filter paper was placed in a clean plastic envelope and sealed; all monitoring information was recorded on a standard data sheet and
- The filters were sent to (Acumen Laboratory and Testing Ltd) for analysis.

3.13. Maintenance and Calibration:

- The HVS and their accessories were maintained in a good working condition. For example, motor brushes were replaced routinely and electrical wiring was checked to ensure a continuous power supply; and
- ◆ The flow rate of each HVS with mass flow controller was calibrated using an orifice calibrator, Initial calibrations of the dust monitoring equipment were conducted upon installation and prior to commissioning. Five-point calibration was carried out for HVS using TE-5025A Calibration Kit and TE-5028A Calibration KIT. HVS is calibrated in fortnightly Intervals. The calibration records for the HVS is given in **Appendix H**.

3.14. Wind Data Monitoring:

• The wind speed has been recorded from Hong Kong Observatory- King's Park meteorological station, along with portable wind speed meter stand by as back up if malfunction occurred or data was not recorded from HKO.

Monitoring Locations

3.15. During the site visit, air quality monitoring station Hong Kong International Trade and Exhibition Centre had been recommended in the approved EM&A Manual. A designated air quality monitoring location was identified and agreed with IEC and EPD. Detail of the air monitoring station is described in **Table 3.2**. The location plan of air quality monitoring stations is shown in **Appendix J**.

Table 3.2Location of the Air Quality Monitoring Station

Monitoring Station	Monitoring Location
E-A1	Hong Kong International Trade and Exhibition Centre

Monitoring Date, Time, Frequency and Duration

3.16. A summary of impact monitoring duration, sampling parameter and frequency is presented in **Table 3.3**.

Impact Monitoring	Duration	Sampling Parameter	Frequency
Dust	1-hour continuous measurement	1-hour TSP	3 times per six days
Dust	24-hour continuous sampling	24-hour TSP	Once per six days

Table 3.3Summary of Impact Monitoring Programme

Result Summary

3.17. According to our field observations, the major dust source identified at the designated air quality monitoring station in the reporting month are summarised in **Table 3.4**.

Table 3.4Observation at Air Quality Monitoring Station

Monitoring Station	Major Dust Source
E-A1	Nearby traffic

- 3.18. Air quality impact monitoring for the reporting month was carried out on 4, 10, 16, 22 and 27 August 2022 at E-A1.
- 3.19. The results for 1-hour TSP and 24-hour TSP are summarized in **Table 3.5** and **Table 3.6**. The measurement data and details of influencing factors such as weather conditions and site observation are presented in **Appendix K**.

Table 3.5 Summary of 1-hour TSP Monitoring Results	Table 3.5	Summary of 1-hour TSP Monitoring Results
--	-----------	--

Γ	Monitoring Location	Range (µg/m³)	Action Level(μg/m ³)	Limit Level(µg/m ³)
	E-A1	60.0 - 68.0	279	500

Table 3.6	Summary of 24-hour TSP Monitoring Results
-----------	---

Monitoring Location	Range	Action Level	Limit Level
	(µg/m³)	(µg/m³)	(µg/m ³)
E-A1	10 - 46	142	260

4. WASTE MANAGEMENT

4.1. The 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. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix L**.

			Quanti	ty		
]	Non-inert C&	D Materials	
Reporting period	Inert C&D Materials	Chemical Waste	Others, e.g. General Refuse	Re	cycled materi	als
	(in '000tonnes)	(in 'kg)	disposed at Landfill (in 'kg)	Paper/ cardboard (in 'kg)	Plastics (in '000 kg)	Metals (in '000 kg)
Aug 2022	1.42	30.00	118290.00	75.00	0.00	0.00

Table 4.1Quantities of Waste Generated from the Project

5. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND

PROSECUTIONS

5.1. The Environmental Complaint Handling Procedure is shown in below Table 5.1.

Table 5.1 Envir	onmental Complaint Ha	ndling Procedure	
Complaint Received via	Project Hotline	Complaint Received vi	a 1823 or from other
		government departments	
Contractor notify ER, E	T and IEC	ER notify Contractor, ET	and IEC
Contractor log complai	nt and date of receipt on	to the complaint database.	Contractor, ER and ET
	to conduct investi	gation of complaint	
If complaint is considered	ed not valid	If complaint is found val	id
ET or ER to reply the co	omplainant if necessary	Contractor to identify a	nd implement remedial
		measures in consultation	with the IEC, ET and
		ER.	
		The ER, ET and IEC to 1	eview the effectiveness
		of the Contractor's reme	edial measures and the
		updated situation; ET t	o undertake additional
		monitoring and audit to	verify the situation if
		necessary and oversee that	at circumstances leading
		to the complaint do not	t recur. ER to conduct
		further inspection as nec	essary.
If the complaint is refe	erred by the EPD, the Co	ntractor to prepare interim	report on the status of
the complaint investig	ation and follow-up acti	ons stipulated above, inclu	ding the details of the
remedial measures and	additional monitoring id	lentified or already taken,	for submission to EPD

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

within the time frame assigned by the EPD

- 5.2. 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.
- 5.3. No exceedance of the Action and Limit Levels of 24-hour TSP and 1-hour TSP monitoring was recorded in the reporting month.
- 5.4. No complaint and non-compliance were received in the reporting month.
- 5.5. No notification of summons and successful prosecution was received in the reporting month.
- 5.6. Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix M**.

6. EM&A SITE INSPECTION

- 6.1. 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 3, 10, 17, 24 and 31 August 2022, along with bi-weekly inspection of the implementation of landscape and visual mitigation measures conducted on 3, 17 and 31 August 2022.
- 6.2. One joint site inspection with IEC also undertaken on 10 August 2022. Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized in **Table 6.1**.

Date	Environmental Observations	Follow-up Status
3 August 2022	NA	NA
10 August 2022	NA	NA
17 August 2022	1. Drip tray should be provided for chemical storage.	1. Chemical containers has removed away.
24 August 2022	1. At Ring Road, drip tray should be provided for chemical containers.	1. Chemical was removed.
31 August 2022	NA	NA

Table 6.1Site Observations

- 6.3. The Contractor had rectified all observation identified during environmental site inspection in the reporting period.
- 6.4. 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**.

7. FUTURE KEY ISSUES

7.1. The construction activities to be undertaken in the next reporting month are:

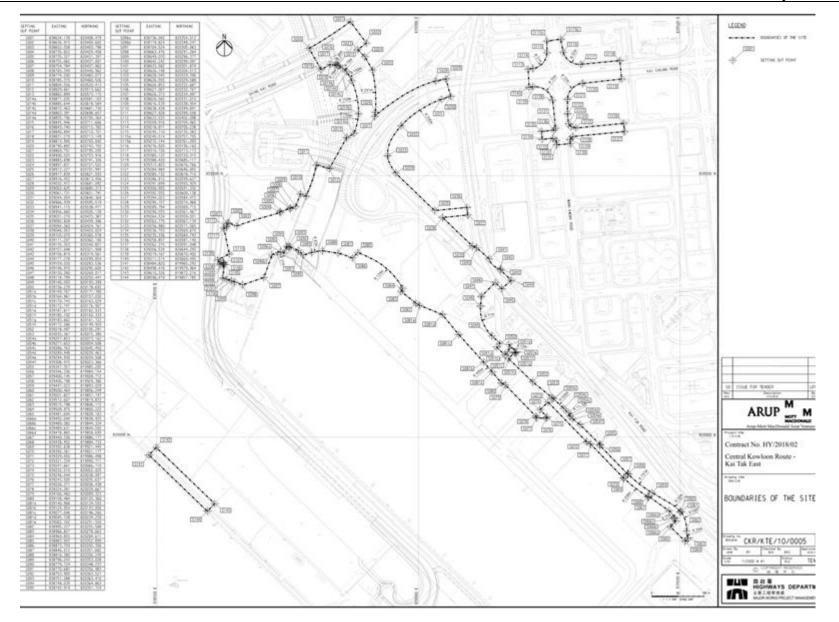
Construction Activities to be undertaken

- Pile Cap Construction at U turn, Portion 1A, Portion 3B & Portion 2B.
- S1, S4, S9 Bridge Construction.
- Retaining Wall Construction at U-Turn & Portion 2B.
- Sheetpiling Work at Portion 3B.
- 7.2. Potential environmental impacts arising from the above construction activities are mainly associated with dust and waste management.
- 7.3. The tentative schedule of 1-hour TSP and 24-hour TSP monitoring in the next reporting period is presented in **Appendix N**.
- 7.4. The construction programme for the Project for the next reporting month is presented in Appendix B.

8. CONCLUSION AND RECOMMENDATIONS

- 8.1. This 36th monthly EM&A Report presents the EM&A works undertaken during the period from 1 August 2022 to 31 August 2022 in accordance with the EM&A Manual and the requirement under EP-457/2013/C and EP-457/2013/D.
- 8.2. Air quality (including 1-hour TSP and 24-hour TSP) was carried out in the reporting period. No exceedance of the Action and Limit Level was recorded for air quality impact monitoring during the reporting month.
- 8.3. Weekly environmental site inspections by the representative of ET, Contractor and Engineer were conducted during the reporting period. Joint site inspection with IEC were carried out on 10 August 2022. Minor deficiency was observed during site inspection and was rectified within the specified deadlines. The environmental performance of the Project was therefore considered satisfactory.
- 8.4. No complaint and non-compliance situation were received in the reporting month.
- 8.5. No notification of summons or prosecution was received since commencement of the Contract.
- 8.6. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A Alignment and Works Area for the Contract No. HY/2018/02



Acuity Sustainability Consulting Limited

Appendix B Construction Programme

ta Date: 25-Jul-22 nt Date: 08-Aug-22 1						e Kow	loon	Rou	/2018/02 - Kai Tak Eas	t											iex – F	Paul Y	Joint Ve	enture	
rID	Activity Name	Orig Du	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day)	July 39			Augus 40	1			September 41		-	00	42			Nov	ember 43	_
entral Kowloo	on Route - Kai Tak East (Month 39 Update) (Re	547	25-Mar-21 A	07-Feb-23	22-Mar-22	26-Feb-26	903	567.00	6 03 10 17	24	31 0)7 14	21	28	04	11	18 25	02	09	16	23	30	06	13 2	0
PRELIMINAR	IES AND GENERAL REQUIREMENTS	198	25-Apr-22 A	24-Nov-22	18-Jul-22	16-Sep-25	824	0.00																	
	ates and Milestones																								
Key Dates		196	30-Apr-22 A	12-Nov-22	18-Jul-22	16-Sep-25	1039	0.00																	
Sections of the	Works	196	30-Apr-22 A	12-Nov-22	18-Jul-22	16-Sep-25	1039	0.00																	
KD-04	KD04 - Section 4: Comprises the Establishment Works for Landscape			30-Apr-22 A		16-Sep-25																			
KD-08	Softworks under Section 3 (365 days) KD08 - Section 8: Completion of struct. of Vent. adit, & RR Underpassand			12-Nov-22*		18-Jul-22	-117																		
	Vacof 182,102,104 (758d fr 182)		05-May-22 A		15-Apr-23	15-Apr-23	-11/	0.00															1		
Access Dates	Access date for Part 1C (1192 days)		05-May-22 A	051918y-22 A	15-Apr-23	15-401-25		0.00																	
Section Subject			25-Apr-22 A	25-Apr-22 A	28-Dec-22	27-Mar-23		0.00																	
SE-505	PM's Notify to execute Section 5 of the Works (Latest Date 1,096 days)		25-Apr-22 A		27-Mar-23																				
SE-506	PM's Notify to execute Section 6 of the Works (Latest Date 1,096 days)	(25-Apr-22 A		28-Dec-22																				
Independent S	Safety Audit Scheme ACC D31(5)	(25-Jul-22	25-Jul-22	18-Mar-24	18-Mar-24	602	0.00																	
Safety Aduit		(25-Jul-22	25-Jul-22	18-Mar-24	18-Mar-24	602	0.00																	
SA-1114	7th Safety Audit at 6 months intervals	0	25-Jul-22		18-Mar-24		602			•															
Utilities Sched	lule (WSD/DSD/CLP/TG/PCCW/HKB/ATC/KT Tu	n 198	28-Apr-22 A	24-Nov-22	19-Sep-23	23-Jan-24	341	0.00																	
Utilities Monthly	y Meeting	198	28-Apr-22 A	24-Nov-22	19-Sep-23	23-Jan-24	341	0.00																	
UU-1046	12nd Utilities monthly meeting	(28-Apr-22 A		19-Sep-23																				
UU-1048	13rd Utilities monthly meeting	(25-Jul-22		19-Sep-23		341																		
UU-1050	14th Utilities monthly meeting		24-Sep-22		22-Nov-23		341																		
UU-1052	15th Utilities monthly meeting		24-Nov-22		23-Jan-24		341																		
	ENGINEERING		05-Nov-21 A	30-Nov-22	08-Jun-22	12-Jul-23	175	0.00																	
DES - Kiosks	orks Design & Engineering	108	25-Jul-22	30-Nov-22	28-Feb-23	12-Jul-23	175	0.00																	
								0.00																	
DES-1228	DES - Prepare preliminary proposal submission		25-Jul-22	19-Sep-22	28-Feb-23	28-Apr-23	175							ļ											
DES-1230	DES - Prepare submission of design and drawings		20-Sep-22	05-Oct-22	29-Apr-23	13-May-23	175																		
DES-1232	DES - ICE checking and approval	12		19-Oct-22	15-May-23	29-May-23	175											-		-					
DES-1234	DES - Project Manager checking and approval	24	20-Oct-22	16-Nov-22	30-May-23	27-Jun-23	175																	•	
DES-1236	DES - Prepare submission of details design	12	17-Nov-22	30-Nov-22	28-Jun-23	12-Jul-23	175																		-
Cost Saving D	esign & Engineering	(25-May-22 A	25-May-22 A	15-Apr-23	15-Apr-23		0.00																	
CSD-F for Found	dation of Ring Road Underpass & Ventilation Adit	(25-May-22 A	25-May-22 A	15-Apr-23	15-Apr-23		0.00																	
Detailed Design	n for Foundation of Ring Road Underpass & Ventilation Adi	: 0	25-May-22 A	25-May-22 A	15-Apr-23	15-Apr-23		0.00																	
DES-0200	CSD-F Consent to start the works	(25-May-22 A		15-Apr-23																			
Temporary We	orks Design & Engineering	276	05-Nov-21 A	04-Nov-22	08-Jun-22	11-Mar-23	100	0.00																	
	ry Works for Bridges	274	05-Nov-21 A	02-Nov-22	27-Jun-22	11-Mar-23	102	0.00																	
_																		l De	aste T		Ri	evision		Checker	d A
Current Milest Actual Work		Kowlo	on Rout	e - Kai T	ak Fas	t (Mont	h 39 I	Indat	Rev32 - CSD)		Project ID: Baseline:	KTE-WP3	32_M39					25-Feb 25-Mar-		Submit CSE Submit CSE	Program	ne Rev 28 me Rev 29	with M34 Mo with M35 Mon.	TYY TYY	DC
Ortical Remain	ining Work			ree Mon						L	ayout: KT		ths Rolling					25-April 25-Mar	-22 N	M36 Monthle	ly Updates		uth M37 Mon.	TYY	DC
Remaining W	llark									E F	Filter: TAS	K filters: 3	Months R	olling_1.	KTE - Su	ubmission.		25-May 25-Juni		AATTE USD	nogam	no Play 304	with M37 Mon. with M38 Mon.	TW	DC

ID	Activity Name	Orig Dur Start	Finish	Late Start	Late Finish	Total Float	TRA (Day	July 39	21 07	August 40	20 04	September 41	1 36 1	Octobe 42	er 23	1 30 1	November 43	20
DES_T03 - Ten	np working platform for Bridge S1/S9 over Kai Fuk Road	24 05-Nov-21 A	09-Jul-22 A	27-Jun-22	27-Jun-22		0.00	10 17 24	31 07	14 21	28 04	11 18	20 0	12 09	16 23	30 0	3 13	20
DES-1322	DES - Project Manager checking and approval; consent to start the Portal works	24 05-Nov-21 A	09-Jul-22 A	27-Jun-22	27-Jun-22													
DES_T05 - Ten	mp working platform for Bridge S7 over Kai Cheung Slip Roa	84 25-Jul-22	02-Nov-22	18-Oct-22	11-Mar-23	102	0.00											
DES-1324	DES - Prepare preliminary proposal submission	36 25-Jul-22	03-Sep-22	18-Oct-22	28-Nov-22	70					_							
DES-1326	DES - ICE checking and approval	24 05-Sep-22	05-Oct-22	09-Jan-23	11-Feb-23	102					_							
DES-1328	DES - Project Manager checking and approval; consent to start the Portal	24 06-Oct-22	02-Nov-22	13-Feb-23	11-Mar-23	102												
DEC TOC - Ton	works np working platform for Bridge S2 & S8 over KF Rd & KC Rd	84 25-Jul-22	02-Nov-22	18-Oct-22	02-Feb-23	70	0.00											
DES-1330	DES - Prepare preliminary proposal submission	36 25-Jul-22	03-Sep-22	18-Oct-22	28-Nov-22	70	0.00				_							
DES-1330																		
	DES - ICE thetking and approval	24 05-Sep-22	05-Oct-22	29-Nov-22	28-Dec-22	70					_			-				
DES-1334	DES - Project Manager checking and approval; consent to start the Portal works	24 06-Oct-22	02-Nov-22	29-Dec-22	02-Feb-23	70												
DES_T17 - ELS	5 Design for Bridge S8 - 8A-S8 to 8D-S8	72 25-Jul-22	19-Oct-22	03-Aug-22	28-Oct-22	8	0.00											
DES-1378	DES - Prepare preliminary proposal submission	36 25-Jul-22	03-Sep-22	03-Aug-22	14-Sep-22	8					_							
DES-1380	DES - ICE thedding and approval	12 05-Sep-22	19-Sep-22	15-Sep-22	28-Sep-22	8												
DES-1382	DES - Project Manager checking and approval; consent to start the ELS works	24 20-Sep-22	19-Oct-22	29-5ep-22	28-Oct-22	8									-			
DES - Temporar	ry Works for Underpasses, Adit and Roads	86 25-Jul-22	04-Nov-22	08-Jun-22	17-Sep-22	-39	0.00											
DES_T08 - Ten	np works for construction of Sign Gantries, Lighting Poles &	86 25-Jul-22	04-Nov-22	08-Jun-22	17-Sep-22	-39	0.00											
DES-1390	DES - Prepare preliminary proposal submission	36 25-Jul-22	03-Sep-22	08-Jun-22	20-Jul-22	-39		_	_		_							
DES-1392	DES - ICE checking and approval	26 05-Sep-22	07-0d-22	21-Jul-22	19-Aug-22	-39					_			-				
DES-1394	DES - Project Manager checking and approval; consent to start the works	24 08-Oct-22	04-Nov-22	20-Aug-22	17-Sep-22	-39									_	_		
CONSTRUCTI		547 25-Mar-21 A	07-Feb-23	22-Mar-22	26-Feb-26	903	567.00											
	rary Traffic Management Scheme																	
		0 26-5ep-22	26-Sep-22	10-Aug-22	10-Aug-22	-39	0.00											
	r Kai Cheung Road		20-949-22		10909-22		0.00											
KCR-TTA-1A	TTA - Kai Cheung Road - Stage 1A (add TTA for 8A pile)	0 26-Sep-22		10-Aug-22		-39												
TTM Scheme fo		121 21-Jun-22 A	04-Nov-22	27-Jun-22	13-Dec-22	33	0.00											
KFR-TTA-3	TTA - Kai Fuk Road - Stage 3	0 21-Jun-22 A		29-Jun-22														
KFR-TTA-281	TTA - Kai Fuk Road - Stage 28-1, (Night Work) (Span 1E to 1F/7A-WB)	0 08-Aug-22		27-Jun-22		-35			•									
KFR-TTA-282	TTA - Kai Fuk Road - Stage 2B-2, (Night Work) (Span 1E to 1F/7A- EB)	0 16-Sep-22		15-Aug-22		-27						•						
KFR-TTA-2C	TTA - Kai Fuk Road - Stage 2C, (Night Work) (Span 2A to 2B)	0 04-Nov-22		13-Dec-22		33										•		
KFR-TTA-2D	TTA - Kai Fuk Road - Stage 2D, (Night Work) (Span 2B to 2C)	0 04-Nov-22		13-Dec-22		33										•		
Section 1 - All	I the Works of the Site, except Section 2 to 17	324 16-Dec 21 A	07-Feb-23	08-Jun-22	26-Feb-26	903	409.00											
Sch_1 Prelimin	aries Works	125 07-May-22 A	22-Oct-22	11-Jun-22	05-May-23	152	0.00											
Site Establishn	nent Works	125 07-May-22 A	22-Oct-22	11-Jun-22	05-May-23	152	0.00											
	el platform over Kai Tak River	100 17-May-22 A		11-Jun-22	05-May-23	177	0.00											
DTA reiostate	ment works	100 17-45y-22 A		11-)un-22	05-May-23	177												
1-23388	SE - Early removal of cofferdam (S3) and reinstate for bdge falsework	12 17-May-22 A		05-May-23	05-May-23													
1-2338D	SE - Early removal of cofferdam (CKRW) and reinstate for bdge falsework	12 25-Jun-22 A	07-Jul-22 A	20-Sep-22	20-Sep-22													
1-2338F	SE - Early removal of cofferdam (S4B) and reinstate for bdge falsework	12 09-Jul-22 A	14-Jul-22 A	25-Oct-22	25-Oct-22													
1-2338E	SE - Early removal of cofferdam (S4A) and reinstate for bdge falsework	7 28-Jul-22	05-Aug-22	11-Jun-22	18-Jun-22	-39												
									1					Date	D	evision	0.0	eded
Current Miles		owloon Rout	A Kail	Tak Eco	t (Month	201	Indet	CSD)	Project ID: KT Baseline:	E-WP32_M39				5-Feb-22 Subr	mit CSD Program mit CSD Program	me Rev 28 with	434 Mo TYY	0.000
	Central K	owioon Rout	e - Nai	iak Eas	i (wonti	1 22 0	puat	- (30)									ounder iff	-
Oritical Rema		The	no Men	th Dolla	na Dree	ram	-		Layout: KTE -	3 Months Rolling	rogramme				Monthly Updates		111	
Critical Remaining V		Th	ree Mon	th Rolli	ng Prog	gramn	ne			3 Months Rolling iters: 3 Months Ro		Submission.	2	5-May-22 Subr 5-Jun-22 Subr	Monthly Updates mit CSD Program mit CSD Program mit CSD Program	me Rev 30with f me Rev 31with f	38 Mon TYY	_

	Activity Name	Orig Dur	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Da)	39		A	40		41		00	42		43	- All	-
1-2338C	SE - Early removal of cofferdam (CKRE) and reinstate for bdge falsewo	rk 12	07-Sep-22 21-	-Sep-22	27-Sep-22	12-Oct-22	16		26 03 10 17	24 31	07	14 21	28 04	11 18	25 (12 09	16 2	23 30	06 1	3 20	+
Cemporary Wo	orks for Early Commencement of 8A Pilling Works	116 0	7-May-22 A 22	-Oct-22	14-Jun-22	03-Sep-22	-39	0.0													
	Steel Deck at KCR near Abutment 1G		7-May-22 A 24	-Sep-22	14-Jun-22	09-Aug-22		0.0													
1-1600A	8A - Traffic Deck - Mobilisation; site dearance	2 0	7-May-22 A 09-1	May-22 A	14-Jun-22	14-Jun-22															
1-1602	8A - Traffic Deck - Instal sheetoiles		0-May-22 A 18-1		14-Jun-22	14-Jun-22															
1-1604	8A - Traffic Deck - exc to 1st layer of strut; install 1st layer of strut;		5-May-22 A 02-		14-Jun-22	14-Jun-22															
							.24														
1-1606	8A - Traffic Deck - exc to 2nd layer of strut; install 2nd layer of strut			I-Jul-22	14-Jun-22	20-Jun-22	-34														
	8A - Traffic Deck - construct RC footing (approx 45m3 conc)				21-Jun-22																
1-1610	8A - Traffic Deck - erection of steel strut and sheetpile deck		-	-Sep-22	06-Jul-22	02-Aug-22	-34					_									
1-1612	8A - Traffic Deck - temp road diversion at KCR				03-Aug-22	09-Aug-22	-39							-							
1-1611	8A - completion of 1G, RW S1 (Bay 1-3) and baddfill	0	19-Sep-22		03-Aug-22		-39							•							
1-1614	8A - Pilling platform - Mobilisation; site dearance; trial pit	4	26-Sep-22 29	-Sep-22	10-Aug-22	13-Aug-22	-39								-						
1-1616	8A - Pilling platform - Install sheetpiks	8	30-Sep-22 11	-Oct-22	15-Aug-22	23-Aug-22	-39								-	-					
1-1618	8A - Pilling platform - exc to 8.5mPD for pilling operation	10	12-Oct-22 22	-Oct-22	24-Aug-22	03-Sep-22	-39									-	_				
1-1620	8A - Pilling platform - installation of concrete blk wall and backfill	10	12-Oct-22 22	-Oct-22	24-Aug-22	03-Sep-22	-39									-	_				
h_3.1 Bridge	e S1 Works	96 0	07-May-22 A 10-	-Sep-22	12-Jul-22	25-Mar-23	156	7.0													
1 - Deck		96 0	07-May-22 A 10	-Sep-22	12-Jul-22	25-Mar-23	156	7.0													
1 - Span 1A-1	16	96 0	7-May-22 A 10	-Sep-22	26-Jul-22	25-Mar-23	156	4.0													
3.1-2360	S1 - Span 1A-1E Web and Soffit	24 0	07-May-22 A 23-3	Jun-22 A	26-Jul-22	26-Jul-22		2.0													
3.1-2364	S1 - Span 1A-1E Deck Section	24 2	24-Jun-22 A 30	-Jul-22	26-Jul-22	01-Aug-22	1	2.0		_											
3.1-2362	S1 - Span 1A-1E Post-tensioning (Stage 1)	12	15-Aug-22 27-	Aug-22	02-Aug-22	15-Aug-22	-11	0.0				_									
3.1-2366	S1 - Span 1A-1E Remove Falsework & Formwork	12		-Sep-22	13-Mar-23	25-Mar-23	156	0.0													
S1 - Span 1E-1				-Sep-22	12-Jul-22	25-Mar-23	162	3.0													
3.1-2376	S1 - Span 1E-1D Web and Soffit			Jul-22 A	12-Jul-22	12-Jul-22	TOP	1.0													
3.1-2378	S1 - Span 1E-1D Dedk Section S1 - Span 1E-1D Remove Fakework & Formwork			Aug-22	12-Jul-22	01-Aug-22	-11	2.0					_								
			-		20-Mar-23	25-Mar-23	162	0.0													
th_3.2 Bridge				-Dec-22	14-Jun-22	15-Jun-23	136	33.0													
2 - Piling Wo				-Dec-22	05-Sep-22	26-Oct-22	-39	2.0													
Piling Works -	Pier P-8A	42	24-Oct-22 11-	-Dec-22	05-Sep-22	26-Oct-22	-39	2.0													
3.2-2523	S2 - Mobilisation	6	24-Oct-22 29	-Oct-22	05-Sep-22	10-Sep-22	-39										•	-			
3.2-2524	S2 - Bored Piles for 8A (1nr) (Left-in casing)	43	30-Oct-22 11-	-Dec-22	13-Sep-22	26-Oct-22	-46	2.0										_		-	+
2 - Pile Caps,	Pier / Abutment	230 0	13-May-22 A 21-	-Dec-22	14-Jun-22	15-Jun-23	136	27.0													
Pier 2A		116 0	07-Jun-22 A 12	-Oct-22	14-Jun-22	30-Aug-22	-34	7.0													
3.2-2532	S2 - Install sheetpile for pile cap 2A	5 0	07-Jun-22 A 25-3	Jun-22 A	14-Jun-22	14-Jun-22		1.0													
3.2-2534	S2 - Excavation down to formation level C-2A	10	11-Jul-22 A 08-	Aug-22	14-Jun-22	28-Jun-22	-34	0.0		-	- 1										
3.2-2536	S2 - Prepare pile head (2 nrs) 2A	9	09-Aug-22 18-	Aug-22	29-Jun-22	09-Jul-22	-34	1.0			-	-									
3.2-2538	S2 - Construct pile cap C-2A	15	19-Aug-22 05	-Sep-22	11-Jul-22	27-Jul-22	-34	2.0													
Current Mile Actual Work	Centr	al Kowloor							e) (Rev32 - CSD)	Base					25	5-Mar-22 S	Submit CSD Pro Submit CSD Pro	gramme Rev 25	with M34 Mo		
Remaining V			Three	Mont	h Rolli	ng Prog	gramn	ne		Filte		Months Rolling rs: 3 Months R		Submission.	2	5-May-22 5 5-Jun-22 5	Submit CSD Pro Submit CSD Pro	gramme Rev 30 gramme Rev 31	with M37 Mon with M38 Mon with M39 Mon	TW TW	

D	Activity Name	Orig D	ur Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day)	39		August 40	September 41		October 42	November 43	
3.2-2540	S2 - Construct Pier P-2A (3 Lifts)	2	9 06-Sep-22	12-Oct-22	28-Jul-22	30-Aug-22	-34	3.00	26 03 10 17	24 :	31 07 14 21	28 04 11 18 25	02 0	9 16 23 30	06 13	20 3
Pier 2B		2	9 19-May-22 A	25-Aug-22	05-Sep-22	10-Oct-22	36	3.00								
3.2-2550	S2 - Construct Pier P-2B (3 Lifts)	2	9 19-May-22 A	25-Aug-22	05-Sep-22	10-Oct-22	36	3.00		-						
Pier 2CL/2CR		14	8 03-May-22 A	15-Sep-22	05-Nov-22	29-Dec-22	86	3.00								
3.2-2564	S2 - Construct Pier P-2CL (3 Lifts)	2	9 03-May-22 A	30-Aug-22	05-Nov-22	12-Dec-22	86	3.00)				
10-8562	S2 - Construct Pier P-2CR (3 Lifts)	2	9 03-May-22 A	15-Sep-22	05-Nov-22	29-Dec-22	86			-						
Pier 2DL/2DR		6	6 06-Oct-22	21-Dec-22	06-Jan-23	08-May-23	104	9.00								
3.2-2568	S2 - Excavation down to formation level 2DL/2DR	1	1 05-Oct-22	18-Oct-22	06-Jan-23	18-Jan-23	76	2.00						_		
3.2-2570	S2 - Prepare pile head (4 nrs) C-2DR & C-2DL	1	7 19-Oct-22	07-Nov-22	19-Jan-23	14-Feb-23	76	1.00								
3.2-2572	S2 - Construct pile cap C-2DR		9 08-Nov-22	17-Nov-22	15-Feb-23	24-Feb-23	76	1.00								
	S2 - Construct Pier P-2DR (3 Lifts)	2	9 18-Nov-22	21-Dec-22	30-Mar-23	08-May-23	104	3.00								_
3.2-2576	S2 - Construct pile cap C-2DL	1	0 18-Nov-22	29-Nov-22	25-Feb-23	08-Mar-23	76	2.00								_
Pier 2EL/2ER			8 06-Jun-22 A	26-Oct-22	03-Feb-23	15-Jun-23	184	5.00								
	S2 - Construct Pier P-2EL (3 Lifts)		9 06-Jun-22 A	30-Sep-22	03-Feb-23	15-Apr-23	154	3.00								
	S2 - Construct Pier P-2ER (2 Lifts)		0 03-Oct-22	26-Oct-22	23-May-23	15-Jun-23	184	2.00								
S2 - Deck	SE - CONSIGNET HIS PREIK (E DIG)		3 19-Nov-22	15-Dec-22	11-Oct-22	05-Nov-22	-34	4.00								
			3 19-Nov-22	15-Dec-22	11-Oct-22	05-Nov-22	-34	4.00								
S2 Span (L)	-2B(L) (Stage 1)		3 19-160v-22	15-00-22	11-0d-22	05-1/00-22	-54	4.00								
							-34	4.00								
	S2 - Span 2A-2B Falsework and formworks		3 19-Nov-22	15-Dec-22	11-Oct-22	05-Nov-22	-34									
Sch_3.3 Bridge S			8 20-Aug-22	18-Oct-22	27-Mar-23	04-May-23	156	7.00								
S3 - Pile Caps, Pi			8 20-Aug-22	18-Oct-22	27-Mar-23	04-May-23	156	7.00								
Abutment 3A-S3			9 13-Sep-22	18-Oct-22	27-Mar-23	04-May-23	156	4.00								
	S3 - Construct Abutment A-3A-S3		9 13-Sep-22	06-Oct-22	27-Mar-23	21-Apr-23	156	3.00								
3.3-2828	S3 - A-3A-S3 Install Permeate Membrane and Baddfill	1	0 07-Oct-22	18-Oct-22	22-Apr-23	04-May-23	156	1.00								
Abutment 3D-S3			6 20-Aug-22	20-Sep-22	30-Mar-23	04-May-23	178	3.00								
	S3 - Construct Abutment A-3D-S3	1	6 20-Aug-22	07-Sep-22	30-Mar-23	21-Apr-23	178	2.00			<u> </u>					
	S3 - A-3D-S3 Install Permeate Membrane and Baddfill	1	0 08-Sep-22	20-Sep-22	22-Apr-23	04-May-23	178	1.00								
Sch_3.4 Bridge S	4 Works	24	9 04-Feb-22 A	12-Dec-22	08-Jun-22	22-Apr-23	100	64.00								
S4 - Pile Caps, Pi	ier / Abutment	23	4 04-Feb-22 A	10-Dec-22	08-Jun-22	03-Feb-23	38	24.00								
Abutment A-4A-	-54	1	0 14-Nov-22	24-Nov-22	11-Jan-23	21-Jan-23	47	2.00								
3.4-3048	54 - A-4A-53 ELS	1	0 14-Nov-22	24-Nov-22	11-Jan-23	21-Jan-23	47	2.00							-	-
Pier 4K-S4-A-1		2	7 17-Mar-22 A	13-Aug-22	08-Jun-22	28-Jun-22	-39	3.00								
3.4-3082	S4 - Construct Pier 4K-S4-A-1 (2 Lifts)	2	7 17-Mar-22 A	13-Aug-22	08-Jun-22	28-Jun-22	-39	3.00		-						
Pier 4K-S4-A-2		2	7 17-Mar-22 A	10-Aug-22	11-Jun-22	28-Jun-22	-36	3.00								
3.4-3088	S4 - Construct Pier-4K-S4-A-2 (3 Lifts)	2	7 17-Mar-22 A	10-Aug-22	11-Jun-22	28-Jun-22	-36	3.00								
Pier 4K-S4-B-1		2	7 15-Apr-22 A	28-Jul-22 A	25-0d-22	25-0d-22		3.00								
3.4-3094	S4 - Construct Pier 4K-S4-B-1 (3 Lifts)	2	7 15-Apr-22 A	28-Jul-22 A	25-Oct-22	25-Oct-22		3.00		•						
Pier 4K-S4-B-2		2	7 15-Apr-22 A	23-Jul-22 A	25-Oct-22	25-Oct-22		3.00								
Current Mileston Cutrent Mileston Actual Work Cotical Remaining Wor	ng Wark	entral Kowlo				t (Monti ng Prog			e) (Rev32 - CSD)	Ba	oject ID: KTE-WP32_M39 iseline: iyout: KTE - 3 Months Rolling Pr ter: TASK filters: 3 Months Rolli		Date 25-Feb-22 25-Mar-22 25-Apr-22 25-May-22 25-An-22	Revision Submit CSD Programme Rev / Submit CSD Programme Rev / M36 Monthly Updates Submit CSD Programme Rev / Submit CSD Programme Rev /	Swith M35 Mon TYY TYY Swith M37 Mon TYY	ed Ap DC DC DC DC DC DC

	Activity Name	0	irig Dur	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day	July 39 26 03 10 17 2	4 21	07 I	40 14 21	28	04	41	8 25	02	0ctobe 42	16 21	30	06 No	43 13	20 1
3.4-3100	S4 - Construct Pier 4K-S4-B-2 (3 Lifts)		27	15-Apr-22 A	23-Jul-22 A	25-Oct-22	25-Oct-22		3.0			01			-							00		-
Pier 4E-S4			20	07-Feb-22 A	15-Oct-22	10-Aug-22	01-Nov-22	14	2.0															
3.4-3112	S4 - Construct Pier 4E-S4 (2 Lifts)		20	07-Feb-22 A	15-Oct-22	10-Aug-22	01-Nov-22	14	2.0		-	+ +		-	+ +			+ +	_					
Pier 4F-S4			65	14-May-22 A	10-Dec-22	07-Sep-22	03-Feb-23	38	6.0															
3.4-3120	S4 - Construct Pile Cap 4F-S4		18	14-May-22 A	15-Jun-22 A	07-Sep-22	07-Sep-22		3.0															
3.4-3122	S4 - Construct Pier 4F-S4 (3 Lifts)		29	15-Jun-22 A	10-Dec-22	07-Sep-22	03-Feb-23	38	3.0			+ +		-	+ +		-	+ +	-	+	-	-	-	-
Pier 4J-S4			20	04-Feb-22 A	31-Aug-22	08-Jul-22	15-Aug-22	-14	2.0															
3.4-3142	S4 - Construct Pier 43-S4 (3 Lifts)		20	04-Feb-22 A	31-Aug-22	08-Jul-22	15-Aug-22	-14	2.0		-	+ +	-	-										
S4 - Deck			152	08-Jun-22 A	12-Dec-22	20-Jun-22	22-Apr-23	100	40.0															
S4-Span (L)			146	08-Jun-22 A	05-Dec-22	20-Jun-22	22-Apr-23	106	26.0															
54- Span 48-4	IK(L) (Stage 1)			08-Jun-22 A	01-Nov-22	20-Jun-22	14-Sep-22																	
3.4-3172	S4 - Span 4B(A) - 4K(A) Falsework and formworks		24	08-Jun-22 A	27-Aug-22	20-Jun-22	13-Jul-22	-39	3.0					-										
3.4-3174	S4 - Span 48(A) - 4K(A) Web and Soffit		20	29-Aug-22	21-Sep-22	14-Jul-22	05-Aug-22	-39	3.0					-	+ +	-								
3.4-3176	S4 - Span 48(A) - 4K(A) Deck Section		9	22-5ep-22	03-Oct-22	06-Aug-22	16-Aug-22	-39	1.0								-	•						
3.4-3178	S4 - Span 4B(A) - 4K(A) Post-tensioning (Stage 1)		12	05-Oct-22	18-Oct-22	17-Aug-22	30-Aug-22	-39	0.0									-	-					
3.4-3180	S4 - Span 4B(A) - 4K(A) Remove Falsework, Formwork and Truss	95	12	19-Oct-22	01-Nov-22	31-Aug-22	14-Sep-22	-39	0.0											-	-			
S4- Span 4K-4	U(L) (Stage 2)		91	15-Aug-22	01-Dec-22	08-Jul-22	22-Apr-23	109	12.0															
3.4-3276	S4 - Span 4K(A)-43 Falsework and formworks		22	15-Aug-22	08-Sep-22	08-Jul-22	02-Aug-22	-32	6.0				_	-	-									
3.4-3278	S4 - Span 4K(A)-4J Install Bearings		8	09-Sep-22	19-Sep-22	03-Aug-22	11-Aug-22	-32	2.0						-	-								
3.4-3280	S4 - Span 4K(A)-4J Web and Soffit		22	27-Sep-22	24-Oct-22	12-Aug-22	06-Sep-22	-38	3.0								-	-	-	÷.				
3.4-3282	S4 - Span 4K(A)-43 Deck Section		9	25-Oct-22	03-Nov-22	07-Sep-22	17-Sep-22	-38	1.0											-	-			
3.4-3283	S4 - Span 4K(A)3-43 Post-tensioning (Stage 2)		12	04-Nov-22	17-Nov-22	19-Sep-22	03-Oct-22	-38	0.0												-		-	
3.4-3284	54 - Span 4K(A)-43 Remove Falsework and Formwork		12	18-Nov-22	01-Dec-22	06-Apr-23	22-Apr-23	109	0.0														-	-
S4- Span 43-2	A(L) (Stage 3)		41	19-Oct-22	05-Dec-22	31-Aug-22	20-Oct-22	-39	7.0															
3.4-3286	S4 - Span 43-2A Falsework and formworks		19	19-Oct-22	09-Nov-22	31-Aug-22	22-Sep-22	-39	3.0											-	-	-		
3.4-3288	S4 - Span 43-2A Install Bearings		8	10-Nov-22	18-Nov-22	23-Sep-22	03-Oct-22	-39	2.0													-	-	
3.4-3290	S4 - Span 43-2A Web and Soffit		14	19-Nov-22	05-Dec-22	05-Oct-22	20-Oct-22	-39	2.0															-
S4-Dpan (R)			103	11-Aug-22	12-Dec-22	25-Oct-22	10-Jan-23	22	14.00															
54- Span 48-4	IK(R) (Stage 1)			11-Aug-22	27-Oct-22	25-Od-22	10-Jan-23																	
3.4-3184	S4 - Span 4B(B) - 4K(B) Falsework and formworks		18	11-Aug-22	31-Aug-22	25-Oct-22	14-Nov-22	61	3.0			-	-	-										
3.4-3186	S4 - Span 4B(B) - 4K(B) Web and Soffit		24	01-Sep-22	29-Sep-22	15-Nov-22	12-Dec-22	61	3.0							_	_							
3.4-3188	S4 - Span 4B(B) - 4K(B) Deck Section		10	30-Sep-22	13-Oct-22	13-Dec-22	23-Dec-22	61	1.0										-					
3.4-3190	S4 - Span 4B(B) - 4K(B) Post-tensioning (Stage 1)		12	14-Oct-22	27-Oct-22	24-Dec-22	10-Jan-23	61	0.0										-	+				
S4- Span 4K-4	IE(R) (Stage 2)		49	17-0d-22	12-Dec-22	02-Nov-22	30-Dec-22	14	7.0															
3.4-3208	S4 - Span 4K(B)-4E Falsework and formworks		49	17-Oct-22	12-Dec-22	02-Nov-22	30-Dec-22	14	7.0												-		-	_
Sch_3.5 Bridge	S7 Works		261	23-Dec-21 A	15-Nov-22	19-Aug-22	25-Apr-23	125	12.0															
S7 - Pile Caps, F	Pier / Abutment		261	23-Dec-21 A	15-Nov-22	19-Aug-22	25-Apr-23	125	12.0															
Pier 7B			48	22-Jul-22 A	15-Nov-22	19-Aug-22	20-Oct-22	-22	7.0															
Current Miest	1000												1000 1100					Date			Revision		Checke	ad be
Adual Work Otical Remain Remaining Wi	ning Work Cen	tral Kow	loo				t (Mont ing Prog			e) (Rev32 - CSD)	Base	ine: Jt: KTE - 3 I	WP32_M39 Months Rollin rs: 3 Months			mission		25-Feb-22 25-Mar-22 25-Apr-22 25-May-22	Subm M36 M Subm	nit CSD Progr Monthly Upda nit CSD Progr	amme Rev 30	with M35 Mor	TW TW TW	Di Di Di
												5 of 16	s. 3 Months	Rolling_1	, NIE - SU	anission.		25-Jun-22 27-Aug-22	Subm	nit CSD Progr	amme Rev 31 tamme Rev 32	with M38 Mor	TYY	1

D	Activity Name	Orig Du	Stat	Finish	Lale Start	Late Finish	Total Float	TRA (Day)	July 39	August 40 31 07 14 21 21	September 41 04 11 18 25	Octobe 42	f	November 43 06 13	~
3.5-3415	S7 - 78-S7 ELS	5	22-Jul-22 A	27-Jul-22	19-Aug-22	22-Aug-22	22	1.00		31 07 14 21 21	04 11 18 25	02 09	16 23 30	06 13	20
3.5-3416	S7 - Excavation down to formation level C-78-S7	4	19-Sep-22	22-Sep-22	23-Aug-22	26-Aug-22	-22	1.00			-				
3.5-3418	S7 - Prepare pile head (2 nrs) C-78-S7	9	23-Sep-22	05-Oct-22	27-Aug-22	06-Sep-22	-22	1.00				_			
3.5-3420	S7 - Construct pile cap C-78-S7	15	06-Oct-22	22-Oct-22	07-Sep-22	24-Sep-22	-22	2.00							
3.5-3422	S7 - Construct Pier P-78-S7 (2 Lifts)	20	24-Oct-22	15-Nov-22	26-Sep-22	20-Oct-22	-22	2.00							
Pier 7C		20	23-Dec-21 A	29-Sep-22	14-Feb-23	25-Apr-23	163	2.00							
3.5-3426	S7 - Construct Pier P-7C-S7 (2 Lifts)	20	23-Dec-21 A	29-Sep-22	14-Feb-23	25-Apr-23	163	2.00							
Abutment 7D			25-May-22 A	31-Aug-22	23-Dec-22	09-Feb-23	127	3.00							
3.5-3434	S7 - Construct Abutment A-7D-S7	83	25-May-22 A	31-4-0-22	23-Dec-22	09-Feb-23	127	3.00							
Sch 3.6 Bridge			30-Sep-22	04-Nov-22	03-Aug-23	17-Oct-23	278	6.00							
	s, Pier / Abutment		30-Sep-22	04-Nov-22	03-Aug-23	17-Oct-23	278	6.00							
Pier 8C	s, Her / Adutment		30-Sep-22	04-Nov-22	03-Aug-23	05-Sep-23	244	3.00							
3.6-3634	S8 - Construct Pier P-8C-S8 (3 Lifts)			04-Nov-22			244	3.00							
			30-Sep-22		03-Aug-23	05-Sep-23									
Abutment 8D			30-Sep-22	26-Oct-22	21-Sep-23	17-Oct-23	286	3.00							
3.6-3642	S8 - Construct Abutment A-8D-S8		30-Sep-22	26-Oct-22	21-Sep-23	17-Oct-23	286	3.00							
Sch_3.7 Bridge	je S9 Works	254	16-Dec-21 A	03-Jan-23	08-Jun-22	06-Dec-22	-21	43.00							
S9 - Pile Caps	s, Pier / Abutment	169	16-Dec-21 A	20-Sep-22	23-Jun-22	19-Aug-22	-26	19.00							
Pier 9C		20	22-Mar-22 A	04-Aug-22	12-Jul-22	22-Jul-22	-11	2.00							
3.7-3850	S9 - Construct Pier P-9C-S9 (2 Lifts)	20	22-Mar-22 A	04-Aug-22	12-Jul-22	22-Jul-22	-11	2.00							
Pier 9D		160	16-Dec-21 A	20-Sep-22	23-Jun-22	19-Aug-22	-26	7.00							
3.7-3870	S9 - Construct Pier P-9D-B-S9 (3 Lifts) (R)	29	16-Dec-21 A	08-Aug-22	23-Jun-22	08-Jul-22	-26	3.00							
3.7-3868	S9 - Construct Pier P-9D-A-S9 (2 Lifts) (L)	20	03-Jan-22 A	31-Aug-22	09-Jul-22	01-Aug-22	-26	2.00							
3.7-3876	S9 - Construct Pier Portal P-9D	16	01-Sep-22	20-Sep-22	02-Aug-22	19-Aug-22	-26	2.00							
Abutment 4H	1/9E	113	27-Apr-22 A	07-Sep-22	06-Jul-22	19-Aug-22	-16	10.00							
3.7-3878	S9 - Prepare pile head (6nrs) C-4H/9H	14	27-Apr-22 A	14-Jun-22 A	06-Jul-22	06-Jul-22		2.00							
3.7-3880	S9 - Construct Abutment Base A-4H/9E	26	15-Jun-22 A	23-Jul-22 A	06-Jul-22	06-Jul-22		4.00							
3.7-3882	S9 - Construct Abutment A-4H/9E	27	25-Jul-22	24-Aug-22	06-Jul-22	05-Aug-22	-16	4.00							
3.7-3883	S9 Install Permeate Membrane and Baddfill	12	25-Aug-22	07-Sep-22	06-Aug-22	19-Aug-22	-16								
S9 - Deck			06-Jun-22 A	28-Nov-22	08-Jun-22	24-Oct-22	-30	19.00							
S9 - Span 1D-	-94 (Stage 1)		06-Jun-22 A	06-Sep-22	08-Jun-22	22-Jul-22	-39	4.00							
3.7-3884	S9 - Span 1D-9A Falsework and formworks	13	06-Jun-22 A	27-3un-22 A	08-Jun-22	08-Jun-22		2.00							
3.7-3888	S9 - Span 1D-9A Web and Soffit		28-Jun-22 A		08-Jun-22	08-Jun-22		1.00							
3.7-3668	S9 - Span 10-9A Web and Some		25-Jul-22 A	09-Aug-22	08-Jun-22	23-Jun-22	-39	1.00							
3.7-3892	S9 - Span 1D-9A Post-tensioning (Stage 1) S9 - Span 1D-9A Remove Fakework and Formwork		10-Aug-22	23-Aug-22	24-Jun-22	08-Jul-22 22-Jul-22	-39 -39	0.00							
			24-Aug-22	06-Sep-22	09-Jul-22		-39								
S9 - Span 9A-			17-Jul-22 A	14-Oct-22	27-Jun-22	24-Od-22	8	5.00							
3.7-3894	S9 - Span 9A-9B Falsework and formworks		17-Jul-22 A	05-Aug-22	27-Jun-22	11-Jul-22	-23	3.00							
3.7-3896	S9 - Span 9A-9B Web and Soffit	9	24-Aug-22	02-Sep-22	12-Jul-22	21-Jul-22	-37	1.00			-				
Urrent Mik	Bertinos									Design ID 1775 MID20 MICS		Date	Revision		ded Ap
Adual Work	rk.	Central Kowlo	on Route	e - Kai T	ak Eas	t (Mont	h 39 L	Jpdat	e) (Rev32 - CSD)	Project ID: KTE-WP32_M39 Baseline:		25-Mar-22 Subr	nit CSD Programme Rev 2 nit CSD Programme Rev 2		DC
Critical Rem Remaining	maining Work					ing Prog			-,,,	Layout: KTE - 3 Months Rolling Prog		25-Apr-22 M36	Monthly Updates nit CSD Programme Rev 3	TYY	DC
	y =====									Filter: TASK filters: 3 Months Rolling	1, KIE - Submission.	25-Jun-22 Subr	nit CSD Programme Rev 3 nit CSD Programme Rev 3	1with M38 Mon TYY	DC
										Page 6 of 16					

ID	Activity Name	Orig Dur	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day)	July 39		August 40	September 41		October 42		N	43	_
3.7-3898	S9 - Span 9A-9B Deck Section	9	03-Sep-22	14-Sep-22	22-Jul-22	01-Aug-22	-37	1.00	26 03 10 17 24	31	07 14	21 28 04 11 18	25 02 0	.9 16	23 30	06	13 2	.0 2
3.7-3900	S9 - Span 9A-9B Post-tensioning (Stage 2)	12	15-Sep-22	28-Sep-22	02-Aug-22	15-Aug-22	-37	0.00					-					
3.7-3901	S9 - Span 9A-98 Remove Falsework and Formwork	12	29-Sep-22	14-Oct-22	11-Oct-22	24-Oct-22	8							-				
S9 - Span 9B-	9C (Stage 3)	62	07-Sep-22	21-Nov-22	23-Jul-22	24-Oct-22	-24	5.00										
3.7-3902	S9 - Span 98-9C Falsework and formworks	20	07-Sep-22	30-Sep-22	23-Jul-22	15-Aug-22	-39	3.00					_					
3.7-3904	S9 - Span 98-9C Web and Soffit		03-Oct-22				-39	1.00						_				
				13-Oct-22	16-Aug-22	25-Aug-22												
3.7-3906	S9 - Span 98-9C Deck Section	9	14-0d-22	24-0d-22	26-Aug-22	05-Sep-22	-39	1.00						1				
3.7-3908	S9 - Span 9B-9C Post-tensioning (Stage 3)	12	25-0d-22	07-Nov-22	06-Sep-22	20-Sep-22	-39	0.00							_	-		
3.7-3909	S9 - Span 9B-9C Remove Falsework and Formwork	12	08-Nov-22	21-Nov-22	11-Oct-22	24-Oct-22	-24									-	-	
S9 - Span 9C-	9D-9E (Stage 4)	48	03-Oct-22	28-Nov-22	20-Aug-22	13-Oct-22	-39	5.00										
3.7-3910	S9 - Span 9C-9E Falsework and formworks	20	03-Oct-22	26-Oct-22	20-Aug-22	13-Sep-22	-35	1.00					_		-			
3.7-3912	S9 - Span 9C-9E Install Bearings	6	27-Oct-22	02-Nov-22	14-Sep-22	20-Sep-22	-35	2.00							-			
3.7-3914	S9 - Span 9C-9E Web and Soffit	9	08-Nov-22	17-Nov-22	21-Sep-22	30-Sep-22	-39	1.00								-	-	
3.7-3916	S9 - Soan 9C-9E Deck Section		18-Nov-22	28-Nov-22	03-Oct-22	13-Oct-22	-39	1.00									-	_
S9 - Miscellan			25-Oct-22	03-Jan-23	28-Sep-22	06-Dec-22	-21	5.00										
															-			
3.7-3920	S9 - Install Profile barrier / Parapet Wall / Planter	58	25-0d-22	03-Jan-23	28-Sep-22	06-Dec-22	-21	5.00							_			_
Sch_3.8 Bridge	e S1/S9 Works		27-Apr-22 A	05-Dec-22	08-Jun-22	08-Nov-22	-23	45.00										
S1/S9 - Pile C	aps, Pier / Abutment	95	27-Apr-22 A	19-Aug-22	08-Jun-22	13-Aug-22	-5	16.00										
Pier 1E		23	07-May-22 A	05-Aug-22	13-Jun-22	25-Jun-22	-35	3.00										
3.8-4044	S1/S9 - Construct Pier P-1E-S1/S9	23	07-May-22 A	06-Aug-22	13-Jun-22	25-Jun-22	-35	3.00		-								
Pier 1F/7A		64	06-Jun-22 A	19-Aug-22	19-Jul-22	13-Aug-22	-5	6.00										
3.8-4050	S1/S9 - Prepare pile head (1nr) C-1F/7A-S1/S9	6	06-Jun-22 A	11-Jun-22 A	19-Jul-22	19-Jul-22		1.00										
3.8-4052	S1/S9 - Construct pile cap C-1F/7A-S1/S9	35	13-Jun-22 A	23-Jul-22 A	19-Jul-22	19-Jul-22		3.00										
3.8-4054	\$1/59 - Construct Pier P-1F/7A-51/59 (2 Lifts)		25-Jul-22	19-Aug-22	19-Jul-22	13-Aug-22	-5	2.00										
Abutment 1G	31/39 - Calebrar Harry Act (2) (2) (10)		27-Apr-22 A	13-Aug-22	08-Jun-22	28-Jun-22	-39	7.00										
							-39											
3.8-4062	S1/S9 - Construct Abutment Base A-1G-S1/S9		27-Apr-22 A		08-Jun-22	08-Jun-22		3.00										
3.8-4064	S1/S9 - Construct Abutment A-1G-51/S9	31	27-May-22 A	13-Aug-22	08-Jun-22	28-Jun-22	-39	4.00										
S1/S9 - Deck		100	08-Aug-22	05-Dec-22	27-Jun-22	08-Nov-22	-23	29.00										
S1/S9 - Span	1D-1E (Stage 1)	71	22-Aug-22	15-Nov-22	12-Jul-22	25-Oct-22	-18	13.00										
3.8-4068	S1/S9 - Span 1D-1E Falsework and formworks (L& R)	21	22-Aug-22	15-Sep-22	12-Jul-22	04-Aug-22	-35	3.00										
3.8-4070	S1/S9 - Span 1D-1E Install Bearings	9	16-Sep-22	26-Sep-22	05-Aug-22	15-Aug-22	-35	2.00										
3.8-4076	S1/S9 - Span 1D-1E(L) Web and Soffit	17	27-Sep-22	18-Oct-22	16-Aug-22	03-Sep-22	-35	2.00						_				
3.8-4072	S1/S9 - Span 1D-1E(R) Web and Soffit		13-Oct-22	01-Nov-22	30-Aug-22	19-Sep-22	-35	2.00						_	_			
3.8-4078	S1/S9 - Span 1D-1E(L) Ded Section		19-Oct-22	01-Nov-22	26-Sep-22	11-Oct-22	-18	2.00										
3.8-4074	S1/S9 - Span 1D-1E(R) Deck Section		02-Nov-22	15-Nov-22	12-Oct-22	25-Oct-22	-18	2.00										
	1E-1F/1E-7A (Stage 1)		08-Aug-22	05-Dec-22	27-Jun-22	25-0d-22	-35	11.00										
3.8-4080A	S1/59 - Span 1E to 1F/7A Erect Steel Portal (over Kal Fuk Road) Night works (WB)(2-W)		08-Aug-22	20-Aug-22	27-Jun-22	11-Jul-22	-35	0.00		1								
3.8-4080B	S1/S9 - Span 1E to 1F/7A Fabrication Steel Portal (over Kai Fuk Road) Day works (WB)(2-W)	10	08-Aug-22	18-Aug-22	29-Jun-22	11-Jul-22	-33											
Current Mic													Date		Revision		Checked	id App
Current Mile Current Mile Adual Work		owloo	n Rout	o - Kai 1	ak Fas	t (Mont	391	Indate) (Rev32 - CSD)	Project II Baseline:	: KTE-WP3	2_M39	25-Feb-22 25-Mar-22		Programme Rev Programme Rev		x TYY	DC
Critical Rem	aining Work	0.0100				ng Prog			(Nev32 - C3D)	Layout: H		hs Rolling Programme	25-Apr-22	M36 Monthly	Updates		TYY	DC
Remaining 1	Work				Kolli		, ann			Filter: TA	SK filters: 3	Months Rolling_1, KTE - Submission.	25-May22 25-Jun-22	Submit CSD	Programme Rev Programme Rev	31with M38 Mo	n TYY	DC
										1			27-Aug-22	LSubmit CSD	Programme Rev	32with M39 Mo	n TYY	DC

riD	Activity Name	Orig Dur	Stat	Finish	Lale Start	Late Finish	Total Float	TRA (Day	July 39	August 40 31 07 14 21	September 41 28 04 15 58 26	Octo 4;	ber 2	November 43	20
3.8-4080	S1/S9 - Span 1E to 1F/7A Erect Steel Portal (over Kai Fuk Road) Night works (EB)(2-E)	12	16-Sep-22	29-Sep-22	15-Aug-22	27-Aug-22	-27	0.00	20 03 10 11 24	31 07 14 21		VE OF	10 23 54	00 12	20
3.8-4080C	S1/59 - Span 1E to 1F/7A Erect Steel Portal (over Kai Fuk Road) Day works	10	16-Sep-22	27-Sep-22	17-Aug-22	27-Aug-22	-25								
	(EB)(2-E) S1/S9 - Span 1E-1F/7A Falsework and formworks (L & R)	18	30-Sep-22	22-Oct-22	29-Aug-22	19-Sep-22	-27	3.00							
3.8-4086	S1/S9 - Span 1E-1F/7A (L) Web and Soffit	17	24-0d-22	11-Nov-22	20-Sep-22	11-Oct-22	-27	2.00						_	
	S1/59 - Span 1E-1F/7A (R) Web and Soffit		02-Nov-22	21-Nov-22	20-Sep-22	11-Oct-22	-35	2.00							
			12-Nov-22	25-Nov-22	12-Oct-22	25-Oct-22	-27	2.00							
	S1/59 - Span 1E-1F/7A (L) Deck Section														
	S1/S9 - Span 1E-1F/7A (R) Deck Section		22-Nov-22	05-Dec-22	12-Oct-22	25-Oct-22	-35	2.00							
S1/S9 - Span 1F-			24-0d-22	10-Nov-22	21-0d-22	08-Nov-22	-2	3.00							
	S1/S9 - Span 1F-1G(R) Falsework and formworks		24-0d-22	10-Nov-22	21-0d-22	08-Nov-22	-2	3.00					_		
S1/S9 - Span 7A-	-7B (L) (Stage 3)	11	16-Nov-22	28-Nov-22	21-Oct-22	02-Nov-22	-22	2.00							
3.8-4098	S1/S9 - Span 7A-78(L) Falsework and formworks	11	16-Nov-22	28-Nov-22	21-Oct-22	02-Nov-22	-22	2.00						-	
Sch_3.9 Bridge Cl	KRW Works	159	29-Mar-22 A	15-Dec-22	20-Sep-22	21-Jan-23	29	10.00							
CKRW - Pile Caps	s, Pier / Abutment	148	29-Mar-22 A	02-Dec-22	20-Sep-22	21-Jan-23	40	7.00							
Abutment A-K1-C	CKRW	27	02-Nov-22	02-Dec-22	20-Sep-22	21-Jan-23	40	4.00							
3.9-4236	OKRW - Construct Abutment A-K1-OKRW	18	02-Nov-22	22-Nov-22	20-Sep-22	12-Oct-22	-35	4.00							-
3.9-4238	OKRW - A-K1-OKRW Install Permeate Membrane and Backfill	9	23-Nov-22	02-Dec-22	12-Jan-23	21-Jan-23	40	0.00							
Abutment A-K4-C	CKRW	80	29-Mar-22 A	10-Sep-22	21-Sep-22	21-Jan-23	108	3.00							
3.9-4272	CKRW - Construct Abutment A-K4-CKRW	22	29-Mar-22 A	31-Aug-22	21-Sep-22	31-Oct-22	49	3.00							
3.9-4274	OKRW - A+K4-OKRW Install Permeate Membrane and Baddill	9	01-Sep-22	10-Sep-22	12-Jan-23	21-Jan-23	108	0.00							
CKRW - Deck		20	23-Nov-22	15-Dec-22	13-Oct-22	04-Nov-22	-35	3.00							
	-CKRW - K5-CKRW		23-Nov-22	15-Dec-22	13-Oct-22	04-Nov-22	-35	3.00							
	CKRW - Span K14K5 Falsework and formwork		23-Nov-22	15-Dec-22	13-Oct-22	04-Nov-22	-35	3.00							_
			14-Apr-22 A	16-Dec-22	14-3ul-22	02-Mar-23	56	28.00							
Sch_4.2 Slip Road					10-5eb-23	02-Mar-23	127	6.00							
	to TTA (Ramp W4-W1)		01-Sep-22	22-Sep-22											
ELS for Underpas		18	01-Sep-22	22-Sep-22	10-Feb-23	02-Mar-23	127	6.00							
	S3 - Install cofferdam		01-Sep-22	22-Sep-22	10-Feb-23	02-Mar-23	127	6.00							
S3 - TTA Stage 2	(Box Section Bay 2 & 3)	202	14-Apr-22 A	16-Dec-22	14-Jul-22	14-Dec-22	-2	22.00							
TTA Advance Wo	orks	34	14-Apr-22 A	23-Aug-22	14-Jul-22	04-Aug-22	-17	0.00							
4-4592	TTA - Utilities diversion / protection	18	14-Apr-22 A	23-Aug-22	14-Jul-22	03-Aug-22	-17	0.00							
4-4592A	TTA - uncharted TCSS cable diversion (PMI-XXX)	4	17-May-22 A	29-Jun-22 A	04-Aug-22	04-Aug-22			-						
ELS for Underpas	ss	100	28-May-22 A	28-Oct-22	04-Aug-22	08-Oct-22	-17	19.00							
4-4594	S3 - Mobilisation	4	28-May-22 A	28-May-22 A	04-Aug-22	04-Aug-22		0.00							
4-4596	S3 - Install cofferdam; impacted by restricted 07:00-11:00 by KITEC cinema	33	28-May-22 A	26-Aug-22	04-Aug-22	06-Aug-22	-17	7.00							
	(PME-XXX) S3 - Excavation down to 0.5m below 1st waling & strut; install waling & strut	11	27-Aug-22	08-Sep-22	08-Aug-22	19-Aug-22	-17	2.00		_					
4-4602	S3 - Excavation down to 0.5m below 2nd waling & strut; install waling & stru		09-Sep-22	28-Sep-22	20-Aug-22	07-Sep-22	-17	4.00							
4-4604	S3 - Excavation down to 0.5m below 3rd waling & strut; install waling & stru	16	29-Sep-22	19-Oct-22	08-Sep-22	27-Sep-22	-17	4.00					-		
	S3 - Excavation down to final formation level		20-Oct-22	28-Oct-22	28-Sep-22	08-Oct-22	-17	2.00					_		
RC Strucutres			29-Oct-22	16-Dec-22	10-Oct-22	14-Dec-22	-2	3.00							
in Junious		42		10 000 22	1000122	1100.22		5.00							
Current Miestone	26									Project ID: KTE-WP32_M39		Date	Revision	0	hedwed /
Actual Work	Central K	owloc	n Rout	e - Kai 1	Tak Eas	t (Mont	h 39	Updat) (Rev32 - CSD)	Baseline:		25-Mar-22 Su	bmit CSD Programme Re bmit CSD Programme Re		r Di
Critical Remaining	ng Work				th Rolli				,,/	Layout: KTE - 3 Months Rolling Pro		25-Apr-22 M3 25-May-22 Su	6 Monthly Updates Iomit CSD Programme Re	30with M37 Mon Trh	(D
Hemaning Work	•					3				Filter: TASK filters: 3 Months Rollin	g_1, KIE - Submission.	25-Jun-22 Su	bmit CSD Programme Re	v 31with M38 Mon Trh	r D
										Page 8 of 16		27-Aug-22 Su	bmit CSD Programme Re	r samen Mate Mon TY'r	· E

	Activity Name	Orig Dur	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day)	17 1 22	August 40 31 07 14 21	September 41 28 04 11 18 2	42	61 16 23 30	43 06 13
iox Sections		42	29-Oct-22	16-Dec-22	10-0d-22	14-Dec-22	-2	3.00		31 07 14 21	40 04 11 18 4	02 09	10 23 30	30 13
Bay B2 (L=10	0m) FS Plant Room	42	29-Oct-22	16-Dec-22	10-Oct-22	26-Nov-22	-17	2.00						
4-4608	S3-82 - Consturd: Base slab (with PS plantroom)	18	29-Oct-22	18-Nov-22	10-Oct-22	29-Oct-22	-17	1.00					-	_
4-4610	S3-82 - Consturd: External Wall (with PS plantroom)	24	19-Nov-22	16-Dec-22	31-Oct-22	26-Nov-22	-17	1.00						
Bay B3 (L=10	0m)	9	19-Nov-22	29-Nov-22	05-Dec-22	14-Dec-22	13	1.00						
4-4614	S3-B3 - Consturt: Base slab	9	19-Nov-22	29-Nov-22	05-Dec-22	14-Dec-22	13	1.00						-
ch 5A Retaini	ng Walls and At-grade Road Works	290	11-Feb-22 A	07-Feb-23	13-Jun-22	26-Feb-26	903	154.00						
- Retaining Wall		258	11-Feb-22 A	21-Dec-22	13-Jun-22	26-Feb-26	935	124.00						
RW-S1		176	25-May-22 A	21-Dec-22	13-Jun-22	07-Dec-22	-12	33.00						
Retaining Wal			25-May-22 A	21-Dec-22	13-Jun-22	07-Dec-22		33.00						
5A-5035	RW-S1 - Excavation down to formation level +2.8 ; additional 500 mm exc	24	25-May-22 A	14-Jul-22 A	13-Jun-22	13-Jun-22		2.00						
5A-5051	and formation replacement RW-S1 - Plate Load Test and Report (P3)		15-Jul-22 A	19-Jul-22 A	13-Jun-22	13-Jun-22		0.00						
5A-5024	RW-S1 - Excavation down to formation level +2.9/+4.0	10	25-Jul-22	04-Aug-22	05-Sep-22	16-Sep-22	36	2.00						
5A-5052	RW-S1 - Construct Base Slab (Bay 2/1)		25-Jul-22	09-Aug-22	13-Jun-22	28-Jun-22	-35	2.00						
5A-5032	RW-S1 - Consultational State State (State 2)		25-Jul-22	29-Jul-22	23-Aug-22	27-Aug-22	25	1.00						
5A-5028	RW-S1 - Plate Load Test and Report (P2) RW-S1 - Plate Load Test and Report (P1)		05-Aug-22	10-Aug-22	17-Sep-22	22-Sep-22	36	2.00						
5A-5048	RW-S1 - Construct Base Slab (Bay 3)		10-Aug-22	17-Aug-22	17-5qp-22 14-Jul-22	22-54p-22 21-Jul-22	-23	1.00						
5A-5048	NW-51 - Construct Base Salo (Bay 3) NRW-51 - Construct Wall (Bay 1)		10-Aug-22	24-Aug-22	29-Jun-22	09-Jul-22	-23	1.00						
5A-50564								1.00						
	RWFS1 - Construct Base Slab (Bay 4)		18-Aug-22	25-Aug-22	04-Aug-22	11-Aug-22	-12				<u></u>			
5A-5056	RW-S1 - Construct Wall (Bay 2)		25-Aug-22	05-Sep-22	11-Jul-22	21-Jul-22	-39	3.00						
5A-5040	RW-S1 - Construct Base Slab (Bay 6/5)	14		10-Sep-22	12-Aug-22	27-Aug-22	-12	2.00						
5A-5054	RW-S1 - Construct Wall (Bay 3)		06-Sep-22	17-Sep-22	22-Jul-22	02-Aug-22	-39	1.00						
5A-5058A	RW-S1 - Fill upto formation level for 8A temp traffic deck		06-Sep-22	17-Sep-22	22-Jul-22	02-Aug-22	-39							
5A-5036	RW-S1 - Construct Base Slab (Bay 7)	7	13-Sep-22	20-Sep-22	29-Aug-22	05-Sep-22	-12	1.00						
5A-5050	RW-S1 - Construct Wall (Bay 4)	9	19-Sep-22	28-Sep-22	05-Sep-22	15-Sep-22	-11	1.00						
5A-5032	RWFS1 - Construct Base Slab (Bay 9/8)	14	21-Sep-22	08-Oct-22	06-Sep-22	22-Sep-22	-12	2.00						
5A-5046	RW-S1 - Construct Wall (Bay 6/5)	9	29-Sep-22	11-Oct-22	16-Sep-22	26-Sep-22	-11	1.00						
5A-5030	RW-S1 - Construct Base Slab (Bay 12/11/10)	21	10-Oct-22	02-Nov-22	23-Sep-22	19-Oct-22	-12	3.00				_		
5A-5042	RW-S1 - Construct Wall (Bay 7)	9	12-Oct-22	21-Oct-22	27-Sep-22	08-Oct-22	-11	1.00				-	-	
5A-5038	RW-S1 - Construct Wall (Bay 9/8)	9	22-Oct-22	01-Nov-22	10-Oct-22	19-Oct-22	-11	1.00						
5A-5034	RW-S1 - Construct Wall (Bay 12/11/10)	14	03-Nov-22	18-Nov-22	20-Oct-22	04-Nov-22	-12	2.00						
5A-5058	RW-S1 - Fill upto formation level (SPT)	28	19-Nov-22	21-Dec-22	05-Nov-22	07-Dec-22	-12	4.00						
RW-S2		171	25-May-22 A	15-Dec-22	16-Jun-22	07-Jan-23	17	28.00						
5A-5103	RW-S2 - Excavation down to formation level +3.0 (at Bay 0)	12	25-May-22 A	07-Jul-22 A	16-Jun-22	16-Jun-22								
5A-5105	RW-S2 - Plate Load Test and Report (P3)	4	08-Jul-22 A	12-Jul-22 A	16-Jun-22	16-Jun-22								
5A-5104	RW-S2 - Construct Wall (Bay 7)	5	25-Jul-22	29-Jul-22	25-Oct-22	29-Oct-22	76	1.00						
5A-5424	RW-S2 - Construct Base Slab (Bay 0)	20	25-Jul-22	16-Aug-22	16-Jun-22	09-Jul-22	-32	2.00						
	RW-52 - Plate Load Test and Report (P2)		25-Jul-22	29-Jul-22	05-Jul-22	09-Jul-22	-17	1.00						

	Activity Name	Orig Dur	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day	July 39 26 03 10 17 2		August 40 14 21 28 04	September 41		October 42		Novemb 43	81
5A-5108	RW-52 - Construct Wall (Bay 6)	5	30-Jul-22	04-Aug-22	31-Oct-22	04-Nov-22	76	1.00	20 03 10 17 2	31 07	14 21 28 04	11 18	63 02	76 2	3 30	00 13	t
5A-5426	RW-S2 - Construct Wall (Bay 0) (2 Lifts)	24	10-Aug-22	06-Sep-22	27-Jul-22	23-Aug-22	-12	2.00									
5A-5114	RW-S2 - Construct Base Slab (Bay 2/1)	19	17-Aug-22	07-Sep-22	11-Jul-22	01-Aug-22	-32	3.00									
5A-5110	RW-S2 - Construct Base Slab (Bay 3)	7	08-Sep-22	16-Sep-22	29-Sep-22	08-Oct-22	17	1.00				-					
5A-5118	RW-52 - Construct Wall (Bay 2/1)	19	08-Sep-22	30-Sep-22	02-Aug-22	23-Aug-22	-32	3.00					-				
5A-5106	RW-52 - Construct Base Slab (Bay 5/4)	14	17-Sep-22	05-Oct-22	10-Oct-22	25-Oct-22	17	2.00					_				
5A-5116	RW-52 - Construct Wall (Bay 3)	9	17-Sep-22	27-Sep-22	26-Oct-22	04-Nov-22	31	1.00									
5A-5120A	RW-52 - Fill up to formation level (SPT) for temp haul road to 8A from KCR	18	22-Sep-22	14-Oct-22	15-Aug-22	03-Sep-22	-32					_		-			
5A-5112	RW-52 - Construct Wall (Bay 5/4)	9	06-Oct-22	15-0ct-22	26-0d-22	04-Nov-22	17	1.00					_	_			
5A-5120	RW-52 - Fill up to formation level (SPT)	28		17-Nov-22	05-Nov-22	07-Dec-22	17	4.00									
5A-5151	RW-52 - Temporary road and drainage works for KCR Stage 2	24	18-Nov-22	15-Dec-22	08-Dec-22	07-Jan-23	17	6.00									1
RW-S7-a	Temponary roca and analogo mana temponary a		15-Sep-22	18-Nov-22	10-Nov-22	11-Mar-23	88	9.00									
5A-5190	RW-57-a - Plate Load Test and Report	14		30-Sep-22	10-Nov-22	25-Nov-22	46	2.00					_				
5A-5192	RW-57-a - Construct Base Slab (RW-57-a1)		03-Oct-22	19-Oct-22	26-Nov-22	12-Dec-22	46	2.00					-				
5A-5196	RW-S7-a - Construct Wall (RW-S7-a1)		20-Oct-22	29-Oct-22	16-Dec-22	28-Dec-22	49	1.00									
SA-5416	RW-S7-a - Construct Base Slab (RW-S7-a2)	12		02-Nov-22	10-Feb-23	23-Feb-23	88	2.00									
5A-5418	RW-S7-a - Construct Wall (RW-S7-a2)		03-Nov-22	18-Nov-22	24-Feb-23	11-Mar-23	88	2.00							-		1
RW-S7		186	16-May-22 A	05-Dec-22	20-0d-22	26-Feb-26	949	9.00									
5A-5212a	RW-57 - Construct Wall (Bay 6/8)	12	16-May-22 A	31-May-22 A	26-Feb-26	26-Feb-26											
5A-5188	RW-S7 - Excavation down to formation level +3.5/+4.1	7	29-Aug-22	05-Sep-22	20-Oct-22	27-Oct-22	42	1.00									
5A-5194	RW-S7 - Construct Base Slab (Bay 1)	7	20-Oct-22	27-Oct-22	13-Dec-22	20-Dec-22	46	1.00						-	•		
5A-5198	RW-S7 - Construct Base Slab (Bay 2/3)	14	28-Oct-22	12-Nov-22	21-Dec-22	09-Jan-23	46	2.00								_	
5A-5200	RW-57 - Construct Wall (Bay 1)	9	31-Oct-22	09-Nov-22	29-Dec-22	09-Jan-23	49	1.00								-	
5A-5210	RW-S7 - Construct Base Slab (Bay 9)	7	14-Nov-22	21-Nov-22	27-Feb-23	06-Mar-23	81	1.00									÷
5A-5204	RW-S7 - Construct Wall (Bay 2/3)	19	14-Nov-22	05-Dec-22	10-Jan-23	07-Feb-23	46	3.00									+
RW-S7/S8		83	06-Sep-22	14-Dec-22	02-Nov-22	18-Apr-23	94	13.00									
5A-5218	RW-S7/S8 - Excavation down to formation level +3.8/+3.9	7	06-Sep-22	14-Sep-22	02-Nov-22	09-Nov-22	46	1.00									
5A-5220	RW-S7/S8 - Plate Load Test and Report	14	15-Sep-22	30-Sep-22	09-Jan-23	31-Jan-23	94	2.00					-				
5A-5222	RW-S7/S8 - Construct Base Slab (Bay 1)	7	03-Oct-22	11-Oct-22	01-Feb-23	08-Feb-23	94	1.00									
5A-5224	RW-S7/S8 - Construct Base Slab (Bay 2)	7	12-Oct-22	19-Oct-22	11-Feb-23	18-Feb-23	96	1.00									
5A-5226	RW-57/S8 - Construct Wall (Bay 1)		12-Oct-22	21-Oct-22	09-Feb-23	18-Feb-23	94	1.00									
5A-5228	RW-S7/S8 - Construct Base Slab (Bay 3)		20-Oct-22	27-Oct-22	22-Feb-23	01-Mar-23	98	1.00									
5A-5230	RW-S7/S8 - Construct balle Sido (baly 3) RW-S7/S8 - Construct Wall (Bay 2)	9		01-Nov-22	20-Feb-23	01-Mar-23	90	1.00									
																_	
5A-5232	RW+57/S8 - Construct Wall (Bay 3)		02-Nov-22	11-Nov-22	02-Mar-23	11-Mar-23	94	1.00							_		
5A-5234	RWFS7/S8 - Fill upto formation level		12-Nov-22	14-Dec-22	13-Mar-23	18-Apr-23	94	4.00									
RW-S8-a		62	21-Sep-22	03-Dec-22	11-Nov-22	01-Feb-23	42	9.00									
5A-5260	RW-S8-a - Plate Load Test and Report		21-Sep-22	08-Oct-22	11-Nov-22	26-Nov-22	42	2.00				_					
5A-5262	RW-S8-a - Construct Base Slab (RW-S8-a1)	14	10-Oct-22	25-Oct-22	28-Nov-22	13-Dec-22	42	2.00					•				
Current Mic Adual Wor Cotical Rem Remaining	* Central K	owloo				t (Mont ng Prog) (Rev32 - CSD)		3 Months Rolling Programme ters: 3 Months Rolling_1, KTE -	Submission.	Date 25-Feb-22 25-Mar-22 25-Mar-22 25-Mary-22 27-Aug-22	Submit CSD Pro M36 Monthly Up Submit CSD Pro Submit CSD Pro	Revision gamme Rev 28 wit gamme Rev 29wit lates gamme Rev 30wit gamme Rev 31wit gamme Rev 31wit	th M34 Mo T h M35 Mon T th M37 Mon T h M38 Mon T	

	Activity Name	Orig Dur	Stat	Finish	Lale Staff	Late Finish	Total Float	TRA (Day)	39		40	September 41		42		43
5A-5264	RW-58-a - Construct Wall (RW-58-a1)	9	26-Oct-22	04-Nov-22	15-Dec-22	24-Dec-22	43	1.00	26 03 10 17 24	31 (17 14 21	28 04 11 18 25	02 09	16 23	30 06	13 2
5A-5420	RW-58-a - Construct Base Slab (RW-58-a2)	20	26-Oct-22	17-Nov-22	14-Dec-22	09-Jan-23	42	2.00								_
5A-5422	RW-58-a - Construct Wall (RW-58-a2) (2 Lifts)		07-Nov-22	03-Dec-22	28-Dec-22	01-Feb-23	42	2.00							_	
	Resolution - Consolution (Remolection (Consol		01-Jun-22 A	26-Nov-22	28-Oct-22	19-Jan-23	43	6.00								
RW-S8							43									
5A-5270	RW-58 - Construct Wall (Bay 1)		01-Jun-22 A			28-Dec-22		1.00								
5A-5258	RW-58 - Excavation down to formation level +2.6/+4.1	12	06-Sep-22	20-Sep-22	28-Oct-22	10-Nov-22	42	1.00								
5A-5276	RW-S8 - Construct Base Slab (Bay 6)	7	26-Oct-22	02-Nov-22	12-Jan-23	19-Jan-23	64	1.00							-	
5A-5272	RW-S8 - Construct Wall (Bay 2)	19	05-Nov-22	26-Nov-22	28-Dec-22	19-Jan-23	43	3.00								
RW-S9		168	11-Feb-22 A	03-Sep-22	13-Jun-22	14-May-24	493	12.00								
Stage 1			11-Feb-22 A	03-Sep-22	13-Jun-22	14-May-24										
5A-5318	RW-59 - Fill upto formation level	28	11-Feb-22 A	02-Aug-22	13-Jun-22	21-Jun-22	-35	4.00		-						
5A-5306	RW-S9 - Construct Base Slab (Bay 3)	9	11-Feb-22 A	09-Aug-22	18-Mar-24	06-Apr-24	484	2.00								
5A-5304	RW-59 - Construct Wall (Bay 4)	14	25-Jul-22	09-Aug-22	18-Mar-24	05-Apr-24	484	2.00								
5A-5308	RW-59 - Construct Base Slab (Bay 2)	11	10-Aug-22	22-Aug-22	12-Apr-24	24-Apr-24	488	2.00								
5A-5312	RW-59 - Construct Base Slab (Bay 1)		23-Aug-22	03-Sep-22	02-May-24	14-May-24	493	2.00								
RW-CKR			30-Sep-22	18-Oct-22	19-Oct-22	03-Nov-22	14	2.00								
RW-CKR-c			30-Sep-22	18-0:1-22	19-0d-22	03-Nov-22	14	2.00								
								2.00								
5A-5358	RW-OKR-c - Install sheetpile cofferdam		30-Sep-22	18-0d-22	19-0d-22	03-Nov-22	14	2.00								
RW-CKRW			14-Nov-22	07-Dec-22	26-Jun-23	20-Jul-23	176	3.00								
5A-5372	RW-CKRW - Excavation down to formation level +5.2/+5.9		14-Nov-22	21-Nov-22	26-Jun-23	04-Jul-23	176	1.00								-
5A-5374	RW-CKRW - Plate Load Test and Report	14	22-Nov-22	07-Dec-22	05-Jul-23	20-Jul-23	176	2.00								•
Road Works		208	31-May-22 A	07-Feb-23	29-Jun-22	04-Feb-23	-2	30.00								
Initial Stage fo	or Kai Fuk Road	44	09-Jun-22 A	01-Sep-22	25-Aug-22	17-Sep-22	13	6.00								
5A-5500	KFRd - Temp relocate existing Traffic Gantry (EB)Ksn23C	14	09-Jun-22 A	10-Jun-22 A	25-Aug-22	25-Aug-22		2.00								
5A-5506	KFRd - Construct temp Bus Stop at Kai Fuk Rd (EB)	20	10-Aug-22	01-Sep-22	25-Aug-22	17-Sep-22	13	4.00				-				
At-grade Road	d Kai Fuk Road Eastbound S019/S020	156	09-Jun-22 A	07-Dec-22	29-Jun-22	22-0d-22	-39	4.00								
5A-5559	KFR(EB) - removal of traffic gantry Ksn23c (nightwork)	4	09-Jun-22 A	10-Jun-22 A	29-Jun-22	29-Jun-22										
5A-5556	S019/S020 - Sign Gantry G31 Footing (EB)	28	05-Nov-22	07-Dec-22	19-Sep-22	22-Oct-22	-39	4.00							_	
At-grade Road	d Kai Cheung Road U-turn	113	25-Jul-22	06-Dec-22	16-Aug-22	04-Feb-23	43	20.00								
5A-5565	KCRd - Reinstate Kai Cheung Road U-tum (Bridge S2)		25-Jul-22	13-Aug-22	16-Aug-22	05-Sep-22	19	4.00								
5A-4093	S2 - Span 2EL/2ER-8A/2F Erect Steel Portal (over Kai Cheung Road U-turn)						19	6.00								
	(8)		15-Aug-22	03-Sep-22	05-Sep-22	27-Sep-22					-					
5A-4091	S1/59 - Span 1F-1G(R) Erect Steel Portal (over Kai Cheung Road U-turn) (3)		05-Sep-22	26-Sep-22	28-Sep-22	20-Oct-22	19	6.00								
5A-5564	KCRd - Reinstate Kai Cheung Road U-turn (Bridge S1/S9)		16-Nov-22	06-Dec-22	09-Jan-23	04-Feb-23	43	4.00								
Kai Fuk Road	(EB) - Maintain 3 traffic lanes until CKR commissioning (PMI 253	208	31-May-22 A	07-Feb-23	11-Jul-22	30-Dec-22	-26	0.00								
5A-5846	KFR(EB) - 3 lanes - Tree felling works; TTA required (ind TTA application)	0	31-May-22 A	02-Jun-22 A	17-Nov-22	17-Nov-22										
5A-5842	KFR(EB) - 3 lanes - UU diversion for CLP/Towngas/HKT/HGC/HKBN; set-back	72	10-Aug-22	04-Nov-22	11-Jul-22	05-Od-22	-26								-	
5A-5848	KFR(EB) - 3 lanes - existing planter removal works	36	10-Aug-22	21-Sep-22	17-Nov-22	30-Dec-22	82									
5A-5840	KFR(EB) - 3 lanes - UU diversion for watermain and drainage; set-back	72	05-Nov-22	07-Feb-23	06-Oct-22	30-Dec-22	-26								_	_
													Date	Rev		Checker
Current Mile				- K-17	Tale For		- 20 -	ر م الع ما ا) (Dev22 (CCD)	Project ID: Baseline:	KTE-WP32_M39		25-Feb-22	Submit CSD Programm Submit CSD Programm	Rev 28 with M34 M	Ao TYY
Critical Rema	aning Work Central Ko	owloc) (Rev32 - CSD)		E - 3 Months Rollin	Programme	25-Apr-22	M36 Monthly Updates		TYY
Remaining V	Nok		Th	ree Mon	th Rolli	ng Prog	grami	ne				tolling_1, KTE - Submission.		Submit CSD Programm Submit CSD Programm		
																kn TYY

	Activity Name	Orig Dur Sta	Finish	Lale Start	Late Finish	Total Float	TRA (Day)	39	31 07	40	41 04 11 18	25 02	42	23
CH_6B Re-co	nstruction of Existing Box Culvert	30 25-Jul	22 27-Aug-22	13-Sep-22	19-Oct-22	42	0.00		. Jr			10 Už		
kox Culvert re	-construction Works	30 25-Jul	22 27-Aug-22	13-Sep-22	19-Oct-22	42	0.00							
BC- Reinstate	ment Works	30 25-Jul	22 27-Aug-22	13-Sep-22	19-Oct-22	42	0.00							
68-5782	BC - Reinstate hard paving and related UU	12 25-Jul	22 05-Aug-22	13-Sep-22	26-Sep-22	42			-					
6B-5784	BC - Reinstate planter wall in DSD compound	12 08-Aug	22 20-Aug-22	27-Sep-22	12-Oct-22	42								
68-5786	BC - Transplant 5 nos of tree in DSD compound	3 08-Aug	22 10-Aug-22	10-Oct-22	12-Oct-22	51								
68-5788	BC - Reinstate fending in DSD compound	6 22-Aug	22 27-Aug-22	13-Oct-22	19-Oct-22	42				_				
68-5790	BC - Complete reconstruction of Box Culvert	0	27-Aug-22		19-Oct-22	42				•				
ction 4 - E	stablishment Works for Landscape Softworks under	450 01-May	21 A 25-Jul-22	16-Sep-25	16-Sep-25	1150	0.00							
h_8 Establis	hment Works	450 01-May	1 A 25-Jul-22	16-Sep-25	16-Sep-25	1150	0.00							
6128	S4 - Establishment Works for Landscape Softworks under Section 3	365 01-May	25-Jul-22	16-Sep-25	16-Sep-25	1150	0.00							
5130	S4 - Completion of the Works in Section 4	0	25-Jul-22		16-Sep-25	1150		•						
tion 8 - V	entilation and E&M adit and Ring Road Underpass	540 25-Mar	1 A 30-Jan-23	22-Mar-22	22-Deo-23	269	112.00							
	ition and E&M Adit Works	500 25-Mar	1 A 03-Dec-22	16-May-22	22-Dec-23	309	32.00							
	, 1D3, 1B1 & 1B2	473 25-Mar	1 A 24-Sep-22	16-May-22	13-Apr-23	157	12.00							
A - RC Struc		50 15-Nov	1 A 25-Jul-22	17-Jun-22	17-Jun-22	-30	0.00							
VA Sections	Bay B5 (14.5m)	50 15-Nov	25-Jul-22	17-Jun-22	17-Jun-22									
6A-6571	VA-85 - Baddilling to strik L3/L4/L5	50 15-Nov	21 A 25-Jul-22	17-Jun-22	17-Jun-22	-30								
A - Miscellar		473 25-Mar		16-May-22	13-Apr-23	157	12.00							
	Miscellaneous works	423 25.464	1 A 01-Sep-22	16-May-22	13-Apr-23	176	6.00							
5A-6604	VA - Movement Joint / Waterproofing, Stage 1	32 25-Mar	1 A 25-3ul-22 A	16-May-22	16-May-22		2.00							
A-6605	VA - Boddilling up to GL with additional concrete bik end wall, Stage 1	16 28-Dec			17-Jun-22	-58	4.00							
5A-6607						176	4.00							
	VA - Haul Road preparation & diversion, stage 1 (end May 2021)	6 26-Aug	22 01-Sep-22	03-Apr-23	13-Apr-23	170	6.00							
A - Stage 3		50 24 Jan	24-369-22	10-3011-22	10.50122	-36	3.00							
A-6608	VA - Movement Joint / Waterproofing, Stage 3	50 24-Jan- 56 25-Jul-	2 A 25-Jul-22 A		18-Jun-22 18-Jul-22	-58	2.00							
6A-6612	VA - Baddilling up to GL, Stage 3			18-Jun-22			9.00							
	Completion of Structure of vent. and E&M Adit within Parts 1B1, 1B2, 1D1, 1D3	0	24-Sep-22	15 4	18-Jul-22	-58	20.00					T		
ea Part 1C		111 05-May		15-Apr-23	22-Dec-23	309	20.00							
/A - Piling Wo		93 05-May			15-Apr-23		5.00							
6A-6614	Access to Part 1C	0 05-May		15-Apr-23										
6A-6616	VA - Mobilisation Works, Part 1C		2 A 10-May-22 /		15-Apr-23									
6A-6622	VA - Socket H-piles for PCI-VA (5 nrs)		22 A 24-Jun-22 A		15-Apr-23		5.00							
6A-6624	VA - PC1 Proof drilling & Piles testing	24 08-Jul-			15-Apr-23		0.00							
	cs (Parts 1C)	111 25-Jul		12-Aug-23	22-Dec-23	309	15.00							
A-6626	VA - Mobilisation, 1C	6 25-Jul		12-Aug-23		309	0.00							
5A-6628	VA - Install Cofferdam, 1C	22 01-Aug	22 25-Aug-22	19-Aug-23	13-Sep-23	309	3.00							
	VA - Excavation Down to 1st waling & Strut; Install waling & Strut, 1C	12 26-Aug	22 08-Sep-22	14-Sep-23	27-Sep-23	309	2.00			-				
A-6632														

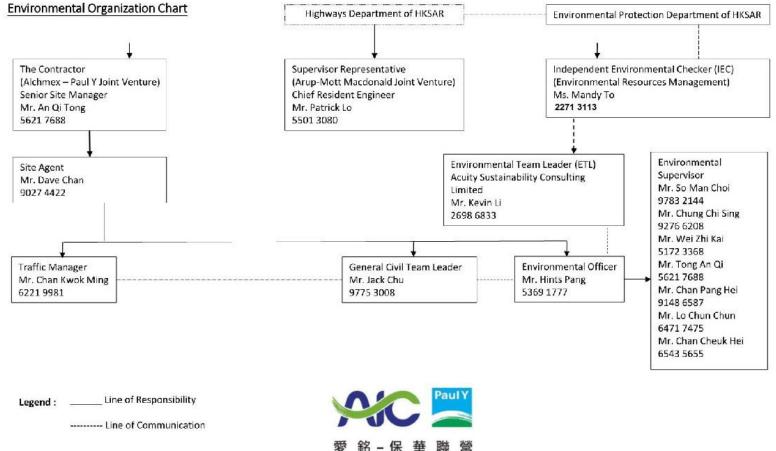
Activity Name	Orig Dur	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day	August September 40 41	October Novem 42 43
+6634 VA - Excavation Down to 3rd waling & Strut; Install waling & S	t, 1C 16	26-Sep-22	15-Oct-22	16-Oct-23	03-Nov-23	309	2.00	24 31 07 14 21 28 04 11 18	25 02 09 16 23 30 06 13
r6635 VA - Excavation Down to 4th waling & Strut; Install waling &	t, 1C 16	17-Oct-22	03-Nov-22	04-Nov-23	22-Nov-23	309	2.00		
6636 VA - Excavation Down to 5th waling & Strut; Install waling &	t, 1C 13	04-Nov-22	18-Nov-22	23-Nov-23	07-Dec-23	309	2.00		
6637 VA - Excavation Down to 6th waling & Strut; Install waling &	t, 1C 13	19-Nov-22	03-Dec-22	08-Dec-23	22-Dec-23	309	2.00		
4.1 Ring Road Underpass	213	23-Apr-22 A	30-Jan-23	22-Mar-22	18-Dec-23	265	80.00		
- Part 1D1, 1D2, 1D3, 1D4, 1B1 & 1B2	179	23-Apr-22 A	10-Dec-22	22-Mar-22	07-Nov-23	264	45.00		
- Box Sections, Pump Sump & FS Plant Room		23-Apr-22 A		22-Mar-22	25-May-23	141	25.00		
R - Interface with DCS Contractor (1002EM19A)	166	11-May-22 A	25-Nov-22	22-Mar-22	17-Aug-22		0.00		
-6700-1 RR-DCS pipe laying (stage 1) by DCS contractor- 11 May to 3	un 43	11-May-22 A	25-Jul-22	22-Mar-22	22-Mar-22	-98			
-6700-2 RR- DCS pipe laying (stage 2) by DCS contractor- 1 Jul to 31 /		25-Jul-22	23-Sep-22	23-Mar-22	28-May-22	-98			
-6700-3 RR-DCS pipe laying (stage 3) by DCS contractor- 1 Sept to 31		24-Sep-22	25-Nov-22	17-Jun-22	17-Aug-22	-83			
R - Bay B3 (S011 CH0+134 to 0+146)	21	05.5m-22	29.5et-22	02-May-23	25.May 23	188	2.00		
6748 RR-R3 - Construct Top Slab		05-Sep-22	29-Sep-22	02-May-23	25-May-23	188	2.00		<u>_</u> -
			29-3dp-22	J2may-23	254489-23		2.00		-
R - Bay B4 (S011 CH0+146 to 0+161) 6754 RR-R4 - Construct Top Slab		02-Sep-22	29-5ep-22	14400-23	11-0ay-23	176	2.00		
	23	02-Sep-22	29-Sep-22	14-Apr-23	11-May-23	176	2.00		-
R - Bay B5 (S011 CH0+161 to 0+180)	23	25-Jul-22	19-Aug-22	21-Jun-22	18-Jul-22	-28	2.00		
-6766 RR-R5 - Construct Top Slab	23	25-Jul-22	19-Aug-22	21-Jun-22	18-Jul-22	-28	2.00		
-6768 RR-R6 - Construct Base slab	14	04-May-22 A	27-Jul-22	19-May-22	21-May-22	-55	3.00	-	
-6770 RR-R6 - Construct External Wall	24	28-Jul-22	24-Aug-22	23-May-22	20-Jun-22	-55	2.00		
-6772 RR-R6 - Construct Top Slab	23	25-Aug-22	21-Sep-22	21-Jun-22	18-Jul-22	-55	2.00		
R - Bay B7 (S011 CH0+193.3 to 0+211.6) (at-grade) (RU1)	140	23-Apr-22 A	09-Nov-22	21-May-22	18-Jul-22	-95	0.00		
-6777 RR-RU1 - Construct. Plantroom Top Slabs up to -0.675 (PS pl	room 2) 40	23-Apr-22 A	30-Sep-22	21-May-22	06-Jun-22	-98			-
-6779 RR-RU1 - Construct remaining wall	32	03-Oct-22	09-Nov-22	10-Jun-22	18-Jul-22	-95			
R - Bay B8 (S011 CH0+211.6 to 0+225) (at-grade) (RU2)	121	03-May-22 A	12-Nov-22	24-May-22	18-Jul-22	-98	4.00		
-6782 RR-RU2 - Construct Base slab	15	03-May-22 A	17-May-22 A	24-May-22	24-May-22		2.00		
-6783 RR-RU2 - Construct Side Walls 1st pour	23	19-Sep-22	17-0d-22	24-May-22	20-Jun-22	-98			
-6786 RR-RU2 - Construct Side Walls 2nd pour	23	18-Oct-22	12-Nov-22	21-Jun-22	18-Jul-22	-98	2.00		
R - Bay B9 (S011 CH0+225 to 0+239) (at-grade) (RU3)	74	04.May-22.A	20-Aug-22	14-Jun-22	18-Jul-22	-29	2.00		
6785 RR-RU3 - Construct Side Walls 1st pour	9	04-May-22 A	28-Jul-22	14-Jun-22	17-Jun-22	-34			
-6790 RR-RU3 - Construct Side Walls 2nd pour	20	29-Jul-22	20-Aug-22	24-Jun-22	18-Jul-22	-29	2.00		
R - Bay B10 (S011 CH0+239 to 0+252.295) (at-grade) (RU4)	64	24-May-22 A	25-Oct-22	18-Jun-22	18-Jul-22	-82	4.00		
6788 RR-RU4 - Construct Base slab	13	24-May-22 A	07-Jun-22 A	18-Jun-22	18-Jun-22		2.00		
-6792 RR-RU4 - Construct Side Walls		24-Sep-22	25-Oct-22	18-Jun-22	18-Jul-22	-82	2.00		
R - Bay B11 (S011 CH0+252.295 to 0+265.675) (VA Section)	128		26-0:4-22	17-10-22	18-14-22	-83	2.00		
6794A RR-VA -bay 11- Construct base slab			23-May-22 A	17-Jun-22	17-Jun-22		2.00		
							3 00		
		24-Sep-22	26-Oct-22	17-Jun-22	18-Jul-22	-83	2.00		
- Miscellaneous Works	60	30-Sep-22	10-Dec-22	18-Jul-22	07-Nov-23	264	20.00		
Current Miestone									Date Revision
	tral Kowloo	on Rout	e - Kai '	Tak Eas	t (Monti	h 39 I	Indat	Project ID: KTE-WP32_M39 Baseline:	25-Feb-22 Submit CSD Programme Rav 28 with M34 Mo 25-Mar-22 Submit CSD Programme Rev 29with M35 Mon.
Ortical Remaining Work					ng Proc			Layout: KTE - 3 Months Rolling Programme	25Apr-22 M36 Monthly Updates 25May-22 Submit CSD Programme Rev 30with M37 Mon.
Remaining Work						,		Filter: TASK filters: 3 Months Rolling_1, KTE - Submission.	25-Jun-22 Submit USD Programme Rev 31with M38 Mon. 25-Jun-22 Submit CSD Programme Rev 31with M38 Mon. 27-Aug-22 Submit CSD Programme Rev 32with M39 Mon.
								Page 13 of 16	ar y signal outrie cour mogramme nev 3246h M39 Mon.

	Activity Name	Orig Du	Stat	Finish	Late Start	Late Finish	Total Float	TRA (Day			August 40			41			42			43
RR - Stage 2 M	Hiscellaneous Works	44	03-Oct-22	23-Nov-22	14-Sep-23	07-Nov-23	279	8.00	7 24	31 07	14	21 28	04	11 18	25	02 0	19 16	23 3	0 06	12
4-6882	RR - Movement joint / Waterproofing, Stage 2	33	03-Oct-22	09-Nov-22	14-Sep-23	24-Oct-23	279	4.00								_			_	
4-6884	RR - Baddiling up to GL. Stage 2		18-Oct-22	23-Nov-22	28-Sep-23	07-Nov-23	279	4.00												1
	Hiscellaneous Works		20.000.22	23110122	20-549-25	07110723	176	+.00												
			30-549-22	12-1404-22	12-0409-23	24-JUN-23	176	8.00												
4-6801	RR - Movement joint / Waterproofing, Stage 4		30-Sep-22	29-Oct-22	12-May-23	09-Jun-23	176	4.00												
4-6802	RR - Baddfilling up to GL. Stage 4	24	17-Oct-22	12-Nov-22	27-May-23	24-Jun-23	176	4.00												-
4-6806	Completion of Structure of Ring Road within Parts 1B1, 1B2, 1D1, 1D3 & 1D4	0		12-Nov-22		18-Jul-22	-98	0.00												•
4-6886	RR - Movement joint / Waterproofing, Stage 5	24	14-Nov-22	10-Dec-22	23-Sep-23	24-Oct-23	252	4.00												
R - Part 1C		151	05-May-22 A	30-Jan-23	15-Apr-23	18-Dec-23	265	35.00												
RR - Piling Wor	iks	63	05-May-22 A	23-Jul-22 A	15-Apr-23	15-Apr-23		5.00												
4-6808	Access to Part 1C	0	05-May-22 A		15-Apr-23															
4-6810	RR - Mobilisation Works, Part 1C	6	06-May-22 A	10-May-22 A	15-Apr-23	15-Apr-23		0.00												
4-6814	RR - Mobilisation for Piling Works	3	06-May-22 A	10-May-22 A	15-Apr-23	15-Apr-23		0.00												
4-6816	RR - Sodvet H-piles for PC1-RR (5 nrs)		10-May-22 A			15-Apr-23		5.00												
4-6818	RR - PC1 Proof drilling & Piles testing		08-Jul-22 A	23-Jul-22 A	15-Apr-23	15-Apr-23		0.00												
							244	13.00	_											
RR - ELS Work			25-Jul-22	23-Sep-22	15-Apr-23	16-Jun-23	211													
4-6820	RR - Mobilisation, 1C		25-Jul-22	30-Jul-22	15-Apr-23	21-Apr-23	211	0.00												
4-6822	RR - Install Cofferdam, 1C	12	01-Aug-22	13-Aug-22	22-Apr-23	06-May-23	211	3.00			-									
4-6826	RR - Excavation Down to 1st waling & Strut; Install waling & Strut, 1C	11	15-Aug-22	26-Aug-22	08-May-23	19-May-23	211	4.00				-								
4-6828	RR - Excavation Down to 2nd walling & Strut; Install walling & Strut, 1C	17	27-Aug-22	16-Sep-22	20-May-23	09-Jun-23	211	4.00				-	1 1	_						
4-6832	RR - Excavation Down to Final Formation Level, 1C	6	17-Sep-22	23-Sep-22	10-Jun-23	16-Jun-23	211	2.00						-	•					
RR - RC Structa	ire	56	24-5ep-22	30-Nov-22	17-Jun-23	31-Aug-23	218	10.00												
RR - Pile Cap I	PC1		24-Sep-22	31-Oct-22	17-Jun-23	24-Jul-23														
4-6834	RR - Prepare Pile Head for PC1	14	24-Sep-22	12-Oct-22	17-Jun-23	05-Jul-23	211	2.00							_		1			
4-6836	RR - Construct Pile Cap PC1	16	13-Oct-22	31-Oct-22	06-Jul-23	24-Jul-23	211	2.00												
RR - Bay R1 (S	5011 CH0+118.88 to 0+130)	26	01-Nov-22	30-Nov-22	25-3ul-23	23-Aug-23	211	4.00												
4-6838	RR-R1 - Construct Base slab	17	01-Nov-22	14-Nov-22	25-Jul-23	07-Aug-23	211	2.00												_
4-6840	RR-R1 - Construct External Wall		15-Nov-22	30-Nov-22	08-Aug-23	23-Aug-23	211	2.00												T
		14	131104-22	301107-22	30-Hug-23	237Kug-23	112	2.00												-
	5011 CH0+130 to 0+130)	10	15-169-22	25-107-22	21-Hug-23	51-Yug-23		2.00												
4-6738	RR-R2 - Construct Base slab		15-Nov-22	25-Nov-22	21-Aug-23	31-Aug-23	222	2.00												1
R - Miscellane			23-Nov-22	30-Jan-23	20-Oct-23	18-Dec-23	265	7.00												
4-6844	RR - Install Profile Barriers	50	23-Nov-22	30-Jan-23	20-Oct-23	18-Dec-23	265	7.00												
ction 10 - F	ootbridge, E&M Installation and Miscellaneous Wc	102	03-Aug-22	02-Dec-22	22-Jun-22	22-Oct-22	-35	11.00												
ch_7 Abandon	Exisitng Subway KS-20	102	03-Aug-22	02-Dec-22	22-Jun-22	22-Oct-22	-35	11.00												
S-20 - Demol	istion / Filling Works	102	03-Aug-22	02-Dec-22	22-Jun-22	22-Oct-22	-35	11.00												
Kai Fuk Road (Central)	6	03-Aug-22	09-Aug-22	22-Jun-22	28-Jun-22	-35	0.00												
7-7337	KS20 - Reinstate road pavement before implement KFR TTA Stage 3	6	03-Aug-22	09-Aug-22	22-Jun-22	28-Jun-22	-35			-										

D	Activity Name	Orig Du	Stat	Finish	Lale Start	Late Finish	Total Float	TRA (Day)	July 39			August 40		1	September 41			Octob 42	er			Novemb 43	er	-
Kai Fuk Road	(EB)	96	10-Aug-22	02-Dec-22	29-Jun-22	22-0ct-22	-35	11.00	26 03 10 17	24	31 07	14	1 28	04	11	18 25	02	09	16	23 3	0 06	13	20	2
7-7324	KS20 - Bridswork wall for Subway	14	10-Aug-22	25-Aug-22	29-Jun-22	15-Jul-22	-35						•											
7-7326	KS20 - Foamed concrete infil / Non-shrink grout	6	26-Aug-22	01-Sep-22	16-Jul-22	22-Jul-22	-35						-											
7-7314	KS20 - Install sheetpile along Kai Fuk Road Ramp (EB)	11	02-Sep-22	15-Sep-22	23-Jul-22	04-Aug-22	-35	2.00							_									
7-7316	KS20 - Demolish extg ramp upper part down to +2.50		16-Sep-22	12-Oct-22	05-Aug-22	29-Aug-22	-35	3.00							_			_						
7-7318	KS20 - General fill to formation level (Ramp) / Utilities diversion / Laying inside		13-Oct-22	31-Oct-22	30-Aug-22	17-Sep-22	-35	2.00												_				
7-7320	subway S019 - Reconstruct Bus Stop Bay (Permanent) (Kai Fuk Road EB)		01-Nov-22	02-Dec-22	19-Sep-22	22-Oct-22	-35	4.00																_
		20	22-40#10	02-08-22	19-349-22	22-00-22	-55	4.00																T
	Structure of Bridge CKRE			12-086-22		154909-22	-23																	
	ge CKRE Works		21-Mar-22 A		21-Jul-22	15-Nov-22	-23	24.00																
CKRE - Piling \			25-Apr-22 A	20-Aug-22	21-Jul-22	19-Sep-22	24	0.00																
	- Pier P-K5-CKRE	24	25-Jul-22	20-Aug-22	05-Aug-22	19-Sep-22	24	0.00																
3.10-7510	CKRE - KS-CKRE-1 Proof drilling & Piles testing	24	25-Jul-22	20-Aug-22	05-Aug-22	01-Sep-22	10	0.00																
3.10-7518	OKRE - KS-OKRE-2 Proof drilling & Piles testing	24	25-Jul-22	20-Aug-22	22-Aug-22	19-Sep-22	24	0.00		-	_	-												
Piling Works -	- ABUT A-K4-CKRE	17	25-Apr-22 A	16-May-22 A	21-Jul-22	21-Jul-22		0.00																
3.10-7526	CKRE - ABUT A-K4-CKRE Proof drilling & Piles testing	17	25-Apr-22 A	16-May-22 A	21-Jul-22	21-Jul-22		0.00																
CKRE - Pile Ca	ps, Pier / Abutment	137	21-Mar-22 A	26-Sep-22	21-Jul-22	22-Sep-22	-3	16.00																
Abutment A-K	K1-CKRE	24	21-Mar-22 A	22-Aug-22	20-Aug-22	19-Sep-22	23	4.00																
3.10-7536	OKRE - Construct Abutment A-K1-OKRE	20	21-Mar-22 A	11-Aug-22	20-Aug-22	07-Sep-22	23	4.00			_													
3.10-7538	OKRE - A-K1-CKRE Install Permeate Membrane and Baddill	9	12-Aug-22	22-Aug-22	08-Sep-22	19-Sep-22	23	0.00																
Pier K5-CKRE	-1		25-Apr-22 A	06-Sep-22	02-Sep-22	19-Sep-22	10	4.00																
3.10-7540	OKRE - Prepare Pile Head for KS-OKRE-1		25-Apr-22 A			02-Sep-22		1.00																
3.10-7542	ORE - Construct Pier KS-ORE-1 (2 Lifts)		24-May-22 A		08-Sep-22	19-Sep-22	10	2.00																
			- ,											T										
3.10-7544	OKRE - KS-OKRE-1 Reinstatement of Slab of Kai Tak River; remaining works		22-Aug-22	26-Aug-22	02-Sep-22	07-Sep-22	10	1.00				-	-											
Pier K5-CKRE		79	24-Apr-22 A	06-Sep-22	02-Sep-22	19-Sep-22	10	4.00																
3.10-7554	OKRE - Construct Pier K5-OKRE-2 (2 Lifts)	18	24-Apr-22 A		08-Sep-22	19-Sep-22	10	2.00						1										
3.10-7552	OKRE - Prepare Pile Head for KS-OKRE-2	24	25-Apr-22 A	23-May-22 A	02-Sep-22	02-Sep-22		1.00																
3.10-7556	OKRE - KS-OKRE-2 Reinstatement of Slab of Kai Tak River; remaining works	5	22-Aug-22	26-Aug-22	02-Sep-22	07-Sep-22	10	1.00				•	-											
Abutment A-K	K4-CKRE	137	21-Mar-22 A	26-Sep-22	21-Jul-22	22-Sep-22	-3	4.00																
3.10-7570	CKRE - Construct Abutment Base A-K4-CKRE	17	21-Mar-22 A	19-Aug-22	21-Jul-22	16-Aug-22	-3	1.00		+	_	-												
3.10-7572	CKRE - Construct Abutment A-K4-CKRE	22	20-Aug-22	15-Sep-22	17-Aug-22	10-Sep-22	-3	3.00				-	_	-	-									
3.10-7574	OKRE - A+K4-OKRE Install Permeate Membrane and Baddfill	9	16-Sep-22	26-Sep-22	13-Sep-22	22-Sep-22	-3	0.00							-	-								
CKRE - Deck		47	19-Oct-22	12-Dec-22	20-Sep-22	15-Nov-22	-23	8.00																
CKRE- Span K	1-CKRE - K5-CKRE	44	19-Oct-22	08-Dec-22	20-Sep-22	15-Nov-22	-20	4.00																
3.10-7578	OKRE - Span K1-KS Falsework and formwork	18	19-0d-22	08-Nov-22	20-Sep-22	12-Oct-22	-23	4.00												_	_			
3.10-7580	OKRE - Span K1-KS Install Boarings		09-Nov-22	15-Nov-22	17-Oct-22	22-Oct-22	-20	0.00																
3.10-7582	ORE - Span K1+KS Web and Soffit		16-Nov-22	08-Dec-22	24-Oct-22	15-Nov-22	-20	0.00																_
	CS-CKRE - K4-CKRE		22-Oct-22	12-Dec-22	23-Sep-22	15-Nov-22	-23	4.00																
3.10-7598	ORE - Span K5-K4 Falsework and formworks		22-0d-22				-23	4.00														_		
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Appendix C Project Organization Chart



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Appendix D Dust Event-Action Plan (EAP) (Air Quality Monitoring)

EVENT	ACTION			
	ЕТ	IEC	ER	CONTRACTOR
ACTION LE	VEL			
Exceedance for one sample	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC and ER; Repeat measurement to confirm finding; Increase monitoring frequency to daily. 	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	 1.Rectify any unacceptable practice; 2.Amend working methods if appropriate.
Exceedance for two or more consecutive samples	 Identify source; Inform IEC and ER; Advise the ER on the effectiveness of the proposed remedial measures; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC and Contractor on remedial actions required; If exceedance continues, arrange meeting with IEC and ER; If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET 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. 	 Submit proposals for remedial to ER within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
LIMIT LEVE	EL			
Exceedance for one sample	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor and EPD; 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and 	 Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	 3.Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5.Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	Contractor on possible remedial measures; 4.Advise the ER on the effectiveness of the proposed remedial measures; 5.Supervise implementation of remedial measures.	properly implemented.	of notification; Implement the agreed proposals; 4.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. 	 Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 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. 	 to avoid further exceedance; 2.Submit proposals for remedial actions to IEC within 3 working days of notification; 3.Implement the agreed proposals; 4.Resubmit proposals if problem still not under control;

Note:

ET – Environmental Team

ER – Engineer's Representative

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

EVENT		ACTION		
	ЕТ	IEC	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. 	notification of failure in writing; 2. Notify Contractor; 3.Require Contractor to	 Submit noise mitigation proposals to IEC; Implement noise mitigation proposals.

Note:

ET – Environmental Team

IEC -- Independent Environmental Checker

ER – Engineer's Representative

Appendix F Environmental Mitigation Implementation Schedule (EMIS)

Environm	ental M	itigation Implementation Schedule – Contra	act No.: $HY/20$	18/02 (Kai Tak I	last)			
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
			Constru	ction Dust Impact				
S4.3.10	D1	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation and Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation.	Minimize dust impact and adverse health effects at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	 APCO To control the dust impact To meet HKAQO and TM-EIA criteria 	Implemented after reminder
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/m ² to achieve the dust removal efficiency.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	 APCO To control the dust impact To meet HKAQO and TM-EIA criteria 	Implemented after reminder
xS4.3.10	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; 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	 APCO To control the dust impact To meet HKAQO and TM-EIA criteria 	Implemented

Environmental Mitigation Implementation Schedule – Contract No.: HY/2018/02 (Kai Tak East)

	1							
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 load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle. Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing facilities 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; 						

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
		 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 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
			Construc	tion Noise (Airborn	ne)			
S5.4.1	Nl	 Implement the following good site practices: Only well-maintained plant should be operated onsite, 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; 	Control construction airborne noise	Contractor	All construction sites	Construction stage	• Annex 5, TM- EIAO	Implemented

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
		 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. 						
\$5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening	Contractor	All construction sites	Construction stage	• Annex 5, TM- EIAO	Implemented
\$5.4.1	N3	Install movable noise barriers (typical design is wooden framed barrier with a small-cantilevered on a skid footing with 25mm thick internal sound absorptive lining), acoustic mat or full enclosure, screen the noisy plants including air compressors, generators and handheld breakers, etc.	Sreen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM- EIAO	Implemented
\$5.4.1	N4	Use 'Quiet plant'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM- EIAO	Implemented
\$5.4.1	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	Implemented
S5.4.1	N6	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM- EIAO	Implemented

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
			reduce the construction airborne noise					
\$5.4.1	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 Quali	ity (Construction Pl	nase)			
\$6.9.1.1		 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: <u>Construction Runoff</u> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or 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 	To minimize water quality impact from the construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	 Water Pollution Control Ordinance ProPECC PN 1/94 TM-EIAO TM-DSS 	Implemented after reminder

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
		 trap. The sediment/ silt traps should be incorporated in the permanent drainage channels to enhance deposition rates; The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/ sand traps should be 5 minutes under maximum flow conditions. Sizes may vary depending upon the flow rate, but for a flow rate of 0.1 m3/s a sedimentation basin of 30 m3 would be required and for a flow rate of 0.5 m3/s the basin would be 150 m3. The detailed design of the sand/ silt traps shall be undertaken by the contractor prior to the commencement of construction; All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. Exposed slope surfaces should be 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; 						

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 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 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes; All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and site wheel washing facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of 						

				-				
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 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. 						
\$6.9.1.2	W2	 <u>Tunneling Works and Underground Works</u> Cut-&-cover tunneling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable. Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge; 	To minimize construction water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	 Water Pollution Control Ordinance ProPECC PN 1/94 TM-DSS 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
		 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) is not allowed. It should be reconditioned and reused wherever practicable. Temporary storage locations (typically a properly closed warehouse) should be provided on site for any unused bentonite that needs to be transported away after all the related construction activities area completed. The requirements in ProPECC PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 						
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 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
\$6.9.1.5	W4	 Groundwater from Potential Contaminated Area: No direct discharge of groundwater from contaminated areas should be adopted. 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 	To minimize groundwater quality impact from contaminated area	Contractor	Excavation areas where contamination is found	Construction stage	 Water Pollution Control Ordinance TM-DSS TM-EIAO 	Implemented

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
		 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 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 yell. Prior to recharge, 						

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
		any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor.						
S6.9.1.6		 <u>Accidental Spillage</u> 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 1/94 TM-EIAO TM-DSS 	Implemented
			Waste Manage	ement (Construction V	Waste)			
S7.4.1	WM1	 On-site sorting of C&D material Geological assessment should be carried out by competent persons on site during excavation to identify materials which are not suitable to use as aggregate in structural concrete (e.g. volcanic rock, Aplite dyke rock, etc.). Volcanic rock and Aplite dyke rock should be separated at the source sites as far as practicable and stored at designated stockpile area preventing them from delivering to crushing facilities. The crushing plant operator should also be reminded to set up measures to prevent unsuitable rock from ending up at concrete batching plants and 	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

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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
\$7.5.1	WM2	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. Construction and Demolition Material	Good site	Contractor	All	Construction stage	• Land	Implemented
		 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 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. 	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		construction sites		 (Miscellaneous Provisions) Ordinance Waste Disposal Ordinance ETWB TCW No. 19/2005 	

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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
\$7.5.1	WM3	 <u>C&D Waste</u> Standard formwork or pre-fabrication should be used as far as practicable in order to minimize the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage; 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 	Implemented
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 	Implemented

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
\$7.5.1	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; 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; 	To control pollution due to marine sediment	Contractor	Along CKR alignment	Construction stage	• ETWB TCW No. 34/2002	Implemented

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
		 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; 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 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 	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 after observation

EIA Ref.	EM& A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 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; 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. 	address					
S7.5.1	WM7	 General Refuse 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. Aluminum cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible; 	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	Waste Disposal Ordinance	Implemented

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
		• 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.						
			La	and Contamination				
S8.9 & Appendix 8.4		 Excavation of the Contaminated Soil Prior to commencement of the excavation works at the contamination zone, the zone should be clearly marked out on site and the surface levels recorded. Excavation of contaminated material should be undertaken using dedicated earth-moving plant. The excavated contaminated soils would be stockpiled at designated area on site and covered by sheet to prevent dispersion of contamination during stockpiling. The Contractor should pay attention to the selection of suitable groundwater lowering schemes and discharge points if the groundwater table is higher than the contaminated soils during excavation. The Contractor should also obtain a valid Water Pollution Control Ordinance (WPCO) discharge licence from EPD where applicable. 	The contaminated soil will be excavated for on-site reuse	Contractor	PBH4	Prior to commencement of construction works within the contaminated area	 Practice Guide (PG) for Investigation and Remediation of Contaminated Land Guidance Notes for Contaminated Land Assessment and Remediation Guidance Manual for Use of Risk-Based 	N/A
S8.9 & Appendix 8.4	LC3	Following completion of the excavation to the specified depth, at least one sample from the base of the excavation and four samples evenly distributed along the boundary of the excavation shall be taken for a closure assessment testing. The acceptance criterion is shown below: Location Testing Acceptance Criteria requirement PBH4 PCBs RBRGs (Public Park)					Remediation Goals (RBRGs) for Contaminated Land Management	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
		 If the results of analysis below the RBRGs (Public Park), no further excavation will be required. If the analysis indicates presence of contamination (i.e. noncompliance of the acceptance criteria), further excavation shall be carried out in 0.5m increment vertically and/or horizontally depending on the location(s) of the sample(s) which has exceeded the acceptance criteria. Further sampling shall also be conducted for compliance testing. The process of excavation, 						
		sampling and compliance testing should continue until all contaminated materials are removed and should be supervised by a Land Contamination Specialist.						
Appendix 8.4	LC4	A Remediation Report (RR) to demonstrate adequate clean-up shall be prepared and submitted to EPD for endorsement prior to the commencement of any construction/development works within the sites. No construction/development works shall be carried out prior to the endorsement of the RR by EPD.						N/A
			I	Hazard to Life				
S9.18		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
\$9.18		Emergency response plans in case of road accident should be prepared and implemented. The driver and his assistant should be familiar with the emergency procedures including evacuation, and proper communication/ fire-fighting equipment should be	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	N/A

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EIA Ref.	EM& A Log Ref.	Recommended Mitigation Measures provided to the driver and his assistant.	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			Lan	dscape & Visual				
S10.10.1 Table 10.11	LV3	 <u>Good Site Management</u> Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance. 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
S10.10.1 Table 10.11	LV4	 <u>Screen Hoarding</u> Decorative screen hoarding should be erected to screen the public from the construction area. It should be designed to be compatible with the existing urban context. 	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented
S10.10.1 Table 10.11	LV5	 <u>Lighting Control during Construction</u> All lighting in the construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residencies and GIC. The Contractor shall consider other security measures, which shall minimize the visual impacts. 	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented
S10.10.1 Table 10.11	LV6	 <u>Erosion Control</u> The potential for soil erosion shall be reduced by minimizing the extent of vegetation disturbance on site and by providing a protective cover over newly exposed soil. 	Minimize landscape impact	Contractor	Within Project site	Construction stage	-	Implemented

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
S10.10.1 Table 10.11	LV7	<u>Tree Protection & Preservation</u> • 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 Basis and on a Tree Basis', Greening, Landscape and Tree Management (GLTM) Section, DEVB Latest recommended horticultural practices from GLTM Section, DEVB 	Implemented
S10.10.1 Table 10.11	LV8	<u>Tree Transplantation</u> • 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

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
S10.10.1 Table 10.11	LV9	 <u>Compensatory Planting</u> For trees unavoidably affected by the Project that have to be removed, where practical transportation will be chosen as the top priority method of removal but if this is not possible or practical compensatory planting will be provided for trees unavoidably felled. All felled trees shall be compensated for by planting trees to the satisfaction of relevant Government projects. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006. 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 Government during the Tree Felling Application process. 	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 ETWB TCW 2/2004 	N/A
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

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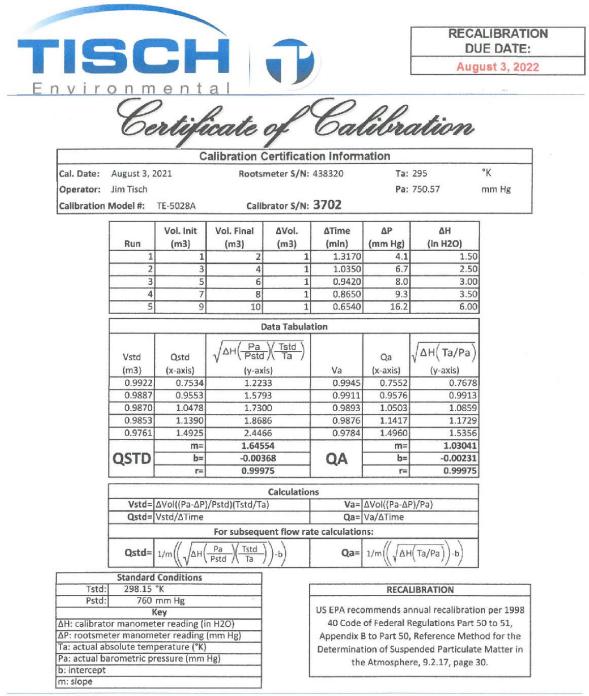
EIA Ref.	EM& A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S10.10.1 Table 10.11	LV12	 <u>Reinstatement</u> All 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
			Cultural Heritage	Impact (Constructi	on Phase)			
S11.4.4	CH1	The contractor should be alerted during the construction on the possibility of locating archaeological remains and as a precautionary measure, AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject sites.	To preserve any cultural heritage items which may be removed and damaged by the excavation	Contractor	During construction works for cut and cover tunnels	Construction stage	AMOs requirements	Implemented
				EM&A Project				
S13.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Control EM&A Performance	Highways Department	All construction sites	Construction stage	 EIAO Guidance Note No. 4/2010 TM-EIAO 	Implemented
\$13.2- 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. 	Perform environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	 EIAO Guidance Note No. 4/2010 TM-EIAO 	Implemented

Appendix G Monitoring Schedule of the Reporting Month



Appendix H Calibration Certificates (Air Monitoring)

Sibata Ll		NG LIMITED	ification ⁻	est by T	otal Suspend	ded Parti	culate	L Tel. : (85 Fox.: (85	Sha Wan, Kowloon. 2) 2698 6855 2) 2698 9383 t Report
Verification T Next Verificat	est Date: ion Test Date: est- Model No est Serial No.	:	27-Jun-21 1-Jul-22 Sibata LD-5F 761173 RPT-21-HVS	to	1-Jul-21				
Standard Eq	uipment Info	ormation							
	on Date		MFC	Tisch's TSP HVS TE-517(X 1049 17-Jun 21 17-Aug 21	Tish HVS Calibrator TE-5028 1050 24-Sep-20 24-Sep-21				\mathcal{V}
Verification Test No.	Date		Time		K-Factor	Counts/ Minute (R)	Total Counts	⁺sP S⁺.mple '⊃ No.	Dust Concentration (ug/m3), (C)
i corno.		Start-tim -	End-une	Elapsed Time (in min)	K-Factor (K-C/R)	x-axis	(1C)	5 110.	y axis
1	27/6/2021	12',4.?/	1257.37	180.00	0.00119	27.90	2652	R210872/1	33.33
2	27/6/2021	1 .58 44	1261.44	180.00	0.00050	61.70	1539	R210872/2	59.26
3	27/6/2021	1 262.31	1265.31	1°5.00	0.00097	10.00	1983	R210872/3	9.72
4	1/7/2021	1. 65.8 1	1268.84	180.00	0 00093	78.30	2313	R210887/1	73.15
5	1/7/2021 1/7/2021	12, 9.10 1272.50	1272.10 1275.50	180.00	0.00096	14.40 28.50	1407 1299	R210887/2 R210887/3	13.89 24.07
3y Linear Reg	o be inputted ression of y or slope, mh=	1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	rrected 1 dec	imal point):	0.00098		Veri	fication Cur	ve
*Corr plation (Verification * If the Correl	tercept,ch= Coemciont R= ה Test Result: ג נוטו, Coefficie	Strong Corre ent, R is <0.5.					r = 0.928x + R ² = 0.98		<u>^</u>
	n à ce required			\checkmark	10	0.00			
Verified By:	Technical Ma	lagt r	Date:	20-07-2021		6.00	26.00 Cour	46.00 66.(t/Minute (R)	00 86.00



Tisch Environmental, Inc.

145 South Miami Avenue

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village of Cleves, OH 45002

InnoTech Instrumentation Co. Ltd.

創新科儀有限公司

	HIVOL SAMPLER		BRATION Information	DATA SH	EET (TSP)
Location:	Emax	Site ID:	. Information	Date:	26-Jul-2022
Serial No:		Model:	TE-5170X	Operator:	
Serial No:	1049				Kate Wong
Corrected Pre	ssure (mm Hg):	755.3	ient Condition		300.6
		Calib	oration Orifice		
Model:		1	ГЕ-5028A	Slope:	1.64554
Serial No.:			3702	Intercept:	-0.00368
Calibration Du	ie Date:	2	25-Sep-22	Corr. Coeff:	0.99975
		Cali	ibration Data		
Plate or	In,H2O	(Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m3/min)	(chart)	(corrected)
1	1.88		0.829	31.8	31.57
2	2.27		0.911	33.3	33.06
3	2.66		0.986	34.9	34.64
4	3.04 3.33		1.054 1.104	36.2 37.2	35.93
	tation Relationship (Qa on				C C C 00000
m=	19.6982	b=	15.1873	-	Corr. Coeff= 0.9998
Samp	oler set point(SSP)	39	CFM	_	
IC = I[Sqrt(Pa/ Qstd = standar IC = corrected of I = actual char m = calibrator (b to = calibrator (C Ta = actual tem Pa = actual pre Tstd = 298 deg Pstd = 760 mm For subsequent	chart response response Qstd slope Qstd intercept Iperature during calibration ssure during calibration (mm K	b] (deg K) 1 Hg)	Calculations m = sampler s b = sampler in I = chart respo Tav = average f Pav = average f	tercept onse cemperature	
Checked by:	蔷薇菊		_	Date:	26-Jul-22

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	HIVOL SAMPLEF			DATA SH	EET (TSP)						
		Site	Information	1							
Location:	Emax	Site ID:		Date:	08-Aug-2022						
Serial No:	1049	Model:	TE-5170X	Operator:	Kate Wong						
Ambient Condition											
Corrected Pre	ssure (mm Hg):	754.8	Temperature	(deg K):	301.5						
Calibration Orifice											
Model:		1	`E-5028A	Slope:	1.03041						
Serial No.:			3702	Intercept:	-0.00231						
Calibration Du	ue Date:		3-Aug-22	Corr. Coeff:	0.99975						
		Cali	bration Data								
Plate or	In,H20		a, X-Axis	I, CFM	IC, Y-Axis						
Test #	(in)		m3/min)	(chart)	(corrected)						
1	1.51		1.184	35.5	35.18						
2	1.82		1.300	36.8	36.46						
3	2.19		1.425	38.9	38.54						
4	2.40		1.492	41.2	40.82						
5	2.76		1.600	43.8	43.40						
Sampler Calib	tation Relationship (Qa on	x-axis, IC	on v-axis)								
m=	20.0030	b=	10.8749	_	Corr. Coeff= 0.9823						
Samı	oler set point(SSP)	35	CFM	_							
IC = I[Sqrt(Pa/ Qstd = standar IC = corrected I = actual chart m = calibrator b = calibrator Ta = actual tem Pa = actual pre Tstd = 298 deg Pstd = 760 mm For subsequen	chart response response Qstd slope Qstd intercept pperature during calibration ssure during calibration (m K	·b] (deg K) n Hg)	Calculations m = sampler s b = sampler in I = chart respo Tav = average t Pav = average p	tercept onse cemperature							
Checked by:	菱图图		_	Date:	8-Aug-22						

InnoTech Instrumentation Co. Ltd.

創新科儀有限公司

	HIVOL SAMPLEF			DATA SH	EET (TSP)						
		Site	Information	1							
Location:	Emax	Site ID:		Date:	20-Aug-2022						
Serial No:	1049	Model:	TE-5170X	Operator:	Kate Wong						
Ambient Condition											
Corrected Pre	ssure (mm Hg):	755.7	Temperature	(deg K):	301.4						
		Calib	oration Orifice	•							
Model:		L 1	E-5028A	Slope:	1.03041						
Serial No.:			3702	Intercept:	0.00231						
Calibration Du	ie Date:	3	3-Aug-22	Corr. Coeff:	0.99975						
		Cali	bration Data								
Plate or	In,H20		a, X-Axis	I, CFM	IC, Y-Axis						
Test #	(in)		m3/min)	(chart)	(corrected)						
1	1.77		1.278	32.5	32.22						
2	2.44		1.501	34.6	34.31						
3	2.67		1.570	35.7	35.40						
4	3.12		1.697	36.8	36.49						
5	3.88		1.893	39.2	38.87						
Sampler Calib	tation Relationship (Qa on	x-axis, IC	on v-axis)								
m=	10.7922	b=	18.3198	-	Corr. Coeff= 0.9977						
Samp	oler set point(SSP)	32	CFM	_							
			Calculations	_							
Qstd = 1/m[Sqi	t(H2O(Pa/Pstd)(Tstd/Ta))	·b]	m = sampler s	lope							
IC = I[Sqrt(Pa/I	Pstd)(Tstd/Ta)]		b = sampler in								
			I = chart respo								
Qstd = standard			Tav = average t								
IC = corrected o I = actual chart			Pav = average p	oressure							
m = calibrator											
b = calibrator (
	perature during calibration	(deg K)									
	ssure during calibration (mi										
Tstd = 298 deg	K										
Pstd = 760 mm											
For subsequent	t calculation of sampler flow qrt(298/Tav)(Pav/760)]	:									
	芝南西										
Checked by:	文文与		_	Date:	20-Aug-22						
			_								

Appendix I The Certification of Laboratory with HOKLAS Accredited Analytical Tests



Appendix J Location Plan of Air Quality Monitoring Station



Acuity Sustainability Consulting Limited

Appendix K Monitoring Data (Air Monitoring)

Location:	Hong Kong International Trade and Exhibition Centre (E-A1)
Monitoring date:	4, 10, 16, 22 and 27 August 2022
Parameter:	TSP 1-hour
Other Factors:	Nearby traffic

	1-hour TSP (μg/m³)									
Date	Weather	Start Time	1 st hour (μg/m ³)	2 nd hour (µg/m ³)	3 rd hour (μg/m ³)					
4 August 2022	Fine	9:09	66	62	65					
10 August 2022	Cloudy	9:12	61	67	62					
16 August 2022	Cloudy	9:03	63	65	60					
22 August 2022	Fine	9:10	65	68	61					
27 August 2022	Fine	9:07	66	63	67					

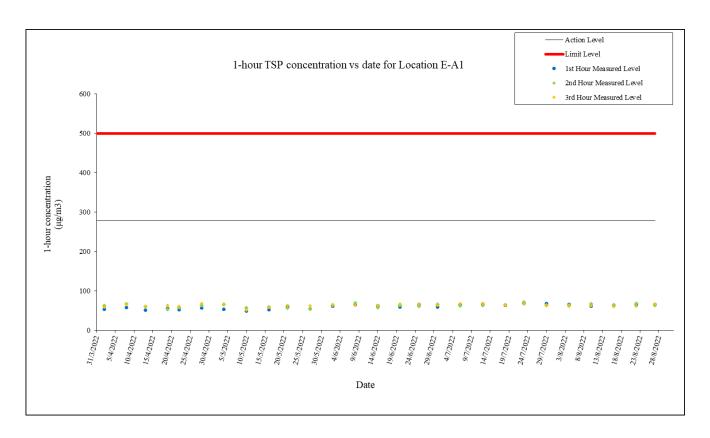


Figure 1: Graphical Illustration of Measured 1-hour TSP ($\mu g/m^3$) Levels at E-A1

Location:

Monitoring date:

Parameter:

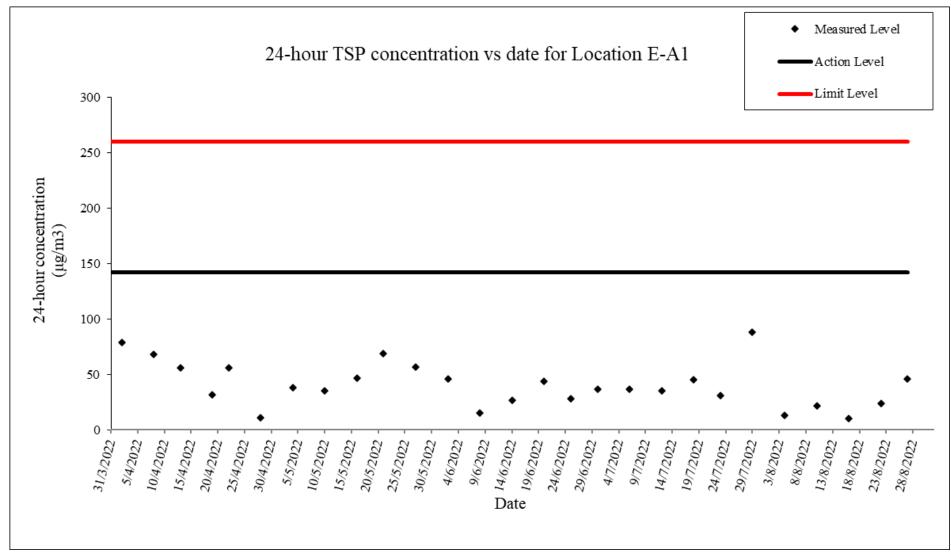
Other Factors:

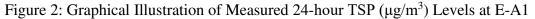
4, 10, 16, 22 and 27 August 2022 TSP 24-hour

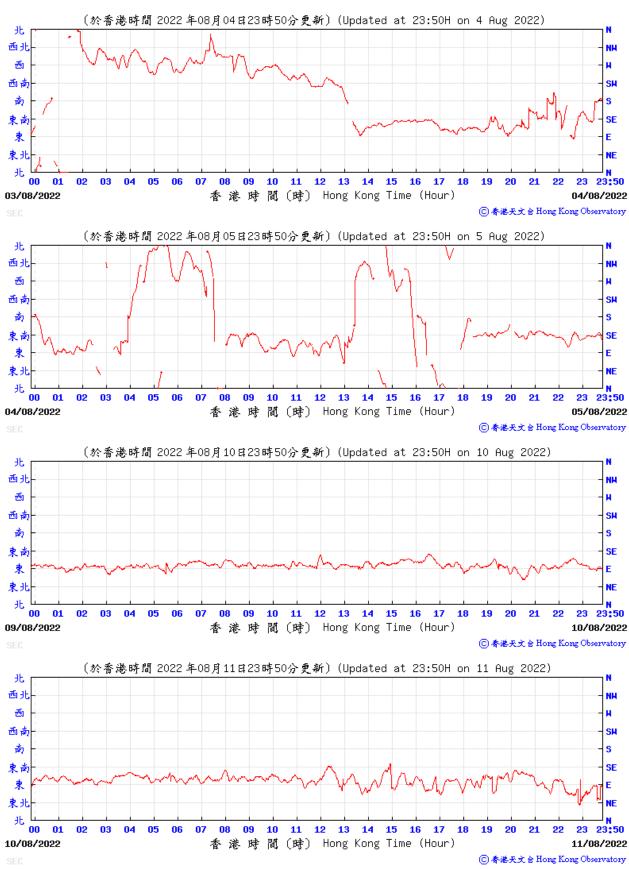
Nearby traffic

										Date of	Calibration:	26-Jul-22	2	Slope =	19.6982
										Calibrat	on due date:	9-Aug-22	2	Intercept =	15.1873
										Date of	Calibration:	8-Aug-22	2	Slope =	20.0030
										Calibrati	on due date:	22-Aug-22	2	Intercept =	10.8749
										Date of	Calibration:	20-Aug-22	2	Slope =	10.7922
										Calibrat	on due date:	3-Sep-22	2	Intercept =	18.3198
Start Date	Weather		Elapse Time		Chart Reading		Chart Reading		Avg Atmospheric Pressure	Flow Rate	Standard Air Volume	Filter W	eight (g)	Particulate weight	Conc.
	Condition	Initial	Final	Actual (min)	Min	Max	Avg	(°C)	(mm hPa)	(m ³ /min)	(m ³)	Initial	Final	(g)	(μg/m ³)
04/08/2022	Cloudy	4150.68	4174.68	1440.00	37	39	38.0	27.1	1004.5	1.13	1632	2.7480	2.7691	0.0211	13
10/08/2022	Cloudy	4174.68	4198.68	1440.00	39	40	39.5	27.4	1004.1	1.40	2022	2.7640	2.8094	0.0454	22
16/08/2022	Cloudy	4198.68	4222.68	1440.00	38	42	40.0	29.4	1005.6	1.42	2052	2.7512	2.7721	0.0209	10
22/08/2022	Sunny	4222.68	4246.68	1440.00	38	40	39.0	30.1	1006.9	1.86	2679	2.7677	2.8311	0.0634	24
27/08/2022	Sunny	4246.68	4270.68	1440.00	38	39	38.5	29.7	1009.2	1.83	2628	2.7715	2.8935	0.1220	46
														Min	10
														Max	46

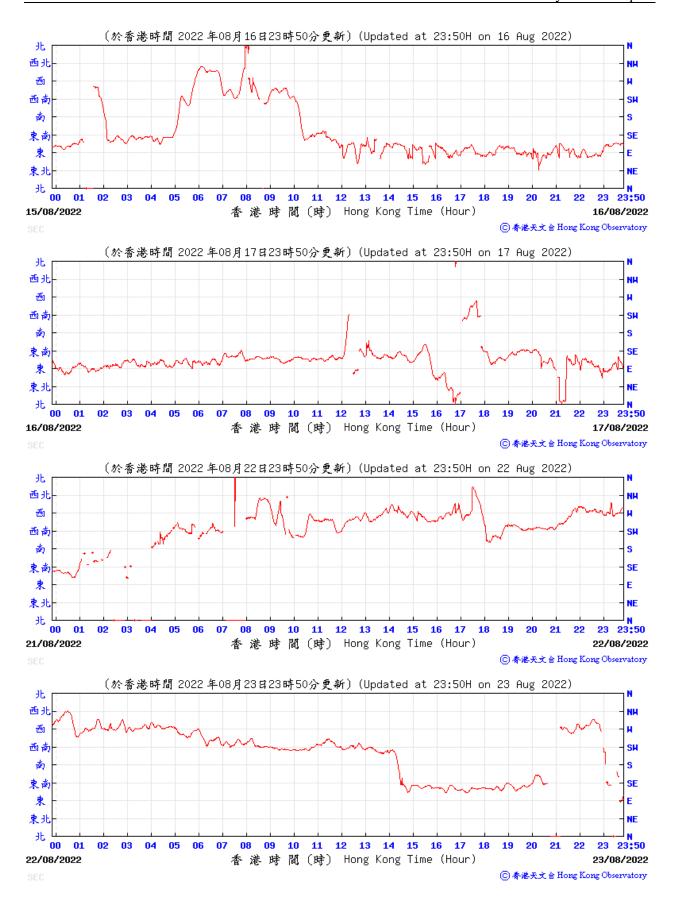
Hong Kong International Trade and Exhibition Centre (E-A1)

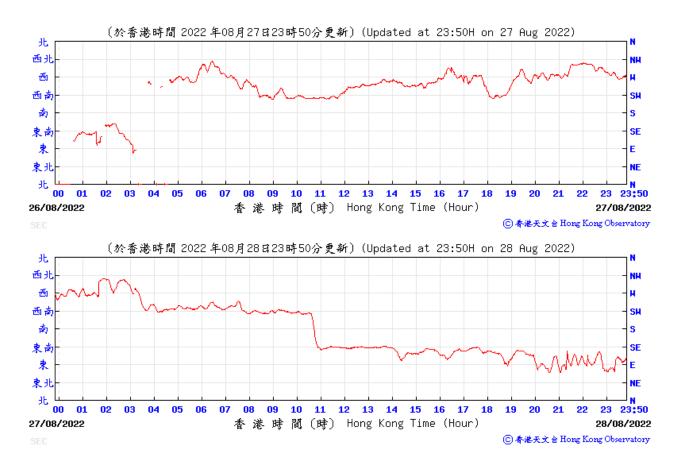


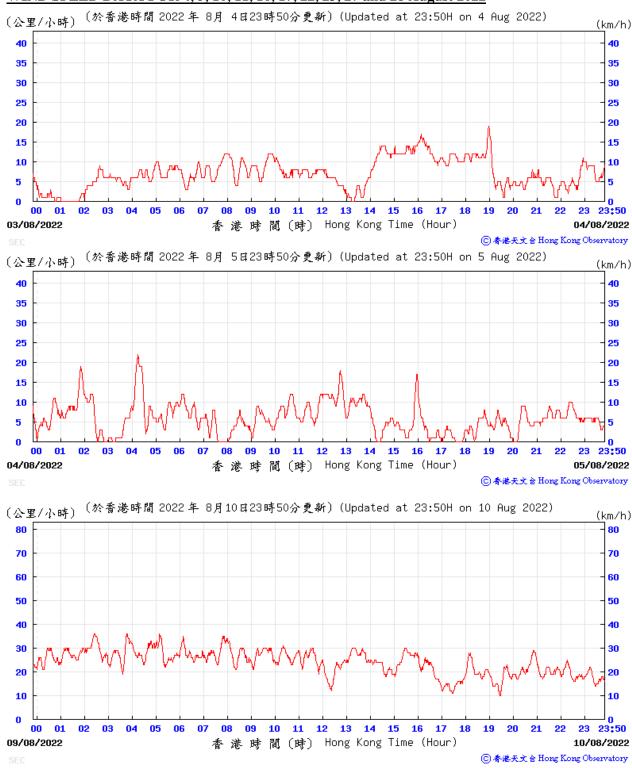




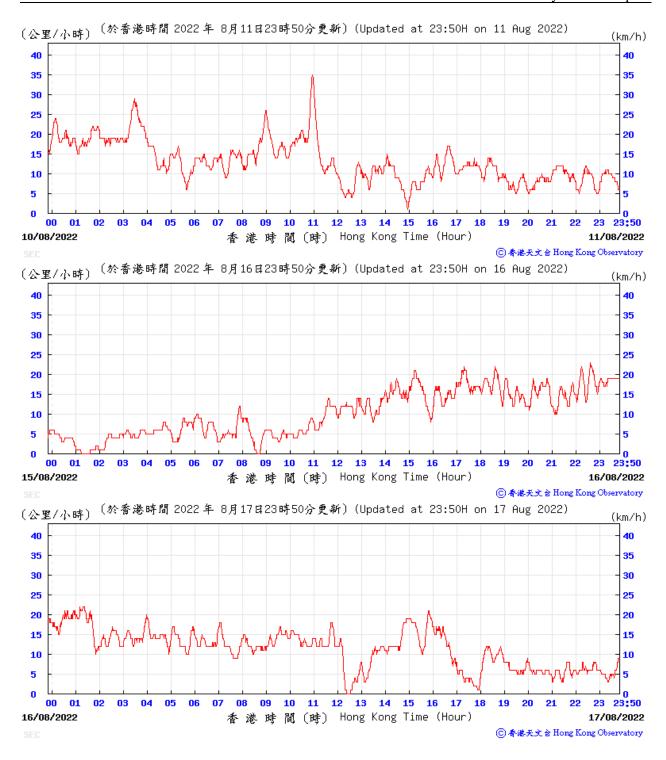
WIND DIRECTION DATA FOR 4, 5, 10, 11, 16, 17, 22, 23, 27 and 28 August 2022





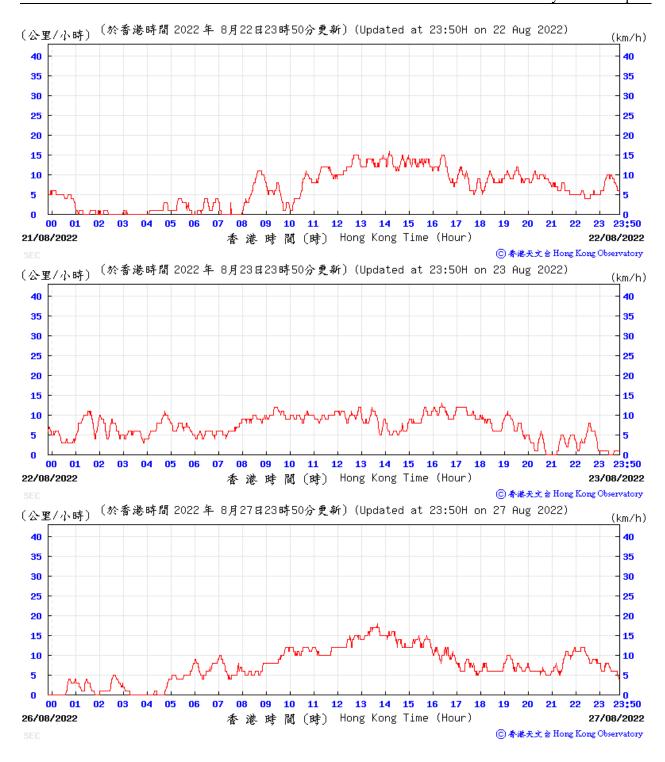


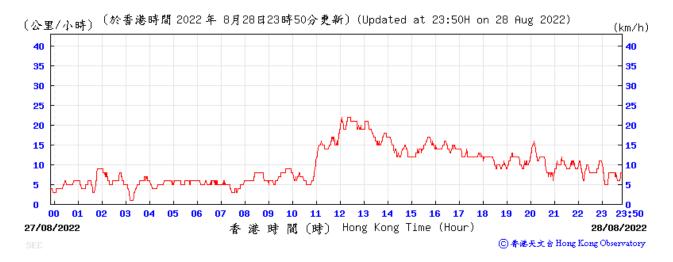
WIND SPEED DATA FOR 4, 5, 10, 11, 16, 17, 22, 23, 27 and 28 August 2022



Acuity Sustainability Consulting Limited







Appendix L Waste Flow Table



Contract No.: HY/2018/02 Central Kowloon Route - Kai Tak East

Name of Department: HyD

Monthly Summary Waste Flow Table - Aug 2022

	Actual Quantities of Inert C&D Material Generated Monthly																			
					Actu	al Quantities of I	nert C&D Mater	ial Generated Mo	onthly					Actual Quantities of C&D Waste Generated Monthly						
Month	Total Qty Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects (KSZHJV)	Reused in other Projects (SFK)		Reused in other Projects (TKO- LTT)	Reused in other Projects (KTW)	Reused in other Projects (SFK- DH)	Projecte	Disposal at Sorting Facility	Disposed as Public Fill	Imported Fill	Metals (Steel)	Metals (Aluminum)	Metals (Copper)	Paper/cardboar d packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in '000tonne)	(in 'kg)	(in 'kg)	(in 'kg)	(in 'kg)	(in 'kg)	(in 'kg)	(in 'kg)
2019	7.12	0.34	0.14	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	7.88	0.00	22,570.00	0.00	0.00	50.00	0.00	0.00	500,000.00
2020	142.34	0.00	0.14	NIL	4.40	19.47	NIL	10.50	NIL	NIL	0.62	104.95	1.11	207,420.00	48.00	0.00	1,284.00	0.00	0.00	419,060.00
2021	98.11	0.00	0.10	2.28	0.00	13.42	0.17	2.32	1.63	20.50	0.00	57.79	0.00	1028670.00	0.00	0.00	525.00	0.00	0.00	1100340.00
Jan	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	0.00	0.00	150.00	0.00	0.00	88980.00
Feb	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	160.00	0.00	0.00	85530.00
Mar	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	100.00	0.00	0.00	35660.00
Apr	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	50.00	0.00	0.00	96510.00
May	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	141.03	0.00	0.00	50.00	0.00	0.00	93100.00
Jun	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	25.00	0.00	0.00	92250.00
Jul	1.12	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	30.00	0.00	0.00	103880.00
Aug	1.42	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	75.00	0.00	30.00	118290.00
Sep																				
Oct																				
Nov																				
Dec																				
Total	256.81	0.34	1.28	2.28	4.40	32.89	0.17	12.83	1.63	20.50	0.62	178.96	1.11	1,258,801.03	48.00	0.00	2,499.00	0.00	30.00	2,733,600.00

Appendix M Statistics on Complaint, Notifications of Summons and Successful Prosecutions

	Statistical Summary of Exceedances								
	Air Quality								
Location	Action Level	Limit Level	Total						
E-A1	E-A1 0 0 0								

Statistical Summary of Environmental Complaints

Donouting Douiod	Environmental Complaint Statistics								
Reporting Period	Frequency	Cumulative	Complaint Nature						
1 August 2022 - 31 August 2022	0	2	N/A						

Statistical Summary of Environmental Non-compliance

Departing Davied	Environmental Non-compliance Statistics								
Reporting Period	Frequency	Cumulative	Details						
1 August 2022 - 31 August 2022	0	0	N/A						

Statistical Summary of Environmental Summons

Donorting Dariad	Environmental Summons Statistics							
Reporting Period	Frequency	Cumulative	Details					
1 August 2022 - 31 August 2022	0	0	N/A					

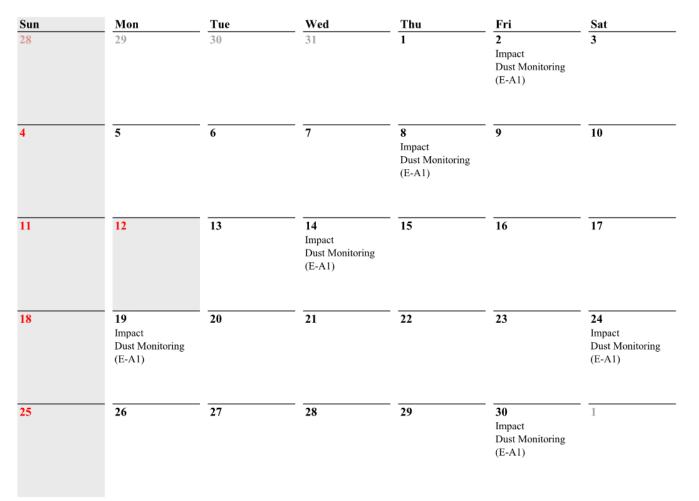
Statistical Summary of Environmental Prosecution

Donouting David	Environmental Prosecution Statistics		
Reporting Period	Frequency	Cumulative	Details
1 August 2022 - 31 August 2022	0	0	N/A

Appendix N Monitoring Schedule of the Coming Month

Contract No.: HY/2018/02 Central Kowloon Route Section of Kai Take East

Tentative Environmental Monitoring Schedule (September 2022)



Central Kowloon Route Buildings, Electrical and Mechanical Works Contract No. HY/2019/13 (Kai Tak East Area)

Gammon Construction Limited

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

Monthly EM&A Report No. 23 (August 2022)

Version 1 Date of Report: 13 September 2022

Certified By

BC+.

(Environmental Team Leader:

Ms. Betty Choi)

REMARKS:

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

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

CINOTECH CONSULTANTS LTD

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Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract: Buildings, Electrical and Mechanical Works (HY/2019/1

Reference Document/Plan

Document/Plan to be Certified/ Verified:	Monthly EM&A Report No.23
Date of Report:	13 September 2022 (Version 1)
Date received by IEC:	13 September 2022

Reference EP Condition

Environmental Permit Condition:

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.

3.4

IEC Verification

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

Mandy 20.

Ms Mandy To Independent Environmental Checker Date:

13 September 2022

Our ref: 0436942_IEC Verification Cert_BEM_Monthly EM&A Rpt No.23_20220913.docx

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EXECUTIVE SUMMARY

Introduction

- This is the 23rd Monthly Environmental Monitoring and Audit (EM&A) Report prepared by the Environmental Team (ET), Cinotech Consultants Ltd., for Contract No. HY/2019/13 "Central Kowloon Route – Buildings, Electrical and Mechanical Works". This report summarized the monitoring results and audit findings of the EM&A programme under the issued EP No. EP-457/2013/D, and in accordance with the EM&A programme in Kai Tak East Area during the reporting period from 1st August 2022 – 31st August 2022.
- 2. The major site activities undertaken in Kai Tak East Area in the reporting month included:
 - Piling works (pipe piles and sheet piles);
 - Excavation & sub-structure works.

Environmental Monitoring Works

- 3. Environmental monitoring for the Project was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Joint weekly site inspections with the representative of ET, Engineer Representative and the Contractor were conducted on 2, 9, 16, 23 & 30 August 2022, whereas joint site inspection with the representative of IEC was conducted on 16 August 2022. The implementation of the environmental mitigation measures, Event and Action Plans and environmental complaint handling procedures were also checked.
- 4. A summary of the non-compliance (exceedance) during the reporting month (August 2022) and the investigation results and/or follow-up actions is provided below:

Air Quality Monitoring

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

Landscape and Visual Monitoring

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

Complaint Handling, Prosecution and Public Engagement

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

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

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

Reporting Changes

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

Future Key Issues

- 7. The key works or activities will be anticipated in the coming two months are as follows:
 - Piling works (pipe piles and sheet piles);
 - Excavation & sub-structure works.

1 INTRODUCTION

Background

- 1.1 Central Kowloon Route (CKR) is a 4.7km long dual 3-lane trunk road across Central Kowloon linking Yau Ma Tei Interchange in West Kowloon and the road network at Kai Tak Development and Kowloon Bay in East Kowloon. The underground tunnel section will be about 3.9km long. In particular, an underground tunnel of about 370m long in Kowloon Bay to the north of To Kwa Wan Typhoon Shelter will be constructed.
- 1.2 The Environmental Impact Assessment Report for Central Kowloon Route Design and Construction (Register No.: AEIAR-171/2013) was approved under the Environmental Impact Assessment Ordinance (EIAO) on 11 July 2013. An Environmental Permit (EP No.: EP-457/2013) was issued on 9 August 2013. Variations of Environmental Permit (VEP) was subsequently applied and an EP (EP No. EP-457/2013/C) was issued on 16 January 2017. The latest EP (EP No. EP-457/2013/D) was issued by Environmental Protection Department (EPD) on 15 June 2021.
- 1.3 The construction of the CKR had been divided into different sections. This Contract No. HY/2019/13 – Central Kowloon Route – Buildings, Electrical and Mechanical Works ("The Project") will include the architectural, civil and structural construction works of Yau Ma Tei Ventilation Building (YVB), Ho Man Tin Ventilation Building (HVB), Kai Tak Ventilation Building (KVB) and Central Kowloon Route Administration Building (ADB) for the CKR. The landscaping and electrical and mechanical (E&M) works within the building sites will be involved as well.
- 1.4 Cinotech Consultants Limited was assigned as the Environmental Team (ET) to undertake the EM&A works for the Project. The construction of this Contract was commenced on 12th December 2020.

Purpose of the Report

1.5 This is the 23rd Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme in Kai Tak East Area during the reporting period from 1st August 2022 – 31st August 2022. The Kai Tak East Area site layout plan for the Project is shown in Figure 1.1.

Project Organizations

- 1.6 Different Parties with different levels of involvement in the project organization include:
 - Project Proponent Highways Department (HyD)
 - Engineer Representative (ER) Arup Mott MacDonald Joint Venture (AMMJV)
 - Environmental Team (ET) Cinotech Consultants Limited (Cinotech)
 - Independent Environmental Checker (IEC) Environmental Resources Management -Hong Kong Limited (ERM)
 - Contractor Gammon Construction Limited (GCL)

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

Table 1.1	Key Project Contacts	

	y					
Party	Role	Contact Person	Phone No.			
AMMJV	Engineer Representative	gineer Representative Mr. Dennis Yu				
Cinotech	Environmental Team	Ms. Betty Choi	2151 2072			
ERM	Independent Environmental Checker	Ms. Mandy To	2271 3113			
GCL	Contractor	Mr. Harry Lam	9353 6141			

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

Construction Activities undertaken during the Reporting Month

- 1.9 The construction programme is presented in **Appendix A**.
- 1.10 The major site activities undertaken in the reporting month included:
 - Piling works (pipe piles and sheet piles);
 - Excavation & sub-structure works.

Summary of EM&A Requirements

- 1.11 The EM&A programme requires air quality monitoring, landscape and visual monitoring and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:
 - Environmental requirements and mitigation measures, as recommended in the EM&A Manual under the EP.
- 1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 6 of this report.

Statues of Environmental Licensing and Permitting

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

Table 1.2 Summary of Environmental Licensing and Permit Status

Downit / Licongo No	Valid P	eriod	Status							
Permit / License No.	From	То	Status							
Environmental Permit (EP)										
EP-457/2013/D	15 Jun 2021	N/A	Valid							
Notification of Construction Wor	ks under Air Pollutio	n Control Ordinar	nce (APCO)							
457346	18 Jun 2020	End of Project	Valid							
Billing Account for Construction	ling Account for Construction Waste Disposal									
7037679	26 Jun 2020	N/A	Valid							
Registration of Chemical Waste P	Producer – Kai Tak									
5211-286-G2347-54	13 Jul 2020	N/A	Valid							
Wastewater Discharge Licence - I	Kai Tak									
WT00037178-2020	18 Dec 2020	31 Dec 2025	Valid							
Construction Noise Permit - Kai	Fak Site (General Wo	orks [grouting, pili	ng])							
GW-RE0534-22	31 May 2022	29 Sep 2022	Valid							
Construction Noise Permit for W	orks at 2nd office									
GW-RE0541-22	2 June 2022	1 Aug 2022	Valid until 1 Aug 2022							
GW-RE0739-22	2 Aug 2022	1 Dec 2022	Valid							

2 AIR QUALITY

Monitoring Requirements

2.1 As all of the air quality (1-hour TSP and 24-hour TSP) monitoring works in Kai Tak East Area are currently covered under the Contract No. HY/2018/02 (Central Kowloon Route - Kai Tak East), the corresponding monitoring parameters, equipment, methodology, results and established Action and Limit Levels could be referred to Section 3 of the EM&A report for Contract No. HY/2018/02 during this reporting month.

Observations

- 2.2 No Action/Limit Level exceedance was recorded for all 1-hour TSP and 24-hour TSP monitoring in the reporting month.
- 2.3 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. The summary of site audits is shown in **Table 6.1** of this report.

3 NOISE

Monitoring Requirements

3.1 As no Noise Sensitive Receiver (NSR) is located within 300m from the boundary of Kai Tak East Area, no construction noise monitoring is required in Kai Tak East Area for this Project.

Observations

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

4 WASTE MANAGEMENT

Monitoring Requirements

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

Results and Observations

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

			Quant	ity							
	Inert C&D	Materials		Non-inert C&D Materials							
Reporting Period	Total Quantity Generated (in '000m ³)	Disposed as Public Fill (in '000m ³)	Others, e.g. general refuse (in '000m ³)	Metals (in '000kg)	Paper/cardboard Packaging (in '000kg)	Plastics (in '000kg)	Chemical waste (in '000kg)				
August 2022	7.567	7.359	0.047	0	0	0	0				

Table 4.1Quantities of Waste Generated from the Project

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

5 LANDSCAPE AND VISUAL

Monitoring Requirements

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

Results and Observations

- 5.2 Bi-weekly inspection of the implementation of landscape and visual mitigation measures within the site boundaries of this Project was conducted on 2, 16 & 30 August 2022. The implementation status of the landscape and visual mitigation measures in the reporting period are summarized in **Appendix C**. The summary of observations and recommendations made for landscape and visual mitigation measures during site audits are shown in **Table 6.1** of this report.
- 5.3 No non-compliance of the landscape and visual impact was recorded in the reporting month.

6 ENVIRONMENTAL AUDIT

Site Audits

- 6.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 6.2 Site audits were conducted on 2, 9, 16, 23 & 30 August 2022 in the reporting month. Joint site inspection with the representative of IEC was conducted on 16 August 2022. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

- 6.3 According to Environmental Permit, the approved EIA Report (Register No.: AEIAR-171/2013), and the EM&A Manual of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix C**.
- 6.4 The ET weekly site inspections were carried out during the reporting month and the observations and follow-up actions in Kai Tak East Area are summarized in **Table 6.1**.

Parameters	Date	Observations	Follow-up Actions		
Water Quality	2 Aug 2022	Stagnant water should be cleared at Kai Tak Ventilation Building Site	Holes have been drilled on the I-Beams to allow water pass through and prevent from stagnation.		
	30 Aug 2022	Ponding water should be removed at KTE Site.	Ponding water have been removed at KT site.		
Air Quality	N/A	No environmental deficiency was identified in the reporting period.	N/A		
Noise	N/A	Stagnant water should be cleared at Kai Tak Ventilation Building SiteHoles have b I-Beams to a through an stagPonding water should be removed at KTE Site.Ponding w removeNo environmental deficiency was identified in the reporting period.Ponding w removeNo environmental deficiency was identified in the reporting period.Chemicals should store properly in the designated area.No environmental deficiency was identified in the reporting period.Chemicals haNo environmental deficiency was identified in the reporting period.Chemicals haNo environmental deficiency was identified in the reporting period.Chemicals haNo environmental deficiency was identified in the reporting period.No environmental deficiency period.No environmental deficiency was identified in the reporting period.No environmental deficiency period.No environmental deficiency was identified in the reporting period.No environmental deficiency period.No environmental deficiency 	N/A		
Waste / Chemical	9 Aug 2022	Chemicals should store properly	Chemicals have been removed.		
Management	23 Aug 2022	in the designated area.	Chemicals have been removed.		
Land Contamination	N/A	was identified in the reporting	N/A		
Landscape and Visual	N/A	was identified in the reporting	N/A		
Permits /Licences	N/A	was identified in the reporting	N/A		

 Table 6.1
 Observations and Recommendations of Site Inspections

Implementation Status of Event and Action Plans

6.5 The Event and Action Plans for noise could be referred to Appendix D of the EM&A report in Contract No. HY/2018/02.

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.

Landscape and Visual Monitoring

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

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

6.6 No environmental complaints, warning, notifications of summons and successful prosecutions was received in the reporting month. The summary of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix D**.

Status of Required Submission under Environmental Permit

6.7 Status of required submission under EP-457/2013/D during the reporting period are summarized in **Table 6.2**.

Table 6.2 Status of Required Submission under Environmental Permit

EP Condition (EP-457/2013/D)	Submission	Submission Date
Condition 3.4	Monthly EM&A Report (July 2022)	12 August 2022

7 FUTURE KEY ISSUES

- 7.1 Major site activities undertaken for the coming two months include:
 - Piling works (pipe piles and sheet piles);
 - Excavation & Sub-structure Works.
- 7.2 Key environmental issues in the coming two months include:
 - Stockpile accumulation on-site;
 - Water spraying for dust generating activities and on haul road;
 - Wastewater and runoff discharge from site;
 - Coverage of open manholes to avoid dirty runoff to drainage system;
 - Noise from operation of the equipment, especially for excavation works and machinery onsite;
 - Accumulation of general refuse and construction waste on-site;
 - Proper storage of construction materials on-site; and
 - Storage of chemicals/fuel and chemical waste/waste oil on-site.

8 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

8.1 This is the 23rd Monthly EM&A Report which presents the EM&A works undertaken in Kai Tak East Area during the reporting month from 1st August 2022 – 31st August 2022 in accordance with the EM&A Manual and the requirements under the EP.

Air Quality Monitoring

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

Landscape and visual

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

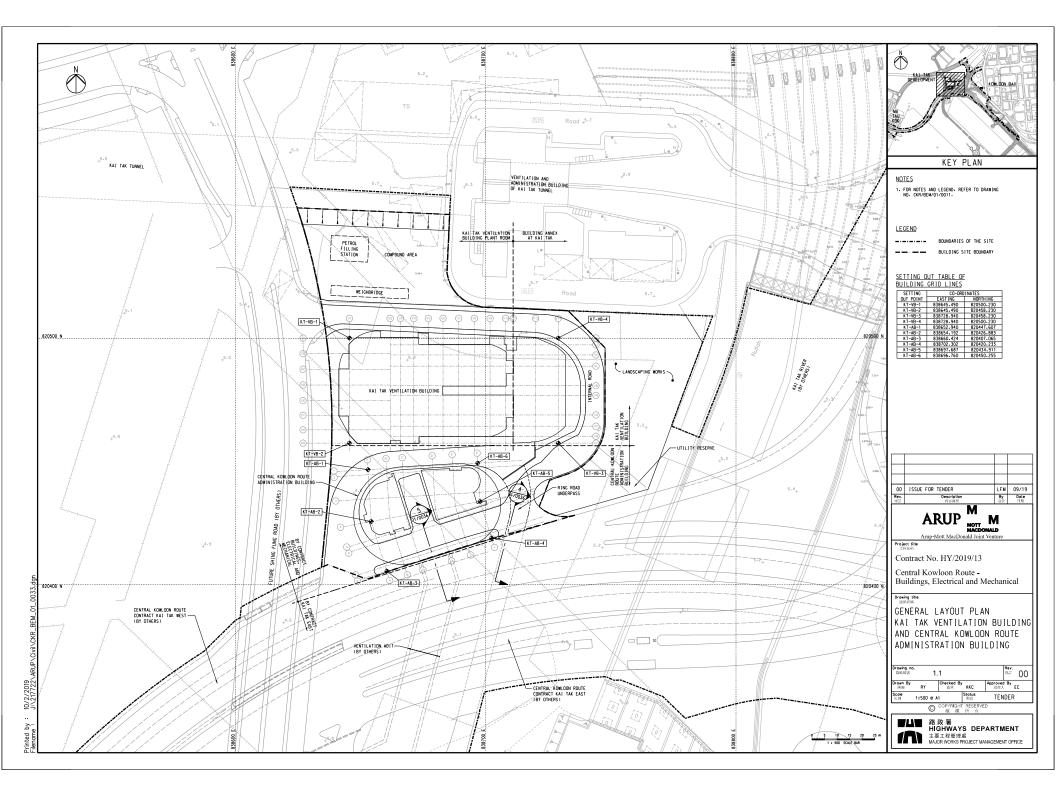
Site Audit

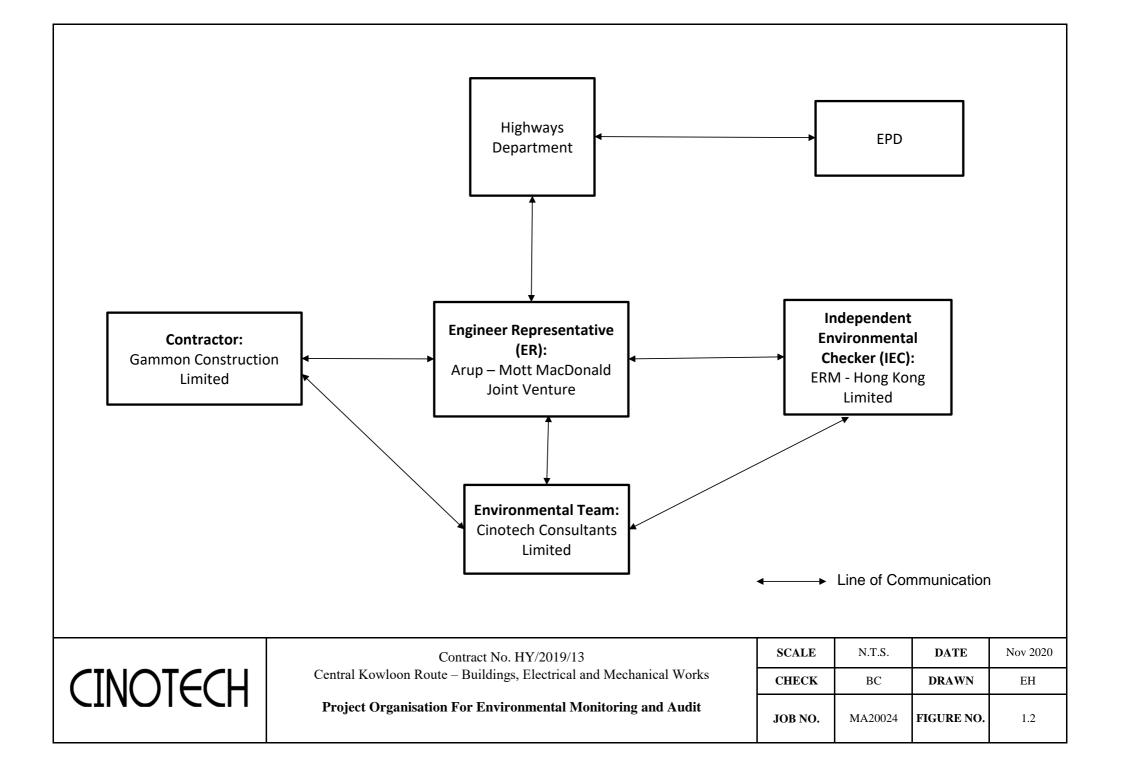
8.4 5 ET joint weekly environmental site inspections were conducted in the reporting month. Joint weekly site inspections with the representative of ET, Engineer Representative and the Contractor were conducted on 2, 9, 16, 23 & 30 August 2022, whereas joint site inspection with the representative of IEC was conducted on 16 August 2022. All environmental deficiencies observed during site inspections were rectified by the Contractor.

Complaint, Notification of Summons and Successful Prosecution

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

FIGURES



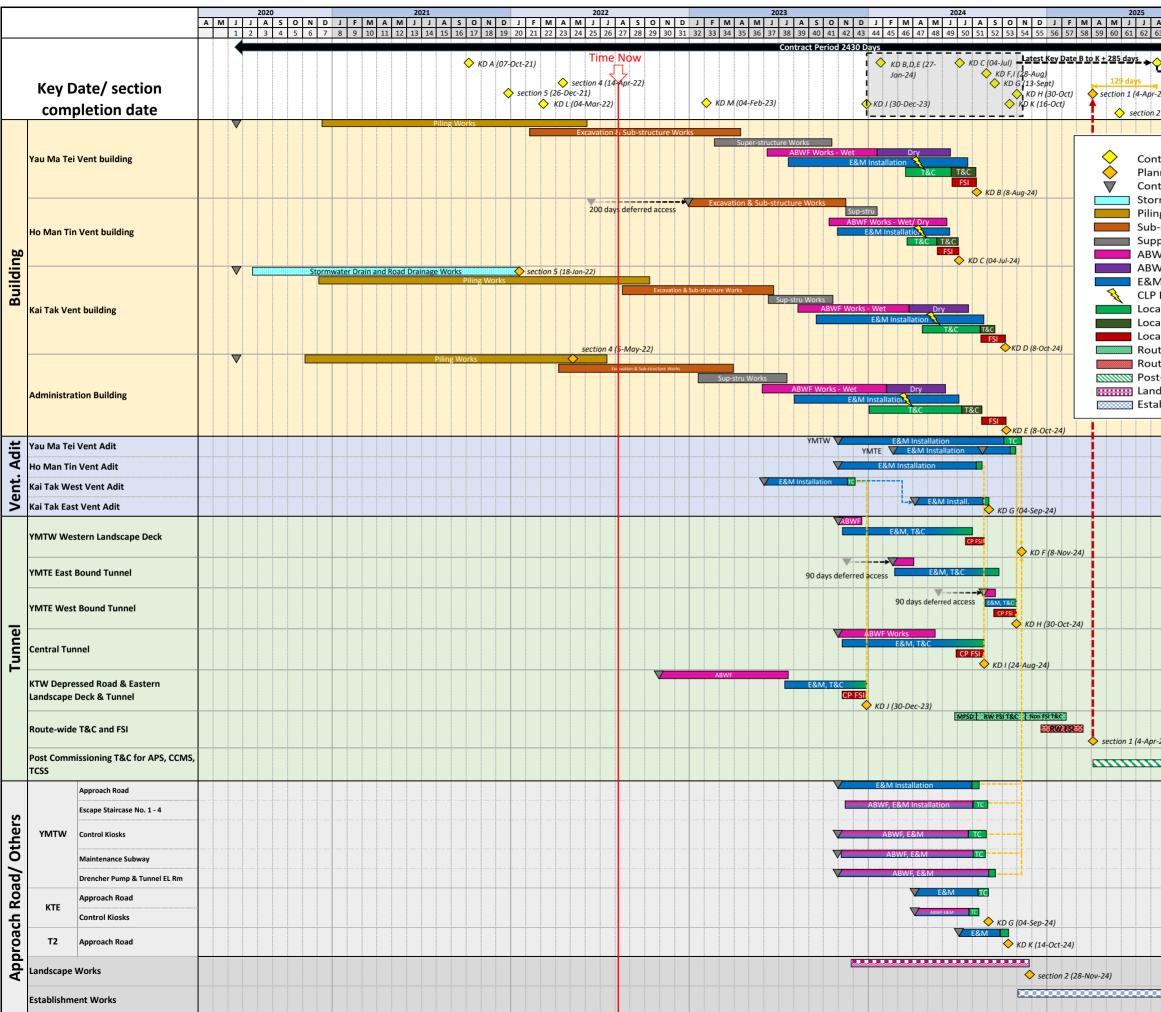


APPENDIX A CONSTRUCTION PROGRAMME



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

Summary Programme





路政署 HIGHWAYS DEPARTMENT 主要王程管理處

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APPENDIX B SUMMARY OF WASTE GENERATION AND DISPOSAL RECORDS

Monthly Summary Waste Flow Table

[PS Clauses 25.24(11)S & 25.34(16)(a)]

Annex 4 to Appendix C

Name of Department: HyD

Contract No.: HY/2019/13

Central Kowloon Route - Buildings, Electrical and Mechanical Works

Kai Tak Site Area

Monthly Summary Waste Flow Table for 2022 (year)
--

	Actual Quantites of Inert C&D Materials Generated Monthly Actual Quantites of C&D Waste Generated Monthly											
	Total Quantity	Hard Rock and	Reused in the	Reused in	Disposed as	Imported Fill	Metals	Paper /	Plastics	Chemical	Marine	Others, e.g.
	Generated	Large Broken	Contract	other Projects	Public Fill	(see Note 5)		cardboard	(see Note 3)	Waste	Sediment	general refuse
		Concrete	(see Note 5)	(see Note 5)	(see Note 5)			packaging		(see Note 5)	(see Note 7)	(see Note 5)
		(see Note 5)										
Month	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)	(in '000m3)
Jan	1.451	0.000	0.000	0.000	1.451	0.000	0.000	0.000	0.000	0.000	0.000	0.017
Feb	1.121	0.000	0.000	0.000	1.121	0.000	0.000	0.000	0.000	0.000	0.000	0.029
Mar	1.462	0.000	0.000	0.000	1.462	0.000	0.000	0.000	0.000	0.000	0.000	0.033
Apr	2.606	0.000	0.000	0.000	2.606	0.000	0.000	0.000	0.000	0.000	0.000	0.042
May	2.446	0.000	0.000	0.821	1.625	0.000	0.000	0.000	0.000	0.000	0.000	0.037
Jun	1.888	0.000	0.000	0.495	1.393	0.000	0.000	0.000	0.000	0.000	0.000	0.014
Sub-Total	10.976	0.000	0.000	1.317	9.659	0.000	0.000	0.000	0.000	0.000	0.000	0.171
Jul	1.932	0.000	0.000	0.000	1.932	0.000	0.000	0.000	0.000	0.000	0.000	0.042
Aug	7.567	0.000	0.000	0.208	7.359	0.000	0.000	0.000	0.000	0.000	0.000	0.047
Sep												
Oct												
Nov												
Dec												
Total (2022)	20.475	0.000	0.000	1.525	18.950	0.000	0.000	0.000	0.000	0.000	0.000	0.261
Total (whole)	39.683	0.000	0.000	1.525	38.158	0.000	0.000	0.000	0.000	1.080	0.000	0.529

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

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

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

(4)

Note:

The summary table shall be submitted to the Project Manager monthly together with the Waste Flow Table for review and monitoring in accordance with the PS Clause 25.24 (5) Density values and Bulk Factors adopted:

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

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

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

APPENDIX C ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
	n Dust Impact				A 11		ADCO	^
S4.3.10	DI	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	- APCO - To control the dust impact to meet HKAQO and TM-EIA criteria	A
S4.3.10	D2	Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road should be conducted to achieve dust removal efficiencies of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.3 L/m2 to achieve the dust removal efficiency.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	- APCO - To control the dust impact to meet HKAQO and TM-EIA criteria	^
S4.3.10	D3	Proper watering at exposed spoil should be undertaken throughout the construction phase. Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	- APCO - To control the dust impact to meet HKAQO and TM-EIA criteria	^ ^
		and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading.					criteria	
		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.						٨
		The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.						^
		Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.	1					٨

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
		When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided and properly maintained as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.						۸
		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.						٨
		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.						٨
		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						٨
		Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding.						N/A
		Any skip hoist for material transport should be totally enclosed by impervious sheeting.						۸
		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						٨
		Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed.						N/A
		Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
		Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.						N/A
S4.3.10	D6	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected rep. dust monitoring station	Construction stage	- TM-EIA	٨
Construction	n Noise (Airbor		·	·			·	
S5.4.1	N1	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.	Control construction airborne noise	Contractor	All construction sites	Construction stage	- Annex 5, TM-EIAO	^
		Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.					^	
		Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs.						^
		Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works.						٨
		Mobile plant should be sited as far away from NSRs as possible and practicable.						٨
		Material stockpiles, mobile container site office and other structures should be effectively utilized, where practicable, to screen noise from on-site construction activities.						N/A
S5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening	Contractor	All construction sites	Construction stage	- Annex 5, TM-EIAO	۸

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Timing	Implementatio n Stage	standards to be achieved	Implementation Status
S5.4.1	N3	Install movable noise barriers (typical design is wooden framed barrier with a small-cantilevered on a skid footing with 25mm thick internal sound absorptive lining), acoustic mat or full enclosure, screen the noisy plants including air compressors, generators and handheld breakers, etc.	Sreen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction stage	- Annex 5, TM-EIAO	N/A
S5.4.1	N4	Use 'Quiet plants'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	- Annex 5, TM-EIAO	۸
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	۸
S5.4.1	N6	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	- Annex 5, TM-EIAO	^
S5.4.1	N7	Implement a noise monitoring programme under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected rep. noise monitoring station	Construction stage	- TM-EIAO	N/A
	ity (Constructio	on Phase)						
S6.9.1.1	W1	<u>Construction Runoff</u> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction.	To minimize water quality impact from the construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	 Water Pollution Control Ordinance ProPECC PN 1/94 TM-EIAO TM-DSS 	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
		The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/ sediment trap. The sediment/ silt traps should be incorporated in the permanent drainage channels to enhance deposition rates.						۸
		The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/ sand traps should be 5 minutes under maximum flow conditions. Sizes may vary depending upon the flow rate, but for a flow rate of 0.1 m3/s a sedimentation basin of 30 m3 would be required and for a flow rate of 0.5 m3/s the basin would be 150 m3. The detailed design of the sand/ silt traps shall be undertaken by the contractor prior to the commencement of construction.						~
		All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. Exposed slope surfaces should be covered by tarpaulin or other means.						N/A
		The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows.						N/A
		All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.						*
		Measures should be taken to minimize the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.						٨

EIA Ref.	EM&A Ref.		Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
		Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m3 should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.						۸
		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.						٨
		Precautions be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes.						٨
		All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and site wheel washing facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel wash bay to the public road should be paved with sufficient backfall toward the wheel wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.						Α
		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.						٨
		Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.						٨

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
		All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby.						^
		Adopt best management practices.						^
		All earth works should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable.						^
S6.9.1.2	W2	<u>Tunneling Works and Underground Works</u> Cut-&-cover tunneling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable.	To minimize construction water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	- Water Pollution Control Ordinance - ProPECC PN 1/94 - TM-EIAO TM DSS	N/A
		Uncontaminated discharge should pass through sedimentation tanks prior to off- site discharge.					- TM-DSS	N/A
		The wastewater with a high concentration of SS should be treated (e.g. by sedimentation tanks with sufficient retention time) before discharge. Oil interceptors would also be required to remove the oil, lubricants and grease from the wastewater.						N/A
		Direct discharge of the bentonite slurry (as a result of D-wall) is not allowed. It should be reconditioned and reused wherever practicable. Temporary storage locations (typically a properly closed warehouse) should be provided on site for any unused bentonite that needs to be transported away after all the related construction activities area completed. The requirements in ProPECC PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.						N/A
S6.9.1.3	W3	<u>Sewage Effluent</u> Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	To minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction stage	- Water Pollution Control Ordinance - TM-DSS	^

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status		
\$6.9.1.5	W4	Groundwater from Potential Contaminated Area: No direct discharge of groundwater from contaminated areas should be adopted.	To minimize groundwater quality impact from	hize Contractor Excavation areas where contamination is found - Water Pollution Control Ordinance - TM-EIAO - TM-DSS - TM-DSS TM-DSS	where stage Contro	٨				
		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.	contaminated area		found		- TM-DSS	^		
		If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (e.g. TPH) to undetectable range. All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be discharged into the foul sewers.						^		
		If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor.								

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

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	standards to be achieved	Implementation Status
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.	Good site practice to minimize the waste generation and recycle the C&D materials as	Contractor	All construction sites	Construction stage	· Land (Miscellaneous Provisions) Ordinance · Waste Disposal Ordinance · ETWB TCW No.	^
		Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate far as practicable so as to reduce the amount for final 19/2005		۸				
		facilities with a view to recovering broken concrete effectively for recycling purpose, where possible.	disposal				 Land (Miscellaneous Provisions) Ordinance Waste Disposal Ordinance ETWB TCW No. 19/2005 	N/A
		Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.						۸
		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.						۸
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.	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		^
		The Contractor should recycle as much of the C&D materials as possible on- site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage.						N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
S7.5.1		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	t of	Practice Guide (PG) for Investigation and Remediation of Contaminated Land · GN/GM for land contamination	^
S7.5.1	WM5	<u>Land-based and Marine-based Sediment</u> 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	• ETWB TCW No. 34/2002	^
		All vessels shall be sized such that adequate draft is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.						N/A
		Before moving the vessels which are used for transporting dredged material, excess material shall be cleaned from the decks and exposed fittings of vessels and the excess materials shall never be dumped into the sea except at the approved locations.						N/A
		Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.	-					N/A
		The Contractors shall monitor all vessels transporting material to ensure that no dumping outside the approved location takes place. The Contractor shall keep and produce logs and other records to demonstrate compliance and that journeys are consistent with designated locations and copies of such records shall be submitted to the engineers.						N/A
		The Contractors shall comply with the conditions in the dumping licence.						^
		All bottom dumping vessels (Hopper barges) shall be fitted with tight fittings seals to their bottom openings to prevent leakage of material.						N/A
		The material shall be placed into the disposal pit by bottom dumping.						N/A

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

EIA Ref.	EM&A Ref.		Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n 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 generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes.	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	• Waste Disposal Ordinance	^
		construction sites is prohibited by law. Aluminum cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible. Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should						^
Land Contai	mination	be considered by the Contractor.						
S8.9 & Appendix 8.4	LC2		The contaminated soil will be excavated for on- site reuse	Contractor	PBH4	t of construction works within the	Practice Guide (PG) for Investigation and Remediation of Contaminated Land - Guidance Notes for Contaminated Land	N/A N/A
		The Contractor should pay attention to the selection of suitable groundwater lowering schemes and discharge points if the groundwater table is higher than the contaminated soils during excavation. The Contractor should also obtain a valid Water Pollution Control Ordinance (WPCO) discharge licence from EPD where applicable.				contaminated area	Assessment and Remediation · Guidance Manual for Use of Risk-Based Remediation Goals (RBRGs) for Contaminated Land Management	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
Hazard to L	-		—	-		- ·		^
S9.18	Н8	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	7	ň
S9.18	H9	Emergency response plans in case of road accident should be prepared and implemented. The driver and his assistant should be familiar with the emergency procedures including evacuation, and proper communication/ fire-fighting equipment should be provided to the driver and his assistant.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	1	^
Landscape a	nd 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.	Minimize visual impact	Contractor	Within Project site	Construction Phase	/	۸
		Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.						۸
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	/	۸
S10.10.1 Table 10.11	LV5	<u>Lighting Control during Construction</u> All lighting in the construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residencies and GIC. The Contractor shall consider other security measures, which shall minimize the visual impacts.	Minimize visual impact	Contractor	Within Project site	Construction Phase	/	۸
S10.10.1 Table 10.11	LV6	<u>Erosion Control</u> The potential for soil erosion shall be reduced by minimizing the extent of vegetation disturbance on site and by providing a protective cover over newly exposed soil.	Minimize landscape impact	Contractor	Within Project site	Construction Phase	/	۸

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
S10.10.1 Table 10.11	LV7	<u>Tree Protection & Preservation</u> 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.	1	Contractor	Within Project site		 'Guidelines for Tree Risk Management and Assessment Arrangement on an Area Basis and on a Tree Basis', Greening, Landscape and Tree Management (GLTM) Section, DEVB Latest recommended horticultural practices from GLTM Section, 	N/A
S10.10.1 Table 10.11	LV8	<u>Tree Transplantation</u> 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.	visual impact	Contractor	Within Project site and designated off- site locations		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	<u>Compensatory Planting</u> For trees unavoidably affected by the Project that have to be removed, where practical transportation will be chosen as the top priority method of removal but if this is not possible or practical compensatory planting will be provided for trees unavoidably felled. All felled trees shall be compensated for by planting trees to the satisfaction of relevant Government projects. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006.	enhance landscape	Contractor	Within Project site	Construction Phase	• ETWB TCW 3/2006 • Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB • ETWB TCW 2/2004	N/A

EIA Ref. EM&A Ref.		Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
S10.10.1 Table 10.11	LV10	Screen Planting Tall screen/buffer trees, shrubs and climbers should be planted, in so far as is possible, to soften and screen proposed structures such as roads and central strip, vertical edges and buildings and to enhance streetscape greening effect where appropriate. Indiscriminate use of trees for screening must be avoided and the principle of 'right tree for the right place' must be followed. This detail will be provided at the Detailed Design stage. This measure may additionally form part of the compensatory planting and will improve and create a pleasant pedestrian environment.	Minimize visual impact and also enhance landscape	Contractor	Within Project site		 Guidelines on Greening of Noise Barriers, issued April 2012, GLTMS, DevB ETWB TCW 2/2004 	N/A
S10.10.1 Table 10.11	LV11	<u>Green Roof</u> Roof greening will be established on ventilation and administration buildings to reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels.	Minimize landscape and visual impact	Contractor	Within Project site	Construction Phase	/	N/A
S10.10.1 Table 10.11	LV12	<u>Reinstatement</u> All works areas, excavated areas and disturbed areas for tunnel construction and temporary road diversion or any other proposed works shall be reinstated to former conditions or better, with reasonable landscape treatment and to the satisfaction of the relevant Government departments. (Specific mitigation for disturbance to public open space is detailed separately under LV14)	Minimize landscape impact	Contractor	Within Project site	Construction Phase	/	N/A
S10.10.1 Table 10.11	LV13	Reprovising of Public Open Space All areas of public open space affected by the Project will be reprovisioned either at the same location following the completion of temporary works, or at a separate site, as agreed with relevant Government departments. Open space should be re-provisioned in an enhanced manner.	Minimize landscape impact	Contractor	Within Project site	Construction Phase	Open space should be re-provided in an enhanced manner.	N/A
Cultural Her	ritage Impact (Construction Phase)				1		
S11.4.4	CH1	The contractor should be alerted during the construction on the possibility of locating archaeological remains and as a precautionary measure, AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject sites.	To preserve any cultural heritage items which may be removed and damaged by the excavation	Contractor	During construction works for cut and cover tunnels	During the Construction Phase	· AMOs requirements	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementati on Agent	Location / Timing	Implementatio n Stage	Requirements and/ or standards to be achieved	Implementation Status
EM&A Proj	ect							
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 	٨
\$13.2-13.4	EM2	An Environmental Team needs to be employed as per the EM&A Manual.	Perform environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	 EIAO Guidance Note No. 4/2010 TM-EIAO 	٨
		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.						٨

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

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

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

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

Reporting Month: Aug 2022

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

Remarks: No environmental complaint, warning/summon and prosecution was received in the reporting period.