Leighton-China States Joint Venture

Contract SCL1123 – Exhibition Station & Western Approach Tunnel

Monthly EM&A Report No. 35 for

FEP-13/364/2009/H & FEP-03/376/2009

[Period from 1 to 30 November 2023]

(December 2023)

	Classica.
Verified by:	Claudine LEE
Position: _	Independent Environmental Checker
Date:	12 December 2023

Leighton-China State Joint Venture

Contract SCL1123 – Exhibition Station & Western Approach Tunnel

Monthly EM&A Report No.35

for

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6

Certified by:	FUNG Yiu Wah		
Position:	Environmental Team Leader		
Date:	13 December 2023		



Leighton - China State J.V.

Shatin to Central Link - Hung Hom to Admiralty Section

Works Contract 1123 - CEDD Entrusted Work for Road P2 & other roads and Slip Road 3

Monthly EM&A Report for November 2023

[December 2023]

	Name	Signature
Prepared & Checked:	repared & Checked: Kelvin Wu	
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Version: 0	Date: 12 December 2023

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Page

Table of Contents

		_
EXEC	CUTIVE SUMMARY	1
1	INTRODUCTION	3
1.1	Purpose of the Report	3
1.2	Report Structure	
2	PROJECT INFORMATION	4
2.1	Background	4
2.2	Site Description	
2.3	Construction Programme and Activities	
2.4	Project Organisation	
2.5	Status of Environmental Licences, Notification and Permits	6
3	ENVIRONMENTAL MONITORING REQUIREMENT	7
3.1	Construction Dust Monitoring	7
3.2	Construction Noise Monitoring	
3.3	Landscape and Visual Monitoring	8
4	IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES	9
5	MONITORING RESULTS	10
5.1	Construction Dust Monitoring	10
5.2	Regular Construction Noise Monitoring	
5.3	Waste Management	10
5.4	Landscape and Visual	
6	ENVIRONMENTAL SITE INSPECTION AND AUDIT	11
7	ENVIRONMENTAL NON-CONFORMANCE	12
7.1	Summary of Monitoring Exceedances	12
7.2	Summary of Environmental Non-Compliance	
7.3	Summary of Environmental Complaints	
7.4	Summary of Environmental Summon and Successful Prosecutions	
8	FUTURE KEY ISSUES	13
9	CONCLUSIONS AND RECOMMENDATIONS	14
9.1	Conclusions	14
9.2	Recommendations	

i

List of Tables

Γable 2.1	Contact Information of Key Personnel
Γable 2.2	Status of Environmental Licenses, Notifications and Permits
Γable 3.1	Locations of Construction Dust Monitoring Station
Γable 3.2	Noise Monitoring Parameters, Frequency and Duration
Γable 3.3	Noise Monitoring Station during the Construction Phase
Γable 3.4	Landscape and Visual Monitoring Task and Frequency
Γable 4.1	Status of Required Submission under Further Environmental Permit
Table 5 1	Observations and Recommendations of Site Audit

List of Figures

Figure 1.1	Site Layout Plan of CEDD Entrusted Works under Contract 1123
Figure 1.2	Tree Survey Plan for the Landscape Work
Figure 1.3	Tree Planting Plan for the Landscape Work
Figure 3.1	Air Quality and Noise Monitoring Locations for CEDD Entrusted Works

List of Appendices

Appendix A	Project Organisation Structure
Appendix B	Implementation Schedule of Environmental Mitigation Measures
Appendix C	Cumulative Statistics on Complaints, Notification of Summons and Successful
	Prosecutions
Appendix D	Monthly Summary Waste Flow Table

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EXECUTIVE SUMMARY

Shatin to Central Link Contract 1123 – CEDD Entrusted Work for Road P2 & other roads and Slip Road 3 (hereafter called "the Project") covers part of the construction of CEDD entrusted work under the granted Further Environmental Permit: FEP–03/376/2009 and FEP–13/364/2009 respectively.

The Project comprises the construction of Road P2 and other roads which are classified as primary/district distributor roads and Slip Road 3.

The EM&A programme commenced on 25 January 2021. The impact EM&A for the Project includes air quality and noise monitoring.

This report documents the findings of EM&A works conducted in the period between 1 and 30 November 2023. As informed by the Contractor, major activities in the reporting period were:

Location	Site Activities
Road P2 –	
West (Slip Road 3)	
Road P2 –	Fleming Road to Tonnochy Road - Irrigation system installation
East (Hung Hing Road)	completed
Road P2 –	
Permanent PTI (Public	
Transport Interchange)	

As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed and with respect to the joint inspection conducted with IEC on 11 October 2023. The Contractor, ET and IEC share the view that there is no adverse environmental impact of remaining works under FEP-03/376/2009 and FEP-13/364/2009/H, hence the respective weekly environmental site inspection and environmental monitoring for air quality and noise during the construction phase were suspended from 1 November 2023 onwards as agreed with IEC.

In accordance with the updated EM&A Manual clause 8.2.1, the monitoring of the implementation and maintenance of landscape mitigation measures during the 12-month establishment period for FEP-03/376/2009 will be commenced upon the completion of construction activities. As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 have been completed, hence the monitoring during the establishment period will be commence in December 2023 at a frequency of quarterly basis. The monitoring on the landscape and visual implementation in establishment period will be scheduled in February, May, August and November 2024 tentatively.

Apart from the above, as confirmed with the Contractor, no landscape works associated with the Slip Road 3 area under FEP-13/364/2009/H, thus the EM&A programme for FEP-13/364/2009/H could be suspended. The figures extract form the Landscape Plan indicated that no landscape works associated with the Slip Road 3 are shown in **Figure 1.2** and **Figure 1.3**.

Breaches of Action and Limit Levels for Air Quality

Air quality monitoring was suspended in the reporting month.

Breaches of Action and Limit Levels for Noise

Regular Noise Monitoring

Noise monitoring was suspended in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

No complaint, notification of summons and successful prosecution were received in the reporting month.

Reporting Changes

There was no reporting change in the reporting month.

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Future Key Issues

As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed with respect to the joint inspection conducted with IEC on 11 October 2023. The Contractor, ET and IEC share the view that there is no adverse environmental impact of remaining works under FEP-03/376/2009 and FEP-13/364/2009/H, thus no future key issues have been predicted in reporting month.

AECOM Asia Co. Ltd. 2 December 2023

1 INTRODUCTION

Leighton – China State Joint Venture (JV) was commissioned by MTR as the Civil Contractor for CEDD Entrusted Works under Contract 1123. AECOM Asia Company Limited (AECOM) was appointed by JV as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme during construction phase of the Project.

1.1 Purpose of the Report

1.1.1 This is the 35th monthly EM&A Report which summaries the impact monitoring results and audit findings for the Project during the reporting period between 1 and 30 November 2023.

1.2 Report Structure

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

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2 PROJECT INFORMATION

2.1 Background

- 2.1.1 Road P2 and other roads which are classified as primary/district distributor roads identified as DP2 which covered in the Environmental Permit No. EP-376/2009 in the approved Wan Chai Development Phase II (WDII) and Central Wan Chai Bypass (CWB) comprising (i) a dual 2-lane primary distributor road, Road P2; and (ii) other new primary and district distributor roads connecting to the slip roads of the Central-Wan Chai Bypass.
- 2.1.2 Slip road 3 identified as part of DP1 which covered in the Environmental Permit No. EP-364/2009/H in the approved Wan Chai Development Phase II (WDII) and Central Wan Chai Bypass (CWB) comprising (i) slip roads to connect the CWB to the local road system in the Wan Chai North and Causeway Bay area; and (ii) associated road lighting, road signing, traffic control and surveillance system (iii) other associated works.
- 2.1.3 The Environmental Impact Assessment Report for Central Wan Chai Bypass and Island Eastern Corridor Link (CWB&IECL) EIA Report (Register No. AEIAR-041/2001) and the Wan Chai Development Phase II and Central-Wan Chai Bypass (WDII&CWB) EIA Report (Register No. AEIAR-125/2008) which were approved on 31 August 2001 and 11 December 2008 under the Environmental Impact Assessment Ordinance (EIAO). Following the approval of the EIA Report, an Environmental Permits (EPs) were granted on 13 November 2009 and 22 April 2020 respectively, which covers Road P2 and other roads which are classified as primary/district distributor roads [DP2] and Central Wan Chai Bypass (CWB) including its Road Tunnel and Slip Roads [DP1] (EP No.: EP-376/2009 and EP-364/2009/H), for the construction and operation. Further Environmental Permits (FEP No. FEP-03/376/2009 and FEP-13/364/2009/H) were both subsequently granted from the Director of Environmental Protection (DEP) on 2 June 2020, which cover the construction works for DP2 and a part of DP1 respectively.
- 2.1.4 The site layout plan of the Project is shown in **Figure 1.1**.

2.2 Site Description

- 2.2.1 The major construction activities under CEDD Entrusted Works of Contract 1123 include:
 - a) Site preparation;
 - b) Construct for dual 2-lane primary distributor road, Road P2;
 - c) Construct for other new primary and district distributor roads connecting to the slip roads of the Central-Wan Chai Bypass;
 - d) Construct for slip roads to connect the CWB to the local road system in the Wan Chai North and Causeway Bay area;
 - e) Construct for associated road lighting, road signing, traffic control and surveillance system;
 and
 - f) Construct for other associated works.

AECOM Asia Co. Ltd. 4 December 2023

2.3 Construction Programme and Activities

2.3.1 The major construction activities undertaken in the reporting month are summarised below:

Location	Site Activities
Road P2 –	
West (Slip Road 3)	
Road P2 –	Fleming Road to Tonnochy Road - Irrigation system installation
East (Hung Hing Road)	completed
Road P2 –	
Permanent PTI	
(Public Transport	
Interchange)	

2.4 Project Organisation

2.4.1 The project organization structure is shown in **Appendix A**. The key personnel contact names and numbers for the Project are summarised in **Table 2.1.**

Table 2.1 Contact Information of Key Personnel

Party	Role	Position	Name	Telephone	Fax
MTD	Residential	Chief Construction Manager – SCL Civil	Mr. Raymond Koo	2171 3801	3959 2200
MTR Engineer (E	Engineer (ER)	SCL Project Environmental Team Leader	Mr. Alex Siu	2688 1641	3761 4610
Meinhardt	Independent Environmental Checker	Independent Environmental Checker	Ms. Claudine Lee	2859 5409	2540 1580
JV	Contractor	Project Director	Mr. Mark Challis	3973 1997	31051126
JV Contractor		Environmental Engineer	Ms. Yolanda Gao	3973 1498	31031120
AECOM Contractor's Environmental Team (ET)		ET Leader	Mr. Y W Fung	3922 9366	2317 7609

2.5 Status of Environmental Licences, Notification and Permits

2.5.1 Relevant environmental licenses, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarized in **Table 2.2**.

Table 2.2 Status of Environmental Licenses, Notifications and Permits

Permit / License No.	Valid Period		_		
/ Notification/ Reference No.	F		Remarks		
Environmental Permit					
FEP-03/376/2009	2 Jun 2020	End of Contract	Valid		
FEP-13/364/2009/H	2 Jun 2020	End of Contract	Valid		
Construction Noise Pe	ermit				
-	-	-	-	-	
Wastewater Discharge	e License				
WT00040510-2022	10 May 2022	31 May 2027	Valid	For W21 & W22	
Chemical Waste Produ	ucer Registratio	n			
5213-135-L2881-01	2 Apr 2015	End of Contract	Valid	For whole site at Wan Chai Area	
Marine Dumping Perm	nit				
-	-	-	-	-	
Billing Account for Construction Waste Disposal					
7021736	16 Feb 2015	End of Contract	Valid	For Disposal of C&D Waste	
Notification Under Air Pollution Control (Construction Dust) Regulation					
385128	1 Mar 2015	End of Contract	Valid	For whole site at Wan Chai Area	

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3 ENVIRONMENTAL MONITORING REQUIREMENT

3.1 Construction Dust Monitoring

Monitoring Requirements

3.1.1 In accordance with the approved EM&A Manuals, 24-hour and 1-hour Total Suspended Particulates (TSP) levels at the designated air quality monitoring station is required. Impact 24-hour monitoring should be carried out for at least once every 6 days and 1-hour TSP monitoring should be done at least 3 times every 6 days while the highest dust impact is expected.

Monitoring Locations

3.1.2 The monitoring station for construction dust monitoring pertinent to the Project has been identified based on the approved EM&A Manual for SCL (HUH-ADM) of the Project. The location of the construction dust monitoring stations are summarised in **Table 3.1** and shown in **Figure 3.1**.

Table 3.1 Locations of Construction Dust Monitoring Station

Station ID	Dust Monitoring Station
CMA5b ¹	Pedestrian Plaza
CMA6a ¹	WDII PRE Site Office

Remark:

Monitoring Schedule for the Reporting Month

3.1.3 Environmental monitoring for air quality during the construction phase was suspended from 1 November 2023 onwards as agreed with IEC, thus no schedule for environmental monitoring has been made in November 2023.

AECOM Asia Co. Ltd. 7 December 2023

According to the updated site layout of CEDD Entrusted Works and Updated EM&A Manual for EP-376/2009 and EP-364/2009, Pedestrian Plaza (CMA5b) and WDII PRE Site Office (CMA6A) were selected as the most affected sensitive receiver during the construction phase.

3.2 Construction Noise Monitoring

Monitoring Requirements

3.2.1 In accordance with the EM&A Manual, impact noise monitoring should be conducted for at least once a week during the construction phase of the Project. **Table 3.2** summarises the monitoring parameters, frequency and duration of impact noise monitoring.

Table 3.2 Noise Monitoring Parameters, Frequency and Duration

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

Monitoring Locations

3.2.2 The monitoring station for construction noise monitoring pertinent to the Project has been identified based on the approved EM&A Manual for SCL (HUH-ADM) of the Project. Location of the noise monitoring station is summarised in **Table 3.3**.

Table 3.3 Noise Monitoring Station during the Construction Phase

Identification No.	District	Alternative Noise Monitoring Location
M1a ¹	Wan Chai	Footbridge for Ex-Harbour Road Sports Centre

Remark:

Monitoring Schedule for the Reporting Month

3.2.3 Environmental monitoring for noise during the construction phase was suspended from 1 November 2023 onwards as agreed with IEC, thus no schedule for environmental monitoring has been made in November 2023.

3.3 Landscape and Visual Monitoring

Monitoring Requirements

3.3.1 In accordance with the EM&A Manual, the implementation and maintenance of landscape mitigation measures should be checked to ensure that they are fully realized. The task and frequency on Landscape and Visual Monitoring is summarised in **Table 3.4**.

Table 3.4 Landscape and Visual Monitoring Task and Frequency

Phase Monitoring Task		Frequency
Construction	Monitoring of the contractor's operations during the construction period.	Weekly
Establishment Works	Monitoring of the planting works during the 12-month Establishment period after completion of the construction works.	Quarterly

Monitoring Schedule for the Reporting Month

3.3.2 The monitoring for Landscape and Visual during the establishment period will be commence in December 2023 at a frequency of quarterly basis. The first monitoring on the landscape and visual implementation in establishment period will be scheduled in February, May, August and November 2024 tentatively.

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According to the updated site layout of CEDD Entrusted Works and Updated EM&A Manual for EP-376/2009 and EP-364/2009, Footbridge for Ex-Harbour Road Sports Centre (M1a) was selected as the most affected sensitive receiver during the construction phase.

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

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

Table 4.1 Status of Required Submission under Further Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.3 (FEP- 13//364/2009/H & FEP- 03/376/2009)	Monthly EM&A Report for October 2023	12 November 2023

AECOM Asia Co. Ltd. 9 December 2023

5 MONITORING RESULTS

5.1 Construction Dust Monitoring

5.1.1 As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed, hence the environmental monitoring for air quality during the construction phase was suspended from 1 November 2023 onwards as agreed with IEC.

5.2 Regular Construction Noise Monitoring

5.2.1 As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed, hence the environmental monitoring for noise during the construction phase was suspended from 1 November 2023 onwards as agreed with IEC.

5.3 Waste Management

- 5.3.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 5.3.2 As advised by the Contractor, 10m³ of inert C&D material was generated and disposed of as public fill in the reporting month. No inert C&D materials were reused in other projects or in the Contract in the reporting month. No fill material was imported in the reporting month. 31m³ general refuse was generated in the reporting month. No metal, paper/cardboard packaging material, plastic was collected by recycling contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. No Type 1 and Type 2 of Marine sediment were disposed of at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table is annexed in **Appendix D**.
- 5.3.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 5.3.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

5.4 Landscape and Visual

5.4.1 Weekly inspection of the implementation of landscape and visual mitigation measures was conducted. A summary of the site inspection is provided in **Appendix B**. The observations and recommendations made during the site inspections are presented in **Table 5.1**.

Table 5.1 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Landscape & Visual	Nil	Nil	Nil

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6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

6.1.1 As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed with respect to the joint inspection conducted with IEC on 11 October 2023. The Contractor, ET and IEC share the view that there is no adverse environmental impact of remaining works under FEP-03/376/2009 and FEP-13/364/2009/H, hence the respective weekly environmental site inspection was suspended from 1 November 2023 onwards as agreed with IEC.

AECOM Asia Co. Ltd. 11 December 2023

7 ENVIRONMENTAL NON-CONFORMANCE

7.1 Summary of Monitoring Exceedances

- 7.1.1 Air quality monitoring was suspended in the reporting month.
- 7.1.2 Noise monitoring was suspended in the reporting month.

7.2 Summary of Environmental Non-Compliance

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

7.3 Summary of Environmental Complaints

7.3.1 No environmental related complaint was received in the reporting month. Cumulative statistics on environmental complaints is provided in **Appendix C**.

7.4 Summary of Environmental Summon and Successful Prosecutions

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

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8 FUTURE KEY ISSUES

8.1.1 As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed with respect to the joint inspection conducted with IEC on 11 October 2023. The Contractor, ET and IEC share the view that there is no adverse environmental impact of remaining works under FEP-03/376/2009 and FEP-13/364/2009/H, thus no future key issues have been predicted in reporting month.

AECOM Asia Co. Ltd. 13 December 2023

9 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

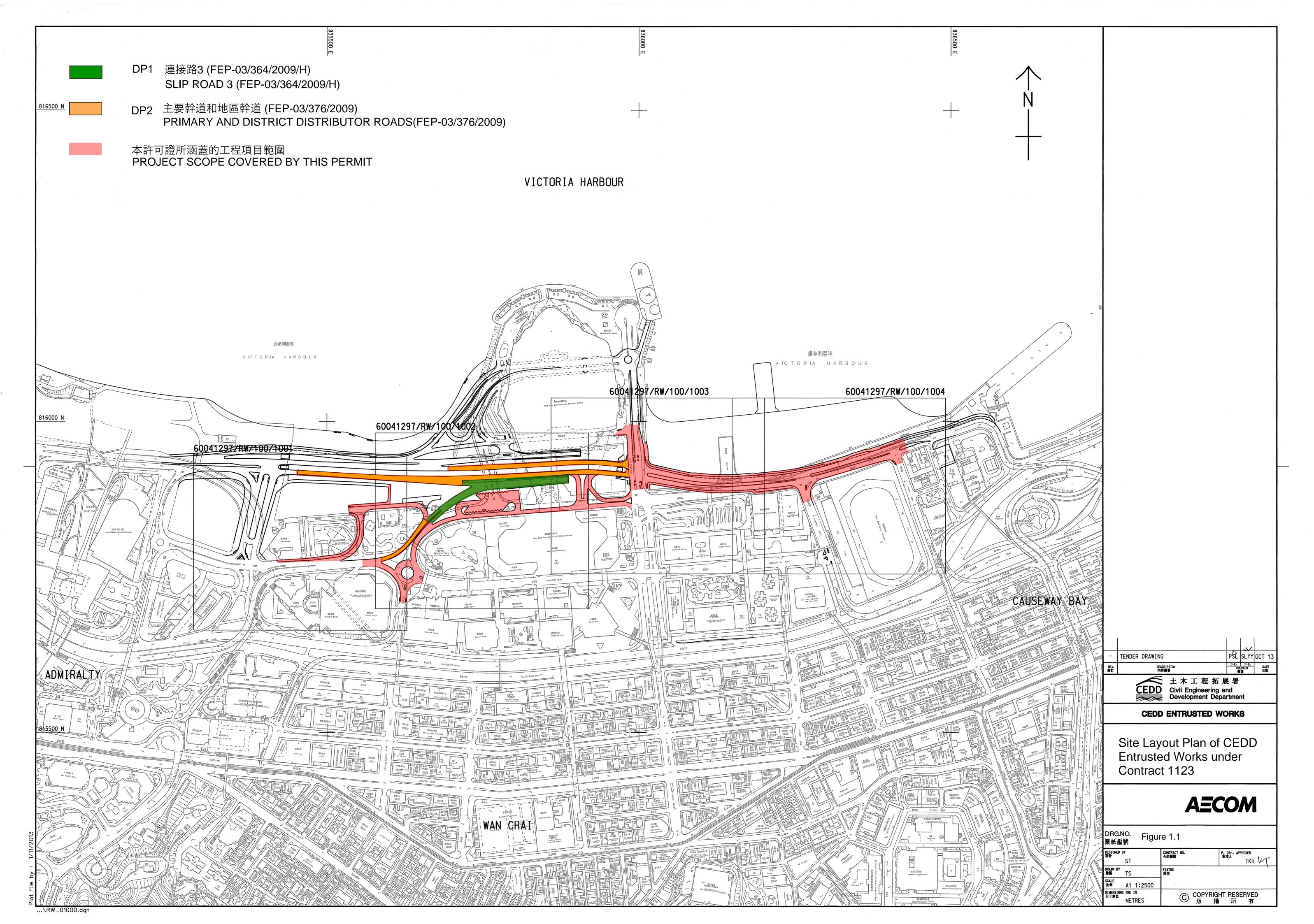
- 9.1.1 No environmental complaint was received in the reporting month.
- 9.1.2 No notification of summons and successful prosecution were received in the reporting month.
- 9.1.3 Referring to the Contractor's information, no notification of summons and successful prosecution was received in the reporting month.
- 9.1.4 As confirmed with the Contractor, the major construction activities under FEP-03/376/2009 and FEP-13/364/2009/H have been completed with respect to the joint inspection conducted with IEC on 11 October 2023. The Contractor, ET and IEC share the view that there is no adverse environmental impact of remaining works under FEP-03/376/2009 and FEP-13/364/2009/H, hence the respective weekly environmental site inspection and environmental monitoring for air quality and noise during the construction phase were suspended from 1 November 2023 onwards as agreed with IEC.

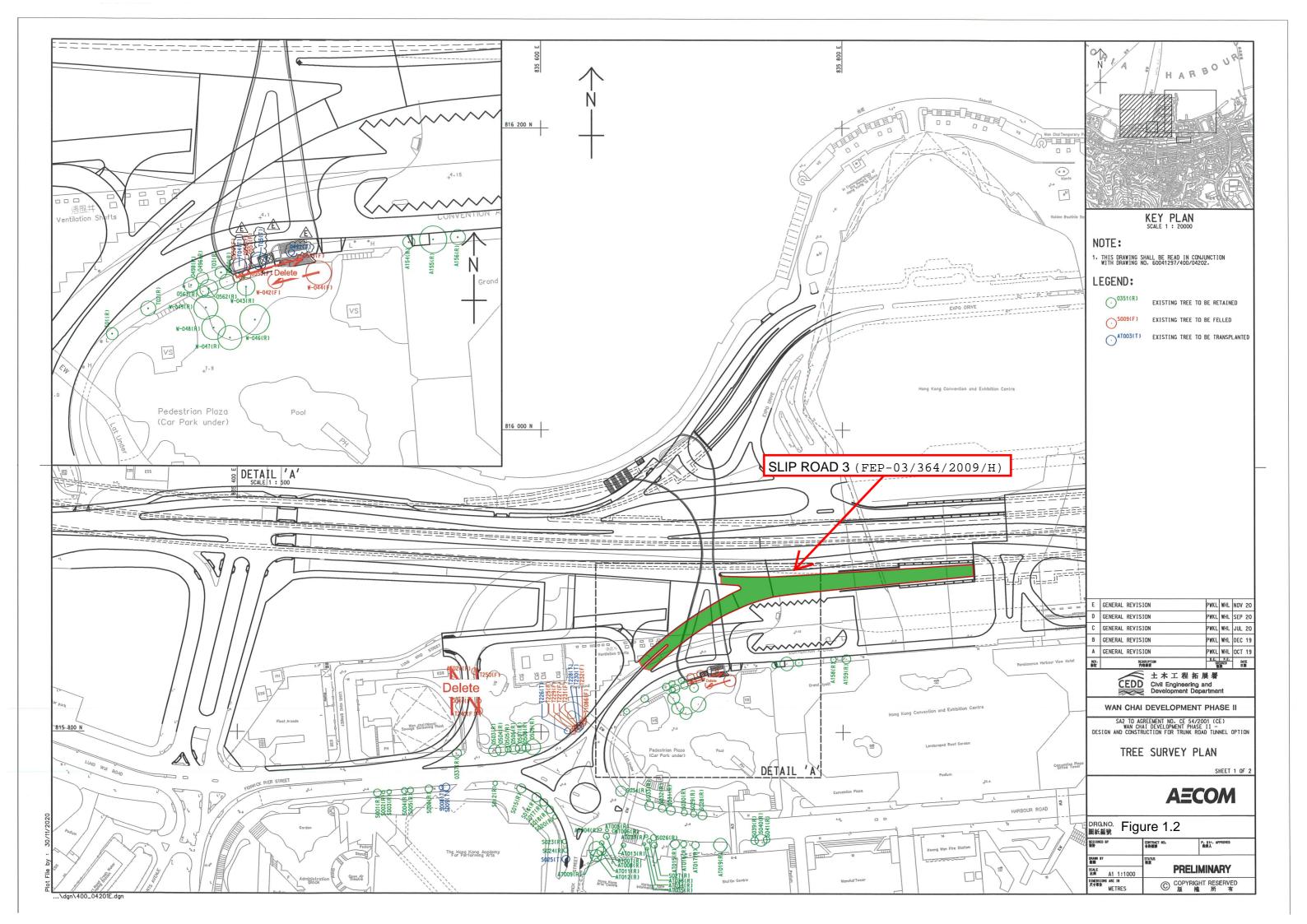
9.2 Recommendations

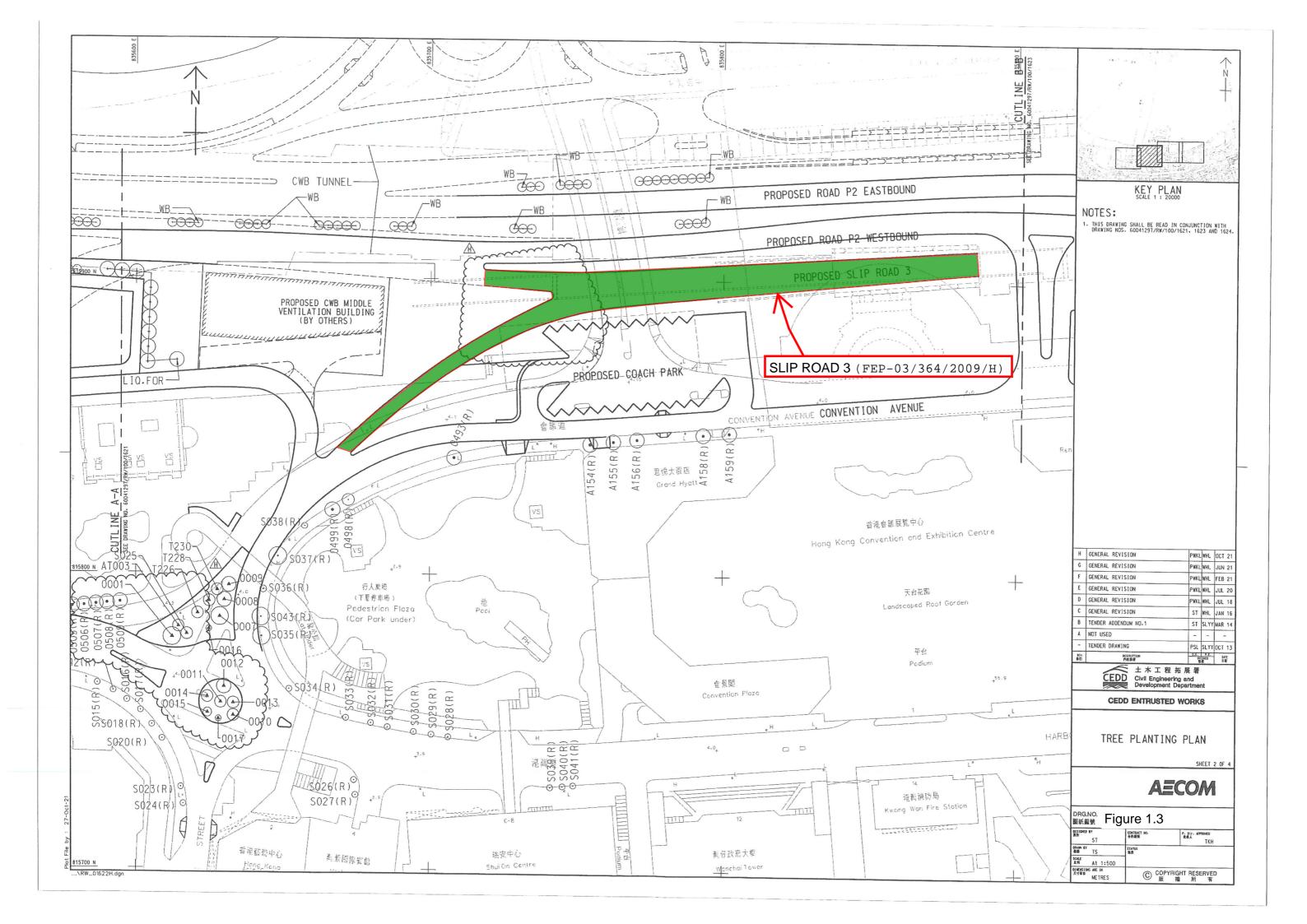
9.2.1 As the environmental site inspections were suspended in the reporting month, hence no recommendation was made.

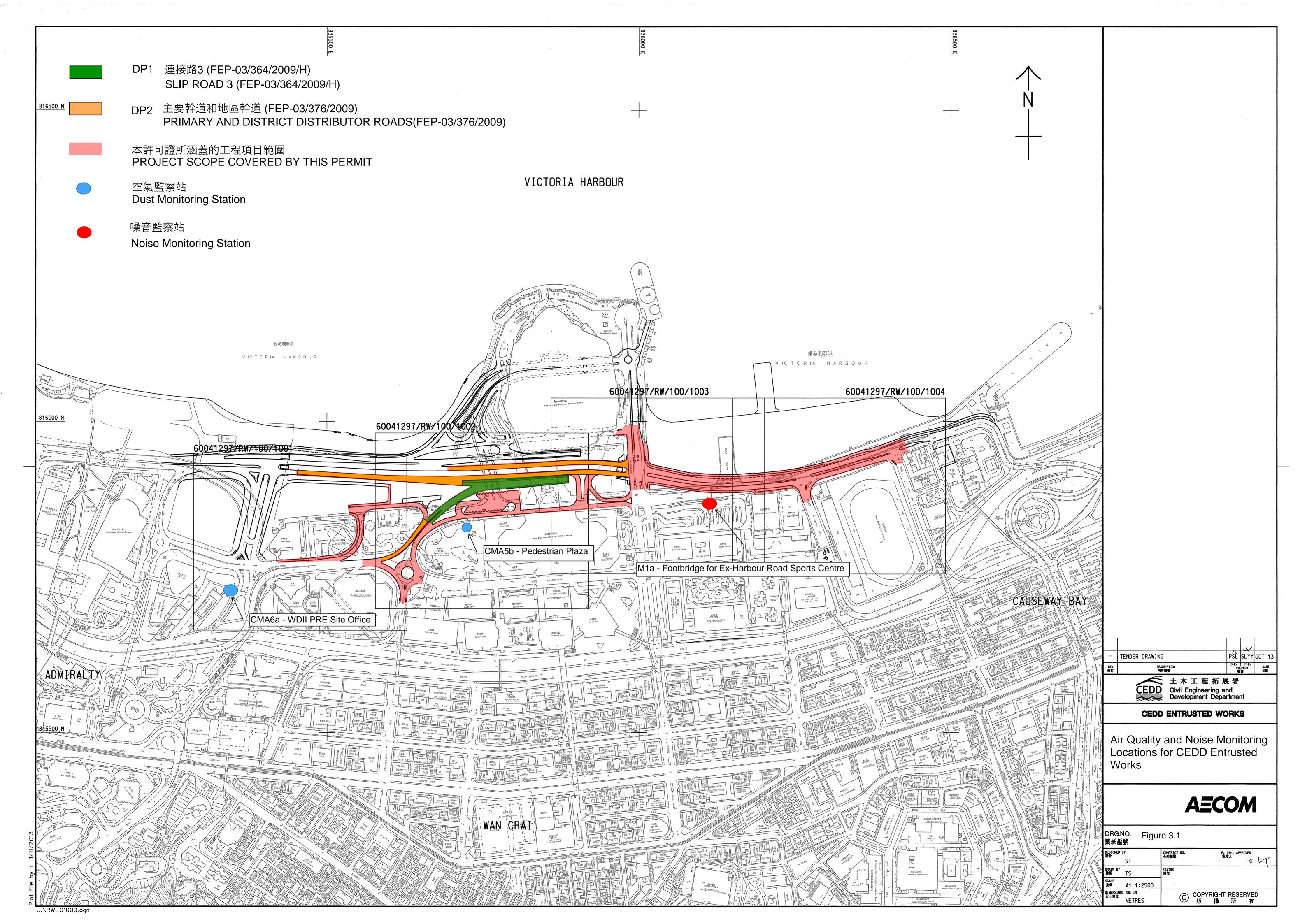
AECOM Asia Co. Ltd. 14 December 2023







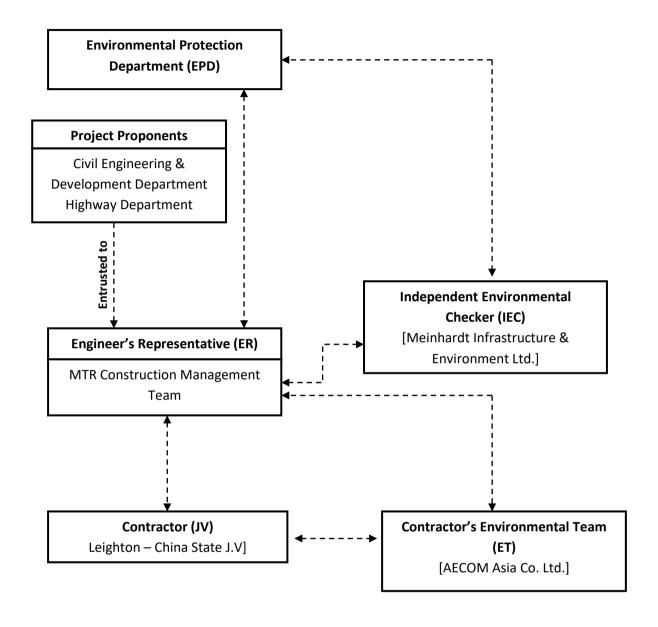




APPENDIX A

Project Organization Structure

Appendix A Project Organisation Structure



Appendix A AECOM

APPENDIX B

Implementation Schedule of Environmental Mitigation Measures

EIA Ref.	Recommended Mitigation Measures	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
Construct	ion Dust Impact	<u> </u>			
Construct	ion Phase				
S3.6.5	Four times a day watering of the work site with active operations	Contractor	Works areas	Construction phase	N/A
S3.8.1	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts.	Contractor	Works areas	Construction phase	
	 Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition; 				N/A
	Watering during excavation and material handling;				N/A
	 Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and 				N/A
	Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.				N/A
/	 Dust suppression measures (con't) De-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement The portion of any road where along the site boundary should be kept clear of dusty materials. Use of frequent watering for any dusty construction process (e.g. breaking works) to reduce dust emissions. 	Contractor	Works areas	Construction phase	N/A N/A N/A
/	 Emission from Vehicles and Plants All vehicles shall be shut down in intermittent use. Only well-maintained plant should be operated on-site and plant should be serviced regularly to avoid emission of black smoke. All diesel fuelled construction plant within the works areas shall be powered by ultra low sulphur diesel fuel (ULSD) 	Contractor	Works areas	Construction phase	N/A N/A N/A
Airborne I	Noise Impact				
	ion Phase				
S4.9.4	 Good Site Practice: Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction 	Contractor	Works areas	Construction phase	N/A
	 Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program. 				N/A
	Mobile plant, if any, shall be sited as far away from NSRs as possible.				N/A
	 Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum. 				N/A N/A
	 Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. 				N/A
	 Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from onsite construction activities. 				IVA

EIA Ref.	Recommended Mitigation Measures	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
For DP1 –	 CWB (Within the Project Boundary)				
S4.8.3 – S4.8.5	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: Slip road 8 tunnel Construction of diaphragm wall and substructures of the tunnel approach ramp Excavation Construction of slabs Backfill Demolition and construction of substructures for the IEC Demolition works of existing piers and crossheads of the marine section of the existing IEC Use of PME grouping for the following tasks:	Contractor	Works areas	Construction phase	N/A N/A N/A N/A N/A N/A
	At-grade roadwork				N/A N/A
	Substructure for IECL connection				IN/A
	WDII Major Roads (Road P2)			1	
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: • Temporary road diversion • Resurfacing				N/A N/A
NA 4 2	At-grade roadwork				N/A
Water Qua					
Constructi		_	T	T -	1
S5.8	 Construction Runoff and Drainage: Use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow; 	Contractor	Works areas	Construction phase	N/A
	 Permanent drainage channels shall incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities shall be based on the guidelines in Appendix A1 of ProPECC 				N/A
	 PN 1/94; A sediment tank constructed from preformed individual cells of approximately 6 - 8 m³ capacity can be used for actiling ground water prior to disposely. 				N/A
	 settling ground water prior to disposal; Oil interceptors shall be provided in the drainage system for the tunnels and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor shall 				N/A
	 have a bypass to prevent flushing during periods of heavy rain; Precautions and actions to be taken when a rainstorm is imminent or forecast, and during or after rainstorms. 				N/A
	Particular attention shall be paid to the control of any silty surface runoff during storm events; On-site drainage system shall be installed prior to the commencement of other construction activities. Sediment				N/A
	 traps shall be installed in order to minimize the sediment loading of the effluent prior to discharge; All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge shall be adequately designed for the controlled release of storm flows. All sediment control measures shall be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage shall be reinstated to its original condition when the construction work is finished or the temporary diversion is no longer required; 				N/A
	 All fuel tanks and store areas shall be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity; 				N/A

EIA Ref.	Recommended Mitigation Measures	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
	Minimum distances of 100 m shall be maintained between the storm water discharges and the existing or planned WSD flushing water intakes during construction phase				N/A
\$5.8	Sewage from Construction Work Force: Construction work force sewage discharges on site shall be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage shall be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.	Contractor	Works areas	Construction phase	N/A
5.8	Floating Debris and Refuse: Collection and removal of floating refuse shall be performed at regular intervals on a daily basis. The contractor shall be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.	Contractor	Works areas and adjacent water	Construction phase	N/A
5.8	Storm Water Discharges: Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.	Contractor	Works areas and adjacent water	Construction phase	N/A
/aste Mai	nagement Implications				
onstruct	ion Phase				
66.7.7	 Good Site Practices: Recommendations for good site practices during the construction activities include: Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; Training of site personnel in proper waste management and chemical waste handling procedures; Provision of sufficient waste disposal points and regular collection for disposal; Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and 	Contractor	Works areas	During planning and design stage, and construction stage	V V V
6.7.8	A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites). Waste Reduction Measures:	Contractor	Works areas	During planning	V
	 Recommendations to achieve waste reduction include: Sort C&D waste from demolition of the existing waterfront structures to recover recyclable portions such as metals. Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. 			and design stage, and construction stage	N/A V V
	 Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force. Any unused chemicals or those with remaining functional capacity shall be recycled. Use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material. Prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re- 				N/A N/A V

EIA Ref.	Recommended Mitigation Measures	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
S6.7.10	General Refuse: General refuse shall be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from	Contractor	Works areas	Construction phase	V
	 C&D material. A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material. 				V
S6.7.11	Chemical Wastes: After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Contractor	Works areas	Construction phase	N/A
S6.7.12 – S6.7.13	 Construction and Demolition Material: C&D material shall be sorted on-site into inert C&D material (that is, public fill) and C&D waste. All the suitable inert C&D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary 	Contractor	Works areas	Construction phase	N/A
	 stockpiling area will be required for the separated materials. In order to monitor the disposal of public fill and C&D waste at public fill reception facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system. 				N/A
S6.7.14	 Bentonite Slurry: The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows: If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis. 	Contractor	Works areas	Construction phase	N/A
	 If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. 				N/A
	 If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal. 				N/A
/	 Accidental spillage To prevent accidental spillage of chemicals, the following is recommended: Proper storage and handling facilities will be provided. All the tanks, containers, storage area will be bunded and the locations will be locked as far as possible from the sensitive watercourse and stormwater drains. The contractor will register as a chemical waste producer if chemical wastes would be generated. Storage of 	Contractor	Works areas	Construction phase	N/A N/A N/A
	chemical waste arising from the construction activities will be stored with suitable labels and warnings. • Disposal of chemical wastes will be conducted in compliance with the requirements as stated in the Waste disposal (Chemical Waste) (General) Regulation.				N/A
Land Cont	amination Impact				
S.7.1.1	As no potential contaminative land uses were identified within the Study Area, adverse land contamination impacts associated with the construction and operation of the Project is not expected. As such, environmental protection and mitigation measures are considered not necessary and will not be covered in this EM&A Manual.	-	-	-	N/A

EIA Ref.	Recommended Mitigation Measures	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status				
Landscape	Landscape and Visual								
Construction	on Phase								
For DP1 – C	CWB (Within the Project Boundary) and DP2 - WDII Major Roads (Road P2)								
Table 10.5	 CM1 - Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical. CM2 - Existing trees to be retained on site shall be carefully protected during construction. CM3 - Trees unavoidably affected by the works shall be transplanted where practical. 	Contractor	Works areas	Construction phase	V N/A N/A				
	CM4 - Compensatory tree planting shall be provided to compensate for felled trees. CM5 - Control of night-time lighting. CM6 - Erection of decorative screen hoarding compatible with the surrounding setting.				N/A V N/A				

Legend: V = implemented;

x = not implemented;

@ = partially implemented;

N/A = not applicable

APPENDIX C

Cumulative Statistics of Exceedances, Complaints, Notification of Summons and Successful Prosecutions

Appendix D

Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. received in this month	Total no. received since project commencement
Environmental complaints	-	-	-	0	0
Notification of summons	-	-	-	0	0
Successful Prosecutions	-	-	-	0	0

APPENDIX D

Waste Flow Table

MONTHLY SUMMARY WASTE FLOW TABLE

Contract No.:MTR SCL 1123 - Exhibition Station and Western Approach Tunnel (Road P2 Works)

Reporting Month: Nov 2023

Monthly Summary Waste Flow Table for 2023

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly					Actual Quantities of Marine Dumping Monthly	
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics	Chemical Waste	Others, e.g. general refuse	Type 1	Type 2
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)	(in '000m ³)	(in '000m ³)
Jan	0.015	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Feb	0.013	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000
Mar	0.014	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000
Apr	0.082	0.000	0.000	0.000	0.082	0.000	0.000	0.000	0.000	0.000	0.071	0.000	0.000
May	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000
Jun	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000
Sub-total	0.124	0.000	0.000	0.000	0.124	0.000	0.000	0.000	0.000	0.000	0.124	0.000	0.000
July	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
August	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
September	0.004	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000
October	0.003	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000
November	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.031	0.000	0.000
December													
Total	0.131	0.000	0.000	0.000	0.141	0.000	0.000	0.000	0.000	0.000	0.178	0.000	0.000

Comments:

- Assumption: The densities of Rock, Soil, Mixed Rock and Soil, and Regular Spoil are 2.0 ton/m³; the density of general refuse is 1.0 ton/m³; the density of waste oil is 1.0 kg/L.
- 2) The cut-off date of waste amount in Nov is 30/10/2023 for Public Fill Facilities and Landfill.
- 3) The amounts of waste in Nov is 31.39 ton for Landfill and 25.58 tons for Public Fill.
- 4) The amount of import fill in June is 0 ton, for cut-off date as 30/11/2023.
- 5) The amount of metal waste generated in Nov is 0 kg, for cut-off date as 30/11/2023.
- 6) The amount of paper waste generated in Nov is 0 kg, for cut-off date as 30/11/2023.
- 7) The amount of plastic waste generated in Nov is 0 kg, for cut-off date as 30/11/2023.