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## **QUARTERLY EM&A REPORT**

## September 2017 - November 2017

Client : Civil Engineering and Development

Department, HKSAR

Contract No. : KLN/2015/07

Contract Name: Environmental Monitoring Works for

Contract KL/2014/03 – Kai Tak Development – Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway

**Report No.** : 0405/15/ED/0952A

EP-337/2009 New Distributor Roads Serving the Planned Kai Tak

**Development Area** 

EP-339/2009/A Decommissioning of the Remaining Parts (Ex-GFS

Building, Radar Station and Hong Kong Aviation Club)

of the former Kai Tak Airport

EP-451/2013 Trunk Road T2

**Prepared by :** Janet W. T. Yu

**Reviewed by:** Alfred Y. S. Lam

Certified by :

Colin K. L. Yung

Environmental Team Leader MateriaLab Consultants Limited



Ref.: CEDKTDS3EM00 0 0256L.17

27 December 2017

Hyder-Meinhardt Joint Venture 20/F., AXA Tower, Landmark East, 100 How Ming Street, Kwun Tona, Kowloon, Hong Kong

By Post and Email

Attention: Mr. Wong W K, Chris

Dear Mr. Wong,

Re: Contract No. KL/2014/03 - Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway **Quarterly EM&A Report for September to November 2017** 

Reference is made to the Environmental Team's submission of the Quarterly EM&A Report for September 2017 to November 2017 (Report No. 0405 15 ED 0952A) we received by e-mail on 23 December 2017.

Please be informed that we have no adverse comment on the captioned report.

Thank you for your attention. Please do not hesitate to contact us should you have any queries.

Yours sincerely, For and on behalf of Ramboll Environ Hong Kong Limited

ant for Deorf

F. C. Tsang

Independent Environmental Checker

C.C. CEDD Attn.: Ms. Amy Chu

Fax: 2369 4980

MateriaLab Attn.: Mr. Colin K. L. Yung

Fax: 2450 8032

CRBC

Attn.: Mr. Arnold Chan

Fax: 2283 1689

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## **EXECUTIVE SUMMARY**

- i. The Civil Engineering and Development Department HKSAR has appointed MateriaLab Consultants Limited (MCL) to undertake the Environmental Team services for the Project and implement the EM&A works.
- ii. This is the seventh Quarterly EM&A Report presents the environmental monitoring and audit works for the period between 1 September 2017 and 30 November 2017. As informed by the Contractor, major activities in the reporting period included:

September 2017	October 2017	November 2017
<ul> <li>Excavation and laying of drainage pipe and manhole;</li> <li>Seawall modification works;</li> <li>Construction of tunnel box structure;</li> <li>D-wall construction works;</li> <li>Pumping test; and</li> <li>Excavation and ELS construction.</li> </ul>	<ul> <li>Excavation and laying of drainage pipe and manhole;</li> <li>Seawall modification works;</li> <li>Construction of tunnel box structure;</li> <li>D-wall construction works;</li> <li>Pumping test; and Excavation and ELS construction.</li> </ul>	<ul> <li>Excavation and laying of drainage pipe and manhole;</li> <li>Seawall modification works;</li> <li>Construction of tunnel box structure;</li> <li>D-wall construction works;</li> <li>Pumping test; and Excavation and ELS construction.</li> </ul>

#### Breaches of the Action and Limit Levels

iii. No Action and Limit Level exceedance for 24-hr TSP and noise was recorded in the reporting period at all monitoring stations.

## Complaint, Notification of Summons and Successful Prosecution

iv. No environmental complaint and no notification of summons and successful prosecution were received in the reporting period.

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#### 1. INTRODUCTION

#### 1.1 **Background**

- The Kai Tak Development is located in the south-eastern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.
- Contract No. KL/2014/03 is the works package to construct an approximately 420m long supporting underground structure (SUS) underneath Shing Cheong Road and Cheung Yip Street. The EM&A programme under this Contract is governed by three EPs (EP-337/2009, EP-339/2009/A and EP-451/2013) and two EM&A Manuals (AEIAR-130/2009 and AEIAR-174/2013). The Works to be executed under this Contract and corresponding EPs include but not be limited to the following main items:

### EP-451/2013 - Trunk Road T2

Construction of approximately 420m long supporting underground structure (SUS) (i) including diaphragm walls, barrettes, piled foundation, top and bottom slabs, end wall and adits underneath Shing Cheong Road and Cheung Yip Street;

## EP-337/2009 - New Distributor Roads Serving the Planned Kai Tak Development

- Widening and re-alignment of Cheung Yip Street of approximately 330m long and associated footpaths;
- Demolition, reconstruction and widening of Shing Cheong Road of approximately 410m (iii) long and associated footpaths;
- Construction of drainage outfall and modification of existing seawall; (iv)
- Construction of ancillary works including surface drainage, sewerage, water, fire (v) fighting, street lighting, street furniture, road marking, road signage, utilities and services, irrigation and landscape works.

# EP-339/2009/A - Decommissioning of the Remaining Parts (Ex-GFS Building, Radar Station and Hong Kong Aviation Club) of the former Kai Tak Airport

(vi) Demolition of RADAR Tower and guard house;

## Other works not covered by any EP

- Construction of two subways between Phase II of New Acute Hospital (Site A) and Hong Kong Children's Hospital (Site C), and between Phase I of New Acute Hospital (Site B) and Site C;
- (viii) Construction of District Cooling System (DCS) along Cheung Yip Street and Shing Cheong Road
- 1.1.3 The location and boundary of the site is shown in **Figure 1**.
- This Quarterly EM&A report is required under Section 16.1.2 and 16.7.1 of the EM&A Manual AEIAR-130/2009. It is to report the results and findings of the EM&A programme required in the EM&A Manual.
- 1.1.5 This is the seventh quarterly EM&A Report which summaries the impact monitoring results and audit findings for the Project within the period between 1 September 2017 and 30 November 2017.

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#### 1.2 **Project Organization**

- 1.2.1 The project proponent was the Civil Engineering and Development Department, HKSAR (CEDD). Hyder Meinhardt Joint Venture (HMJV) was commissioned by CEDD as the Engineer for the Project. Ramboll Environ Hong Kong Limited was commissioned as the Independent Environmental Checker (IEC). China Road and Bridge Corporation (Hong Kong) (CRBC) was appointed as the main contractor for the construction works under the contract KL/2014/03. MateriaLab Consultants Limited (MCL) was appointed as the Environmental Team (ET) by CEDD to implement the EM&A programme for the Project.
- The organization structure is shown in Appendix B. The key personnel contact names and 1.2.2 numbers for the Project are summarized in **Table 1.1**.

Table 1 1 Contact Information of Key Personnel

Table 1.1 Contact information of Key Personner								
Party	Position	Name	Telephone	Fax				
Project Proponent (CEDD)	Co-ordinator	Ms. Amy Chu	3106 3172	2369 4980				
Engineer's Representative (HMJV)	Chief Resident Engineer	Mr. W. K., Chris Wong	3742 3803	3742 3899				
IEC (Ramboll Environ Hong Kong Limited)	Independent Environmental Checker	Mr. F. C. Tsang	3465 2851	3465 2899				
Main Contractor (CRBC)	Site Agent	Mr. Chan See Wai, Arnold	9380 4110	2283 1689				
Main Contractor (CRBC)	Environmental Officer	Mr. Calvin So	9724 6254	2283 1689				
ET (MCL)	Environmental Team Leader	Mr. Colin Yung	3565 4114	3565 4160				

#### 1.3 **Construction Programme and Activities**

1.3.1 The construction of the Project commenced in February 2016 and is expected to complete in 2020. The construction programme is shown in **Appendix A**. A summary of the major construction activities undertaken in the reporting period were:

September 2017	October 2017	November 2017
<ul> <li>Excavation and laying of drainage pipe and manhole;</li> <li>Seawall modification works;</li> <li>Construction of tunnel box structure;</li> <li>D-wall construction works;</li> <li>Pumping test; and</li> <li>Excavation and ELS construction.</li> </ul>	<ul> <li>Excavation and laying of drainage pipe and manhole;</li> <li>Seawall modification works;</li> <li>Construction of tunnel box structure;</li> <li>D-wall construction works;</li> <li>Pumping test; and Excavation and ELS construction.</li> </ul>	<ul> <li>Excavation and laying of drainage pipe and manhole;</li> <li>Seawall modification works;</li> <li>Construction of tunnel box structure;</li> <li>D-wall construction works;</li> <li>Pumping test; and Excavation and ELS construction.</li> </ul>

#### 2. SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

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#### 2.1 **Monitoring Requirement**

In accordance with the approved EM&A Manuals, 24-hour Total Suspended Particulates (TSP) level and Leg (30min) at the designated monitoring stations is required. Impact 24-hour TSP monitoring should be carried out at least once every 6 days. In case of complaints, 1-hour TSP monitoring should be carried out at least 3 times per 6 days when the highest dust impacts are likely to occur. Leg (30min) monitoring is conducted for at least once a week during the construction phase between 0700 and 1900 on normal weekdays. The Action and Limit Levels of the air quality monitoring and noise monitoring are given in Appendix C

#### 2.2 **Monitoring Locations**

- According to the EM&A Manual, three monitoring locations for air quality monitoring and noise monitoring, namely KTD1, KTD2 and KER1, are covered by this Contract within the South Apron Area of Former Kai Tak Airport. The other two air quality monitoring locations and two noise monitoring locations which are identified in Cha Kwo Ling area, are farther than 500m and 300m away from the site boundary respectively and thus not covered by this Contract. The monitoring works in Cha Kwo Ling area are covered by other Contract(s) respectively.
- 2.2.2 According to the approved alternative baseline air quality and noise monitoring locations (EPD reference: EP2/K19/A/21 Pt.5), the original monitoring locations (KTD1, KTD2 and KER1) are proposed to be replaced by alternative monitoring locations (KTD1a, KTD2a and KER1b), they are summarized in Table 2.1 and shown in Figure 2.

Table 2.1 **Location of Air Quality Monitoring and Noise Monitoring Station** 

Monitoring Station	Location
KTD1a	Centre of Excellence in Paediatrics (Children's Hospital)
KTD2a	G/IC Zone next to Kwun Tong Bypass (Future Hospital at Site 3C1)
KER1b	Site Boundary at Cheung Yip Street

#### 2.3 **Results and Observations**

- No Action and Limit Level exceedance for 24-hr TSP was recorded in the reporting period at all monitoring stations.
- 2.3.2 No Action / Limit Level exceedance for construction noise was recorded in the reporting period at all monitoring stations.
- No raining and wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.
- During the reporting period, major dust sources including loading and unloading of C&D wastes, vehicles movement were observed in the site. Major noise sources including noise emission from plant & PME and some other construction activities, travel of vehicles, loading and unloading of C&D waste were observed in the site. Non-project related construction activities at the nearby construction site and road traffic along Shing Cheong Road, Cheung Yip Street and the Kwun Tong By-pass were observed. The above factors may affect the monitoring results.
- 2.3.5 Graphical presentation of the monitoring data in the reporting period is presented in **Appendix**

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#### 2.4 **Comparison of Monitoring Results with EIA Predictions**

2.4.1 The monitoring data was compared with the EIA predictions as summarized in Table 2.4 and **Table 2.5.** 

Table 2.4 Comparison of 24-hr TSP data with EIA predictions

Monitoring Station	Receiver Reference	eiver hour TSP Rep		24-hour TSP concentration in Reporting Period (μg/ m³)			Average 24-hour TSP concentration in Reporting Period (μg/ m³)		
			Concentration (µg/m³)	Sep 2017	Oct 2017	Nov 2017	Sep 2017	Oct 2017	Nov 2017
KTD1a	KTD3	126	101 – 159	35 - 119	66 -134	122	79	97	
KTD2a	-	-	25 – 122	26 - 82	7 - 81	50	58	48	
KER1b	KTD6	169	42 – 110	39 - 81	26 - 78	68	61	66	

Note:

For KTD2a, there was no receiver reference in the EIA report, EIAR-174/2013.

Predicted Maximum TSP Concentration extracted from Table 4.14 of EIA Report, EIAR-174/2013.

Table 2.5 Comparison of Noise Monitoring data with EIA predictions

•							
Monitoring Station	Receiver	Maximum Predicted Mitigated		Leq <sub>(30min)</sub> dB(A) in Reporting Period			
Monitoring Station	Reference	Construction Noise Level, dB(A)	Sep 2017	Oct 2017	Nov 2017		
KTD1a	KTD1	74	62 - 72	60 - 77	61 - 72		
KTD2a	KTD2	75	60 - 66	61 - 71	61 - 70		
KER1b	KER1	75	67 - 70	65 - 71	64 - 70		

Note:

Maximum Predicted Mitigated Construction Noise Level extracted from Table 5.13 of EIA Report, EIAR-174/2013.

- For the monitoring location KTD 1a, the measured noise level (77 dB(A)) on 27<sup>TH</sup> October 2017 exceeded the limit level. Piling noise from the Children Hospital was observed by our staff during noise monitoring. Repeat measurement was conducted to confirm the finding and the measured noise level (60 dB(A)) was below the limit level. Only vehicle noise along Shing Fung Road was observed in the second noise monitoring.
- The 24-hour TSP monitoring result of KTD 1a on 16, 28 September and 14 November 2017 exceeded the prediction in the approved EIA report. No project-related dust source was observed during the site monitoring. The discrepancy between the 24-hour TSP concentration and EIA Prediction in KTD1a is considered due to dust source from the non-project related construction activities near the monitoring station and the road traffic along Shing Fung Road.
- The noise monitoring results in the reporting months were below the Maximum Predicted Mitigated Construction Noise Level in the approved Environmental Impact Assessment (EIA) Report and no Action / Limit Level exceedance was recorded in the reporting period.

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#### LANDSCAPE AND VISUAL 3.

#### 3.1 **Results and Observations**

- To monitor and audit the implementation of landscape and visual mitigation measures, 13 weekly Landscape and Visual Site audits were carried out and 6 of them were carried out by a Registered Landscape Architect. The weekly Landscape and Visual Impact reports were counter-signed by IEC as according to the requirement of EM&A Manual (AEIAR-130/2009).
- 3.1.2 Total 3 no. of non-compliance were recorded in the weekly Landscape and Visual Site audits in the reporting period.
- 3.1.3 Observations and recommendations during site audits are summarized in **Table 5.1**.

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#### **WASTE MANAGEMENT** 4.

#### 4.1 **Results and Observations**

- C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 4.1.2 The amount of wastes generated by the site activities in the reporting period is shown in Appendix E.
- 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.
- 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.

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#### SITE INSPECTION 5.

#### 5.1 **Site Inspection**

- Site inspections were carried out weekly to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the mitigation measures implementation schedule is provided in **Appendix F**.
- 5.1.2 In the reporting month, 13 site inspections were carried out. 6 of them were the joint inspections with the IEC, ER, the Contractor and the ET.
- 5.1.3 No outstanding issues were reported during the reporting period.
- 5.1.4 All the follow-up actions requested by Contractor's ET and IEC during the site inspections were undertaken as reported by the Contractor and confirmed in the following weekly site inspection conducted during the reporting month.
- 5.1.5 Details of observations recorded during the site inspections are presented in **Table 5.1**.

Table 5.1 Observations and Recommendations of Site Audit

1 able 5.1 (	Jusei valions and N	ecommendations of Site Audit	
Parameters	Date	Observations and Recommendations	Follow-up
	20 September 2017	Open stockpile of construction materials shall be fully covered with impermeable sheeting (Zone 4).	The item was rectified by the Contractor and inspected on 28 September 2017.
	28 September 2017	Dust was found during the transportation of truck (Portion I). Contractors was reminded to provide adequate watering.	The item was rectified by the Contractor and inspected on 4 October 2017.
Air Quality	28 September 2017	Reminder: Exposed dry cement ash was handled and mixed in open area which generated a bulk dust (Zone 2). Contractor was reminded to handle the cement/PFA in an enclosed area with ventilation system and filter provided.	The item was rectified by the Contractor and inspected on 4 October 2017.
	12 October 2017	Contractor was reminded that open stockpiles of material shall be properly covered with impermeable sheeting to enhance dust suppression. Impermeable sheeting shall be provided. (Portion I)	The item was rectified by the Contractor and inspected on 18 October 2017.

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Parameters	Date	Observations and Recommendations	Follow-up
	12 October 2017	Contractor was reminded that handling or storage of bulk cement should be carried out in an enriched system or place in an arch shelter with the top and the three sides (Zone 2, 4)	The item was rectified by the Contractor and inspected on 18 October 2017.
	26 October 2017	Contractor was reminded that stock of more than 20 bags of cement should be covered by impervious sheeting (Zone 2).	The item was rectified by the Contractor and inspected on 2 November 2017.
	30 November 2017	Plant and equipment should be well-maintain to prevent dark smoke emission (Zone 4). Contractor should maintain plant and equipment to prevent dark smoke emission.	The item was rectified by the Contractor and inspected on 6 December 2017.
Noise	4 October 2017	Constructor was reminded to provide acoustic fabric for breaking tip (zone 1).	The item was rectified by the Contractor and inspected on 12 October 2017.
Nuise	12 October 2017	The door of air compressor shall be closed to reduce noise impact. (Zone 4)	The item was rectified by the Contractor and inspected on 18 October 2017.
Water Quality		NA	
	28 September 2017	Chemical containers should be stored properly (Zone 1). Proper drip tray shall be provided.	The item was rectified by the Contractor and inspected on 4 October 2017.
Chemical and Waste Management	4 October 2017	Chemical containers shall be stored on drip tray (Zone 4).	The item was rectified by the Contractor and inspected on 12 October 2017.
	18 October 2017	Contractor was reminded to store chemical containers properly. (Zone 2, 4)	The item was rectified by the Contractor and inspected on 26 October 2017.

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Parameters	Date	Observations and Recommendations	Follow-up		
	26 October 2017	Chemicals should be stored in drip tray properly (zone 4). Drip tray shall be provided.	The item was rectified by the Contractor and inspected on 2 November 2017.		
	30 November 2017	Contractor was reminded to store chemical in drip tray (Zone 1). Drip tray shall be provided.	The item was rectified by the Contractor and inspected on 6 December 2017.		
Land Contamination	NA				
	20 September 2017	Open stockpiles of construction materials shall be fully covered with impermeable sheeting. (Zone 4)	The item was rectified by the Contractor and inspected on 28 September 2017.		
Landscape and Visual Impact	12 October 2017	Stockpile at Portion I should be properly covered.	The item was rectified by the Contractor and inspected on 18 October 2017.		
	12 October 2017	Building materials at zone 4 should be properly stored and covered.	The item was rectified by the Contractor and inspected on 18 October 2017.		
General		NA			

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**MateriaLab** 

#### **ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE** 6.

#### 6.1 **Environmental Exceedance**

No Action and Limit Level exceedance for 24-hr TSP and noise was recorded in the reporting period at all monitoring stations. Number of exceedance in the reporting period was summarized in Table 6.1.

Table 6.1 Summary of Exceedance in Reporting Period

Table 6.1 Sammary of Exocedance in Reporting 1 ched								
Monitoring Station		Number of exceedance in the reporting period						
		24hr TSP μg/m³			Leq (30min) dB(A)			
		September 2017	October 2017	November 2017	September 2017	October 2017	November 2017	Total
L/TD4 -	AL	0	0	0	0	0	0	0
KTD1a	LL	0	0	0	0	0	0	0
VTD2c	AL	0	0	0	0	0	0	0
KTD2a	LL	0	0	0	0	0	0	0
KER1b	AL	0	0	0	0	0	0	0
NEKID	LL	0	0	0	0	0	0	0
Total	AL	0	0	0	0	0	0	0
	LL	0	0	0	0	0	0	0

#### 6.2 **Complaints, Notification of Summons and Prosecution**

6.2.1 No inspection notice, notification of summons or prosecution was received in this reporting period. Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in Table 6.2, 6.3 and 6.4.

Table 6.2 Environmental Complaints Log

Complaint Log No.	Date of Notification	Received From and Received By	Nature of Complaint	Date of Investigation	Outcome	Date of Reply
1	7 December 2016	Andy Choy	Air	13 February 2017	Project- related	13 February 2017
2	9 February 2017	Andy Choy	Air	22 February 2017	Not Project- related	7 March 2017
3	2 May 2017	Andy Choy	Noise	4 May 2017	Not Valid	22 May 2017
4	16 July 2017	HMJV	Water Quality	4 August 2017	Not Project- related	4 August 2017

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Table 6.3 Cumulative Statistics on Complaints

Environmental Parameters  Cumulative No. Brought		No. of Compla	Cumulative Project-to-		
Parameters	Forward	September 2017	October 2017	November 2017	Date
Air	2	0	0	0	2
Noise	1	0	0	0	1
Water	1	0	0	0	1
Waste	0	0	0	0	0
Total	0	0	0	0	0

## Table 6.4 Cumulative Statistics on Successful Prosecutions

Environmental	Cumulative No. Brought	No. of Comple	aints This Repor	ting Period	Cumulative Project-to-
Parameters	Forward	September 2017	October 2017	November 2017	Date
Air	0	0	0	0	0
Noise	0	0	0	0	0
Water	0	0	0	0	0
Waste	0	0	0	0	0
Total	0	0	0	0	0

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#### 7. IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

#### 7.1 **Implementation Status**

7.1.1 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 mitigation measures during the reporting period is summarized in **Appendix F**.

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#### **CONCLUSIONS** 8.

- No Action and Limit Level exceedance for 24-hr TSP and noise was recorded in the reporting 8.1.1 period at all monitoring stations.
- No complaint of air quality was received. Therefore, no impact 1-hour TSP monitoring was conducted in the reporting period.
- 13 weekly environmental site inspections were carried out in the reporting period. Recommendations on mitigation measures on air quality, water quality, noise, waste management, land contamination and landscape and visual impact were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 13 weekly Landscape and Visual Site audits were carried out on in the reporting period and 6 of them were carried out by a Registered Landscape Architect in the reporting period. The weekly Landscape and Visual Impact reports were counter-signed by IEC as according to the requirement of EM&A Manual (AEIAR-130/2009). Total 3 no. of non-compliance were recorded in the weekly Landscape and Visual Site audits in the reporting period.
- Referring to the Contractor's information, no environmental complaint, notification of summons and successful prosecution was received in the reporting period.
- 8.2 Comment and Recommendations
- The recommended environmental mitigation measures, as proposed in the EIA reports and EM&A Manuals shall be effectively implemented to minimize the potential environmental impacts from the Project. The EM&A programme would effectively monitor the environmental impacts generated from the construction activities and ensure the proper implementation of mitigation measures.
- 8.2.2 According to the environmental audit performed in the reporting period, the following recommendations were made:

#### Air Quality Impact

- Open stockpile shall be covered with impermeable sheeting to prevent dust emission.
- Regular watering to site working areas shall be provided to suppress dust emission.
- Handling or storage of bulk cement should be carried out in an enriched system or place in an arch shelter with the top and the three sides.
- Plant and equipment should be well-maintain to prevent dark smoke emission

## Construction Noise Impact

- Contractor was reminded to close the door of the air compressor to reduce noise
- Appropriate noise absorption material shall be provided to the operating breaker.

## Water Quality Impact

No specific observation was identified in the reporting period.

## Chemical and Waste Management

- General refuse shall be stored properly in enclosed bins or compaction units and removed regularly.
- Chemical containers shall be stored on drip tray.

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## Land Contamination

No specific observation was identified in the reporting period.

## Landscape and Visual Impact

- Open stockpiles shall be covered by unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance.
- Handling or storage of bulk cement should be carried out in an enriched system or place in an arch shelter with the top and the three sides.

# **General Condition**

No specific observation was identified in the reporting period.

## Permit / Licenses

No specific observation was identified in the reporting period.

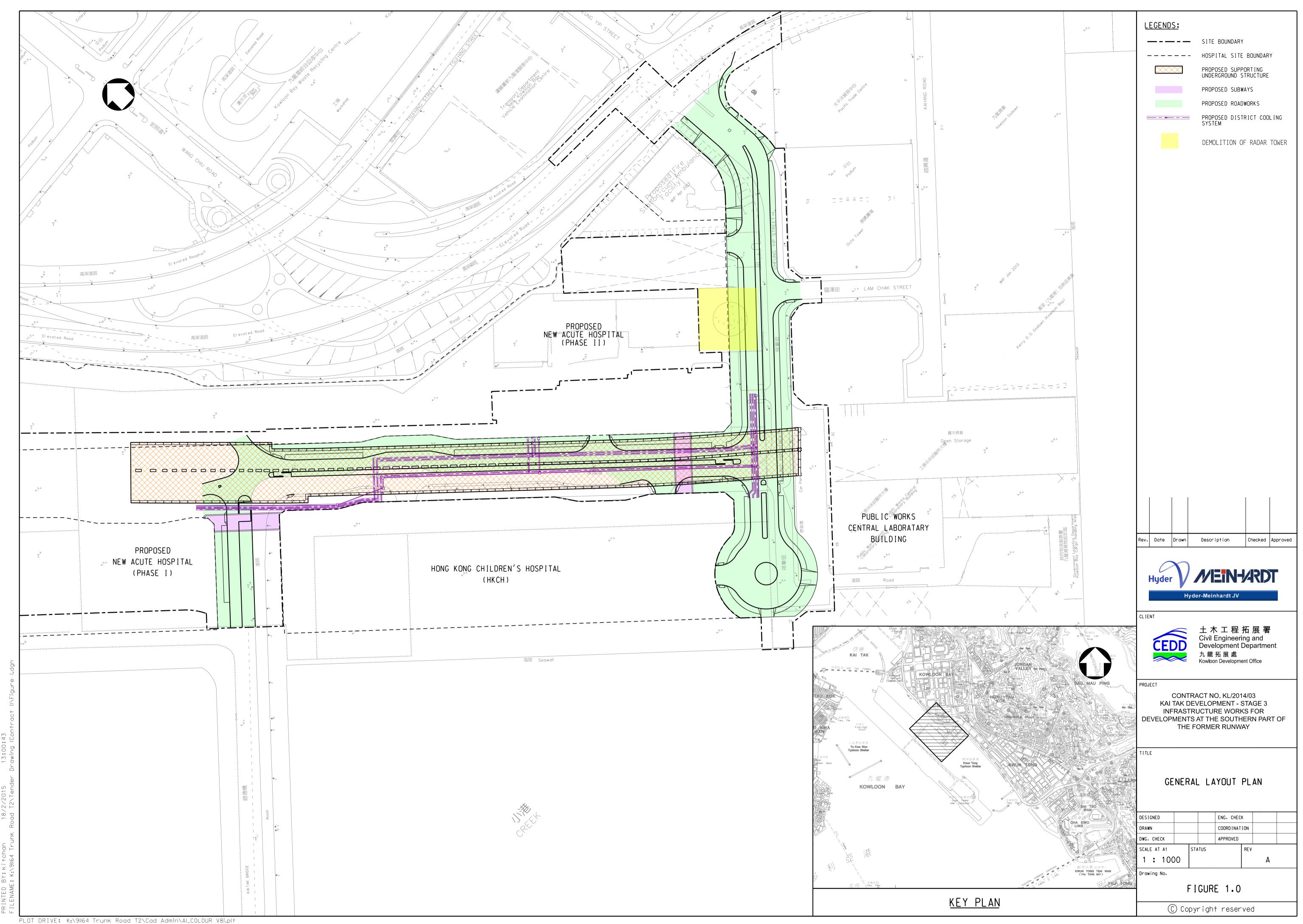
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Figure 1

**Project General Layout** 



Room 723 & 725, 7/F, Block B,

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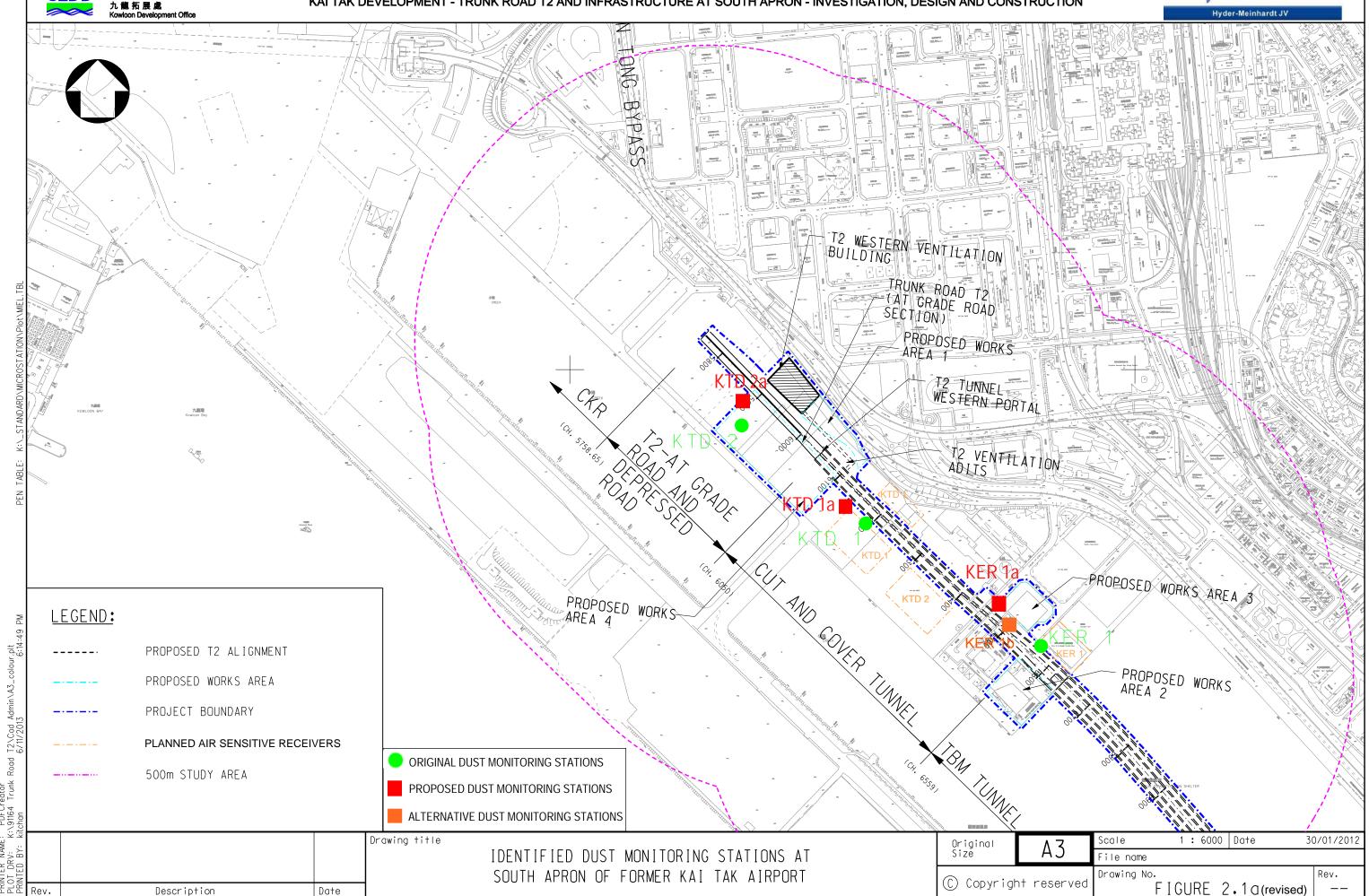
# Figure 2

**Air and Noise Monitoring Locations** 

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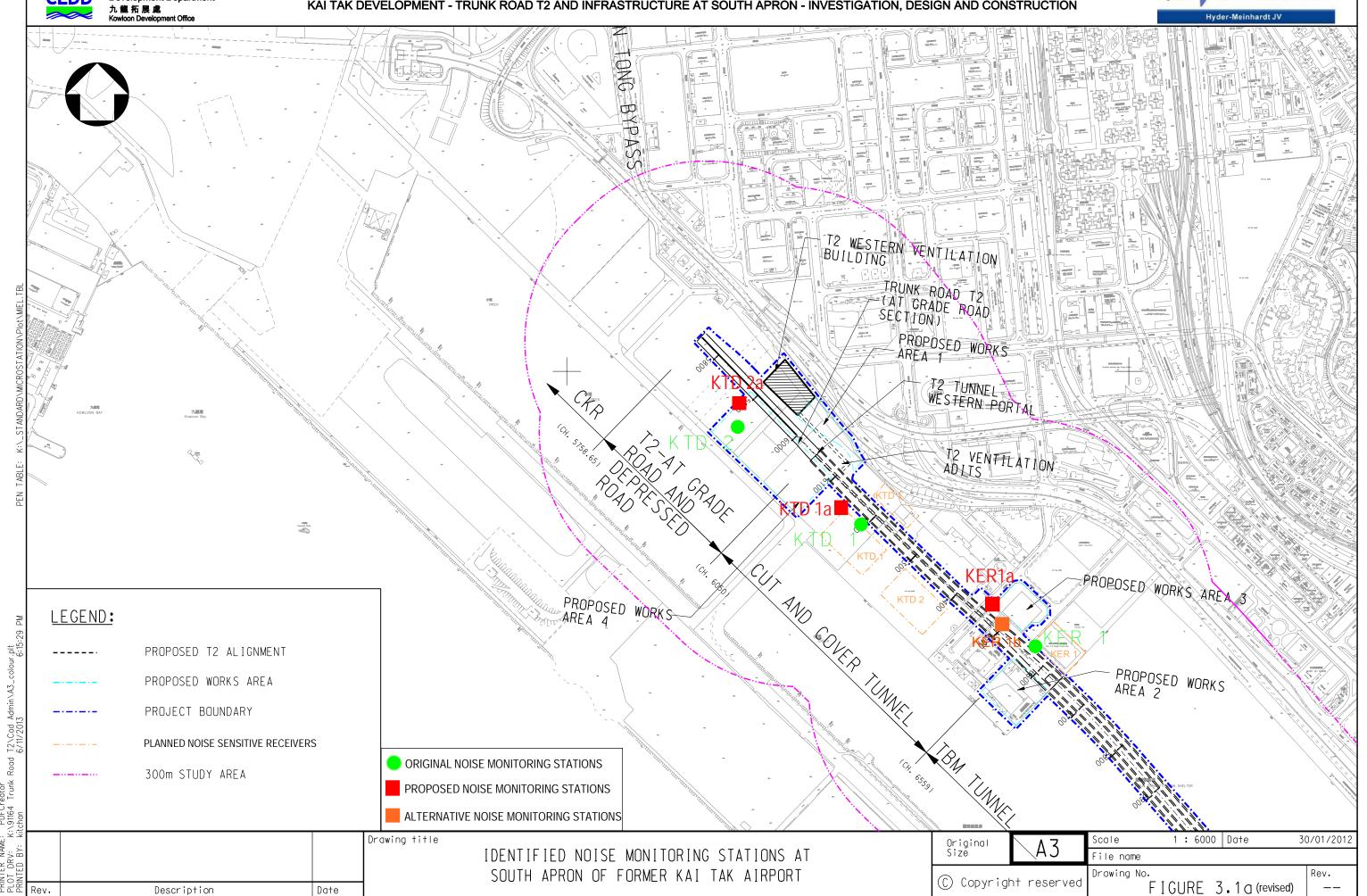




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Kowloon Development Office

# AGREEMENT NO. CE 38/2008(HY) KAI TAK DEVELOPMENT - TRUNK ROAD T2 AND INFRASTRUCTURE AT SOUTH APRON - INVESTIGATION, DESIGN AND CONSTRUCTION





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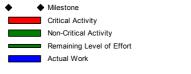


# Appendix A

**Construction Programme** 

#### 土木工程拓展署 Civil Engineering and Development Department Hyder MEIN-ARDT KL/2014/03 Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway CEDD 九龍拓展處 Dur KL/2014/03-Stage 3 Infrastructure Works for Developments at the Southern Par 660 04-Jan-16 A 1190 660 01-Feb-16 A 21-Jun-19 **Project Key Dates** 0 26-Oct-17 26-Oct-17 **Project Completion Date** K-PK-PCD-1200 Section 2 - Demolition of Radar Tower and Guard House within Portions X and P of the Site 26-Oct-17\* 0 0 31-Aug-17 31-Aug-17 **Site Handover Date** K-PK-SHD-1100 Portion B 0 31-Aug-17\* 129 10-May-17 A 06-Jan-18 **General Submission** 0 21-Aug-17 A 31-Aug-17 A Condition Survey & Construction Impact Assessment Submit condition survey report at HKCH K-DR-PRE-1195 Submit condition survey report at HKCH 14 0 21-Aug-17 A 31-Aug-17 A 84 07-Dec-17 15-Sep-17 **Alternative Design Submission and Approval** Package B06: SUS Top & base slab and intermediate wall from (CH6+220 to CH6+568) 07-Dec-17 84 84 15-Sep-17 K-PA-ADS-1420 Revise & resubmit DDA drawing (SUS Top & Base slab and Intermediate wall from 12-Oct-17 28 28 15-Sep-17 CH6+220 to CH6+568) K-PA-ADS-1430 | Engineer's review and approval 56 13-Oct-17 07-Dec-17 56 06-Jan-18 238 129 14-May-17 A **Major Temporary Works Design** ELS design for construction of SUS from C K-PA-GSP-6820 ELS design for construction of SUS from CH6+220 to CH6+291 in Zone 2 - horizontal 30-Oct-17 05-Sep-17 ELS design for construction of SUS from CH6+291 to CH6+568 in Zone 4 - horizontal members K-PA-GSP-6835 | ELS design for construction of SUS from CH6+291 to CH6+568 in Zone 4 - horizontal 25 14-May-17 A 24-Sep-17 members K-PA-GSP-6840 ELS design for construction of subway A (Bay 1&5) 56 56 12-Nov-17 06-Jan-18 25-Dec-17 K-PA-GSP-6900 Falsework design for construction of top slab of SUS structure 56 56 31-Oct-17 101 10-May-17 A 09-Dec-17 **Major Construction Works Method Statement** 14 29-Jun-17 A K-PA-GSP-7155 Engineer's comments and approval 28 13-Sep-17 Method statement of Excavation and ELS for SUS Construction for Zone 4 K-PA-GSP-7160 Method statement of Excavation and ELS for SUS Construction for Zone 4 07-Sep-17 2.8 8 12-Aug-17 A Engineer's comments and approval K-PA-GSP-7165 Engineer's comments and approval 28 05-Oct-17 28 08-Sep-17 Method statement of Excavation and ELS for SUS Construction for Zone 2 K-PA-GSP-7170 Method statement of Excavation and ELS for SUS Construction for Zone 2 08-Oct-17 28 28 11-Sep-17 Engineer's comments and approva 05-Nov-17 K-PA-GSP-7175 Engineer's comments and approval 28 28 09-Oct-17 Method statement for Construction K-PA-GSP-7450 Method statement for Construction of top slab and base slab of SUS 09-Oct-17 05-Nov-17 28 28 03-Dec-17 K-PA-GSP-7455 Engineer's comments and approval 28 28 06-Nov-17 K-PA-GSP-7460 Method statement for Construction of subway A (Bay 1&5) 28 28 12-Nov-17 09-Dec-17 K-PA-GSP-7495 Engineer's comments and approval 28 14 10-May-17 A 13-Sep-17 380 01-Feb-16 A 14-Sep-18 **Materials Procurement (Major Materials)** ELS struct / waling 75 | 10-Jun-16 A 13-Nov-17 K-PA-MP-1150 Manufacturing & delivery to site 360 75 10-Jun-16 A 13-Nov-17





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K-IM-TMT-1000 Tilt Monitoring near PWCL

**Roadwork and Drainage Works** 

Section 1 of the Works-Remainder of the Works



310

12 25-Apr-16 A

121 30-Aug-17 A

121 121 30-Aug-17 A 29-Dec-17

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K-01-RWS-9790 | Maintance department handover inspection



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K-1A-SV1-8950 | Construction of Side Wall Construction

K-1A-SV1-8960 | Erection of Scaffold and Installation of Re-prop Struct inside W/B and E/B



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Construction of Side Wall Construction

Erection of Scaffold and In

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#### 土木工程拓展署 Civil Engineering and Development Department Hyder MEIN-ARDT KL/2014/03 Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway CEDD Orig Dur Dur **Excavation and ELS Construction** 80 16-Aug-17 A Installation of Steel Bridge for Temporary Vehicular Access at CH6+325 K-1A-SV3-5530 Installation of Steel Bridge for Temporary Vehicular Access at CH6+325 08-Sep-17 10 8 16-Aug-17 A Laying Sheetpiles and Concreting for Temporary Vehicular Access at CH6+325 K-1A-SV3-5540 Laying Sheetpiles and Concretng for Temporary Vehicular Access at CH6+325 10 25-Aug-17 A 15-Sep-17 Miscellaneous Activities for Temporary Vehicular Access at CH6+325 K-1A-SV3-5550 Miscellaneous Activities for Temporary Vehicular Access at CH6+325 5 21-Sep-17 16-Sep-17 Excavation and Lateral Support (S2A) to +0.2mPD (CH6+291 to CH6+330) K-1A-SV3-7444 Excavation and Lateral Support (S2A) to +0.2mPD (CH6+291 to CH6+330) 12 22-Sep-17 07-Oct-17 12 Excavation and Lateral Support (S4A) to -1.52mPD (CH6+ 19-Oct-17 K-1A-SV3-7446 Excavation and Lateral Support (S4A) to -1.52mPD (CH6+291 to CH6+330) 10 10 09-Oct-17 Excavation and Lateral Suppor K-1A-SV3-7448 | Excavation and Lateral Support (S5A) to -6.47mPD (CH6+291 to CH6+330) 15 20-Oct-17 07-Nov-17 24-Nov-17 K-1A-SV3-7450 Excavation and Lateral Support (S6) to -9.4mPD (CH6+291 to CH6+330) 15 08-Nov-17 Construction of temporary steel decking and platfo K-1A-SV3-7456 Construction of temporary steel decking and platforms along the westbound diaphram walls 27 27 22-Sep-17 25-Oct-17 Excavation and Lateral Support K-1A-SV3-7458 Excavation and Lateral Support (S1A) to +1.25mPD (CH6+330 to CH6+370) 10 10 26-Oct-17 07-Nov-17 K-1A-SV3-7460 Excavation and Lateral Support (S2A) to -0.95mPD (CH6+330 to CH6+370) 12 12 08-Nov-17 21-Nov-17 05-Dec-17 K-1A-SV3-7462 Excavation and Lateral Support (S4A) to -3.41mPD (CH6+330 to CH6+370) 12 12 22-Nov-17 Excavation and Lateral Support (S2A) to -2.75mPD (CH6+370 to CH6+443) K-1A-SV3-7474 | Excavation and Lateral Support (S2A) to -2.75mPD (CH6+370 to CH6+443) 23 20 25-Aug-17 A 22-Sep-17 Excavation and Lateral Support (S4A) to -7.25mP 25-Oct-17 K-1A-SV3-7476 | Excavation and Lateral Support (S4A) to -7.25mPD (CH6+370 to CH6+443) 26 23-Sep-17 K-1A-SV3-7478 Excavation and Lateral Support (S5A) to -12.25mPD (CH6+370 to CH6+443) 30 30 26-Oct-17 30-Nov-17 ◆ Miscellaneous Activities for Temporary Vehicul K-1A-SV3-7486 Miscellaneous Activities for Temporary Vehicular Access at CH6+482 27-Oct-17 0 Excavation and Lateral Supp 09-Nov-17 K-1A-SV3-7488 Excavation and Lateral Support (S1) to +1.25mPD (CH6+443 to CH6+467) 10 30-Oct-17 Excavation K-1A-SV3-7490 Excavation and Lateral Support (S2) to -2.25mPD (CH6+443 to CH6+467) 10 10 10-Nov-17 21-Nov-17 K-1A-SV3-7492 Excavation and Lateral Support (S3) to -5.25mPD (CH6+443 to CH6+467) 10 10 22-Nov-17 02-Dec-17 187 87 27-Feb-17 A 13-Dec-17 SUS Structure from CH6+467 to 6+568 in Zone 4 E/B Construction of D-Wall 19 27-Feb-17 A 21-Sep-17 Testing of D-wall (Sonic test and IC) (CH6+510 to CH6+560) K-1A-SV4-2450 Testing of D-wall (Sonic test and IC) (CH6+510 to CH6+560) 18 10 27-Feb-17 A 11-Sep-17 K-1A-SV4-2460 Toe Grouting Works 14 05-Aug-17 A 21-Sep-17 **Construction of Socketed H-Pile** 12-Sep-17 26-Sep-17 Installation of Socketted H-piles (CH6+560 to CH6+565) K-1A-SV4-3600 Installation of Socketted H-piles (CH6+560 to CH6+565) 13 12-Sep-17 26-Sep-17 19 12-Apr-17 A 21-Sep-17 W/B and End Construction of D-Wall in TTA Stage 1A Construction of D-wall (CH6+560 to CH6+568) & end wall at CH6+568 K-1A-SV4-4700 Construction of D-wall (CH6+560 to CH6+568) & end wall at CH6+568 55 10 06-Jul-17 A 11-Sep-17 Testing of D-wall (Sonic test and IC) (CH6+467 to CH6+510) K-1A-SV4-4745 Testing of D-wall (Sonic test and IC) (CH6+467 to CH6+510) 12 12 12-Apr-17 A 13-Sep-17



K-1A-SV4-4760 Toe Grouting Works

**Pumping Test** 

K-1A-SV4-4750 Testing of D-wall (Sonic test and IC) (CH6+510 to CH6+568 and End Wall)



18

18 19-Apr-17 A

16 22-Jul-17 A 33 19-Aug-17 A

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20-Sep-17

21-Sep-17

10-Oct-17

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3 Months Rolling Programme					
Date	Revision	Checked	Approved		
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Testing of D-wall (Sonic test and IC) (CH6+510 to CH6+568 and End Wall)

#### KL/2014/03 Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway Hyder / MEINHARDT Dur K-1A-SV4-5000 Installation of Dewatering Well, Observation Well and Recharging Well at CH6+467 to Installation of Dewatering Well, Observation Well and Recharging Well at CH6+467 to CH 25 19-Aug-17 A 28-Sep-17 Installation of Dewatering Well, Observation Well and Recharging Well at CH6+550 to CH6+568 K-1A-SV4-5005 Installation of Dewatering Well, Observation Well and Recharging Well at CH6+550 to 20-Sep-17 8 12-Sep-17 ■ Initial Dewatering to verify the Discharge Rates of Wells for Pumping Test for Excavation in Zone 4 K-1A-SV4-5100 Initial Dewatering to verify the Discharge Rates of Wells for Pumping Test for Excavation in 21-Sep-17 21-Sep-17 Dewatering to Required Levels and Maintained for 48 Hours for Pumping Test for Excavation in K-1A-SV4-5110 Dewatering to Required Levels and Maintained for 48 Hours for Pumping Test for 25-Sep-17 3 22-Sep-17 Excavation in Zone 4 Ground Water Recovery Stage for Pumping Test for Excavation in Zone 4 K-1A-SV4-5120 Ground Water Recovery Stage for Pumping Test for Excavation in Zone 4 28-Sep-17 3 26-Sep-17 Review stage for Pumping test for excavation in Zone 4 29-Sep-17 K-1A-SV4-5130 Review stage for Pumping test for excavation in Zone 4 29-Sep-17 Review Report for Pumping test for excavation in Zone 4 K-1A-SV4-5140 Review Report for Pumping test for excavation in Zone 4 7 30-Sep-17 10-Oct-17 13-Dec-17 **Excavation and ELS Construction** 82 25-Aug-17 A Excavation and Triming Dwall to +2.0mPD for Temporary Bridge at CH6+482 K-1A-SV4-5500 Excavation and Triming Dwall to +2.0mPD for Temporary Bridge at CH6+482 6 25-Aug-17 A 12-Sep-17 ■ Breaking Bulging for Temporary Vehicular Access at CH6+482 K-1A-SV4-5510 Breaking Bulging for Temporary Vehicular Access at CH6+482 13-Sep-17 15-Sep-17 3 Installation of Lateral Support for Temporary Vehicular Access at CH6+482 26-Sep-17 K-1A-SV4-5520 Installation of Lateral Support for Temporary Vehicular Access at CH6+482 16-Sep-17

10 27-Sep-17

0 31-Aug-17

0 31-Aug-17

 Laying Sheetpiles and Concreting for Temporary Vehicula K-1A-SV4-5540 Laying Sheetpiles and Concretng for Temporary Vehicular Access at CH6+482 10 10 11-Oct-17 21-Oct-17 Miscellaneous Activities for Temporary Vehicul K-1A-SV4-5550 | Miscellaneous Activities for Temporary Vehicular Access at CH6+482 27-Oct-17 23-Oct-17 Breaking existing concrete slab / Excavation to +2.5mPD from CH6+4 Breaking existing concrete slab / Excavation to +2.5mPD from CH6+467 to CH6+530 12-Oct-17 K-1A-SV4-5555 17 17 25-Aug-17 A Excavation and Lateral Support (S1) to +0. K-1A-SV4-5600 Excavation and Lateral Support (S1) to +0.84mPD 14 13-Oct-17 30-Oct-17 Excavation K-1A-SV4-5650 Excavation and Lateral Support (S2) to -4.20mPD 20-Nov-17 18 18 31-Oct-17 13-Dec-17 K-1A-SV4-5700 Excavation and Lateral Support (S3) to -9.20mPD 20 20 21-Nov-17 0 31-Aug-17 31-Aug-17 Section 4B of the Works- Construction of Subway B (Subject to Excision) 0 31-Aug-17 31-Aug-17 Bay 1 & 2 K-4B-BAY-3100 Handover of Portion B 31-Aug-17\* 0

31-Aug-17

10-Oct-17

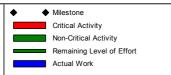
28-Nov-17 Section 5 of the Works-Completion of All Landscape Softworks 90 31-Aug-17 Procurement of plant species 28-Nov-17 90 31-Aug-17 21-Jun-19 660 04-Jan-16 A Section 7 of the Works-Preservation and Protection of Existing Trees Section 7 of the Works-Preservation and Protection of Existing Trees K-07-001-1000 1200 660 04-Jan-16 A 21-Jun-19 0 31-Aug-17 31-Aug-17 **Sections Completion Date** Completion of Section 2-Demolition of Radar Tower and Guard House Completion of Section 2-Demolition of Radar Tower and Guard House K-PK-SCC-2100 31-Aug-17 0



Bay 3 & 4

K-1A-SV4-5530 Installation of Steel Bridge for Temporary Vehicular Access at CH6+482

K-4B-BAY-2480 Interface Connection Details for HKCN of subway B



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Interface Connection Details for HKCN of subway B

3 Months Rolling Programme				
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土木工程拓展署 Civil Engineering and Development Department

九龍拓展處

CEDD

Installation of Steel Bridge for Temporary Vehicular Access at CH6+482

Room 723 & 725, 7/F, Block B,

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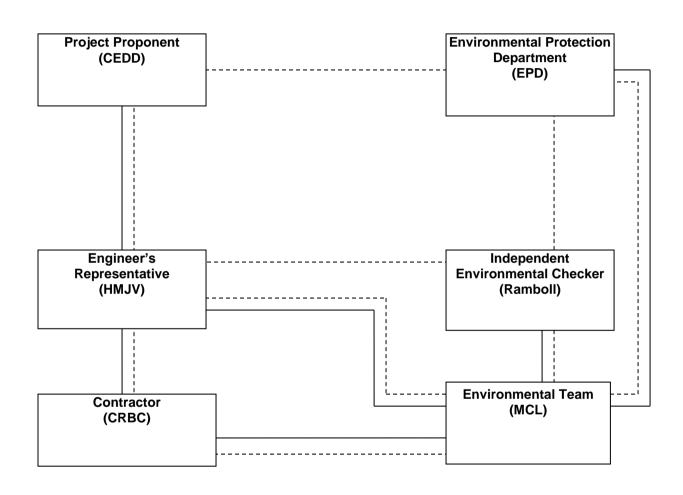
# Appendix B

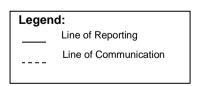
**Project Organization Chart** 

Room 723 & 725, 7/F, Block B, Profit Industrial Building,

: (852)-24508238 : (852)-24508032 Tel 1-15 Kwai Fung Crescent, Kwai Fong, Fax Hong Kong.. Email : mcl@fugro.com







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# Appendix C

**Action and Limit Levels for Air Quality and Noise** 

Room 723 & 725, 7/F, Block B, Profit Industrial Building,

1-15 Kwai Fung Crescent, Kwai Fong, Fax

: (852)-24508238 : (852)-24508032 Hong Kong.. Email : mcl@fugro.com



## Action and Limit Levels for 24-hr TSP and 1-hr TSP

Parameter	Monitoring Station	Action Level (μg/m³)	Limit Level (µg/ m³)
24-hr TSP	KTD1a	177	
24-π 13P (μg/m³)	KTD2a	157	260
(μg/πι-)	KER1b	172	
*1-hr TSP	KTD1a	285	
(µg/m³)	KTD2a	279	500
(μg/πι-)	KER1b	295	

### Note:

Action and Limit Levels for Construction Noise, Leq (30min), dB(A)

Time Period	Location	Action	Limit
0700-1900 hrs on normal weekdays	KTD1a KTD2a KER1b	When one documented complaint is received	75 dB(A)

<sup>1-</sup>hr TSP monitoring should be required in case of complaints.

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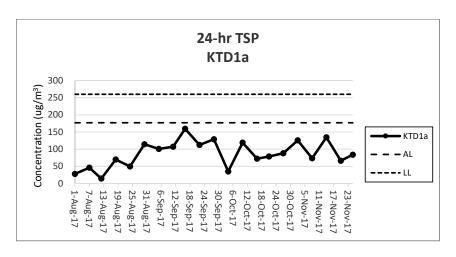
: (852)-24508238 1-15 Kwai Fung Crescent, Kwai Fong, Fax : (852)-24508032

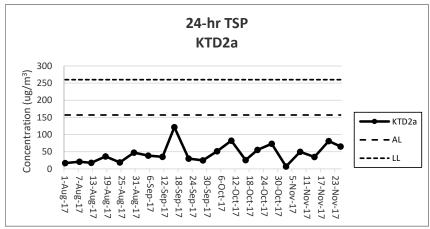
Hong Kong.. Email : mcl@fugro.com

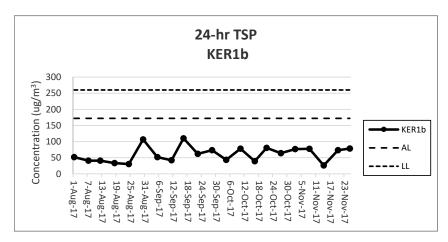


# Appendix D

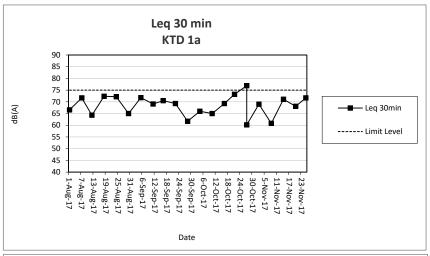
**Graphical Presentation of Monitoring Data** 

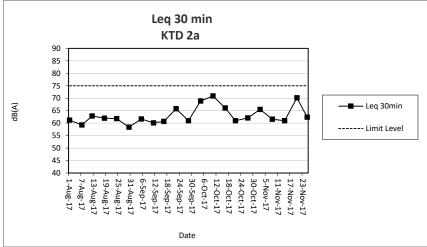


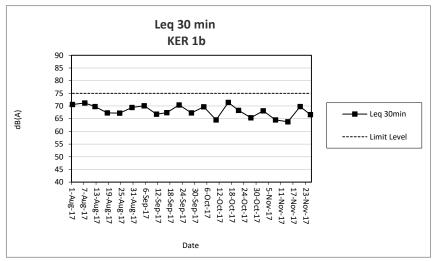




- 1) The major activities being carried out on site during the reporting period can be referred to Section 1.3.1.
- 2) The weather conditions during monitoring in the reporting period was range from cloudy, fine and sunny.
- 3) Any other factors which might affect the monitoing results can be referred to Section 2.3.4.







- 1) The major activities being carried out on site during the reporting period can be referred to Section 1.3.1.
- 2) The weather conditions during the reporting period can be referred to Appendix K.
- 3) Any other factors which might affect the monitoing results can be referred to Section 3.7.2.
- 4) QA/QC results, calibration results and detection limits can be referred to Appendix D.
- 5) For the monitoring location KTD 1a, the measured noise level (77 dB(A)) on 27<sup>TH</sup> October 2017 exceeded the limit level. Piling noise from the Children Hospital was observed by our staff during noise monitoring. Repeat measurement was conducted to confirm the finding and the measured noise level (60 dB(A)) was below the limit level. Only vehicle noise along Shing Fung Road was observed in the second noise monitoring.

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Appendix E

**Waste Flow Table** 

Room 723 & 725, 7/F, Block B, Profit Industrial Building,

1-15 Kwai Fung Crescent, Kwai Fong, Hong Kong.. Tel : (852)-24508238 Fax : (852)-24508032 Email : mcl@fugro.com



Waste Flow Table for Year 2016											
		Actual Quant	tities of Inert C&I	O Materials Gene	erated Monthly		Actual (	Quantities of Non-	inert C&D Wast	es Generated M	lonthly
Months	Total Quantity Generated (Inert C&D)	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 (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m³)	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2016 Jan	0.159	0.101	0.058	Nil	Nil	Nil	Nil	0.023	0.00002	0.0158	0.0335
2016 Feb	0.291	0.050	0.241	Nil	Nil	Nil	1.34	0.023	0.00002	0.0158	0.0335
2016 Mar	2.7389	0.0407	0.0662	Nil	2.632	Nil	5.92	0.023	0.00002	0.0158	0.0571
2016 Apr	4.1718	0.0578	0.462	Nil	3.652	Nil	12.5	0.023	0.00002	0.0158	0.0426
2016 May	3.592	Nil	0.299	Nil	3.293	Nil	5.23	0.023	0.00002	0.0158	0.0621
2016 June	4.6035	Nil	0.8555	Nil	3.748	Nil	Nil	0.023	0.00002	0.0158	0.0619
2016 July	6.155	0.153	0.015	Nil	5.987	Nil	7.84	0.023	0.00002	0.0158	0.0433
2016 Aug	5.1155	Nil	Nil	Nil	5.1155	Nil	19.93	0.023	Nil	Nil	0.0147
2016 Sept	7.2267	Nil	Nil	Nil	7.2267	Nil	33.65	0.023	Nil	Nil	0.0103
2016 Oct	4.6448	Nil	Nil	Nil	4.6448	Nil	13.30	0.023	Nil	Nil	0.0385
2016 Nov	6.1626	Nil	Nil	Nil	6.1626	Nil	27.06	0.023	Nil	Nil	0.0192
2016 Dec	6.3522	Nil	Nil	Nil	6.3522	Nil	13.30	0.023	Nil	Nil	0.0121
Total	51.213	0.4025	1.9967	Nil	48.8138	Nil	140.07	0.276	0.00014	0.1106	0.4288

<sup>1)</sup> The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

<sup>2)</sup> Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

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Waste Flow Table for Year 2017											
		Actual Quant	tities of Inert C&I	O Materials Gene	erated Monthly		Actual	Quantities of Non-	inert C&D Wast	es Generated M	onthly
Months	Total Quantity Generated (Inert C&D)	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 (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m³)	(in '000m³)	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2017 Jan	4.2300	Nil	Nil	Nil	4.2300	Nil	0.015	0.023	Nil	Nil	0.0109
2017 Feb	3.2128	Nil	Nil	Nil	3.2128	Nil	0.015	0.023	Nil	Nil	0.0096
2017 Mar	9.4759	Nil	Nil	Nil	9.4759	Nil	0.034	0.023	Nil	Nil	0.0162
2017 Apr	4.8827	Nil	Nil	Nil	4.8827	Nil	0.016	0.023	Nil	Nil	0.0062
2017 May	3.0366	Nil	Nil	Nil	3.0366	Nil	0.022	0.023	Nil	Nil	0.0282
2017 Jun	2.5656	Nil	Nil	Nil	2.5656	Nil	41.25	Nil	Nil	Nil	0.0357
2017 Jul	5.5267	Nil	0.7851	Nil	4.7416	Nil	4.01	0.4515	Nil	0.25	0.0364
2017 Aug	11.4734	Nil	0.0276	Nil	11.4458	Nil	7.4	Nil	Nil	Nil	0.0196
2017 Sep	23.9373	Nil	2.6167	Nil	21.3206	Nil	3.52	Nil	Nil	Nil	0.0333
2017 Oct	17.8261	Nil	0.4069	Nil	17.4192	Nil	Nil	Nil	Nil	Nil	0.0156
2017 Nov	5.8834	Nil	0.6664	Nil	5.217	Nil	Nil	Nil	Nil	Nil	0.023
Total	92.0505	Nil	4.5027	Nil	87.5478	Nil	56.282	0.5665	Nil	0.25	0.2347

<sup>1)</sup> The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

<sup>2)</sup> Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

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**MateriaLab** 

# Appendix F

**Environmental Mitigation Implementation Schedule (EMIS)** 

Room 723 & 725, 7/F, Block B, Profit Industrial Building,

1-15 Kwai Fung Crescent, Kwai Fong, Hong Kong..



EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
Air Quality Measur					
	ads Serving the Pla				
AEIAR-130/2009 \$3.2	AEIAR 130/2009 EM&A Manual S2.2	8 times daily watering of the work site with active dust emitting activities.	Contractor	All relevant worksites	Implemented
Decommissioning	of the Radar Station	n of the former Kai Tak Airport			
AEIAR-130/2009 S5.2.19	AEIAR 130/2009 EM&A Manual S4.2.4	The excavation area should be limited to as small in size as possible and backfilled with clean and/or treated soil shortly after excavation work.	Contractor	All relevant worksites	Not Applicable
		The exposed excavated area should be covered by the tarpaulin during night time.  The top layer soils should be sprayed with fine misting of water immediately before the excavation.			
Trunk Road T2					
AEIAR-174/2013 S4.9.2.1	AEIAR-174/2013 EM&A Manual S2.3.1.1	Watering of the construction areas 12 times per day to reduce dust emissions by 91.7%, with reference to the "Control of Open Fugitive Dust Sources" (USEPA AP-42). The amount of water to be applied would be 0.91L/m2 for the respective watering frequency.	Contractor	All relevant worksites	Implemented
		Dust enclosures with watering would be provided along the loading ramps and conveyor belts for unloading the C&D materials to the barge for dust suppression.	Contractor	All relevant worksites	Not Applicable
		8 km per hour is the recommended limit of the speed for vehicles on unpaved site roads.	Contractor	All relevant worksites	Implemented
		Good Site Practices			
AEIAR-130/2009 S3.2, S5.2.19,	AEIAR 130/2009 EM&A Manual	Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	Contractor	All relevant worksites	Partially Implemented
AEIAR-174/2013 S4.9.2.2	S2.2, S4.2, AEIAR- 174/2013 EM&A Manual S2.3.1.2	Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs.	Contractor	All relevant worksites	Partially Implemented
		Misting for the dusty material should be carried out before being loaded into the vehicle. Any vehicle with an open load carrying area should have properly fitted side and tail boards.	Contractor	All relevant worksites	Implemented
		Material having the potential to create dust should not be loaded from a level higher than the side and tail boards and should be dampened and covered by a clean tarpaulin.	Contractor	All relevant worksites	Implemented

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Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations; The tarpaulin should be properly secured and should extent all should expense of the sides and tailboards. The material should also be dampened if necessary before transportation.  The vehicles should be restricted to maximum speed of 10 km per hour. Confined haulage and delivery vehicle to designated roadways insider the site. Onsite unpaved roads should be compacted and kept free of lose materials.  Vehicle washing facilities should be provided at every vehicle exit point. Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.  The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.  Every main haul road should be scaled with concrete and kept and full saft (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.  Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed.  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 filler or equivalent air pollution control system.  Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.  Open stockpiles shall be avoided or covered. Prevent placing dusty material storage piles near ASRs.  Dark smoke	EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
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distance from ASRs. worksites  Dark smoke				Contractor		
			distance from ASRs.	Contractor		Implemented
			Dark smoke  Dark smoke emission shall be control in accordance with the Air Pollution Control (Smoke)	Contractor	All relevant	Partially

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		Regulation and ETWB TCW 19/2005.		worksites	Implemented
		Plant and equipment should be well maintained to prevent dark smoke emission.	Contractor	All relevant worksites	Implemented
Noise Measures					
Trunk Road T2					
AEIAR-174/2013 \$5.9.2.1	AEIAR-174/2013 EM&A Manual S3.4.1.1	for the list of equipment:  Concrete lorry mixer  Dump Truck, 5.5 tonne < gross vehicle weight <= 38 tonne  Generator, Super Silenced, 70 dB(A) at 7m  Poker, vibratory, Hand-held (electric)  Water Pump, Submersible (Electric)  Mobile Crane - KOBELCO CKS900  Excavator, wheeled/tracked - HYUNDAI R80CR-9	Contractor	All relevant worksites	Implemented
		Use of temporary or fixed noise barriers with a surface density of at least 10kg/m² to screen noise from movable and stationary plant.	Contractor	All relevant worksites	Not Applicable
		Use of enclosures with covers at top and three sides and a surface density of at least 10kg/m <sup>2</sup> to screen noise from generally static noisy plant such as air compressors.	Contractor	All relevant worksites	Not Applicable
		Use of acoustic fabric for the silent piling system, drill rigs, rock drills etc.	Contractor	All relevant worksites	Partially Implemented
		Good Site Practices			
AEIAR-130/2009 S3.3, S5.3.10,	AEIAR 130/2009 EM&A Manual	Only well-maintained plant should be operated on-site and plant shall be serviced regularly during the construction/ decommissioning program.	Contractor	All relevant worksites	Implemented
AEIAR-174/2013 S5.9.2.1	S2.3, S4.3.2, AEIAR-174/2013	Silencers or mufflers on construction equipment should be utilized and shall be properly maintained during the construction/ decommissioning program.	Contractor	All relevant worksites	Not Applicable
	EM&A Manual S3.4.1.1	Mobile plant, if any, should be sited as far away from NSRs as possible.	Contractor	All relevant worksites	Implemented
		Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or should be throttled down to a minimum.	Contractor	All relevant worksites	Implemented
		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.	Contractor	All relevant worksites	Implemented
		Material stockpiles and other structures should be effectively utilized, wherever practicable, in	Contractor	All relevant	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		screening noise from on-site construction/ decommissioning activities.		worksites	
		Use of site hoarding as a noise barrier to screen noise at low level NSRs.	Contractor	All relevant worksites	Implemented
		For the use of hand held percussive breakers (with mass of above 10kg) and portable air compressors (supply air at 500 kPa or above), the noise level of such PME shall comply with a stringent noise emission standard and a noise emission label shall be obtained from the DEP before use at any time in construction site.	Contractor	All relevant worksites	Implemented
		Quiet powered mechanical equipment (PME) shall be used for the construction of the Project.	Contractor	All relevant worksites	Implemented
		Full enclosures shall be used to screen noise from relatively static PMEs (including air compressor, bar bender, concrete pump, generator and water pump) from sensitive receiver(s).	Contractor	All relevant worksites	Not Applicable
		Movable cantilevered noise barriers shall be used to screen noise from mobile PMEs (including asphalt paver, breaker, excavator and hand-held breaker) from sensitive receiver(s). These movable cantilevered noise barriers shall be located close to the mobile PMEs and shall be moved/adjusted iteratively in step with each movement of the corresponding mobile PMEs in order to maximize their noise reduction effects.	Contractor	All relevant worksites	Not Applicable
		Only approved or exempted Non-road Mobile Machineries (NRMMs) including regulated machines and non-road vehicles with proper labels are allowed to be used in specified activities on-site.	Contractor	All relevant worksites	Implemented
Water Quality Mea	sures				
Trunk Road T2					
		Accidental Spillage			
AEIAR-174/2013 S6.4.8.5	AEIAR-174/2013 EM&A Manual S4.2.1.1	All bentonite slurry should be stored in a container that resistant to corrosion, maintained in good conditions and securely closed; The container should be labelled in English and Chinese and note that the container is for storage of bentonite slurry only.	Contractor	All relevant worksites	Implemented
		The storage container should be placed on an area of impermeable flooring and bunded with capacity to accommodate 110% of the volume of the container size or 20% by volume stored in the area and enclosed with at least 3 sides.	Contractor	All relevant worksites	Implemented
		The storage container should be sufficiently covered to prevent rainfall entering the container or bunded area (water collected within the bund must be tested and disposed of as chemical waste, if necessary). An emergency clean up kit shall be readily available where bentonite fluid will be stored or used.	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		The handling and disposal of bentonite slurries should be undertaken in accordance within ProPECC PN 1/94. Surplus bentonite slurries used in construction works shall be reconditioned and reused wherever practicable. Residual bentonite slurry shall be disposed of from the site as soon as possible as stipulated in Clause 8.56 of the General Specification for Civil Engineering Works. The Contractor should explore alternative disposal outlets for the residual bentonite slurry (dewatered bentonite slurry to be disposed to a public filling area and liquid bentonite slurry, if mixed with inert fill material, to be disposed to a public filling area) and disposal at landfill should be the last resort.	Contractor	All relevant worksites	Implemented
AEIAR-174/2013 S6.4.8.8	AEIAR-174/2013 EM&A Manual S4.2.1.1	In order to protect against impacts to the surrounding marine waters of the KTTS and Victoria Harbour in the event of an accidental spillage of fuel or oil, the Contractor will be required to prepare a spill response plan to the satisfaction of AFCD, EPD, FSD, Police, TD and WSD to define procedures for the control, containment and clean-up of any spillage that could occur on the construction site.	Contractor	All relevant worksites	Implemented
		Dredging, Reclamation and Filling			
		No dredging, reclamation or filling in the marine environment shall be carried out.	Contractor	All relevant worksites	Implemented
Decommissioning	of the Radar Station	n of the former Kai Tak Airport			
		Building Demolition			
AEIAR-130/2009 S5.4	AEIAR 130/2009 EM&A Manual	The site practices outlined in ProPECC PN 1/94 "Construction Site Drainage" should be followed as far as practicable in order to minimise surface runoff and the chance of erosion.	Contractor	All relevant worksites	Not Applicable
	S4.4	There is a need to apply to EPD for a discharge licence under the WPCO for discharging effluent from the construction site. The discharge quality is required to meet the requirements specified in the discharge licence. All the runoff, wastewater or extracted groundwater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. It is anticipated that the wastewater generated from the works areas would be of small quantity. Monitoring of the treated effluent quality from the works areas should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD.	Contractor	All relevant worksites	Implemented
		General Construction Works			
		Construction Runoff			
AEIAR- 130/2009 S3.4,	AEIAR 130/2009 EM&A Manual	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the	Contractor	All relevant worksites	Implemented

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S5.4/ AEIAR- 174/2013	S2.4, S4.4/ AEIAR 174/2013 EM&A	above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include the use of sediment traps and adequate maintenance of			
S6.4.8.1	Manual S4.2.1.1	drainage systems to prevent flooding and overflow.  Construction site should be provided with adequately designed perimeter channel and pretreatment facilities and proper maintenance. The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94.	Contractor	All relevant worksites	Implemented
		Ideally, construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.	Contractor	All relevant worksites	Implemented
		Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m³ capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	Contractor	All relevant worksites	Implemented
		Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m <sup>3</sup> 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.	Contractor	All relevant worksites	Partially Implemented
		Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	Contractor	All relevant worksites	Implemented
		Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events.	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	Contractor	All relevant worksites	Implemented
		An adequately designed and located wheel washing bay should be provided at every site exit, and 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.  Drainage	Contractor	All relevant worksites	Implemented
		It is recommended that on-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There should be no direct discharge of effluent from the site into the sea.	Contractor	All relevant worksites	Implemented
		All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	Contractor	All relevant worksites	Implemented
		Stormwater Discharges  Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes.  Sewage Effluent	Contractor	All relevant worksites	Implemented
		Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets should be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor should also be responsible for waste disposal and maintenance practices.	Contractor	All relevant worksites	Implemented
		Debris and Litter In order to maintain water quality in acceptable conditions with regard to aesthetic quality,	Contractor	All relevant	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		contractors should be required, under conditions of contract, to ensure that site management is optimised and that disposal of any solid materials, litter or wastes to marine waters does not occur. Debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering into the adjacent harbour waters. Stockpiles of cement and other construction materials should be kept covered when not being used.  Accidental Spillage		worksites	
		Oils and fuels should only be used and stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to the nearby harbour waters, all fuel tanks and storage areas should be provided with locks and be 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 the coastal waters of the Victoria Harbour WCZ. The bund should be drained of rainwater after a rain event.	Contractor	All relevant worksites	Implemented
	T	Waste Management Plan  Waste Management Plan	I		
AEIAR-174/2013 S11.4.8.1	AEIAR-174/2013 EM&A Manual S9.2.1.2	Contractor should be requested to submit an outline Waste Management Plan (WMP) prior to the commencement of construction work, in accordance with the ETWB TC(W) No.19/2005 so as to provide an overall framework of waste management and reduction.  Good Site Practices	Contractor	All relevant worksites	Implemented
AEIAR-130/2009 S3.5, S5.5	AEIAR 130/2009 EM&A Manual S2.5, S4.5	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.	Contractor	All relevant worksites	Implemented
		Training of site personnel in proper waste management and chemical waste handling procedures.	Contractor	All relevant worksites	Implemented
		Provision of sufficient waste disposal points and regular collection for disposal.	Contractor	All relevant worksites	Implemented
		Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	Contractor	All relevant worksites	Implemented
		A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	Contractor	All relevant worksites	Implemented
		Waste Reduction Measures  Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals.	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		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.	Contractor	All relevant worksites	Implemented
		Encourage collection of aluminum 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.	Contractor	All relevant worksites	Implemented
		Any unused chemicals or those with remaining functional capacity should be recycled.	Contractor	All relevant worksites	Implemented
		Proper storage and site practices to minimize the potential for damage or contamination of construction materials.	Contractor	All relevant worksites	Implemented
		Construction and Demolition Materials			
		Where it is unavoidable to have transient stockpiles of C&D material within the work site pending collection for disposal, the transient stockpiles shall be located away from waterfront or storm drains as far as possible.	Contractor	All relevant worksites	Implemented
		Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Contractor	All relevant worksites	Partially Implemented
		Skip hoist for material transport should be totally enclosed by impervious sheeting.	Contractor	All relevant worksites	Implemented
		Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site.	Contractor	All relevant worksites	Implemented
		The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.	Contractor	All relevant worksites	Implemented
		The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle.	Contractor	All relevant worksites	Implemented
		All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.	Contractor	All relevant worksites	Implemented
		The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.	Contractor	All relevant worksites	Implemented
		When delivering inert C&D material to public fill reception facilities, the material should consist entirely of inert construction waste and of size less than 250mm or other sizes as agreed with the Secretary of the Public Fill Committee. In order to monitor the disposal of the surplus C&D material at the designed public fill reception facility and to control fly tipping, a trip-ticket system as stipulated in the ETWB TCW No. 31/2004 "Trip Ticket System for Disposal of Construction"	Contractor	All relevant worksites	Implemented

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		and Demolition Materials" should be included as one of the contractual requirements and implemented by an Environmental Team undertaking the Environmental Monitoring and Audit work. An Independent Environmental Checker should be responsible for auditing the results of the system.			
		Chemical Waste  After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals should 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	All relevant worksites	Partially Implemented
		General Refuse  General refuse should be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Effective collection and storage methods (including enclosed and covered area) of site wastes would be required to prevent waste materials from being blown around by wind, wastewater discharge by flushing or leaching into the marine environment, or creating odour nuisance or pest and vermin problem.	Contractor	All relevant worksites	Implemented
Land Contamination	on Measures				
		For any excavation works conducted at Radar Station		-	
AEIAR-130/2009 \$3.6.57	AEIAR 130/2009 EM&A Manual S4.6	As the risk due to dermal contact with groundwater by site workers is uncertain, it is recommended that personnel protective equipment (PPE) be used by site workers as a mitigation measure.	Contractor	All relevant worksites	Not Applicable
Landscape and Vi					
New Distributor Ro	pads Serving the Pla				
		Construction Phase			
AEIAR-130/2009 S3.8.12	AEIAR 130/2009 EM&A Manual	All existing trees should be carefully protected during construction.	Contractor	All relevant worksites	Not Applicable
	S2.8	Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work.	Contractor	All relevant worksites	Not Applicable
		Control of night-time lighting.	Contractor	All relevant	Not Applicable

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
				worksites	
		Erection of decorative screen hoarding.	Contractor	All relevant worksites	Implemented
Trunk Road T2					
		Construction Phase			
AEIAR-174/2013 \$9.9.1.1	AEIAR-174/2013 EM&A Manual S7.2.1.2	All works shall be carefully designed to minimize impacts on existing landscape resources and visually sensitive receivers. Existing trees within works area shall be retained and protected.	Contractor	All relevant worksites	Not Applicable
		Existing trees of good quality and condition that are unavoidably affected by the works should be transplanted.	Contractor	All relevant worksites	Not Applicable
		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.	Contractor	All relevant worksites	Partially Implemented
		Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.	Contractor	All relevant worksites	Partially Implemented
		Erection of decorative screen hoarding should be designed to be compatible with the existing urban context.	Contractor	All relevant worksites	Implemented
		All lighting in construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residences and GIC user. The contractor shall consider other security measures, which shall minimize the visual impacts.	Contractor	All relevant worksites	Not Applicable
General Condition					
		The Permit Holder shall display conspicuously a copy of this Permit on the Project site(s) at all vehicular site entrances/exits or at a convenient location for public's information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended Permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).	Contractor	All relevant worksites	Implemented

Implementation status: Implemented / Partially Implemented / Not Implemented / Not Applicable