

**Environmental Protection Department**

Contract No. HY/2012/06

**Widening of Fanling Highway  
- Tai Hang to Wo Hop Shek  
Interchange**

**Quarterly EM&A Report  
for February 2016 to April 2016**

[05/2016]

	Name	Signature
Prepared & Checked:	Adam Zhu	
Reviewed & Approved:	Y W Fung	

Version:	Rev. 0	Date: 23 May 2016
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Hyder-Arup-Black & Veatch Joint Venture  
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Dear Sir,

23 May 2016  
By Fax (2805 5028) & Hand

**Attn: Mr. James Penny**

**EM&A for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2 (between Tai Hang to Wo Hop Shek Interchange)**  
**Environmental Permit No. EP-324/2008/D**  
**Quarterly EM&A Summary Report for February 2016 to April 2016 for the portion of Stage 2 works under Contract No. HY/2012/06**

We refer to the revised Quarterly EM&A Summary Report for February 2016 to April 2016 for the captioned Project received on 23 May 2016 submitted by ET via email. We confirm we have no comment.

Yours faithfully  
for MOTT MACDONALD HONG KONG LIMITED



Steven Tang  
Independent Environmental Checker

c.c. HyD – Mr. Chung Lok Chin (Fax: 2714 5198)  
AECOM – Mr. Y W Fung (Fax:2891 0305)

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## EXECUTIVE SUMMARY

The proposed widening of Tolo Highway and Fanling Highway between Island House Interchange and Fanling (the Project) is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). An Environmental Impact Assessment (EIA) Report (the approved EIA Report) together with an Environmental Monitoring and Audit (EM&A) Manual (the approved EM&A Manual) were completed and approved under the EIAO on 14 July 2000 (Register Number: EIA-043/2000).

The objective of the Project “Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling” is to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic.

The construction works for this Project will be delivered in 2 stages i.e. Stage 1 (between Island House Interchange and Tai Hang) and Stage 2 (between Tai Hang and Wo Hop Shek Interchange). Stage 2 would be implemented under two works contracts. Contract No. HY2012/06 “Widening of Fanling Highway – Tai Hang to Wo Hop Shek Interchange” and the entrusted portion to CEDD under Contract No. CV/2012/09 “Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 3”. This report focuses on Contract No. HY2012/06 “Widening of Fanling Highway – Tai Hang to Wo Hop Shek Interchange” in Stage 2 of the Project only.

Pursuant to the EP (EP-324/2008/C) Condition 2.7, the Capture Survey Trip Report for Ma Wat River Northern Meander (Version 2) for the Project was submitted on 24 December 2013 by the Environmental Team (ET) and verified by the Independent Environmental Checker (IEC) on 6 January 2014.

The construction phase of the Contract under the EP and the Environmental Monitoring and Audit (EM&A) programme of the contract commenced on 21 November 2013. The impact environmental monitoring and audit includes air quality and noise monitoring.

This report documents the findings of EM&A works conducted in the period between 1 February 2016 and 30 April 2016. As informed by the Contractor, construction activities in the reporting period were as follows:

- Site clearance
- Ground investigation
- Piling works
- Pipe laying
- Retaining wall construction
- Noise barrier
- Excavation
- Backfilling
- Drainage
- Temporary bridge construction
- House construction
- Footbridge demolition
- Bridge construction

### Reporting Change

There was no reporting change required in the reporting period.

### Breaches of Action and Limit Levels for Air Quality

No exceedance of Action and Limit Level was recorded for 1-hour and 24-hour TSP monitoring in the reporting period.

### **Breaches of Action and Limit Levels for Noise**

No Action or Limit Level exceedance of construction noise was recorded in the reporting period. No noise complaints related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting period.

### **Complaint, Notification of Summons and Successful Prosecution**

No complaint, notification of summons or successful prosecution was received in the reporting period.

### **Future Key Issues**

Key issues to be considered in the coming month include:

- Properly store and label oils and chemicals on site;
- Chemical, chemical waste and waste management;
- Collection of construction waste should be carried out regularly;
- Properly maintain all drainage facilities and wheel washing facilities on site;
- Exposed slopes should be covered up properly if no temporary work will be conducted;
- Quieter powered mechanical equipment should be used;
- Suppress dust generated from excavation activities and haul road traffic; and
- Tree protective measures for all retained trees should be well maintained.

## 1 INTRODUCTION

### 1.1 Project Organization and Contacts of Key Management

1.1.1 The project organization structure is shown in Appendix A. The key personnel contact names and numbers are summarized in Table 1.1.

**Table 1.1 Contact Information of Key Personnel**

Party	Position	Name	Telephone	Fax
<b>ER</b> (Hyder-Arup-Black & Veatch Joint Venture)	Chief Resident Engineer	Edwin Chung	6115 0818	2638 0950
<b>IEC</b> (Mott MacDonald Hong Kong Limited)	Independent Environmental Checker	Steven Tang	2828 5920	2827 1823
<b>Contractor</b> (China State Construction Engineering (Hong Kong) Limited)	Environmental Officer	Michael Tsang	9277 4956	2672 2501
		C C Chow	9679 6315	2672 2501
<b>ET</b> (AECOM Asia Company Limited)	ET Leader	Y W Fung	3922 9393	3922 9797

### 1.2 Programme

1.2.1 The Construction Programme is shown in Appendix B.

### 1.3 Summary of Construction Works

1.3.1 Details of the construction works carried out by the Contractor in this reporting period are listed below:

- Site clearance
- Ground investigation
- Piling works
- Pipe laying
- Retaining wall construction
- Noise barrier
- Excavation
- Backfilling
- Drainage
- Temporary bridge construction
- House construction
- Footbridge demolition
- Bridge construction

- 1.3.2 The general layout plan of the Project site showing the contract areas is shown in Figure 1.1.
- 1.3.3 The environmental mitigation measures implementation schedule are presented in Appendix C.

## 2 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

### 2.1 Monitoring Parameters

- 2.1.1 The updated EM&A Manual has designated 1 air quality monitoring station and 2 noise monitoring stations to monitor environmental impacts on air quality and noise due to Stage 2 of the Project.
- 2.1.2 The updated EM&A Manual also requires environmental site inspections for air quality, noise, water quality, chemical, waste management, ecology and landscape and visual impacts.

### 2.2 Monitoring Locations

- 2.2.1 For air quality monitoring, the monitoring station was set up at Fanling Government Secondary School, in accordance with updated EM&A Manual. The location is shown in Figure 1.2a.
- 2.2.2 For noise monitoring, the monitoring stations M2 and M3 were set up at West Tai Wo and Fanling Government Secondary School respectively in accordance with updated EM&A Manual. Figure 1.2a-b shows the locations of the monitoring stations.

### 2.3 Environmental Quality Performance Limits (Action/Limit Levels)

- 2.3.1 The environmental quality performance limits (i.e. Action/Limit Levels) of air quality monitoring were derived from the baseline air quality monitoring results at the monitoring station (AM2); while the environmental quality performance limits of noise monitoring were defined in the EM&A Manual.
- 2.3.2 The environmental quality performance limits are given in Appendix D.

### 2.4 Environmental Mitigation Measures

- 2.4.1 Relevant environmental mitigation measures were stipulated in the Particular Specification and EP for the Contractor to adopt. A list of environmental mitigation measures and their implementation statuses are given in Appendix C.

## 3 AIR QUALITY MONITORING

- 3.1.1 In accordance with the updated EM&A Manual, baseline 1-hour and 24-hour TSP levels at one air quality monitoring station was established. Impact 1-hour TSP monitoring was conducted for at least three times every 6 days, while impact 24-hour TSP monitoring was carried out for at least once every 6 days.
- 3.1.2 The weather was mostly cloudy, with several fine, sunny and rainy days in the reporting quarter. Weather information including the wind speed and wind direction is annexed in Appendix F. The information was obtained from the Hong Kong Observatory Tai Po and Tai Mei Tuk Automatic Weather Stations.
- 3.1.3 The monitoring results for 1-hour TSP and 24-hour TSP monitoring are summarized in Tables 3.1 and 3.2 respectively. Detailed impact air quality monitoring results are presented in Appendix E.

**Table 3.1 Summary of 1-hour TSP Monitoring Results in the Reporting Period**

Location	Average ( $\mu\text{g}/\text{m}^3$ )	Range ( $\mu\text{g}/\text{m}^3$ )	Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
<b>AM2</b> (Fanling Government Secondary School)	75.1	63.8 – 81.2	317.8	500



**Table 3.2 Summary of 24-hour TSP Monitoring Results in the Reporting Period**

Location	Average ( $\mu\text{g}/\text{m}^3$ )	Range ( $\mu\text{g}/\text{m}^3$ )	Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
<b>AM2</b> (Fanling Government Secondary School)	41.8	9.5 – 93.8	200.7	260

- 3.1.4 The major dust sources in the reporting period included construction activities from Stage 2 of the Project, as well as nearby traffic emissions.
- 3.1.5 All 1-hour and 24-hour TSP results were below the Action and Limit Level in the reporting quarter.
- 3.1.6 Detailed impact air quality monitoring results are presented in Appendix E.

## 4 NOISE MONITORING

- 4.1.1 In accordance with the EM&A Manual, impact noise monitoring was conducted for at least once per week during the construction phase of the Contract.
- 4.1.2 The monitoring results for construction noise are summarized in Table 4.1 and the monitoring data are provided in Appendix G.

**Table 4.1 Summary of Construction Noise Monitoring Results in the Reporting Period**

	Average (dB(A))	Range (dB(A))	Limit Level (dB(A))
	$L_{eq}$ (30 mins)	$L_{eq}$ (30 mins)	$L_{eq}$ (30 mins)
M2*	69.5	67.3 – 71.4	75
M3#	63.8	60.8 – 67.5	65/70

\*+3dB(A) Façade correction included

# Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

- 4.1.3 The major noise sources during the noise monitoring included nearby road traffic noise.
- 4.1.4 No Action or Limit Level exceedance of construction noise was recorded in the reporting period. No noise complaints related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting period.
- 4.1.5 The graphical plots of the trends of the monitoring results are provided in Appendix G.

## 5 ADVICE ON THE SOLID AND LIQUID WASTE MANAGEMENT STATUS

- 5.1.1 As advised by the Contractor, 5,518 m<sup>3</sup> of inert C&D material was disposed of as public fill to Tuen Mun 38 (of which 0m<sup>3</sup> was broken concrete), while 215 m<sup>3</sup> of general refuse was disposed of at NENT landfill. 189 kg of paper/cardboard packaging, 1,332 kg of plastics and 0 kg of metals were collected by recycling contractors in the reporting period. 2,972 m<sup>3</sup>, 1,075 m<sup>3</sup>, and 1,408 m<sup>3</sup> of inert C&D materials were reused on site, in other projects and in NENT for backfilling purpose respectively. 0kg of chemical wastes was collected by licensed contractors in the reporting period.
- 5.1.2 The actual amounts of different types of waste generated by the activities of the Project in the reporting quarter are summarized in Table 5.1.

**Table 5.1 Summary of Waste Flow Table**

<b>Waste Type</b>	<b>Actual Amount</b>	<b>Disposal/Reuse Locations</b>
Inert C&D materials	5,518 m <sup>3</sup> (of which 0 m <sup>3</sup> was broken concrete)	Tuen Mun 38
General refuse	215 m <sup>3</sup>	NENT Landfill
Paper/cardboard packaging	189 kg	Recycling Contractors
Plastics	1,332 kg	Recycling Contractors
Metals	0 kg	Recycling Contractors
C&D materials reused on site	2,972 m <sup>3</sup>	Site Area
C&D materials reused in other projects	1,075 m <sup>3</sup>	Other projects
C&D materials reused in NENT for backfilling	1,408 m <sup>3</sup>	NENT Landfill
Chemical wastes	0 kg	Licensed Contractors

## **6 SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT**

- 6.1.1 All 1-hour and 24-hour TSP monitoring results complied with the Action / Limit Levels in the reporting quarter.
- 6.1.2 No Action or Limit Level exceedance of construction noise was recorded in the reporting period. No noise complaints related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting period.

## **7 SUMMARY OF COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS**

- 7.1.1 No complaint, notification of summons or successful prosecution was received in the reporting period.
- 7.1.2 The statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix H.
- 7.1.3 A 24-hour complaint hotline at 6628 8366 has been established for the Project. The hotline number is displayed at the site entrances, fencings and project signboards, as well as printed on publications such as newsletters for the public.

## 8 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

### 8.1 Comments

8.1.1 According to the environmental site inspections performed in the reporting period, the following comments are made to the Contractor for precautionary and rectification purposes:

#### ***Air Quality Impact***

- The Contractor should provide and affix a valid NRMM label for the mentioned roller and excavator properly.
- The Contractor was reminded to cover the stockpile properly.
- The Contractor should dampen the road to reduce dust generation.
- The Contractor was reminded to cover or remove the stockpile before the end of the work.

#### ***Construction Noise Impact***

- The Contractor should replace the NEL in order to show the information clearly.

#### ***Water Quality Impact***

- The Contractor should provide effective wheel washing facilities at the works area.
- The Contractor should clear the mud trail and provide effective wheel washing facilities.
- The Contractor should provide sandbags or other equivalent measures to prevent surface runoff from entering public road and public.

#### ***Chemical and Waste Management***

- Several oil drums and chemical containers were observed on bare ground at NB49. The Contractor should provide drip tray to the chemicals to prevent chemical leakage.
- The Contractor should improve the housekeeping.
- The Contractor was reminded to improve the site tidiness.

#### ***Landscape and Visual Impact***

- Nil.

#### ***Miscellaneous***

- The Contractor should remove the stagnant water to prevent mosquito breeding.
- The Contractor should remove or turn over the panels such that no water can be retained.

## **8.2 Recommendations**

- 8.2.1 The impact air quality and noise monitoring programme ensures that any deterioration in environmental condition is readily detected and timely actions are taken to rectify any non-compliances. Assessment and analysis of monitoring results collected demonstrated the environmental acceptability of the Project. The weekly environmental site inspections ensure that all the environmental mitigation measures recommended in the ERR are effectively implemented.
- 8.2.2 The EM&A programme effectively monitored the environmental impacts from the construction activities and no particular recommendations were advised for the improvement of the programme.

## **8.3 Conclusions**

- 8.3.1 All 1-hour and 24-hour TSP monitoring results complied with the Action / Limit Levels in the reporting quarter.
- 8.3.2 No Action or Limit Level exceedance of construction noise was recorded in the reporting period. No noise complaints related to 0700 – 1900 hours on normal weekdays was received and followed by the Environmental Team in the reporting period.
- 8.3.3 No complaint, notification of summons or successful prosecution was received in the reporting period.

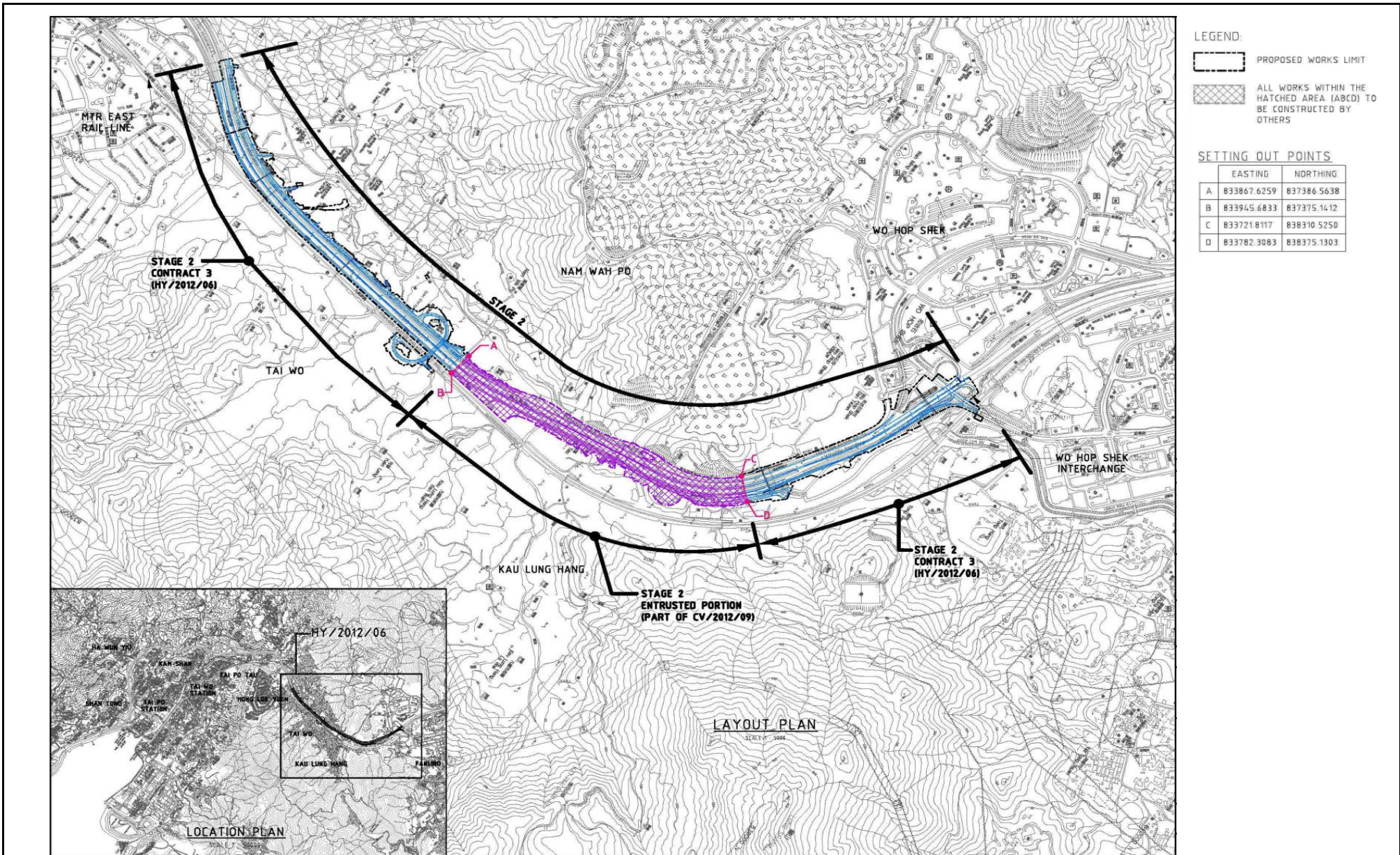
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## FIGURES

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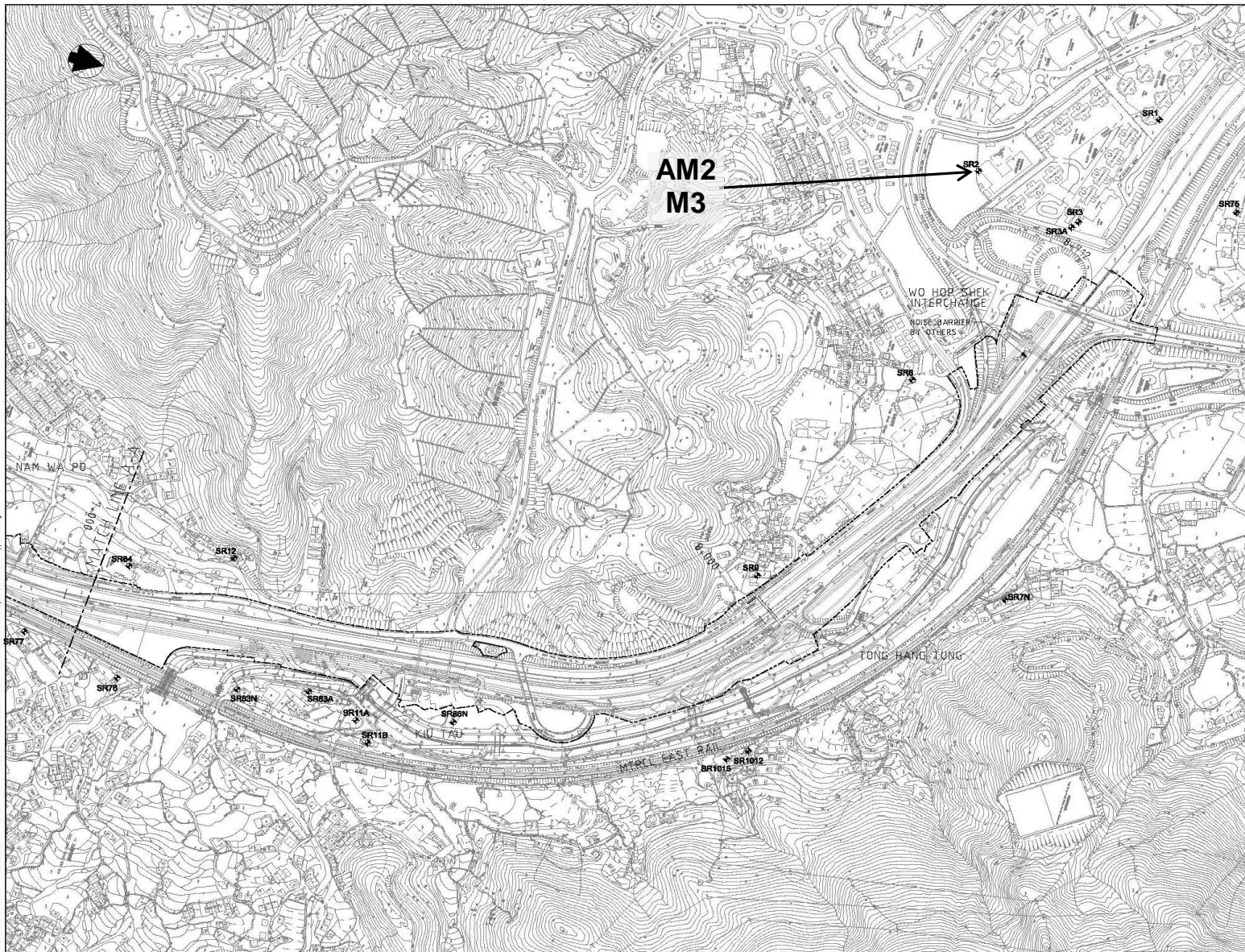
CONTRACT NO. HY/2012/06  
 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Layout Plan

Date: Dec 2013

Figure 1.1



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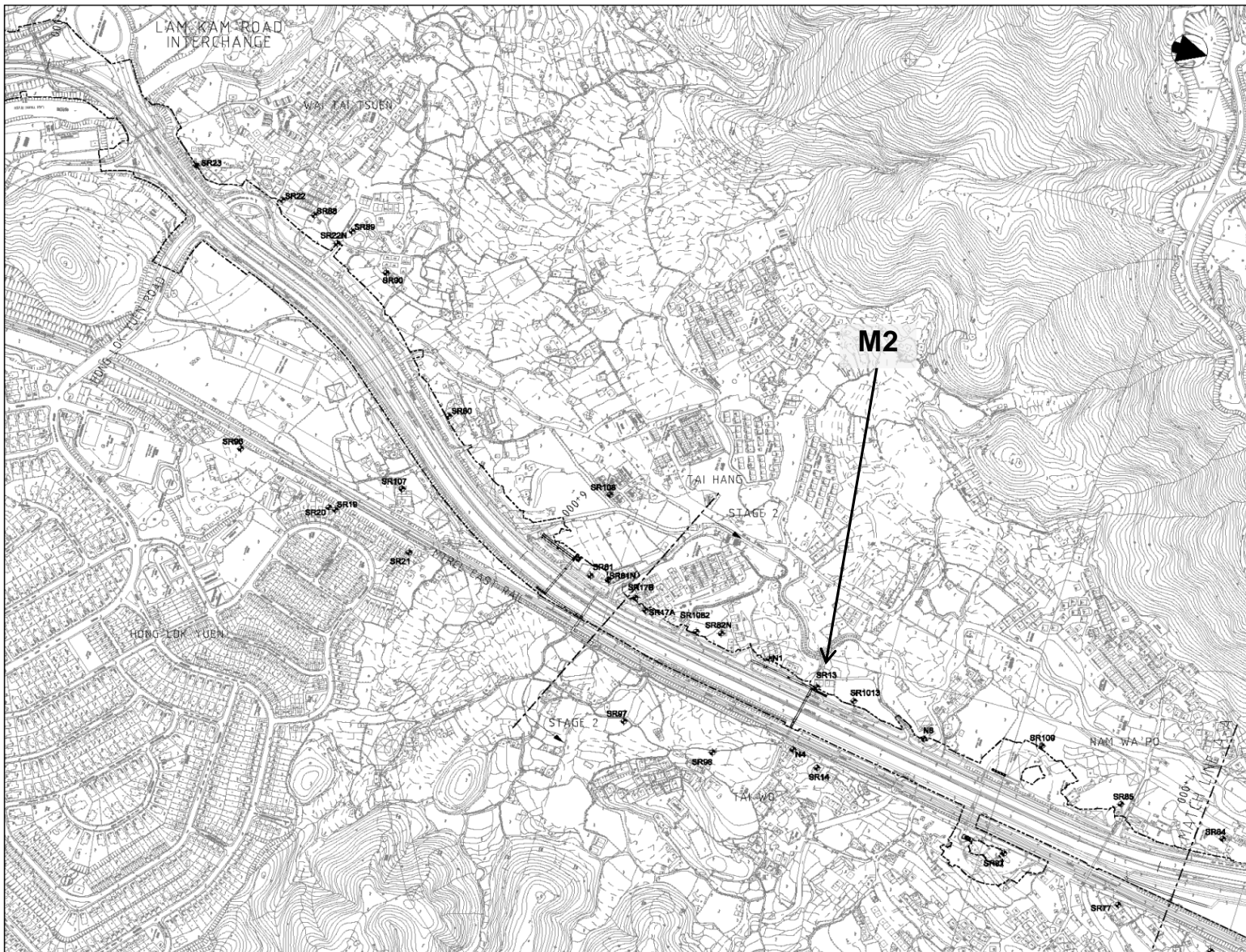
CONTRACT NO. HY/2012/06  
 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Locations of Monitoring Station

Date: Dec 2013

Figure 1.2a



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CONTRACT NO. HY/2012/06  
 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Locations of Monitoring Station

Date: Dec 2013

Figure 1.2b



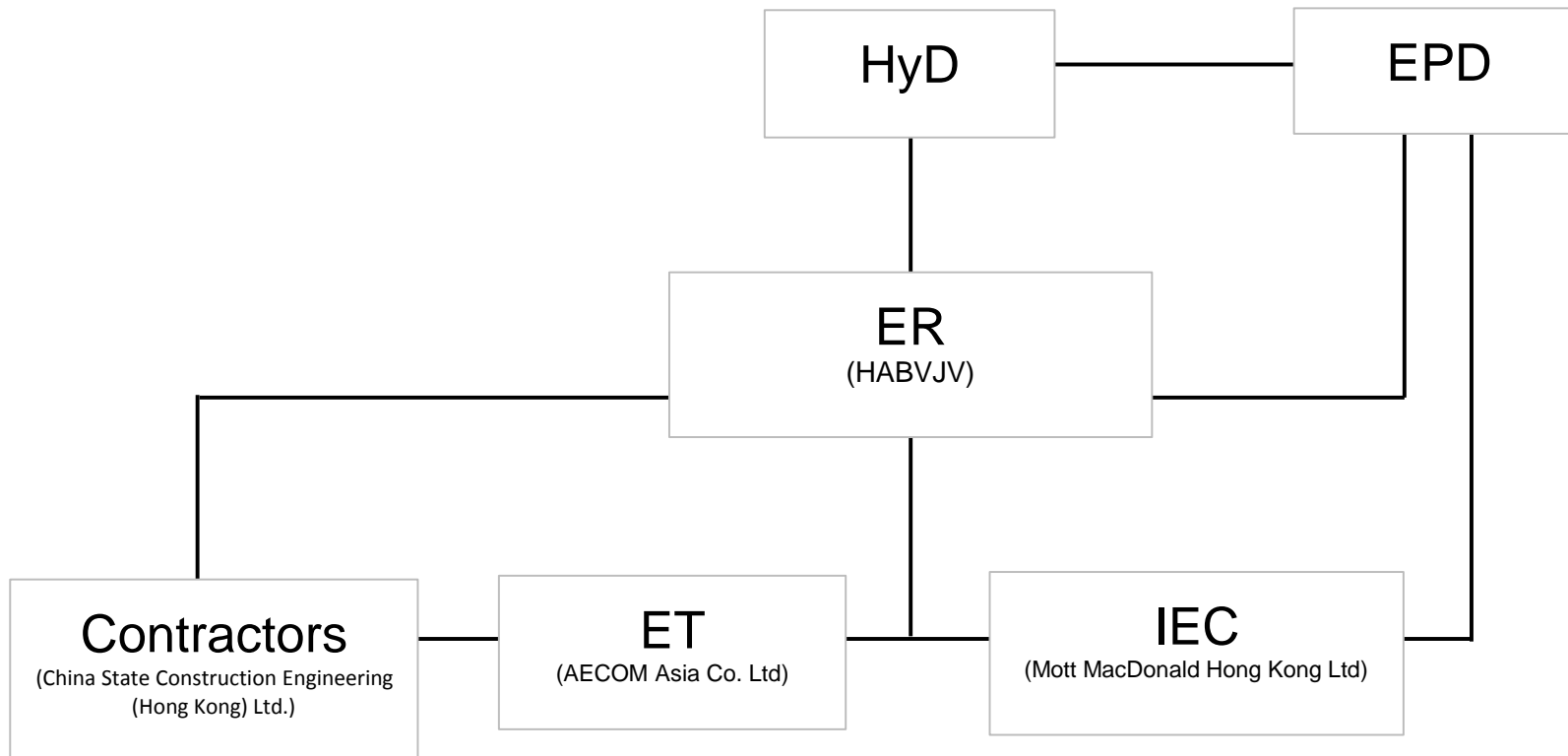
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**APPENDIX A  
PROJECT ORGANIZATION STRUCTURE**

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CONTRACT NO. HY/2012/06  
 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Project Organization Structure

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**APPENDIX B  
CONSTRUCTION PROGRAMMES**

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Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016			
								Apr	May	Jun	Jul
TSZ10280	Watermain installation (along NB47)	71.79%	11	39	20-Feb-16 A	03-May-16	22				
TSZ10290	Firemain installation (along NB47)	0%	26	26	04-May-16	03-Jun-16	22				
<b>NB47A (Ch.5950-5975)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00330	NB47A - backfilling	97.31%	5	186	07-Sep-15 A	28-May-16	9				
NB00335	Backfilling (Along NB47A-above ID1)	96.93%	5	163	06-Oct-15 A	28-May-16	9				
NB00340	NB47A - NB production	91.57%	14	166	20-Oct-15 A	03-May-16	1087				
NB00350	NB47A - NB post & panel installation	0%	5	5	30-May-16	03-Jun-16	859				
<b>Underground Utility Works</b>											
UUZ20110	Utility cable laying by Utility companies (Along NB47A)	59.09%	27	66	13-Jan-16 A	23-May-16	-17				
UUZ20240	Utility cable laying by Utility companies (Along NB47A-above	64.94%	27	77	13-Jan-16 A	23-May-16	-17				
<b>NB48 (Ch.5995-6120)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00390	NB48 (Ch5995-6060) - backfilling	0%	12	12	11-Jun-16	24-Jun-16	17				
NB00400	NB48 (Ch5995-6060) - NB production	0%	45	45	20-Mar-16 A	03-Jun-16	1056				
NB00410	NB48 (Ch5995-6060) - NB post & panel installation	0%	5	5	25-Jun-16	30-Jun-16	837				
NB00450	NB48 (Ch6060-6120) - backfilling	0%	12	12	07-Jun-16	21-Jun-16	20				
NB00460	NB48 (Ch6060-6120) - NB production	0%	45	45	20-Mar-16 A	03-Jun-16	1056				
NB00470	NB48 (Ch6060-6120) - NB post & panel installation	0%	5	5	22-Jun-16	27-Jun-16	840				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10430	Watermain installation (along NB48, 0-60m)	60%	12	30	21-Mar-16 A	04-May-16	17				
TSZ10440	Firemain installation (along NB48, 0-60m)	0%	30	30	05-May-16	10-Jun-16	17				
TSZ10480	Watermain installation (along NB48, 60-110m)	0%	26	26	19-Apr-16 A	21-May-16	20				
TSZ10490	Firemain installation (along NB48, 60-110m)	0%	26	26	06-May-16	06-Jun-16	20				
<b>Underground Utility Works</b>											
UUZ20120	Utility cable laying by Utility companies (Along NB48, 0-60m)	0%	24	24	21-Jan-16 A	19-May-16	-14				
UUZ20130	Utility cable laying by Utility companies (Along NB48, 60-110m)	0%	20	20	05-Feb-16 A	13-May-16	-10				
<b>NB49 (Ch.6145-6215)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00520	NB49 - backfilling	0%	12	12	21-Jun-16	05-Jul-16	25				
NB00530	NB49 - NB production	0%	45	45	20-Apr-16	03-Jun-16	1056				
NB00540	NB49 - NB post & panel installation	0%	5	5	06-Jul-16	11-Jul-16	829				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10510	DSD Trunk Sewer laying (along NB49)	16.67%	10	12	11-Apr-16 A	30-Apr-16	25				
TSZ10530	Watermain installation (along NB49)	0%	20	20	03-May-16	26-May-16	25				
TSZ10540	Firemain installation (along NB49)	0%	20	20	27-May-16	20-Jun-16	25				
<b>Underground Utility Works</b>											
UUZ20140	Utility cable laying by Utility companies (Along NB49, 0-70m)	48.28%	30	58	03-Feb-16 A	26-May-16	-20				
<b>NB49B (Ch.6215-6235)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00570	NB49B - Footing & Wall Structure - 2 bays	50%	10	20	14-Mar-16 A	05-May-16	-13				
NB00574	Pending for revised RC detail design	0%	7	5	13-Apr-16 A	27-Apr-16	-13				
NB00580	NB49B - backfilling	0%	12	12	06-May-16	20-May-16	16				
NB00590	NB49B - NB production	0%	45	45	06-May-16	19-Jun-16	1040				
NB00600	NB49B - NB post & panel installation	0%	5	5	20-Jun-16	24-Jun-16	842				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10550	Sheet Piling & Excavation (~5m below ground) (along NB49B)	0%	21	21	06-May-16	31-May-16	19				
TSZ10570	DSD Trunk Sewer laying (along NB49B - ID2-1)	0%	34	34	01-Jun-16	12-Jul-16	19				
TSZ10580	Watermain installation (along NB49B)	0%	20	20	13-Jul-16	04-Aug-16	23				
<b>Underground Utility Works</b>											
UUZ20150	Utility cable laying by Utility companies (Along NB49B, 0-16m)	0%	10	10	06-May-16	18-May-16	-13				
<b>NB54 (Ch.6240-6280)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00710	NB54 - NB production	39.19%	45	74	20-Jan-16 A	03-Jun-16	1056				
NB00720	NB54 - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10630	Watermain installation (along NB54)	0%	30	30	20-Apr-16	26-May-16	71				
TSZ10640	Firemain installation (along NB54)	0%	30	30	27-May-16	02-Jul-16	71				
<b>Underground Utility Works</b>											
UUZ20160	Utility cable laying by Utility companies (Along NB54, 0-40m)	75.51%	12	49	21-Jan-16 A	04-May-16	-2				
<b>NB54A (Ch.6290-6350)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00760	NB54A - Footing & Wall Structure - 6 bays	98.04%	4	204	01-Aug-15 A	23-Apr-16	-6				
NB00770	NB54A - backfilling	0%	12	12	16-Jun-16	29-Jun-16	58				
NB00780	NB54A - NB production	0%	45	45	23-Apr-16	07-Jun-16	1052				
NB00790	NB54A - NB post & panel installation	0%	5	5	30-Jun-16	06-Jul-16	833				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10680	Watermain installation (along NB54A)	63.64%	16	44	14-Mar-16 A	09-May-16	58				
TSZ10690	Firemain installation (along NB54A)	0%	30	30	10-May-16	15-Jun-16	58				
<b>Underground Utility Works</b>											
UUZ20170	Utility cable laying by Utility companies (Along NB54A, 0-60m)	0%	12	12	25-Apr-16	09-May-16	-6				
<b>NB57 (Ch.6365-6445)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											

Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016			
								Apr	May	Jun	Jul
NB00840	NB57 - backfilling	0%	12	12	19-Apr-16 A	04-May-16	29				
NB00850	NB57 - NB production	0%	45	45	20-Apr-16	03-Jun-16	1056				
NB00860	NB57 - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10730	Watermain installation (along NB57)	0%	27	27	10-May-16	11-Jun-16	31				
TSZ10740	Firemain installation (along NB57)	0%	30	30	13-Jun-16	18-Jul-16	31				
TSZ10785	PCCW drawpit by Pccw	69.23%	16	52	29-Jan-16 A	09-May-16	31				
TSZ10990	Backfilling for UU and Firemain & Watermain	0%	12	12	19-Jul-16	01-Aug-16	31				
<b>Underground Utility Works</b>											
UZZ20180	Utility cable laying by Utility companies (Along NB57, 0-80m)	0%	26	26	26-Feb-16 A	21-May-16	-16				
<b>NB58 (Ch.6445-6480)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00900	NB58 - Footing & Wall Structure - 3 bays	96.39%	6	166	15-Sep-15 A	26-Apr-16	-8				
NB00910	NB58 - backfilling	0%	12	12	12-May-16	26-May-16	11				
NB00920	NB58 - NB production	0%	45	45	27-Apr-16	10-Jun-16	1049				
NB00930	NB58 - NB post & panel installation	0%	5	5	11-Jun-16	16-Jun-16	849				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10780	Watermain installation (along NB58)	0%	40	40	20-Apr-16	07-Jun-16	51				
TSZ10790	Firemain installation (along NB58)	0%	40	40	20-Apr-16	07-Jun-16	51				
TSZ11010	Backfilling	0%	12	12	01-Jun-16	15-Jun-16	51				
<b>Underground Utility Works</b>											
UZZ20190	Utility cable laying by Utility companies (Along NB58, 0-45m)	0%	12	12	27-Apr-16	11-May-16	-8				
<b>NB59 (Ch.6490-6590)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB00970	NB59 - Footing & Wall Structure - 9 bays	96.25%	10	267	02-May-15 A	30-Apr-16	94				
NB00980	NB59 - backfilling	0%	12	12	04-Jul-16	16-Jul-16	44				
NB00990	NB59 - NB production	0%	45	45	30-Apr-16	14-Jun-16	1034				
NB01000	NB59 - NB post & panel installation	0%	12	12	18-Jul-16	30-Jul-16	812				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10830	Watermain installation (along NB59)	0%	30	30	11-Apr-16 A	26-May-16	44				
TSZ10840	Firemain installation (along NB59)	0%	30	30	27-May-16	02-Jul-16	44				
<b>Underground Utility Works</b>											
UZZ20200	Utility cable laying by Utility companies (Along NB59, 0-95m)	53.73%	31	67	29-Jan-16 A	27-May-16	-21				
<b>NB63 (Ch.6610-6700)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB01040	NB63 - NB production	57.14%	45	105	20-Jan-16 A	03-Jun-16	1056				
NB01050	NB63 - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10330	Watermain installation (along NB63)	48.28%	30	58	15-Feb-16 A	26-May-16	56				
TSZ10340	Firemain installation (along NB63)	0%	30	30	27-May-16	02-Jul-16	56				
<b>DSD Southern Trunk Sewer - Trenchless Construction</b>											
TSZ11020	Watermain & Firemain installation above Trunk Sewer	87.01%	10	77	14-Dec-15 A	30-Apr-16	57				
TSZ11025	Town gas pipe laying (change of design)	0%	20	20	03-May-16	26-May-16	57				
<b>Underground Utility Works</b>											
UZZ20230	Utility cable laying by Utility companies (Along NB63~100m)	98.34%	6	362	29-Jan-15 A	26-Apr-16	4				
<b>Bridge Construction</b>											
<b>New Tai Hang Footbridge</b>											
<b>General</b>											
THBF0335	Structure steel Shop drawing approval (THFB)	99.2%	3	377	04-Dec-14 A	22-Apr-16	1246				
THBF0340	Structure steel procurement (THFB)	59.6%	122	302	22-Sep-15 A	19-Aug-16	47				
<b>TWSR-West/ FL Highway N/B Side Section</b>											
THBF0140	THP5 - Pile cap, Pier and Pier Head	58.82%	77	187	31-Oct-15 A	22-Jul-16	182				
THBF0180	THP8, THP9 - Pile cap, Pier and Pier Head	72.4%	77	279	13-Jul-15 A	22-Jul-16	242				
THBF0220	THAB3 - pile cap & abutment wall	0%	69	69	20-Apr-16	13-Jul-16	223				
THBF0230	THAB3 - Backfilling (~4m)	0%	27	27	14-Jul-16	13-Aug-16	223				
THBF0270	THP6, THP7 - Pile cap, Pier and Pier Head	77.78%	16	72	01-Feb-16 A	09-May-16	163				
THBF0310	THAB2 - pile cap & abutment wall	0%	30	30	10-May-16	15-Jun-16	163				
THBF0320	THAB2 - Backfilling (~3m)	0%	20	20	16-Jun-16	09-Jul-16	163				
THBF0325	Steel Ramp ready for erection (THFB-TWSR-W side)	0%	0	0		09-Jul-16	163				09-Jul-16 ♦ Steel R
<b>TWSR-East FL Highway S/B Side Section</b>											
THBF0470	THAB1 - pile cap & abutment wall	0%	30	30	03-May-16	07-Jun-16	154				
THBF0480	THAB1 - Backfilling (~3m)	0%	20	20	08-Jun-16	02-Jul-16	154				
THBF0510	THP2 - Pile Test	85.33%	11	75	16-Feb-16 A	30-Apr-16	188				
THBF0520	THP2 - Pile cap, Pier and Pier Head	0%	45	45	04-Jul-16	24-Aug-16	154				
THBF0720	THP3 - Pile Test	85.33%	11	75	16-Feb-16 A	30-Apr-16	250				
THBF0730	THP3 - Pile cap, Pier and Pier Head	0%	45	45	03-May-16	25-Jun-16	204				
THBF0760	THP4 - Pile Test	85.33%	11	75	16-Feb-16 A	30-Apr-16	212				
THBF0770	THP4 - Pile cap, Pier and Pier Head	0%	45	45	03-May-16	25-Jun-16	174				
THBF0780	Modified existing column head of existing footbridge	0%	30	30	27-Jun-16	01-Aug-16	174				
<b>Lift at TWSR-W Side</b>											
L1500	Temp work & Pile cap	0%	45	45	20-Apr-16	14-Jun-16	102				
L1510	Lift pit (NF115)	0%	30	30	15-Jun-16	20-Jul-16	102				

Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016			
								Apr	May	Jun	Jul
L1556	Lift contractor sub-letting	88.8%	14	125	21-Sep-15 A	06-May-16	47				
L1557	Lift submission & ordering period	0%	240	240	07-May-16	01-Mar-17	47				
L1600	CLP Power available (by CLP)	0%	365	365	20-Apr-16	19-Apr-17	97				
<b>Lift at FLHY S/B</b>											
L1345	THB (E) - Pre-bored H pile - NF78 (8 nos)	89.13%	10	92	31-Dec-15 A	30-Apr-16	73				
L1350	Temp work & Pipe cap	0%	40	40	03-May-16	20-Jun-16	73				
L1360	Lift pit	0%	30	30	21-Jun-16	26-Jul-16	73				
L1450	CLP Power available (by CLP)	0%	365	365	20-Apr-16	19-Apr-17	99				
<b>New Tai Wo Footbridge</b>											
<b>General</b>											
TWFB1030	Structure steel Shop drawing approval (TWFB)	92.57%	30	404	04-Dec-14 A	26-May-16	121				
TWFB1040	Structure steel procurement (TWFB)	70.57%	88	299	22-Aug-15 A	16-Jul-16	96				
TWFB1050	Steel Staircase & Ramp prefabrication (TWFB-TWSR-W)	0%	60	60	18-Jul-16	26-Sep-16	79				
TWFB1090	Steel Bridge prefabrication (TWFB)	0%	60	60	18-Jul-16	26-Sep-16	644				
<b>TWSR-West/ FL Highway N/B Side Section</b>											
TWFB1160	TWP1 - Pile cap, Pier and Pier Head	45.76%	32	59	18-Feb-16 A	28-May-16	209				
TWFB1240	TWAB2 - pile cap & abutment wall	0%	30	30	07-May-16	13-Jun-16	735				
TWFB1250	TWAB2 - Backfilling (~4m)	0%	27	27	14-Jun-16	15-Jul-16	735				
TWFB1260	Steel Staircase ready for erection (THFB-TWSR-W side)	0%	0	0		15-Jul-16	735				15-Jul-16 ♦ St
TWFB1300	TWP4, TWP5 - Pile cap, Pier and Pier Head	92.91%	9	127	16-Nov-15 A	29-Apr-16	202				
TWFB1340	TWAB1 - pile cap & abutment wall	79.73%	30	148	22-Oct-15 A	26-May-16	161				
TWFB1350	TWAB1 - Backfilling (~3m)	0%	20	20	27-May-16	20-Jun-16	161				
TWFB1360	Steel Ramp ready for erection (TWFB-TWSR-W side)	0%	0	0		20-Jun-16	161				20-Jun-16 ♦ Steel Ramp ready for ere
<b>Crossing Fanling Highway Section</b>											
TWFB1410	TWP2 - Predrilling	0%	18	18	24-Jun-16	15-Jul-16	51				
TWFB1420	TWP2 - Pre-bored H pile (6 nos)	0%	18	18	16-Jul-16	05-Aug-16	51				
<b>Lift at TWSR-W Side</b>											
L1660	Lift pit	0%	30	30	15-Apr-16 A	26-May-16	634				
L1670	Lift shaft & roof	0%	52	52	27-May-16	28-Jul-16	634				
L1720	Lift contractor sub-letting	90%	13	133	21-Sep-15 A	06-May-16	510				
L1730	Lift submission & ordering period	0%	270	270	06-May-16	06-Apr-17	510				
L1780	CLP Power available (by CLP)	0%	365	365	20-Apr-16	19-Apr-17	699				
<b>Temporary Tai Wo Footbridge</b>											
<b>Design Works</b>											
TWFB-T1010	Design preparation	86.19%	31	227	20-Jul-15 A	28-May-16	88				
TWFB-T1020	Engineer Comment	0%	26	26	28-May-16	29-Jun-16	88				
TWFB-T1030	Design amendment	0%	26	26	29-Jun-16	30-Jul-16	88				
<b>Demolition of Existing Tai Wo Footbridge</b>											
<b>TWSR-West/ FL Highway N/B Side Section</b>											
TWFB-T1135	Demolish existing TWFB across TWSR-W	0%	25	25	16-Jun-16	15-Jul-16	51				
TWFB-T1230	Watermain & Firemain at NB58 & backfill	0%	46	46	20-Apr-16	15-Jun-16	51				
<b>TWSR-West Construction</b>											
<b>Drainage &amp; Road Works</b>											
<b>Ch 5880-6125</b>											
RDZ20160	Z2 : New TWSR-West D&R Works (lane 1)	0%	120	120	03-Jun-16	26-Oct-16	5				
<b>Noise Barrier Along Fanling Highway S/B</b>											
<b>NB51 (Ch.5935-6055)-FH S/B Side</b>											
<b>Noise Barrier Works</b>											
NB02280	NB51 ID1-3 (0-25m) - Footing & Wall Structure	0%	90	90	20-Apr-16	06-Aug-16	418				
<b>NB53 (Ch.6125-6300) -FH S/B Side (MTRC I&amp;P Area)</b>											
<b>Noise Barrier Works</b>											
NB02430	Precautionary Measure installation	0%	26	26	20-Apr-16	21-May-16	603				
NB02440	NB53 (0-100m) - Sheet piling & Excavation	0%	26	26	23-May-16	22-Jun-16	603				
NB02450	NB53 (0-100m) - Footing & Wall Structure	0%	60	60	23-Jun-16	01-Sep-16	603				
NB02490	NB53 ID2-3 (100-125m), 18nos Predrilling	0%	10	10	04-Jun-16	16-Jun-16	686				
NB02500	NB53 ID2-3 (100-125m) 18nos Piling- 1 rigs	0%	27	27	17-Jun-16	19-Jul-16	686				
NB02590	NB53 (125-180m) - NB production	0%	45	45	20-Apr-16	03-Jun-16	1056				
NB02600	NB53 (125-180m) - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>NB55 (Ch.6300-6360)-FH S/B Side (MTRC I&amp;P Area)</b>											
<b>Noise Barrier Works</b>											
NB02640	NB55 - Footing & Wall Structure	94.3%	24	421	07-Nov-14 A	19-May-16	686				
NB02650	NB55- backfilling	0%	50	50	20-May-16	19-Jul-16	686				
NB02660	NB55 - NB production	86.67%	10	75	15-Jan-16 A	29-Apr-16	1091				
<b>NB56 (Ch.6360-6400)-FH S/B Side (MTRC I&amp;P Area)</b>											
<b>Noise Barrier Works</b>											
NB02730	NB56 - NB production	39.19%	45	74	20-Feb-16 A	03-Jun-16	1056				
NB02740	NB56 - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>NB61 (Ch.6400-6560)-FH S/B Side (MTRC I&amp;P Area)</b>											
<b>Noise Barrier Works</b>											
NB02770	NB61 (0-50m) - Sheet piling & Excavation	0%	18	18	20-Apr-16	11-May-16	778				
NB02780	NB61 (0-50m) - Footing & Wall Structure	0%	50	50	12-May-16	12-Jul-16	778				
NB02790	NB61 (0-50m)- backfilling	0%	50	50	13-Jul-16	08-Sep-16	778				
NB02800	NB61 (0-50m) - NB production	0%	45	45	13-Jul-16	26-Aug-16	972				

Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016			
								Apr	May	Jun	Jul
NB02850	NB61 (50-160m) - NB production	0%	45	45	20-Apr-16	03-Jun-16	1056				
NB02860	NB61 (50-160m) - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>NB61A (Ch.6560-6745)-FH S/B Side (MTRC I&amp;P Area)</b>											
<b>Noise Barrier Works</b>											
NB02920	NB61A (0-50m) - NB production	39.19%	45	74	20-Feb-16 A	03-Jun-16	1056				
NB02930	NB61A (0-50m) - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
NB02970	NB61A ID2-3 (50-75m) - Footing & Wall Structure	89.84%	32	315	01-Apr-15 A	28-May-16	824				
NB02980	NB61A ID2-3 (50-75m)- backfilling	0%	20	20	30-May-16	22-Jun-16	839				
NB02990	NB61A ID2-3 (50-75m) - NB production	0%	45	45	28-May-16	12-Jul-16	1017				
NB03000	NB61A ID2-3 (50-75m) - NB post & panel installation	0%	5	5	12-Jul-16	18-Jul-16	823				
NB03040	NB61A (75-190m) - NB production	39.19%	45	74	20-Feb-16 A	03-Jun-16	1056				
NB03050	NB61A (75-190m) - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	854				
<b>Other Works</b>											
<b>Site Clearance &amp; Demolition of Existing Structure</b>											
<b>Contract Condition</b>											
MCLT1050	Apply cert for exemption by DLO by Engineer	0%	0	0	20-Apr-16	20-Apr-16	1249				
MCLT1080	Construct New MCLT (Structure)	87.84%	27	222	21-Jul-15 A	23-May-16	109				
MCLT1090	New MCLT - finishes works	0%	75	75	24-May-16	20-Aug-16	109				
<b>TCSS Works</b>											
<b>G54</b>											
TCSS1500	Slow lane footing - G54 (NB61)	0%	0	0		20-Apr-16	746				
20-Apr-16 ♦ Slow lane footing - G54 (NB61)											
<b>South Buffer Zone 1 (SBZ1) (within Zone 2)(Ch.6740 to 6930)</b>											
<b>Noise Barrier Along TWSR-West and Laying New Utilities</b>											
<b>NB63A (Ch.6710-6840)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB01090	NB63A-1 - NB production	0%	45	45	20-Apr-16	03-Jun-16	452				
NB01130	NB63A-2 - backfilling	0%	12	12	20-May-16	02-Jun-16	5				
NB01140	NB63A-2 - NB production	0%	45	45	20-Apr-16	03-Jun-16	452				
NB01150	NB63A-2 - NB post & panel installation	0%	5	5	04-Jun-16	10-Jun-16	364				
NB01170	NB63A-3 - Footing & Wall Structure (ch24.2-86.9) - 5 bays	81.82%	12	66	18-Jan-16 A	04-May-16	17				
NB01180	NB63A-3 - backfilling	0%	12	12	20-May-16	02-Jun-16	5				
NB01190	NB63A-3 - NB production	0%	45	45	05-May-16	18-Jun-16	437				
NB01200	NB63A-3 - NB post & panel installation	0%	5	5	20-Jun-16	24-Jun-16	352				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10860	DSD Trunk Sewer laying (along NB63A)	18.75%	26	32	14-Mar-16 A	21-May-16	33				
TSZ10880	Watermain installation (along NB63A)	0%	30	30	23-May-16	27-Jun-16	33				
TSZ10890	Firemain installation (along NB63A)	0%	30	30	28-Jun-16	02-Aug-16	33				
<b>Underground Utility Works</b>											
UUZ20210	Utility cable laying by Utility companies (Along NB63A, 125m)	0%	24	12	18-Mar-16 A	19-May-16	-14				
<b>NB64 &amp; NB64A (Ch.6860-6920)-TWSR West Side</b>											
<b>Noise Barrier Works</b>											
NB001060	NB64 & NB64A -NB post & panel installation	54.55%	5	11	14-Mar-16 A	25-Apr-16	401				
<b>DSD Southern Trunk Sewer, Water Main Fire Main Works</b>											
TSZ10910	DSD Trunk Sewer laying (along NB64)	0%	18	18	20-Apr-16	11-May-16	35				
TSZ10920	Backfill up to NB64 footing level	0%	6	6	12-May-16	19-May-16	35				
TSZ10930	Watermain installation (along NB64)	0%	30	30	20-May-16	24-Jun-16	35				
TSZ10940	Firemain installation (along NB64)	0%	30	30	25-Jun-16	30-Jul-16	35				
<b>Underground Utility Works</b>											
UUZ20220	Utility cable laying by Utility companies (Along NB64, 60m)	0%	24	24	29-Feb-16 A	19-May-16	-14				
<b>Bridge Construction</b>											
<b>Kau Lung Hang Vehicular Bridge</b>											
<b>Target Milestone</b>											
MS01	Completion of Bridge Deck 1 Structure between West	0%	0	0		17-May-16	0				17-May-16* ♦ Completion of Bridge Deck 1 Structure between West At
MS02	Completion of Bridge Deck 2 Structure between VPB3 to VBP6	0%	0	0		27-Apr-16*	3				27-Apr-16* ♦ Completion of Bridge Deck 2 Structure between VPB3 to VBP6
MS03	Completion of Bridge Deck 3 Structure between	0%	0	0		31-May-16	0				31-May-16* ♦ Completion of Bridge Deck 3 Structure betw
MS04	Completion of Installation of all Precast Concrete Skins	0%	0	0		13-Jun-16*	15				13-Jun-16* ♦ Completion of Installation of all
MS05	Completion of Installation of all Parapet Walls and Planter Walls	0%	0	0		14-Jul-16*	2				14-Jul-16* ♦ Co
<b>Other Off-Site Prefabrication</b>											
PC0260	Parapet Concrete Skin Fabrication	74.7%	21	83	12-Jan-16 A	16-May-16	27				
<b>KLH Bridge - West Ramp</b>											
KLH.1034	West Ramp Structure Work (6 bays after P3-4 beams lifting)	70.15%	20	67	20-Feb-16 A	13-May-16	0				
KLH.1140	West Ramp - Backfilling & Drainage	0%	45	45	16-May-16	08-Jul-16	0				
KLH.1180	West Ramp - Parapet skin (92nos)	11.11%	40	45	07-Apr-16 A	07-Jun-16	0				
KLH.1240	West Ramp -Parapet Wall & Planter Wall	0%	45	45	21-May-16	14-Jul-16	0				
KLH.1250	West Ramp - Road Surface work ready to start	0%	0	0	09-Jul-16		0				♦ West Ra
KLH.1260	West Ramp - barrier	0%	21	21	15-Jul-16	08-Aug-16	0				
KLH.1280	West Ramp - Lighting	0%	21	21	15-Jul-16	08-Aug-16	0				
KLH.1290	West Ramp - Planting	0%	21	21	15-Jul-16	08-Aug-16	0				
<b>KLH Bridge - Deck 1</b>											
KLH.1130	Deck 1 - Bridge deck construction (VBP2 to VBP3)	56%	22	50	14-Mar-16 A	17-May-16	0				
KLH.3380	Deck 1 - Parapet skin (61nos)	49.12%	29	57	14-Mar-16 A	25-May-16	6				
KLH.3390	Deck 1 - Parapet Wall & Planter Wall	0%	45	45	07-May-16	30-Jun-16	6				



Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016				
								Apr	May	Jun	Jul	
KLH.3400	Deck 1 - Road Surface work ready to start	0%	0	0	02-Jul-16		6					◆ Deck 1 - Road
KLH.3410	Deck 1 - barrier	0%	21	21	02-Jul-16	26-Jul-16	11					
KLH.3420	Deck 1 - Lighting	0%	21	21	02-Jul-16	26-Jul-16	11					
KLH.3430	Deck 1 - Planting	0%	21	21	02-Jul-16	26-Jul-16	11					
KLH.3630	Pedestrian walkway Roof & Parapet P2 to P3	0%	30	30	07-Jun-16	13-Jul-16	8					
KLH.3640	Pedestrian walkway floor finishes P2 to P3	0%	14	14	14-Jul-16	29-Jul-16	8					
<b>KLH Bridge - Deck 2</b>												
KLH.3122	Diaphragm construction (steel fixing & formwork)	0%	6	6	20-Apr-16	26-Apr-16	2					
KLH.3124	Diaphragm concreting	0%	1	1	27-Apr-16	27-Apr-16	1					
KLH.3130	Precast Concrete Skin (P5 to P6)(14nos)	0%	8	8	29-Apr-16	18-May-16	3					
KLH.3140	Parapet wall (P5 to P6)	0%	30	30	11-May-16	16-Jun-16	4					
KLH.3150	Finished Surface of Road ready for P5-P6	0%	0	0	17-Jun-16		4					◆ Finished Surface of Road re
KLH.3160	Pedestrian walkway Roof & Parapet P5-P6	0%	30	30	17-Jun-16	22-Jul-16	4					
KLH.3170	Pedestrian walkway floor finishes P5-P6	0%	14	14	19-Jul-16	03-Aug-16	4					
KLH.3230	Precast Concrete Skin (P4 to P5)(12nos)	0%	5	5	03-May-16	07-May-16	2					
KLH.3240	Parapet wall (P4 to P5)	0%	30	30	09-May-16	14-Jun-16	2					
KLH.3250	Finished Surface of Road ready for P4 to P5	0%	0	0	15-Jun-16		2					◆ Finished Surface of Road read
KLH.3260	Pedestrian walkway Roof & Parapet P4 to P5	0%	30	30	15-Jun-16	20-Jul-16	2					
KLH.3330	Precast Concrete Skin (P3 to P4)(11nos)	28.57%	10	14	23-Apr-16 A	30-Apr-16	2					
KLH.3340	Parapet wall (P3 to P4)	0%	30	30	03-May-16	07-Jun-16	7					
KLH.3350	Finished Surface of Road ready for P3 to P4	0%	0	0	08-Jun-16		7					◆ Finished Surface of Road ready for P
KLH.3360	Pedestrian walkway Roof & Parapet P3 to P4	0%	30	30	08-Jun-16	14-Jul-16	7					
KLH.3370	Pedestrian walkway floor finishes P3 to P4	0%	14	14	15-Jul-16	30-Jul-16	7					
<b>KLH Bridge - Deck 3</b>												
KLH.1380	Deck - VBP6 to VBP7	58.02%	34	81	20-Feb-16 A	31-May-16	0					
KLH.1400	Deck - VBP7 to VBP8	81.05%	18	95	28-Dec-15 A	11-May-16	6					
KLH.3450	Deck 3 - Parapet skin (61nos)	0%	44	44	20-Apr-16	13-Jun-16	0					
KLH.3460	Deck 3 - Parapet Wall & Planter Wall	0%	45	45	21-May-16	14-Jul-16	0					
KLH.3470	Deck 3 - Road Surface work ready to start	0%	0	0	15-Jul-16		0					◆ De
KLH.3480	Deck 3 - barrier	0%	21	21	15-Jul-16	08-Aug-16	0					
KLH.3490	Deck 3 - Lighting	0%	21	21	15-Jul-16	08-Aug-16	0					
KLH.3500	Deck 3 - Planting	0%	21	21	15-Jul-16	08-Aug-16	0					
KLH.3650	Pedestrian walkway Roof & Parapet P6 to P7	0%	30	30	17-Jun-16	22-Jul-16	0					
<b>KLH Bridge - East Ramp</b>												
KLH.3520	East Ramp Structure Work (5/8 remaining)	93.79%	10	161	02-Oct-15 A	30-Apr-16	1					
KLH.3530	East Ramp - Backfilling & Drainage	0%	60	60	25-Apr-16	07-Jul-16	1					
KLH.3540	East Ramp - Parapet skin (79nos)	43.33%	34	60	23-Mar-16 A	31-May-16	13					
KLH.3550	East Ramp -Parapet Wall & Planter Wall	0%	45	45	07-May-16	30-Jun-16	13					
KLH.3560	East Ramp - Road Surface work ready to start	0%	0	0	08-Jul-16		1					◆ East Ran
KLH.3570	East Ramp - barrier	0%	21	21	08-Jul-16	01-Aug-16	6					
KLH.3580	East Ramp - Lighting	0%	21	21	08-Jul-16	01-Aug-16	6					
KLH.3590	East Ramp - Planting	0%	21	21	08-Jul-16	01-Aug-16	6					
<b>KLH Bridge - Ramp R1</b>												
Z2.KLH.1450	Ramp R1 - Pile caps and pier construction (R1P1)	91.32%	21	242	02-Jul-15 A	16-May-16	4					
Z2.KLH.1680	Ramp R1 - Ramp construction (Abutment R1 to R1P1)	0%	40	40	17-May-16	04-Jul-16	30					
Z2.KLH.1685	Ramp R1 - Ramp construction (R1P1 to P1P3)	0%	40	40	17-May-16	04-Jul-16	4					
Z2.KLH.1710	Ramp R1 - Abutment R1 - base slab & wall	91.63%	21	251	22-Jun-15 A	16-May-16	10					
Z2.KLH.1720	Ramp R1 - Abutment R1 - Top slab	0%	30	30	17-May-16	21-Jun-16	10					
Z2.KLH.1730	Ramp R1 - Abutment R1 - Staircase	0%	30	30	22-Jun-16	27-Jul-16	10					
Z2.KLH.3610	Ramp R1 - Steel roof	0%	40	40	02-Jun-16	20-Jul-16	4					
Z2.KLH.3620	Ramp R1 - finishes work	0%	30	30	29-Jun-16	03-Aug-16	4					
<b>KLH Bridge - Ramp R2</b>												
Z2.KLH.1523	VO 028 - Boundary Wall to Hse 190B structure	0%	24	24	20-Apr-16*	19-May-16	846					
Z2.KLH.1524	VO 028 - Boundary Wall to Hse 190B E&M, Drainage	0%	26	26	20-May-16	20-Jun-16	846					
Z2.KLH.1530	Ramp R2 - Pile cap, abutment and pier construction	77.3%	32	141	20-Nov-15 A	28-May-16	1					
Z2.KLH.1540	Ramp R2 - Ramp construction	0%	65	65	28-Apr-16	16-Jul-16	1					
Z2.KLH.1545	Ramp R2 - Ramp construction (section after VBP6-7 deck)	0%	35	35	18-Jul-16	26-Aug-16	1					
<b>Bridge Road Work</b>												
Z2.KLH.1930	Road Pavement Works (East Ramp)	0%	26	26	08-Jul-16	06-Aug-16	1					
Z2.KLH.1940	Road Pavement Works (Deck 1)	0%	26	26	02-Jul-16	01-Aug-16	6					
Z2.KLH.1950	Road Pavement Works (Deck 2)	0%	26	26	17-Jun-16	18-Jul-16	18					
Z2.KLH.1960	Road Pavement Works (Deck 3)	0%	21	21	15-Jul-16	08-Aug-16	0					
Z2.KLH.1970	Road Pavement Works (West Ramp)	0%	26	26	09-Jul-16	08-Aug-16	0					
<b>Lift at TWSR-W Side</b>												
L01093	Lift contractor sub-letting	90.83%	20	218	10-Aug-15 A	13-May-16	86					
L01094	Lift submission & ordering period	0%	270	270	16-May-16	13-Apr-17	86					
L01140	CLP Power available (by CLP)	0%	365	365	04-Apr-16 A	19-Apr-17	187					
<b>Lift at FLHY S/B</b>												

Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016			
								Apr	May	Jun	Jul
L01180	Earliest date for lift construction resume	0%	0	0	14-Jun-16		79				◆ Earliest date for lift construction
L01190	Set up & Pile test	0%	45	45	14-Jun-16	05-Aug-16	79				
L01300	CLP Power available (by CLP)	0%	365	365	20-Apr-16	19-Apr-17	190				
<b>Noise Barrier Along Fanling Highway S/B</b>											
<b>NB62 (Ch.6745-6910)-FH S/B Side (MTRC I&amp;P Area)</b>											
<b>Noise Barrier Works</b>											
NB03080	NB62 (0-80m) - Sheet piling & Excavation	0%	18	18	20-Apr-16	11-May-16	12				
NB03090	NB62 (0-80m) - Footing & Wall Structure	0%	60	60	12-May-16	23-Jul-16	12				
NB03180	NB62 (110-170m) - Sheet piling & Excavation	0%	18	18	28-Jun-16	19-Jul-16	7				
<b>NB70 (Ch.6910-6930)-FH S/B Side</b>											
<b>Noise Barrier Works</b>											
NB03250	NB70 - Sheet piling & Excavation	0%	18	18	20-Apr-16	11-May-16	7				
NB03260	NB70 - Footing & Wall Structure	0%	26	26	12-May-16	13-Jun-16	7				
NB03270	NB70- backfilling	0%	12	12	14-Jun-16	27-Jun-16	7				
NB03280	NB70 - NB production	0%	45	45	14-Jun-16	28-Jul-16	1001				
<b>North Buffer Zone 2 (NBZ2) (within Zone 4) (Ch. 7925 to 8100)</b>											
<b>Bridge Construction</b>											
<b>New Ho Ka Yuen Footbridge</b>											
<b>General</b>											
HKY1060	Steel Staircase & Ramp prefabrication (HKYB-TWSR-W)	0%	30	30	01-Apr-16 A	26-May-16	-9				
HKY1070	Steel Staircase & Ramp available on site (HKYB-TWSR-W side)	0%	0	0	27-May-16		-9				◆ Steel Staircase & Ramp available on site (HKYB-TWSR-W side)
HKY1100	Steel Bridge prefabrication (HKYB)	0%	45	45	01-Apr-16 A	14-Jun-16	4				
HKY1110	Steel Bridge available on site (HKYB)	0%	0	0	15-Jun-16		4				◆ Steel Bridge available on site (HKYB)
<b>TWSR-West/ FL Highway N/B Side Section</b>											
HKY1162	Mobilisation, backfill & remove completed ELS & Redesign ELS	33.33%	20	30	14-Apr-16 A	13-May-16	-59				
HKY1170	HKYP6 - Pile cap, Pier and Pier Head	0%	60	60	16-May-16	26-Jul-16	-59				
HKY1310	HKYP7 - Pile cap, Pier and Pier Head	67.33%	33	101	18-Jan-16 A	30-May-16	-12				
HKY1350	HKYAB4 - pile cap & abutment wall	40%	33	55	21-Mar-16 A	30-May-16	-24				
HKY1360	HKYAB4 - Backfilling (~3m)	0%	12	12	31-May-16	14-Jun-16	-24				
<b>Crossing Fanling Highway Section</b>											
HKY1416	TTA Stage 4 start	0%	0	0	16-Jun-16		1203				◆ TTA Stage 4 start
HKY1450	HKYP2 - Pile cap, Pier and Pier Head	35.71%	36	56	26-Feb-16 A	02-Jun-16	13				
<b>TWSR-East FL Highway S/B Side Section</b>											
HKY1600	Finishes Work	0%	30	30	20-Apr-16	26-May-16	43				
HKY1610	Bridge Structure complete (HKYFB-TWSR-E side)	0%	0	0		05-Jul-16	11				05-Jul-16 ◆ Bridge Structure complete (HKYFB-TWSR-E side)
HKY1860	Erect Steel Ramp (HKYFB-TWSR-E side)	43.86%	32	57	20-Feb-16 A	28-May-16	11				
HKY1870	Steel Ramp finishes work (HKYFB-TWSR-E side)	0%	30	30	30-May-16	05-Jul-16	11				
<b>ZONE 4 (Ch. 7925 to 8700)</b>											
<b>Noise Barrier Along Fanling Highway N/B</b>											
<b>NB77 (Ch.8090-8450)-FH N/B Side</b>											
<b>Noise Barrier Works</b>											
NB4285	TTA for FH N/B (Stage 6) start	0%	0	0	16-Jul-16		35				◆ TTA for FH N/B (Stage 6) start
<b>Bridge Construction</b>											
<b>New Wo Hop Shek Pedstrian &amp; Cycle Bridge</b>											
<b>General</b>											
WHS1060	Steel Ramp available on site (WHSB)	0%	0	0	20-Apr-16		35				◆ Steel Ramp available on site (WHSB)
WHS1080	Steel Staircase available on site (WHSB)	0%	0	0	20-Apr-16		898				◆ Steel Staircase available on site (WHSB)
<b>TWSR-West/ FL Highway N/B Side Section</b>											
WHS1228	WHSP7 - Pile cap, Pier and Pier Head	0%	45	45	20-Apr-16	14-Jun-16	796				
WHS1260	WHSAB1 - pile cap & abutment wall	0%	30	30	15-Jun-16	20-Jul-16	796				
WHS1930	WHSP4 - Pile cap, Pier and Pier Head	86.33%	35	256	02-Jul-15 A	01-Jun-16	0				
WHS1980	1st half Steel Ramp ready for erection (WHS-TWSR-W side)	0%	0	0		01-Jun-16	0				01-Jun-16 ◆ 1st half Steel Ramp ready for erection (WHS-TWSR-W side)
WHS1990	Erect 1st half ramp	0%	60	60	02-Jun-16	12-Aug-16	0				
<b>Crossing Fanling Highway Section</b>											
WHS1480	Erect WHS bridge Structure across fanling highway	70%	27	90	20-Jan-16 A	23-May-16	83				
WHS1490	Finishes Work	0%	30	30	24-May-16	28-Jun-16	83				
WHS1500	Bridge Structure complete (WHSB-Cross fanling highway)	0%	0	0		28-Jun-16	83				28-Jun-16 ◆ Bridge Structure complete (WHSB-Cross fanling highway)
<b>Slip Road Y Construction</b>											
<b>Drainage &amp; Road Works</b>											
<b>TWSR-East FL Highway S/B Side Section</b>											
RDZ41020	Construct Slip Rd Y @ existing TWSR-E junction	79.39%	34	165	01-Dec-15 A	31-May-16	29				
RDZ41082	Construct Slip Rd Y (Ch7925-8050)(SA3460) - 1 lane @	83.17%	34	202	17-Sep-15 A	31-May-16	1215				
RDZ41084	Construct Slip Rd Y (Ch7925-8050)(SA3460) - 1 temp	81.32%	34	182	11-Nov-15 A	31-May-16	40				
<b>Underground Utility Works</b>											
<b>DN600 and DN900 Watermain</b>											
DN1056	Laying DN600 section after DN900 changeover Works	56.41%	34	78	01-Feb-16 A	31-May-16	23				
DN1060	Watermain (DN600) changeover for TTA stage 4	0%	6	6	01-Jun-16	07-Jun-16	23				
<b>VO - Wall 76A Construction</b>											
<b>Retaining Wall W76A</b>											
<b>TWSR-East FL Highway S/B Side Section</b>											
W76A1050	Drainage work for Caltex access road	0%	150	150	20-Apr-16	19-Oct-16	628				
<b>Fanling Highway Construction</b>											
<b>Drainage &amp; Road Works</b>											
<b>TWSR-East FL Highway S/B Side Section</b>											
RDZ41025	Construct FH S/B Lane 1,2 @ existing TWSR-E junction	77.33%	34	150	18-Dec-15 A	31-May-16	29				

Activity ID	Activity Name	Dur. % Complete	Rem. Duration	Original Duration	Start	Finish	Total Float	2016			
								Apr	May	Jun	Jul
RDZ41050	Traffic Diversion for FH S/B road construction (Z4 TTA-Stage 4)	0%	6	6	08-Jun-16	15-Jun-16	23				
RDZ41090	Remove FH central barrier	0%	25	25	16-Jun-16	15-Jul-16	23				
RDZ41100	TTA for FH N/B Lane 1, 2, 3 construction (Ch7925-8600)(SA340)	0%	6	6	16-Jul-16	22-Jul-16	23				
<b>Other Works</b>											
<b>Retaining Wall W77B</b>											
<b>TWSR-East FL Highway S/B Side Section</b>											
RWZ4.1100	Base slab & Wall (0-3m high)- RW77B (Ch 0-40)	0%	59	52	01-Mar-16 A	30-Jun-16	167				
RWZ4.1110	Backfilling (0-3m) - RW77B (Ch 0-40)	0%	30	30	02-Jul-16	05-Aug-16	197				
<b>TCSS Works</b>											
<b>TCSS Pre-Construction Works</b>											
TCSS0120	Prepare Shop Drawing-TCSS	0%	45	45	20-Apr-16	14-Jun-16	277				
TCSS0130	Shop Drawing Comment & Approval	0%	21	21	15-Jun-16	05-Jul-16	346				
TCSS0140	Revised & Re-submission TCSS shop Drawing	0%	18	18	06-Jul-16	26-Jul-16	277				
<b>FVMS2 (Deleted by RFI-138, Pending for VO)</b>											
TCSS1640	Slow lane footing - FVMS2 (CH8400, S/B)- Deleted by RFI-138	0%	30	30	16-Jun-16	21-Jul-16	610				

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**APPENDIX C  
IMPLEMENTATION SCHEDULE OF  
ENVIRONMENTAL MITIGATION MEASURES  
(EMIS)**

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## **Appendix C - Implementation Schedule of Environmental Mitigation Measures (EMIS)**

### **Air Quality – Schedule of Recommended Mitigation Measures**

Impact	Mitigation Measures	Timing	Implementation Status		
			Feb 16	Mar 16	Apr 16
Air Quality during construction	Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading.	During construction	V	V	V
	All stockpiles of excavated materials or spoil of more than 50m <sup>3</sup> shall be enclosed, covered or dampened during dry or windy conditions.		+	+	V
	Effective water sprays shall be used to control potential dust emission sources such as unpaved haul roads and active construction areas.		V	@	V
	All spraying of materials and surfaces shall avoid excessive water usage.		V	V	V
	Vehicles that have the potential to create dust while transporting materials shall be covered, with the cover properly secured and extended over the edges of the side and tail boards.		V	V	V
	Materials shall be dampened, if necessary, before transportation.		V	V	V
	Travelling speeds shall be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks.		V	V	V
	Vehicle washing facilities shall be provided to minimize the quantity of material deposited on public roads.		V	@	@

### Noise – Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Feb 16	Mar 16	Apr 16
Noise during construction	Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant.	During construction	@	V	V
	Reduce the number of equipment and their percentage on-time.		V	V	V
	3.5 m and 5.5 m high temporary noise barrier at culvert construction work area (Figure 2a of the Environmental Permit).		V	V	V
	3 m high temporary noise barrier along the northern edge of Bridge 12 at ground level (Figure 2b of the Environmental Permit).		V	V	V
	2 m high temporary noise barrier along the northern edge of Bridge 12 at bridge level (Figure 2b of the Environmental Permit).		V	V	V
	2.5 m high temporary noise barrier along Tai Wo Service Road West (Figure 2c of the Environmental Permit).		V	V	V
	3.5m and 7m high temporary noise barrier along Tai Wo Services Road West near Tai Hang (Figure 2c of the Environmental Permit).		V	V	V
	7 m high temporary noise barrier along Tai Wo Service Road West near Tai Wo Footbridge work area (Figure 2d of the Environmental Permit).		V	V	V
	7 m high temporary noise barrier near Kiu Tau Footbridge work area (Figure 2d of the Environmental Permit).		V	V	V
	2.5 m high temporary noise barrier near river diversion work area (Figure 2e of the Environmental Permit).		N.A.	N.A.	N.A.

**Water Quality – Schedule of Recommended Mitigation Measures**

Impact	Mitigation Measures	Timing	Implementation Status		
			Feb 16	Mar 16	Apr 16
Water quality during construction	Demolition and reconstruction of bridges <ul style="list-style-type: none"> <li>- Prevent off-site migration through use of sheet piles.</li> <li>- Minimise duration of works as far as practical.</li> <li>- All sewer and drainage connections should be sealed to prevent debris, soil, sand, etc, from entering public sewers/drains.</li> <li>- Site surface runoff should be settled to remove sand/silt before it is discharged into the existing storm drains.</li> </ul>	During construction	V	V	V
	Road Widening Works, Earthworks and Culvert Extension Works <ul style="list-style-type: none"> <li>- Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settleable solids, and pH adjustment as necessary. All sewage discharges from the study area should meet the TM standards and approval from EPD through the licensing process is required.</li> <li>- Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained.</li> <li>- Runoff from exposed working areas, unfinished slopes and from unlined temporary channels should be directed to stilling basins and/or silt traps before discharging to the drainage outfalls.</li> <li>- Regular inspections of stilling basins and/or silt traps is required to ensure that sediment is not conveyed into the existing drainage system.</li> <li>- Open stockpiles should be covered with a tarpaulin cover.</li> <li>- During the wet season, any exposed top soils should be covered with a tarpaulin, shotcreted or hydroseeded.</li> <li>- Sand and silt from wash-water from vehicle washing should be settled out before discharging into storm drains.</li> <li>- Fuels should be stored in bunded areas such that spillage can be easily collected.</li> </ul>		@	@	@

### Waste – Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Feb 16	Mar 16	Apr 16
Waste management during construction	<b>General Waste</b> <ul style="list-style-type: none"> <li>- Transport of wastes off site as soon as possible.</li> <li>- Maintenance of accurate waste records.</li> <li>- Minimisation of waste generation for disposal (via reduction/recycling/re-use).</li> <li>- No on-site burning will be permitted.</li> <li>- Use of re-useable metal hoardings/signboards.</li> </ul>	During construction	@	V	@
	<b>Vegetation from site clearance</b> <ul style="list-style-type: none"> <li>- Segregation of materials to facilitate disposal.</li> <li>- Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas.</li> </ul>		V	V	V
	<b>Demolition Wastes</b> <ul style="list-style-type: none"> <li>- Segregation of materials to facilitate disposal.</li> <li>- Appropriate stockpile management.</li> </ul>		V	V	V
	<b>Excavated Materials</b> <ul style="list-style-type: none"> <li>- Segregation of materials to facilitate disposal / reuse.</li> <li>- Appropriate stockpile management.</li> <li>- Re-use of excavated material on or off site (where possible).</li> <li>- Special handling and disposal procedures in the event that contaminated materials are excavated.</li> </ul>		V	V	V
	<b>Construction Wastes</b> <ul style="list-style-type: none"> <li>- Segregation of materials to facilitate recycling/reuse (within designated area in appropriate containers/stockpiles).</li> <li>- Appropriate stockpile management.</li> <li>- Planning to reduce over ordering and waste generation.</li> <li>- Recycling and re-use of materials where possible (e.g. metal, wood from formwork)</li> <li>- For material which cannot be re-used/recycled, collection should be carried out by an approved waste contractor for landfill disposal.</li> </ul>		V	V	V
	<b>Bentonite Slurries</b> <ul style="list-style-type: none"> <li>- Bentonite slurries should be reused as far as possible.</li> <li>- Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94.</li> </ul>		#	#	#



	<p>Chemical Wastes</p> <ul style="list-style-type: none"> <li>- Storage within locked, covered and bunded area.</li> <li>- The storage area shall not be located adjacent to sensitive receivers e.g. drains.</li> <li>- Minimise waste production and recycle oils/solvents where possible.</li> <li>- A spill response procedure shall be in place and absorption material available for minor spillages.</li> <li>- Use appropriate and labelled containers.</li> <li>- Educate site workers on site cleanliness/waste management procedures.</li> <li>- If chemical wastes are to be generated, the contractor must register with EPD as a chemical waste producer.</li> <li>- The chemical wastes shall be collected by a licensed chemical waste collector.</li> </ul>		@	V	V
	<p>Municipal Wastes</p> <ul style="list-style-type: none"> <li>- Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal.</li> <li>- Regular, daily collections are required by an approved waste collector.</li> </ul>		V	+	V

### Ecology – Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Feb 16	Mar 16	Apr 16
Ecology during construction	<p>Accurate Delineation of Works Area</p> <ul style="list-style-type: none"> <li>- Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats.</li> <li>- Individual trees which fall within the works areas but which work plans do not require removal are to be retained and fenced off to maximize protection.</li> </ul>	During construction	V	V	V
	<p>Vegetation Clearance</p> <ul style="list-style-type: none"> <li>- No fires shall be lit within the works area for the purpose of burning cleared vegetation.</li> <li>- The Contractor shall give consideration to mulching the cleared vegetation for recycling within the works area / adjacent land.</li> </ul>		V	V	V
	<p>Dust generation</p> <p>There are a number of measures which shall be taken as specified in the Air Pollution Control (Construction Dust) Regulation on 'Dust Control Requirements, including the following key measures to be applied during construction:</p> <ul style="list-style-type: none"> <li>- Vehicle washing facilities to be provided at every discernible or designated vehicle exit point;</li> <li>- All temporary site access roads shall be sprayed with water to suppress dust as necessary;</li> <li>- All dusty materials should be sprayed with water immediately prior to any handling; and</li> <li>- All debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area.</li> </ul>		V	V	V
	<p>Surface Run-off</p> <p>In general, mitigation measures shall be in accordance with ProPECC PN1/94 on 'Construction Site Drainage'. Key measures include:</p> <ul style="list-style-type: none"> <li>- Bund and cover stock piles to avoid run-off;</li> <li>- Channel any run-off through a system of oil, grease and sediment / silt traps and reuse water on site where ever practical;</li> <li>- All vehicle maintenance to be undertaken within a bunded area; and</li> <li>- Maximise vegetation retention on-site to maximise absorption (minimise transport).</li> </ul>		V	V	V

### Landscape and Visual Impact – Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Feb 16	Mar 16	Apr 16
Landscape & Visual during construction	<b>Preservation of Existing Vegetation</b> - Trees identified for retention within the project limit would be protected during the works; - The tree transplanting and planting works shall be implemented by approved Landscape Contractors.	During construction	V	V	V
	<b>Temporary Works Areas</b> - Where feasible the works areas would be screened using hoarding and existing vegetation would be retained where possible to reduce the landscape and visual impacts arising from the construction activity. The landscape of these works areas would be restored following the completion of the construction phase.		V	V	V
	<b>Hoarding</b> - A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSRs.		V	V	V
	<b>Top Soils</b> - The works will result in disturbance to extensive areas of topsoil. Topsoil worthy of retention should be stockpiled for use following completion of the civil engineering works. It should either be temporarily vegetated with hydroseeded grass or turned over on a regular basis.		#	#	#
	<b>Protection of Important Landscape Features</b> - Important features such as temples, Island House and kilns within the study area, although remote from the proposed works retained and adequately protected.		#	#	#

**Legend:**

V = implemented;

x = not implemented;

@ = partially implemented;

+ = recommended and immediately implemented during the site inspection by the Contractor;

N/A = not applicable - No such work was undertaken or no such material was used on site;

# = to be implemented.

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**APPENDIX D  
SUMMARY OF ACTION AND LIMIT LEVELS**

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## Appendix D - Summary of Action and Limit Levels

Table 1 – Action and Limit Levels for 1-hour TSP

Location	Action Level	Limit Level
AM2	317.8 µg/m <sup>3</sup>	500 µg/m <sup>3</sup>

Table 2 – Action and Limit Levels for 24-hour TSP

Location	Action Level	Limit Level
AM2	200.7 µg/m <sup>3</sup>	260 µg/m <sup>3</sup>

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

Location	Action Level	Limit Level
M2	When one documented complaint, related to 0700 – 1900 hours on normal weekdays, is received from any one of the sensitive receivers	75 dB(A)
M3*		65/70 dB(A)

\*Daytime noise Limit Level of 70 dB(A) applies to education institutions, while 65dB(A) applies during school examination period

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**APPENDIX E  
IMPACT AIR QUALITY MONITORING  
RESULTS AND THEIR GRAPHICAL  
PRESENTATION**

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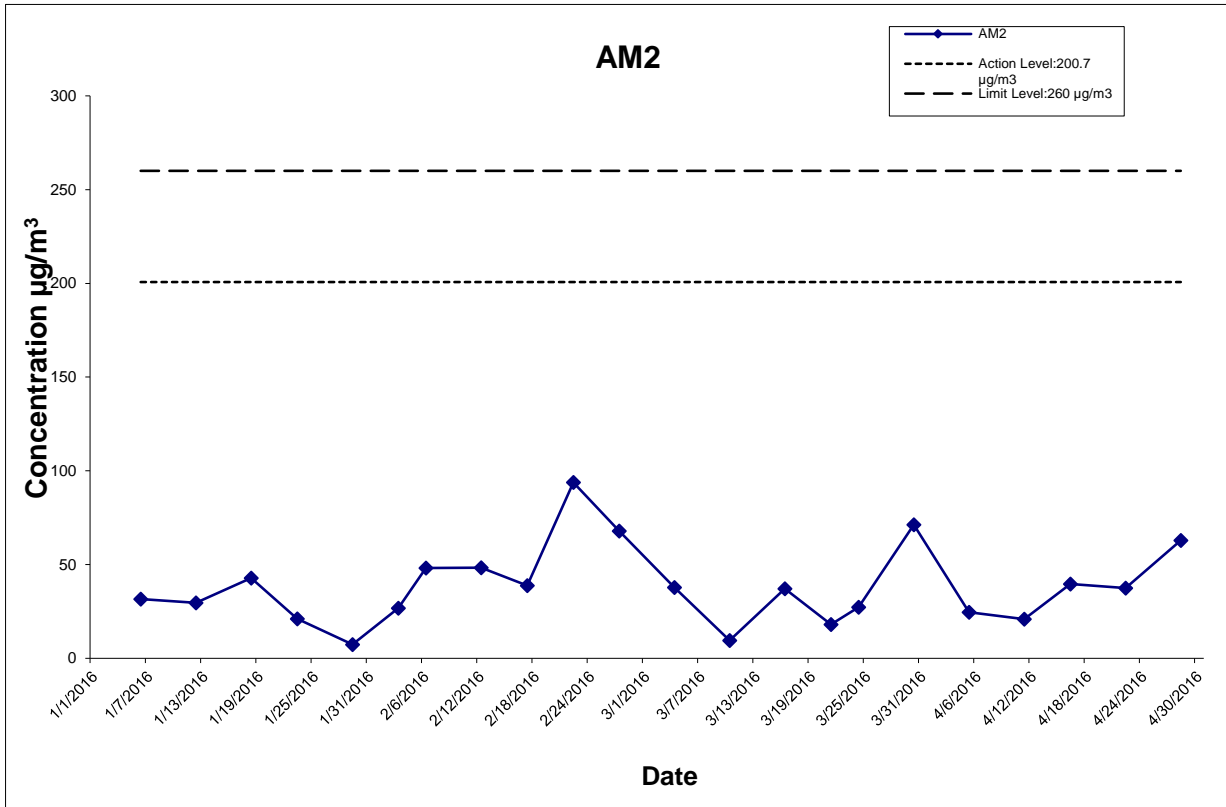
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## Impact Air Quality Monitoring Results

### 24-hour TSP Monitoring Results at Station AM2 (Fanling Government Secondary School)

Date	Weather Condition	Air Temp. (°C)	Atmospheric Pressure(hPa)	Flow Rate (m <sup>3</sup> /min.)		Av. flow (m <sup>3</sup> /min)	Total vol. (m <sup>3</sup> )	Filter Weight (g)		Particulate weight(g)	Elapse Time		Sampling Time(hrs.)	Conc. (µg/m <sup>3</sup> )	Action Level (µg/m <sup>3</sup> )	Limit Level (µg/m <sup>3</sup> )
				Initial	Final			Initial	Final		Initial	Final				
6-Jan-16	Fine	20.9	1018.8	1.314	1.314	1.314	1892.2	2.8890	2.9490	0.0600	6626.03	6650.03	24.00	31.7	200.7	260
12-Jan-16	Fine	17.3	1019.9	1.314	1.314	1.314	1892.2	2.9183	2.9743	0.0560	6650.03	6674.03	24.00	29.6	200.7	260
18-Jan-16	Fine	15.2	1017.1	1.314	1.314	1.314	1892.2	2.8988	2.9798	0.0810	6674.03	6698.03	24.00	42.8	200.7	260
23-Jan-16	Cloudy	8.5	1027.1	1.314	1.314	1.314	1892.2	2.9150	2.9550	0.0400	6698.03	6722.03	24.00	21.1	200.7	260
29-Jan-16	Rainy	16.6	1017.9	1.314	1.314	1.314	1892.2	2.8928	2.9068	0.0140	6722.03	6746.03	24.00	7.4	200.7	260
3-Feb-16	Fine	12.5	1023.6	1.314	1.314	1.314	1892.2	2.8827	2.9335	0.0508	6746.03	6770.03	24.00	26.8	200.7	260
6-Feb-16	Sunny	13.6	1024.9	1.314	1.314	1.314	1892.2	2.8636	2.9546	0.0910	6770.03	6794.03	24.00	48.1	200.7	260
12-Feb-16	Cloudy	19.2	1013.4	1.314	1.314	1.314	1892.2	2.8981	2.9894	0.0913	6794.03	6818.03	24.00	48.3	200.7	260
17-Feb-16	Cloudy	12.9	1024.1	1.314	1.314	1.314	1892.2	2.8231	2.8966	0.0735	6818.03	6842.03	24.00	38.8	200.7	260
22-Feb-16	Cloudy	16.1	1020.6	1.314	1.314	1.314	1892.2	2.8389	3.0164	0.1775	6842.03	6866.03	24.00	93.8	200.7	260
27-Feb-16	Cloudy	15.5	1024.7	1.314	1.314	1.314	1892.2	2.8154	2.9441	0.1287	6866.03	6890.03	24.00	68.0	200.7	260
4-Mar-16	Sunny	20.2	1018.1	1.314	1.314	1.314	1892.2	2.7468	2.8184	0.0716	6890.03	6914.03	24.00	37.8	200.7	260
10-Mar-16	Rainy	13.4	1019.5	1.314	1.314	1.314	1892.2	2.8466	2.8645	0.0179	6914.03	6938.03	24.00	9.5	200.7	260
16-Mar-16	Fine	15.3	1015.0	1.314	1.314	1.314	1892.2	2.8321	2.9023	0.0702	6938.03	6962.03	24.00	37.1	200.7	260
21-Mar-16	Cloudy	17.1	1014.8	1.314	1.314	1.314	1892.2	2.8048	2.8391	0.0343	6962.03	6986.03	24.00	18.1	200.7	260
24-Mar-16	Cloudy	15.3	1020.2	1.314	1.314	1.314	1892.2	2.9065	2.9580	0.0515	6986.03	7010.03	24.00	27.2	200.7	260
30-Mar-16	Cloudy	20.0	1018.3	1.314	1.314	1.314	1892.2	2.8067	2.9416	0.1349	7010.03	7034.03	24.00	71.3	200.7	260
5-Apr-16	Cloudy	22.3	1013.3	1.314	1.314	1.314	1892.2	2.7931	2.8396	0.0465	7034.03	7058.03	24.00	24.6	200.7	260
11-Apr-16	Cloudy	21.5	1010.1	1.314	1.314	1.314	1892.2	2.8907	2.9302	0.0395	7058.03	7082.03	24.00	20.9	200.7	260
16-Apr-16	Cloudy	24.7	1010.5	1.314	1.314	1.314	1892.2	2.8864	2.9614	0.0750	7082.03	7106.03	24.00	39.6	200.7	260
22-Apr-16	Cloudy	23.7	1010.7	1.314	1.314	1.314	1892.2	2.8361	2.9071	0.0710	7106.03	7130.03	24.00	37.5	200.7	260
28-Apr-16	Sunny	26.0	1010.4	1.314	1.314	1.314	1892.2	2.8699	2.9889	0.1190	7130.03	7154.03	24.00	62.9	200.7	260

Average for the reporting quarter (Feb 16 to Apr 16)	41.8
Minimum for the reporting quarter(Feb 16 to Apr 16)	9.5
Maximum for the reporting quarter(Feb 16 to Apr 16)	93.8



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CONTRACT NO. HY/2012/06  
 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Graphical Presentation of Impact 24-hour TSP Monitoring Results

Project No.: 60307376

Date: May-16

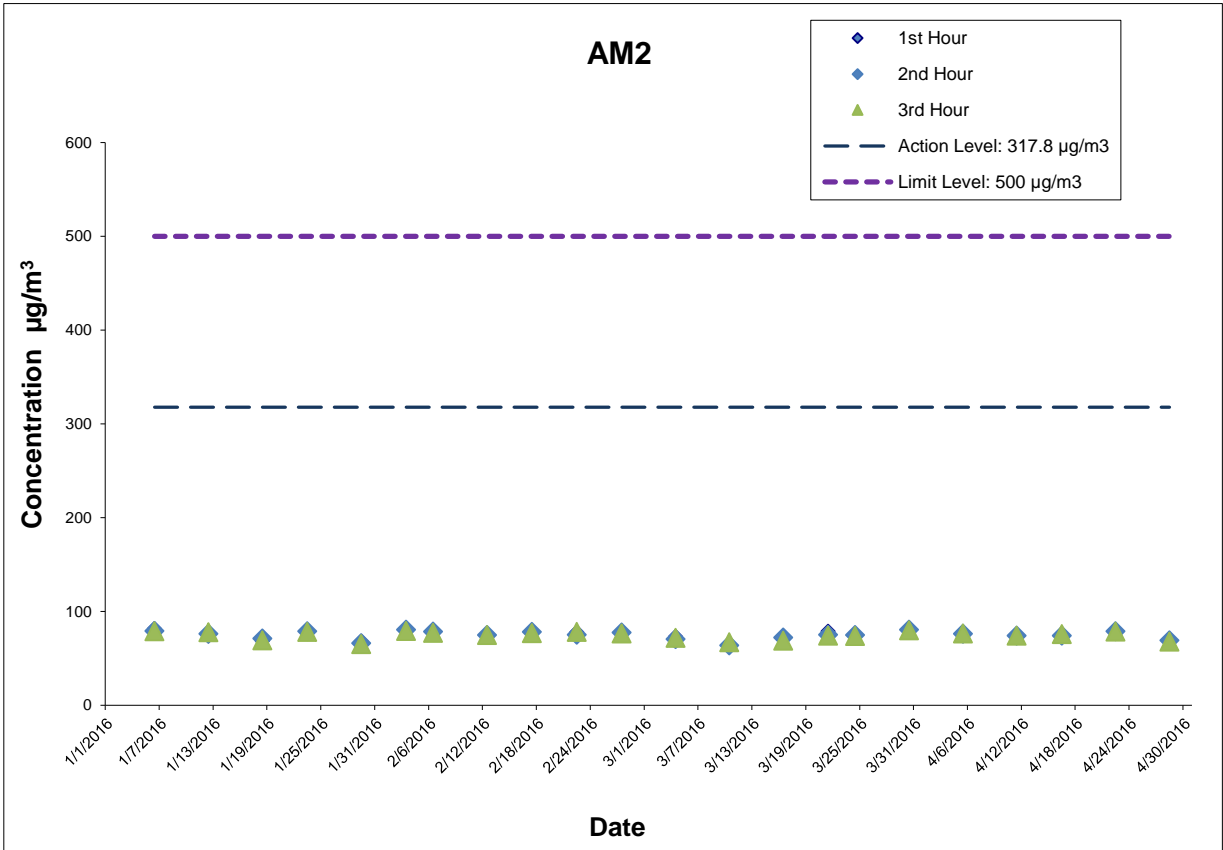
Appendix E



## Impact Air Quality Monitoring Results

### 1-hour TSP Monitoring Results at Station AM2 (Fanning Government Secondary School)

Date	Start Time (hh:mm)	1st Hour Conc. ( $\mu\text{g}/\text{m}^3$ )	2nd Hour Conc. ( $\mu\text{g}/\text{m}^3$ )	3rd Hour Conc. ( $\mu\text{g}/\text{m}^3$ )
6-Jan-16	13:40	81.6	79.4	79.0
12-Jan-16	10:15	73.8	76.3	77.9
18-Jan-16	10:00	68.6	71.2	69.4
23-Jan-16	13:11	78.0	78.9	78.4
29-Jan-16	10:30	68.2	66.2	65.4
3-Feb-16	9:35	80.9	80.5	79.4
6-Feb-16	10:03	77.6	78.5	77.3
12-Feb-16	9:52	75.6	74.9	75.1
17-Feb-16	10:02	77.4	78.2	77.1
22-Feb-16	10:00	77.8	75.3	78.4
27-Feb-16	12:52	76.2	77.5	76.7
4-Mar-16	9:50	73.3	70.5	72.1
10-Mar-16	10:00	65.2	63.8	67.2
16-Mar-16	10:10	70.6	72.4	68.8
21-Mar-16	10:05	78.8	75.2	74.4
24-Mar-16	13:06	74.6	75.1	74.1
30-Mar-16	13:25	81.2	80.7	79.8
5-Apr-16	10:02	77.4	76.3	76.5
11-Apr-16	11:29	73.3	74.4	74.2
16-Apr-16	9:57	75.6	74.2	76.0
22-Apr-16	10:15	78.4	79.1	78.5
28-Apr-16	9:50	68.6	69.2	67.9
Average for the reporting quarter (Feb 16 to Apr 16)				75.1
Minimum for the reporting quarter (Feb 16 to Apr 16)				63.8
Maximum for the reporting quarter (Feb 16 to Apr 16)				81.2



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 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Graphical Presentation of Impact 1-hour TSP Monitoring Results

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**APPENDIX F  
METEROLOGICAL DATA**

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## Daily Extract of Meteorological Observations , February 2016 - Tai Po

Year  Month  

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	1023.1#	15.1	11.1#	8.9	9.4#	89#	***	***	***
02	1025.1#	9.2	8.4#	6.9	4.9#	79#	***	***	***
03	1024.3	13.5	10.8	8.0	6.7	76	***	***	***
04	1022.2	18.9	14.6	11.1	9.7	73	***	***	***
05	1021.9	18.4	14.2	11.0	6.3	60	***	***	***
06	1025.8	16.5	13.6	10.9	-4.9	28	***	***	***
07	1026.6	17.9	13.1	8.0	-7.7	25	***	***	***
08	1024.4	19.1	12.6	7.0	1.4	49	***	***	***
09	1021.3	21.6	15.1	8.2	6.9	59	***	***	***
10	1017.9	17.5	16.1	14.1	10.3	69	***	***	***
11	1015.0	22.1	18.3	16.4	16.2	88	***	***	***
12	1013.6	19.7	18.4	17.4	18.1	98	***	***	***
13	1012.5	26.8	22.0	18.4	20.1	90	***	***	***
14	1015.2	24.1	20.5	16.2	16.2	78	***	***	***
15	1025.1	16.2	12.1	9.7	4.5	60	***	***	***
16	1026.2	13.9	11.4	9.4	3.4	58	***	***	***
17	1024.6	13.0	11.6	10.2	7.2	75	***	***	***
18	1022.4	14.1	12.8	10.7	11.0	89	***	***	***
19	1021.0	15.4	14.3	13.4	13.0	92	***	***	***
20	1023.7	19.4	15.1	12.2	8.3	67	***	***	***
21	1022.8	15.3	14.7	12.6	9.9	73	***	***	***
22	1021.1	16.8	15.8	14.9	14.5	92	***	***	***
23	1023.2#	15.8	14.2#	12.3	12.8#	92#	***	***	***
24	1028.2	14.5	12.8	11.4	8.8	77	***	***	***
25	1029.5	15.8	13.9	12.3	9.6	76	***	***	***
26	1027.9	16.6	14.4	12.8	10.7	79	***	***	***
27	1025.1	19.8	15.5	12.4	11.2	76	***	***	***
28	1024.2	20.2	15.5	10.3	10.7	74	***	***	***
29	1024.9	24.0	17.3	11.2	9.0	61	***	***	***

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# data incomplete

Rainfall measured in increment of 0.5 mm. Amount of &lt; 0.5 mm cannot be detected

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## Daily Extract of Meteorological Observations , February 2016 - Tai Mei Tuk

Year  Month  

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	***	15.0	11.3	9.2	***	***	14.0	060	11.0
02	***	9.9	8.9	8.1	***	***	0.5	050	7.8
03	***	14.1	11.3	8.7	***	***	0.0	060	7.8
04	***	21.0	15.5	11.5	***	***	0.0	150	5.4
05	***	19.9	14.5	10.9	***	***	0.0	060	13.7
06	***	17.1	13.4	10.4	***	***	0.0	060	33.2
07	***	18.6	13.9	9.2	***	***	0.0	050	24.7
08	***	22.0	13.8	8.9	***	***	0.0	100	7.6
09	***	23.3	16.0	9.9	***	***	0.0	070	7.6
10	***	18.5	16.7	13.8	***	***	0.5	070	7.2
11	***	25.0	19.4	16.7	***	***	0.0	140	8.4
12	***	20.9	19.1	17.7	***	***	0.5	080	7.2
13	***	26.3	22.4	19.7	***	***	5.5	120	8.6
14	***	27.1	21.1	15.1	***	***	0.0	050	10.9
15	***	15.2	11.7	8.9	***	***	0.5	050	16.4
16	***	15.4	11.8	9.3	***	***	0.0	040	10.5
17	***	13.9	11.9	10.6	***	***	0.5	050	10.3
18	***	15.2	13.1	10.9	***	***	1.0	070	7.1
19	***	15.8	14.6	13.7	***	***	9.5	060	7.6
20	***	20.4	15.9	12.2	***	***	2.0	050	17.0
21	***	15.1	14.7	13.8	***	***	0.0	100	24.7
22	***	15.4	15.2#	15.0	***	***	0.0#	110#	18.7#
23	***	13.7	13.0#	12.3	***	***	0.0#	060#	10.0#
24	***	15.3	13.0	11.3	***	***	0.5	060	11.3
25	***	17.4	14.5	12.6	***	***	0.0	070	10.6
26	***	17.9	14.9	13.2	***	***	0.0	060	4.8
27	***	21.2	16.1	13.3	***	***	0.0	070	6.5
28	***	23.5	16.6	11.7	***	***	0.0	140	4.3
29	***	26.2	17.7	12.7	***	***	0.0	060	10.1

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# data incomplete

Rainfall measured in increment of 0.5 mm. Amount of &lt; 0.5 mm cannot be detected

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## Daily Extract of Meteorological Observations , March 2016 - Tai Po

Year  Month  

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	1025.1	19.1	16.2	14.2	10.6	70	***	***	***
02	1024.2	19.1	16.1	13.8	9.6	66	***	***	***
03	1021.2	22.3	17.7	12.9	13.6	78	***	***	***
04	1018.3	22.9	19.0	15.7	16.3	84	***	***	***
05	1016.9	22.9	20.4	18.7	16.9	81	***	***	***
06	1015.8	25.1	21.1	18.0	18.3	85	***	***	***
07	1015.1	19.8	18.6	17.3	17.8	95	***	***	***
08	1012.6	19.9	19.4	18.7	18.4	94	***	***	***
09	1012.6	21.3	20.0	17.1	19.5	97	***	***	***
10	1020.3	17.4	12.2	8.9	10.7	90	***	***	***
11	1023.5	12.5	10.2	8.5	6.2	76	***	***	***
12	1018.4	14.4	13.0	10.6	10.8	86	***	***	***
13	1015.0	16.5	15.5	14.1	14.9	96	***	***	***
14	1018.6	15.6	14.4	12.6	11.2	81	***	***	***
15	1017.7	15.3	14.2	13.4	10.7	80	***	***	***
16	1015.1#	16.0	15.2#	13.7	13.6#	91#	***	***	***
17	1014.6	17.5	16.5	15.6	15.8	96	***	***	***
18	1012.2	19.9	18.6	17.1	18.2	98	***	***	***
19	1013.2#	23.2	20.5#	18.7	20.1#	97#	***	***	***
20	1014.9	21.5	18.9	17.7	17.2	90	***	***	***
21	1015.0	18.4	17.2	16.5	16.3	95	***	***	***
22	1013.6	17.6	16.7	15.9	15.9	95	***	***	***
23	1013.1	19.5	18.1	17.1	17.7	98	***	***	***
24	1020.6	18.0	15.1	12.5	14.3	95	***	***	***
25	1024.3	16.1	13.2	10.9	8.1	73	***	***	***
26	1023.9	20.3	14.6	9.1	8.3	68	***	***	***
27	1024.5	21.2	16.0	11.7	7.5	59	***	***	***
28	1024.5	19.1	15.6	12.0	8.1	63	***	***	***
29	1021.8	20.1	17.1	13.2	9.9	64	***	***	***
30	1018.6	22.1	19.2	17.7	16.3	84	***	***	***
31	1015.4	24.5	20.4	17.6	18.8	90	***	***	***

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## Daily Extract of Meteorological Observations , March 2016 - Tai Mei Tuk

Year  Month  

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	***	21.7	16.4	13.7	***	***	0.0	110	14.8
02	***	21.5	16.4	13.3	***	***	0.0	100	14.3
03	***	24.9	18.5	14.1	***	***	0.0	090	6.0
04	***	25.3	20.0	16.6	***	***	0.0	070	5.5
05	***	25.6	21.1	18.9	***	***	0.0	080	5.5
06	***	27.0	21.9	18.6	***	***	0.0	280	4.0
07	***	20.7	19.0	18.3	***	***	1.0	080	6.7
08	***	20.7	19.6	18.8	***	***	0.0	070	6.9
09	***	22.2	20.2	16.5	***	***	12.0	080	8.6
10	***	16.6	12.1	8.6	***	***	17.0	060	15.4
11	***	13.8	10.6	8.5	***	***	0.0	050	9.3
12	***	14.3	13.1	11.1	***	***	0.5	050	15.7
13	***	17.0	15.7	14.1	***	***	6.0	100	8.2
14	***	16.5	14.8	13.0	***	***	0.0	050	12.3
15	***	15.4	14.2	13.4	***	***	0.5	060	16.0
16	***	16.3	15.2	14.0	***	***	2.0	070	12.9
17	***	17.5	16.5	15.8	***	***	6.5	130	6.8
18	***	22.0	19.4	17.2	***	***	0.0	080	4.3
19	***	25.9	22.0	19.4	***	***	2.5	080	4.5
20	***	22.6	18.7	17.4	***	***	0.5	090	18.8
21	***	18.0	17.2	16.7	***	***	60.0	090	14.2
22	***	17.2	16.6	15.8	***	***	4.0	100	14.0
23	***	20.4	18.3	17.2	***	***	11.0	140	6.2
24	***	17.8	14.8	11.9	***	***	24.5	050	19.1
25	***	16.1	13.4	11.1	***	***	1.0	050	10.8
26	***	22.1	15.4	10.6	***	***	0.0	140	7.7
27	***	22.3	16.8	11.5	***	***	0.0	070	13.4
28	***	21.2	16.3	12.6	***	***	0.0	090	12.8
29	***	23.5	17.8	13.9	***	***	0.0	080	6.0
30	***	24.0	19.9	18.0	***	***	0.5	070	4.9
31	***	27.2	21.5	18.1	***	***	0.0	270	3.6

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## Daily Extract of Meteorological Observations , April 2016 - Tai Po

 Year  Month  

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	1014.6	25.0	21.4	19.6	19.5	89	***	***	***
02	1015.7	23.5#	21.2	20.0#	19.6	91	***	***	***
03	1014.5	24.9#	22.4	20.5#	20.6	90	***	***	***
04	1012.4	29.1	23.2	21.0	21.2	89	***	***	***
05	1013.4	23.6#	21.7	19.9#	20.8	94	***	***	***
06	1013.2	25.2#	22.9	21.3#	21.3	91	***	***	***
07	1013.3	24.5#	23.0	21.9#	22.0	94	***	***	***
08	1013.1	29.0	25.1	22.6	22.5	86	***	***	***
09	1011.3	28.0	25.3	23.7	22.9	87	***	***	***
10	1009.1	26.2	22.9	20.8	21.5	92	***	***	***
11	1010.1	22.2	21.3	20.5	19.8	91	***	***	***
12	1009.2	20.9#	20.3	19.8#	19.0	92	***	***	***
13	1005.5	22.9	21.3	20.7	21.1	99	***	***	***
14	1008.5	23.0	22.1	21.1	22.1	100	***	***	***
15	1011.3	22.9#	21.1	20.3#	20.7	97	***	***	***
16	1010.3	28.3	24.3	20.7	22.4	90	***	***	***
17	1010.7	28.5#	25.6	23.2#	23.6	89	***	***	***
18	1014.5	26.7	22.5	20.3	20.2	87	***	***	***
19	1017.5	21.2	20.4	19.2	17.4	83	***	***	***
20	1014.6	22.9	21.5	20.1	19.5	89	***	***	***
21	1012.4	26.6	23.2	20.9	22.0	93	***	***	***
22	1010.5	25.2	22.6	20.4	21.5	94	***	***	***
23	1008.0	27.8	24.2	21.8	22.4	90	***	***	***
24	1008.5	26.7	23.8	22.3	22.6	93	***	***	***
25	1009.5	30.4	25.6	22.8	24.0	91	***	***	***
26	1009.1	29.9	27.3	25.3	24.3	84	***	***	***
27	1007.8	30.6	26.5	23.8	24.1	87	***	***	***
28	1010.3	28.4#	25.9	24.0#	22.0	80	***	***	***
29	1013.8	24.6	23.8	22.9	18.9	75	***	***	***
30	1012.2	22.8	22.1	20.3	18.2	79	***	***	***

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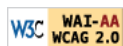
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## Daily Extract of Meteorological Observations , April 2016 - Tai Mei Tuk


Year  Month  Go

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	***	26.5#	22.0	19.7#	***	***	0.0	080	7.3
02	***	25.1#	21.6	20.1#	***	***	0.0	070	6.7
03	***	28.0#	23.1	21.0#	***	***	0.0	070	6.0
04	***	29.4#	23.7	20.9#	***	***	20.5	060	6.3
05	***	25.4	22.3	20.4	***	***	0.5	080	6.8
06	***	28.0#	23.5	21.1#	***	***	0.0	080	9.4
07	***	26.5	23.5	22.2	***	***	0.0	070	7.2
08	***	29.9	25.6	22.8	***	***	0.0	070	6.8
09	***	28.6#	25.6	24.0#	***	***	0.0	070	6.2
10	***	26.4	22.9	21.0	***	***	39.5	060	10.3
11	***	22.7#	21.2	20.2#	***	***	0.0	080	14.8
12	***	21.3#	20.3	19.8#	***	***	12.5	100	14.0
13	***	23.1	21.7	21.1	***	***	50.5	090	8.3
14	***	23.9	22.7	21.5	***	***	3.5	080	5.5
15	***	23.4	21.1	20.4	***	***	3.5	080	10.4
16	***	29.1	24.5	20.5	***	***	0.0	260	9.9
17	***	27.8#	25.8	24.0#	***	***	0.0	070	7.5
18	***	27.1#	22.8	20.2#	***	***	16.0	080	11.8
19	***	20.9	20.1	19.3	***	***	0.0	110	20.7
20	***	23.7	21.8	20.1	***	***	0.0	080	10.3
21	***	28.2#	24.2#	21.5#	***	***	0.0	140	4.2
22	***	***	***	***	***	***	9.0	280	5.4
23	***	***	***	***	***	***	0.5	070	6.3
24	***	24.8#	24.1#	23.6#	***	***	12.0	070	5.0
25	***	30.7	26.0	23.6	***	***	2.5	070	4.9
26	***	28.9	27.3	25.9	***	***	1.0	260	10.8
27	***	30.2	27.0	23.8	***	***	23.5	280	5.5
28	***	29.1#	26.0	22.8#	***	***	0.0	070	9.2
29	***	25.9	23.8	22.3	***	***	0.0	100	18.5
30	***	23.3	22.2	20.1	***	***	4.0	110	14.4

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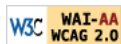
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**APPENDIX G  
IMPACT DAYTIME CONSTRUCTION NOISE  
MONITORING RESULTS AND THEIR  
GRAPHICAL PRESENTATION**

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**Location : M2 (West Tai Wo - Free Field)**

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

Date	Measured Noise Level for 30-min, dB(A)				Limit Level, dB(A)	Exceedance (Y/N)
	Start Time	Leq*	L10*	L90*		
6-Jan-16	14:06	71.0	73.1	69.5	75	N
12-Jan-16	11:20	69.8	71.5	67.5	75	N
18-Jan-16	10:50	69.0	71.5	66.5	75	N
29-Jan-16	11:10	68.6	71.2	63.4	75	N
3-Feb-16	14:40	69.5	71.3	67.5	75	N
12-Feb-16	10:36	69.2	71.1	66.0	75	N
17-Feb-16	10:48	69.6	71.1	68.9	75	N
22-Feb-16	10:06	69.2	74.0	66.4	75	N
4-Mar-16	10:45	69.6	71.5	67.4	75	N
10-Mar-16	11:05	69.8	73.4	65.9	75	N
16-Mar-16	11:00	70.6	74.8	67.5	75	N
21-Mar-16	10:10	71.4	74.5	67.2	75	N
24-Mar-16	11:19	68.8	70.1	64.6	75	N
30-Mar-16	15:49	67.3	69.8	72.9	75	N
5-Apr-16	11:00	68.8	70.4	64.9	75	N
11-Apr-16	10:02	69.6	72.4	65.2	75	N
22-Apr-16	11:15	69.2	71.4	65.4	75	N
28-Apr-16	10:35	69.8	72.0	68.5	75	N
Minimum for Feb 16 to Apr 16		67.3	69.8	64.6		
Maximum for Feb 16 to Apr 16		71.4	74.8	72.9		
Average for Feb 16 to Apr 16		69.5	72.0	67.0		

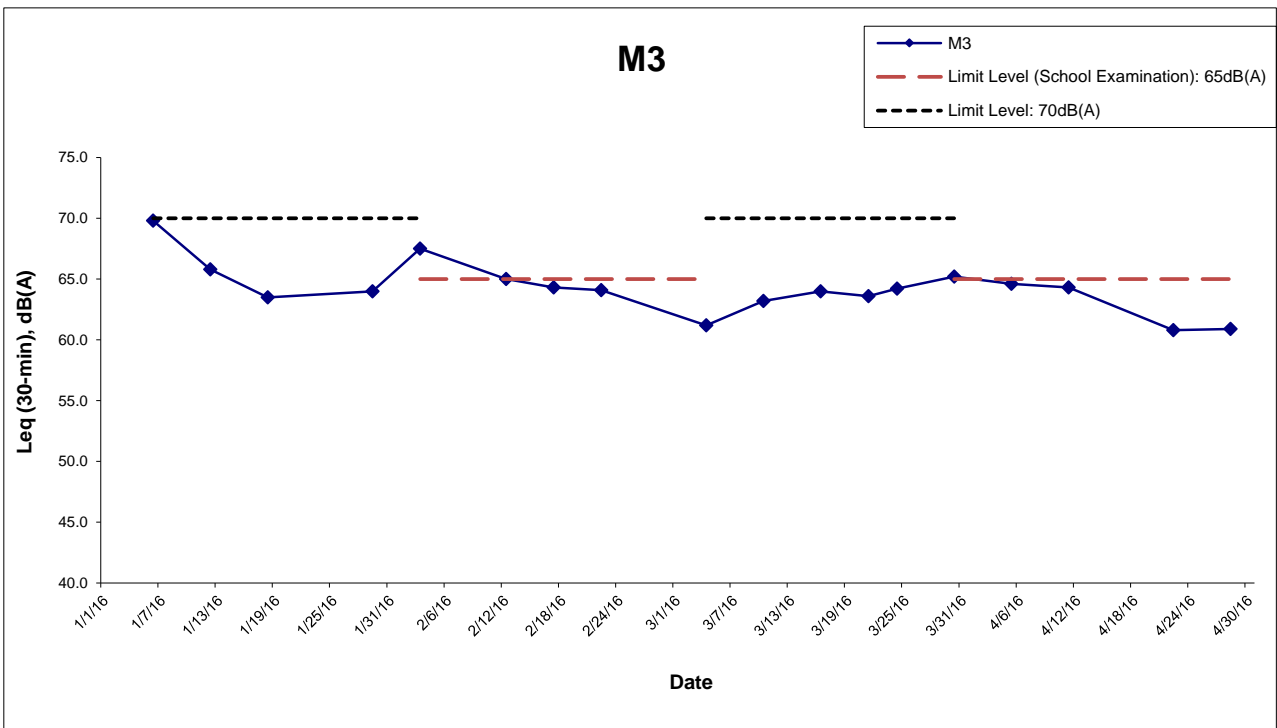
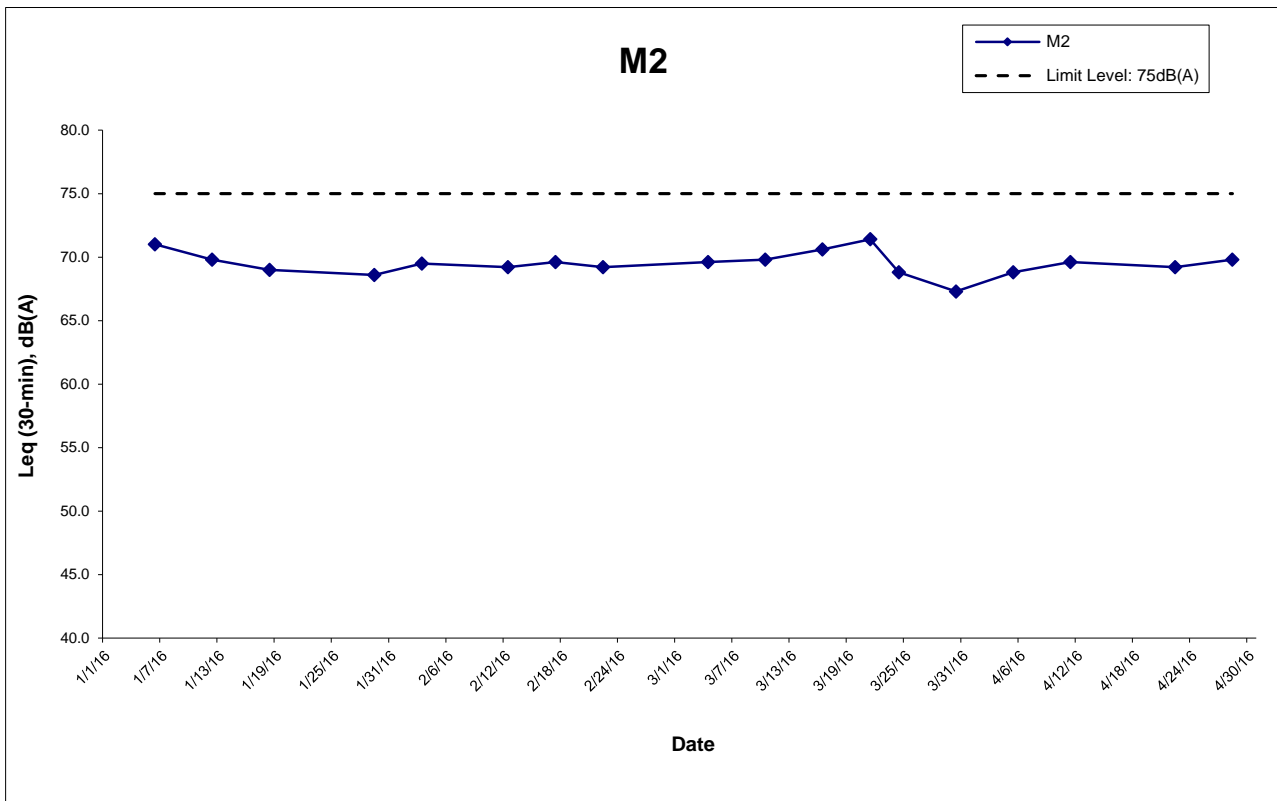
**Location : M3 (Fanling Government Secondary School- Façade)**

Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

Date	Measured Noise Level for 30-min, dB(A)				Limit Level, dB(A)^	Exceedance (Y/N)
	Start Time	Leq	L10	L90		
6-Jan-16	14:50	69.8	71.6	65.9	70	N
12-Jan-16	10:22	65.8	67.0	63.0	70	N
18-Jan-16	10:00	63.5	65.0	60.0	70	N
29-Jan-16	10:30	64.0	67.9	60.5	70	N
3-Feb-16	15:50	67.5	69.7	65.3	70	N
12-Feb-16	9:53	65.0	66.1	63.7	65	N
17-Feb-16	10:02	64.3	66.1	62.7	65	N
22-Feb-16	11:00	64.1	67.9	61.5	65	N
4-Mar-16	9:50	61.2	62.5	57.5	70	N
10-Mar-16	10:10	63.2	66.8	59.6	70	N
16-Mar-16	10:10	64.0	67.6	60.2	70	N
21-Mar-16	11:10	63.6	67.5	60.2	70	N
24-Mar-16	13:00	64.2	66.3	62.0	70	N
30-Mar-16	16:40	65.2	67.9	71.4	70	N
5-Apr-16	10:02	64.6	65.7	61.4	65	N
11-Apr-16	11:29	64.3	66.0	60.5	65	N
22-Apr-16	10:20	60.8	62.6	59.4	65	N
28-Apr-16	9:50	60.9	62.0	58.5	65	N
Minimum for Feb 16 to Apr 16		60.8	62.0	57.5		
Maximum for Feb 16 to Apr 16		67.5	69.7	71.4		
Average for Feb 16 to Apr 16		63.8	66.1	61.7		

\* +3dB(A) Façade effect correction included

^ Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.



Remark:

^ Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

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CONTRACT NO. HY/2012/06  
 WIDENING OF FANLING HIGHWAY  
 - TAI HANG TO WO HOP SHEK INTERCHANGE



Graphical Presentation of Impact Daytime Construction Noise  
 Monitoring Results

Project No.: 60307376

Date: May-16

Appendix G

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**APPENDIX H  
STATISTICS ON COMPLAINTS,  
NOTIFICATION OF SUMMONS AND  
SUCCESSFUL PROSECUTIONS**

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## Appendix H

### Statistics on Complaints, Notifications of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. followed up by the ET this reporting period	Total no. followed up by the ET since project commencement
<b>Environmental complaints</b>	19 December 2013	EPD referred a complaint from Lot no. 116 of Fui Sha Wai at Tai Hang of Tai Po which is concerned about the construction noise and diesel-like smell generated from construction activities nearby which caused nuisance and health problems on 19 December 2013 morning.	Closed	0	5
	24 February 2014	EPD referred an air-and-odour complaint on 24 February 2014. The complainant complained about the construction site located near the bus stop in Fui Sha Wai, Tai Hang, Tai Wo Service Road West. When construction works were carried out, odour, white smoke and dust were generated. The complainant asked for follow-up actions.	Closed		

<b>Date Received</b>	<b>Subject</b>	<b>Status</b>	<b>Total no. followed up by the ET this reporting period</b>	<b>Total no. followed up by the ET since project commencement</b>
23 October 2014	<p>EPD referred an air complaint on 24 October 2014.</p> <p>A resident complained against the excavation works of Tai Wo Service Road West between Nam Wah Po &amp; Tai Hang Tsuen, which have piled up high stockpiles, causing serious dust nuisance to his house.</p> <p>The resident also complained that the stockpiles have not been covered and watered properly. He now requires the EPD to follow up.</p> <p>The location of complaint is near Lamppost Location EB5717.</p>	Closed		
31 December 2014	<p>EPD referred a water complaint on 31 December 2014.</p> <p>The complainant complained about the muddy river outside Tai Hang Village Office on 29 December 2014. It was suspected that the muddy water was discharged from the construction works of the Project.</p> <p>He required the EPD to follow up.</p>	Closed		

	<b>Date Received</b>	<b>Subject</b>	<b>Status</b>	<b>Total no. followed up by the ET this reporting period</b>	<b>Total no. followed up by the ET since project commencement</b>
	25 March 2015	<p>EPD referred a water complaint on 25 March 2015.</p> <p>The complainant complained about the generation of the smell of gasoline from the Widening of Fanling Highway construction site on Tai Wo Service Road West, causing serious nuisance to nearby houses.</p> <p>The situation has continued for a few weeks and she asked the EPD to follow up as soon as possible.</p>	Closed		
<b>Notification of summons</b>	-	-	-	0	0
<b>Successful Prosecutions</b>	-	-	-	0	0