

MATERIALAB CONSULTANTS LIMITED

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MaterialLab

Report No.: 0165/15/ED/0615

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT (Rev. 4)

October 2016

Client: China Harbour Engineering Co., Ltd.

Project: Contract No. HY/2013/03
Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing Facilities -
Vehicle Clearance Plazas and
Ancillary Buildings and Facilities

Report No.: 0165/15/ED/0615

Prepared by: Sandra Pang

Reviewed by: Bong Yu

Certified by:


Arthur Cheng
Environmental Team Leader

9 December 2016

By Fax (3468 2076) and By Post

AECOM Asia Co. Ltd.
The PRE's Office
5 Ying Hei Road, Tung Chung, Lantau
Hong Kong

Attention: Mr. Michael Tovey

Dear Sir,

**Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities,
and Tuen Mun-Chek Lap Kok Link – Investigation**

**Contract No. HY/2013/03 – HZMB HKBCF – Vehicle Clearance Plazas and
Ancillary Buildings and Facilities
Monthly Environmental Monitoring & Audit Report for October 2016**

Reference is made to the Environmental Team's submission of Monthly Environmental Monitoring & Audit Report for October 2016 (Rev. 4) certified by the ET Leader (ET's ref.: "MCL/ED/0714/2016/C" dated 9 December 2016) and provided to us via e-mail on 9 December 2016.

We are pleased to inform you that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 5.4 of the Environmental Permit No. EP-353/2009/K.

To ensure Conditions 5.4 and 5.5 of the EP can be satisfied, it is reminded that the ET Leader shall review the progress and programme of the works to check that relevant environmental laws have not been violated, and that any foreseeable potential for violating laws can be prevented and relevant Contractor(s) shall regularly copy relevant statutory and associated documents to the ET Leader so that checking can be carried out as per Section 15.2.3 and 15.2.4 of the approved EM&A manual respectively.

Thank you very much for your attention and please feel free to contact the undersigned should you require further information.

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



Raymond Dai
Independent Environmental Checker

c.c.	HyD	Mr. Vico Cheung	(By Fax: 3188 6614)
	HyD	Mr. Ken Woo	(By Fax: 3188 6614)
	MCL	Mr. Arthur Cheng	(By Fax: 2450 8032)
	CHEC	Mr. Johnason Ko	(By Fax: 2887 3014)

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Internal: DY, YH, ENPO Site

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Date 09 December 2016
Our Ref. MCL/ED/0714/2016/C

Ramboll Environ Hong Kong Limited
(formerly ENVIRON Hong Kong Limited)
21/F, BEA Harbour View Centre
56 Gloucester Road, Wan Chai
Hong Kong

BY HAND

Attn.: Mr. Raymond Dai, IEC

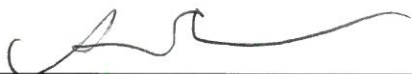
Dear Sir,

**EP Condition 5.4 – Monthly EM&A Report for
Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities –
Vehicle Clearance Plazas and Ancillary Buildings and Facilities (Contract No. HY/2013/03)**

Pursuant to Condition 5.4 of the Environmental Permit (EP-353/2009/K) for the captioned project, we are pleased to submit the certified Monthly EM&A Report for October 2016 (Rev.4) for your verification.

Should you require further information, please do not hesitate to contact our Miss Scarlet Cheng at 3565 4156 or the undersigned at 3565 4115.

Yours faithfully,
for and on behalf of
MATERIALAB CONSULTANTS LIMITED



Arthur Cheng
Environmental Team Leader

AC/by

c.c. AECOM – Mr. P.K. Lee, Mr. W.S. Ng, Mr. Patrick Ko
RAMBOLL ENVIRON – Mr. Ray Yan, Mr. Andy Wong
CHEC – Mr. Marko Chan

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EXECUTIVE SUMMARY

This Monthly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract No. HY/2013/03 “Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Vehicle Clearance Plazas and Ancillary Buildings and Facilities” (includes the construction works of Contract No. HY/2013/06 “Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System” within Contract No. HY/2013/03 works area) (hereafter referred to as “the Contract”) for the Highways Department of Hong Kong Special Administrative Region (HKSAR). Contract No. HY/2013/03 was awarded to China Harbour Engineering Co. Limited (construction works of Contract No. HY/2013/06 was awarded to ATAL Technologies Limited within Contract No. HY/2013/03 works area) (hereafter referred to as “the Contractor”) and MaterialLab Consultants Limited (MCL) was appointed as the Environmental Team (ET) by the Contractor.

Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) is part of the “Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities” (HZMB HKBCF) Project which is a “Designated Project” under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and for which an EIA Report (Register No. AEIAR-145/2009) was prepared and approved. The current Environmental Permit (EP) for HKBCF, namely No. EP-353/2009/K, was issued on 11 April 2016. These documents are available through the EIA Ordinance Register.

Commencement of Contract No. HY/2013/03 took place on 10 April 2015 while the construction works and the EM&A programme of Contract No. HY/2013/03 commenced on 29 August 2015 (commencement of Contract No. HY/2013/06 took place on 14 August 2015 while the construction works and the EM&A programme of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area commenced on 13 September 2016).

MaterialLab Consultants Limited (MCL) has been appointed by the Contractor to implement the Environmental Monitoring & Audit (EM&A) programme for the Contract in accordance with the Updated EM&A Manual for HKBCF (Version 1.0) and will be providing environmental team services for the Contract.

This is the 14th Monthly EM&A Report for the Contract which summaries findings of the EM&A programme during the reporting period from 01 October 2016 to 31 October 2016 (includes the findings of the EM&A programme of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area during the reporting period from 01 October 2016 to 31 October 2016) (the “reporting period”). The monthly EM&A programme was undertaken in accordance with the Updated EM&A Manual for HKBCF (Version 1.0). It should be noted that the air quality and noise monitoring works for the Contract are covered by Contract No. HY/2010/02 “Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works” and Contract No. HY/2011/03 “Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between Scenic Hill and HKBCF”. The ET of the Contract or another ET of the HZMB project is required to conduct impact air quality monitoring at AMS6 and AMS7 and noise monitoring at NMS2 and NMS3B as part of EM&A programme if these monitoring stations are no longer covered under Contract No. HY/2010/02 and HY/2011/03. However, this is subject to ENPO’s final decision on which ET should carry out the monitoring work at these stations.

The dates of site inspection for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) during the reporting period are listed below:

Environmental Site Inspection: 06, 13, 27 and 28 October 2016.

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Environmental site inspection of 21 October 2016 was cancelled due to hoisting of typhoon signal no. 8 on 21 October 2016 and re-scheduled to 28 October 2016.

Breaches of Action and Limit Levels

Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.

There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

There was no Action and Limit Level exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

There was no marine works conducted during the reporting period and therefore, no water quality impact monitoring result is reported.

There was no marine works conducted during the reporting period and therefore, no ecology monitoring result is reported.

Complaint Log

There were no complaints received in relation to the environmental impact during the reporting period.

Notifications of Summons and Successful Prosecutions

There were no notifications of summons or prosecutions received during this reporting period.

Reporting Changes

There was no reporting change during the reporting period.

Future Key Issues

The future key issues to be undertaken in the upcoming month are:

For Contract No. HY/2013/03

1. Site Investigation at Portion G & N;
2. Building at Portion A1, B, G, N, J, STP & Pumping Stations;
3. Piling at Portion C, STP, Area G (Bridge A1 & A9), Box Culvert B & C;
4. CUE Construction at Portion B, C & J;
5. Drainage & Sewerage Work at Portion B, H1, H2, J, P, G & A1;
6. Radiation Screen Wall and Sign Gantry Footing at Portion B;
7. Sewerage Pumping Station, High Mast Lighting Foundation & Box Culvert C at Portion G;
8. Bridge Works at A1 to A9;
9. Site Foundation Works at Portion K;
10. Cover Walkway at Portion H1 & H2;
11. Box Culvert D at Portion A1; Shuttle kiosk & Subway at Portion E; and
12. Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee.

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For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1. Conduit duct laying at CUE Kiosk.

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1. INTRODUCTION

1.1 Background

- 1.1.1 MaterialLab Consultants Limited was commissioned by China Harbour Engineering Co. Limited (also referred to as “the Contractor”) to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for Contract No. HY/2013/03 “Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Vehicle Clearance Plazas and Ancillary Buildings and Facilities” (includes the construction works of Contract No. HY/2013/06 “Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System” within Contract No. HY/2013/03 works area) (“the Contract”) for the Highways Department of Hong Kong Special Administrative Region (HKSAR).
- 1.1.2 Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) is part of Hong Kong–Zhuhai–Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) which is “Designated Projects”, under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499) and for which an EIA Report (Register No. AEIAR-145-2009) was prepared and approved. The current Environmental Permit (EP) for HKBCF, namely No. EP- 353/2009/K, was issued on 11 April 2016. These documents are available through the EIA Ordinance. The general layout of the Project area is shown in **Appendix A**.
- 1.1.3 This is the fourteenth EM&A report to document the findings of site inspection activities and EM&A programme carried out by the Contractor of Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) from 01 October 2016 to 31 October 2016 (reporting period) under Contract No. HY/2013/03 (from 01 October 2016 to 31 October 2016 for the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) and is submitted to fulfil Condition 5.4 of the EP.

1.2 Project Description

- 1.2.1 The works to be executed under Contract No. HY/2013/03 include the following major items:
- a. Cargo clearance facilities including kiosks for clearance of good vehicles, customs inspection platforms, X-ray building, etc.;
 - b. Passenger related facilities including processing kiosks and examination facilities for private cars and coaches, annexure for examination of accompanying passengers of private cars, etc.;
 - c. Accommodation/offices for the facilities (like fire station, police station, buildings for Immigration Department [ImmD], Hong Kong Customs and Excise Department [C&ED], Agriculture, Fisheries and Conservation Department [AFCD], Food and Environmental Hygiene Department [FEHD], Department of Health [DofH] etc.) of the Government departments providing services in connection with the HKBCF;
 - d. Provision of transport and miscellaneous facilities inside the HKBCF including public transport interchange (PTI), transport drop-off and pick-up areas, vehicle holding areas, passenger queuing areas, road networks, footbridges, fencing, sewerage and drainage systems, sewage treatment plant and treated effluent disposal facilities, water supply system, building services works, electronic system, and traffic control and information

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system including traffic control and surveillance system (TCSS), etc.;

- e. Provision of roads connecting the BCF to the Hong Kong Link Road (HKLR), the Tuen Mun – Chek Lap Kok Link (TM-CLKL) and the Hong Kong International Airport (HKIA), expect the part of road works in HKIA entrusted to the HKLR project; and
- f. Reprovisioning of the affected HKIA's facilities, expect those affected by the Automated People Mover (APM) system such as the existing east rescue berth.

1.2.2 The works to be executed under Contract No. HY/2013/06 within Contract No. HY/2013/03 works area include the following major items:

- a. The Automatic Vehicle Clearance Support System amid to increasing traffic flow for Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities;
- b. Responsible for designs and develops a set of tailor-made computer monitoring and control systems to for daily security operation; and
- c. The Clearance Workstations at 72 vehicle clearance kiosks, Customs and Excise's inbound and outbound traffic control centers as well as a Vehicle Tracking System.

1.3 Project Organisation

1.3.1 The Project Organisation for Environmental Works of Contract No. HY/2013/03 is shown in **Appendix B**. The contact person and telephone numbers of key personnel for the captioned project are shown in **Table 1.1**:

Table 1.1 Contact Persons and Telephone Numbers of Key Personnel (for Contract No. HY/2013/03)

Party	Position	Contact Person	Telephone No.	Fax No.
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. Michael Tovey	3985 7470	3902 8800
Environmental Project Office / Independent Environmental Checker (Ramboll Environ Hong Kong Limited)	Environmental Project Office Leader	Mr. Y. H. Hui	3547 2133	3465 2899
	Independent Environmental Checker (IEC)	Mr. Raymond Dai	3465 2888	3465 2899
	Environmental Site Supervisor	Mr. Ray Yan	5181 8165	3465 2899
Contractor (China Harbour Engineering Co. Ltd)	Site Agent	Mr. Paul Pui	9125 0700	2512 0427
	Environmental Officer	Mr. Marko Chan	9427 2879	2512 0427
Environmental Team (Materialab Consultants Limited)	Environmental Team Leader (ETL)	Mr. Arthur Cheng	3565 4115	2450 8032
24-hr Complaint Hotline	--	--	5236 7111	--

1.3.2 The Project Organisation for Environmental Works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area is shown in **Appendix B**. The contact person and telephone numbers of key personnel for the captioned project are shown in **Table 1.2**:

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Table 1.2 Contact Persons and Telephone Numbers of Key Personnel (for Contract No. HY/2013/06 within Contract No. HY/2013/03 works area)

Party	Position	Contact Person	Telephone No.	Fax No.
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. Michael Tovey	3985 7470	3902 8800
Environmental Project Office / Independent Environmental Checker (Ramboll Environ Hong Kong Limited)	Environmental Project Office Leader	Mr. Y. H. Hui	3547 2133	3465 2899
	Independent Environmental Checker (IEC)	Mr. Raymond Dai	3465 2888	3465 2899
	Environmental Site Supervisor	Mr. Ray Yan	5181 8165	3465 2899
Contractor (ATAL Technologies Limited)	Site Agent	Mr. Eric Yim	2565 3355	3162 5217
	Environmental Officer	Mr. W. Li	2565 3137	3162 5217
Environmental Team (MaterialLab Consultants Limited)	Environmental Team Leader (ETL)	Mr. Arthur Cheng	3565 4115	2450 8032
24-hr Complaint Hotline	--	--	6509 0375	--

1.3.3 The Contract HY/2013/03 has commenced on 10 April 2015. The commencement of construction works and the EM&A programme have commenced on 29 August 2015.

1.3.4 The Contract HY/2013/06 has commenced on 14 August 2015. The commencement of construction works and the EM&A programme have commenced on 13 September 2016 within Contract No. HY/2013/03 works area.

1.4 Construction Programme

1.4.1 The construction programme for Contract No. HY/2013/03 (includes the construction works of HY/2013/06 within Contract No. HY/2013/03 works area) are provided in **Appendix C**.

1.5 Construction Works Undertaken during the Reporting Period

1.5.1 The construction works of Contract No. HY/2013/03 commenced on 29 August 2015 (includes the construction works of Contract No. HY/2013/06 commenced on 13 September 2016 within Contract No. HY/2013/03 works area). During this reporting period, the following major site activities were commenced:

For Contract No. HY/2013/03

1. Site Investigation at Portion G & N;
2. Building at Portion A1, B, G, N, J, STP & Pumping Stations;
3. Piling at Portion C, STP, Area G (Bridge A1 & A9), Box Culvert B & C;
4. CUE Construction at Portion B, C & J;
5. Drainage & Sewerage Work at Portion B, H1, H2, J, P, G & A1;

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6. Radiation Screen Wall and Sign Gantry Footing at Portion B;
7. Sewerage Pumping Station, High Mast Lighting Foundation & Box Culvert C at Portion G;
8. Bridge Works at A1 to A9;
9. Site Foundation Works at Portion K;
10. Cover Walkway at Portion H1 & H2;
11. Box Culvert D at Portion A1; Shuttle kiosk & Subway at Portion E; and
12. Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1. Conduit duct laying at CUE Kiosk.
- 1.5.2 Refer to operation team confirmation and further checking, the reported construction works for box culverts, pumping stations and STP were confirmed land-based for Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area). There was no work activities or construction works at the seafront or in contact with marine water during the reporting period for Contract No. HY/2013/03 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2013/03 works area).

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2. AIR QUALITY MONITORING

2.1 Monitoring Locations

- 2.1.1 The air quality monitoring works for the Contract are covered by Contract No. HY/2010/02 Hong Kong-Zhuhai-Macao-Bridge HKBCF – Reclamation Works” and Contract No. HY/2011/03 “Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between Scenic Hill and HKBCF”. The ET of the Contract or another ET of the HZMB project is required to conduct impact air quality monitoring at AMS6 and AMS7 as part of EM&A programme if these air quality monitoring stations are no longer covered under Contract No. HY/2010/02 and HY/2011/03. **Figure 1** shows the locations of air monitoring stations.

Table 2.1 Air Quality Monitoring Location

Air Monitoring Station	Location
AMS6	Dragonair/CNAC (Group) Building (A80)
AMS7	Hong Kong SkyCity Marriott Hotel

2.2 Monitoring Requirements

- 2.2.1 The monitoring requirements, equipment, parameters, frequency and duration, methodology, schedule, and meteorological information are described in the monthly EM&A Reports prepared for Contract No. HY/2010/02 and HY/2011/03.

- 2.2.2 The Action and Limit levels for 1-hr TSP and 24-hr TSP are summarized in **Table 2.2**.

Table 2.2 Action and Limit Levels for Air Quality

Monitoring Station	Action Level (µg/m³)	Limit Level (µg/m³)
1 hour TSP		
AMS6	360	500
AMS7	370	
24 hours TSP		
AMS6	173	260
AMS7	183	

- 2.2.3 The event and action plan is provided in **Appendix D**.
- 2.2.4 If exceedance(s) at these stations is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.

2.3 Monitoring Results

- 2.3.1 The monitoring results for AMS6 and AMS7 are reported in the monthly EM&A Reports prepared for Contract No. HY/2011/03 and HY/2010/02 respectively.
- 2.3.2 Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.
- 2.3.3 There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.

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3. NOISE MONITORING

3.1 Monitoring Locations

- 3.1.1 The noise monitoring works for the Contract are covered by Contract No. HY/2010/02 “Hong Kong-Zhuhai-Macao Bridge HKBCF – Reclamation Works”. The ET of the Contract or another ET of the HZMB project is required to conduct noise monitoring at NMS2 and NMS3B as part of EM&A programme if these monitoring stations are no longer covered under Contract No. HY/2010/02. **Figure 2** shows the locations of noise monitoring stations.

Table 3.1 Construction Noise Monitoring Location

ID No.	Description
NMS2	Seaview Crescent
NMS3B	Site Boundary of Site Office Area at WA2

3.2 Monitoring Requirements

- 3.2.1 The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology and monitoring schedule are detailed in the monthly EM&A Reports prepared for Contract No. HY/2010/02.
- 3.2.2 The Action and Limit Levels for construction noise are defined in **Table 3.2**.

Table 3.2 Action and Limit Level for Construction Noise

Monitoring Station	Action Level	Limit Level
For the Time Period 0700-1900 hrs. on Normal Weekdays		
NMS2	When one documented complaint is received	75.0 dB (A) Leq (30 min.)
NMS3B		70.0 dB (A) Leq (30 min.)*

Notes: If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

* Reduce to 70 dB(A) for schools and 65 dB(A) during school examination period

3.3 Monitoring Results

- 3.3.1 The monitoring results for NMS2 and NMS3B are reported in the monthly EM&A Reports prepared for Contract No. HY/2010/02. No noise exceedances were recorded at stations NMS2 and NMS3B by the ET of Contract No. HY/2010/02 during the reporting period.

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4. WATER QUALITY MONITORING

- 4.1 There was no marine works conducted during the reporting period and therefore, no relevant monitoring result is reported. However, ET of the Contract shall closely monitor on the status of marine works, which shall conduct monitoring when marine works commence in the future.
- 4.2 The ET of the Contract is required to conduct impact water quality monitoring as part of EM&A programme if water quality monitoring is no longer covered by another ET of the HZMB project. The ETL shall review and obtain IEC, ENPO and EPD agreement on the contract specific water quality monitoring works at least a month before the commencement of any marine works.

Report No.: 0165/15/ED/0615

5. ECOLOGY MONITORING

- 5.1 There was no marine works conducted which impacted to the ecology during the reporting period and therefore, no relevant monitoring result is reported. However, ET of the Contract shall closely monitor on the status of marine works, which shall conduct monitoring when marine works commence in the future.
- 5.2 The ET of the Contract is required to conduct ecology monitoring as part of EM&A programme if ecology monitoring is no longer covered by another ET of the HZMB project. The ETL shall review and obtain IEC, ENPO, AFCD and EPD agreement on the contract specific marine ecology monitoring works at least a month before the commencement of any marine works.

Report No.: 0165/15/ED/0615

6. DISPOSAL OF MARINE SEDIMENT EXTRACTED FROM BORED PILING WORKS

6.1 Background

- 6.1.1 After the acceptance of the review of the approved Sediment Quality Report (SQR) for this Project under EPD letter dated 19 August 2015, an approval to dispose the marine sediment extracted from bored piling for this Project was then approved under memo from Secretary, Marine Fill Committee of CEDD dated 20 August 2015 for the disposal of marine sediment extracted from bored piling works. The disposal sites allocated to this Project are the Mud Pit CMP2 of the Confined Marine Sediment Disposal Facility to the South of The Brothers (or at the East of Sha Chau). As advised by CEDD in the memo dated 19 February 2016, from 00:00 on 22 March 2016 onward, the disposal space at CMP2 of the South of The Brothers is closed and all disposal of contaminated sediment is to be carried out at CMP Vd to the East of Sha Chau (ESC).
- 6.1.2 No extracted marine sediment was treated using cement solidification/stabilisation (Cement S/S) techniques under Contract No. HY/2013/03 during this reporting period. The marine sediment extracted from this Contract was disposed to the MFC allocated disposal sites directly without treatment during this reporting period. As a practical means, the disposal operation is managed by one contractor who is also responsible for applying dumping permit and its subsequent extension applications from EPD. Contract No. HY/2013/03 has been assigned to coordinate and arrange for disposal of extracted marine sediment from all three Contracts (Contract Nos. HY/2013/02, HY/2013/03 and HY/2013/04).

6.2 Dumping Arrangements

- 6.2.1 The barge for disposal of marine sediment was morn at the temporary loading and unloading at the east shore of the HKBCF Island, which has been being used by reclamation contractor (Contract No. HY/2010/02) for reclamation activities. In terms of safety consideration and to avoid mixing of sediment between contracts, each dumping date was allocated to one Contract. The quantity of marine sediment disposed on each date was from one Contract.
- 6.2.2 During dumping, Contractor of Contract No. HY/2013/03 is responsible for transporting the marine sediment from the site area of Contract No. HY/2013/03 to the barge. The estimated quantity of marine sediment in each truck is confirmed by Resident Site Staff of Contract Nos. HY/2013/02, HY/2013/03 and HY/2013/04. The trip tickets for transportation and disposal of marine sediment are collected and checked. Contract No. HY/2013/03 as the dumping permit holder is responsible for reporting to EPD the quantity disposed of as the condition stipulated in the dumping permit. The disposal site allocated to this Project is the Mud Pit CMP Vd of the Confined Marine Sediment Disposal Facility to the East of Sha Chau (ESC) during this reporting period.

6.3 Quantity Disposed

- 6.3.1 Marine sediment extracted from bored piling from this Contract was disposed to allocated dumping site in October 2016. The summary of marine sediment disposed up to end October 2016 is shown in the following table:

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Table 6.1 Summary of Marine Sediment Disposed to Dumping Site

Month/Year	Quantity disposed (in '000m ³)			
	HY/2013/02	HY/2013/03	HY/2013/04	Total
Jan 2016	1.272	1.950	0.800	4.022
Feb 2016	2.816	2.328	0.704	5.848
Mar 2016	0.600	2.464	3.942	7.006
Apr 2016	5.128	5.602	5.028	15.758
May 2016	0.000	0.000	0.000	0.000
Jun 2016	1.200	4.584	1.578	7.362
Sub-Total	11.016	16.928	12.052	39.996
Jul 2016	0.728	10.728	3.690	15.146
Aug 2016	1.784	1.544	4.428	7.756
Sep 2016	2.328	6.816	3.888	13.032
Oct 2016	1.096	2.376	5.286	8.758
Total	16.952	38.392	29.344	84.688

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7. ENVIRONMENTAL SITE INSPECTION AND AUDIT**7.1 Site Inspection**

- 7.1.1 Site audits were carried out by ET on weekly basis to monitor the implementation of proper environmental management practices and mitigation measures in the Project site (site audit of 21 October 2016 was cancelled due to hoisting of typhoon signal no. 8 on 21 October 2016 and re-scheduled to 28 October 2016).
- 7.1.2 The joint site audits for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) were conducted on 06, 13, 27 and 28 October 2016 by the representatives of Engineer, Contractor, ET and IEC (IEC for 28 October 2016).
- 7.1.3 Particular observations during the site inspection and corrective actions undertaken by the Contractor are described below:

For Contract No. HY/2013/0328 Sep 2016

1. CHEC was reminded to increase watering for dust suppression on site. Subsequently, watering was increased for dust suppression on site. The observation was closed on 06 October 2016.

06 Oct 2016

1. CHEC is reminded to maintain good housekeeping on site (Building 041). Subsequently, good housekeeping was maintained on site (Building 041). The observation was closed on 13 October 2016.

13 Oct 2016

1. CHEC was reminded to remove the stagnant water accumulated at the lifting holes of the precast concretes on site. Subsequently, stagnant water was removed at the lifting holes of the precast concretes on site. The observation was closed on 27 October 2016.

21 Oct 2016

1. Site inspection was cancelled due to hoisting of typhoon signal no. 8 on 21 Oct 2016 and re-scheduled to 28 Oct 2016.

27 Oct 2016

1. CHEC is reminded to maintain proper housekeeping on site (CUE works area). Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.
2. CHEC is reminded to remove stagnant water on site (CUE works area). Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.

28 Oct 2016

1. CHEC was reminded to increase watering for dust suppression on site. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.
2. CHEC was reminded to clear the stagnant water accumulated at Building 037. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.

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3. CHEC was reminded to remove the general refuse accumulated at Building 037. Follow-up actions for outstanding observation will be checked in the upcoming site inspections and reported in the coming reporting period.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

06 Oct 2016

1. Nil findings.

13 Oct 2016

1. Nil findings.

21 Oct 2016

1. Site inspection was cancelled due to hoisting of typhoon signal no. 8 on 21 Oct 2016 and re-scheduled to 28 Oct 2016.

27 Oct 2016

1. Nil findings.

28 Oct 2016

1. Nil findings.

7.2 Advice on the Solid and Liquid Waste Management Status

- 7.2.1 The Contractor of Contract No. HY/2013/03 registered as a chemical waste producer for the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.
- 7.2.2 The monthly summary of waste flow table for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) are detailed in **Appendix E**.
- 7.2.3 2.376 (in'000m³) of excavated marine sediment (from Contract No. HY/2013/03), 0.379 (in'000m³) of Inert C & D Wastes and 0.332 (in'000m³) of Non-inert C & D Wastes were generated (from Contract No. HY/2013/03) in this reporting period. No Inert C & D Wastes and 0.002 tonnes of paper/cardboard packaging were generated and recycled (from Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) in this reporting period.
- 7.2.4 The excavated marine mud from the land-based works was disposed of at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee. The Contractor of Contract No. HY/2013/03 shall ensure no spilling and overflowing of materials during loading / unloading / transportation is allowed.
- 7.2.5 The Contractor was 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 Packing, Labelling and Storage of Chemical Waste.
- 7.2.6 Contractor of Contract No. HY/2013/03's site arrangement for disposal of bentonite slurry to Tseung Kwan O Area 137 Fill Bank was checked by ET and formal consent has been obtained from Tseung Kwan O Area 137 Fill Bank for receiving used bentonite slurry generated from Contract No. HY/2013/03.

7.3 Environmental Licenses and Permits

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- 7.3.1 The valid environmental licenses and permits for Contract No. HY/2013/03 (includes Contract No. HY/2013/06 within Contract No. HY/2013/03 works area) during the reporting period are summarized in **Appendix F**.

7.4 Implementation Status of Environmental Mitigation Measures

- 7.4.1 In response to the site audit findings, the Contractor carried out corrective actions.
- 7.4.2 A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix G**. All necessary mitigation measures at this stage of works were implemented properly.
- 7.4.3 Implementation status of Regular Marine Travel Route Plan (RMTRP) was checked by ET. Training of marine travel route for marine vessels operator was given to relevant staff and relevant records were kept properly. The marine traffic records and geographical plots of all the vessels tracks to demonstrate the conformance of the vessel to the proposed route in October 2016 would be provided to ER, ETL, IEC/ENPO for checking within the month of November 2016.
- 7.4.4 With respect to condition 3.26A of EP-353/2009/K approved by EPD on 11 April 2016, the numbers and operating periods of floating grout production facilities and floating concrete batching plants on-site to review on the compliance to this EP condition were checked. Under Contract No. HY/2013/03, one floating concrete batching plant was operated on-site during the reporting period.

7.5 Summary of Exceedance of the Environmental Quality Performance Limit

- 7.5.1 Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.
- 7.5.2 There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- 7.5.3 There was no Action and Limit Level exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- 7.5.4 There was no marine works conducted during the reporting period and therefore, no relevant monitoring result is reported.
- 7.5.5 There was no marine works conducted during the reporting period and therefore, no ecology monitoring result is reported.

7.6 Summary of Complaints, Notification of Summons and Successful Prosecution

- 7.6.1 There were no complaints received in relation to the environmental impact during the reporting period. The details of cumulative statistics of Environmental Complaints are provided in **Appendix H**.

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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and "Lab" is in a bolder weight. The logo is set against a background of two horizontal black bars, one above and one below the text.

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- 7.6.2 There was no notification for summons or prosecutions received in relation to the environmental impact during this reporting period.
- 7.6.3 Statistics on environmental complaints, notifications of summons and successful prosecutions are provided in **Appendix H**.

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8. FUTURE KEY ISSUES

8.1 Construction Programme for the Coming Months

8.1.1 As informed by the Contractor, the following are the major construction activities anticipated in November 2016:

For Contract No. HY/2013/03

1. Site Investigation at Portion G & N;
2. Building at Portion A1, B, G, N, J, STP & Pumping Stations;
3. Piling at Portion C, STP, Area G (Bridge A1 & A9), Box Culvert B & C;
4. CUE Construction at Portion B, C & J;
5. Drainage & Sewerage Work at Portion B, H1, H2, J, P, G & A1;
6. Radiation Screen Wall and Sign Gantry Footing at Portion B;
7. Sewerage Pumping Station, High Mast Lighting Foundation & Box Culvert C at Portion G;
8. Bridge Works at A1 to A9;
9. Site Foundation Works at Portion K;
10. Cover Walkway at Portion H1 & H2;
11. Box Culvert D at Portion A1; Shuttle kiosk & Subway at Portion E; and
12. Marine sediment excavation activities from the land-based works and corresponding disposal at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee.

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

1. Conduit duct laying at CUE Kiosk.

8.2 Environmental Site Inspection Schedule for the Coming Month

8.2.1 The tentative schedule for weekly site inspections for November 2016 is provided in **Appendix I**.

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9. CONCLUSIONS

- 9.1 Commencement of Contract No. HY/2013/03 took place on 10 April 2015. The commencement date for construction works and the EM&A programme of Contract No. HY/2013/03 commenced on 29 August 2015 (commencement of Contract No. HY/2013/06 took place on 14 August 2015. The commencement date for construction works and the EM&A programme of Contract No. HY/2013/06 commenced on 13 September 2016 within Contract No. HY/2013/03 works area).
- 9.2 Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A report prepared by Contract No. HY/2011/03.
- 9.3 There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at station AMS7 by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- 9.4 There was no Action and Limit Level exceedance for noise recorded at station NMS2 and station NMS3B by the Environmental Team of Contract No. HY/2010/02 during the reporting period.
- 9.5 There was no marine works conducted during the reporting period and therefore, no water quality impact monitoring result is reported.
- 9.6 There was no marine works conducted during the reporting period and therefore, no ecology monitoring result is reported.
- 9.7 Environmental site inspections were carried out on 06, 13, 27 and 28 October 2016 (site inspection of 21 October 2016 was cancelled due to hoisting of typhoon signal no. 8 on 21 October 2016 and re-scheduled to 28 October 2016). Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site inspections.
- 9.8 There were no complaints received in relation to the environmental impact during the reporting period.
- 9.9 There were no notifications of summons or prosecutions received during the reporting period.

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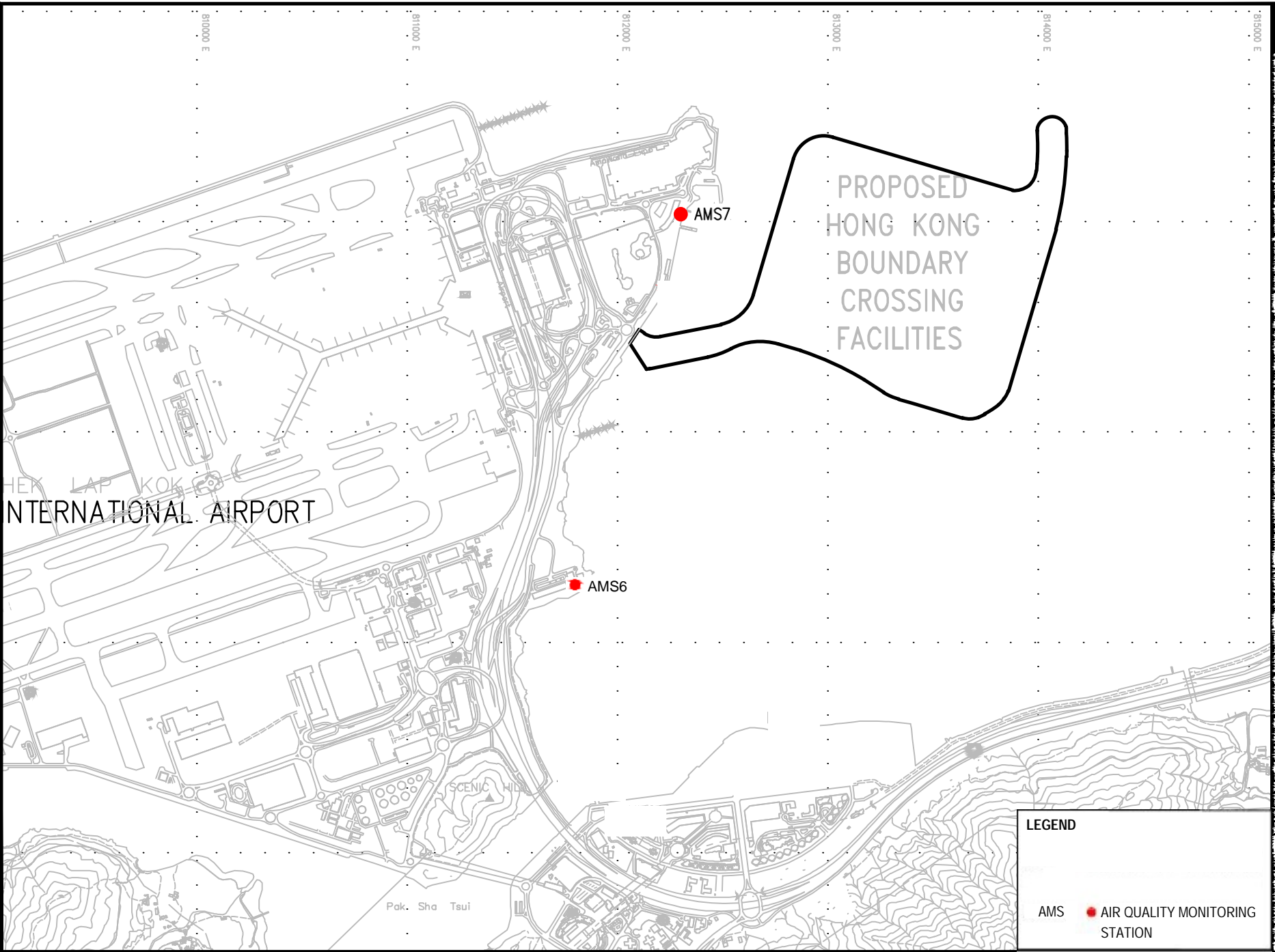
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Figure 1

Air Quality Monitoring Stations



LEGEND

AMS AIR QUALITY MONITORING STATION

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Figure 2

Noise Monitoring Stations



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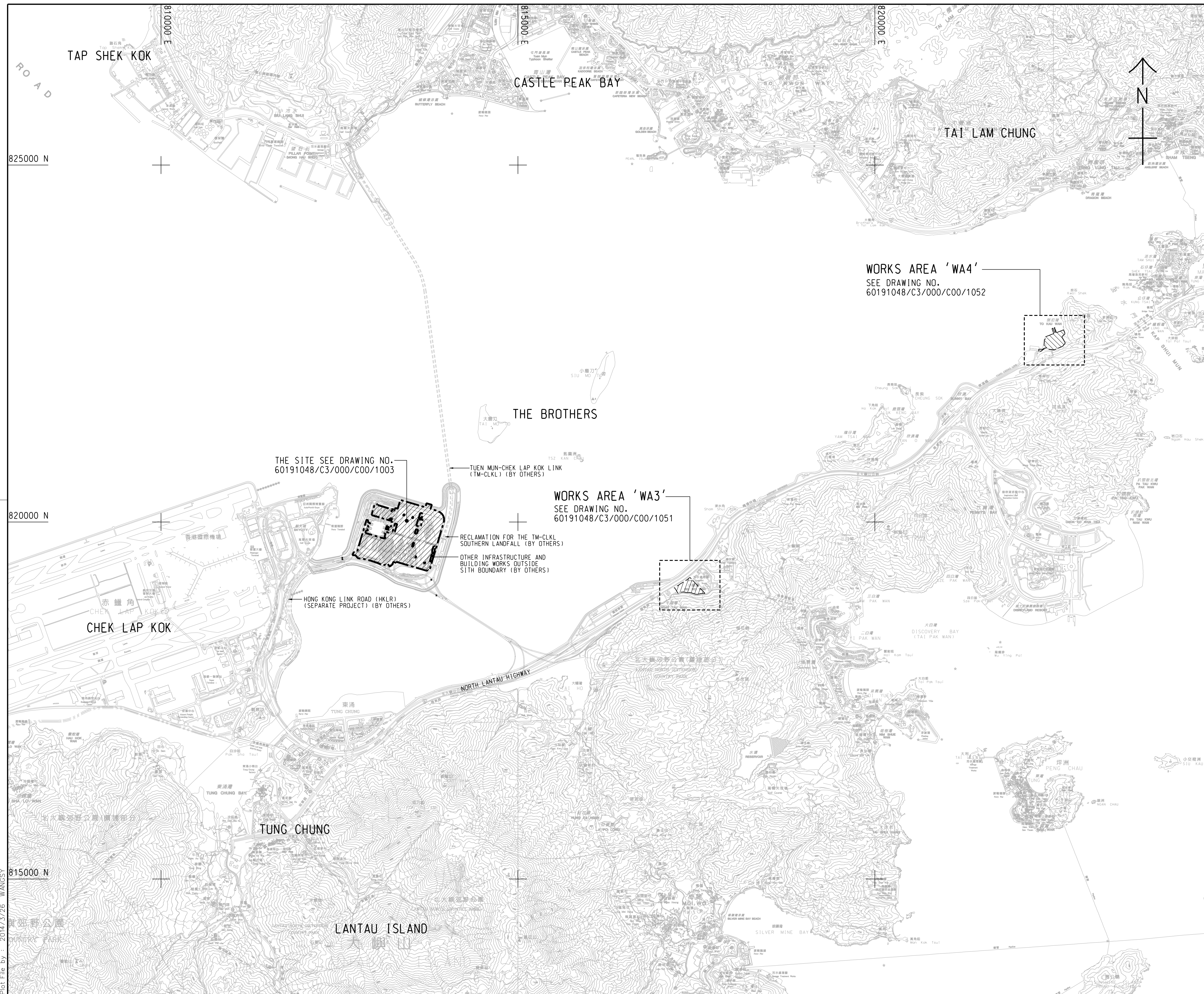
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Appendix A

Location of Works Areas



NOTES:

1. COORDINATES ARE RELATED TO HONG KONG METRIC GRID (1980).
2. DIMENSIONS ARE IN MILLIMETER AND CHAINAGE ARE IN METRES UNLESS OTHERWISE SHOWN.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. 60191048/C3/000/C00/1051 TO 1053.

LEGEND:

SITE BOUNDARY

WORKS AREA

			B	L	M	
-	TENDER DRAWING		BWCW	SCI		MAR. 14
REV. 修訂	DESCRIPTION 內容摘要	CHECKED 覆核	D.E.	P.E.	DATE 日期	

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HIGHWAYS DEPARTMENT

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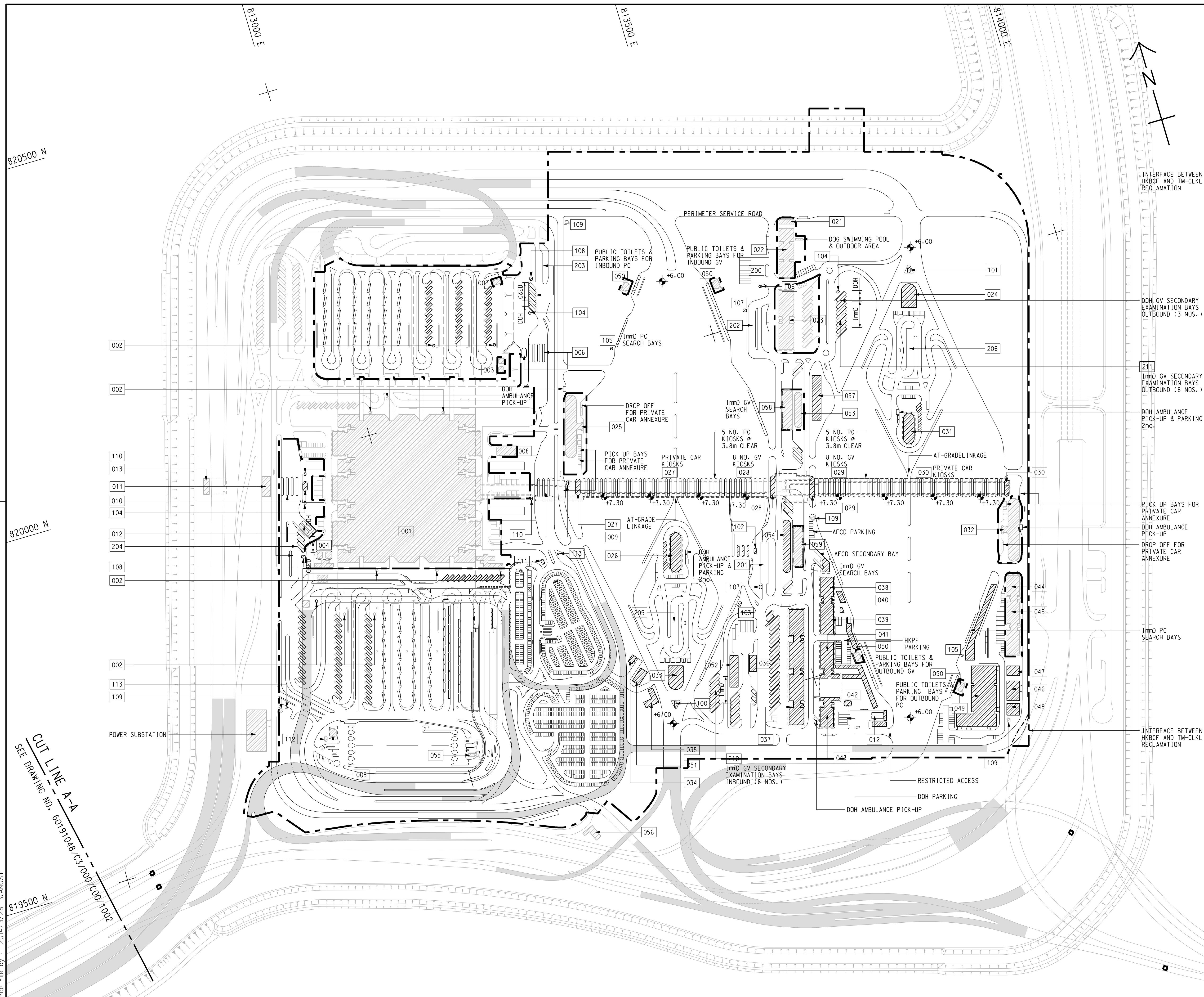
HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- VEHICLE CLEARANCE PLAZAS AND
ANCILLARY BUILDINGS AND FACILITIES

SITE LOCATION PLAN

AECOM	+	+
Rogers Stirk Harbour + Partners		Aedas
BURO HAPPOLD ATKINS ADI	+	+

DRG.NO. 60191048/C3/000/C00/1000
圖紙編號




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BWCW		HY/2013/03		TKH WT	
DRAWN BY 繪圖		STATUS 階段			
WSY					
SCALE 比例		A1 1 : 25000			
DIMENSIONS IN 尺寸單位		METRES			
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NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH
DRAWING NO. 60191048/C3/000/C00/1003.

LEGEND:

- | | |
|---|---------------------|
|  | SITE BOUNDARY |
|  | VIADUCT |
|  | BUILDING/FACILITIES |

INTERFACE BETWEEN HKBCF AND TM-CLKL RECLAMATION

DDH_GV SECONDARY
EXAMINATION BAYS
OUTBOUND (3 NOS.)

Immd GV SECONDARY
EXAMINATION BAYS
OUTBOUND (8 NOS.)

DOH AMBULANCE
PICK-UP & PARKING
2no.

PICK UP BAYS FOR
PRIVATE CAR
ANNEXURE
DOH AMBULANCE
PICK-UP
DROP OFF FOR
PRIVATE CAR
ANNEXURE

ImmD PC
SEARCH BAYS

INTERFACE BETWEEN HKBCF AND TM-CLKL RECLAMATION

-	TENDER DRAWING	BWCW SCI	MAR. 14
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 **路政署**
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HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- VEHICLE CLEARANCE PLAZAS AND
ANCILLARY BUILDINGS AND FACILITIES

**Figure 1- 1
Current Layout Plan**

SHEET 1 OF 2

AECOM	+	+
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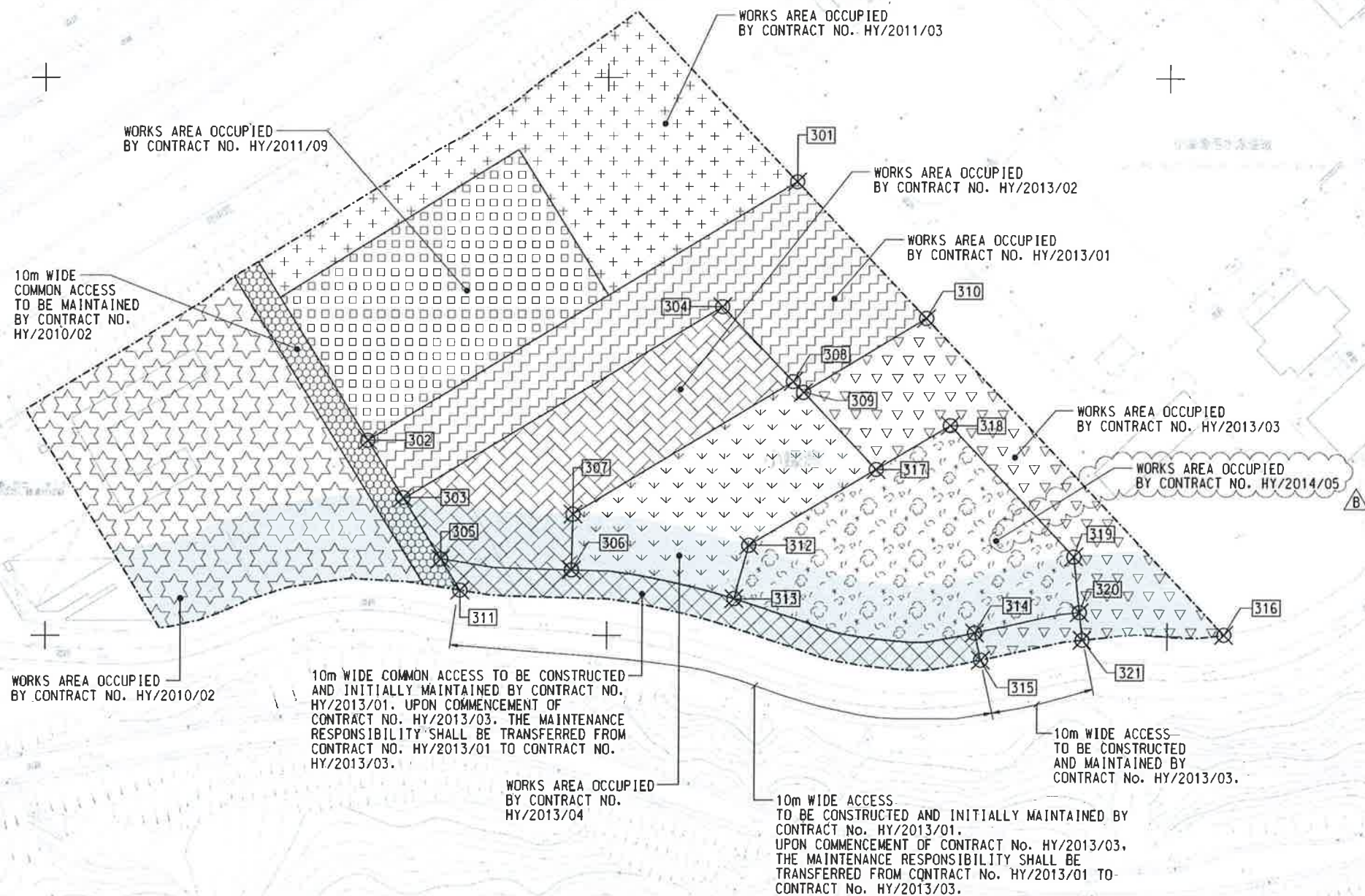
DRG.NO. 60191048/C3/000/C00/1001
圖紙編號

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DRAWN BY 繪圖	WSY	STATUS 階段				
SCALE 比例	A1 1 : 2500					
DIMENSIONS ARE IN 尺寸單位		METRES © COPYRIGHT RESERVED 版權所有				

SETTING OUT POINT

POINT	EASTING	NORTHING
301	817467.265	819162.683
302	817314.741	819069.828
303	817327.338	819049.295
304	817440.865	819117.811
305	817340.825	819027.314
306	817387.350	819023.403
307	817387.861	819043.396
308	817466.133	819091.047
309	817469.783	819087.181
310	817513.449	819113.764
311	817347.717	819016.082
312	817450.595	819032.307
313	817445.369	819013.157
314	817531.154	819001.065
315	817533.345	818991.306
316	817620.269	819000.620
317	817495.827	819059.596
318	817522.110	819075.388
319	817566.404	819028.472
320	817568.507	819008.526
321	817569.551	818998.621

NORTH LANTAU HIGHWAY



WORKS AREA WA3
TUNG CHUNG

LOCATION PLAN
SCALE 1 : 25000

NOTES:

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LEGEND:

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PORTION 3.7	[Pattern]
PORTION 3.8	[Pattern]
PORTION 3.9	[Pattern]
PORTION 3.10	[Pattern]
NON-BUILDING AREA 8200m ² (WHOLE)	[Pattern]

FOR CONSTRUCTION

C	WORKING DRAWING	BWCW SCI	MAY. 15
B	TENDER ADDENDUM NO. 2	BWCW SCI	MAY. 14
A	TENDER ADDENDUM NO. 1	BWCW SCI	APR. 14
-	TENDER DRAWING	BWCW SCI	MAR. 14
REV.	DESCRIPTION	REV.	DATE

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HONG KONG - ZHUHAI - MACAO BRIDGE HONG KONG PROJECT MANAGEMENT OFFICE
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WORKS AREA WA3

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DESIGNED BY BWCW	CONTRACT NO. HY/2013/03	P. INR. APPROVED TKH
DRAWN BY WSY	STATUS B/C	WORKING DRAWING
SCALE A1 1 : 1000	DIMENSIONS ARE IN METRES	© COPYRIGHT RESERVED

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准經核准
准經核准

SETTING OUT POINT

POINT	EASTING	NORTHING
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402	822640.593	822689.415
403	822515.608	822559.848
404	822610.940	822599.642
405	822629.428	822607.359
406	822526.988	822529.813
407	822618.348	822567.950
408	822542.232	822489.581
409	822584.983	822507.426
410	822606.866	822516.561
411	822560.278	822441.956
412	822602.949	822460.010
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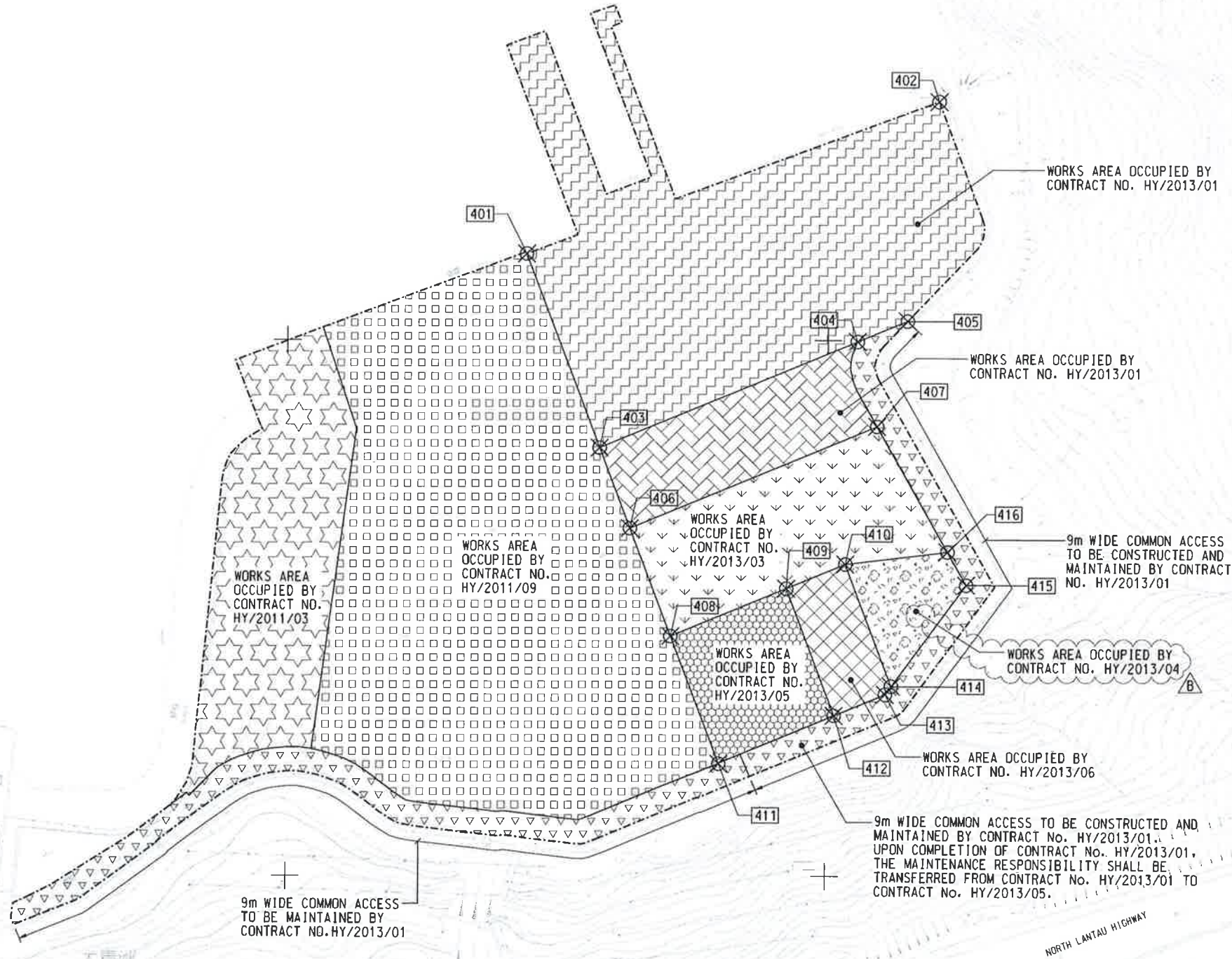
822400 N

Plot File by 2014/5/5 WANGSY

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LOCATION PLAN
SCALE 1 : 25000

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LEGEND:

WORKS AREA BOUNDARY	
PORTION 4.1	
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PORTION 4.4	
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PORTION 4.6	
PORTION 4.7	
PORTION 4.8	
PORTION 4.9	

CONTROLLED DOCUMENT

FOR CONSTRUCTION

C	WORKING DRAWING	BWCW SCI MAY.15
B	TENDER ADDENDUM NO. 2	BWCW SCI MAY.14
A	TENDER ADDENDUM NO. 1	BWCW SCI APR.14
-	TENDER DRAWING	BWCW SCI MAR.14
REV. NO.	DESCRIPTION	DATE

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HONG KONG - ZHUHAI - MACAO BRIDGE PROJECT MANAGEMENT OFFICE
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WORKS AREA WA4

AECOM **Aedas**
Rogers Stirk Harbour + Partners
BURO HAPPOLD ATKINS ADI

DRGNO. 60191048/C3/000/C00/1052C
圖紙編號

DESIGNED BY BWCW	CONTRACT NO. HY/2013/03	APPROVED BY TKH
DRAWN BY WSY	STATUS WORKING DRAWING	
SCALE A1 1 : 1000		
DIMENSIONS ARE IN METRES		

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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and the "Lab" part is in a bolder weight. The logo is set against a background of two horizontal black bars, one above and one below the text.

Report No.: 0165/15/ED/0615

Appendix B

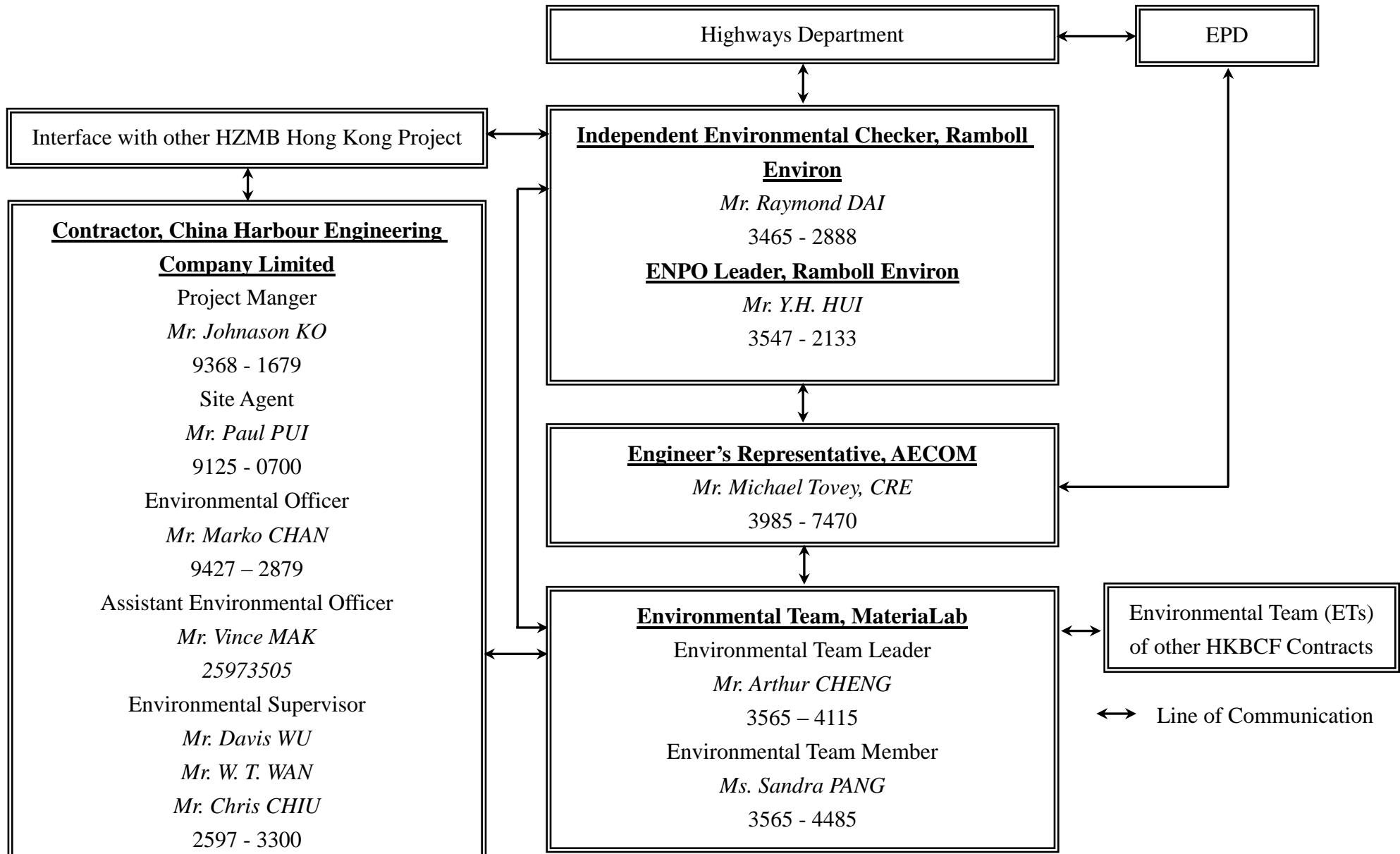
Project Organization for Environmental Works

CHINA HARBOUR ENGINEERING COMPANY LIMITED



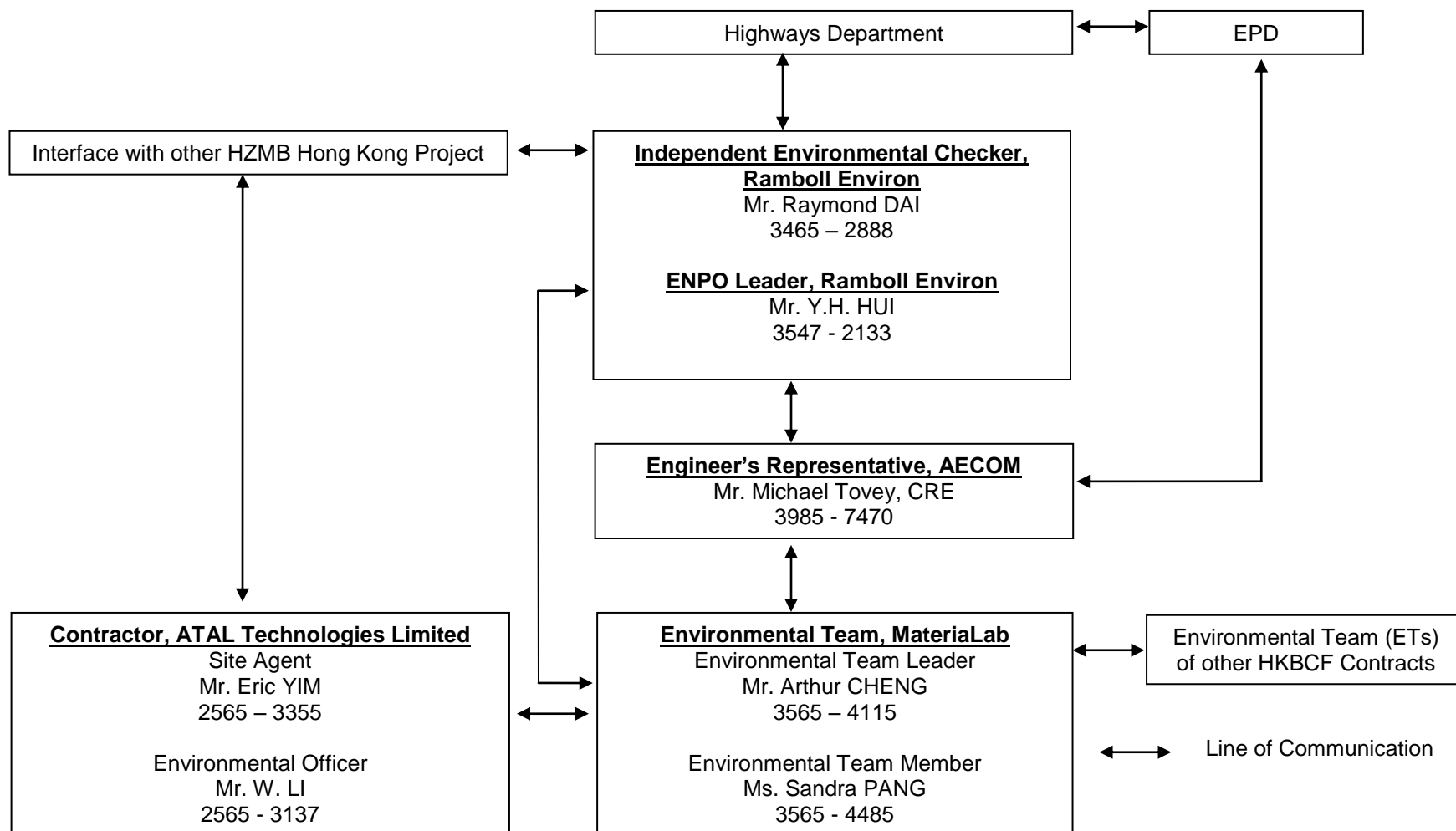
Contract No. HY/2013/03 Hong Kong-Zhuhai-Macao Bridge, Hong Kong Boundary Crossing
Facilities – Vehicle Clearance Plazas and Ancillary Buildings and Facilities

Projects Organization for Environmental Works



Contract No. HY/2013/06 (within Contract No. HY/2013/03 works area)
Hong Kong-Zhuhai-Macao Bridge, Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System

Projects Organization for Environmental Works



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Report No.: 0165/15/ED/0615

Appendix C

Construction Programme

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16									
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017						
								Oct	Nov	Dec	Jan	Feb					
HKBCF - VCP & Ancillary Buildings and Facilities, DWP Rev. 3, DD 31 Oct. 16																	
CONTRACT DATES																	
Key Dates																	
A1150	KD15 Achievement of Stage 14 of the Works (548 days; 08 Oct. 16)	0	0	0%		13-Dec-16*	-66						◆ KD15 Achievement of Stage 14 of the Works (5				
A1320	KD32 Achievement of Section IV(b) of the Works (646 days; 15 Jan. 17)	0	0	0%		14-Jan-17*	1						◆ KD32 Achievement o				
A1330	KD33 Achievement of Section IV(c) of the Works (646 days; 15 Jan. 17)	0	0	0%		14-Jan-17*	1						◆ KD33 Achievement o				
Site Access & Possession																	
Possession of Portion of Site																	
A0030	Possession of Portion B (<=100 days)	0	0	0%		31-Oct-16*	-470						◆ Possession of Portion B (<=100 days)				
A0040	Possession of Portion C (<=100 days)	0	0	0%		01-Jan-17*	-533						◆ Possession of Portion C (<=10				
A0050	Possession of Portion D (<=220 days)	0	0	100%		11-Oct-16 A							◆ Possession of Portion D (<=220 days)				
A0070	Possession of Portion F (<=220 days)	0	0	0%		01-Jan-17*	-413						◆ Possession of Portion F (<=22				
A0080	Possession of Portion G (<=225 days)	0	0	100%		14-Oct-16 A							◆ Possession of Portion G (<=225 days)				
A0110	Possession of Portion J (<=320 days)	0	0	0%		31-Oct-16*	-312						◆ Possession of Portion J (<=320 days)				
A0150	Possession of Portion N (<=345 days)	0	0	0%		31-Oct-16*	-225						◆ Possession of Portion N (<=345 days)				
A0160	Possession of Portion P (<=502 days)	0	0	0%		31-Oct-16*	-68						◆ Possession of Portion P (<=502 days)				
A0170	Possession of Portion Q (<=500 days)	0	0	0%		31-Oct-16*	-70						◆ Possession of Portion Q (<=500 days)				
A0180	Possession of Portion R (<=610 days)	0	0	0%		01-Jan-17*	-199						◆ Possession of Portion R (<=61				
Access to Locations of the Site																	
A0210	Contract Date for Access to Location 1.1 (490 days)	0	0	0%		31-Oct-16*	-269						◆ Contract Date for Access to Location 1.1 (490 days)				
A0220	Contract Date for Access to Location 1.2 (405 days)	0	0	0%		31-Oct-16*	-165						◆ Contract Date for Access to Location 1.2 (405 days)				
A0230	Contract Date for Access to Location 1.3 (488 days)	0	0	0%		31-Oct-16*	-136						◆ Contract Date for Access to Location 1.3 (488 days)				
A0240	Contract Date for Access to Location 1.4 (488 days)	0	0	0%		31-Oct-16*	-136						◆ Contract Date for Access to Location 1.4 (488 days)				
A0250	Contract Date for Access to Location 1.5 (580 days)	0	0	0%		09-Nov-16*	0						◆ Contract Date for Access to Location 1.5 (580 days)				
A0280	Contract Date for Access to Location 1.7A (610 days)	0	0	0%		09-Dec-16*	0						◆ Contract Date for Access to Location 1.7A (610 days)				
A0290	Contract Date for Access to Location 1.7B (610 days)	0	0	0%		09-Dec-16*	0						◆ Contract Date for Access to Location 1.7B (610 days)				
A0300	Contract Date for Access to Location 1.7C (610 days)	0	0	0%		09-Dec-16*	0						◆ Contract Date for Access to Location 1.7C (610 days)				
A0310	Contract Date for Access to Location 1.8 PCB (Basement level up to ground floor slab) (395 days)	0	0	0%		31-Oct-16*	-175						◆ Contract Date for Access to Location 1.8 PCB (Basement level up to ground floor sl				
A0320	Contract Date for Access to Location 1.8 PCB (Ground Floor level or above) (515 days)	0	0	0%		31-Oct-16*	-55						◆ Contract Date for Access to Location 1.8 PCB (Ground Floor level or above) (515 d				
A0330	Contract Date for Access to External Area for Contract HY/2013/01 for ELV System Installation (570 days)	0	0	0%		31-Oct-16*	0						◆ Contract Date for Access to External Area for Contract HY/2013/01 for ELV System				
A0340	Contract Date for Access to External Area for Contract HY/2013/02 for ELV System Installation (560 days)	0	0	0%		31-Oct-16*	-10						◆ Contract Date for Access to External Area for Contract HY/2013/02 for ELV System				
A0350	Contract Date for Access to External Area for Contract HY/2013/04 ELV System Installation (560 days)	0	0	0%		31-Oct-16*	-10						◆ Contract Date for Access to External Area for Contract HY/2013/04 ELV System Inst				
Section/Stage Subject to Excision																	
A0770	Contract Date for Section VI (650 days, latest date when the Engineer may order)	0	0	0%	18-Jan-17*		0						◆ Contract Date for				
A0780	Contract Date for Section VII (650 days, latest date when the Engineer may order)	0	0	0%	18-Jan-17*		0						◆ Contract Date for				
PRELIMINARY																	
Precast Yard for Bridge Segement																	
A0630	Segment Manufacture	300	102	66%	17-Jun-16 A	04-Mar-17	111										
<div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical</div> <div><div>◆</div> Milestone</div>		THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES Page 1 of 21											Date	Revision		Checked	Approved
													31-Aug-16	3MRP updated as of 31 Aug. 2016		ZJ	
													30-Sep-16	3MRP updated as of 30 Sep. 2016		ZJ	
													31-Oct-16	3MRP updated as of 30 Oct. 2016		ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
PORTION A1												
Portion A1 Structures												
Bridge A9												
Bored Pile												
SA9120	Bored pile for A9 Bridge, 10 no.	70	27	61.43%	17-May-16 A	30-Nov-16	34					
SA9140	Pile testing	7	7	0%	31-Oct-16	07-Nov-16	34					
Pile Cap												
SA9210	Cap - A905	30	30	0%	08-Nov-16	12-Dec-16	72					
SA9220	Cap - P904	30	30	0%	08-Nov-16	12-Dec-16	77					
SA9230	Cap - P903	30	30	0%	08-Nov-16	12-Dec-16	34					
SA9240	Cap - P902	30	30	0%	08-Nov-16	12-Dec-16	34					
SA9250	Cap - A901	30	30	0%	08-Nov-16	12-Dec-16	75					
Pier & Abutment												
SA9310	Abutment A905	30	30	0%	13-Dec-16	19-Jan-17	72					
SA9320	Pier P904	25	25	0%	13-Dec-16	13-Jan-17	77					
SA9330	Pier P903	25	25	0%	13-Dec-16	13-Jan-17	34					
SA9340	Pier P902	25	25	0%	13-Dec-16	13-Jan-17	34					
SA9350	Abutment A901	30	30	0%	13-Dec-16	19-Jan-17	75					
Structure Deck												
SA9400	Falsework for Deck A905 - P904	14	14	0%	20-Jan-17	08-Feb-17	72					
SA9430	Falsework for Deck P903 - P902	14	14	0%	14-Jan-17	02-Feb-17	34					
Retaining Wall W8-1												
SW8110	Construction of Retaing Wall W8-1 (U-shape, 4 bays)	80	76	5%	19-Sep-16 A	02-Feb-17	125					
Retaining Wall W9-1												
SW9110	Construction of Retaining Wall W9-1 (U-shape, 4 bays) (+PL Test)	80	76	5%	19-Sep-16 A	02-Feb-17	147					
Box Culvert D												
Box Culvert D Construction												
SD0140	Box Culvert D Construction (Stage 1, Bay 33 - 35)	50	0	100%	17-May-16 A	15-Oct-16 A						
SD0150	Box Culvert D Construction (Stage 2, Bay 36 - 38)	50	4	92%	27-Jul-16 A	03-Nov-16	162					
SD0160	Box Culvert D Construction (Stage 3, Bay 39 - 42)	50	12	76%	08-Aug-16 A	12-Nov-16	99					
SD0170	Box Culvert D Construction (Stage 4, Bay 19 - 21 & 24 - 32)	75	68	10%	08-Aug-16 A	20-Jan-17	99					
SD0180	Box Culvert D Backfilling	75	75	0%	20-Jan-17	26-Apr-17	99					
047 - Fresh Water Pumping Station, Portion A1 & A2												
A04720	Excavation + Blinding	12	12	0%	31-Oct-16	12-Nov-16	-184					
A04730	Pile Testing	7	7	0%	14-Nov-16	21-Nov-16	-184					
A04740	Water Tank Construction	58	58	0%	22-Nov-16	03-Feb-17	-184					
049 - Sewage Treatment Plant, Portion A1 & A2												
A04946	Excavation to 0.0mPD/+4.9mPD	10	9	10%	19-Sep-16 A	09-Nov-16	-151					
A04948	Pile Testing	14	0	100%	10-Oct-16 A	24-Oct-16 A						
A04950	Sheet Piling as ELS1 for Equalization Tanks	40	12	70%	29-Sep-16 A	12-Nov-16	-151					

Actual Work

Remaining Work

Critical

Milestone

THREE MONTH ROLLING PROGRAMME

VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES

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Date	Revision	Checked	Approved
31-Aug-16	3MRP updated as of 31 Aug. 2016	ZJ	
30-Sep-16	3MRP updated as of 30 Sep. 2016	ZJ	
31-Oct-16	3MRP updated as of 30 Oct. 2016	ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
A04960	Sheet Piling as ELS2 for Sludge Holding Tanks	20	20	0%	26-Oct-16 A	22-Nov-16	600					
B04960	ELS1 + Blinding for Equalization Tanks	14	3	78.57%	20-Oct-16 A	02-Nov-16	-151					
B04970	Constructing Base Slab for Equalization Tanks	15	15	0%	03-Nov-16	19-Nov-16	-86					
B04980	Backfilling + Removing 3rd Strut of ELS1	6	6	0%	21-Nov-16	26-Nov-16	-86					
B04990	Constructing Wall Stem for Equalization Tanks	27	27	0%	28-Nov-16	30-Dec-16	-86					
C04910	Water-tightness Test for Equalization Tanks	12	12	0%	31-Dec-16	14-Jan-17	-86					
C04920	Backfilling + Removal of ELS1	10	10	0%	16-Jan-17	26-Jan-17	-86					
C04930	ELS2 + Blinding for Equalization Tanks	10	10	0%	03-Nov-16	14-Nov-16	-151					
C04940	Constructing Base Slab of Equalization Tanks	20	20	0%	15-Nov-16	07-Dec-16	-151					
C04950	Backfilling + Removal Strut of ELS2	5	5	0%	08-Dec-16	13-Dec-16	-151					
C04960	Constructing Wall Stem of Sludge Holding Tanks	20	20	0%	14-Dec-16	09-Jan-17	-151					
C04970	Water-tightness Test for Sludge Holding Tanks	12	12	0%	10-Jan-17	23-Jan-17	-151					
C04990	Backfilling + Removal of ELS2	12	12	0%	24-Jan-17	09-Feb-17	-151					
D04910	ELS3 w/struts + Blinding for MBR Tanks	5	5	5%	29-Sep-16 A	04-Nov-16	-153					
D04920	Constructing Base Slab for MBR Tanks	30	30	0%	04-Nov-16	09-Dec-16	-153					
D04930	Constructing Wall Stem for MBR Tanks	25	25	0%	09-Dec-16	11-Jan-17	-153					
D04940	Water-tightness Test for MBR Tanks	12	12	0%	11-Jan-17	25-Jan-17	-153					
D04950	Backfilling + Removal of ELS3	12	12	0%	25-Jan-17	11-Feb-17	-153					
D04955	Excavation + Blinding for Ground Slab, Transformer Room	20	0	100%	11-Oct-16 A	18-Oct-16 A						
D04960	Constructing Ground Slab for Transformer Room	25	19	23%	19-Oct-16 A	22-Nov-16	-130					
D04970	Transformer Room Construction	30	30	0%	22-Nov-16	29-Dec-16	-130					
D04980	BS + E&M for Transformer Room to CLP (KD7)	25	25	0%	29-Dec-16	01-Feb-17	-130					
Completion of Fire Services Installation and Equipment (FCD)												
F04950	Provision of Approved Building Plans by the Engineer	0	0	0%		31-Oct-16	9			Provision of Approved Building Plans by the Engineer		
Waterworks Ordinance (WSD)												
G04910	Provision of Approval Letter and approved Drawings by the Engineer	0	0	0%		31-Oct-16	-12			Provision of Approval Letter and approved Drawings by the Engineer		
G04920	Submission of WWO46 - Part I & II (Inside Services)	24	24	0%	01-Nov-16	28-Nov-16	-12					
Portion A1 Buildings												
012 - DOH Disinsection Area and Store Room 1, at Portion A1												
A01250	Finishing	80	64	20%	27-Aug-16 A	16-Jan-17	62					
A01260	BS for Office Accomodation (Stage 8)	73	58	20%	29-Aug-16 A	10-Jan-17	-12					
A01270	BS + E&M for Office Accomodation (Stage 9)	80	80	0%	10-Jan-17	21-Apr-17	-12					
A01280	Other BS + E&M Installation	150	150	0%	31-Oct-16	06-May-17	46					
036 - Weigh Station												
A03665	External Wall Plaster & Tile	75	37	50.67%	02-May-16 A	12-Dec-16	136					
A03670	BS for Office Accomodation (Stage 8)	90	0	100%	13-Jan-16 A	08-Oct-16 A						
A03680	BS + E&M for Office Accomodation (Stage 9)	90	52	42.22%	10-Oct-16 A	31-Dec-16	74					
A03690	Other BS + E&M Instaallation	183	74	59.56%	02-Nov-15 A	27-Jan-17	174					
B03620	WWO 46 Part I & II Submission	0	0	0%	21-Nov-16		140				WWO 46 Part I & II Submission	
Actual Work		THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES Page 3 of 21						Date	Revision		Checked	Approved
Remaining Work								31-Aug-16	3MRP updated as of 31 Aug. 2016		ZJ	
Critical								30-Sep-16	3MRP updated as of 30 Sep. 2016		ZJ	
Milestone								31-Oct-16	3MRP updated as of 30 Oct. 2016		ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities										31-Oct-16		
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
B03640	Plumbing Inspection by WSD	75	75	0%	05-Jan-17	06-Apr-17	119					
037 C&ED Tower Cum Inbound Cargo Examination Building (Portion A1 & B)												
A03738	DDA Submission/Approval for Curtain Wall/Metal Roof/Alum. Cladding	75	23	69.33%	30-Jun-16 A	25-Nov-16	36					
A03740	Steel Frame Structure Installation	90	90	0%	31-Oct-16	18-Feb-17	2					
A03742A	Mock-up Sample for Curtain Wall	50	50	0%	26-Nov-16	26-Jan-17	36					
A03742B	Mock-up Sample for Cladding	50	50	0%	26-Nov-16	26-Jan-17	36					
A03742C	Mock-up Sample for Mesh Screen Wall (SS41) & Balustrade	25	25	0%	31-Oct-16	28-Nov-16	75					
A03742D	Mock-up Sample for Painted Concrete Wall	25	3	88%	01-Aug-16 A	29-Nov-16	197					
A03742F	Mock-up Sample for External Wall Tiling	25	25	0%	31-Oct-16	28-Nov-16	123					
A03744	Curtain Wall/Metal Roof/Aluminium Cladding Installation	100	100	0%	27-Jan-17	03-Jun-17	150					
A03746	Blockwall Laying	100	50	50%	02-Jul-16 A	29-Dec-16	50					
A03748	Wall/Ceiling Plastering/Tiling	100	50	50%	29-Jul-16 A	27-Jan-17	50					
A03752	Floor Screed/Tiling	100	100	0%	31-Oct-16	02-Mar-17	48					
A03760	BS for Office Accomodation (Stage 8)	88	52	40.91%	03-Oct-16 A	31-Dec-16	-75					
A03770	BS + E&M for Office Accomodation (Stage 9)	90	90	0%	03-Jan-17	25-Apr-17	-16					
A03780	BS + E&M for AVCSS Works (KD18A)	52	0	100%	26-Sep-16 A	15-Oct-16 A						
A03785	BS + E&M for AVCSS Cabling (KD18B)	68	52	23.53%	17-Oct-16 A	31-Dec-16	-62					
A03790	Other BS + E&M Installation	235	221	5.96%	17-Oct-16 A	31-Jul-17	-4					
B03720	WWO 46 Part I & II Submission	0	0	0%	21-Nov-16		57					
041 Fire Station Cum Ambulance Depot												
A04110	Substructure	84	0	100%	13-Jun-16 A	30-Sep-16 A						
A04120	Super Structure, G/F to 1/F	80	27	66.25%	09-Jul-16 A	30-Nov-16	-92					
A04122	Super Structure, 1/F to 2/F (incl. parapet wall and planter wall)	80	52	35%	17-Oct-16 A	31-Dec-16	-92					
A04124	DDA Submission/Approval for Cladding & Curtain Wall	60	28	53.33%	01-Sep-16 A	01-Dec-16	71					
A04126	Cladding & Curtain Wall Installation (incl. steel & metal works)	100	100	0%	02-Dec-16	05-Apr-17	71					
A04132	Blockworks	60	60	0%	03-Jan-17	16-Mar-17	-90					
A04133	Ceiling & Wall Plastering/Wall Tiling	60	60	0%	17-Jan-17	30-Mar-17	-90					
A04140	BS for Office Accomodation (Stage 8)	85	85	0%	03-Jan-17	19-Apr-17	-92					
A04160	Other BS + E&M Installation	156	156	0%	03-Jan-17	15-Jul-17	87					
B04120	WWO 46 Part I & II Submission	0	0	0%	21-Nov-16		27					
042 Drill Tower												
A04250	Super Structure	69	0	100%	05-May-16 A	25-Oct-16 A						
A04260	Finishing	80	80	0%	26-Oct-16 A	07-Feb-17	46					
A04270	BS for Office Accomodation (Stage 8)	65	65	0%	26-Oct-16 A	17-Jan-17	-23					

Actual Work

Remaining Work

Critical

Milestone

THREE MONTH ROLLING PROGRAMME

VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES

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Date

Revision

Checked

Approved

31-Aug-16

3MRP updated as of 31 Aug. 2016

ZJ

30-Sep-16

3MRP updated as of 30 Sep. 2016

ZJ

31-Oct-16

3MRP updated as of 30 Oct. 2016

ZJ

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
A04280	BS + E&M for Office Accomodation (Stage 9)	84	84	0%	18-Jan-17	05-May-17	-23					
A04290	Other BS + E&M Installation	160	160	0%	14-Nov-16	02-Jun-17	97					
043 DOH Office + Store Room												
A04330	Super Structure	60	26	56.67%	27-May-16 A	29-Nov-16	-43					
A04340	Water Tanks for F.S./Sprinkler Pump Room	120	120	0%	30-Nov-16	29-Apr-17	-20					
A04360	DDASubmission for Cladding & Curtain Wall	75	0	100%	01-Sep-16 A	31-Oct-16 A						
A04370	Cladding & Curtain Wall Installation (incl. steel & metal works)	125	125	0%	31-Dec-16	07-Jun-17	81					
A04380	BS for Office Accomodation (Stage 8)	69	69	0%	30-Nov-16	24-Feb-17	-43					
B04310	Other BS + E&M Installation	170	170	0%	19-Dec-16	20-Jul-17	408					
B04330	Stainless Steel Mesh Installation	100	100	0%	30-Nov-16	01-Apr-17	131					
B04340	Metal Windows/Louvres/Doors/Railing etc. installation	136	136	0%	30-Nov-16	20-May-17	95					
B04350	Blockworks	50	50	0%	30-Nov-16	02-Feb-17	37					
B04360	Wall Plastering/Tiling	50	50	0%	30-Dec-16	02-Mar-17	37					
C04310	C/S Wall Plastering	48	48	0%	30-Nov-16	27-Jan-17	159					
C04340	WWO 46 Part I & II Submission	0	0	0%	21-Nov-16		21					
052 - Transforms (Zone 4)												
A05235	Energisation by CLP	50	10	80%	24-Feb-16 A	10-Nov-16	62					
A05240	BS + E&M Installation (KD9)	66	0	100%	02-Nov-15 A	29-Oct-16 A						
A05250	Ceiling/Wall Painting Finish & FloorScreed	100	26	74%	31-May-16 A	29-Nov-16	0					
A05260	External Wall Plaster & Wall (KD10)	100	100	0%	30-Nov-16	01-Apr-17	0					
A05270	Main Switch/L.V. Switch Board Installation	50	50	0%	30-Nov-16	02-Feb-17	50					
A05280	Genset Installation	60	60	0%	16-Dec-16	02-Mar-17	65					
Completion of Fire Services Installation and Equipment (FCD)												
F05240	Provision of Approved Building Plans by the Engineer	0	0	0%		31-Oct-16	141					
Waterworks Ordinance (WSD)												
G05210	Provision of Approval Letter and approved Drawings by the Engineer	0	0	0%		31-Oct-16	7					
105 IMMD Guard Booth, Portion A1 (Mock Up)												
B10500	Shop Drawings & Material Submission	69	69	0%	31-Oct-16	07-Jan-17	-85					
B10510	Excavation + Blinding	5	5	0%	27-Jan-17	04-Feb-17	-86					
Facade Envelop Structure Installation												
B10580	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	84					
B10590	Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	84					
External Works for Portion A1												
Drainage Works												
ED0020	Drainage Works (773m & 34MHs), Stage 1 (Western)	100	10	90%	16-Sep-15 A	10-Nov-16	-223					
ED0030	Sewerage (300m & 9MHs), Stage 1 (Western)	100	10	90%	04-Jan-16 A	10-Nov-16	-223					
ED5590	Drainage Works (774m & 35MHs), Stage 2 (Middle)	100	100	0%	11-Nov-16	14-Mar-17	-223					
ED5600	Sewerage (300m & 9MHs), Stage 2 (Middle)	100	100	0%	11-Nov-16	14-Mar-17	-223					
Waterpipe Laying												
</												

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16					
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017		
								Oct	Nov	Dec	Jan	Feb	
EW5010	Fresh Water Main Laying (700 m), Stage 1 (Western)	75	68	10%	13-Oct-16 A	20-Jan-17	-231	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
	EW6010	Flushing Water Main Laying (322 m), Stage 1 (Western)	75	68	10%	13-Oct-16 A	20-Jan-17	-231	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	EW6020	Fresh Water Main Laying (700 m), Satge 2 (Middle)	75	75	0%	20-Jan-17	26-Apr-17	-231				<div></div>	<div></div>
	EW6030	Flushing Water Main Laying (322 m), Stage 2 (Middle)	75	75	0%	20-Jan-17	26-Apr-17	-231				<div></div>	<div></div>
	Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
EU5260	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV	200	200	0%	19-Nov-16	27-Jul-17	-18		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
PORTION A2													
Portion A2 Structures													
048 - Reclaimed Water Pumping Station, Portion A2													
A04830	Sheet Piling as ELS for Basement 1	12	12	0%	31-Oct-16	12-Nov-16	-198		<div></div>				
A04840	Pile testing	7	7	0%	14-Nov-16	21-Nov-16	-198		<div></div>				
A04850	Excavation + Blinding for Basement 1	20	20	0%	22-Nov-16	14-Dec-16	-198		<div></div>	<div></div>			
A04860	Basement 1 Construction	40	40	0%	15-Dec-16	06-Feb-17	-198			<div></div>	<div></div>	<div></div>	
Retaining Wall W9-2													
SW9210	Construction of Retaining Wall W9-2 (U-shape, 6 bay)	120	120	0%	31-Oct-16	25-Mar-17	-216		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
External Works for Portion A2													
Drainage Works													
A2S010	Initial Survey	6	6	0%	31-Oct-16	05-Nov-16	-138	<div></div>					
PORTION B													
Portion B Structures													
Retaining Wall W7-2													
S70870	Construction of Retaining Wall W7-2 (L-shape, 1 bays)	25	25	0%	14-Nov-16	12-Dec-16	181		<div></div>				
S70890	RW7-2 Backfilling	30	30	0%	28-Dec-16	04-Feb-17	170				<div></div>	<div></div>	
Retaining Wall W6-1													
S62050	Construction of Retaining Wall W6-1 (L-shape, 4bays)	80	48	40%	12-Jul-16 A	24-Dec-16	165	<div></div>	<div></div>	<div></div>			
S62060	RW6-1 Backfilling	30	30	0%	28-Dec-16	04-Feb-17	165				<div></div>	<div></div>	
Bay 4 - 19 of CUE/Staff Subway													
C02760	Internal Finishes & Cable Containment (KD1)	100	27	73%	01-Aug-16 A	30-Nov-16	-220	<div></div>	<div></div>	<div></div>			
C02770	BS + E&M Installation for AVCSS (Stage 1)	100	52	48%	22-Aug-16 A	31-Dec-16	-220	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
C02780	Chilled Water Pipe (CUE) installation	50	50	0%	03-Jan-17	04-Mar-17	221				<div></div>	<div></div>	
Bay 20 - 24 of CUE/Staff Subway													
C02820	Bay 20 - 24 Construction - Base Slab	63	52	17.46%	25-Feb-16 A	31-Dec-16	-269	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
C02830	Bay 20 - 24 Construction - Wall + Top Slab	100	74	26%	03-May-16 A	02-Feb-17	-269	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
C02840	Internal Finishes & Cable Containment (KD1)	75	75	0%	30-Nov-16	03-Mar-17	-269			<div></div>	<div></div>	<div></div>	<div></div>
C02850	BS + E&M Installation for AVCSS (Stage 1)	75	75	0%	30-Nov-16	03-Mar-17	-269			<div></div>	<div></div>	<div></div>	<div></div>
C02860	Chilled Water Pipe (CUE) installation	50	50	0%	20-Jan-17	22-Mar-17	206				<div></div>	<div></div>	<div></div>
Bay 25 - 29 of CUE/Staff Subway													
C02920	Bay 25 -29 Construction - Base Slab	28	27	3.57%	03-May-16 A	30-Nov-16	-270	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16					
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017		
								Oct	Nov	Dec	Jan	Feb	
	C02930	Bay 25 - 29 Construction - Wall + Top Slab	100	52	48%	04-Jul-16 A	31-Dec-16	-270					
	C02960	Internal Finishes & Cable Containment (KD1)	75	75	0%	01-Dec-16	04-Mar-17	-270					
	C02970	BS + E&M Installation for AVCSS (KD1)	75	75	0%	01-Dec-16	04-Mar-17	-270					
	C02980	Chilled Water Pipe (CUE) installation	50	50	0%	21-Jan-17	23-Mar-17	205					
Portion B Buildings													
027/028 Inbound Kiosks & 029 Outbound Kiosks													
A02700	Submission & Approval for Steel Works	98	26	73.47%	01-Apr-16 A	29-Nov-16	-179						
A02710	Pre-fabrication for the Steel Kiosks	100	50	50%	01-Aug-16 A	29-Dec-16	-179						
A02715	Mock up for Steel Kiosks	100	27	73%	01-Aug-16 A	30-Nov-16	-154						
A02718	Mock up for Goods Vehicle Canopy	25	25	0%	02-Nov-16	30-Nov-16	-101						
A02720	Super structure	100	75	25%	17-Sep-16 A	04-Mar-17	-181						
A02730	Construction of Subway Entrance	25	25	0%	05-Sep-16 A	31-Dec-16	-26						
A02740	Construction of Subway Toilets	25	25	0%	03-Jan-17	03-Feb-17	-26						
A02780	BS + E&M for AVCSS Works (KD18A)	54	54	0%	29-Dec-16	06-Mar-17	-181						
027/028 Inbound Kiosks & 029 Outbound Kiosks, Section IX, Subject to Excision													
B02740	Pre-fabrication for the Steel Kiosks	100	50	50%	01-Aug-16 A	29-Dec-16	-26						
B02750	Super structure	96	50	47.92%	17-Oct-16 A	01-Apr-17	-52						
B02760	BS + E&M for AVCSS Works (KD18C)	84	84	0%	28-Dec-16	10-Apr-17	-52						
026 Inbound IMMD and DOH Secondary Screening Building													
A02630	Super Structure	75	63	16%	16-Feb-16 A	14-Jan-17	-117						
A02640	Finishing	150	150	0%	16-Jan-17	21-Jul-17	5						
A02650	Contractor's Design Submission for SS Mesh Screen & Approval	100	100	0%	16-Jan-17	22-May-17	5						
A02660	Contractor's Design Submission for Aluminium Cladding & Approval	50	50	0%	16-Jan-17	17-Mar-17	5						
A02670	BS for Office Accomodation (Stage 8)	90	90	0%	16-Jan-17	10-May-17	-117						
A02690	Other BS + E&M Installation	180	171	5%	01-Feb-16 A	02-Sep-17	-2						
054 Inbound Fixed X-ray Building													
A05455	Superstructure, 1/F to 2/F (incl. parapet wall and planter wall)	35	0	100%	20-Jun-16 A	04-Oct-16 A							
A05460	Finishing	150	75	50%	02-Jul-16 A	01-Feb-17	-39						
A05467	Energisation by CLP	75	75	0%	03-Oct-16 A	01-Feb-17	78						
A05470	BS for Office Accomodation (Stage 8)	90	52	42.22%	05-Oct-16 A	31-Dec-16	-16						
A05490	Other BS + E&M Installation	180	171	5%	08-Feb-16 A	01-Jun-17	69						
B05410	Lift Installation	75	75	0%	02-Dec-16	06-Mar-17	25						
Completion of Fire Services Installation and Equipment (FCD)													
F05440	Provision of Approved Building Plans by the Engineer	0	0	0%		31-Oct-16	102						
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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
Waterworks Ordinance (WSD)												
G05410	Provision of Approval Letter and approved Drawings by the Engineer	0	0	0%		31-Oct-16	8	◆ Provision of Approval Letter and approved Drawings by the Engineer				
038 AFCD Office												
A03820	Substructure	24	2	91.67%	22-Sep-16 A	01-Nov-16	-202					
A03830	Super Structure; G/F to 1/F	45	45	0%	02-Nov-16	23-Dec-16	-130					
A03840	Super Structure; 1/F to 2/F (incl. parapet and planter wall)	45	45	0%	24-Dec-16	21-Feb-17	-130					
039 Police Main Building												
A03920	Substructure	70	12	82.86%	03-Sep-16 A	12-Nov-16	-262					
A03930	Super Structure; G/F to 1/F	75	75	0%	14-Nov-16	15-Feb-17	-262					
040 Incident Control Tower												
A04020	Substructure	14	14	0%	31-Oct-16	15-Nov-16	606					
A04040	Super Structure	97	97	0%	02-Nov-16	01-Mar-17	-202					
Facade Cladding System												
B04010	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	23					
B04020	Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	23					
Glass Wall												
C04010	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	51					
C04020	Fabrication of Glass Wall	60	60	0%	05-Dec-16	18-Feb-17	51					
102 HKPF UVSS Monitor Room												
A10210	Substructure (Raft Foundation)	45	0	100%	24-Sep-16 A	05-Oct-16 A						
A10220	Super Structure	45	0	100%	06-Oct-16 A	31-Oct-16 A						
A10230	Finishing (False Ceiling) (KD9)	70	70	0%	31-Oct-16	23-Jan-17	-18					
A10240	BS for Office Accomodation (Stage 8)	80	80	0%	31-Oct-16	07-Feb-17	-34					
A10270	Other BS + E&M Installation	150	150	0%	18-Nov-16	25-May-17	74					
Metal Canopy and Roof Installation												
B10210	Shop Drawing Submission and Approval	30	0	100%	03-Oct-16 A	31-Oct-16 A						
B10212	Fabrication of MC/R	60	60	0%	31-Oct-16	11-Jan-17	28					
B10220	Casted-in Items Installation	40	40	0%	12-Jan-17	02-Mar-17	28					
103 Police Inspection Post												
A10310	Excavation + Blinding	5	0	100%	25-Oct-16 A	31-Oct-16 A						
A10330	Raft Foundation	20	20	0%	31-Oct-16	22-Nov-16	-94					
A10340	Super Structure (Roof Slabs)	40	40	0%	23-Nov-16	11-Jan-17	-94					
A10350	Finishing (False Ceiling) (KD9)	60	60	0%	12-Jan-17	25-Mar-17	-68					
A10360	BS for Office Accomodation (Stage 8)	80	80	0%	12-Jan-17	22-Apr-17	-94					
HPL Composite Panel Cladding System												
B10310	Shop Drawing Submission and Approval	30	30	0%	24-Dec-16	03-Feb-17	61					
057 Transformers (Zone 2)												
A05730	Supersturcture	104	52	50%	20-Aug-16 A	31-Dec-16	-306					
A05740	Finishing	90	90	0%	03-Jan-17	25-Apr-17	-16					
A05750	BS + E&M for Tx Room to CLP (Stage 4)	90	90	0%	03-Jan-17	25-Apr-17	-306					
A05760	BS for Office Accomodation (Stage 8)	70	70	0%	03-Jan-17	28-Mar-17	-70					
A05780	Other BS + E&M Installation	130	130	0%	21-Jan-17	04-Jul-17	56					
<div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical</div> <div>◆ ◆ Milestone</div>		THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES Page 8 of 21						Date	Revision	Checked	Approved	
								31-Aug-16	3MRP updated as of 31 Aug. 2016	ZJ		
								30-Sep-16	3MRP updated as of 30 Sep. 2016	ZJ		
								31-Oct-16	3MRP updated as of 30 Oct. 2016	ZJ		

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
Completion of Fire Services Installation and Equipment (FCD)												
F05740	Provision of Approved Building Plans by the Engineer	0	0	0%		31-Oct-16	54		◆ Provision of Approved Building Plans by the Engineer			
Waterworks Ordinance (WSD)												
G05710	Provision of Approval Letter and approved Drawings by the Engineer	0	0	0%		31-Oct-16	7		◆ Provision of Approval Letter and approved Drawings by the Engineer			
107 - C&ED Mobile X-ray Operation Office (Cargo), Portion B												
C10710	Excavation + Blinding	7	0	100%	24-Oct-16 A	31-Oct-16 A						
C10720	Raft Foundation	32	32	0%	31-Oct-16	06-Dec-16	-112					
C10730	Superstructure (Roof Slabs)	62	62	0%	07-Dec-16	23-Feb-17	-112					
113 - Field Kiosk for Access Control, Portion B												
B11310	Excavation + Blinding	7	0	100%	31-Aug-16 A	30-Sep-16 A						
B11320	Raft Foundation	32	2	93.75%	03-Oct-16 A	01-Nov-16	-161					
B11330	Superstructure (Roof Beams & Slabs)	60	60	0%	02-Nov-16	13-Jan-17	-161					
B11340	Finishing	130	130	0%	14-Jan-17	26-Jun-17	131					
B11350	BS for Office Accomodation (Stage 8)	70	70	0%	14-Jan-17	10-Apr-17	-80					
External Works for Portion B												
Works in Location 1.7A												
BB1480	ELV Works & T&C in Location 1.7A	125	125	0%	10-Dec-16	18-May-17	0					
Works in Location 1.7B												
BB1490	ELV Works & T&C in Location 1.7B	125	125	0%	10-Dec-16	18-May-17	0					
Drainage Works												
ED1540	Drainage Works (1130m & 60 MHs), Stage 1 (S/W)	90	0	100%	17-Dec-15 A	31-Oct-16	-17					
ED3580	Sewerage (275m & 8MHs), Stage 1 (S/W)	90	1	98.89%	02-Jan-16 A	31-Oct-16	-18					
ED5650	Drainage Works (1130m & 60MHs), Stage 2 (S/E)	90	25	72.22%	01-Mar-16 A	28-Nov-16	27					
ED5660	Sewerage (300m & 8MHs), Stage 2 (S/E)	90	25	72.22%	01-Mar-16 A	28-Nov-16	27					
ED5670	Drainage Works (1130m & 60MHs), Stage 3 (N/W)	90	90	0%	29-Nov-16	20-Mar-17	27					
ED5680	Sewerage (300m & 8MHs), Stage 3 (N/W)	90	90	0%	29-Nov-16	20-Mar-17	27					
Waterpipe Laying												
EW1550	Fresh Water Main Laying (472m), Stage 1 (S/W)	60	15	75%	24-Sep-16 A	21-Nov-16	-18					
EW1560	Flushing Water Main Laying (460m), Stage 1 (S/W)	60	15	75%	24-Sep-16 A	21-Nov-16	-18					
EW6080	Fresh Water Main Laying (500m), Stage 2 (S/E)	90	90	0%	22-Nov-16	13-Mar-17	-18					
EW6090	Flushing Water Main Laying (460m), Stage 2 (S/E)	90	90	0%	22-Nov-16	13-Mar-17	-18					
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
EU5300	Duct & Cable Laying for Utilities/Telecom, CLP, BS & ELV	300	270	10%	24-Sep-16 A	30-Sep-17	-18					
Roadworks												
ER1640	Subbase (10000 ton), Stage 1 (N/W)	75	75	0%	31-Oct-16	01-Feb-17	-20					
ER3590	Bitumen Pavement (14000 ton), Stage 1 (N/W)	75	75	0%	28-Nov-16	01-Mar-17	-20					
ER3600	Rigid Pavement (594 m3), Footpath & EVA, Stage 1 (N/W)	75	75	0%	28-Nov-16	01-Mar-17	-20					
Sign Gantry ADS 306A & ADS 306B												
<div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical</div> <div><div>◆</div> Milestone</div>		THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES Page 9 of 21						Date	Revision		Checked	Approved
								31-Aug-16	3MRP updated as of 31 Aug. 2016		ZJ	
								30-Sep-16	3MRP updated as of 30 Sep. 2016		ZJ	
								31-Oct-16	3MRP updated as of 30 Oct. 2016		ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
ES5240	Fabrication & Delivery of Sign Gantrys to Site	250	221	11.6%	30-Sep-16 A	31-Jul-17	2					
PORTION C												
Portion C Buildings												
010 - Inbound Coach Kiosk & Staff Subway Entrance												
A01010	Substructure and Staircase Construction	75	75	0%	03-Jan-17	03-Apr-17	-327					
009 - Staff Subway Entrance (Bay 0 - 3) & Shuttle Bus Kiosks												
A00930	Constructing Wall + Top Slab of Bay 0 -3	50	0	100%	20-Jun-16 A	11-Oct-16 A						
A00940	Finishing	50	27	46%	17-Oct-16 A	30-Nov-16	-285					
A00950	BS + E&M for AVCSS works (KD 1)	50	27	46%	17-Oct-16 A	30-Nov-16	-285					
A00960	Chilled Water Pipe Installation (CUE)	50	50	0%	30-Dec-16	02-Mar-17	26					
B00910	Substructure and Staircase Construction (Portion B&C)	50	50	0%	12-Oct-16 A	29-Dec-16	-285					
B00920	Kiosk Superstructure	75	75	0%	30-Dec-16	31-Mar-17	-285					
012 - DOH Disinsection Area and Store Room 1, at Portion C												
B01210	Excavation & Blinding	10	10	0%	03-Jan-17	13-Jan-17	-188					
B01220	Raft Foundation	20	20	0%	14-Jan-17	09-Feb-17	-188					
104 - DOH Secondary Screening Station, at Portion C												
A10420	Excavation & Blinding	5	5	0%	03-Jan-17	07-Jan-17	-110					
A10430	Substructure	35	35	0%	09-Jan-17	21-Feb-17	-110					
Facade Cladding System												
A10460	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	2					
A10465	Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	2					
108 C&ED Mobile X-ray Machine Operation Office, Portion C												
A10805	Excavation & Blinding	5	5	0%	03-Jan-17	07-Jan-17	-244					
A10810	Raft Foundation	25	25	0%	09-Jan-17	09-Feb-17	-244					
HPL Composite Panel Cladding System												
A10800	Shop Drawing Submission and Approval	30	30	0%	03-Jan-17	09-Feb-17	56					
110 IMMD Guard Booth (Type 2) East												
A11020	Excavation & Blinding	5	5	0%	09-Jan-17	13-Jan-17	-105					
A11030	Substructure	25	25	0%	14-Jan-17	15-Feb-17	-105					
Facade Envelop Structure Installation												
A11040	Shop Drawing Submission and Approval	30	30	0%	03-Jan-17	09-Feb-17	56					
110 IMMD Guard Booth (Type 2) West												
C11010	Excavation & Blinding	5	5	0%	14-Jan-17	19-Jan-17	85					
111 Field Kiosk for Carpark Operator												
A11120	Excavation & Blinding	5	5	0%	03-Jan-17	07-Jan-17	-156					
A11130	Raft Foundation	25	25	0%	14-Jan-17	15-Feb-17	-161					
HPL Composite Panel Cladding System												
B11110	Shop Drawing Submission and Approval	30	30	0%	03-Jan-17	09-Feb-17	56					
113 - Field Kiosk for Access Control, Portion C												
C11310	Excavation & Blinding	5	5	0%	03-Jan-17	07-Jan-17	-165					
C11320	Raft Foundation	30	30	0%	09-Jan-17	15-Feb-17	-165					
External Works for Portion C												
Works in Location 1.2, 1.8 & 011 - Emergency Generator Building												
BB1440	Works & T&C in Location 1.2	90	90	0%	31-Oct-16	18-Feb-17	143					
BB1460	ELV System Installation for Contract HY/2013/01	50	50	0%	31-Oct-16	29-Dec-16	273					
<div>Actual Work</div> <div>Remaining Work</div> <div>Critical</div> <div>Milestone</div>		THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES Page 10 of 21						Date	Revision	Checked	Approved	
								31-Aug-16	3MRP updated as of 31 Aug. 2016	ZJ		
								30-Sep-16	3MRP updated as of 30 Sep. 2016	ZJ		
								31-Oct-16	3MRP updated as of 30 Oct. 2016	ZJ		

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
Drainage Works												
B00040	Initial Survey	4	4	0%	03-Jan-17	06-Jan-17	-271					
SG2400	Drainage Works (400m & 18MHs), Stage 1 (Eastern)	75	75	0%	07-Jan-17	08-Apr-17	-271					
SG3610	Sewerage (90m & 2MHs), Stage 1 (Eastern)	75	75	0%	07-Jan-17	08-Apr-17	-271					
PORTION D												
Portion D Building												
113 - Field Kiosk for Access Control, Portion D												
C11350	Excavation & Blinding	5	0	100%	26-Sep-16 A	30-Sep-16 A						
C11360	Raft Foundation	30	12	60%	03-Oct-16 A	12-Nov-16	-149					
C11370	Superstructure (Roof Beams & Slabs)	60	60	0%	14-Nov-16	25-Jan-17	-46					
C11380	Finishing	130	130	0%	26-Jan-17	08-Jul-17	121					
D11340	BS for Office Accomodation (Stage 8)	70	70	0%	02-Dec-16	28-Feb-17	-46					
External Works for Portion D												
Drainage Works												
B00050	Initial Survey	6	0	100%	17-Oct-16 A	22-Oct-16 A						
SG3640	Drainage Works (361m & 14MHs)	100	100	0%	14-Nov-16	16-Mar-17	-149					
SG3760	Sewerage (121m & 6MHs)	100	100	0%	14-Nov-16	16-Mar-17	-149					
Waterpipe Laying												
SW3650	Fresh Water Main Laying (108m)	100	100	0%	12-Dec-16	18-Apr-17	-149					
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
B11480	ELV System Installation for Contract HY/2013/02	61	61	0%	31-Oct-16	12-Jan-17	262					
SU5350	Duct & Cable Laying for TCSS & Lighting	100	100	0%	12-Dec-16	18-Apr-17	-149					
Works of Car Park Management System at Location 1.5, 1.6A & 1.6B												
SR5540	Works & T&C for Car Park Management System at Location 1.5	97	97	0%	10-Nov-16	09-Mar-17	0					
Roadworks												
SR3740	Subbase (261 ton)	100	100	0%	12-Jan-17	18-May-17	85					
PORTION E												
Portion E Building												
006 - Shuttle Bus Kiosk & Staff Subway Entrance, at Portion E & M												
A00610	ELS + Blinding for Subway	12	12	0%	31-Oct-16	12-Nov-16	-249					
A00620	Constructing base of Subway	25	25	0%	14-Nov-16	12-Dec-16	-249					
A00630	Constructing wall stem + top slab of Subway	40	40	0%	13-Dec-16	03-Feb-17	-249					
External Works for Portion E												
Drainage Works												
B00060	Initial Survey	6	0	100%	24-Oct-16 A	31-Oct-16 A						
PORTION F												
External Works for Portion F												
Drainage Works												
B00070	Initial Survey	6	6	0%	03-Jan-17	09-Jan-17	-175					
SG3930	Drainage Works (122m & 9MHs)	80	80	0%	10-Jan-17	20-Apr-17	-175					
SG4050	Sewerage (70m & 3MHs)	80	80	0%	10-Jan-17	20-Apr-17	-175					
PORTION G, H1 & H2												
Portion G Structures												

Actual Work

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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
SA3350	Pier P303	25	17	32%	24-Oct-16 A	18-Nov-16	37					
Structure Deck												
SA3410	Falsework for Deck P301 - P302	14	14	0%	31-Oct-16	15-Nov-16	44					
SA3420	Deck on P301 - P302 + Stressing	75	75	0%	16-Nov-16	17-Feb-17	58					
SA3430	Falsework for Deck P302 - P303	14	14	0%	24-Nov-16	09-Dec-16	37					
SA3440	Deck on P302 - P303 + Stressing	75	75	0%	10-Dec-16	14-Mar-17	37					
Bridge A4												
Bored Pile												
SA4130	Pile Testing	7	7	0%	31-Oct-16	07-Nov-16	-10					
Pile Cap												
SA4210	Cap - P401	30	30	0%	08-Nov-16	12-Dec-16	-10					
SA4220	Cap - P402	30	30	0%	13-Dec-16	19-Jan-17	-10					
Pier & Abutment												
SA4310	Pier P401	25	25	0%	13-Dec-16	13-Jan-17	-5					
SA4320	Pier P402	25	25	0%	20-Jan-17	21-Feb-17	-10					
Structure Deck												
SA4410	Falsework for Deck P502b, P401	14	14	0%	14-Jan-17	02-Feb-17	6					
Bridge A5												
Bored Pile												
SA5150	Pile Testing for A503 & P506	6	0	100%	03-Oct-16 A	08-Oct-16 A						
Pile Cap												
SA5210	Cap - P504	30	0	100%	19-Sep-16 A	12-Oct-16 A						
SA5220	Cap - P505	30	0	100%	19-Sep-16 A	07-Oct-16 A						
SA5230	Cap - P503	30	30	0%	31-Oct-16	03-Dec-16	-15					
SA5240	Cap - P506	30	6	80%	24-Oct-16 A	05-Nov-16	-238					
SA5250	Cap - A501	30	30	0%	31-Oct-16	03-Dec-16	53					
SA5260	Cap - P502a/b	30	30	0%	31-Oct-16	03-Dec-16	13					
Pier & Abutment												
SA5310	Pier P504	25	14	44%	13-Oct-16 A	15-Nov-16	-201					
SA5320	Pier P505	25	12	52%	08-Oct-16 A	12-Nov-16	-244					
SA5330	Pier P503	25	25	0%	05-Dec-16	05-Jan-17	-15					
SA5340	Pier P506	25	25	0%	14-Nov-16	12-Dec-16	-244					
SA5350	Pier P507	35	12	65.71%	23-Sep-16 A	12-Nov-16	-231					
SA5360	Pier P502a/b	25	25	0%	05-Dec-16	05-Jan-17	13					
SA5370	Abutment A501	30	30	0%	05-Dec-16	11-Jan-17	53					
Structure Deck												
SA5410	Falsework for Deck P504 - P505	14	14	0%	16-Nov-16	01-Dec-16	-201					
SA5420	Deck on P504, P505 + Stressing	90	90	0%	02-Dec-16	23-Mar-17	-201					
SA5450	Falsework for Deck P505 - P506	14	14	0%	30-Dec-16	16-Jan-17	-244					
SA5460	Deck on P505, P506 + Stressing	75	75	0%	17-Jan-17	21-Apr-17	-222					
Bridge A6												
Pile Cap												

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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
SA6270	Cap - A607/711	40	0	100%	30-Jun-16 A	30-Sep-16 A						
Pier & Abutment												
SA6370	Abutment A607	30	12	60%	03-Oct-16 A	12-Nov-16	-66					
Structure Deck												
SA6400	Falsework for Deck P601, P602	14	0	100%	17-Oct-16 A	25-Oct-16 A						
SA6410	Deck on P601, P602 + Stressing	36	6	83.33%	26-Oct-16 A	05-Nov-16	-129					
SA6420	Falsework for Deck P602, P603	14	0	100%	17-Oct-16 A	25-Oct-16 A						
SA6430	Deck on P602, P603 + Stressing	36	6	83.33%	26-Oct-16 A	05-Nov-16	-129					
SA6450	Falsework for Deck P603 - P604	14	14	0%	14-Nov-16	29-Nov-16	-129					
SA6460	Deck on P603, P604 + Stressing	36	36	0%	30-Nov-16	13-Jan-17	-129					
SA6470	Falsework for Deck P604, P605	14	14	0%	12-Dec-16	29-Dec-16	-129					
SA6480	Deck on P604, P605 + Stressing	36	36	0%	30-Dec-16	14-Feb-17	-129					
SA6490	Falsework for Deck P605, P606	14	14	0%	26-Jan-17	14-Feb-17	-129					
Bridge A7a, A7b, A7c												
Bored Pile												
SA7160	Bore Piling for A701, P702 - P705, 10 Nr.	42	0	100%	20-Nov-15 A	24-Oct-16 A						
SA7230	Pile Testing for A701, P702, P703	7	7	0%	04-Nov-16	11-Nov-16	22					
Pile Cap												
SA7360	Cap for P702	30	30	0%	12-Nov-16	16-Dec-16	22					
SA7370	Cap for P703	30	30	0%	12-Nov-16	16-Dec-16	47					
SA7380	Cap for A701	30	30	0%	12-Nov-16	16-Dec-16	72					
Pier & Abutment												
SA7540	Pier P704	25	0	100%	10-Sep-16 A	17-Oct-16 A						
SA7550	Pier P705	25	4	84%	07-Sep-16 A	03-Nov-16	59					
SA7560	Pier P702	25	25	0%	17-Dec-16	18-Jan-17	22					
SA7570	Pier P703	25	25	0%	19-Jan-17	20-Feb-17	22					
SA7650	AbutmentA711	30	12	60%	03-Oct-16 A	12-Nov-16	-66					
Structure Deck												
SA7720	Deck on P706, P707 & P712 (Bridge A7b) + Stressing	95	12	87.37%	01-Sep-16 A	12-Nov-16	-174					
SA7730	Falsework for Deck P705 - P706	15	15	0%	07-Nov-16	23-Nov-16	108					
SA7740	Deck on P705 & P706 (Bridge A7a) + Stressing	36	36	0%	24-Nov-16	07-Jan-17	124					
SA7750	Falsework for Deck P704, P705	14	14	0%	08-Dec-16	23-Dec-16	108					
SA7770	Deck on P704 & P705 (Bridge A7a) + Stressing	36	36	0%	28-Dec-16	11-Feb-17	124					
SA7850	Falsework for Deck P707, P708 (A7c)	14	14	0%	21-Nov-16	06-Dec-16	-174					
SA7860	Deck on P707, P708 (Bridge A7c) + Stressing	75	75	0%	07-Dec-16	10-Mar-17	-174					
SA7940	Parapet for Bridge A7b (8 pour) & E&M Works	50	50	0%	14-Nov-16	13-Jan-17	249					
Bridge A8												
Pile Cap												
SA8210	Cap - Abutment A804	30	0	100%	19-Sep-16 A	12-Oct-16 A						
Pier & Abutment												
<div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical</div> <div><div></div> Milestone</div> <div>THREE MONTH ROLLING PROGRAMME</div> <div>VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES</div> <div>Page 14 of 21</div>								Date	Revision		Checked	Approved
								31-Aug-16	3MRP updated as of 31 Aug. 2016		ZJ	
								30-Sep-16	3MRP updated as of 30 Sep. 2016		ZJ	
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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities										31-Oct-16		
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
SA8310	Abutment A804	30	12	60%	13-Oct-16 A	12-Nov-16	142					
SA8320	Pier P802	25	0	100%	03-Oct-16 A	31-Oct-16 A						
SA8330	Pier P803	25	12	52%	03-Oct-16 A	12-Nov-16	77					
Structure Deck												
SA8410	Falsework for Deck P801, P802	14	14	0%	31-Oct-16	15-Nov-16	49					
SA8420	Deck on P802, P802 + Stressing	75	75	0%	16-Nov-16	17-Feb-17	49					
SA8430	Falsework for Deck P802, P803	14	14	0%	16-Dec-16	04-Jan-17	49					
SA8440	Deck on P802, P803 + Stressing	75	75	0%	05-Jan-17	06-Apr-17	49					
Retaining Walls W1-1, W3-1, W5-1 & W7-1												
Retaining Wall W3-1												
SW3130	Bored Pile for W3-1, 16 Nr.	101	81	20%	12-Oct-16 A	14-Feb-17	-16					
Retaining Wall W5-1												
SW5010	Construction of Retaining Wall W5-1 (L-shape, 5 bays)	100	100	0%	12-Jan-17	18-May-17	53					
Portion G Buildings												
002 - C&ED Observation Guard Booth No.1, Portion H1												
C00220	Excavation + Blinding	5	5	0%	03-Jan-17*	07-Jan-17	-151					
C00230	Raft Foundation	30	30	0%	09-Jan-17	15-Feb-17	-151					
002 - C&ED Observation Guard Booth No. 2, Portion H2												
E00210	Excavation + Blinding	5	5	0%	03-Jan-17*	07-Jan-17	-151					
E00220	Raft Foundation	30	30	0%	09-Jan-17	15-Feb-17	-151					
033 Inbound Private Car Exam Building												
A03330	Finishing	90	81	10%	10-Oct-16 A	08-Feb-17	-130					
A03360	External Works	70	70	0%	31-Oct-16	23-Jan-17	56					
A03370	BS for Office Accomodation (Stage 8)	70	60	15%	01-Sep-16 A	11-Jan-17	-8					
A03380	BS + E&M for Office Accomodation (Stage 9)	70	70	0%	11-Jan-17	07-Apr-17	-4					
A03390	Other BS + E&M Installation	130	130	0%	31-Oct-16	07-Apr-17	73					
Glass Canopy Installation												
B03305	Fabrication of Glass Canopy	60	60	0%	31-Oct-16	11-Jan-17	-89					
B03350	Casted-in Items Installation	40	40	0%	12-Jan-17	02-Mar-17	-89					
Aluminium Metal Canopy												
B03315	Fabrication of F/C System	60	60	0%	31-Oct-16	11-Jan-17	98					
B03320	Casted-in Items Installation	50	50	0%	12-Jan-17	14-Mar-17	98					
034 Satellite RCP South												
A03440	Super Structure (Roof Beams & Slabs)	40	0	100%	22-Sep-16 A	18-Oct-16 A						
A03450	Finishing	60	54	10%	19-Oct-16 A	04-Jan-17	-61					
A03460	BS for Office Accomodation (Stage 8)	59	53	10%	18-Oct-16 A	04-Jan-17	-1					
A03470	BS + E&M for Office Accomodation (Stage 9)	70	70	0%	04-Jan-17	30-Mar-17	3					
A03480	Other BS + E&M Installation	130	130	0%	05-Nov-16	13-Apr-17	150					
S S Facade Greenery System												
B03410	Shop Drawing Submission for Approval	30	30	0%	31-Oct-16	03-Dec-16	68					
B03415	Fabrication of SS F/G System	60	60	0%	05-Dec-16	18-Feb-17	68					

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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
035 - Sewage Pumping Station, Portion G												
A03560	ELS + Blinding for Wet Well	10	10	0%	12-Sep-16 A	10-Nov-16	-151					
A03570	Constructing of Base Slab of Wet Well	20	20	0%	11-Nov-16	03-Dec-16	-151					
A03580	Constructing of Wall Stem of Wet Well	25	25	0%	05-Dec-16	05-Jan-17	-151					
A03590	Water-tightness Test for Wet Wells	12	12	0%	06-Jan-17	19-Jan-17	-151					
B03510	Backfilling + Removal of ELS	10	10	0%	20-Jan-17	03-Feb-17	-151					
051 Transformers (Zone 5)												
A05150	Finishing	60	30	50%	16-May-16 A	03-Dec-16	-91					
A05165	Energisation by CLP	75	27	64%	27-Jun-16 A	30-Nov-16	70					
A05170	BS for Office Accommodations (KD9)	115	27	76.52%	02-Jul-16 A	30-Nov-16	-16					
A05180	BS + E&M for Office Accommodation (KD10)	115	115	0%	01-Dec-16	25-Apr-17	-16					
A05190	Other BS + E & M Installation	150	122	18.67%	22-Feb-16 A	28-Mar-17	31					
Completion of Fire Services Installation and Equipment (FCD)												
F05140	Provision of Approved Building Plans by the Engineer	0	0	0%		31-Oct-16	51					
Waterworks Ordinance (WSD)												
G05120	Submission of WWO46 - Part I & II (Inside Services)	6	6	0%	31-Oct-16	05-Nov-16	49					
100 Inbound Traffic Control Kiosk												
A10040	Super Structure (Roof Beams & Slabs)	67	0	100%	15-Sep-16 A	24-Oct-16 A						
A10050	Finishing	45	43	5%	25-Oct-16 A	19-Dec-16	-156					
A10070	BS + E&M for AVCSS Works (KD18A)	86	77	10%	25-Oct-16 A	04-Feb-17	-156					
HPL Composite Panel Cladding System												
B10010	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	28					
B10015	Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	28					
112 Field Kiosk for Taxi Queuing Area												
A35210	Foundation	15	0	100%	03-Oct-16 A	25-Oct-16 A						
A35220	Structure	30	27	10%	26-Oct-16 A	30-Nov-16	166					
A35230	Finishing	45	45	0%	01-Dec-16	25-Jan-17	251					
B11520	BS + E & M Installation	130	130	0%	01-Dec-16	15-May-17	166					
External Works for Portion G, H1 & H2												
ELV Works within Portion H2 in the Hong Kong Side PTI												
EU1550	ELV Works within Portion H2 in the Hong Kong Side PTI (KD19)	200	200	0%	13-Jan-17	15-Sep-17	-172					
Works within Portion H1 & H2 except the ELV Works in the Hong Kong Side PTI												
EU1560	Drainage & Sewerage Works within Portion H1 & H2 in the Hong Kong Side PTI (KD20)	178	89	50%	03-May-16 A	17-Feb-17	-246					
All Works within the Boundary defined in Drawing No. 60191048/C3/000/C00/1050												
BEU1570	Drainage & Sewerage Works (incl. CLP) within the Boundary defined in Drawing No. 60191048/C3/000/1050	178	89	50%	03-May-16 A	17-Feb-17	-251					
Drainage Works												

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HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities									31-Oct-16				
Activity ID		Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
									Oct	Nov	Dec	Jan	Feb
AS0080		Initial Survey	12	0	100%	15-Oct-16 A	29-Oct-16 A		<div></div>				
ED4070		Drainage Works (6954m & 393MHs)	120	96	20%	03-May-16 A	17-Jul-17	-174	<div></div>				
ED4190		Sewerage (437m & 12MHs)	120	108	10%	03-May-16 A	03-Jul-17	-162	<div></div>				
Sign Gantry DS40, DS41 & DS75													
ES0020		Sign Gantry DS40 Pre-bored H Piling, 12 Nr.	30	30	0%	31-Oct-16	03-Dec-16	113		<div></div>			
ES0040		Sign Gantry DS41 Driven Piling 4 Nr.	7	7	0%	31-Oct-16	07-Nov-16	196		<div></div>			
ES0080		Testing for Pre-bored H Piling	50	50	0%	30-Dec-16	02-Mar-17	123			<div></div>		
ES0180		Fabrication & Delivery of Sign Gantrys to Site	250	196	21.6%	03-Oct-16 A	30-Jun-17	27	<div></div>	<div></div>			
Canopy and Covered Walkway													
CC1310		Shop drawing, Approved & Fabrication	150	150	0%	31-Oct-16	06-May-17	3		<div></div>			
PORTION J													
Portion J Structure													
Bay 30 - 41 of CUE/Staff Subway (Portion J)													
B03040		Bay 30 - 33 Construction - Base Slab	28	11	60%	30-Apr-16 A	12-Nov-16	-253	<div></div>	<div></div>			
B03050		Bay 30 - 33 Construction - Wall + Top Slab	100	75	25%	17-Oct-16 A	01-Feb-17	-253	<div></div>	<div></div>			
B03210		ELS + blinding (Bay 34 - 41) (8 bay)	55	0	100%	29-Aug-16 A	28-Oct-16 A		<div></div>				
B03220		Bay 34 - 39 Construction - Base Slab	75	75	0%	31-Oct-16 A	01-Feb-17	-246		<div></div>			
B03230		Bay 34 - 39 Construction - Wall + Top Slab, Staircase	75	75	0%	21-Nov-16	22-Feb-17	-246		<div></div>			
B03240		Bay 40 - 41 Construction - Base Slab	75	75	0%	03-Nov-16	04-Feb-17	-250		<div></div>			
B03250		Bay 40 - 41 Construction - Wall + Top Slab, Staircase	75	75	0%	25-Nov-16	27-Feb-17	-250		<div></div>			
030 Outbound Private Car & GV Kiosks													
A03010		Submission & Approval for Steel Works	60	0	100%	01-Apr-16 A	30-Sep-16 A						
A03020		Pre-fabrication for the Steel Kiosks	84	84	0%	31-Oct-16	11-Feb-17	-180		<div></div>			
030 Outbound Kiosks, Section IX, Subject to Excision													
C03010		Submission & Approval for Steel Works	100	0	100%	01-Apr-16 A	30-Sep-16 A						
C03020		Pre-fabrication for the Steel Kiosks	84	84	0%	31-Oct-16	11-Feb-17	-94		<div></div>			
Portion J Buildings													
024 Outbound Private Car Exam Building													
A02400		Excavation + Blinding	10	10	0%	05-Nov-16	16-Nov-16	-145		<div></div>			
A02410		Raft Foundation	30	30	0%	17-Nov-16	21-Dec-16	-145		<div></div>			
A02420		Super Structure	40	40	0%	22-Dec-16	13-Feb-17	-145			<div></div>		
Glass Canopy Installation													
B02410		Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	-94		<div></div>			
B02415		Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	-94			<div></div>		
Aluminium Metal Canopy													
B02450		Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	-79		<div></div>			
B02455		Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	-79			<div></div>		
031 Outbound IMMD and DOH Secondary Screen Building													
A03100		Excavation + Blinding (+ PL Test)	10	0	100%	19-Sep-16 A	30-Sep-16 A						

Actual Work

Remaining Work

Critical

Milestone

THREE MONTH ROLLING PROGRAMME

VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES

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Date	Revision	Checked	Approved
31-Aug-16	3MRP updated as of 31 Aug. 2016	ZJ	
30-Sep-16	3MRP updated as of 30 Sep. 2016	ZJ	
31-Oct-16	3MRP updated as of 30 Oct. 2016	ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
A03110	Raft Foundation	35	0	100%	03-Oct-16 A	31-Oct-16 A		<div></div>				
A03140	Super Structure	89	89	0%	31-Oct-16	17-Feb-17	-69		<div></div>			
060 - Single Storey Support Building Associated with Buildings 044 & 045												
A06000	Excavation + Blinding	9	9	0%	04-Jan-17*	13-Jan-17	-251				<div></div>	
A06010	Raft Foundation (Traper)	25	25	0%	14-Jan-17	15-Feb-17	-251				<div></div>	
A06040	Excavation + Blinding (Strip part)	15	15	0%	14-Jan-17	03-Feb-17	-156				<div></div>	
Waterworks Ordinance (WSD)												
G06020	Submission of WWO46 - Part I & II (Inside Services)	6	6	0%	13-Dec-16	19-Dec-16	13			<div></div>		
061 Telecom Building												
A06120	Excavation + Blinding	5	5	0%	31-Oct-16	04-Nov-16	-88	<div></div>				
A06130	Raft Foundation	25	25	0%	05-Nov-16	03-Dec-16	-88		<div></div>			
A06140	Super Structure	40	40	0%	05-Dec-16	23-Jan-17	-88			<div></div>		
A06150	Finishing (KD9)	60	60	0%	24-Jan-17	07-Apr-17	-78				<div></div>	
A06160	BS for Office Accommodations (KD9)	70	70	0%	24-Jan-17	22-Apr-17	-88				<div></div>	
Aluminium Metal Canopy												
B06110	Shop Drawing Submission and Approval	30	30	0%	24-Dec-16	03-Feb-17	81			<div></div>		
101 Outbound Traffic Control Kiosk												
A10100	Excavation + Blinding	5	5	0%	31-Oct-16	04-Nov-16	-183	<div></div>				
A10110	Raft Foundation	13	13	0%	05-Nov-16	19-Nov-16	-183		<div></div>			
A10130	Super Structure (Roof Beams & Slabs)	30	30	0%	21-Nov-16	24-Dec-16	-183		<div></div>			
A10140	Finishing	45	45	0%	28-Dec-16	22-Feb-17	50				<div></div>	
A10150	BS + E&M for AVCSS Works (KD18A)	60	60	0%	28-Dec-16	11-Mar-17	-183				<div></div>	
A10160	BS + E&M for AVCSS Cabling (KD18B)	68	68	0%	28-Dec-16	21-Mar-17	-126				<div></div>	
A10170	BS for Office Accommodations (KD9)	70	70	0%	28-Dec-16	23-Mar-17	-66				<div></div>	
A10190	Other BS + E & M Installation	130	130	0%	17-Jan-17	28-Jun-17	129				<div></div>	
HPL Composite Panel Cladding System												
B10110	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	103		<div></div>			
B10120	Fabrication of HPL Cladding	60	60	0%	05-Dec-16	18-Feb-17	103			<div></div>		
External Works for Portion J												
Works in Location 1.7B												
EU1500	ELV Works & T&C in Location 1.7B	125	125	0%	10-Dec-16	18-May-17	0			<div></div>		
Works in Location 1.7C												
EU1530	ELV Works & T&C in Location 1.7C	125	125	0%	10-Dec-16	18-May-17	0			<div></div>		
Drainage Works												
ED4220	Drainage Works (1700m & 86MHs), Stage 1 (Northern)	150	108	28%	25-Apr-16 A	11-Mar-17	-15	<div></div>	<div></div>			
ED4340	Sewerage (425m & 11MHs), Stage 1 (Northern)	150	108	28%	01-Jun-16 A	11-Mar-17	-15	<div></div>	<div></div>			
Waterpipe Laying												
EW4230	Fresh Water Main Laying (770m), Stage 1 (Northern)	100	100	0%	07-Dec-16	10-Apr-17	-15			<div></div>		
EW4240	Flushing Water Main Laying (431m), Stage 1 (Northern)	100	100	0%	07-Dec-16	10-Apr-17	-15			<div></div>		
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
EU5420	Duct & Cable Laying for Utilities/Telecom	180	180	0%	03-Jan-17	12-Aug-17	-15				<div></div>	
EU5430	Duct & Cable Laying for TCSS & Lighting	180	180	0%	03-Jan-17	12-Aug-17	-15				<div></div>	
Sign Gantry DS104												
ES0140	Sign Gantry DS104 P-bored Piling, 8 Nr.	30	30	0%	05-Dec-16	11-Jan-17	113			<div></div>		
ES5140	Submission and approval for Sign Gantry	60	0	100%	01-Sep-16 A	31-Oct-16 A		<div></div>				

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
ES5150	Fabrication & Delivery of Sign Gantrys to Site	200	200	0%	31-Oct-16	06-Jul-17	23					
PORTION K, L, M, S & T												
Portion M Buildings												
108 - C&ED Mobile X-ray Operation Office, Portion M												
HPL Composite Panel Cladding System												
C10810	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	62					
C10820	Fabrication of HPL Cladding	60	60	0%	05-Dec-16	18-Feb-17	62					
104 DOH Screening Station, at Portion M												
Facade Envelop Structure Installation												
D10450	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	107					
D10455	Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	107					
External Works												
Additional Works (Filling & RE Slope), SA1												
ED3120	Approval of RE Slope by GEO/AECOM	86	52	39.53%	19-Sep-16 A	31-Dec-16	18					
ED3210	C1 Contractor to Completed cooling mains at east Portion (Stage1)	0	0	0%		31-Oct-16	72					
ED3220	Removal of Access & Form another Temp. Access for Cooling Main	12	12	0%	31-Oct-16	12-Nov-16	59					
ED3230	C1 Contractor to Completed cooling mains at east Portion (Stage 2)	0	0	0%		31-Dec-16	74					
ED3260	Consolidation of fill at the Platform	61	46	25%	16-Sep-16 A	15-Dec-16	-148					
ED3270	Remove surcharge at the edge of Platform (North, Portion S, KD32)	21	21	0%	19-Dec-16*	14-Jan-17	-126					
ED3280	Remove surcharge at the Platform (East, Portion T, KD33)	21	21	0%	19-Dec-16*	14-Jan-17	-126					
ED3310	C1 Contractor to Complete Footbridge Supports at the South Portion	0	0	0%		02-Nov-16*	-260					
ED3320	Fill Platform from +11.5PD to near PCB (South)	24	24	0%	03-Nov-16	30-Nov-16	-212					
ED3330	Add surcharge to Platform at +14.5mPD near PCB (South)	18	18	0%	01-Dec-16	21-Dec-16	-212					
ED3340	Consolidation of fill at the Platform (South)	61	61	0%	22-Dec-16	20-Feb-17	-255					
ED3410	C2 Contractor to complete abutment at the North (2 nos.)	0	0	0%		02-Nov-16*	0					
ED3420	Fill Slope around C2 abutments	50	50	0%	03-Nov-16	03-Jan-17	10					
Construction of Slopes												
ED3430	Construction of fill slope (Stage 1) (East)	46	46	0%	03-Jan-17	28-Feb-17	59					
ED3510	Footing for the Planter Wall, RE slope (West)	12	12	0%	03-Jan-17	16-Jan-17	18					
ED3520	Construct RE slope (West)	75	75	0%	17-Jan-17	21-Apr-17	18					
ED3550	Construction of fill slope (North)	83	83	0%	03-Jan-17	13-Apr-17	22					
Drainage Works												
ED4370	Drainage Works (1477m & 81MHs), Stage 1 (Eastern)	100	100	0%	16-Jan-17	22-May-17	0					
ED4490	Sewerage (78m & 2MHs), Stage 1 (Eastern)	100	100	0%	16-Jan-17	22-May-17	0					
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
EU5450	Duct & Cable Laying for TCSS & Lighting	50	50	0%	16-Jan-17	17-Mar-17	-126					
Canopy and Covered Walkway												
CC1400	Shop drawing, Approved & Fabrication	150	75	50%	03-Oct-16 A	01-Feb-17	63					
PORTION N												

<div> <div></div> Actual Work <div></div> Remaining Work <div></div> Critical <div>◆ ◆</div> Milestone </div>	<div>THREE MONTH ROLLING PROGRAMME</div> <div>VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES</div> <div>Page 19 of 21</div>	Date	Revision	Checked	Approved
		31-Aug-16	3MRP updated as of 31 Aug. 2016	ZJ	
		30-Sep-16	3MRP updated as of 30 Sep. 2016	ZJ	
		31-Oct-16	3MRP updated as of 30 Oct. 2016	ZJ	

HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16									
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017						
								Oct	Nov	Dec	Jan	Feb					
Portion N Structure																	
Box Culvert B																	
Bored Pile																	
SB0550	Loading Test	12	0	100%	19-Sep-16 A	03-Oct-16 A											
SB0560	Install H-piles	25	25	0%	24-Oct-16 A	28-Nov-16	-123										
SB0590	Box B - Bore Pile (20 nos.)	144	144	0%	02-Nov-16	29-Apr-17	0										
Box Culvert Structure																	
SB0710	Box B - Construction (Stage 1)	75	75	0%	29-Nov-16	02-Mar-17	-123										
SB0715	Handover from RC (1/11/16)	0	0	0%		01-Nov-16*	0										
SB0722	Box B - Temporary Works for Construction of Outfall Structure	120	120	0%	02-Nov-16	28-Mar-17	59										
Portion N Buildings																	
104 DOH Screening Station, at Portion N																	
Facade Envelop Structure Installation																	
D10410	Shop Drawing Submission and Approval	30	30	0%	15-Nov-16	19-Dec-16	105										
D10415	Fabrication of F/C System	60	60	0%	20-Dec-16	06-Mar-17	105										
106 C&ED Detention Area Guard Booth																	
A10600	Excavation + Blinding	5	5	0%	31-Oct-16	04-Nov-16	-100										
A10610	Structure (Raft Foundation)	20	20	0%	05-Nov-16	28-Nov-16	-100										
A10640	Finishing	45	45	0%	29-Nov-16	23-Jan-17	-16										
E10640	BS for Office Accommodations (KD9)	70	70	0%	29-Nov-16	24-Feb-17	-43										
E10660	Other BS + E & M Installation	130	130	0%	17-Dec-16	01-Jun-17	2										
Facade Envelop Structure Installation																	
B10610	Shop Drawing Submission and Approval	30	30	0%	30-Dec-16	07-Feb-17	58										
107 C&ED Mobile X-ray Operation Office, Portion N																	
A10700	Excavation + Blinding	5	5	0%	05-Nov-16	10-Nov-16	-85										
A10710	Substructure (Raft Foundation)	25	25	0%	29-Nov-16	29-Dec-16	-100										
A10740	Super Structure	35	35	0%	30-Dec-16	13-Feb-17	-100										
External Works for Portion N																	
Works in Location 1.7A																	
EU1540	ELV Works & T&C in Location 1.7A	125	125	0%	10-Dec-16	18-May-17	0										
Drainage Works																	
AS0150	Initial Survey	12	12	0%	31-Oct-16	12-Nov-16	-175										
ED4620	Drainage Works (964m & 56MHs), Stage 1 (Southern)	75	75	0%	14-Nov-16	15-Feb-17	-24										
ED4650	Sewerage (383m & 12MHs), Stage 1 (Southern)	75	75	0%	14-Nov-16	15-Feb-17	-24										
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting																	
EU5470	Duct & Cable Laying for TCSS & Lighting	125	125	0%	13-Dec-16	20-May-17	-175										
PORTION P																	
Portion Structure																	
Retaining Wall RW1																	
RW1110	Construction of Retaining Wall RW1 (U-shape, 5 bays)	100	100	0%	31-Oct-16	02-Mar-17	128										
Portion P Buildings																	
105 IMMD Guard Booth, Portion P																	
Facade Envelop Structure Installation																	
A10560	Shop Drawing Submission and Approval	30	30	0%	31-Oct-16	03-Dec-16	92										
A10565	Fabrication of F/C System	60	60	0%	05-Dec-16	18-Feb-17	92										
<div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical</div> <div><div></div> Milestone</div>		THREE MONTH ROLLING PROGRAMME VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES Page 20 of 21											Date	Revision		Checked	Approved
													31-Aug-16	3MRP updated as of 31 Aug. 2016		ZJ	
													30-Sep-16	3MRP updated as of 30 Sep. 2016		ZJ	
													31-Oct-16	3MRP updated as of 30 Oct. 2016		ZJ	








































































HZMB HK Boundary Crossing Facilities - Vehicle Clearance Plazas and Ancillary Buildings and Facilities								31-Oct-16				
Activity ID	Activity Name	Original Duration	Remaining Duration	% Complete	Start	Finish	Total Float	2016			2017	
								Oct	Nov	Dec	Jan	Feb
External Works for Portion P												
Drainage Works												
AS0160	Initial Survey	6	6	0%	31-Oct-16	05-Nov-16	-55					
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
EU5490	Duct & Cable Laying for TCSS & Lighting (KD15)	24	24	0%	16-Nov-16	13-Dec-16	-55					
PORTION Q												
External Works for Portion Q												
Duct Laying for Utilities/Telecom Cabling, TCSS & Lighting												
ED5570	Duct & Cable Laying for Utilities/Telecom	50	50	0%	07-Nov-16	06-Jan-17	186					
ED5580	Duct & Cable Laying for TCSS & Lighting	34	34	0%	07-Nov-16	15-Dec-16	-53					
EU1490	ELV System Installation for Contract HY/2013/04	50	50	0%	31-Oct-16	29-Dec-16	273					
Roadworks												
AS0170	Initial Survey	6	6	0%	31-Oct-16	05-Nov-16	-53					
ER4920	Subbase (104 ton)	75	75	0%	09-Nov-16	10-Feb-17	186					
ER4950	Bitumen Pavement (215 ton)	75	75	0%	10-Dec-16	14-Mar-17	186					
Railing												
ER4890	Railing	75	75	0%	14-Jan-17	19-Apr-17	186					
Road Furniture												
ER4900	Road Furniture	75	75	0%	14-Jan-17	19-Apr-17	186					
PORTION R												
Portion R Building												
002 - C&ED Observation Guard Booth, Portion R												
D00210	Excavation + Blinding	5	5	0%	03-Jan-17	07-Jan-17	-17					
D00220	Raft Foundation	24	24	0%	09-Jan-17	08-Feb-17	-17					
External Works for Portion R												
Drainage Works												
AS0180	Initial Survey	6	6	0%	03-Jan-17	09-Jan-17	149					
Landscape Works												
A5170	Design and Procurement for Irrigation System	200	77	61.5%	02-Jul-16 A	15-Jan-17	2					
A5180	Installation of Irrigation System	261	261	0%	18-Jan-17	05-Oct-17	0					
A5190	All landscape Soft & Hard Works	317	317	0%	18-Jan-17	30-Nov-17	0					




















































































Contract No.: HY/2013/06			Detail Work Programme										Page 1 of 14											
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3	
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2		
📁 Hong Kong-Zhuhai_Macao Bridge Hong Kong Boundary Crossir		1266	31-Jul-15 A	30-Jan-19	0																			30-Jan-19, H
📁 Key Dates		901	31-Jul-15 A	30-Jan-18	0																			30-Jan-18, Key Dates
📁 A1000	Acceptance of Contract	0	31-Jul-15 A																					Acceptance of Contract; 31-Jul-15 A
📁 A1010	Commencement of Works	0	14-Aug-15*		0																			Commencement of Works; 14-Aug-15*
📁 A1020	Excision of Phase 2 (Section II & III)	365	14-Aug-15	12-Aug-16	0																			Excision of Phase 2 (Section II & III)
📁 A1120	KD1 (Phase 1 / Section I) (28 Kiosks)	0		24-Jul-17*	0																			KD1 (Phase 1 / Section I) (28 Kiosks),
📁 A1470	KD2 (Phase 2 / Section II) (2 Kiosks)	0		02-Oct-17*	0																			KD2 (Phase 2 / Section II) (2 Kiosks),
📁 A1480	KD3 (Phase 2 / Section III) (42 Kiosks)	0		30-Jan-18*	0																			KD3 (Phase 2 / Section III) (42 Kiosks),
📁 Interface Activities		430	14-Aug-15	16-Oct-16	128																			16-Oct-16, Interface Activities
📁 A6860	Interface Management Plan Submission between C6 and C1	212	14-Aug-15	12-Mar-16	154																			Interface Management Plan Submission between C6 and C1
📁 A6865	Interface Management Plan between C6 and C1 reviewed by Engineer	14	13-Mar-16	26-Mar-16	154																			Interface Management Plan between C6 and C1 reviewed by Engineer
📁 A6870	Detailed Interface Document Submission between C6 and C1	30	27-Mar-16	25-Apr-16	154																			Detailed Interface Document Submission between C6 and C1
📁 A6875	Detailed Interface Document between C6 and C1 reviewed by Engineer	14	26-Apr-16	09-May-16	154																			Detailed Interface Document between C6 and C1 reviewed by Engineer
📁 A6880	Interface Management Plan Submission between C6 and C3	262	14-Aug-15	01-May-16	76																			Interface Management Plan Submission between C6 and C3
📁 A6885	Interface Management Plan between C6 and C3 reviewed by Engineer	14	02-May-16	15-May-16	76																			Interface Management Plan between C6 and C3 reviewed by Engineer
📁 A6890	Detailed Interface Document Submission between C6 and C3	30	16-May-16	14-Jun-16	76																			Detailed Interface Document Submission between C6 and C3
📁 A6895	Detailed Interface Document between C6 and C3 reviewed by Engineer	14	15-Jun-16	28-Jun-16	76																			Detailed Interface Document between C6 and C3 reviewed by Engineer
📁 A6900	Interface Management Plan Submission between C6 and C8	372	14-Aug-15	19-Aug-16	128																			Interface Management Plan Submission between C6 and C8
📁 A6905	Interface Management Plan between C6 and C8 reviewed by Engineer	14	20-Aug-16	02-Sep-16	128																			Interface Management Plan between C6 and C8 reviewed by Engineer
📁 A6910	Detailed Interface Document Submission between C6 and C8	30	03-Sep-16	02-Oct-16	128																			Detailed Interface Document Submission between C6 and C8
📁 A6915	Detailed Interface Document between C6 and C8 reviewed by Engineer	14	03-Oct-16	16-Oct-16	128																			Detailed Interface Document between C6 and C8 reviewed by Engineer
📁 Site and Facility Inspection		424	26-Apr-16	23-Jun-17	586																			23-Jun-17, Site and Facility Inspection
📁 A4730	Pre Site and Facility Inspection by Contractor at Location 1 - Deg1	7	26-Apr-16*	02-May-16	154																			Pre Site and Facility Inspection by Contractor at Location 1 - Deg1
📁 A4740	Joint Site and Facility Inspection with Interface Contractor at Location 1 - Deg1	7	03-May-16	09-May-16	154																			Joint Site and Facility Inspection with Interface Contractor at Location 1 - Deg1
📁 A4760	Pre Site and Facility Inspection by Contractor at Location 2 - Deg1	7	25-Jun-16*	01-Jul-16	94																			Pre Site and Facility Inspection by Contractor at Location 2 - Deg1
📁 A4770	Joint Site and Facility Inspection with Interface Contractor at Location 2 - Deg1	7	02-Jul-16*	08-Jul-16	94																			Joint Site and Facility Inspection with Interface Contractor at Location 2 - Deg1
📁 A4772	Pre Site and Facility Inspection by Contractor at Location 2 - Deg2	7	14-Aug-16*	20-Aug-16	122																			Pre Site and Facility Inspection by Contractor at Location 2 - Deg2
📁 A4774	Joint Site and Facility Inspection with Interface Contractor at Location 2 - Deg2	7	21-Aug-16	27-Aug-16	122																			Joint Site and Facility Inspection with Interface Contractor at Location 2 - Deg2
📁 A4775	Joint Site and Facility Inspection with Interface Contractor at Location 2 for Server Installation	7	21-Aug-16*	27-Aug-16	122																			Joint Site and Facility Inspection with Interface Contractor at Location 2 for Server Installation
📁 A4780	Pre Site and Facility Inspection by Contractor at Location 3 - Deg1	7	03-Sep-16*	09-Sep-16	87																			Pre Site and Facility Inspection by Contractor at Location 3 - Deg1
📁 A4790	Joint Site and Facility Inspection with Interface Contractor at Location 3 - Deg1	7	10-Sep-16	16-Sep-16	87																			Joint Site and Facility Inspection with Interface Contractor at Location 3 - Deg1
📁 A4800	Pre Site and Facility Inspection by Contractor at Location 3 - Deg2	7	31-Jan-17*	06-Feb-17	0																			Pre Site and Facility Inspection by Contractor at Location 3 - Deg2
📁 A4810	Joint Site and Facility Inspection with Interface Contractor at Location 3 - Deg2	7	07-Feb-17	13-Feb-17	0																			Joint Site and Facility Inspection with Interface Contractor at Location 3 - Deg2
📁 A4820	Pre Site and Facility Inspection by Contractor at Location 3a - Deg1	7	03-Sep-16*	09-Sep-16	115																			Pre Site and Facility Inspection by Contractor at Location 3a - Deg1
📁 A4830	Joint Site and Facility Inspection with Interface Contractor at Location 3a - Deg1	7	10-Sep-16	16-Sep-16	115																			Joint Site and Facility Inspection with Interface Contractor at Location 3a - Deg1
📁 A4840	Pre Site and Facility Inspection by Contractor at Location 3a - Deg2	7	22-Nov-16*	28-Nov-16	70																			Pre Site and Facility Inspection by Contractor at Location 3a - Deg2
📁 A4850	Joint Site and Facility Inspection with Interface Contractor at Location 3a - Deg2	7	29-Nov-16	05-Dec-16	70																			Joint Site and Facility Inspection with Interface Contractor at Location 3a - Deg2
📁 A4851	Joint Site and Facility Inspection with Interface Contractor at Location 3a for Server Installation	7	29-Nov-16*	05-Dec-16	119																			Joint Site and Facility Inspection with Interface Contractor at Location 3a for Server Installation
📁 A4860	Pre Site and Facility Inspection by Contractor at Location 4 - Deg1	7	11-Jan-17*	17-Jan-17	20																			Pre Site and Facility Inspection by Contractor at Location 4 - Deg1
📁 A4870	Joint Site and Facility Inspection with Interface Contractor at Location 4 - Deg1	7	18-Jan-17	24-Jan-17	20																			Joint Site and Facility Inspection with Interface Contractor at Location 4 - Deg1
📁 A4880	Pre Site and Facility Inspection by Contractor at Location 4 - Deg2	7	10-Jun-17*	16-Jun-17	586																			Pre Site and Facility Inspection by Contractor at Location 4 - Deg2
📁 A4890	Joint Site and Facility Inspection with Interface Contractor at Location 4 - Deg2	7	17-Jun-17	23-Jun-17	586																			Joint Site and Facility Inspection with Interface Contractor at Location 4 - Deg2
📁 A4891	Pre Site and Facility Inspection by Contractor at Location 4a - Deg1	7	11-Jan-17*	17-Jan-17	41																			Pre Site and Facility Inspection by Contractor at Location 4a - Deg1
Programme No.: HZMB-DWP Data Date: 14-Aug-15		<div><div></div> Actual Level of Effort</div> <div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical Remaining Work</div> <div><div></div> Milestone</div> <div><div></div> summary</div>			Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)								Date 14-Nov-16		Revision Rev.: 0		Checked WC		Approved LC					
































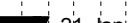







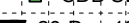





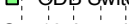



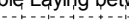

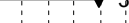






































[illegible]








Contract No.: HY/2013/06				Detail Work Programme										Page 3 of 14										
Activity ID	Activity Name			Original Duration	Start	Finish	Total Float	2015			2016			2017				2018				2019		3
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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
	 A4590	Installation of fencing post along the site boundary	3	02-Nov-15*	04-Nov-15	1183																	
	 A4600	Excavation for underground drainage pipe	1	04-Nov-15*	04-Nov-15	1183																	
	 A4610	Evenly spread the asphalt scrap material by backhoe	3	05-Nov-15*	07-Nov-15	1180																	
	 A4620	Cast concrete for the u-channel and underground drainage pipe	1	05-Nov-15*	05-Nov-15	1182																	
	 A4630	Remove the u-channel framework	1	06-Nov-15*	06-Nov-15	1181																	
	 A4640	Installation of chain-link fencing along the site boundary	2	06-Nov-15*	07-Nov-15	1180																	
	 A4650	Installation of access doors	1	07-Nov-15*	07-Nov-15	1180																	
	 A4660	Excavation for drainage ditch	3	06-Nov-15*	09-Nov-15	1010																	
	 A4670	Cast concrete for the drainage ditch	1	10-Nov-15*	10-Nov-15	1177																	
	 A4680	Compact the asphalt scrap material	2	09-Nov-15*	10-Nov-15	1177																	
	 A4690	Land surveying	1	11-Nov-15*	11-Nov-15	1174																	
	 A4700	Inspection of chain-link fencing and access doors	1	12-Nov-15*	12-Nov-15	1174																	
	 A4710	Testing of drains	1	13-Nov-15*	13-Nov-15	1174																	
	 A4720	Completion of the works	0	14-Nov-15		1174																	
 Detailed Design Specification			365	14-Aug-15	12-Aug-16	0	 12-Aug-16, Detailed Design Specification																
	 A1808	Preliminary System Proposal Submission	28	14-Aug-15	10-Sep-15	0	 Preliminary System Proposal Submission																
	 A1809	Engineer's agreement with preliminary system proposal	45	11-Sep-15	25-Oct-15	0	 Engineer's agreement with preliminary system proposal																
	 A1810	Draft Detailed Design Specification (DDS) Submission	48	26-Oct-15	12-Dec-15	0	 Draft Detailed Design Specification (DDS) Submission																
	 A1814	Draft Hardware Function Design Specification for Computer system and Network system (HFD)	48	26-Oct-15	12-Dec-15	0	 Draft Hardware Function Design Specification for Computer system and Network system (HFD)																
	 A1815	Draft Software Function Design Specification for Computer system and Network system (SFD)	48	26-Oct-15	12-Dec-15	0	 Draft Software Function Design Specification for Computer system and Network system (SFD)																
	 A1820	Engineer's Review and Approval for Draft Detailed Design Specification (DDS)	60	13-Dec-15*	10-Feb-16	0	 Engineer's Review and Approval for Draft Detailed Design Specification (DDS)																
	 A1823	Engineer's Review and Approval for Draft Hardware FDS for Computer system and Network system (HFD)	60	13-Dec-15*	10-Feb-16	0	 Engineer's Review and Approval for Draft Hardware FDS for Computer system and Network system (HFD)																
	 A1824	Engineer's Review and Approval for Draft Software FDS for Computer system and Network system (SFD)	60	13-Dec-15*	10-Feb-16	0	 Engineer's Review and Approval for Draft Software FDS for Computer system and Network system (SFD)																
	 A1829	Interface Requirements for CED (LBS, CED IT Server, Metro-Ethernet) and IMMD (AVCS)	29	01-Feb-16*	29-Feb-16	0	 Interface Requirements for CED (LBS, CED IT Server, Metro-Ethernet) and IMMD (AVCS)																
	 A1830	Final DDS Submission (AVCSS,VTS,VIDS)(Phase 1/Section I)	30	01-Mar-16	30-Mar-16	0	 Final DDS Submission (AVCSS,VTS,VIDS)(Phase 1/Section I)																
	 A1831	Development of System Security Plan	49	11-Feb-16	30-Mar-16	0	 Development of System Security Plan																
	 A1840	Engineer's Review and Approval for Final DDS Submission including System Security Plan (AVCSS)(Phase 1/Section I)	30	31-Mar-16	29-Apr-16	0	 Engineer's Review and Approval for Final DDS Submission including System Security Plan (AVCSS)(Phase 1/Section I)																
	 A1850	Final DDS Submission (AVCSS)(Phase 2/Section II&III)	60	30-Apr-16	28-Jun-16	0	 Final DDS Submission (AVCSS)(Phase 2/Section II&III)																
	 A1860	Engineer's Review and Approval for DDS Submission (AVCSS)(Phase 2/Section II&III)	45	29-Jun-16*	12-Aug-16	0	 Engineer's Review and Approval for DDS Submission (AVCSS)(Phase 2/Section II&III)																
 Contruction Design and Management			60	07-May-16	05-Jul-16	52	 05-Jul-16, Contruction Design and Management																
	 A6920	Construction Health and Safety Plan Submission	30	07-May-16*	05-Jun-16	52	 Construction Health and Safety Plan Submission																
	 A6930	Construction Health and Safety Plan reviewed by Engineer	30	06-Jun-16	05-Jul-16	52	 Construction Health and Safety Plan reviewed by Engineer																
 Supply/Manufacture Mock-up items			82	30-Apr-16	20-Jul-16	51	 20-Jul-16, Supply/Manufacture Mock-up items																
	 A4749	Preparation of Kiosk equipment Mock-up	68	30-Apr-16	06-Jul-16	51	 Preparation of Kiosk equipment Mock-up																
	 A4750	Installation of Kiosk equipment Mock-up	14	07-Jul-16	20-Jul-16	51	 Installation of Kiosk equipment Mock-up																
 Supply/Manufacture prototypes			60	30-Apr-16	28-Jun-16	0	 28-Jun-16, Supply/Manufacture prototypes																
	 A2900	Manufacture LED Display Prototype (VID, ODB and XDB)	60	30-Apr-16	28-Jun-16	0	 Manufacture LED Display Prototype (VID, ODB and XDB)																
	 A2910	Manufacture All-In-One Panel Prototype (AIOP)	60	30-Apr-16	28-Jun-16	0	 Manufacture All-In-One Panel Prototype (AIOP)																
 Software Design, Coding and Testing			407	11-Apr-16	22-May-17	0	 22-May-17, Software Design, Coding and Testing																
Programme No.: HZMB-DWP Data Date: 14-Aug-15			 Actual Level of Effort  Actual Work  Remaining Work  Critical Remaining Work  Milestone  summary			Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)						Date 14-Nov-16	Revision Rev.: 0	Checked WC	Approved LC								










































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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3		
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
<div></div>	<div> Coding</div>	270	11-Apr-16	05-Jan-17	0								05-Jan-17, Coding												
	<div> A5460 CCS, SURCON, SYSCON, CDBS Development Stage 1</div>	70	11-Apr-16*	19-Jun-16	0								<div> CCS, SURCON, SYSCON, CDBS Development Stage 1</div>												
	<div> A5500 VTS Development Stage 1</div>	70	11-Apr-16*	19-Jun-16	0								<div> VTS Development Stage 1</div>												
	<div> A5510 VIDS Development Stage 1</div>	64	11-Apr-16*	13-Jun-16	15								<div> VIDS Development Stage 1</div>												
	<div> A5540 CCS, SURCON, SYSCON, CDBS Development Stage 2</div>	170	20-Jul-16	05-Jan-17	0								<div> CCS, SURCON, SYSCON, CDBS Development Stage 2</div>												
	<div> A5580 VTS Development Stage 2</div>	170	20-Jul-16	05-Jan-17	0								<div> VTS Development Stage 2</div>												
	<div> A5590 VIDS Development Stage 2</div>	162	28-Jul-16	05-Jan-17	0								<div> VIDS Development Stage 2</div>												
	<div> Software System Inetgration</div>	388	30-Apr-16	22-May-17	0								22-May-17, Software System Inetgration												
	<div> A5520 Test Plan Documentation Submission</div>	237	30-Apr-16	22-Dec-16	0								<div> Test Plan Documentation Submission</div>												
	<div> A5530 Engineer's Review and Approval for Test Plan Documentation Submission</div>	14	23-Dec-16	05-Jan-17	0								<div> Engineer's Review and Approval for Test Plan Documentation Submission</div>												
	<div> A5600 Software System Integration Test</div>	45	06-Jan-17	19-Feb-17	0								<div> Software System Integration Test</div>												
	<div> A5630 CCS/SYSCON/SURCON/CDBS/VTS/VIDS Software Enhancement</div>	50	20-Feb-17	10-Apr-17	0								<div> CCS/SYSCON/SURCON/CDBS/VTS/VIDS Software Enhancement</div>												
	<div> A5640 Software User Acceptance Test (UAT)</div>	42	11-Apr-17	22-May-17	0								<div> Software User Acceptance Test (UAT)</div>												
	<div> Prototype & Software Simulation Tests</div>	133	30-Apr-16	09-Sep-16	0								09-Sep-16, Prototype & Software Simulation Tests												
	<div> A1910 Prototype Test Document</div>	30	30-Apr-16	29-May-16	6								<div> Prototype Test Document</div>												
	<div> A2130 Engineer's Approval for Testing Document</div>	15	30-May-16	13-Jun-16	6								<div> Engineer's Approval for Testing Document</div>												
	<div> A2920 CCWS with CDBS, SURCON and SYSCON (Software Simulation/ Software Integration Test)</div>	30	20-Jun-16	19-Jul-16	0								<div> CCWS with CDBS, SURCON and SYSCON (Software Simulation/ Software Integration Test)</div>												
	<div> A2930 Vehicle Tracking System (VTS) (Software Simulation/ Software Integration Test)</div>	30	20-Jun-16	19-Jul-16	0								<div> Vehicle Tracking System (VTS) (Software Simulation/ Software Integration Test)</div>												
	<div> A2950 LED Displays (VID, ODB and XDB)</div>	29	29-Jun-16*	27-Jul-16	0								<div> LED Displays (VID, ODB and XDB)</div>												
	<div> A2960 All-In-One Panel (AIOP)</div>	29	29-Jun-16*	27-Jul-16	0								<div> All-In-One Panel (AIOP)</div>												
	<div> A3020 Prototype Testing Report Submission</div>	30	28-Jul-16	26-Aug-16	0								<div> Prototype Testing Report Submission</div>												
	<div> A4350 Engineer's Approval for Prototype Testing Report</div>	14	27-Aug-16	09-Sep-16	0								<div> Engineer's Approval for Prototype Testing Report</div>												
	<div> Procurement - Phase 1 / Section I</div>	242	30-Apr-16	27-Dec-16	0								27-Dec-16, Procurement - Phase 1 / Section I												
	<div> A3070 Procurement of Equipment for Phase 1/Section I</div>	242	30-Apr-16	27-Dec-16	0								<div> Procurement of Equipment for Phase 1/Section I</div>												
	<div> A3080 Procurement of Cable and Accessories for Phase 1 /Section I</div>	122	30-Apr-16	29-Aug-16	0								<div> Procurement of Cable and Accessories for Phase 1 /Section I</div>												
	<div> A3990 Procurement of All Servers and Workstations</div>	242	30-Apr-16	27-Dec-16	0								<div> Procurement of All Servers and Workstations</div>												
	<div> Supply/Manufacture products for FAT</div>	62	10-Sep-16	10-Nov-16	0								10-Nov-16, Supply/Manufacture products for FAT												
	<div> A2980 Supply/Manufacture LED Display (ODB, VID and XDB) for FAT</div>	54	10-Sep-16	02-Nov-16	0								<div> Supply/Manufacture LED Display (ODB, VID and XDB) for FAT</div>												
	<div> A2990 Supply/Manufacture All-In-One Panel (AIOP) for FAT</div>	62	10-Sep-16	10-Nov-16	0								<div> Supply/Manufacture All-In-One Panel (AIOP) for FAT</div>												
	<div> A3000 Supply/Manufacture off-the-shelf equipment for FAT</div>	50	10-Sep-16	29-Oct-16	0								<div> Supply/Manufacture off-the-shelf equipment for FAT</div>												
	<div> Factory Acceptance Test (FAT)</div>	94	10-Sep-16	12-Dec-16	0								12-Dec-16, Factory Acceptance Test (FAT)												
	<div> A2120 FAT Procedure Document</div>	36	10-Sep-16	15-Oct-16	0								<div> FAT Procedure Document</div>												
	<div> A2121 Engineer's Approval for FAT Procedure Document</div>	14	16-Oct-16	29-Oct-16	0								<div> Engineer's Approval for FAT Procedure Document</div>												
	<div> A3050 FAT for Licence Plate Recognition System (LPRS)</div>	2	30-Oct-16	31-Oct-16	0								<div> FAT for Licence Plate Recognition System (LPRS)</div>												
	<div> A3060 FAT for PA/Intercom</div>	2	01-Nov-16	02-Nov-16	0								<div> FAT for PA/Intercom</div>												
	<div> A3090 FAT for ODB</div>	2	03-Nov-16	04-Nov-16	0								<div> FAT for ODB</div>												
	<div> A3100 FAT for XDB</div>	2	03-Nov-16	04-Nov-16	0								<div> FAT for XDB</div>												
	<div> A3110 FAT for VID</div>	2	03-Nov-16	04-Nov-16	0								<div> FAT for VID</div>												
	<div> A3120 FAT for Video Management System (VMS)</div>	2	05-Nov-16	06-Nov-16	0								<div> FAT for Video Management System (VMS)</div>												
	<div> A3130 FAT for Vehicle Tracking System (VTS)</div>	2	07-Nov-16	08-Nov-16	0								<div> FAT for Vehicle Tracking System (VTS)</div>												
	<div> A3140 FAT for Communication Network (CMN)</div>	2	09-Nov-16	10-Nov-16	0								<div> FAT for Communication Network (CMN)</div>												
	<div> A3150 FAT for All-In-One Panel (AIOP)</div>	2	11-Nov-16	12-Nov-16	0								<div> FAT for All-In-One Panel (AIOP)</div>												
	<div> A3160 FAT for AVCSS System Test</div>	2	13-Nov-16	14-Nov-16	0								<div> FAT for AVCSS System Test</div>												
	<div> A4360 FAT Report Submission</div>	14	15-Nov-16	28-Nov-16	0								<div> FAT Report Submission</div>												
Programme No.: HZMB-DWP Data Date: 14-Aug-15			<div><div></div> Actual Level of Effort</div> <div><div></div> Actual Work</div> <div><div></div> Remaining Work</div> <div><div></div> Critical Remaining Work</div> <div><div></div> Milestone</div> <div><div></div> summary</div>			Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)			<div></div>			<div><div>Date</div><div>Revision</div><div>Checked</div><div>Approved</div><div>14-Nov-16</div><div>Rev.: 0</div><div>WC</div><div>LC</div></div>													

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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
	 A2093 VTS WS Installation	49	14-Feb-17	03-Apr-17	0									 VTS WS Installation									
	 A2094 VID WS Installation	49	14-Feb-17	03-Apr-17	0									 VID WS Installation									
	 A2096 SURCON, SYSCON, WS Tuning	49	04-Apr-17	22-May-17	0									 SURCON, SYSCON, WS Tuning									
	 Location 3a(Inbd Cargo Exam Bldg Main Server Room)	133	10-Jan-17	22-May-17	0									 22-May-17, Location 3a(Inbd Cargo Exam Bldg Main Server Room)									
	 A3330 Cable Laying and termination in Location 3 and Location 3a	35	10-Jan-17	13-Feb-17	0									 Cable Laying and termination in Location 3 and Location 3a									
	 A3340 AVCSS Server Installation	30	04-Apr-17	03-May-17	0									 AVCSS Server Installation									
	 A3350 VTS Server Installation	30	04-Apr-17	03-May-17	0									 VTS Server Installation									
	 A3360 Servers Tuning	19	04-May-17	22-May-17	0									 Servers Tuning									
	 Location 4(Outbd Cargo Exam Bldg (023) MDF Room)	21	14-Feb-17	06-Mar-17	0									 06-Mar-17, Location 4(Outbd Cargo Exam Bldg (023) MDF Room)									
	 A3410 Cable Laying and termination between CUE and Location 4	21	14-Feb-17	06-Mar-17	0									 Cable Laying and termination between CUE and Location 4									
	 Location 4 and 4a(Outbd Cargo Exam Bldg (023) ROCARS Room)	77	07-Mar-17	22-May-17	0									 22-May-17, Location 4 and 4a(Outbd Cargo Exam Bldg (023) ROCARS Room)									
	 A3370 Cable Laying and termination in Location 4 and 4a	35	07-Mar-17	10-Apr-17	0									 Cable Laying and termination in Location 4 and 4a									
	 A3380 AVCSS SYSCON, SURCON and Intercom Installation	14	05-May-17	18-May-17	0									 AVCSS SYSCON, SURCON and Intercom Installation									
	 A3390 VTS WS Installation	14	05-May-17	18-May-17	0									 VTS WS Installation									
	 A3400 SYSCON, SURCON, WS Tuning	4	19-May-17	22-May-17	0									 SYSCON, SURCON, WS Tuning									
	 Location 5(Common Utility Enclosure & Staff Subway)	131	13-Sep-16	21-Jan-17	68									 21-Jan-17, Location 5(Common Utility Enclosure & Staff Subway)									
	 A3430 Cable Laying between Location 5 and Location 7	28	13-Sep-16	10-Oct-16	0									 Cable Laying between Location 5 and Location 7									
	 A3440 Cable Laying between Location 5 and Location 6	28	15-Nov-16	12-Dec-16	0									 Cable Laying between Location 5 and Location 6									
	 A3480 ODB Switch Installation at EL Room 2-7	14	08-Jan-17	21-Jan-17	68									 ODB Switch Installation at EL Room 2-7									
	 Location 6(Common Utility Enclosure & Staff Subway)	42	15-Nov-16	26-Dec-16	94									 26-Dec-16, Location 6(Common Utility Enclosure & Staff Subway)									
	 A3450 Cable Laying between Location 5 and Location 6	28	15-Nov-16	12-Dec-16	0									 Cable Laying between Location 5 and Location 6									
	 A3490 ODB Switch Installation at EL Room 8-9,11-12	14	13-Dec-16	26-Dec-16	94									 ODB Switch Installation at EL Room 8-9,11-12									
	 Location 7(Common Utility Enclosure & Staff Subway)	28	13-Sep-16	10-Oct-16	0									 10-Oct-16, Location 7(Common Utility Enclosure & Staff Subway)									
	 A3470 Cable Laying between Location 5 and Location 7	28	13-Sep-16	10-Oct-16	0									 Cable Laying between Location 5 and Location 7									
	 Location 12(Inbd Private Car Kiosks,GV Kiosks (027,028,029))	195	17-Sep-16	31-Mar-17	0									 31-Mar-17, Location 12(Inbd Private Car Kiosks,GV Kiosks (027,028,029))									
	 Inbd Private Car Kiosks(027) - 9 nos (Phase 1)	134	11-Oct-16	22-Feb-17	0									 22-Feb-17, Inbd Private Car Kiosks(027) - 9 nos (Phase 1)									
	 A2452 Cable Containment in Kiosks	14	11-Oct-16	24-Oct-16	0									 Cable Containment in Kiosks									
	 A2453 Cable Laying and termination	10	25-Oct-16	03-Nov-16	0									 Cable Laying and termination									
	 A2454 Cable Splicing, Testing and Labeling	65	04-Nov-16	07-Jan-17	0									 Cable Splicing, Testing and Labeling									
	 A2460 AVCSS/DOH/MOM Kiosk Equipment Installation (9 nos)	45	08-Jan-17	21-Feb-17	0									 AVCSS/DOH/MOM Kiosk Equipment Installation (9 nos)									
	 A2470 ODB & XDB installation (9 nos)	16	06-Feb-17	21-Feb-17	0									 ODB & XDB installation (9 nos)									
	 A4380 Inbd Private Car Kiosk Installation Complete	0	22-Feb-17		0									 Inbd Private Car Kiosk Installation Complete, 22-Feb-17									
	 Inbd Goods Vehicle Kiosks(028) - 5 nos (Phase 1)	195	17-Sep-16	31-Mar-17	0									 31-Mar-17, Inbd Goods Vehicle Kiosks(028) - 5 nos (Phase 1)									
	 A2532 Cable Containment in Kiosks	14	17-Sep-16	30-Sep-16	0									 Cable Containment in Kiosks									
	 A2533 Cable Laying and termination	10	01-Oct-16	10-Oct-16	0									 Cable Laying and termination									
	 A2534 Cable Splicing, Testing and Labeling	134	11-Oct-16	21-Feb-17	0									 Cable Splicing, Testing and Labeling									
	 A2540 AVCSS/DOH/MOM Kiosk Equipment Installation (5 nos)	37	22-Feb-17	30-Mar-17	0									 AVCSS/DOH/MOM Kiosk Equipment Installation (5 nos)									
	 A2550 AIOP Installation (5 nos)	37	22-Feb-17	30-Mar-17	0									 AIOP Installation (5 nos)									
	 A2560 ODB & XDB installation (5 nos)	37	22-Feb-17	30-Mar-17	0									 ODB & XDB installation (5 nos)									
	 A4390 Inbd Goods Vehicle Kiosks Installation Complete	0	31-Mar-17		0									 Inbd Goods Vehicle Kiosks Installation Complete, 31-Mar-17									
	 Outbd Goods Vehicle Kiosks(029) - 5 nos (Phase 1)	147	04-Nov-16	31-Mar-17	0									 31-Mar-17, Outbd Goods Vehicle Kiosks(029) - 5 nos (Phase 1)									
	 A2572 Cable Containment in Kiosks	14	04-Nov-16	17-Nov-16	0									 Cable Containment in Kiosks									
	 A2573 Cable Laying and termination	10	18-Nov-16	27-Nov-16	0									 Cable Laying and termination									
	 A2574 Cable Splicing, Testing and Labeling	41	28-Nov-16	07-Jan-17	0									 Cable Splicing, Testing and Labeling									
	 A2580 AVCSS/DOH/MOM Kiosk Equipment Installation (5 nos)	37	08-Jan-17	13-Feb-17	0									 AVCSS/DOH/MOM Kiosk Equipment Installation (5 nos)									

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				14-Nov-16	Rev.: 0	WC	LC

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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><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Contract No.: HY/2013/06			Detail Work Programme										Page 11 of 14														
Activity ID	Activity Name		Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3			
							Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2								
<div></div>	<div></div> A4140	Outbound VID field equipment installation (8 VID)	32	03-Apr-17	04-May-17	0																					
	<div></div> A4150	Outbound VTS field equipment installation (3 RFID + 3 Cameras)	16	11-Apr-17	26-Apr-17	0																					
	<div></div> A4170	Outbound TLS field equipment installation (4 TLS)	8	27-Apr-17	04-May-17	0																					
	<div></div> A4180	Outbound VID, VTS and TLS field equipment tuning	18	05-May-17	22-May-17	0																					
	<div></div>	Underground Ducting between Inbd Cargo Exam Bldg (037) and CUE		35	08-Jan-17	11-Feb-17	0																				
	<div></div> A3810	Cable Laying and termination (note: Access Date by C03)	35	08-Jan-17	11-Feb-17	0																					
	<div></div>	Underground Ducting between Inbd Cargo Exam Bldg (037) and Inbd Vehicle Clearance Plaza		26	12-Feb-17	09-Mar-17	0																				
	<div></div> A3830	Cable Laying and termination (note: Access Date by C03)	26	12-Feb-17	09-Mar-17	0																					
	<div></div>	Underground Ducting between CUE and Outbd Car Exam Bldg (023)		24	10-Mar-17	02-Apr-17	0																				
	<div></div> A3850	Cable Laying and termination (note: Access Date by C03)	24	10-Mar-17	02-Apr-17	0																					
	<div></div>	Underground Ducting Between Outbd Cargo Exam Bldg (023) and Outbd Vehicle Clearance Plaza		24	03-Apr-17	26-Apr-17	0																				
	<div></div> A3870	Cable Laying and termination (note: Access Date by C03)	24	03-Apr-17	26-Apr-17	0																					
	<div></div>	Underground Ducting between CUE and Outbd Vehicle Clearance Plaza		26	27-Apr-17	22-May-17	0																				
	<div></div> A3890	Cable Laying and termination (note: Access Date by C03)	26	27-Apr-17	22-May-17	0																					
	<div></div>	On-Site Test and Commissioning (Phase 1 / Section I)		128	15-Jan-17	22-May-17	0																				
	<div></div> A2150	Testing & Commissioning Documents Submission (8 weeks before Testings carried out)	30	15-Jan-17*	13-Feb-17	84																					
	<div></div> A2151	Engineer Approval for T&C Document	14	14-Feb-17	27-Feb-17	84																					
	<div></div> A2152	Joint Site Inspection for Permanent Power/Tele-communication for Initial on-site testing	14	17-Mar-17*	30-Mar-17	0																					
	<div></div> A2153	Initial on-site Testing & Commissioning	53	31-Mar-17	22-May-17	0																					
	<div></div>	Site Acceptance Test (Phase 1 / Section I)		94	17-Apr-17	19-Jul-17	0																				
	<div></div> A6601	Interface Readiness CED(LBS, CED IT, Metro-Ethernet) and IMMD (AVS)	36	17-Apr-17*	22-May-17	0																					
	<div></div> A6602	SAT for AVCSS	28	23-May-17	19-Jun-17	0																					
	<div></div> A6603	SAT for Location 18 (AVCSS SURCON and 55" LCD)	5	30-Jun-17	04-Jul-17	0																					
	<div></div> A6630	SAT Test Document Submission	30	20-Jun-17	19-Jul-17	0																					
	<div></div> A6640	Software Manual Documentations Submission	30	20-Jun-17	19-Jul-17	0																					
	<div></div>	Security Risk Assessment and Audit		58	23-May-17	19-Jul-17	0																				
	<div></div> A6800	SRAA (Assessment)	9	23-May-17	31-May-17	0																					
	<div></div> A6810	Fix per SRAA Assessment	40	01-Jun-17	10-Jul-17	0																					
	<div></div> A6820	SRAA Audit	9	11-Jul-17	19-Jul-17	0																					
	<div></div>	Operability Period Test (Phase 1 / Section I)		37	13-Jun-17	19-Jul-17	0																				
	<div></div> A5610	Joint Site Inspection for utilities, telecom connection and metro ethernet for OPT	7	13-Jun-17*	19-Jun-17	0																					
	<div></div> A5620	Operability Period Test (OPT) Phase 1	15	20-Jun-17	04-Jul-17	0																					
	<div></div> A5650	Operability Period Test (OPT) Phase 2	15	05-Jul-17	19-Jul-17	0																					
	<div></div>	Completion (Phase 1 /Section I)		5	20-Jul-17	24-Jul-17	0																				
	<div></div> A2230	AVCSS - Certificate of Completion (Phase 1/Section I)	5	20-Jul-17	24-Jul-17	0																					
	<div></div> A2231	Certificate of Completion Approval by Engineer	0		24-Jul-17	0																					
	<div></div>	Training and Document (Phase 1 /Section I)		140	21-Feb-17	10-Jul-17	14																				
	<div></div> A2180	Training Materials & Documentation Submission	30	21-Feb-17*	22-Mar-17	14																					
	<div></div> A2190	Operation and Maintenance Training	110	23-Mar-17	10-Jul-17	14																					
	<div></div>	Operation (Phase 1 /Section I)		0	25-Jul-17	25-Jul-17	0																				
	<div></div> A2240	Site Operation (Phase 1/Section I)	0	25-Jul-17		0																					
	<div></div>	Engineering Support for Phase 1 / Section I		190	25-Jul-17	30-Jan-18	0																				
Programme No.: HZMB-DWP		<div></div> Actual Level of Effort <div></div> Actual Work <div></div> Remaining Work <div></div> Critical Remaining Work <div></div> Milestone <div></div> summary				Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)				<div></div> ATAL								Date				Revision		Checked		Approved	
Data Date: 14-Aug-15																		14-Nov-16				Rev.: 0		WC		LC	

Contract No.: HY/2013/06			Detail Work Programme										Page 12 of 14										
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
 A4420	Engineering Support for Phase 1/Section I	190	25-Jul-17	30-Jan-18	0																		
	Procurement - Phase 2 / Section II	91	13-Aug-16	11-Nov-16	0																		
 A3980	Procurement of Lane Field Equipment for Phase 2/Section II	91	13-Aug-16	11-Nov-16	0																		
	Delivery and Bench Acceptance Test for Phase 2/Section II	28	12-Nov-16	09-Dec-16	74																		
 A6760	Material On-site for Phase 2/Section II	14	12-Nov-16	25-Nov-16	74																		
 A6770	Bench Acceptance Test for Phase 2/Section II	14	26-Nov-16	09-Dec-16	74																		
	Instatllation - Phase 2 / Section II	171	30-Dec-16	19-Jun-17	0																		
	Location 8(Inbd Pricate Car Annex (025)) (Phase 2)	156	30-Dec-16	04-Jun-17	0																		
 A4090	Site Preparation	10	30-Dec-16	08-Jan-17	54																		
 A4091	Cable Containment in Kiosks	8	09-Jan-17	16-Jan-17	54																		
 A4093	Cable Laying and termination	8	17-Jan-17	24-Jan-17	54																		
 A4094	Cable Splicing, Testing and Labeling	30	25-Jan-17	23-Feb-17	71																		
 A4096	Mobilization of kiosk equipment	10	24-Feb-17	05-Mar-17	71																		
 A4100	AVCSS/DOH/MOM Kiosk Equipment Installation (1 no)	19	16-May-17	03-Jun-17	0																		
 A4430	Inbd Private Car Annex Installation Complete	0	04-Jun-17		0																		
	Location 9(Outbd Private Car Annex (032)) (Phase 2)	145	25-Jan-17	19-Jun-17	0																		
 A4151	Site Preparation	10	25-Jan-17	03-Feb-17	54																		
 A4152	Cable Containment in Kiosks	8	04-Feb-17	11-Feb-17	54																		
 A4153	Cable Laying and termination	8	12-Feb-17	19-Feb-17	54																		
 A4154	Cable Splicing, Testing and Labeling	30	20-Feb-17	21-Mar-17	54																		
 A4156	Mobilization of kiosk equipment	20	22-Mar-17	10-Apr-17	54																		
 A4160	AVCSS/DOH/MOM Kiosk Equipment Installation (1 no)	15	04-Jun-17	18-Jun-17	0																		
 A4440	Outbd Private Car Annex Installation Complete	0	19-Jun-17		0																		
	Test and Commissioning (Phase 2 / Section II)	145	06-May-17	27-Sep-17	0																		
 A2290	Testing & Commissioning Documents Submission	30	06-May-17*	04-Jun-17	0																		
 A2291	Engineer Approval for T&C Document	14	05-Jun-17	18-Jun-17	0																		
 A2292	Initial on-site Testing & Commissioning	31	19-Jun-17	19-Jul-17	0																		
 A2300	Site Acceptance Tests (SAT)	40	20-Jul-17	28-Aug-17	0																		
 A2310	Operability Period Test (OPT)	30	29-Aug-17	27-Sep-17	0																		
	Completion (Phase 2 / Section II)	5	28-Sep-17	02-Oct-17	0																		
 A2320	AVCSS - Certificate of Completion (Phase 2/Section II)	5	28-Sep-17	02-Oct-17	0																		
 A4320	Certificate of Completion Approval by Engineer	0		02-Oct-17	0																		
	Engineering Support for Phase 2 / Section II	120	03-Oct-17	30-Jan-18	0																		
 A4450	Engineering Support for Phase 2/Section II	120	03-Oct-17	30-Jan-18	0																		
	Procurement for Phase2 / Section III	91	13-Aug-16	11-Nov-16	0																		
 A4000	Procurement of Lane Field Equipment for Phase 2/Section III	91	13-Aug-16	11-Nov-16	0																		
	Delivery and Bench Acceptance Test for Phase2 / Section III	14	12-Nov-16	25-Nov-16	0																		
 A6780	Material On-site for Phase 2/Section III	7	12-Nov-16	18-Nov-16	0																		
 A6790	Bench Acceptance Test for Phase 2/Section III	7	19-Nov-16	25-Nov-16	0																		
	Installation - Phase 2 / Section III	223	26-Nov-16	07-Jul-17	0																		
	Location 10,11,12,13 (Vehicle Clearance Kiosks)	223	26-Nov-16	07-Jul-17	0																		
	Shuttle Bus Kiosks (006) - 4 nos (Phase 2)	70	14-Feb-17	25-Apr-17	0																		
A2622	Cable Containment	20	14-Feb-17	05-Mar-17	0																		

Programme No.: HZMB-DWP

Data Date: 14-Aug-15

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Milestone

summary

Hong Kong-Zhuhai-Macao Bridge

Hong Kong Boundary Crossing

Facilities - Automatic Vehicle

Clearance Support System (AVCSS)

ATAL

Date

Revision

Checked

Approved

14-Nov-16

Rev.: 0

WC

LC

Contract No.: HY/2013/06			Detail Work Programme										Page 13 of 14										
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2015			2016				2017				2018				2019		3
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2					
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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and the "Lab" part is in a bolder weight. The logo is set against a background of two thick horizontal black bars, one above and one below the text.

Report No.: 0165/15/ED/0615

Appendix D

Event / Action Plan

Appendix D –

Event / Action Plan for Air Quality and Noise Monitoring

Event / Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
Action Level				
1. Exceedance for one sample	<ol style="list-style-type: none">1. Identify source, investigate the causes of exceedance and propose remedial measures;2. Inform IEC and ER;3. Repeat measurement to confirm finding;4. Increase monitoring frequency to daily.	<ol style="list-style-type: none">1. Check monitoring data submitted by ET;2. Check Contractor's working method.	<ol style="list-style-type: none">1. Notify Contractor.	<ol style="list-style-type: none">1. Rectify any unacceptable practice;2. Amend working methods if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
2. Exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
Limit Level				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedances abated.

Event / Action Plan for Construction Noise Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level	<ol style="list-style-type: none"> 1. Notify IEC and Contractor; 2. Identify source, investigate the causes of exceedance and propose remedial measures; 3. Report the results of investigation to the IEC,ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.

Event	Action			
	ET	IEC	ER	Contractor
Limit Level	1. Inform IEC, ER, EPD and Contractor; 2. Identify source; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

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Report No.: 0165/15/ED/0615

Appendix E

Waste Flow Table



Monthly Summary of Waste Flow Table for 2016 (year)

Name of Person completing the Record: Marko Chan

Month	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated	Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
		(see Note 1)						(see Note 2)		
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 Kg)	(in '000 Kg)	(in '000 Kg)	(in '000 Kg)	(in '000m ³)
Jan	0.000	0	0	0	0.000	0	0.992	0	0	0.073
Feb	0.000	0	0	0	0.000	0	0	0	0	0.093
Mar	0.087	0	0	0	0.087	0	0.392	0	0	0.200
Apr	0.184	0	0	0	0.184	0	0.411	0	0	0.224
May	0.203	0	0	0	0.203	0	0	0	0	0.293
Jun	0.244	0	0	0	0.244	0	0.413	0	0	0.322
Jul	2.429	0	0	0	2.429	0	0.419	0	0	0.312
Aug	0.057	0	0	0	0.057	0	0.340	0	0	0.288
Sept	0.000	0	0	0	0.000	0	0	0	0	0.327
Oct	0.379	0	0	0	0.379	0	0	0	0	0.332
Nov										
Dec										
Total	3.583	0.000	0.000	0.000	3.583	0.000	2.967	0.000	0.000	2.464

Notes:

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

Monthly Summary of Excavated Marine Sediment for 2016 (year)

Month	Total Quantity of Excavated Marine Sediment Generated in '000m ³	Reused in this contract in '000m ³	Reused in other Projects in '000m ³	Disposed of at CMP in '000m ³
Jan	1.950	0	0	1.950
Feb	2.328	0	0	2.328
Mar	2.464	0	0	2.464
Apr	5.602	0	0	5.602
May	0	0	0	0
Jun	4.584	0	0	4.584
Jul	10.728	0	0	10.728
Aug	1.544	0	0	1.544
Sep	6.816	0	0	6.816
Oct	2.376	0	0	2.376
Nov				
Dec				
Total	38.392	0.000	0.000	38.392

Monthly Summary Waste Flow Table



Project name 工程項目名稱 :HKBCF-AVCSS HY/2013/06

Location 工程地點:Artificial Island of HKIAP

Year:2016

Month	Inert C&D Waste disposal 墮性廢物(in tonnes) (see Note 1)						Non-inert C&D Waste disposal / 非墮性廢物 (in tonnes)		Waste to be recycled and returned / 可再循環利用或回收的廢物								Total Quantity Generated / 總生產量		
	Reused in the Work Package (e.g. backfilling) / 再用於工程 (如回填)		Reused in other Projects / 再用於其他工程		Inert Waste (e.g. soil, broken concrete, rubble, fill material etc.) / 墮性廢物(如泥, 石, 填料等)		Others, (e.g. general refuse, broken formwork etc) / 其他 (如垃圾, 廢板枋等)		Metals / 金屬		Plastic / 塑膠		Paper/cardboard packaging / 廢紙/包裝紙類		Chemical Waste / 化學廢物				
	(b)		(c)		(d)		(e)		(in tonnes)		(in tonnes)		(in tonnes)		(in litre)				(a)= (b+c+d+e)
	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	Est./ 估計數量)	Act./ (實際數量)	
January																			
February																			
March																			
April																			
May																			
June																			
July																			
August																			
September	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.002	0.002	N/A	N/A	0.002	0.002
October	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.002	0.002	N/A	N/A	0.002	0.002
November																			
December																			
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.000	0.000	0.004	0.004

Notes: (1) The quantities of C&D Materials, in tonne, was calculated by multiply the estimated volume, in m3, with the density of the soil, which is 1.5 gcm⁻³.

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Report No.: 0165/15/ED/0615

Appendix F

Environmental Licenses and Permits

Appendix F - Environmental Permit / Licences Summary for Contract No. HY/2013/03

(update: 02/11/2016)

Item	Permit/Licence Registration	Permit No.	Work Area	Application Date	Issue Date	Valid Date		Status	Remark
						From	To		
1	Environmental Permit Pursuant to Environmental Impact Assessment Ordinance	EP-353/2009/K	HKBCF	24-Mar-16	11-Apr-16	11-Apr-16	Nil	Valid	
2	Notification Pursuant to Section 3(1) of The Air Pollution Control (Construction Dust) Regulation	Ref No. 387703	Main Site Area	15-Apr-15	15-Apr-15	15-Apr-15	Nil	Valid	
3	Notification Pursuant to Section 3(1) of The Air Pollution Control (Construction Dust) Regulation	Ref No. 387735	Works Area WA3	15-Apr-15	15-Apr-15	15-Apr-15	Nil	Valid	
4	Billing A/C for Construction Waste Disposal Pursuant to Section 6 & 9 of the Waste Disposal (Charges for Disposal of Construction waste) Regulation	A/C No. 7022228	Main Site Area, WA3 & 4	15-Apr-15	06-May-15	06-May-15	Nil	Valid	
5	Registration as Waste Producer Pursuant to Waste Disposal (Chemical Waste) (General) Regulation	5213-951-C1186-28	Main Site Area	28-Apr-15	01-Jun-15	01-Jun-15	Nil	Valid	
6	Registration as Waste Producer Pursuant to Waste Disposal (Chemical Waste) (General) Regulation	5213-974-C3597-03	Works Area WA4	28-Apr-15	01-Jun-15	01-Jun-15	Nil	Valid	
7	Water Discharge License Pursuant to Water Pollution Control Ordinance (Cap 358)	WT00022180-2015	Works Area WA3	29-Apr-15	04-Aug-15	03-Aug-15	31-Aug-20	Valid	
8	Water Discharge License Pursuant to Water Pollution Control Ordinance (Cap 358)	WT00022391-2015	Main Site Area	06-May-15	04-Sep-15	04-Sep-15	30-Sep-20	Valid	
9	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	GW-RS0933-16	Main Site Area	18-Aug-16	01-Sep-16	05-Sep-16	31-Dec-16	Valid	
10	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	GW-RS0960-16	Main Site Area	06-Sep-16	15-Sep-16	19-Sep-16	18-Dec-16	Valid	
11	Construction Noise Permit Pursuant to Section 8(6) of the Noise Control Ordinance	PP-RS0028-16	Portion A, G, H & N	15-Sep-16	29-Sep-16	03-Oct-16	02-Apr-17	Valid	
12	Permit issued Under the Dumping at Sea Ordinance	EP/MD/17-105	East of Sha Chau (CMP Vd)	15-Sep-16	27-Sep-16	01-Oct-16	31-Oct-16	Valid until 31-Oct-16	

Environmental Permit / Licences Summary for Contract No. HY/2013/06 within the HY/2013/03 site works area

(update: 02/11/2016)

Item	Permit/Licence Registration	Permit No.	Work Area	Application Date	Issue Date	Valid Date		Status	Remark
						From	To		
1	Environmental Permit Pursuant to Environmental Impact Assessment Ordinance	EP-353/2009/K	HKBCF	24-Mar-16	11-Apr-16	11-Apr-16	Nil	Valid	
2	Billing A/C for Construction Waste Disposal Pursuant to Section 6 & 9 of the Waste Disposal (Charges for Disposal of Construction waste) Regulation	A/C No. 7023015	Main Site Area	07-Aug-15	20-Aug-15	20-Aug-15	Nil	Valid	

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Appendix G

Implementation Schedule for Environmental Mitigation Measures (EMIS)

Appendix G – Implementation Schedule of Environmental Mitigation Measures (EMIS)

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
Air Quality				
S5.5.6.1	A1	1) The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	All construction sites	V
S5.5.6.2	A2	2) Proper watering of exposed spoil should be undertaken throughout the construction phase: <ul style="list-style-type: none"> Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; A stockpile of dusty material should not extend beyond the pedestrian barriers, fencing or traffic cones. The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; 	All construction sites	V
S5.5.6.2	A2	<ul style="list-style-type: none"> When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials, Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; Any skip hoist for material transport should be totally enclosed by impervious sheeting; Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top 	All construction sites	V
S5.5.6.2	A2	<ul style="list-style-type: none"> 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 	All construction sites	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and <ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies 		
S5.5.6.3	A3	3) The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.	All construction sites	V
S5.5.6.4	A4	4) Engineer to incorporate the controlled measures into the Particular Specification (PS) for the civil work. The PS should also draw the contractor's attention to the relevant latest Practice Notes issued by EPD.	All construction sites	V
S5.5.6.4	A5	5) Implement regular dust monitoring under EM&A programme during the construction stage.	Selected Representative dust monitoring station	V
S5.5.7.1	A6	The following mitigation measures should be adopted to prevent fugitive dust emissions for concrete batching plant; <ul style="list-style-type: none"> Loading, unloading, handling, transfer or storage of any dusty materials should be carried out in totally enclosed system; All dust-laden air or waste gas generated by the process operations should be properly extracted and vented to fabric filtering system to meet the emission limits for TSP; Vents for all silos and cement/pulverised fuel ash (PFA) weighing scale should be fitted with fabric filtering system; The materials which may generate airborne dusty emissions should be wetted by water spray system; All receiving hoppers should be enclosed on three sides up to 3m above unloading point; All conveyor transfer points should be totally enclosed; All access and route roads within the premises should be paved and wetted; and Vehicle cleaning facilities should be provided and used by all concrete trucks before leaving the premises to wash off any dust on the wheels and/or body 	Selected Representative dust monitoring station	N/A
S5.5.2.7	A7	The following mitigation measures should be adopted to prevent fugitive dust emissions at barging point: <ul style="list-style-type: none"> All road surface within the barging facilities will be paved; Dust enclosures will be provided for the loading ramp; Vehicles will be required to pass through designated wheels wash facilities; and Continuous water spray at the loading points 	All construction sites	V
Construction Noise (Air borne)				
S6.4.10	N1	1) Use of good site practices to limit noise emissions by considering the following: <ul style="list-style-type: none"> only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; 	All construction sites	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		<ul style="list-style-type: none"> mobile plant should be sited as far away from NSRs as possible and practicable; material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. 		
S6.4.11	N2	2) Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period.	All construction sites	V
S6.4.12	N3	3) Install movable noise barriers (typically density@14kg/m acoustic mat or full enclosure close to noisy plants including compressor, generators, saw.	For plant items listed in Appendix 6D of the EIA report at all construction sites	N/A
S6.4.13	N4	4) Select "Quiet plants" which comply with the BS 5228 Part 1 or TM standards.	For plant items listed in Appendix 6D of the EIA report at all construction site	V
S6.4.14	N5	5) Sequencing operation of construction plants where practicable	All construction sites where practicable	V
S5.1	N6	6) Implement a noise monitoring under EM&A programme.	Selected representative noise monitoring station	V
Sediment				
S7.3	S1	1) The requirements as recommended in ETWB TC 34/2002 Management of Dredged/Excavated Sediment shall be included in the Particular Specification as appropriate.	All construction sites	V
Waste Management (Construction Waste)				
S8.3.8	WM1	Construction and Demolition Material The following mitigation measures should be implemented in handling the waste: <ul style="list-style-type: none"> Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement; Carry out on-site sorting; Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified; and Implement an enhanced Waste Management Plan similar to ETWBTC (Works) No. 19/2005 - "Environmental Management on Construction Sites" to encourage on-site sorting of C&D materials and to minimize their generation during the course of construction. In addition, disposal of the C&D materials onto any sensitive locations such as agricultural lands, etc. should be avoided. The Contractor shall propose the final 	All construction sites	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		disposal sites to the Project Proponent and get its approval before implementation		
S8.3.9-S8.3.11	WM2	<u>C&D Waste</u> <ul style="list-style-type: none"> Standard formwork or pre-fabrication should be used as far as practicable in order to minimise the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage. The Contractor should recycle as much of the C&D materials as possible on-site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage. 	All construction sites	V
S8.2.12-S8.3.15	WM3	<u>Chemical Waste</u> <ul style="list-style-type: none"> Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation. The storage area for chemical wastes should be clearly labeled and used solely for the storage of chemical waste; enclosed on at least 3 sides; have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20 % of the total volume of waste stored in that area, whichever is the greatest; have adequate ventilation; covered to prevent rainfall entering; and arranged so that incompatible materials are adequately separated. Disposal of chemical waste should be via a licensed waste collector; be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers chemical waste collection service and can supply the necessary storage containers; or be to a reuser of the waste, under approval from the EPD. 	All construction sites	V
S8.3.16	WM4	<u>Sewage</u> <ul style="list-style-type: none"> Adequate numbers of portable toilets should be provided for the workers. The portable toilets should be maintained in a state which will not deter the workers from utilizing these portable toilets. Night soil should be collected by licensed collectors regularly. 	All construction sites	V
S8.3.17	WM5	<u>General Refuse</u> <ul style="list-style-type: none"> General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by 	All construction sites	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		<p>law.</p> <ul style="list-style-type: none"> Aluminium cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible. Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor. Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including reduction, reuse and recycling of wastes. 		
Water Quality (Construction Phase)				
S9.11.1.7	W2	<p><u>Land Works</u></p> <p>General construction activities on land should also be governed by standard good working practice. Specific measures to be written into the works contracts should include:</p> <ul style="list-style-type: none"> wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters; sewage effluent and discharges from on-site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided; storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks; silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm; temporary access roads should be surfaced with crushed stone or gravel; rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities; measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system; open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms; manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers; discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system; 	Land-based works area	V
S9.11.1.7	W2	<ul style="list-style-type: none"> all vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit; wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain; the section of construction road between the wheel 	Land-based works area	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		<p>washing bay and the public road should be surfaced with crushed stone or coarse gravel;</p> <ul style="list-style-type: none"> wastewater generated from concreting, plastering, Internal decoration, cleaning work and other similar activities, shall be screened to remove large objects; vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal; the contractors shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately; waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance; all fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank; and surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system. 		
Ecology (Construction Phase)				
S10.7	E4	<ul style="list-style-type: none"> Watering to reduce dust generation; prevention of siltation of freshwater habitats; Site runoff should be desilted, to reduce the potential for suspended sediments, organics and other contaminants to enter streams and standing freshwater 	Land-based works areas	V
S10.7	E5	<ul style="list-style-type: none"> Good site practices, including strictly following the permitted works hours, using quieter machines where practicable, and avoiding excessive lightings during night time 	Land-based works areas	V
S10.7	E8	<ul style="list-style-type: none"> Control vessel speed Skipper training Predefined and regular routes for working vessels; avoid Brother Islands. 	Marine Traffic	V
Fisheries				
S11.7	F4	<ul style="list-style-type: none"> Maritime Oil Spill Response Plan (MOSRP); Contingency plan. 	HKBCF	V
Landscape & Visual (Detailed Design Phase)				
S14.3.3.1	LV1	<p>General design measures include:</p> <ul style="list-style-type: none"> Roadside planting and planting along the edge of the HKBCF Island is proposed; Transplanting of mature trees in good health and amenity value where appropriate and reinstatement of areas disturbed during construction by compensatory hydro-seeding and planting; Protection measures for the trees to be retained during construction activities; Optimizing the sizes and spacing of the bridge columns; Fine-tuning the location of the bridge columns to avoid visually-sensitive locations; Providing planting area around peripheral of HKBCF for tree planting screening effect; Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline; For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and 	HKBCF	V

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Location of the measures	Implementation Status
		transparent cover for elevated footbridges) to provide harmonious atmosphere of the HKBCF; and <ul style="list-style-type: none"> • Fine-tuning the sizes of the structural members to minimize the bulkiness of buildings and adjustment of building arrangement to minimise disturbance to surrounding vegetation in the HKBCF. 		
Landscape & Visual (Construction Phase)				
S14.3.3.3	LV2	Mitigate both Landscape and Visual Impacts G1. Grass-hydroseed bare soil surface and stock pile areas. G2. Add planting strip and automatic irrigation system if appropriate at some portions of bridge footbridge to screen bridge and traffic. G3. Not applicable as this is for HKLR. G4. For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonious atmosphere of the HKBCF G5. Vegetation reinstatement and upgrading to disturbed areas G6. Maximizing new tree shrub and other vegetation planting to compensate tree felled and vegetation removed G7. Providing planting area around peripheral of HKBCF for tree planting screening effect; G8. Plant salt-tolerant native and shrubs etc along the planter strip at affected seawall. G9. Reserve of loose natural granite rocks for re-use, Provide new coastline to adopt "natural-look" by means of using armour rocks in the form of natural rock materials and planting strip area accommodating screen buffer to enhance "natural-look" of the new coastline.	HKBCF	N/A
S14.3.3.3	LV3	<u>Mitigate Visual Impacts</u> V1. Minimize time for construction activities during construction period. V2. Provide screen hoarding at the portion of the project site / works areas / storage areas near VSRs who have close low-level views to the Project during HKBCF construction.	HKBCF	N/A
EM&A				
S15.2.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	All construction sites	V
S15.5 – S15.6	EM2	1) An Environmental Team needs to be employed as per the EM&A Manual. 2) Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures. 3) An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with.	All construction sites	V

Legend: V = implemented;

x = not implemented;

N/A = not applicable

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The logo for MaterialLab, featuring the word "MaterialLab" in a bold, sans-serif font. The "Material" part is in a lighter weight, and the "Lab" part is in a bolder weight. The logo is set against a background of two thick horizontal black bars, one above and one below the text.

Report No.: 0165/15/ED/0615

Appendix H

Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions

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Appendix H –

Statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

For Contract No. HY/2013/03

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This reporting period	0	0	0
From commencement date of construction to end of reporting month	2	0	0

For Contract No. HY/2013/06 within Contract No. HY/2013/03 works area

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This reporting period	0	0	0
From commencement date of construction to end of reporting month	0	0	0

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Appendix I

Environmental Site Inspection Schedule

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Contract No. HY/2013/03

**HZMB HKBCF – Vehicle Clearance Plazas and Ancillary Buildings and Facilities
Weekly Environmental Site Inspection Schedule**

Environmental Site Inspection Schedule for October 2016

Oct-2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						¹ Public Holiday
²	3	4	5	6 Environmental Site Inspection	7	8
⁹	¹⁰ Public Holiday	11	12	13 Environmental Site Inspection	14	15
¹⁶	17	18	19	20	21 Environmental Site Inspection* (Cancelled)	22
²³	24	25	26	27 Environmental Site Inspection	28 Environmental Site Inspection*	29
³⁰	31					

* Environmental site inspection of 21 Oct 2016 was cancelled due to hoisting of typhoon signal no. 8 on 21 Oct 2016 and re-scheduled to 28 Oct 2016

Tentative Environmental Site Inspection Schedule for November 2016

Nov-2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3 Environmental Site Inspection	4	5
⁶	7	8	9	10 Environmental Site Inspection	11	12
¹³	14	15	16	17 Environmental Site Inspection	18	19
²⁰	21	22	23	24	25 Environmental Site Inspection	26
²⁷	28	29	30			

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Report No.: 0165/15/ED/0615

Contract No. HY/2013/06 (within Contract No. HY/2013/03 works area)
HZMB HKBCF – Automatic Vehicle Clearance Support System
Weekly Environmental Site Inspection Schedule

Environmental Site Inspection Schedule for October 2016

Oct-2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						¹ Public Holiday
²	3	4	5	6 Environmental Site Inspection	7	8
⁹	¹⁰ Public Holiday	11	12	13 Environmental Site Inspection	14	15
¹⁶	17	18	19	20	21 Environmental Site Inspection* (Cancelled)	22
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