CONTRACT NO: HK/2011/07

WANCHAI DEVELOPMENT PHASE II AND CENTRAL WANCHAI BYPASS SAMPLING, FIELD MEASUREMENT AND TESTING WORKS (STAGE 2)

ENVIRONMENTAL PERMIT NO. EP-356/2009, FURTHER EVIRONMENTAL PERMIT NOS. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009 ,FEP-05/356/2009, FEP-06/356/2009 AND FEP-07/356/2009

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

- SEPTEMBER 2014 -

CLIENTS:

Civil Engineering and Development Department

and

Highways Department

PREPARED BY:

Lam Geotechnics Limited

11/F Centre Point 181-185 Gloucester Road, Wanchai, H.K.

Telephone: (852) 2882-3939 Facsimile: (852) 2882-3331 E-mail: info@lamenviro.com

Website: http://www.lamenviro.com

CERTIFIED BY:

Raymond Dai

Environmental Team Leader

DATE:

13 October 2014



By Post and Fax (2691 2649)

Ref.: AACWBIECEM00_0_5780L.14

13 October 2014

AECOM Asia Company Limited 11/F, Tower 2 Grand Central Plaza 138 Shatin Rural Committee Road Shatin, New Territories Hong Kong

Attention: Mr. Conrad Ng

Dear Sir,

Re: Wan Chai Development Phase II and Central-Wan Chai Bypass Monthly Environmental Monitoring and Audit Report (September 2014) for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009

Reference is made to the Environmental Team's submission of the captioned Monthly Environmental Monitoring and Audit (EM&A) Report for September 2014 received by e-mail on 13 October 2014 for our review and comment.

Please be informed that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 3.4 in the captioned Environmental Permits.

Thank you very much for your kind attention and please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,

David Yeung

Independent Environmental Checker

c.c. HyD

Mr. Eddy Wu

by Fax: 2714 5289

CEDD

Mr. Jason Cheung

by Fax: 2577 5040

AECOM

Mr. Francis Leong / Mr. Stephen Lai

by Fax: 2691 2649

Lam

Mr. Raymond Dai

by Fax: 2882 3331

Q:\Projects\AACWBIECEM00\Corr\AACWBIECEM00_0_5780L.14.doc



TABLE OF CONTENTS

EXE	CUTI	/E SUMMARY	4
1.	INTR	ODUCTION	10
	1.1 1.2	Scope of the ReportStructure of the Report	
2.	PRO	JECT BACKGROUND	13
	2.1 2.2 2.3 2.4	Background	13 14
3.	STAT	US OF REGULATORY COMPLIANCE	19
	3.1	Status of Environmental Licensing and Permitting under the Project	21
4.	MON	ITORING REQUIREMENTS	31
	4.1 4.2 4.3	Noise Monitoring Air Monitoring Water Quality Monitoring	35
5.	MON	ITORING RESULTS	43
	5.1 5.2 5.3 5.4 5.5	Noise Monitoring Results Real-time Noise Monitoring Air Monitoring Results Water Monitoring Results Waste Monitoring Results	45 46 47
6.	СОМ	PLIANCE AUDIT	60
	6.1 6.2 6.3 6.4 6.5 6.6	Noise Monitoring Real-time noise Monitoring Air Monitoring Water Quality Monitoring Review of the Reasons for and the Implications of Non-compliance Summary of action taken in the event of and follow-up on non-compliance	62 63 64
7.	CUM	ULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS	64
8.	ENVI	RONMENTAL SITE AUDIT	65
9.	COM	PLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION	67
10	CON	CLUSION	71



LIST OF TABLES

Table I	Summary of Water Quality Monitoring Exceedances in Reporting Month
Table II	Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month
Table 2.1	Schedule 2 Designated Projects under this Project
Table 2.2	Details of Individual Contracts under the Project
Table 2.3	Contact Details of Key Personnel
Table 3.1	Summary of the current status on licences and/or permits on environmental
	protection pertinent to the Project
Table 3.4	Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/01
Table 3.5	Summary of submission status under FEP-02/356/2009 Condition
Table 3.6	Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/02
Table 3.7	Summary of submission status under FEP-03/356/2009 Condition
Table 3.8	Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/15
Table 3.9	Summary of submission status under FEP-04/356/2009 Condition
Table 3.10	Cumulative Summary of Valid Licences and Permits under Contract no. HK/2010/06
Table 3.11	Summary of submission status under EP-356/2009 and FEP-05/356/2009 Condition
Table 3.12	Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19
Table 4.1	Noise Monitoring Station
Table 4.2	Real Time Noise Monitoring Station
Table 4.3	Air Monitoring Station
Table 4.4	Marine Water Quality Stations for Water Quality Monitoring
Table 4.5	Marine Water Quality Monitoring Frequency and Parameters
Table 4.6	Marine Water Quality Stations for Enhanced Water Quality Monitoring
Table 4.7	Marine Water Quality Stations for Additional DO Monitoring
Table 5.2	Noise Monitoring Station for Contract nos. HK/2009/01, HK/2009/02 and HK/2010/06
Table 5.3	Noise Monitoring Station for Contract no. HY/2009/15
Table 5.4	Noise Monitoring Station for Contract no. HY/2009/19
Table 5.5	Real Time Noise Monitoring Station for Contract no. HY/2009/19
Table 5.8	Air Monitoring Station for Contract no. HK/2009/02
Table 5.9	Air Monitoring Station for Contract no. HY/2009/15
Table 5.10	Air Monitoring Stations for Contract no. HY/2009/19
Table 5.12	Water Monitoring Stations for Contract no. HK/2009/01
Table 5.13	Water Monitoring Stations for Contract no. HK/2009/02
Table 5.14	Water Monitoring Stations for Contract no. HK/2010/06
Table 5.15	Water Monitoring Stations for Contract no. HY/2009/15
Table 5.16	Water Monitoring Stations for Contract no. HY/2009/19
Table 5.17	Summary of Water Quality Monitoring Exceedances in Reporting Month
Table 5.18	Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month
Table 5.19	Details of Waste Disposal for Contract no. HK/2009/01
Table 5.20	Details of Waste Disposal for Contract no. HK/2009/02
Table 5.21	Details of Waste Disposal for Contract no. HY/2009/15
<i>Table 5.22</i>	Details of Waste Disposal for Contract no. HK/2010/06
Table 5.23	Details of Waste Disposal for Contract no. HY/2009/19
<i>Table 5.24</i>	Details of Waste Disposal for Contract no. HK/2012/08
<i>Table 5.25</i>	Details of Waste Disposal for Contract no. HY/2010/08
Table 8.1	Summary of Environmental Inspections for Contract no. HK/2009/01
Table 8.2	Summary of Environmental Inspections for Contract no. HK/2009/02
Table 8.3	Summary of Environmental Inspections for Contract no. HY/2009/15
Table 8.4	Summary of Environmental Inspections for Contract no. HK/2010/06
Tahla 8 5	Summary of Environmental Inspections for Contract no. HV/2000/10



Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

Table 9.1	Cumulative Statistics on Complaints
Table 9.2	Cumulative Statistics on Successful Prosecutions
Table 10.1	Construction Activities and Recommended Mitigation Measures in Coming
	Reporting Month

LIST OF FIGURES

Figure 2.1 Figure 2.2 Figure 4.1	Project Layout Project Organization Chart Locations of Environmental Monitoring Stations
LIST OF APP	ENDICES
Appendix 4.1 Appendix 4.2 Appendix 5.1 Appendix 5.2 Appendix 5.3 Appendix 5.4	Environmental Mitigation Implementation Schedule Action and Limit Level Copies of Calibration Certificates Monitoring Schedule for Reporting Month and Coming month Noise Monitoring Results and Graphical Presentations Air Quality Monitoring Results and Graphical Presentations Water Quality Monitoring Results and Graphical Presentations a Additional Dissolved Oxygen Monitoring Results

Appendix 5.5 Real-time Noise Monitoring Results and Graphical Presentations Appendix 6.1 Event Action Plans

Appendix 6.2 Summary for Notification of Exceedance

Appendix 9.1 Complaint Log
Appendix 10.1 Construction Programme of Individual Contracts



EXECUTIVE SUMMARY

i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – September 2014 for the Project of Wan Chai Development Phase II and Central-Wanchai Bypass under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009. This report presents the environmental monitoring findings and information recorded during the period August 2014 to September 2014. The cut-off date of reporting is at 27th of each reporting month.

Construction Activities for the Reported Period

- ii. During this reporting period, the major work activities for Contract no. HK/2009/01 included:
 - Rock trimming works
- iii. During this reporting period, the major work activities for Contract no. HK/2009/02 included:
 - · Works of covered walkway
 - ABWF works at section VIIIA
 - HHR Flyover Diversion at Stage 2
 - Demolition of Existing Wan Chai Ferry Pier
- iv. During this reporting period, the major work activities for Contract no. HY/2009/15 included:
 - Construction works of East Ventilation Shaft
 - Removal of temporary reclamation and seawall blocks at TPCWAE & TS4
 - Demolition of D-Wall at TS2, TPCWAE & TS4
- v. During this reporting period, the major work activities for Contract no. HK/2010/06.
 - Nil
- vi. During this reporting period, the major work activities for Contract no. HY/2009/19 included:
 - Construction of Dolphin Cap
- vii. During this reporting period, the major work activities for Contract no. HK/2012/08 included:
 - ELS for box culvert La at Lung King Street
 - · Installation of caisson seawall
 - Removal of rock armour
 - Filling
 - Sheet piling
- viii. During this reporting period, the major work activities for Contract no. HY/2010/08.
 - Rock filling works
 - Dredging works



- Seawall blocks installation
- Sheet pilling works at outfall Q
- Installation of water tank

Noise Monitoring

- ix. No action or limit level exceedance was recorded in this reporting month.
- x. Noise monitoring during daytime and restricted hour were conducted at the stations M1a, M2b, M3a, M4b, M5b and M6 on a weekly basis in the reporting month.

Real-time Noise Monitoring

- xi. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at RTN1 FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- xii. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- xiii. 24-hour real time noise monitoring was conducted at RTN2a Hong Kong Electric Centre. No project related exceedance was recorded in the reporting month.

Air Quality Monitoring

- xiv. Due to electricity interruption, the following 24hr TSP monitoring events were rescheduled in the reporting month,
 24hr TSP monitoring at CMA5a was rescheduled from 24 September 2014 to 25 September 2014.
- xv. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 2, 18 and 29 September 2014 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded during this reporting month.
- xvi. Due to extension of site boundary by contractor of HY/2009/19, location of air monitoring station CMA1b Oil Street Community Liaison Centre has been finely adjusted on 21 April 2012.
- xvii. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.
- xviii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at CMA1b Oil Street Site Office; CMA2a Causeway Bay Community Center; CMA3a CWB PRE Site Office Area; CMA4a Society for the Prevention of Cruelty to Animals; CMA5a Children Garden opposite to Pedestrian Plaza.



Water Quality Monitoring

- xix. As confirmed by WDII RSS and IEC, the cross harbor dredging works have completed since 16 March 2012 while the dredging works for submarine outfall pipeline has completed since 29 November 2011, considering current construction stage and dredging Scenario, the water quality monitoring at stations WSD9 and WSD17 was temporarily suspended since 8 September 2014 flood tide.
- xx. Action and Limit level of water quality monitoring was transited from dry season to wet season from 1 April 2014.
- xxi. With respect to the switching over of cooling water intake location, the water quality monitoring at the relocated intake station RW21-P789 under HK/2009/02 was commenced since 29 July 2013 and monitoring station C5e and C5w were temporarily suspended and switched over to monitoring station RW21-P789 on 29 July 2013 due to suspension of pump house operation.
- xxii. As advised by WDII RSS, the water quality monitoring for WSD21 pump station with respect to HK/2009/02 was switched over to the relocated location since 12 March 2014. According to the EM&A Manual, the water quality monitoring station WSD21 was relocated to station RW21-P789 and the water quality monitoring at station WSD21 was temporarily suspended since 12 March 2014.
- xxiii. With respect to the commencement of marine dredging works under contract HY/2010/08. The respective water quality monitoring station C7 were associated with HY/2009/15 and HY/2010/08.
- xxiv. With respect to the commencement of marine dredging works under contract HK/2012/08/ The respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08 Since September 2013.
- xxv. WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013.
- xxvi. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- xxvii. As confirmed by CWB RSS, the marine pilling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.
- xxviii. RSS confirmed that all Type III Dredging works under HK/2009/01 have been completed since Oct 2012.
- xxix. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.
- xxx. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.

- xxxi. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- xxxii. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others remain unchanged.
- xxxiii. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration. Water quality monitoring at WSD10 and WSD15 was temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;
- xxxiv. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and it was completed on 6 February 2012.
- xxxv. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- xxxvi. Water quality monitoring at C8 and C9 have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 12.

Table I Summary of Water Quality Monitoring Exceedances in Reporting Month

	Water	Water Mid-flood			Mid-ebb								
Contract no.	Monitoring	D	0	Turb	idity	S	S	D	0	Turb	idity	S	S
	Station	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01	C1	0	0	0	0	0	0	0	0	0	0	0	0
	WSD19	0	0	0	1	0	0	0	0	1	1	0	1
	P1	0	0	0	0	0	0	0	0	0	0	0	0
HK/2012/08	P3	0	0	0	0	0	0	0	0	0	0	0	0
	P4	0	0	0	0	0	0	0	0	0	0	0	0
	P5	0	0	0	0	0	0	0	0	0	0	0	0
HK/2009/02 Monitoring started on 8 Feb 2012	WSD9	0	0	0	0	0	0	0	0	0	0	0	1
	WSD17	0	0	0	0	0	0	0	0	0	0	0	0
Monitoring started on 29 July 2013	RW21-P789	0	0	0	0	1	0	0	0	0	0	0	0

Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

	Water	Mid-flood						Mid-ebb					
Contract no.	Monitoring Station	D	0	Turb	idity	S	S	D	0	Turb	idity	S	S
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HY/2009/15 & HY/2010/08	C7	0	0	0	0	0	0	0	0	0	0	0	0
Total			0	0	1	1	0	0	0	1	1	0	2

Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.

- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
- 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 were completed on 6 Feb 2012.
- C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
- C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
- WSD7 and WSD20 water quality monitoring were temporarily suspended from 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
- Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.
- xxxvii. There were 1 action level and 2 limit level exceedances of turbidity, and 1 action level and 2 limit level exceedances of SS recorded in the reporting month. Investigation found that the exceedance was not related to Project works. The details of recorded exceedance can be referred to the **Section 6.4**.
- xxxviii. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in *Table II*.

Table II Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month

	Contract Water Menitoring		lood	Mid-ebb		
Contract no.	Water Monitoring Station	D	0	D	0	
110.	Cidion	AL	LL	AL	LL	
	C6	0	0	0	0	
HY/2009/15	C7	0	0	0	0	
111/2009/13	Ex-WPCWA SW	0	5	0	0	
	Ex-WPCWA SE	1	3	2	1	
	1	8	2	1		

xxxix. There were 3 action level exceedances and 9 limit level exceedances of enhanced dissolved oxygen recorded in this reporting month. Investigation found that the exceedances are not

Contract No. HK/2011/07

related to the Project works. The details of the recorded exceedances can be referred to the Section 6.4.

- χl. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.
- With respect to the commencement of dredging works under HK/2012/08 and the installation xli. of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013.

Complaints, Notifications of Summons and Successful Prosecutions

xlii. There was no environmental complaint received in this reporting month.

Site Inspections and Audit

- The Environmental Team (ET) conducted weekly site inspections for Contract nos. xliii. HK/2009/01, HK/2009/02, HY/2009/15 HK/2010/06, HY/2009/19, HK/2012/08 and HY/2010/08 under EP no. EP-356/2009 in the reporting month. Major observations and recommendations made during the audit sessions were rectified by the Contractors. No non-conformance was identified during the site inspections.
- xliv. Construction works under HK/2010/06 was confirmed completed and the respective work area under FEP-05/356/2009 was handover and inspected under HK/2012/08 from 22 September 2014 onwards.

Future Key Issues

In coming reporting month, the principal work activities of individual contracts are anticipated xlv. as follows:

Contract no. HK/2009/01 - Wan Chai Development Phase II - Central -Wanchai Bypass at **HKCEC**

Rock trimming works

Contract no. HK/2009/02 - Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East

- Works of covered walkway
- **Backfilling works**
- ABWF works at Section VIIIA



- D-Wall trimming and drainage works
- Demolition of Existing Wan Chai Ferry Pier

<u>Contract no. HY/2009/15 - Central-Wanchai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)</u>

- Construction works of East Ventilation Shaft
- Removal of temporary reclamation and seawall locks at TPCWAE & TS4
- Demolition of D-wall at TPCWAE & TS4

<u>Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass</u> over MTR Tsuen Wan Line

Nil

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

• Construction of Dolphin Cap

<u>Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West</u>

- ELS for box culvert La at Lung King Street
- Removal of rock armour
- Filling
- Sheet piling

Contract no. HY/2010/08 - Central - Wan Chai Bypass (CWB) - Tunnel (Slip Road 8)

- Rock filling works
- Dredging works
- · Seawall block installation
- Sheet piling works at outfall Q
- Installation of water tank



1 Introduction

1.1 Scope of the Report

- 1.1.1. Lam Geotechnics Limited (LGL) has been appointed to work as the Environmental Team (ET) under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-014/2001).
- 1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 10.3 of EM&A Manual and "Environmental Monitoring and Audit Requirements" under Particular Specification Section 27.
- 1.1.3. This report documents the finding of EM&A works for Environmental Permit no. EP-356/2009, Further Environmental Permit no. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009 during the period of August 2014 to September 2014. The cut-off date of reporting is at 27th of each reporting month.

1.2 Structure of the Report

- **Section 1** *Introduction* details the scope and structure of the report.
- **Section 2** *Project Background* summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.
- **Section 3 Status of Regulatory Compliance** summarizes the status of valid Environmental Permits / Licenses during the reporting period.
- **Section 4** *Monitoring Requirements* summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.
- **Section 5** *Monitoring Results* summarizes the monitoring results obtained in the reporting period.
- **Section 6 Compliance Audit** summarizes the auditing of monitoring results, all exceedances environmental parameters.
- Section 7 Cumulative Construction Impact due to the Concurrent Projects summarizes the relevant cumulative construction impact due to the concurrent activities of the concurrent Projects.



Section 8 Site Inspection – summarizes the findings of weekly site inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.

Section 9 Complaints, Notification of summons and Prosecution – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 10 Conclusion



2 Project Background

2.1 Background

- 2.1.1. "Wan Chai Development phase II and Central-Wan Chai Bypass" and "Central-Wan Chai Bypass and Island Eastern Corridor Link" (hereafter called "the Project") are Designed Project (DP) under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). The Environmental Impact Assessment (EIA) Reports for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001) and Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) have been approved on 31 August 2001 and 11 December 2008 respectively.
- 2.1.2. The key purpose of Wan Chai Development Phase II (WDII) is to provide land at Wan Chai North and North Point for construction of the Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB). Land formed under the project will be developed as a world-class waterfront promenade joining that at the new Central waterfront for public enjoyment.
- 2.1.3. There is a compelling and present need for the CWB to provide relief to the very congested east-west Connaught Road Central/Harcourt Road / Gloucester Road Corridor (the Corridor) which is currently operating beyond its capacity. The CWB will provide relief to the existing congestion along the Corridor and cater for the anticipated growth of traffic on Hong Kong Island. Without the CWB and its access roads, there will not be sufficient capacity to serve the heavy traffic demands at both strategic and local levels.

2.2 Scope of the Project and Site Description

- 2.2.1. The Project is located mainly in Wan Chai North, Causeway Bay and North Point, and is demarcated by Gloucester Road and Victoria Park Road to the south, Fenwick Pier Street to the west and Tong Shui Road Interchange to the east, as shown in *Figure 2.1*.
- 2.2.2. The study area encompasses existing developments along the Wan Chai, Causeway Bay and North Point shorelines. Major land uses include the Hong Kong Convention & Exhibition Centre (HKCEC) Extension, the Wan Chai Ferry Pier, the ex-Wan Chai Public Cargo Working Area (ex-PCWA), the Royal Hong Kong Yacht Club (RHKYC), the Police Officers' Club, the Causeway Bay Typhoon Shelter (CBTS) and commercial and residential developments.

2.2.3. The scope of the Project comprises:

- Land formation for key transport infrastructure and facilities, including the Trunk Road
 (i.e. CWB) and the associated slip roads for connection to the Trunk Road and for
 through traffic from Central to Wan Chai and Causeway Bay. The land formed for the
 above transport infrastructure will provide opportunities for the development of an
 attractive waterfront promenade for the enjoyment of the public
- Reprovisioning / protection of the existing facilities and structures affected by the land formation works mentioned above
- Extension, modification, reprovisioning or protection of existing storm water drainage outfalls, sewerage outfalls and watermains affected by the revised land use and land formation works mentioned above



- Upgrading of hinterland storm water drainage system and sewerage system, which would be rendered insufficient by the land formation works mentioned above
- Provision of the ground level roads, flyovers, footbridges, necessary transport facilities and the associated utility services
- Construction of the new waterfront promenade, landscape works and the associated utility services
- The Trunk Road (i.e. CWB) within the study area and the associated slip roads for connection to the Trunk Road.
- 2.2.4. The project also contains various Schedule 2 DPs that, under the EIAO, require Environmental Permits (Eps) to be granted by the DEP before they may be either constructed or operated. Table 2.1 summarises the five individual DPs under this Project. Figure 2.1 shows the locations of these Schedule 2 DPs.

Table 2.1 Schedule 2 Designated Projects under this Project

Item	Designated Project	EIAO Reference	Reason for inclusion
DP1	Central-Wanchai Bypass (CWB) including its road tunnel and slip roads	Schedule 2, Part I, A.1 and A.7	Trunk road and road tunnel more than 800 m in length
DP2	Road P2 and other roads which are classified as primary/district distributor roads	Schedule 2, Part I, A.1	Primary / district distributor roads
DP3	Reclamation works including associated dredging works	Schedule 2, Part I, C.1 and C.12	Reclamation more than 5 ha in size and a dredging operation less than 100 m from a seawater intake point
DP5	Wan Chai East Sewage Outfall	Schedule 2, Part I, F.5 and F.6	Submarine sewage pipelines with a total diameter more than 1,200 mm and include a submarine sewage outfall
DP6	Dredging for the Cross-harbour Water Mains from Wan Chai to Tsim Sha Tsui	Schedule 2, Part I, C.12	A dredging operation less than 100 m from a seawater intake point

2.3 **Division of the Project Responsibility**

- 2.3.1. Due to the multi-contract nature of the Project, there are a number of contracts sub-dividing the whole works area into different work areas to be commenced. Contractors of individual contracts will be required by the EP holder to apply Further Environmental Permits (FEP) such that the impact monitoring stations are sub-divided accordingly to facilitate the implementation of EM&A programme and to streamline the EM&A reporting for individual FEP holders correspondingly.
- 2.3.2. The details of individual contracts are summarized in *Table 2.2*.

Table 2.2 Details of Individual Contracts under the Project

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date	
Central –Wanchai Bypass at Hong –		DP3, DP6	23 July 2010	
		DP1, DP2	25 August 2011	
		DP3, DP5	5 July 2010	
	Central – Wan Chai Bypass at WanChai East	DP1	26 April 2011	
HY/2009/11	Wan Chai Development Phase II and Central – Wan Chai Bypass – North Point Reclamation	DP3	17 March 2010 (Completed)	
HY/2009/15	Central-Wanchai Bypass – Tunnel	DP3	10 November 2010	
	(Causeway Bay Typhoon Shelter Section)	DP1	13 July 2011	
HK/2010/06	Wan Chai Development Phase II-Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011	
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)	
HY/2009/17	Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works.	DP1	5 October 2010 (Completed)	
HY/2009/18	Central – Wan Chai Bypass (CWB) – Central Interchange	DP1	21 April 2011	
HY/2009/19	Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011	
HK/2012/08	Wan Chai Development Phase II Central- Wan Chai Bypass at Wan Chai West		10 March 2014	
HY/2010/08	Central- Wanchai Bypass Tunnel – Tunnel (Slip Road 8)	DP1, DP2, DP3	21 March 2013	
HY/2011/08	Central-Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning	DP1	To be commenced tentatively on 4 th quarter in 2014	

2.4 Project Organization and Contact Personnel

- 2.4.1. Civil Engineering and Development Department and Highways Department are the overall project controllers for the Wan Chai Development Phase II and Central-Wan Chai Bypass respectively. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.
- 2.4.2. The proposed project organization and lines of communication with respect to environmental protection works are shown in *Figure 2.2*. Key personnel and contact particulars are summarized in *Table 2.3*:

Table 2.3 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Principal Resident Engineer	Mr. Frankie Fan	2587 1778	2587 1877
	Engineer's Representative for CWB	Principal Resident Engineer	Mr. Peter Poon	3912 3388	3912 3010
Chun Wo – Leader Joint	Contractor under Contract no. HK/2009/01	Joint Venture Board Representative	Mr. Simon Liu	9304 8355	2587 1878
Venture		Deputy Site Agent	Mr. Andy Yu	9648 4896	
		Construction Manager	Mr. Terry Wong	9757 9846	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Construction Manager	Mr. Kenneth Chan	9160 3850	
		Senior Environmental Engineer	Ms. Wendy Ng	9803 0057	
		Assistant Environmental Engineer	Miss. Connie Chan	6157 7057	
Chun Wo – CRGL	Contractor under Contract no.	Project Manager	Mr. Alfred Leung	3658-3022	2827 9996
Joint Venture	HK/2009/02	Quality & Environmental Manager	Mr. C.P. Ho	9191 8856	
China	Contractor under	Project Director	K C Cheung	3557 6399	2566 2192
State Constructi on Engineerin g (HK) Ltd.	Contract no. HY/2009/15	Site Manager	J H Chen	3557 6368	
		Project Manager	Andrew Wong	3557 6358	
		Contractor's Representative	Gene Cheung	3557 6395	
		Senior Project Manager	Eddie Tang	35576452	
		Environmental Officer	Andy Mak	3557 6347	
Gammon	Contractor under	Project Manager	Mr. Paul Lui	9095 7922	2529 2880
-Leader JV	Contract no. HK/2010/06	Site Agent	Mr. Eric Yip	2529 2068	
		Environmental Officer	Clement Pang	9735 9200	
		Environmental Supervisor	Jacky Cheung	9779 2292	



Supervisor

Penny Yiu



Party	Role	Post	Name	Contact No.	Contact Fax
ENVIRON Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899
Lam Geotechni cs Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331

- 2.4.3. For Contract no. HK/2009/01, the principal work activities in this reporting month included:
 - Rock trimming works
- 2.4.4. For Contract no. HK/2009/02, the principal work activities in this reporting month included:
 - Works of covered walkway

Lam Geotechnics Limited

- ABWF works at Section VIIIA
- HHR Flyover Diversion at Stage 2
- Demolition of Existing Wan Chai Ferry Pier
- 2.4.5. For Contract no. HY/2009/15, the principal work activities in this reporting month included:
 - Construction works at East Ventilation Shaft
 - Removal of temporary reclamation and seawall blocks at TPCWAE & TS4
 - Demolition of D-Wall at TPCWAE & TS4
- 2.4.6. For Contract no. HK/2010/06, the principal work activities in this reporting month included:
 - Nil
- 2.4.7. For Contract no. HY/2009/19, the principal work activity in this reporting month included:
 - Construction of Dolphin Cap
- For Contract no. HK/2012/08, the principal work activity in this reporting month included: 2.4.8.
 - ELS for box culvert La at Lung King Street
 - Installation of caisson seawall
 - Removal of rock armour
 - Filling
 - Sheet pilling
- 2.4.9. For Contract no. HY/2010/08, no principal work activities this reporting month.
 - Rock filling works

- Dredging works
- Seawall blocks installation
- Sheet piling works at outfall Q
- Installation of water tank
- 2.4.10. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

<u>Contract no. HK/2009/01 – Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC</u>

Rock trimming works

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East

- Works of covered walkway
- Backfilling works
- ABWF works at Section VIIIA
- D-Wall trimming and drainage works
- Demolition of Existing Wan Chai Ferry Pier

<u>Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon</u> Shelter Section)

- · Construction works of Est Ventilation Shaft
- Removal of temporary reclamation and seawall blocks at TPCWAE & TS4
- Demolition of D-Wall at TPCWAE & TS4

<u>Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass</u> <u>over MTR Tsuen Wan Line</u>

Nil

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

Construction of Dolphin Cap

<u>Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at</u> Wan Chai West

ELS for box culvert La at Lung King Street

Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

- Removal of rock armour
- Filling
- Sheet piling

Contract no. HY/2010/08 - Central - Wan Chai Bypass (CWB) - Tunnel (Slip Road 8)

- Rock filling works
- Dredging works
- Seawall blocks installation
- Sheet piling works at outfall Q
- Installation of water tank



3 Status of Regulatory Compliance

3.1 Status of Environmental Licensing and Permitting under the Project

3.1.1. A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in *Table 3.1*.

Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project

Permits and/or Licences	Reference No.	Issued Date	Status
Environmental Permit	EP-356/2009	30 Jul 2009	Valid
Environmental Permit	EP-364/2009	17 Aug 2009	Superseded
Environmental Permit	EP-364/2009/A	4 Aug 2010	Superseded
Environmental Permit	EP-364/2009/B	20 Sep 2012	Superseded
Environmental Permit	EP-364/2009/C	11 Jul 2014	Valid
Environmental Permit	EP-376/2009	13 Nov 2010	Valid
Further Environmental Permit	FEP-01/356/2009	18 Feb 2010	Surrendered
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	Valid
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	Valid
Further Environmental Permit	FEP-01/364/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-02/364/2009	21 Apr 2010	Valid
Further Environmental Permit	FEP-03/364/2009	12 Jul 2010	Surrendered
Further Environmental Permit	FEP-04/364/2009/A	14 Oct 2010	Surrendered
Further Environmental Permit	FEP-05/364/2009/A	15 Nov 2010	Valid
Further Environmental Permit	FEP-06/364/2009/A	22 Nov 2010	Valid
Further Environmental Permit	FEP-07/364/2009/B	20 Sep 2012	Valid
Further Environmental Permit	FEP-08/364/2009/A	15 Jun 2012	Valid
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	Valid
Further Environmental Permit	FEP-07/356/2009	26 July 2013	Valid
Further Environmental Permit	FEP-10/364/2009/B	26 July 2013	Valid
Further Environmental Permit	FEP-11/362/2009/B	2 May 2014	Valid

21

- 3.1.2. Due to the multi-contract nature of the Project, the status of permits and/or licences under the individual contract(s) are presented as below:
 - <u>Contract no. HK/2009/01 Wan Chai Development Phase II Central –Wanchai Bypass at HKCEC</u>
- 3.1.3. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2009/01 under FEP-02/356/2009 are shown in *Table 3.4* and *Table 3.5*.

Table 3.4 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/01

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental	FEP-02/356/2009	24 Mar 2010	N/A	Valid
Permit	FEP-02/364/2009	21 Apr 2010	N/A	Valid
Notification of Works Under APCO	313088	06 Jan 2010	N/A	Valid
Construction Noise Permit	GW-RS0765-14	30 Jul 2014	15 Aug 2014 to 14 Feb 2015	Valid
(CNP) for non-piling equipment	GW-RS0200-14	18 Mar 2014	21 Mar 2014 to 15 Sept 2014	Expired
equipment	GW-RS0317-14	7 Apr 2014	8 Apr 2014 to 7 Oct 2014	Valid
	GW-RS0362-14	17 Apr 2014	20 Apr 2014 to 8 Oct 2014	Valid
	GW-RS0381-14	8 Apr 2014	9 May 2014 to 11 Nov 2014	Valid
	GW-RS0435-14	30 Apr 2014	13 May 2014 to 12 Nov 2014	Valid
	GW-RS0437-14	2 May 2014	8 May 2014 to 7 Nov 2014	Valid
	GW-RS0451-14	5 May 2014	12 May 2014 to 11 Nov 2014	Valid
	GW-RS0462-14	17 Apr 2014	18 Apr 2014 to 17 Oct 2014	Valid
	GW-RS0498-14	22 May 2014	24 May 2014 to 22 Nov 2014	Replaced by GW-RS0875-14
	GW-RS0875-14	21 Aug 2014	23 Aug 2014 to 21 Feb 2015	Valid
Discharge Licence	WT00018110-2014	6 Jan 2014	31 Mar 2015	Valid



Waste Producer

Permits and/or **Issued Date** Valid Period/ Reference No. Status Licences **Expiry Date** WT00006220-2010 31 Mar 2015 18 Mar 2010 Valid WT00009641-2011 24 Jul 2011 31 Jul 2016 Valid Billing account under Waste 7010069 21 Jan 2010 N/A Valid Disposal Ordinance Registration as a Chemical WPN5213-134-C3585-01 21 Jan 2010 N/A Valid

Table 3.5 Summary of submission status under FEP-02/356/2009 Condition

EP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	13 Apr 2010
Condition 2.7	Works Schedule and Location Plan	8 Apr 2010
	Silt Curtain Deployment Plan (Rev. 5)	24 Aug 2012
Condition 2.8	Silt Curtain Deployment Plan (Rev. 4)	12 July 2012
Condition 2.6	Silt Curtain Deployment Plan (Rev. 3)	27 June 2012
	Silt Curtain Deployment Plan	19 Apr 2010
	Silt Screen Deployment Plan (Rev. 6)	20 Aug 2014
	Silt Screen Deployment Plan (Rev.5)	24 Jul 2013
Condition 2.9	Silt Screen Deployment Plan (Rev.4)	15 Nov 2012
	Silt Screen Deployment Plan	19 Apr 2010
	Supplementary Document on Silt Curtain and Silt Screen Deployment Plan	19 Jul 2010
Conditions 2.8 and 2.9	Report on Field Testing for Silt Curtain	26 Aug 2010
	Report on Field Testing for Silt Curtain (Rev. A)	15 Nov 2010
Condition 2.12(d)	Alternative Proposal on Concurrent Dredging for Sewage Pipeline and Cross Harbour Water Mains	15 Apr 2011
Condition 2.17	Noise Management Plan	23 Apr 2010



EP Condition	Submission	Date of Submission
Condition 2.18	Landscape Plan (Erection of Decorative Screen Hoarding along Construction Site around Hong Kong Exhibition and Convention Centre)	15 May 2010
	Landscape Plan (Night-time Lighting)	22 Oct 2010
	Landscape Plan (Rev. B)	15 Nov 2010
Condition 1.12	Notification of Commencement Date	20 Jun 2011
Condition 2.6 to 2.8	Management Organization, Works Schedule and Location Plan	18 May 2011
Condition 2.9	Silt Screen Deployment Plan	10 Jun 2011
Condition 2.18	Landscape Plan	31 Oct 2013

<u>Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East</u>

3.1.4. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2009/02 under FEP-03/356/2009 are shown in *Table 3.6* and *Table 3.7*.

Table 3.6 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/02

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	N/A	Valid
	FEP-01/364/2009	24 Mar 2010	N/A	Valid
Notification of Works Under APCO	313962	2 Feb 2010	N/A	Valid
	GW-RS0161-14	7 Mar 2014	11 Mar 2014 to 10 Sep 2014	Expired
	GW-RS0162-14	7 Mar 2014	20 Mar 2014 to 19 Sep 2014	Expired
Construction Noise Permit	GW-RS0233-14	21 Mar 2014	25 Mar 2014 to 24 Sep 2014	Expired
(CNP) for non-piling equipment	GW-RS0269-14	28 Mar 2014	7 Apr 2014 to 6 Oct 2014	Valid
	GW-RS0319-14	7 Apr 2014	18 Apr 2014 to 17 Oct 2014	Valid
	GW-RS0407-14	25 Apr 2014	28 Apr 2014 to 16 Oct 2014	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0421-14	30 Apr 2014	30 Apr 2014 to 15 Oct 2014	Valid
	GW-RS0460-14	9 May 2014	10 May 2014 to 9 Nov 2014	Valid
	GW-RS0491-14	16 May 2014	17 May 2014 to 16 Nov 2014	Valid
	GW-RS0494-14	16 May 2014	22 May 2014 to 21 Nov 2014	Valid
	GW-RS0482-14	13 May 2014	14 May 2014 to 6 Nov 2014	Valid
	GW-RS0461-14	9 May 2014	10 May 2014 to 9 Nov 2014	Valid
	GW-RS0422-14	30 Apr 2014	2 May 2014 to 16 Oct 2014	Valid
	GW-RS0515-14	26 May 2014	29 May 2014 to 25 Nov 2014	Valid
	GW-RE0565-14	30 May 2014	30 May 2014 to 29 Nov 2014	Valid
	GW-RS0637-14	26 Jun 2014	2 Jul 2014 to 25 Nov 2014	Valid
	GW-RS0742-14	25 Jul 2014	15 Aug 2014 to 14 Feb 2015	Valid
	GW-RS0745-14	25 Jul 2014	14 Aug 2014 to 13 Feb 2015	Valid
	GW-RS0840-14	18 Aug 2014	23 Aug 2014 to 12 Feb 2015	Valid
	GW-RS0889-14	29 Aug 2014	20 Sep 2014 to 19 Mar 2015	Valid
	GW-RS0910-14	29 Aug 2014	20 Sep 2014 to 19 Mar 2015	Valid
	GW-RS0965-14	12 Sep 2014	14 Sep 2014 to 11 Mar 2015	Valid
	GW-RS0970-14	12 Sep 2014	12 Sep 2014 to 9 Mar 2015	Valid
	GW-RS0946-14	10 Sep 2014	25 Sep 2014 to 24 Mar 2015	Valid
Discharge Licence	WT00006249-2010	22 Mar 2010	31 Mar 2015	Valid



Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	WT00006436-2010	15 Apr 2010	30 Apr 2015	Valid
	WT00006673-2010	14 May 2010	31 Mar 2015	Cancelled
	WT00006757-2010	28 May 2010	31 May 2015	Valid
	WT00007129-2010	28 July 2010	31 Jul 2015	Valid
	WT00008982-2011	26 Apr 2011	30 April 2016	Valid
	WT00009691-2011	1 Aug 2011	31 July 2016	Valid
Billing Account under Waste Disposal Ordinance (Land)	7010255	10 Feb 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance (Marine)	7011496	6 Oct 2010	N/A	Valid
Registration as Chemical Waste Producer (Wan Chai)	WPN5213-135-C3 593-01	10 Mar 2010	N/A	Valid
Registration as Chemical Waste Producer (TKO 137)	WPN5213-839-C3 593-02	22 Sep 2010	N/A	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/15-046	24 Jun 2014	1 Jul 2014 to 31 Dec 2014	Valid
Dumping Permit (Type 2 – Confined Marine Disposal)	EP/MD/15-089	14 Aug 2014	23 Aug 2014 to 22 Sep 2014	Expired
	EP/MD/15-116	19 Sep 2014	23 Sep 2014 to 22 Oct 2014	Valid

Table 3.7 Summary of submission status under FEP-03/356/2009 Condition

EP Condition	Submission	Date of Submission
Condition 1.12	Commencement Date of Construction of Marine Works	8 April 2010
Condition 2.6	Management Organization of Main Construction Companies	10 April 2010
Condition 2.7	Works Schedule and Location Plans	8 April 2010
	Silt Curtain Deployment Plan (Revision A)	20 April 2010
	Silt Curtain Deployment Plan (Revision B)	25 May 2010
	Silt Curtain Deployment Plan (Revision C)	14 Jun 2010
Condition 2.8	Silt Curtain Deployment Plan (Revision H)	15 Feb 2011
Condition 2.8	Silt Curtain Deployment Plan (Revision I)	17 Nov 2011
	Silt Curtain Deployment Plan (Revision J)	15 Feb 2012
	Silt Curtain Deployment Plan (Revision K)	3 May 2012
	Silt Curtain Deployment Plan (Revision L)	25 Oct 2012



EP Condition	Submission	Date of Submission
	Silt Curtain Deployment Plan (Revision M)	30 Nov 2012
	Silt Screen Deployment Plan	21 April 2010
0	Supplementary Information for Existing WSD Salt Water Intakes at Quarry Bay and Sai Wan Ho	5 Oct 2010
Condition 2.9	Silt Screen Deployment Plan (Revision B)	15 Feb 2012
	Silt Screen Deployment Plan (Revision C)	3 May 2012
	Silt Screen Deployment Plan (Revision D)	10 Dec 2012
Condition 2.17	Noise Management Plan	6 May 2010
	Landscape Plan (Decorative Screen Hoarding)	11 May 2010
Condition 2.19	Landscape Plan (Control of Night Time Lighting)	2 June 2010
Condition 2.18	Landscape Plan (Combined Version)	20 July 2011
	Landscape Plan (Combined Version)	5 Aug 2011
	Acknowledge of Submission	22 Aug 2011

<u>Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)</u>

3.1.5. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2009/15 under EP-356/2009 are shown in *Table* 3.8 and *Table* 3.9.

Table 3.8 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/15

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	N/A	Valid
Notification of Works Under APCO	321822	24 Sep 2010	N/A	Valid
Construction Noise Permit (CNP) for concreting works at Eastern Breakwater of CBTS	GW-RS0552-14	30 May 2014	1 Jun 2014 to 26 Nov 2014	Valid
Construction Noise Permit (CNP) for D-wall cutting and seawall removal works at TS4/ME4	GW-RS0721-14	16 Jul 2014	18 Jul 2014 to 15 Jan 2015	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Construction Noise Permit (CNP) for maintenance dredging	GW-RS0368-14	22 Apr 2014	1 May 2014 to 31 Oct 2014	Valid
Construction Noise Permit (CNP) for P3 Mooring	GW-RS0191-14	12 Mar 2014	12 Mar 2014 to 11 Sep 2014	Expired
Construction Noise Permit (CNP) for reclamation and SI works at TPCWAW	GW-RS0944-14	8 Sep 2014	8 Sep 2014 to 7 Mar 2015	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C116 9-35	15 Nov 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance	7011553	30 Sep 2010	27 Sep 2010 to 27 Jan 2016	Valid
Billing Account under Waste Disposal Ordinance (Dumping by Vessel)	7011761	30 Jun 2014	17 Jul 2014 to 16 Oct 2014	Expired
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/15-063	16 Jul 2014	28 Jul 2014 to 27 Jan 2015	Valid
Dumping Permit (Type 1 – Open Sea Disposal(Dedicated Site) and Type 2 – Confined Marine Disposal)	EP/MD/15-085	12 Aug 2014	15 Aug 2014 to 14 Sep 2014	Expired

Table 3.9 Summary of submission status under FEP-04/356/2009 Condition

FEP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	30 Sep 2010
	Amendment for Management Organization of Main Construction Companies	16 May 2011
Condition 2.7	Works Schedule and Location Plans	27 Oct 2010
	Amendment for Works Schedule and Location Plans	12 Nov 2010
Condition 2.8	Silt Curtain Deployment Plan	30 Nov 2010
	Amendment for Silt Curtain Deployment Plan	24 Feb 2011
	Amendment for Silt Curtain Deployment Plan	11 May 2011
	Amendment for Silt Curtain Deployment Plan	11 Sep 2012
	Amendment for Silt Curtain Deployment Plan	30 Oct 2012
Condition 2.9	Silt Screen Deployment Plan	19 Oct 2010
	Amendment for Silt Screen Deployment Plan	18 Feb 2011
	Amendment for Silt Screen Deployment Plan	15 Jun 2011
Condition 2.18	Proposal for the Removal of Odorous Sediment and Slime	13 Jan 2011
	Amendment for Proposal for the Removal of Odorous Sediment and Slime	8 Mar 2011
	Amendment for Proposal for the Removal of Odorous Sediment and Slime	2 Aug 2011
Condition 2.21	Landscape Plan	18 Feb 2011

Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

FEP Condition	Submission	Date of Submission
Condition 2.23	Noise Management Plan	20 Oct 2010
Condition 2.23	Amendment for Noise Management Plan	27 Jan 2011

3.1.6. Implementation status of the recommended mitigation measures during this reporting period is presented in *Appendix 3.1*.

<u>Contract no. HK/2010/06 – Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line</u>

3.1.7. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2010/06 under EP-356/2009 is shown in *Table* 3.10 and *Table* 3.11.

Table 3.10 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2010/06

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	N/A	Valid
ruttiei Environmentai remit	FEP-08/364//2009/A	15 June 2012	N/A	Valid
Notification of Works Under APCO	326344	18 Jan 2011	N/A	Valid
Construction Noise Permit (CNP) for piling equipment	Nil	Nil	Nil	Nil
Billing Account under Waste Disposal Ordinance	7012338	16 Feb 2011	N/A	Valid

Table 3.11 Summary of submission status under EP-356/2009 and FEP-05/356/2009 Condition

EP Condition	Submission	Date of Submission
Condition 2.23	Noise Management Plan	11 March 2011
Condition 2.6	Management Organization of Main Construction 29 April 2013 Companies	
Condition 2.7	Works Schedule and Location Plans 11 March 2011	
Condition 2.8	Revised Silt Curtain Deployment Plan 31 August 2011	
	Revised Silt Curtain Deployment Plan 22 October 2012	
	Revised Silt Curtain Deployment Plan 26 November 2012	
	Revised Silt Curtain Deployment Plan	28 January 2013
Condition 2.9	Silt Screen Deployment Plan 11 April 2011	

Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

3.1.8. Summary of the current status on licences and/or permits on environmental protection pertinent for contract no. HY/2009/19 is shown in *Table 3.12*.

<u>Table 3.12</u> Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19

Permit / Licence / Notification / Approval	Reference No.	Issued Date	Valid Period / Expiry date	Status
Further Environmental Permit	FEP-07/364/2009/B	20 Sep 2012	Granted	Valid
Notification of Works Under APCO	326160	24 Jan 2011	Notified	Valid
Construction Noise Permit (CNP) (For Portion Vi Marine)	GW-RS10073-14	06-Feb-14	02-Aug-14	Cancelled
	GW-RS0507-14	23-May-14	14-Nov-14	Valid
Discharge License (Sea)	WT00010865-2011	03 Nov 2011	30-Nov-16	Valid
C&D Waste Disposal	7012306	10 Feb 2011	Registered	-
Vessel Disposal	7013285	21 July 2011	Registered	-
Registration as Chemical Waste Producer	5213-151-C3654-01	24 Mar 2011	Registered	-



<u>Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West</u>

3.1.9. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2012/08 under EP-356/2009 are shown in *Table 3.13* and *Table 3.14*.

<u>Table 3.1</u>3 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2012/08

ΠΚ/2012/06				
Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	N/A	Valid
Notification of Works Under APCO	355439	4 Feb 2013	N/A	Valid
Registration as a Chemical Waste Producer	5213-134-C3790-01	8 Mar 2013	N/A	Valid
Billing Account under Waste Disposal Ordinance	7016883	18 Feb 2013	18 Jul 2017	Valid
Water Discharge Licence	WT00018223-2014	28 Jan 2014	31 Jan 2019	Valid
Construction Noise Permit	GW-RS0193-14	13 Mar 2014	27 Mar 2014 to 26 Sep 2014	Expired
	GW-RS0232-14	21 Mar 2014	23 Mar 2014 to 20 Sep 2014	Expired
	GW-RS0257-14	26 Mar 2014	28 Mar 2014 to 25 Sep 2014	Expired
	GW-RS0293-14	1 Apr 2014	1 Apr 2014 to 30 Sep 2014	Valid
	GW-RS0966-14	12 Sep 2014	27 Sep 2014 to 26 Mar 2015	Valid
	GW-RS0930-14	8 Sep 2014	10 Sep 2014 to 8 Mar 2015	Valid
	GW-RS0919-14	5 Sep 2014	7 Sep 2014 to 4 Mar 2015	Valid
	PP-RS0023-14	18 Sep 2014	20 Sep 2014 to 17 Mar 2015	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/15-039	1 Jul 2014	31 Dec 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/15-087	11 Aug 2014	24 Sep 2014	Expired
	EP/MD/15-110	4 Sep 2014	24 Oct 2014	Valid

Table 3.14 Summary of submission status under EP-356/2009 and FEP-06/356/2009 Condition

FEP Condition	Submission	Date of Submission
Condition 2.8	Silt Curtain Deployment Plan (Rev. 3)	Submitted on 25 Nov 2013 was returned to CSLJV by EPD.
Condition 2.9	Silt Screen Deployment Plan (Rev. 2)	Generally in order as commented by EPD on 19 Sep 2013
Condition 2.23	Noise Management Plan (Rev. 2)	Generally in order as commented by EPD on 15 Aug 2013
Condition 2.24	Landscape Plan (Rev. 3)	Generally in order as commented by EPD on 31 Oct 2013

Contract no. HY/2010/08 - Central - Wan Chai Bypass (CWB) - Tunnel (Slip Road 8)

3.1.10. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2010/08 under EP-356/2009 are shown in Table 3.15 and *Table 3.16*.

Table 3.15 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2010/08

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-07/356/2009	26 Jul 2013	NA	Valid
	FEP-10/364/2009/B	26 Jul 2013	NA	Valid
Notification of Works Under APCO	357176	2 Apr 2013	NIL	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C11 69-44	27 Mar 2013	NIL	Valid
Billing Account under Waste Disposal Ordinance	7017170	27 Mar 2013	NIL	Valid
Water Discharge Licence	WT00016561-2013	9 Jul 2013	31 Jul 2018	Valid
Construction Noise Permit	GW-RS0701-14	4 Jul 2014	31 Dec 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/15-033	9 Jun 2014	9 Dec 2014	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/15-082	15 Aug 2014	14 Sep 2014	Expired

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	EP/MD/15-106	15 Sep 2014	14 Oct 2014	Valid

Table 3.16 Summary of submission status under EP-356/2009 and FEP-07/356/2009 Condition

FEP Condition	Submission Date of Submission	
Condition 2.8	Silt Curtain Deployment Plan (rev02) 26 Aug 2014	
Condition 2.9	Silt Screen Deployment Plan (rev01) 29 Nov 2013	
Condition 2.23	Noise Management Plan (rev02) 25 Mar 2014	
Condition 2.24	Landscape Plant (rev04)	23 Sep 2014



Monitoring Requirements

4.1 Noise Monitoring

NOISE MONITORING STATIONS

4.1.1. The noise monitoring stations for the Project are listed and shown in *Table 4.1* and *Figure 4.1*. *Appendix 4.1* shows the established Action/Limit Levels for the monitoring works.

Table 4.1 Noise Monitoring Station

Station	Description	
M1a	Harbour Road Sports Centre	
M2b	Noon Gun Area	
МЗа	Tung Lo Wan Fire Station	
M4b	Victoria Centre	
M5b	City Garden	
M6	HK Baptist Church Henrietta Secondary School	

REAL-TIME NOISE MONITORING STATIONS

- 4.1.2. The real-time noise monitoring stations for the Project are listed and shown in *Table 4.2* and *Figure 4.1*. *Appendix 4.1* shows the established Action/Limit Levels for the monitoring works.
- 4.1.3. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 4.1.4. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at RTN1 -FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

Table 4.2 Real Time Noise Monitoring Station

District	Station	Description
North Point	RTN2	Oil Street Community Liaison Centre
North Point	RTN2a	Electric Centre

- Real time noise monitoring results and graphical presentation during night time period are for information only.
- RTN2 had been relocated to RTN2a since 5 Oct 2012

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

4.1.5. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (Leq). Leq (30 minutes) shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time





- periods, $L_{eq (5 \text{ minutes})}$ shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L10 and L90 shall also be obtained for reference.
- 4.1.6. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:
 - One set of measurements between 0700 and 1900 hours on normal weekdays.
- 4.1.7. If construction works are extended to include works during the hours of 1900 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

MONITORING EQUIPMENT

- 4.1.8. As referred to in the Technical Memorandum ™ issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.
- 4.1.9. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

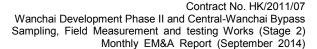
4.2 Air Monitoring

AIR QUALITY MONITORING STATIONS

4.2.1. The air monitoring stations for the Project are listed and shown in *Table 4.3* and *Figure 4.1*. *Appendix 4.1* shows the established Action/Limit Levels for the monitoring works.

Table 4.3 Air Monitoring Station

Station ID	Monitoring Location	Description
CMA1b	Oil Street Community Liaison Centre	North Point
CMA2a	Causeway Bay Community Centre	Causeway Bay
CMA3a	CWB PRE Site Office *	Causeway Bay
CMA4a	Society for the Prevention of Cruelty to Animals	Wan Chai
CMA5a	Children Playgrounds opposite to Pedestrian Plaza	Wan Chai
CMA6a	WDII PRE Site Office * Wan Chai	



Remarks: As per the ENPC meeting in January 2011, the monitoring stations CMA3a – Future CWB site office at Wanchai Waterfront Promenade and CMA6a – Future AECOM site office at Work Area were renamed as remark.

AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.
- 4.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.
- 4.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

- 4.2.5. High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:
 - 0.6 1.7 m3 per minute adjustable flow range;
 - equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
 - installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
 - capable of providing a minimum exposed area of 406 cm2;
 - flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
 - equipped with a shelter to protect the filter and sampler;
 - incorporated with an electronic mass flow rate controller or other equivalent devices;
 - equipped with a flow recorder for continuous monitoring;
 - provided with a peaked roof inlet;
 - · incorporated with a manometer;
 - able to hold and seal the filter paper to the sampler housing at horizontal position;
 - easily changeable filter; and
 - capable of operating continuously for a 24-hour period.
- 4.2.6. Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The concern parties such as IEC shall properly document the calibration data for future reference. All the data should be converted into standard temperature and pressure condition.



LABORATORY MEASUREMENT / ANALYSIS

- 4.2.7. A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.
- 4.2.8. An alternative non-HOKLAS accredited laboratory was set-up for carrying out the laboratory analysis, the laboratory equipment was approved by the ER on 8 February 2011 and the measurement procedures were witnessed by the IEC. Any measurement performed by the laboratory was be demonstrated to the satisfaction of the ER and IEC. IEC shall regularly audit to the measurement performed by the laboratory to ensure the accuracy of measurement results.
- 4.2.9. Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24-hours and be pre-weighed before use for the sampling.
- 4.2.10. After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.
- 4.2.11. All the collected samples shall be kept in a good condition for 6 months before disposal.

IMPACT MONITORING FOR ODOUR PATROL

- 4.2.12. Odour patrols along the shorelines of Causeway Bay Typhoon Shelter and ex-Wan Chai Public Cargo Working Area when there is temporary reclamation in Causeway Bay Typhoon Shelter and/or in the ex-Wan Chai Public Cargo Working Area, or when there is dredging of the odorous sediment and slime at the south-western corner of the Causeway Bay Typhoon Shelter. Odour patrols will be carried out at bi-weekly intervals during July, August and September by a qualified person of the ET who shall:
 - be at least 16 years of age;
 - be free from any respiratory illnesses; and
 - not be allowed to smoke, eat, drink (except water) or use chewing gum or sweets 30 min
 - before and during odour patrol
- 4.2.13. Odour patrol shall be conducted by independent trained personnel / competent persons patrolling and sniffing around the shore as shown in <u>Figure 4.1</u> to detect any odour at the concerned hours (afternoon is preferred for higher daily temperature).
- 4.2.14. The qualified person will use the nose (olfactory sensor) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance will be identified.
- 4.2.15. The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:



- 0 Not detected. No odour perceived or an odour so weak that it cannot be easily characterized or described;
- 1 Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 Moderate Identifiable odour, and moderate chance to have odour nuisance;
- 3 Strong Identifiable, likely to have odour nuisance;
- 4 Extreme Severe odour, and unacceptable odour level.
- 4.2.16. The findings including odour intensity, odour nature and possible odour sources, and also the local wind speed and direction at each location will be recorded. In addition, some relevant meteorological and tidal data such as daily average temperature, and daily average humidity, on that surveyed day will be obtained from the Hong Kong Observatory Station for reference. The Action and Limit levels for odour patrol are shown in <u>Appendix 6.1.</u>
- 4.2.17. The qualified odour patrol member has individual n-butanol thresholds complied with the requirement of European Standard Method of Air Quality – Determination of Odour Concentration by Dynamic Olfactometry (EN13725) in the range of 20 to 80 ppb.

4.3 Water Quality Monitoring

- 4.3.1. The EIA Report has identified that the key water quality impact would be associated with the dredging works during the construction phase. Marine water quality monitoring for dissolved oxygen (DO), suspended solid (SS) and turbidity is therefore recommended to be carried out at selected WSD flushing water intakes. The impact monitoring should be carried out during the proposed dredging works to ensure the compliance with the water quality standards.
- 4.3.2. The updated EM&A Manual for EP-356/2009 (Version in March 2011) is approval by EPD on 29 April 2011. As such, the Action Level and Limit Level for the wet season (April – September) will be effected and applied to the water quality monitoring data from 30 April 2011.

Water Quality Monitoring Stations

4.3.3. It is proposed to monitor the water quality at 3 WSD salt water intakes and 7 cooling water intakes along the seafront of the Victoria Harbour. The proposed water quality monitoring stations of the Project are shown in *Table 4.4* and *Figure 4.1*. *Appendix 4.1* shows the established Action/Limit Levels for the monitoring works.

Table 4.4 Marine Water Quality Stations for Water Quality Monitoring

Station Ref.	Location	Easting	Northing
WSD Salt Water Int	WSD Salt Water Intake		
WSD9	Tai Wan	837921.0	818330.0
WSD17	Quarry Bay	839790.3	817032.2
WSD19	Sheung Wan	833415.0	816771.0
Cooling Water Inta	Cooling Water Intake		
C1	HKCEC Extension	835885.6	816223.0
C7	Windsor House	837193.7	816150.0
P1	HKCEC Phase I	835774.7	816179.4
P3	The Academy of performing Arts	835824.6	816212.0



Station Ref.	Location	Easting	Northing
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/CWB	836268.0	816020.0

WATER QUALITY PARAMETERS

- 4.3.4. Monitoring of dissolved oxygen (DO), turbidity and suspended solids (SS) shall be carried out at WSD flushing water intakes and cooling water intakes. DO and Turbidity are measured in-situ while SS is determined in laboratory.
- 4.3.5. In association with the water quality parameters, other relevant data shall also be measured, such as monitoring location/position, time, sampling depth, water temperature, pH, salinity, dissolved oxygen (DO) saturation, weather conditions, sea conditions, tidal stage, and any special phenomena and work underway at the construction site etc.

SAMPLING PROCEDURES AND MONITORING EQUIPMENT

4.3.6. The interval between two sets of monitoring should not be less than 36 hours except where there are exceedances of Action and/or Limit Levels, in which case the monitoring frequency will be increased. *Table 4.5* shows the proposed monitoring frequency and water quality parameters. Duplicate in-situ measurements and water sampling should be carried out in each sampling event. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.

Table 4.5 Marine Water Quality Monitoring Frequency and Parameters

Activities	Monitoring Frequency ¹	Parameters ²
During the 4-week baseline monitoring period	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
During marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
After completion of marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity

Notes:

- For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.
- 2. Turbidity should be measured in situ whereas SS should be determined by laboratory.

DISSOLVED OXYGEN AND TEMPERATURE MEASURING EQUIPMENT

- 4.3.7. The instrument should be a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and use a DC power source. It should be capable of measuring:
 - a dissolved oxygen level in the range of 0-20 mg/l and 0-200% saturation

- a temperature of 0-45 degree Celsius
- 4.3.8. It should have a membrane electrode with automatic temperature compensation complete with a cable. Sufficient stocks of spare electrodes and cables should be available for replacement where necessary. (e.g. YSI model 59 meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).
- 4.3.9. Should salinity compensation not be build-in in the DO equipment, in-situ salinity shall be measured to calibrate the DO equipment prior to each DO measurement.

TURBIDITY MEASUREMENT INSTRUMENT

4.3.10. The instrument should be a portable, weatherproof turbidity-measuring instrument complete with comprehensive operation manual. The equipment should use a DC power source. It should have a photoelectric sensor capable of measuring turbidity between 0-1000 NTU and be complete with a cable (e.g. Hach model 2100P or an approved similar instrument).

SAMPLER

4.3.11. A water sampler comprises a transparent PVC cylinder, with a capacity of not less than 2 litres, and can be effectively sealed with latex cups at both ends. The sampler should have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth (e.g. Kahlsico Water Sampler or an approved similar instrument).

SAMPLE CONTAINER AND STORAGE

4.3.12. Water samples for suspended solids measurement should be collected in high-density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to ALS Technichem (HK) Pty Ltd. as soon as possible after collection for analysis.

WATER DEPTH DETECTOR

4.3.13. A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station. This unit can either be handheld or affixed to the bottom of the workboat, if the same vessel is to be used throughout the monitoring programme.

SALINITY

4.3.14. A portable salinometer capable of measuring salinity in the range of 0-40 ppt shall be provided for measuring salinity of the water at each of monitoring location.

MONITORING POSITION EQUIPMENT

4.3.15. A hand-held or boat-fixed type digital Global Positioning System (GPS) with waypoint bearing indication or other equivalent instrument of similar accuracy shall be provided and used during monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

CALIBRATION OF IN-SITU INSTRUMENTS

4.3.16. All in-situ monitoring instrument shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or equivalent before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Responses of sensors

Lam Geotechnics Limited

- and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.
- 4.3.17. For the on site calibration of field equipment by the ET, the BS 127:1993, "Guide to Field and on-site test methods for the analysis of waters" should be observed.
- 4.3.18. Sufficient stocks of spare parts should be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.
- 4.3.19. Current calibration certificates of equipments are presented in Appendix 4.2.

LABORATORY MEASUREMENT / ANALYSIS

4.3.20. Analysis of suspended solids has been carried out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd. Water samples of about 1L shall be collected at the monitoring stations for carrying out the laboratory SS determination. The SS determination work shall start within 24 hours after collection of the water samples. The SS determination shall follow APHA 19ed or equivalent methods subject to the approval of IEC and EPD.

ENHANCED WATER QUALITY MONITORING IN THE EX-WAN CHAI PUBLIC CARGO WORKING AREA AND THE CAUSEWAY BAY TYPHOON SHELTER

- 4.3.21. The enhanced water quality monitoring and audit programme is to avoid aggravation of odour nuisance from seawater arising from temporary reclamation in the ex-Wan Chai Public Cargo Working Area and the Causeway Bay Typhoon Shelter.
- 4.3.22. Dissolved oxygen monitoring at the intakes C6 and C7 in Causeway Bay Typhoon Shelter when there is temporary reclamation in Causeway Bay Typhoon Shelter and at the south-western and south-eastern corners of the ex-Wan Chai Public Cargo Working Area. The proposed water quality monitoring stations of the Project are shown in *Table 4.6* and *Figure 4.1*.

Table 4.6 Marine Water Quality Stations for Enhanced Water Quality Monitoring

Station	Location
C6	Excelsior Hotel
C7	Windsor House
Ex-WPCWA-SW	South-western of the ex-Wan Chai Public Cargo Working Area
Ex-WPCWA-SE	South-eastern of the ex-Wan Chai Public Cargo Working Area

4.3.23. The monitoring of dissolved oxygen are to be carried out 3 days per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be equal to or less than 3m, only the mid-depth will be monitored).



DAILY SS MONITORING AND 24 HOURS TURBIDITY MONITORING SYSTEM

- 4.3.24. During dredging of the sediment at the south-western corner of the Causeway Bay Typhoon Shelter, daily monitoring of suspended solids and 24 hour monitoring of turbidity at the cooling water intakes (C6 and C7) shall be conducted.
- 4.3.25. The 24 hours monitoring of turbidty at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data logger which is capable of data capturing at every 5 minutes. The data sahll be downloaded daily and compared with the Action and Limit level determined during the baseline water quality monitoring at the cooling water intake locations.

$\frac{\text{ADDITIONAL DISSOVLED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE}}{\text{FLOW}}$

- 4.3.26. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.
- 4.3.27. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013
- 4.3.28. The monitoring of dissolved oxygen are to be carried out once per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be equal to or less than 3m, only the mid-depth will be monitored).



Lam Geotechnics Limited

5. Monitoring Results

- 5.0.1. The environmental monitoring will be implemented based on the division of works areas of each designed project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in <u>Figure 2.1</u> and <u>Figure 4.1</u>. The monitoring results are presented in according to the Individual Contract(s).
- 5.0.2. In the reporting month, the concurrent contracts are as follows:
 - Contract no. HK/2009/01 Wan Chai Development Phase II Central-Wan Chai Bypass at Hong Kong Convention and Exhibition Centre; and
 - Contract no. HK/2009/02 Wan Chai Development Phase II Central-Wan Chai Bypass at Wan Chai East
 - Contract no. HY/2009/15 Central-Wanchai Bypass Tunnel (Causeway Bay Typhoon Shelter Section)
 - Contract no. HK/2010/06 Wan Chai Development Phase II Central-Wan Chai Bypass over MTR Tsuen Wan Line
 - Contract no. HY/2009/19- Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link
 - Contract no. HK/2012/08 Wan Chai Development Phase II Central- Wan Chai Bypass at Wan Chai West
 - Contract no. HY/2010/08 Central- Wanchai Bypass Tunnel (Slip Road 8 Section)
- 5.0.3. The environment monitoring schedules for reporting month and coming month are presented in *Appendix 5.1*.

5.1 Noise Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II - Central -Wanchai Bypass at HKCEC, Contract no. HK/2009/02 - Wan Chai Development Phase II - Central - Wan Chai Bypass at WanChai East and Contract no. HK/2010/06 Wan Chai Development Phase II - Central-Wan Chai Bypass over MTR Tsuen Wan Line

5.1.1. The proposed division of noise monitoring stations are summarized in *Table 5.2* below.

Table 5.2 Noise Monitoring Station for Contract nos. HK/2009/01, HK/2009/02 and HK/2010/06

Station	Description
M1a	Harbour Road Sports Centre

- 5.1.2. No action or limit level exceedance was recorded in this reporting month.
- 5.1.3. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in <u>Appendix</u> <u>5.2.</u>

<u>Contract no. HY/2009/15 - Central-Wanchai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)</u>

5.1.4. The noise monitoring for HY/2009/15 was commenced on 10 November 2010. The proposed division of noise monitoring stations are summarized in *Table 5.3* below.

Table 5.3 Noise Monitoring Station for Contract no. HY/2009/15

Station	Description	
M2b	Noon Gun Area	
МЗа	Tung Lo Wan Fire Station	

- 5.1.5. No action or limit level exceedance was recorded in this reporting month.
- 5.4.1. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in <u>Appendix</u> <u>5.2.</u>

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.1.6. The proposed division of noise monitoring stations are summarized in *Table 5.4* below.

Table 5.4 Noise Monitoring Station for Contract no. HY/2009/19

Station	Description
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

- 5.1.7. No action or limit level exceedance was recorded in this reporting month.
- 5.1.8. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in <u>Appendix</u> <u>5.2.</u>

Contract no. HY/2010/08-Central-Wanchi Bypass Tunnel (Slip Road 8 Section)

5.1.9. The proposed division of noise monitoring stations are summarized in **Table 5.5** below.



Table 5.5 Noise Monitoring Station for Contract no. HY/2010/08

Station	Description	
M2b	Noon Gun Area	
МЗа	Tung Lo Wan Fire Station	

- 5.1.10. No action or limit level exceedance was recorded in this reporting month.
- 5.1.11. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in <u>Appendix</u> 5.2.

5.2 Real-time Noise Monitoring

Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- 5.2.1 As the marine-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- 5.2.2 The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 5.2.3 The major work activities for Contract no. HY/2009/11 was confirmed substantial complete by RSS on 4 January 2012. The construction site was handed over to contractor HY/2009/19 on 31 December 2011 and the FEP-01/356/2009 was surrendered on 22 Oct 2012.
- 5.2.4 Real-time noise monitoring at FEHD Hong Kong Transport Section Whitfield Depot commenced external wall renovation since 1 June 2012

Table 5.6 Real Time Noise Monitoring Station for Contract no. HY/2009/19

District	Station	Description
North Point	RTN2a	Electric Centre

- Real time noise monitoring results and graphical presentation during night time period are for information only.
- RTN2 had been relocated to RTN2a since 5 Oct 2012
- RTN1 monitoring had been finished on 28 Nov 2012



- 5.2.5 Limit level exceedances were recorded at RTN2a-Electric Centre during daytime on 28 August 2014 and 12 September 2014 in the reporting month. After checking with Contractor of HY/2009/19, bored piling and socket piling were conducted at the concerned location on 28 August 2014 and 12 September 2014 during the recorded period. Mitigation measures including the use of noise barrier and noise blanket were implemented by Contractor. In view of the exceedances are non-continuous, the exceedances are considered to be non-project related and contributed by nearby non CWB Project works and nearby IEC traffic.
- 5.2.6 Details of real time noise monitoring results and graphical presentation can be referred to **Appendix 5.5.**

5.3 Air Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II - Central -Wanchai Bypass at HKCEC

5.3.1. Air monitoring was commenced on 1 April 2011 in response to the commencement of the land-filling work for Contract no. HK/2009/01. The proposed divisions of air monitoring stations are summarized in *Table 5.7* below. No exceedance was recorded in the reporting month.

Table 5.7 Air Monitoring Stations for Contract no. HK/2009/01

Station	Description
CMA5a	Children Playgrounds opposite to Pedestrian Plaza
CMA6a	WDII PRE Site Office

5.3.1 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in *Appendix 5.3*.

<u>Contract no. HK/2009/02 - Wan Chai Development Phase II - Central - Wan Chai Bypass at</u> WanChai East

5.3.2. Air monitoring was commenced in mid-January 2011 for the land-filling work for Contract no. HK/2009/02. The proposed division of air monitoring stations are summarized in *Table 5.8* below. No exceedance was recorded in the reporting month.

Table 5.8 Air Monitoring Station for Contract no. HK/2009/02

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

5.3.3. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in *Appendix 5.3*.



<u>Contract no. HY/2009/15 - Central-Wanchai Bypass - Tunnel (Causeway Bay Typhoon</u> Shelter Section)

5.3.4. Air monitoring was commenced on 15 March 2011 for the land filling work for Contract no. HY/2009/15. The proposed division of air monitoring stations are summarized in *Table 5.9* below.

Table 5.9 Air Monitoring Station for Contract no. HY/2009/15

Station	Description
CMA3a	CWB PRE Site Office

- 5.3.5. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in *Appendix 5.3*.
- 5.3.6. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 2, 18 and 29 September 2014 at the concerned hours (afternoon for higher daily temperature).
- 5.3.7. No Action and Limit Level was recorded during this reporting month. The details of the odour patrol results and meteorological conditions and on the date of odour patrol are shown in Appendix 5.3.

Contract no. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.3.8. The proposed division of air monitoring stations are summarized in Table 5.10 below. No exceedance was recorded in the reporting month.

Table 5.10 Air Monitoring Stations for Contract no. HY/2009/19

Station	Description
CMA1b	Oil Street Site Office
CMA2a	Causeway Bay Community Centre

5.3.9. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in *Appendix 5.3*.

Contract no. HK/2012/08- Wan Chai Development Phase II – Central-Wan Chai Bypass at Wan Chai West

5.3.10. The proposed division of air monitoring stations are summarized in Table 5.11 below. No exceedance was recorded in the reporting month.

Table 5.11 Air Monitoring Stations for Contract no. HY/2012/08

Description

47 EP-356/2009

Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

CMA5a	Children Playgrounds opposite to Pedestrian Plaza
-------	---

5.3.11. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in <u>Appendix 5.3</u>.

Contract no. HY/2010/08- Central-Wanchai Bypass Tunnel (Slip Road 8 Section)

5.3.12. The proposed division of air monitoring stations are summarized in Table 5.12 below. No exceedance was recorded in the reporting month.

Table 5.12 Air Monitoring Stations for Contract no. HY/2009/19

Station	Description
CMA3a	CWB PRE Site Office

5.3.13. No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in <u>Appendix 5.3</u>.

5.4 Water Monitoring Results.

- 5.4.1. As confirmed by WDII RSS and IEC, the cross harbor dredging works have completed since 16 March 2012 while the dredging works for submarine outfall pipeline has completed since 29 November 2011, considering current construction stage and dredging Scenario, the water quality monitoring at stations WSD9 and WSD17 was temporarily suspended since 8 September 2014 flood tide.
- 5.4.2. Action and Limit level of water quality monitoring was transited from dry season to wet season from 1 April 2014.
- 5.4.3. With respect to the switching over of cooling water intake location, the water quality monitoring at the relocated intake station RW21-P789 under HK/2009/02 was commenced since 29 July 2013 and monitoring station C5e and C5w were temporarily suspended and switched over to monitoring station RW21-P789 on 29 July 2013 due to suspension of pump house operation.
- 5.4.4. As advised by WDII RSS, the water quality monitoring for WSD21 pump station with respect to HK/2009/02 was switched over to the relocated location since 12 March 2014. According to the EM&A Manual, the water quality monitoring station WSD21 was relocated to station RW21-P789 and the water quality monitoring at station WSD21 was temporarily suspended since 12 March 2014.
- 5.4.5. With respect to the commencement of marine dredging works under contract HY/2010/08. The respective water quality monitoring station C7 were associated with HY/2009/15 and HY/2010/08.
- 5.4.6. With respect to the commencement of marine dredging works under contract HK/2012/08/ The respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08 Since September 2013.



5.4.7. WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013.

Lam Geotechnics Limited

- 5.4.8. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 5.4.9. As confirmed by CWB RSS, the marine pilling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.
- 5.4.10. RSS confirmed that all Type III Dredging works under HK/2009/01 have been completed since Oct 2012.
- 5.4.11. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.
- 5.4.12. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.
- 5.4.13. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- 5.4.14. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others remain unchanged.
- 5.4.15. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration. Water quality monitoring at WSD10 and WSD15 was temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;



- 5.4.16. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and it was completed on 6 February 2012.
- 5.4.17. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 5.4.18. Water quality monitoring at C8 and C9 have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 12.

Table 5.13 Water Monitoring Stations for contracts with respect to remaining DP3 work areas after the completion of DP5 & DP6 in 2012 and intake diversion in 2013

Contract No.	Remaining DP3 and work area(s)	Relevant Water Monitoring Stations,	Division of WQM w.r.t tentative works commenced / to be commenced
HK/2009/01	WCR3	C1 ¹	Apr 2013
HK/2009/02	WCR3, WCR4, TWCR4	RW21-P789 ¹	Apr 2013
HK/2012/08	HKCEC2W, HKCEC2E	WSD19, P1 ³ , P3 ³ , P4 ³ , P5 ³	Aug 2013
HY/2009/15	TCBR2, TCBR3, TCBR1W, TPCWAE, TPCWAW	C6 ⁴ , C7, Ex-WPCWA SW, Ex-WPCWA SE (plus enhanced DO monitoring described in 4.6.3)	Nov 2010
HY/2010/08	TCBR3, TCBR4	C6 ⁴ , C7 (plus enhanced DO monitoring described in 4.6.3)	Mar 2014

Remarks:

- -The water monitoring stations for WSD19, P1, P3, P4, P5 shall be associated with Contract No. HK/2009/01 prior to their transition to Contract HK/2012/08.
- -4 intakes (re-provisioned Wanchai WSD intake, Great Eagle Centre, China Resources Centre & Sun Hung Kai Centre constructed adjacent to each other) taken as a single group for silt screen protection and monitoring.
- -Re-provisioned intake reference: P1: HKCEC Phase 1; P3: APA, P4: Shui On; P5: Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)
- -Enhanced DO Monitoring at C6 since the intake abandon in May 2011.
- <u>Contract no. HK/2009/01 Wan Chai Development Phase II Central -Wanchai Bypass at HKCEC</u>
- 5.4.19. Water monitoring for Contract no. HK/2009/01 was commenced on 23 July 2010. The proposed division of water monitoring stations are summarized in *Table 5.14* below.

Table 5.14 Water Monitoring Stations for Contract no. HK/2009/01

Station Ref.	Location	Easting	Northing			
Cooling Water Intake						
C1	HKCEC Extension	835885.6	816223.0			



Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations have not been carried out by others.
- WSD7 and WSD20 water quality monitoring were temporarily suspended since 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013

<u>Contract no. HK/2009/02 - Wan Chai Development Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East</u>

5.4.20. Water monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water monitoring stations are summarized in *Table 5.15* below.

Table 5.15 Water Monitoring Stations for Contract no. HK/2009/02

Station Ref.	Location	Easting	Northing			
WSD Salt Water Int						
WSD9	Tai Wan	837921.0	818330.0			
WSD17	Quarry Bay	839790.3	817032.2			
Cooling Water Inta	Cooling Water Intake					
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/CWB	836268.0	816020.0			

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations has not been carried out by others.
- Water quality monitoring at WSD9 and WSD 17 was implemented with respect to HK/2009/02 from 8
 Feb 2012.
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.

<u>Contract no. HK/2012/08 - Wan Chai Development Phase II - Central- Wan Chai Bypass at Wan Chai West</u>

5.4.21. Water monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water monitoring stations are summarized in *Table 5.16* below.

Table 5.16 Water Monitoring Stations for Contract no. HK/2012/08

Station Ref.	Location	Easting	Northing		
WSD Salt Water Intake					
WSD19	Sheung Wan	833415.0	816771.0		
Cooling Water Intake					
P1	HKCEC Phase I	835774.7	816179.4		

Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

Station Ref.	Location	Easting	Northing
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2

<u>Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)</u>

- 5.4.22. As the removal of reclamation work of TS1 at CBTS has been completed, all procedures have been rectified and complied with the conditions set in EP-356/2009 and FEP-04/356/2009.
- 5.4.23. Due to the commencement of the maintenance dredging on 10 November 2010, water quality monitoring for Contract no. HY/2009/15 was commenced on 9 November 2010. The proposed division of water monitoring stations are summarized in Table 5.15 below.
- 5.4.24. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.

Table 5.17 Water Monitoring Stations for Contract no. HY/2009/15

Station Ref.	ation Ref. Location		Northing		
Cooling Water Intake					
C7	Windsor House	837193.7	816150.0		

Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.

<u>Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link</u>

- 5.4.25. Due to the commencement of the marine bored piling on 28 Jan 2012, water quality monitoring for Contract no. HY/2009/19 was commenced on 28 Jan 2012. The proposed division of water monitoring stations are summarized in *Table 5.16* below.
- 5.4.26. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 5.4.27. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Center (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 5.4.28. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land

Lam Geotechnics Limited

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

- and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- 5.4.29. As per the meeting with the representative of Excelsior Hotel and World Trade Centre on 17 May 2011, they confirmed that the seawater intake for The Excelsior was no longer in use and replaced by the connected permanent water supply from WSD pipelines since 11 January 2011. Thus, the impact water quality monitoring for the cooling intake C6 was terminated effective from 26 May 2011.
- 5.4.30. 24 hours monitoring of turbidity at the cooling water intakes at C7 was conducted. With respect to the seawall collapsing at TS4 on 17 November 2011, the 24 hours turbidity monitoring and was kept in November 2011. Since the reinstating the seawall was completed on 13 January 2012 and no any water deterioration was performed, 24 hour turbidity monitoring was then suspended on 27 January 2012.
- 5.4.31. Water monitoring results measured in this reporting period are reviewed and summarized. Details of water quality monitoring results and graphical presentation can be referred in **Appendix 5.4**.

Table 5.18 Summary of Water Quality Monitoring Exceedances in Reporting Month

	Water	Mid-flood					Mid-ebb						
Contract no.	Monitoring	D	0	Turb	idity	S	S	D	0	Turb	idity	S	S
	Station	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01	C1	0	0	0	0	0	0	0	0	0	0	0	0
	WSD19	0	0	0	1	0	0	0	0	1	1	0	1
	P1	0	0	0	0	0	0	0	0	0	0	0	0
HK/2012/08	P3	0	0	0	0	0	0	0	0	0	0	0	0
	P4	0	0	0	0	0	0	0	0	0	0	0	0
	P5	0	0	0	0	0	0	0	0	0	0	0	0
HK/2009/02 Monitoring started on 8 Feb 2012	WSD9	0	0	0	0	0	0	0	0	0	0	0	1
	WSD17	0	0	0	0	0	0	0	0	0	0	0	0
Monitoring started on 29 July 2013	RW21-P789	0	0	0	0	1	0	0	0	0	0	0	0
HY/2009/15 & HY/2010/08	C7	0	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	1	1	0	0	0	1	1	0	2

- Remarks: The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
 - WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
 - 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 were completed on 6 Feb 2012.
 - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
 - C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
 - WSD7 and WSD20 were temporarily suspended from 27 Apr 2012
 - C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
 - C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
 - WSD21 water quality monitoring station was temporarily suspended since 12 March
 - Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.
 - WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.
- 5.4.32. There were 1 action level and 2 limit level exceedances of turbidity, and 1 action level and 2 limit level exceedances of SS recorded in the reporting month. Investigation found that the exceedance was not related to Project works. The details of recorded exceedance can be referred to the Section 6.4.
- 5.4.33. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in *Table* 5.19.



Table 5.19 Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month

				Mid-ebb		
Contract no.	Water Monitoring Station			D	DO	
110.	Clation			LL		
	C6	0	0	0	0	
HY/2009/15	C7	0	0	0	0	
H1/2009/15	Ex-WPCWA SW	0	5	0	0	
	Ex-WPCWA SE	1	3	2	1	
Total		1	8	2	1	

- 5.4.34. There were 3 action level exceedances and 9 limit level exceedances of enhanced dissolved oxygen recorded in this reporting month. Investigation found that the exceedances were not related to the Project works. The details of the recorded exceedances can be referred to the **Section 6.4**.
- 5.4.35. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored. Details of additional DO monitoring results can be referred in Appendix 5.4a.
- 5.4.36. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013

5.5 Waste Monitoring Results

<u>Contract no. HK/2009/01 - Wan Chai Development Phase II - Central -Wanchai Bypass at HKCEC</u>

5.5.1. No inert C&D waste and non- inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in *Table 5.20*.

Table 5.20 Details of Waste Disposal for Contract no. HK/2009/01

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	NIL	62116.405	TKO137, TM38
Inert C&D materials recycled, m ³	NIL	5856.5	N/A
Non-inert C&D materials disposed, m³	NIL	1673.69	SENT Landfill
Non-inert C&D materials recycled, kg	NIL	203993	N/A
Chemical waste disposed, kg	NIL	10250	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m³	NIL (Bulk Volume)	97428.2 (Bulk Volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m ³	NIL (Bulk Volume)	52250 (Bulk Volume)	East of Cha Chau
Dredged Sediment Requiring Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers	NIL (Bulk Volume)	6773 (Bulk Volume)	East of Cha Chau

5.5.2. There were no marine sediment Type 1- Open Sea Disposal and no marine sediments Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

<u>Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East</u>

5.5.3. No Inert C&D waste and Non-inert C&D waste were disposed of in this reporting month.

Details of the waste flow table are summarized in *Table 5.21*.

Table 5.21 Details of Waste Disposal for Contract no. HK/2009/02

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	NIL	263704.45	TKO137 / TM 38
Inert C&D materials recycled, m ³	NIL	18161	N/A
Non-inert C&D materials disposed, m³	NIL	1515.103	SENT Landfill
Non-inert C&D materials recycled, m ³	N/A	N/A	N/A
Chemical waste disposed, kg	NIL	13860	SENT Landfill
Marine Sediment (Type 1 – Open Sea Disposal), m ³	NIL	186070 (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m ³	NIL	129320 (Bulk volume)	East of Sha Chau

5.5.4. There was no Marine Sediment disposed in this reporting month.



<u>Contract no. HY/2009/15 - Central-Wanchai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)</u>

5.5.5. No Inert C&D waste and no non- inert C&D waste disposed of in this reporting month. Details of the waste flow table are summarized in *Table 5.22*

Table 5.22 Details of Waste Disposal for Contract no. HY/2009/15

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Inert C&D materials disposed, m ³	NIL	141579.2	Tuen Mun Area 38	NIL
	NIL	65216	TKO137 FB	NIL
Inert C&D materials recycled, m ³	NIL	304	ex-PCWA	NIL
	NIL	111.9	TS4	NIL
Non-inert C&D materials disposed, m³	NIL	252.2	SENT Landfill	NIL
Non-inert C&D materials recycled, kg	NIL	299361.5	N/A	NIL
Chemical waste disposed, kg	NIL	8,200	N/A	NIL
Marine Sediment (Type 1 – Open Sea Disposal), m ³	NIL (Bulk Volume)	103488 (Bulk Volume)	Cheung Chau South	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m ³	NIL (Bulk Volume)	251325 (Bulk Volume)	East of Sha Chau / South of the Brothers	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers) m ³	NIL (Bulk Volume)	12640 (Bulk Volume)	East of Sha Chau / South of the Brothers	Dredging from TCBR1W / Maintenance dredging
Marine Sediment (Type 2 – Confined Marine Disposal), m³	NIL	9350 (Bulk Volume)	East of Sha Chau	Dredging from Eastern Breakwater of CBTS
Marine Sediment (Type 1 – Open Sea Disposal) , m3	NIL (Bulk Volume)	600 (Bulk Volume)	East Sha Chau / South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Marine Sediment (Type 2– Confined Marine Disposal), m3	NIL (Bulk Volume)	14,780 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangemen t
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynehetic Containers), m3	NIL (Bulk Volume)	2,760 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangemen t

5.5.6. There were no marine sediment Type 1 – Open Sea Disposal and no Type 1 Open Sea Disposal & Type 2 – Confined Marine Disposal disposed in this reporting month.

<u>Contract no. HK/2010/06 - Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line</u>

5.5.7. No inert C&D waste was disposed and no non-Inert C&D waste was recycled in this reporting month. Details of the waste flow table are summarized in *Table 5.23.*

Table 5.23 Details of Waste Disposal for Contract no. HK/2010/06

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m³	NIL	12567.88	TM38
Inert C&D materials recycled, m ³	NIL	267	HK/2009/01
Non-inert C&D materials disposed, m ³	NIL	369.48	SENT/TKO137SF
Non-inert C&D materials recycled, T	NIL	60.58	Recyclers
Chemical waste disposed, L	NIL	2600	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m³	NIL	3,891 (Bulk Volume)	South Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m ³	NIL	12,586 (Bulk Volume)	East Sha Chau

5.5.8. There were no marine sediments Type1- Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal was disposed in this reporting month.

Contract no. HY/2009/19 - Central- WanChai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

5.5.9. No inert C&D waste and non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in *Table 5.24*.

Table 5.24 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	NIL	355921.04	TM38
Inert C&D materials recycled, m ³	NIL	59367	N/A
Non-inert C&D materials disposed, m ³	NIL	1068.6	N/A
Non-inert C&D materials recycled, kg	NIL	333.14	N/A
Chemical waste disposed, L	NIL	2.12	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m³	NIL	162	South Cheung Chau
Marine Sediment (Type 2 – Confined Marine Disposal) , m³	NIL	681	East Sha Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m3	NIL	4976.00	

5.5.10. There was no marine sediment Type1- Open Sea Disposal and there was no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal generated were disposed in this reporting month.

Contract no. HK/2012/08 -Wan Chai Development Phase II - Central- Wan Chai Bypass at Wan Chai West

5.5.11. No inert C&D waste was disposed and non-inert C&D waste were disposed in this reporting month. Details of the waste flow table are summarized in *Table 5.25*.

Table 5.25 Details of Waste Disposal for Contract no. HK/2012/08

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m³	NIL	1247	TM38
Inert C&D materials recycled, m³	NIL	NIL	N/A
Non-inert C&D materials disposed, m³	NIL	315	N/A
Non-inert C&D materials	NIL	NIL	N/A



Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
recycled, kg			
Chemical waste disposed, L	NIL	NIL	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m³	NIL (Bulk volume)	31759 (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m3	NIL (Bulk volume)	108485 (Bulk volume)	South of The Brothers (from 27 Aug 2013 onwards)

5.5.12. No Marine Sediment Type 1 – Open Sea Disposal and no marine sediment Type 1 – Open Sea Disposal (Delicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

Contract no. HY/2010/08 - Central - Wan Chai Bypass (CWB) - Tunnel (Slip Road 8)

5.5.13. No Inert C&D waste and non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in *Table 5.26*

Table 5.26 Details of Waste Disposal for Contract no. HY/2010/08

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m³	NIL	NIL	N/A
Inert C&D materials recycled, m³	NIL	NIL	N/A
Non-inert C&D materials disposed, m ³	NIL	NIL	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A
Chemical waste disposed, L	NIL	NIL	N/A
Dumping Permit (Type 1 – Open Sea Disposal) *	NIL	29880	South Cheung Chau
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal) *	530	24860	Brothers Island

Remarks: Contractor clarified and have been updated the quantity of Type 1 Open Sea Disposal and Type 1- Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal for August reporting month as 13,750m³ and 6,510m³ respectively and the cumulative quantity of Type 1 Open Sea Disposal and Type 1- Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal for August reporting month as 29,880m³ and 24,3300m³ respectively.

5.5.14. There was Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month. No Type 1 – Open Sea Disposal disposed in this reporting month.



6. Compliance Audit

6.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in *Appendix 6.1*.

6.1 Noise Monitoring

<u>Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC</u>

6.1.1 No exceedance was recorded in the reporting month.

<u>Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at</u> WanChai East

6.1.2 No exceedance was recorded in the reporting month.

<u>Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)</u>

6.1.3 No exceedance was recorded in the reporting month.

<u>Contract no. HK/2010/06 - Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line</u>

6.1.4 No exceedance was recorded in the reporting month.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

6.1.5 No exceedance was recorded in the reporting month.

6.2 Real-time noise Monitoring

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

6.2.1 Limit level exceedances were recorded at RTN2a-Electric Centre during daytime on 28 August 2014 and 12 September 2014 in the reporting month. After checking with Contractor of HY/2009/19, bored piling and socket piling were conducted at the concerned location on 28 August 2014 and 12 September 2014 during the recorded period. Mitigation measures including the use of noise barrier and noise blanket were implemented by Contractor. In view of the exceedances are non-continuous, the exceedances are considered to be non-project related and contributed by nearby non CWB Project works and nearby IEC traffic.

6.3 Air Monitoring

<u>Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC</u>

6.3.1 No exceedance was recorded in the reporting month.

<u>Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)</u>

- 6.3.2 No exceedance was recorded in the reporting month.
- 6.3.3 No Action and Limit Level was recorded for odour patrol during this reporting month.

<u>Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island</u> Eastern Corridor Link

6.3.4 No exceedance was recorded in the reporting month.

6.4 Water Quality Monitoring

Contract no. HK/2009/01 - Wan Chai Development Phase II - Central -Wanchai Bypass at HKCEC

6.4.1 No exceedance was recorded in this reporting month

<u>Contract no. HK/2012/08 –Wan Chai Development Phase II – Central- Wan Chai Bypass at</u> Wan Chai West.

6.4.2 No exceedance was recorded in this reporting month.

<u>Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East</u>

- 6.4.3 There were SS exceedances at RW21-P789 and WSD9 monitoring station recorded on 4 September 2014.
- 6.4.4 After checking with Contractor, no marine works was conducted during the monitoring date on 4 September 2014. Silt screen installed around intake location was generally in place. In view that no marine activity was conducted and the exceedance was not continuous, it was considered the exceedance was not related to Project.

<u>Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)</u>

- 6.4.5 There were occasionally DO exceedances at Ex-WPCWA SW and Ex-WPCWA SE recorded on 8, 19, 24 and 26 September 2014. No odour nuisance was noted during DO monitoring.
- 6.4.6 After checking with Contractor, temporary reclamation removal works were conducted during the monitoring date on 8 September 2014 at Ex-WPCWA. No dredging works for marine sediments conducted during those monitoring dates. Contractor mitigation measures including the use of silt curtain was generally in place. The exceedances were possible in relation to upstream discharge at the concerned location as it have been consistently observed such that it was considered the exceedances were not related to Project.
- 6.4.7 As such, no marine work was conducted during the monitoring dates on 19, 24 and 26 September 2014 at Ex-WPCWA. The exceedances were possible in relation to upstream discharge at the concerned location as it have been consistently observed. In view that no marine activities at Ex-WPCWA, it was considered the exceedance was not related to Project.



Contract no. HK/2010/06 - Wan Chai Development Phase II - Central -Wanchai Bypass over MTR Tsuen Wan Line

6.4.8 No exceedance was recorded in this reporting month.

Contract no. HY/2009/19- Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

6.4.9 No exceedance was recorded in this reporting month.

<u>Contract no. HK/2012/08- Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West</u>

- 6.4.10 There were SS exceedance recorded at WSD19 monitoring station on 17 September 2014.
- 6.4.11 After checking with contractor, surveying of caisson seawall and restoration of silt curtain after typhoon were conducted during the monitoring date on 17 September 2014. Silt screen at monitoring station was generally in order. In view that the construction area was located at the downstream of WSD19 monitoring station during the same monitoring period and no exceedance was recorded in the subsequent monitoring, it was considered that the exceedance was not project related.
- 6.4.12 There were occasionally turbidity exceedance recorded at WSD19 monitoring station on 10, 24 and 26 September 2014.
- 6.4.13 After checking with contractor, preparation work for installation of caisson seawall was conducted during the monitoring date on 10 September 2014, and surveying of caisson seawall was conducted during the monitoring date on 24 and 26 September 2014. Silt screen at monitoring station was generally in order. In view that the construction area was located at the downstream of WSD19 monitoring station during the same monitoring period and no exceedance was recorded in subsequent monitoring, it was considered that the exceedances were not project related.

Contract no. HY/2010/08 - Central - Wan Chai Bypass (CWB) - Tunnel (Slip Road 8)

6.4.14 No exceedance was recorded in this reporting month.

6.5 Review of the Reasons for and the Implications of Non-compliance

- 6.5.1 There was no non-compliance from the site audits in the reporting period. The observations and recommendations made in each individual site audit session were presented in Section 8.
- 6.5.2 No non-compliances from monitoring was recorded in the reporting month.
- 6.6 Summary of action taken in the event of and follow-up on non-compliance
- 6.6.1 There was no particular action taken since no non-compliance was recorded from the site audits in the reporting period.

Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

7. Cumulative Construction Impact due to the Concurrent Projects

- 7.0.1. According to Condition 3.4 of the EP-356/2009, this section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III, Central-Wanchai Bypass and Island Eastern Corridor Link projects.
- 7.0.2. According to the Final EM&A Report of Central Reclamation Phase III (CRIII) for Contract HK 12/02, the major construction activities were completed by end of January 2014 and no construction activities were undertaken thereafter and the water quality monitoring was completed in October 2011 and no Project-related exceedance was recorded for air and noise monitoring. It can be concluded that cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was insignificant.
- 7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area, Diaphragm wall construction, pipe pile wall construction and removal of rock armour were performed in September 2014 reporting month. As no project related exceedance were recorded during the reporting period, cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was considered as insignificant.
- 7.0.4. According to the construction programme of Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects, the major construction activities under Wan Chai Development Phase II were marine works at HKCEC areas, tunnel works at Wan Chai East and filling works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were bridge construction and road works at Central Interchange, land base bored pilling works at Victoria Park Road and ELS works at Victoria Park, segment launching works and tunnel works at North Point area. Marine-based construction activities were removal of temporary reclamation at TS4, TS2 and EX-PCWA and seawall construction at TS3 at Causeway Bay Typhoon Shelter in the reporting month.
- 7.0.5. No significant air impact from construction activities was anticipated in the reporting month. Besides, no project related exceedance was recorded during the air and noise environmental monitoring events in the reporting month. Thus, it is evaluated that the cumulative construction impact from the concurrent projects including Central Reclamation Phase III (CRIII), Wan Chai Development Phase II (WDII), Central-Wanchai Bypass (CWB), Island Eastern Corridor Link projects (IECL) was insignificant.



8. Environmental Site Audit

- 8.0.1. During this reporting month, weekly environmental site audits were conducted for Contracts no. HK/2009/01, HK/2009/02, HY/2009/15, HK/2010/06, HY/2009/19, HK/2012/08 and HY/2010/08. No non-conformance was identified during the site audits.
- 8.0.2. Four site inspections for Contract no. HK/2009/01 were conducted on 3, 10, 18 and 24 September 2014 in reporting month. Results of these inspections and outcomes are summarized in *Table 8.1.*

Table 8.1 Summary of Environmental Inspections for Contract no. HK/2009/01

Item	Date	Observations	Action taken by Contractor	Outcome
140903_01	3-Sep-14	The hole of drip tray under the	The hole of drip tray	Completion as
		air compressor shall be	under the air	observed on 10
		covered at Stage 2 area	compressor was	September 2014
			covered.	
140910_01	10-Sep-14	Oil container shall be placed	Oil container was	Completion as
		with a drip tray at Stage 1	taken away and	observed on 18
			disposed.	September 2014
140910_02	10-Sep-14	Oil container shall be provided	Oil container was	Completion as
		with a proper label at Stage 1	taken away and	observed on 18
			disposed.	September 2014
140910_03	10-Sep-14	The hole of drip tray under the	The hole of drip tray	Completion as
		air compressor at Stage 2	under the air	observed on 18
		shall be covered.	compressor was	September 2014
			covered at Stage 2.	
140924_01	24-Sep-14	Oil container shall be placed	Drip tray was	Completion as
		on the drip tray at Stage 1	provided for oil	observed on 30
			container at Stage	September 2014
			1.	
140924_02	24-Sep-14		Oil container was	Completion as
		labelled at Stage 1	labelled at Stage 1.	observed on 30
				September 2014
140924_03	24-Sep-14	Drilling rig shall be repair such	Drilling rig at Stage	Completion as
		that no dark smoke emission	1 was repaired.	observed on 30
		during operation at Stage 1.		September 2014

8.0.3. Five site inspections for Contract no. HK/2009/02 were carried out on 28 August, 4, 11, 17 and 25 September 2014 in reporting month. Results of these inspections and outcomes are summarized in *Table 8.2*.

Table 8.2 Summary of Environmental Inspections for Contract no. HK/2009/02

Item	Date	Observations	Action taken by	Outcome
			Contractor	
140828_01	28-Aug-14	Drip tray shall be properly	New drip tray was	Completion as
		maintain and shall repair a new	provided for air	observed on 4 Sep
		drip tray under the air	compression at	2014
		compressor at Portion 2	Portion 2.	
140828_02	28-Aug-14	Drip tray shall be put under oil	Drip tray was	Completion as
		container at Portion 3 &4	provided for oil	observed on 4 Sep
			container at	2014
			Portion 3&4.	



Item	Date	Observations	Action taken by Contractor	Outcome
140904_01	4-Sep-14	Drip tray shall be provided for oil container at Portion 1.	Drip tray was provided for oil container at Portion 1.	Completion as observed on 11 Sep 2014
140911_01	11-Sep-14	The hole of drip tray under air compressor shall be covered at WCR2	The hole of drip tray was covered with a suitable lid under the air compressor	Completion as observed on 17 Sep 2014
140911_02	11-Sep-14	Breaker shall be covered more properly to mitigate noise effectively at WCR2	Breaker was covered properly at WCR2.	Completion as observed on 17 Sep 2014
140911_03	11-Sep-14	The hole of drip tray under air compressor shall be covered at Portion 3&4	The hole of drip tray under air compressor was covered at Portion 3 & 4	Completion as observed on 17 Sep 2014
140917_01	17-Sep-14	The hole of drip tray under the generator at Portion 3&4 shall be covered more properly.	Drip tray under the generator at Portion 3&4 was properly maintained.	Completion as observed on 25 Sep 2014

8.0.4. Four site inspections for Contract no. HY/2009/15 were carried out on 2, 10, 16, 23 September 2014 in reporting month. The results of these inspections and outcomes are summarized in *Table 8.3*.

Table 8.3 Summary of Environmental Inspections for Contract no. HY/2009/15

Item	Date	Observations	Action taken by Contractor	Outcome
140902_01	2-Sep-2014	Provide impermeable barrier for filled material from -4.0mPD to 7.0mPD (Ex-PCWA)	impermeable barrier was provided	Completion as observed on 10 September 2014
140902_02	2-Sep-2014	Provide drip tray to oil container (TS4)	Oil container was removed	Completion as observed on 10 September 2014
140902_03	2-Sep-2014	Clear the floating refuses/ scum, within site area (Ex-PCWA)	Floating refuses and scum were collected	Completion as observed on 10 September 2014
140910_01	10-Sep-14	Silt curtain enclosing the excavation section shall be properly deployed (TS4)	Silt curtain was provided	Completion as observed on 16 September 2014
140923_01	23-Sep-14	Floating refuses and scum shall be collected more frequently	Floating refuses and scum were collected	Completion as observed on 30 September 2014
140923_02	23-Sep-14	Wastewater treatment plant shall be properly connected to avoid direct discharge of muddy effluent (Ex-PCWA)	The connection of the treatment plant was rectified	Completion as observed on 30 September 2014



Item	Date	Observations	Action taken by Contractor	Outcome
140923_03	23-Sep-14	Silt curtain and geotextile shall be provided to temporary cut slope and silt curtain shall be provided during seawall construction (TS4)	Additional silt curtain was provided at the concerned area.	Completion as observed on 30 September 2014

- 8.0.5. Four site inspections for Contract no. HK/2010/06 were carried out on 1, 11, 18 and 22 September 2014 in reporting month. No observation was found in this reporting month.
- 8.0.6. Four site inspections for Contract no. HY/2009/19 were carried out on 3, 10, 17 and 24 September 2014 in reporting month. No observation was found in the reporting month.
- 8.0.7. Four site inspections for Contract no. HK/2012/08 were carried out on 2, 10, 19 and 24 September 2014 in this reporting period. The results of these inspections and outcomes are summarized in *Table 8.5*

Table 8.5 Summary of Environmental Inspections for Contract no. HK/2012/08

Item	Date	Observations	Action taken by Contractor	Outcome
140902_01	·	Drip tray shall be provided for oil container at Portion 2.	provided for oil container.	Completion as observed on 10 September 2014.
140910_01	10-Sep-14	Cement bags at open area shall be covered by impermeable sheet at Portion 1B	Cement bags were covered by impermeable sheet.	Completion as observed on 19 September 2014
140910_02	10-Sep-14	Haul road shall be sprayed with water to reduce dust emission	Haul road was sprayed with water.	Completion as observed on 19 September 2014
140919_01	19-Sep-14	All oil containers shall be placed with a drip tray at Portion 1b.	Oil containers were stored in a suitable designated area.	completion as observed on 30 September 2014
140919_02	19-Sep-14	Oil grease shall be cleaned up at the outflow of Culvert L.	Oil grease was cleaned up at Culvert L	Completion as observed on 30 September 2014
140924_01	24-Sep-14	Bentonite bags shall be covered on site at Portion 2.	Bentonite bags were covered at Portion 2.	Completion as observed on 30 September 2014
140924_02	24-Sep-14	Oil leaked from the crane at Portion 2A shall be cleaned up.	Crane was removed and repaired at Portion 2A	completion as observed on 30 September 2014
140924_03	24-Sep-14	Hole of drip tray under the pump shall be covered at Portion 1A to prevent any oil leakage.	Hole of drip tray under the pump was covered at Portion 1A	Completion as observed on 30 September 2014

8.0.8. Five site inspections for Contract no. HY/2010/08 were carried out on 28 August 2014, 4, 11, 18 and 25 September 2014 in this reporting period. No particular finding was found in the reporting month. The results of these inspections and outcomes are summarized in *Table 8.6*

Table 8.6 Summary of Environmental Inspections for Contract no. HY/2010/08

Item	Date	Observations	Action taken by Contractor	Outcome
140911_01	11-Sep-14	Muddy seepage outside silt curtain was observed. Contractor was advised to rectify the condition of silt curtain (Victoria Park Road)	No further muddy seepage was observed at the concerned location	Completion as observed on 18 September 2014
140918_01	18-Sep-14	Drip tray shall be provided to chemical containers	Drip tray was provided	Completion as observed on 25 September 2014

9. Complaints, Notification of Summons and Prosecution

- 9.0.1. No environmental complaint was received in the reporting period.
- 9.0.2. The details of cumulative complaint log and updated summary of complaints are presented in *Appendix* 9.1
- 9.0.3. Cumulative statistic on complaints and successful prosecutions are summarized in *Table 9.1* and *Table 9.2* respectively.

Table 9.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
Commencement works (Mar 2010) to last reporting month	30
September 2014	0
Total	30

Table 9.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
Total	-	0	0

10. Conclusion

- 10.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.
- 10.0.2. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others were remains unchanged.
- 10.0.3. As the marine-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- 10.0.4. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 10.0.5. Water quality monitoring at WSD10 and WSD15 will be temporary suspended while water quality monitoring at WSD9 and WSD17 were implemented with respect to HK/2009/02 for the water quality monitoring scheduled on 8 Feb 12 onwards;
- 10.0.6. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 10.0.7. Water quality monitoring at C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013, and conclude if any water deterioration had been identified during the 4-week water quality monitoring.
- 10.0.8. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 10.0.9. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.





- 10.0.10. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.
- 10.0.11. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui- DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- 10.0.12. The scheduled construction activities and the recommended mitigation measures for the coming month are listed in *Table 10.1*.

Table 10.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

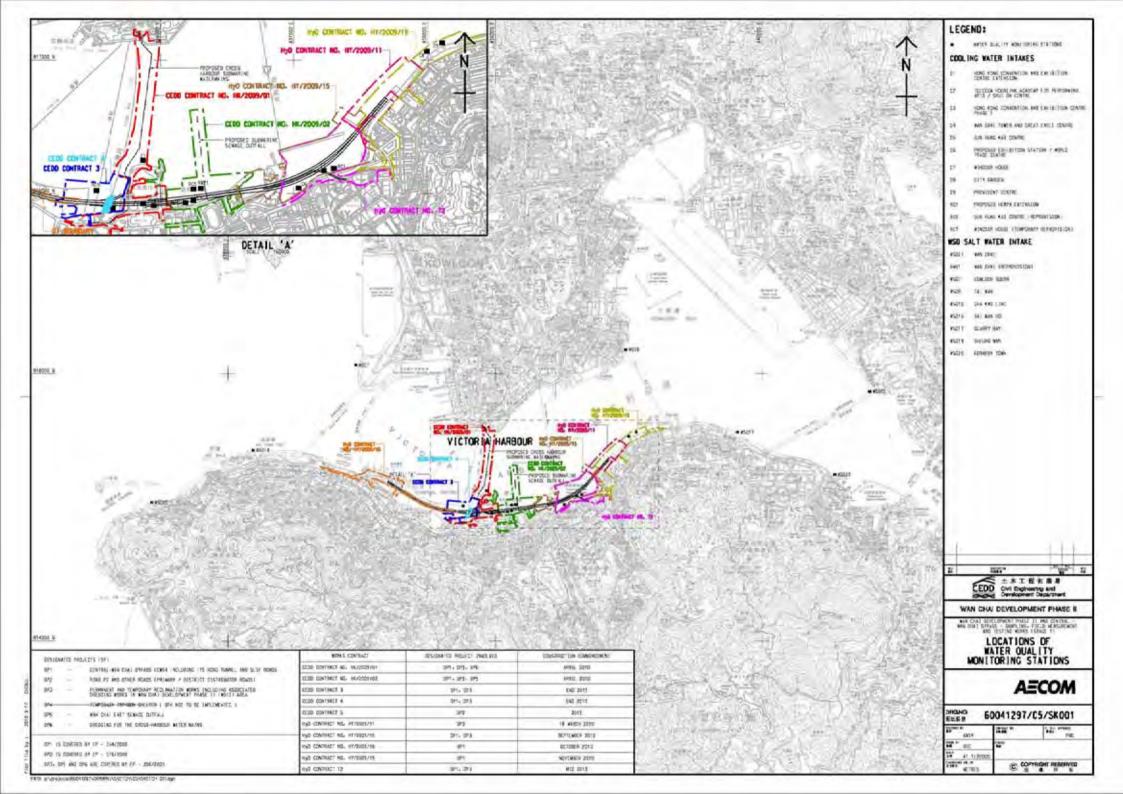
Contract No.	Key Construction Works	Recommended Mitigation Measures
HK/2009/01	Rock trimming works	To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance and dark smoke emission
HK/2009/02	 Works of covered walkway Backfilling works ABWF works at Section VIIIA D-Wall trimming and drainage works Demolition of Existing Wan Chai Ferry Pier 	 To cover the dusty material or stockpile by impervious sheet; To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance and dark smoke emission To conform the installation and setting as in the silt screen and silt curtain deployment plan Movable noise barrier shall be deployed for demolition works Daily visual inspection of silt screen and silt curtain to ensure its operation properly Review silt screen deployment and resubmit associate plans to EPD Implement silt screen and silt curtain in accordance with the associated plans submitted to EPD.
HY/2009/15	 Construction works of East Ventilation Shaft Removal of temporary 	 Daily visual inspection of silt screen and silt curtain to ensure its operation properly Implement silt curtain in
	reclamation and seawall locks at	accordance with the associated

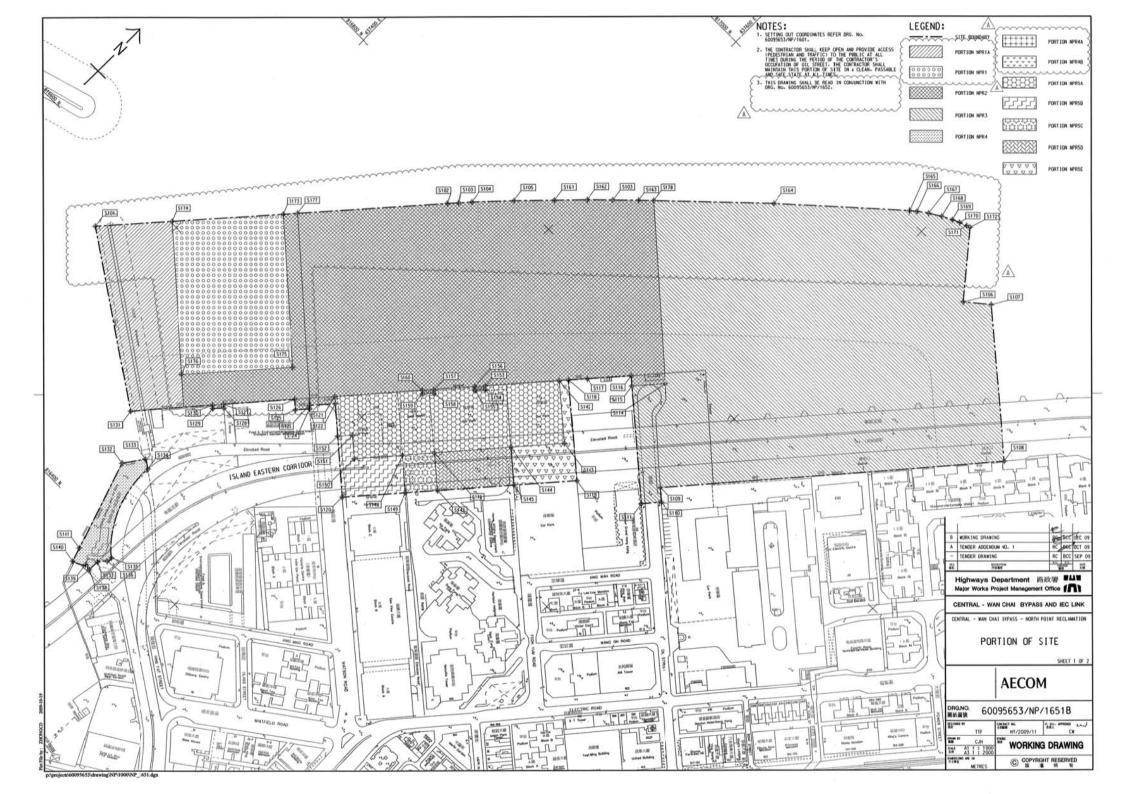
Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Monthly EM&A Report (September 2014)

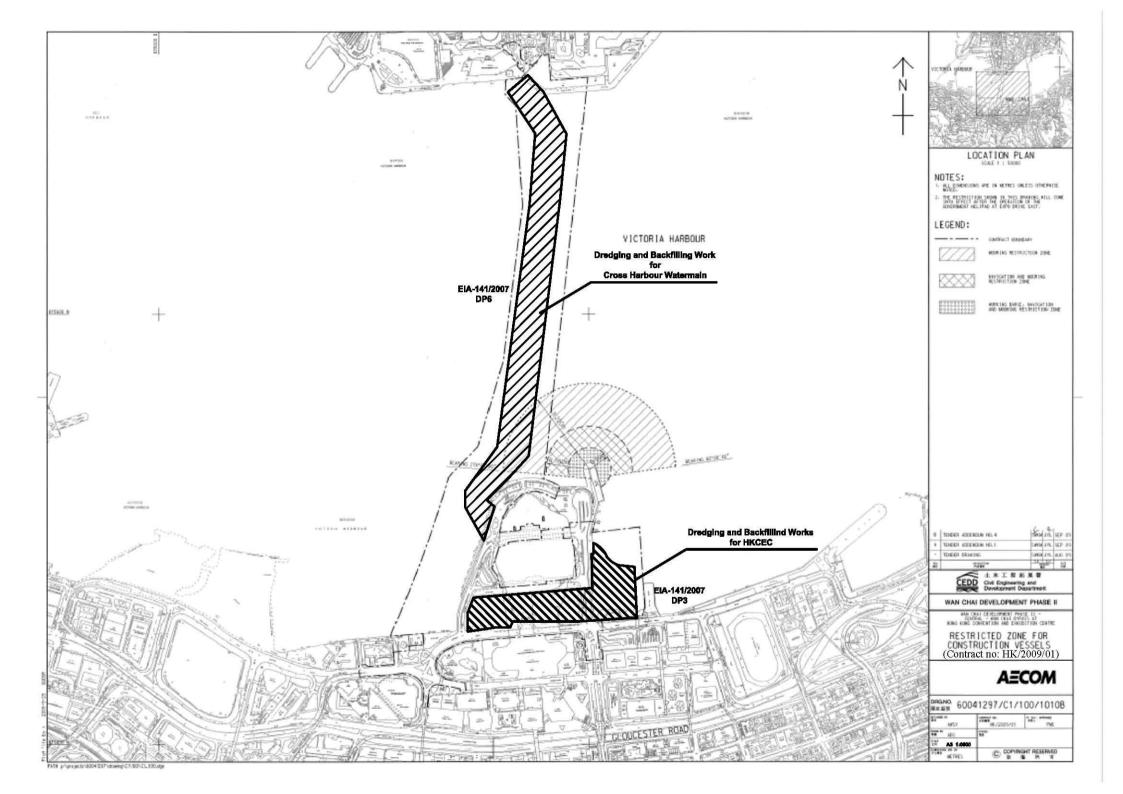
Contract No.	Key Construction Works	Recommended Mitigation Measures
	TPCWAE & TS4Demolition of D-wall at TPCWAE & TS4	plans submitted to EPD.
HK/2010/06	• Nil	• Nil
HY/2009/19	Construction of Dolphin Cap	 To space out noisy equipment and position as far as possible from sensitive receiver.
HK/2012/08	 ELS for box culvert La at Lung King Street Removal of rock armour Filling Sheet piling 	 To conform the installation and setting as in the silt screen and silt curtain deployment plan To space out noisy equipment and position as far as possible from sensitive receiver. Daily visual inspection of silt screen and silt curtain to ensure its operation properly
HY/2010/08	 Rock filling works Dredging works Seawall blocks installation Sheet piling works at Outfall Q Installation of water tank 	 To conform the installation and setting as in the silt screen and silt curtain deployment plan Daily visual inspection of silt screen and silt curtain to ensure its operation properly

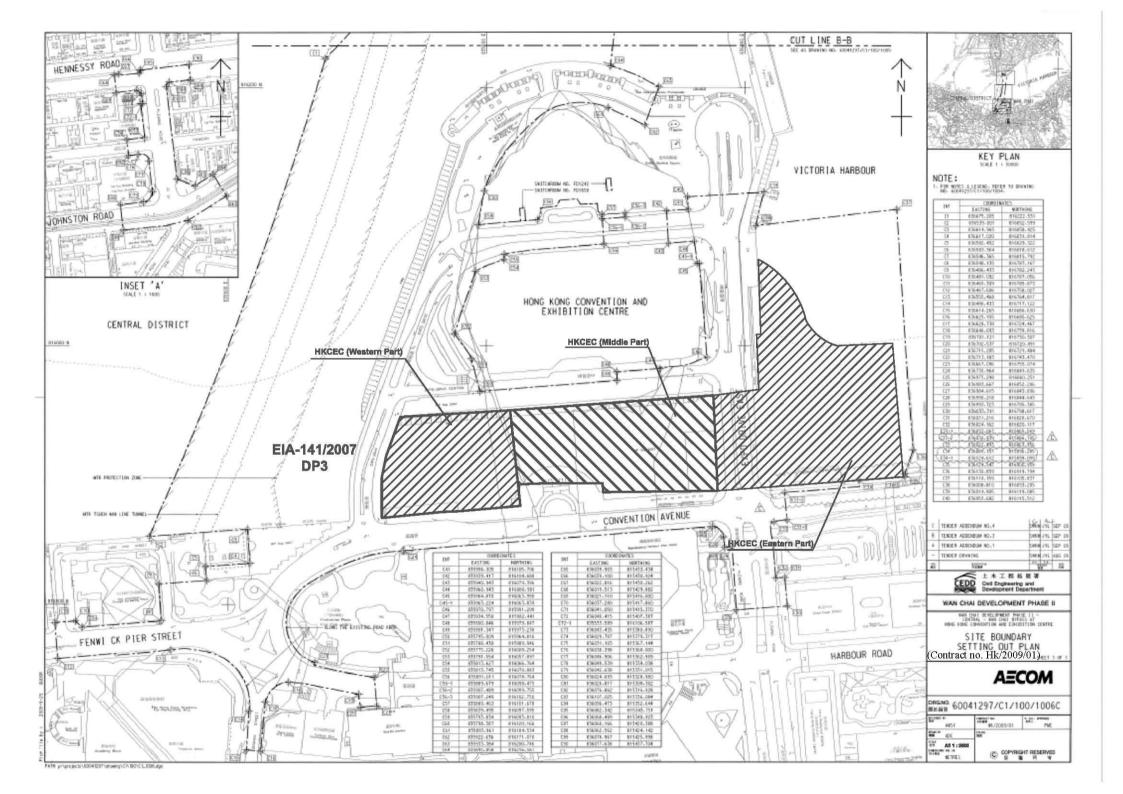
Figure 2.1

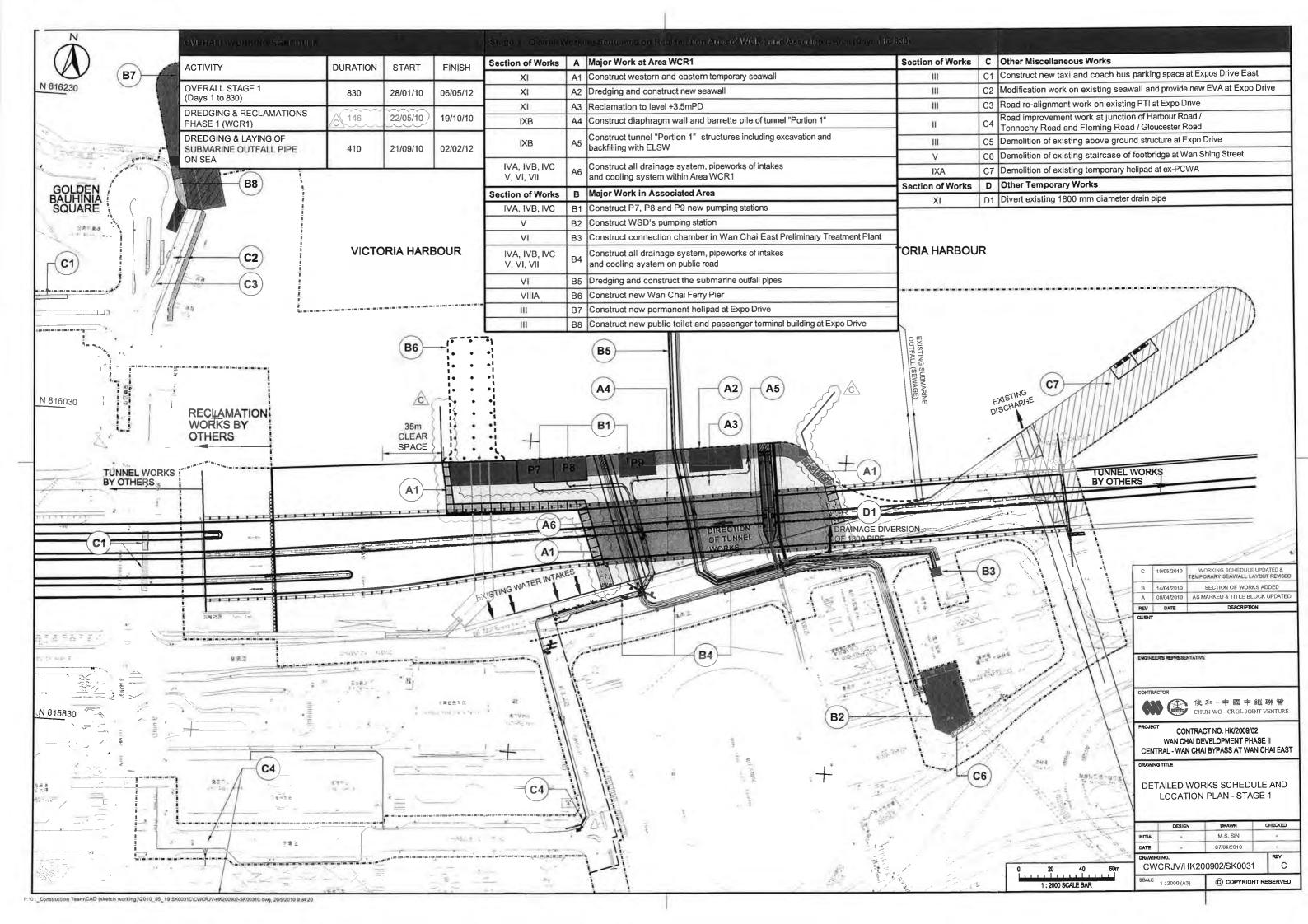
Project Layout

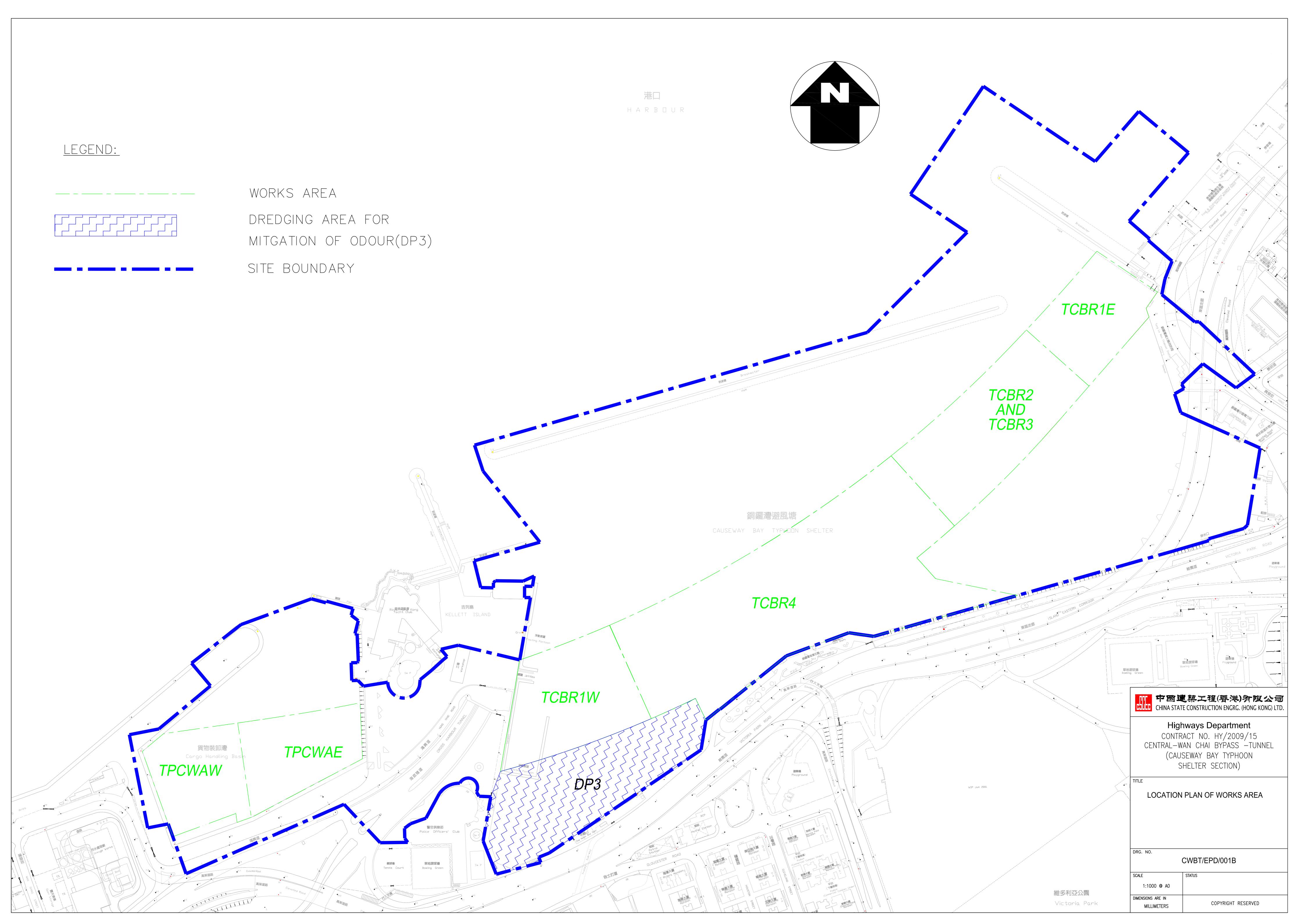












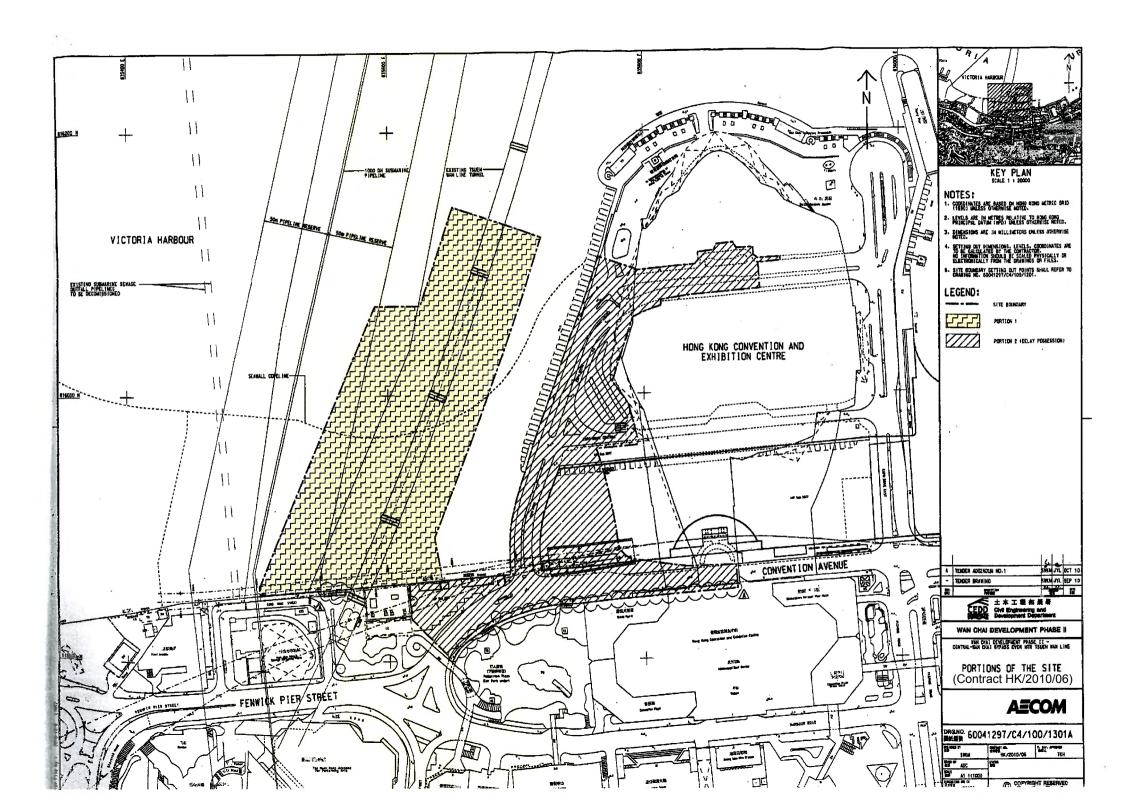
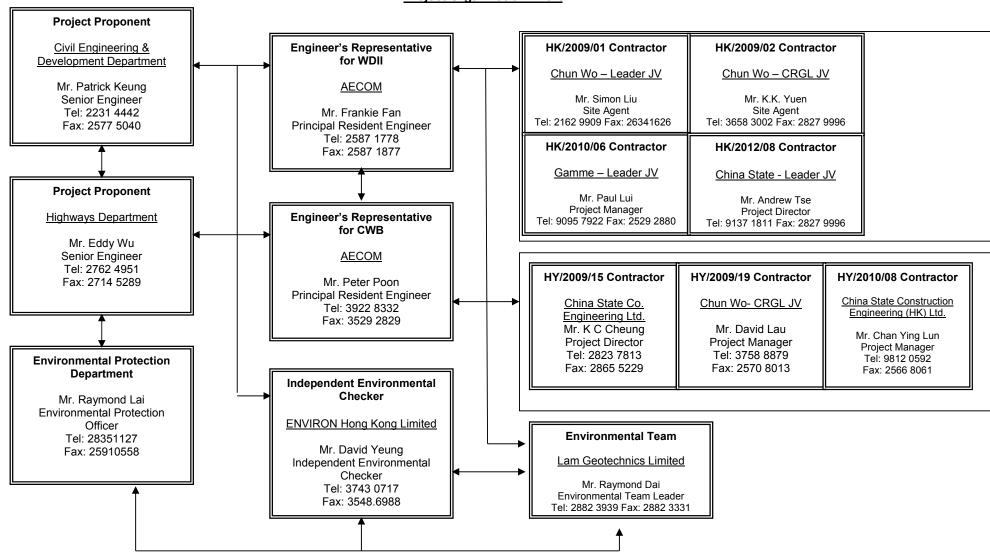


Figure 2.2

Project Organization Chart

Project Organization Chart



Appendix 3.1

Environmental Mitigation Implementation Schedule

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

Environmental Mitigation Implementation Schedule

Implementation Schedule for Air Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*			on	Relevant Legislation
		8	Agent	Des	C	o	Dec	and Guidelines
Constructio								
For the Who	ole Project							
S3.6.5	Four times a day watering of the work site with active operations.	Work site / during construction	Contractor		V			EIAO-TM
S3.8.1	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts. Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition; Watering during excavation and material handling; Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.	Work site / during construction	Contractor		٨			

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
2111111	Zava omnestina i roccioni svenom co / svaniganion svenom co	Doewion, Timing	Agent	Des	C	0	Dec	and Guidelines
\$3.5.6	For the dredging activities carried out in the vicinity of Police Officers' Club, the dredging operation will be restricted to only 1 small close grab dredger to minimise the odour impact during the dredging activity. The dredging rate should be reduced as much as practicable for the area in close proximity to the Police Officers' Club. The sediments contain highly contaminated mud which may be disposed with the use of geosynthetic containers (details shall refer to Section 6), grab dredger has to be used for filling up the geosynthetic containers on barges. the dredging rate for the removal of the sediments at the south-west corner of the typhoon shelter shall be slowed down or restricted to specific non-popular hours in weekdays when it is necessary during construction.	Corner of CBTS/implementation of harbour-front enhancement	CEDD <u>1</u>		√			EIAO-TM
S3.8.8	Carry out dredging at the corner of CBTS to remove the sediment and clean the slime attached on the CBTS shoreline seawall	Corner of CBTS & CBTS shoreline seawall/implementation of harbour-front enhancement	CEDD ²		1			EIAO-TM
Operation I	Phase	I	1	1	1	1	1	I
For the Who	ole Project		<u> </u>					

¹ CEDD will identify an implementation agent.

 $^{^{\}rm 2}$ CEDD will identify an implementation agent.

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
		g	Agent	Des	C	О	Dec	and Guidelines
S3.10.2	Monthly (from July to September) monitoring of odour impacts, for a period of 5 years, is proposed during the operational phase of the Project to ascertain the effectiveness of the Enhancement Package over time, and to monitor any ongoing odour impacts at the ASRs.	Planned ASRs (CBTS Breakwater)/First 5-year period of operation phase	CEDD ¹			V		EIAO-TM
	CWB (Within the Project Boundary)	I	ı					T
S3.6.53 –	The design parameters of the East and Central Ventilation	East and Central	HyD					
S3.6.54	Buildings as set in Tables 3.10 and 3.11	Ventilation Buildings / During operation of the Trunk Road						
S3.10.2	Air quality monitoring for the operation performance of the East Ventilation Building and associated East Vent Shaft will be conducted.	East Vent Shaft / During operation of the East Ventilation Building and associated East Vent Shaft	HyD			V		EIAO-TM

• Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

Contract no. HK/2011/07

 $\label{thm:chain} \mbox{Wan Chai Development Phase II and Central-Wanchai Bypass}$

- Sampling, Field Measurement and Testing Works (Stage 2)

Monthly EM&A Report

Table A13.2 Implementation Schedule for Noise Control

Construction Phase	EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	1 .	entati ges* O	on Dec	Relevant Legislation and Guidelines
Construction I hase	Constructio	n Phase							

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	Relevant Legislation									
21.1111		Eccution / Timing	Agent	Des	C	0	Dec	and Guidelines								
S4.9.4	Good Site Practice:	Work Sites / During	Contractor		√			EIAO-TM, NCO								
	Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.	Construction														
	Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.															
	Mobile plant, if any, shall be sited as far away from NSRs as possible.															
	Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.															
	Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.															
	Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on- site construction activities.															
For DP1 –	CWB (Within the Project Boundary)															

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*				Relevant Legislation
		g	Agent	Des	C	О	Dec	and Guidelines
S4.8.5 S4.8.5	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: Slip road 8 tunnel Construction of diaphragm wall and substructures of the tunnel approach ramp Excavation Construction of slabs Backfill Demolition and construction of substructures for the IEC Demolition works of existing piers and crossheads of the marine section of the existing IEC Use of PME grouping for the following tasks: At-grade road construction Substructure for IECL connection	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
	WDII Major Roads (Road P2)							
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: Temporary road diversion Resurfacing At-grade roadwork	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
For DP3 -	Reclamation Works							
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following task: Filling behind seawall Seawall construction	Work Sites / During Construction	Contractor		V			EIAO-TM, NCO

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Ir	nplem Sta	entati ges*	on	Relevant Legislation
		g	Agent	Des	C	О	Dec	and Guidelines
For DP5 –	Wan Chai East Sewage Outfall							
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: • Submarine pipelines (marine section)	Work Sites / During Construction	Contractor		1			EIAO-TM, NCO
For DP6 _	Use of quiet powered mechanical equipment and movable noise barrier for the following tasks: Installation of a new pipeline (land section)							
For DP6 –	Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui							
\$4.8.3 – \$4.8.4	Use of quiet powered mechanical equipment for the following tasks: • Submarine pipelines (marine section) •	Work Sites / During Construction	Contractor		N			EIAO-TM, NCO

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	ıplem Staş		on	Relevant Legislation and Guidelines
			Agent	Des	C	0	Dec	
		_						
Operation 1	Phase							
For DP1 – 0	CWB (Within the Project Boundary)							

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
		g	Agent	Des	C	o	Dec	and Guidelines
S4.8.14 – S4.8.18	For Existing NSRs about 235m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC about 230m length of noise semi-enclosure with transparent panel covering the main carriageways (eastbound and westbound) of the CWB and IEC about 135m length of 5.5m high cantilevered noise barrier with 3m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC	Near North Point / Before commencement of operation of road project	HyD	V	√	√ ·		EIAO-TM
	 about 95m length of 5.5m high cantilevered noise barrier with 1m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC about 350m length of 3.5m high vertical noise barrier with transparent panel on the eastbound slip road to the IEC 							
	low noise road surfacing for the trunk road (except tunnel section and beneath the landscaped deck at the eastern portal area) with speed limit of 70 km/hour For Future/Planned NSRs about 265m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC	In between the Electric Centre (next to City Garden) and CDA(1) site / Before occupation of Planned NSRs in CDA and CDA(1) sites.	HyD	√	√#			

Appendix 3.1

Contract no. HK/2011/07

 $\label{thm:chain} \mbox{Wan Chai Development Phase II and Central-Wanchai Bypass}$

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta		on	Relevant Legislation
		g	Agent	Des	C	О	Dec	and Guidelines
	• The openable windows of the temple, if any, should be	Near Causeway Bay Fire	Project					
	orientated so as to avoid direct line of sight to the existing	Station / During detailed	Proponent for					
	Victoria Park Road as far as practicable.	design of the re-	the					
		provisioned Tin Hau	re-provisioned					
		Temple	Tin Hau Temple					ļ

^{*} Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

[#] Only the steel frame for this section of noise semi-enclosure would be erected in advance during the construction of the westbound slip road.

Table A13.3 Implementation Schedule for Water Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	Implementation Stages*			on	Relevant Legislation
LIII KCI	Environmental Protection Measures / Mitigation Measures	Timing	Agent	Des	C	0	Dec	and Guidelines
Construction	on Phase							
For DP3 - Boundary)	Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbo	our Water Mains	from Wan Chai to T	sim Sh	a Tsu	i), DP	1 – CW	B (within the Project
S5.8	A phased reclamation approach is planned for the WDII. Containment of fill within each of the reclamation phases by seawalls is proposed, with the seawall constructed first (above high water mark) with filling carried out behind the completed seawalls. Any gaps that may need to be provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site. Filling for seawall construction should be carried out behind the silt curtain	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	Dredging shall be carried out by closed grab dredger for the following works: Seawall construction in all the reclamation areas; Construction of the CWB Tunnel Construction of the proposed WSD water mains; and Construction of the proposed Wan Chai East sewage outfall pipelines.	Work site / During the construction period	Contractor		1			EIAO-TM, WPCO
S5.8, Figure 5.3	Dredging for the Wan Chai East sewage outfall pipelines shall not be carried out concurrently with the following activities: Dredging along the proposed cross-harbour water mains; Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA).	Work site / During the construction period	Contractor		1			EIAO-TM, WPCO

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / N	Aitigation Measures		Location /	Implementation	In		entat ges*	ion	Relevant Legislation
2	Zarva omnestna 11 oceanou premoures / 1	Treightion Trempures		Timing	Agent	Des	C	О	Dec	and Guidelines
S5.8	The water body behind the temporary rec typhoon shelter shall not be fully enclosed		Causeway Bay	Work site / During the construction period	Contractor		1			EIAO-TM, WPCO
S5.8	As a mitigation measure, to avoid the acc within the temporary embayment be impermeable barrier, suspended from a	tween CRIII and floating boom on the	HKCEC1, an water surface	Work site / During the construction	Contractor		√			EIAO-TM, WPCO
	and extending down to the seabed, will be erected by the contractor before the HKCEC1 commences. The barrier will channel the stormwater discharge flows from Culvert L to the outside of the embayment. The contractor will maintain this barrier until the reclamation works in HKCEC2W are carried out and the new Culvert L extension is constructed.			period						
S5.8, Figure 5.3	The total dredging rates in each of the marine works zones shall not be more than the maximum production rates stated in the table below. These are the production rates without considering the effect of silt curtain.			Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
	Reclamation Area	Maximum Dredging Rate	Maximum Dredging Rate							
	Reclamation Area m³ per hour (m³ per day) day (for 16 hrs per day)									
	Dredging along seawall or breakwater									
	North Point Shoreline Zone (NPR)	6,000 375	42,000							
	Causeway Bay TBW	1,500 94	10,500							
	Shoreline Zone TCBR	6,000 375	42,000							
	PCWA Zone	5,000 313	35,000		1	1	1	1	1	I

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entati ges*	on	Relevant Legislation
21.1.10.	Zin i di d	Timing	Agent	Des	C	0	Dec	and Guidelines
	Wan Chai Shoreline Zone (WCR) 6,000 375 42,000 HKCEC Shoreline Zone HKCEC Stage 1 & 3 1,500 94 10,500 (HKCEC) HKCEC Stage 2 6,000 375 42,000 Cross Harbour Water Mains 1,500 94 10,500 Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1.							
S5.8, Figure 5.3	Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m ³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities.	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
S5.8, Figure 5.3	For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawalls shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary.	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
S5.8, Figure 5.3	Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP.	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
S5.8, Figure 5.3	Silt screens shall be applied to seawater intakes at interim construction stages as stated below: Interim Construction Location of Applications	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection	n Measures / Mitigation Measures	Location /	Implementation	Implementation Stages*				Relevant Legislation
			Timing	Agent	Des	C	o	Dec	and Guidelines
	TBW, NP and Water Mains Zone Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.	Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.							
	Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.	WSD saltwater intakes at Sheung Wan and Reprovisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and reprovisioned Windsor House.							
S5.8	spillage and sealed ti contaminated mud, clo • all vessels shall be size vessels and the seabe turbidity is not gene	include: used, shall be designed and maintained to avoid ghtly while being lifted. For dredging of any sed watertight grabs must be used; d so that adequate clearance is maintained between d in all tide conditions, to ensure that undue rated by turbulence from vessel movement or	Work site / During the construction period	Contractor		V			ProPECC PN 1/94; WPCO (TM-DSS)
	their bottom openings to construction activities other objectionable madumping grounds; loading of barges and dredged material into the construction of the construction of the construction of the construction of the cons	dredgers shall be fitted with tight fitting seals to o prevent leakage of material; shall not cause foam, oil, grease, scum, litter or tter to be present on the water within the site or noppers shall be controlled to prevent splashing of the surrounding water. Barges or hoppers shall not to will cause the overflow of materials or polluted							

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation Agent	In		entati ges*	Relevant Legislation	
		Timing		Des	C	o	Dec	and Guidelines
	before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the silt curtain.							
S5.8	Silt screens are recommended to be deployed at the seawater intakes during the reclamation works period. Installation of silt screens at the seawater intake points may cause a potential for accumulation and trapping of pollutants, floating debris and refuse behind the silt screens and may lead to potential water quality deterioration at the seawater intake points. Major sources of pollutants and floating refuse include the runoff and storm water discharges from the nearby coastal areas. As a mitigation measure to avoid the pollutant and refuse entrapment problems and to ensure that the impact monitoring results are representative, regular maintenance of the silt screens and refuse collection shall be performed at the monitoring stations at regular intervals on a daily basis. The Contractor shall be responsible for keeping the water behind the silt screen free from floating rubbish and debris during the impact monitoring period.	Work site / During the construction period	Contractor		√ ·			EIAO-TM, WPCO

Appendix 3.1

Contract no. HK/2011/07 Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entati ges*	on	Relevant Legislation
		Timing	Agent	Des	C	o	Dec	and Guidelines
\$5.8	Dredging of contaminated mud is recommended as a mitigation measures for control of operational odour impact from the Causeway Bay typhoon shelter. In recognition of the potential impacts caused by dredging activities close to the seawater intakes, only I small close grab dredger shall be operated within the typhoon shelter (for the dredging to mitigate odour impact) at any time to minimize the potential impact. Double silt curtains shall be deployed to fully enclose the closed grab dredger during the dredging operation. In addition, an impermeable barrier, suspended from a floating boom on the water surface and extended down to the seabed, shall be erected to isolate the adjacent intakes as much as possible from dredging activities. For example, if dredging is to be carried out at the southwest corner of the typhoon shelter, physical barriers shall be erected to west of the cooling water intake for Excelsior Hotel so that the intake would be shielded from most of the SS generated from the dredging operation to the west of the intake. For area in close proximity of the cooling water intake point, the dredging rate shall be reduced as much as practicable. Site audit and water quality monitoring shall be carried out at the seawater intakes during the dredging operations. Daily monitoring of SS at the cooling water intake shall be carried out, and 24 hour monitoring of turbidity at the intakes shall be implemented during the dredging activities. If the monitoring results indicate that the dredging operation has caused significant changes in water quality conditions at the seawater intakes, appropriate actions shall be taken to stop the dredging and mitigation measures such as slowing down the dredging rate shall be implemented.	Causeway Bay typhoon shelter/Imple mentation of harbour-front enhancement.	CEDD <u>3</u>		1			WPCO

Monthly EM&A Report

EIA Ref	Fr	nvironmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entati ges*	on	Relevant Legislation
LIA KU	L	Tribulinental Frocetion Measures / Miligation Measures	Timing	Agent	Des	C	0	Dec	and Guidelines
For the Wh	ole 1	Project							
S5.8	•	Construction Runoff and Drainage	Work site	Contractor		V			ProPECC PN 1/94; WPCO (TM-DSS)
	•	use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow;	/ During the constructi on period						WPCO (IM-DSS)
	•	Permanent drainage channels shall incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities shall be based on the guidelines in Appendix A1 of ProPECC PN 1/94;							
	•	a sediment tank constructed from pre-formed individual cells of approximately 6 - 8 m3 capacity can be used for settling ground water prior to disposal;							
	•	oil interceptors shall be provided in the drainage system for the tunnels and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor shall have a bypass to prevent flushing during periods of heavy rain;							
	•	precautions and actions to be taken when a rainstorm is imminent or forecast, and during or after rainstorms. Particular attention shall be paid to the control of any silty surface runoff during storm events;							
	•	on-site drainage system shall be installed prior to the commencement of other construction activities. Sediment traps shall be installed in order to minimise the sediment loading of the effluent prior to discharge;							
	•	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge shall be adequately designed for the controlled release of storm flows. All sediment control measures shall be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage shall be reinstated to its original condition when the construction work is finished or the temporary diversion is no longer							

 $^{^{\}rm 3}$ CEDD will identify an implementation agent.

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entati ges*	Relevant Legislation	
		Timing	Agent	Des	C	О	Dec	and Guidelines
	required.							
	All fuel tanks and store areas shall be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity.							
	Minimum distances of 100 m shall be maintained between the storm water discharges and the existing or planned WSD flushing water intakes during construction phase.							
S5.8	Sewage from Construction Work Force Construction work force sewage discharges on site shall be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage shall be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.	Work site / During the construction period	Contractor		V			ProPECC PN 1/94; WPCO (TM-DSS)
S5.8	Floating Debris and Refuse Collection and removal of floating refuse shall be performed at regular intervals on a daily basis. The contractor shall be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.	Work site and adjacent water / During the construction period.	Contractor		V			WPCO

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	Implement Stage			on	Relevant Legislation
		Timing	Agent	Des	C	О	Dec	and Guidelines
S5.8	Storm Water Discharges Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.	Work site and adjacent water / During the design and construction period.	Contractor	V	√ 			WPCO
Operation	Phasa							
	B (within the Project Boundary)							
S5.8	For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO: • The drainage from tunnel sections shall be directed through petrol	CWB/During design and operational period	HyD/TD ³	√		1		WPCO
	interceptors to remove oil and grease before being discharged to the nearby foul water manholes.							
	Petrol interceptors shall be regularly cleaned and maintained in good working condition.							
	Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance.							
	Sewage arising from ancillary facilities of CWB (for examples, car park,							

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation Agent	In	1 .	entatio ges*	on	Relevant Legislation and Guidelines
	Zinyi olilientai 1 Totottoi ili zina katoo / Managattoi Managattoi ili zina katoo / Managattoi ili zina katoo /	Timing		Des	C	О	Dec	
	control room, ventilation and administration buildings and tunnel portals) shall be connected to public sewerage system. Sufficient capacity in public sewerage shall be made available to the proposed facilities. • Road drainage shall also be provided with adequately designed silt trap to minimize discharge of silty runoff. • The design of the operational stage mitigation measures for CWB shall take into account the guidelines published in ProPECC PN 5/93 "Drainage Plans subject to Comment by the EPD." All operational discharges from the CWB into drainage or sewerage systems are required to be licensed by EPD under the WPCO.							

^{*} Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

 $^{^{\}rm 3}$ if employ Management, Operation and Maintenance (MOM) Contract

Table A13.4 Implementation Schedule for Waste Management

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*				Relevant Legislation
			Agent	Des	C	О	Dec	and Guidelines
Construction	on Phase							
For DP3 -	Reclamation Works							
	Marine Sediments	Work site / During the construction period	Contractor		V			ETWB TCW No. 34/2002
S6.7.2	The dredged marine sediments would be loaded onto barges, transported to and disposed of at the designated disposal sites at South of Cheung Chau, East of Ninepin, East of Tung Lung Chau, South of Tsing Yi or East of Sha Chau to be allocated by the MFC depending on their level of contamination or at other disposal sites after consultation with the MFC and EPD. In accordance with the ETWB TCW No. 34/2002, the contaminated material must be dredged and transported with great care. The mitigation measures recommended in Section 5 of the EIA Report shall be incorporated. The dredged contaminated sediment must be effectively isolated from the environment upon final disposal and shall be disposed of at the Type 2 confined marine disposal contaminated mud pit.							
S6.7.3	Based on the biological screening results, the Category H (>10xLCEL) sediment which failed the biological testing would require Type 3 special disposal. The volume of Category H sediment from the Causeway Bay typhoon shelter which would require special disposal arrangements is estimated to be approximately 0.05 Mm³. A feasible containment method is proposed whereby the dredged sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal.							

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	Relevant Legislation	
	S	g	Agent	Des	C	О	Dec	and Guidelines
S6.7.5	It will be the responsibility of the Contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, at least 3 months prior to the dredging contract being tendered							
S6.7.6	During transportation and disposal of the dredged marine sediments requiring Type 1 and Type 2 disposal, the following measures shall be taken to minimise potential impacts on water quality: Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material. Excess material shall							
	be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.							

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
			Agent	Des	C	o	Dec	and Guidelines
	Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.							
S6.6.12	Floating Refuse During the construction phase, the project proponent's contractor will be responsible for the collection of any refuse within their works area. Floating booms will be provided on the water surface to confine the refuse from the working barges as well as to avoid the accumulation of pollutants within temporary embayment as mentioned in Table 13.3.	Work site / During the construction period	Contractor		√			
For the Who	ole Project		•		•			

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
List ites	Environmental Protection Measures / Mitagation Measures	Document Timing	Agent	Des	C	О	Dec	and Guidelines
S6.7.7	Recommendations for good site practices during the construction activities include: nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; training of site personnel in proper waste management and chemical waste handling procedures; provision of sufficient waste disposal points and regular collection for disposal; appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	Work site / During the construction period	Contractor		7			Waste Disposal Ordinance (Cap.354)

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
			Agent	Des	C	О	Dec	and Guidelines
S6.7.8	Waste Reduction Measures Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: • segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Work site / During planning and design stage, and construction stage	Contractor	V	√			
	to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force;							
	any unused chemicals or those with remaining functional capacity shall be recycled;							
	use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material.							
	prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill;							
	proper storage and site practices to minimise the potential for damage or contamination of construction materials; and							
	plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.							

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Ir		entati ges*	on	Relevant Legislation and Guidelines
		_	Agent	Des	C	0	Dec	and Guidennes
S6.7.10	General Refuse General refuse shall be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D material. A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material.	Work site / During the construction period	Contractor		V			Public Health and Municipal Services Ordinance (Cap. 132)
S6.7.11	Chemical Wastes After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Work site / During the construction period	Contractor		V			Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
\$6.7.12	Construction and Demolition Material C&D material shall be sorted on-site into inert C&D material (that is, public fill) and C&D waste. All the suitable inert C&D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.	Work site / During the construction period	Contractor		1			ETWB TCW No. 33/2002, 31/2004, 19/2005

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
			Agent	Des	C	o	Dec	and Guidelines
S6.7.13	In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system.	Work site / During the construction period	Contractor and Independent Environmental Checker		V			ETWB TCW No. 31/2004
S6.7.14	Bentonite Slurry The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows: If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis. If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.	Work site / During the construction period	Contractor		٨			ProPECC PN 1/94

^{*} Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

Table A13.5 Implementation Schedule for Land Contamination

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
23.110.	23. To office the control of the con	Economy 11111111	Agent	Des	C	0	Dec	and Guidelines
Construction	on Phase							
For the Wh	ole Project							
S.12.6	The contaminated site shall be cleaned up before commencement of site clearance and construction work at the concerned area which may disturb the ground.	A King Marine / Before commencement of construction activities at A King Marine.	Project proponent for the re- provisioned Tin Hau Temple	V				"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops" published by EPD, HKSAR EPD ProPECC Note No. 3/94
S7.10	During soil remediation works, the Contractor for the excavation works shall take note of the following points for excavation: • Excavation profiles must be properly designed and executed; • In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; • Quantities of soil to be excavated must be estimated; • It maybe necessary to split quantities of soil according to soil type, degree and nature of contamination. • Temporary storage of soil at intermediate depot or on-site	A King Marine / During soil remediation works	Contractor	1				Air Pollution Control Ordinance Noise Control Ordinance Waste Disposal Ordinance Waste Disposal (Chemical Waste) (General) Regulation

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*			on	Relevant Legislation
			Agent	Des	C	o	Dec	and Guidelines
	maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.							
	Supply of suitable clean backfill materials is needed after excavation. Care must be taken of existing buildings and utilities. Precautions must be taken to control of ground settlement Speed controls for vehicles shall be imposed on dusty site areas. Vehicle wheel and body washing facilities at the site's exit points shall be established and used. The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities:							Water Pollution Control Ordinance

Appendix 3.1	٩р	per	ndi	х 3	. 1
--------------	----	-----	-----	-----	-----

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	ion	Relevant Legislation
23.7.110.7	23. Transmit 1 Total Control of Annual Control o	Economy 1111111	Agent	Des	C	О	Dec	and Guidelines
	 Air Quality Mitigation Measures The loading, unloading, handling, transfer or storage of cement shall be carried out in an enclosed system. The loading, unloading, handling, transfer or storage of other materials which may generate airborne dust emissions such as untreated soil and oversize materials sorted out from the screening plant and stabilized soil stockpiled in the designated handling area, shall be carried out in such a manner to prevent or minimise dust emissions. These materials shall be adequately wetted prior to and during the loading, unloading and handling operations. All practicable measures, including speed controls for vehicles, shall be taken to prevent or minimize the dust emission caused by vehicle movement. Tarpaulin or low permeable sheet shall be put on dusty vehicle loads transported between site locations. 							
	Noise Mitigation Measures The mixing facilities shall be sited as far as practicable to the nearby noise sensitive receivers. Simultaneous operation of mixing facilities and other equipment shall be avoided. Mixing process and other associated material handling activities shall be properly scheduled to minimise potential cumulative noise impact on the nearby noise sensitive receivers. Construction Noise Permit shall be applied for the operation of powered mechanical equipment during restricted hours (if any).							

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation	
			Agent	Des	C	0	Dec	and Guidelines	
	Water Quality Mitigation Measures Stockpile of untreated soil shall be covered as far as practicable to prevent the contaminated material from leaching out. The leachate shall be discharged following the requirements of WPCO.								
	Waste Mitigation Measures Treated oversize materials will be used as filling material for backfilling within the site. Sorted materials of size smaller than 5 cm will be collected and transferred to the mixing plant for further decontamination treatment. Stabilized soils shall be broken into suitable size for backfilling or reuse on site. A high standard of housekeeping shall be maintained within the mixing plant area.								
	If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials.								

^{*} Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

Monthly EM&A Report

Table A13.6 Implementation Schedule for Marine Ecology

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
2111101	Zam omnerm recessor mensures / mangarion mensures	200mion, 11ming	Agent	Des	C	О	Dec	and Guidelines
Construction	on Phase							
For the Wh	ole Project - Schedule 3 DP							
S.9.7.2	Alternative design of the Trunk Road constructed in tunnel shall be adopted to avoid permanent reclamation in CBTS and ex-PWCA Basin.	-	CEDD/HyD	V				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
For DP3 -	Reclamation Works							
S.9.7.3	Translocation of those potentially affected coral colonies to the nearby suitable habitats such as Junk Bay is recommended. A detailed translocation plan (including translocation methodology, monitoring of transplanted corals, etc.) should be drafted and approval by AFCD during the detailed design stage of the Project.	Ex-PCWA Basin and along seawall next to a public pier which is about 250 m away from the CBTS	CEDD/HyD	√				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
23.7 110.7	Environmental Frotestion Medical Co.	Bookin, Timing	Agent	Des	C	0	Dec	and Guidelines
S.9.7.4	During dredging and filling operations, a number of mitigation measures to control water quality shall be adopted to confine sediment plume within reclamation area and protect marine fauna in proximity to the reclamation. The mitigation measures include the following: • Installation of silt curtains during dredging activities • Use of tightly-closed grab dredger • Reduction of dredging rate • Control of grab descending speed • Construction of leading edges of seawall in the early stages of the reclamation works	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
	Adoption of multiple-phase construction schedule							

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Environmental Protection Measures / Mitigation Measures Location / Timing Implementation		Ir	nplem Sta	entati ges*	Relevant Legislation	
2111101	2 omiera 2. ocean 2.2 asia es / Fritigation 17 cusul es	Zoendon / Timing	Agent	Des	C	0	Dec	and Guidelines
S.9.7.6	To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended: Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible. Adoption of multiple-phase construction schedule.	Work site / during construction phase	Contractor		√ 			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.7	construction phase (see noise impact assessment) shall be effectively implemented. Seawalls shall be constructed in advance around the reclamation areas within the area of the CBTS to screen adjacent feeding ground from construction phase activities, reduce noise disturbance to the associated seabirds and also to restrict access to this habitat adjacent to works areas by ship traffic.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.8	Loss of artificial seawall habitats shall be reinstated by the construction of about 1 km vertical wave absorbing seawall along the coastlines of the new reclamation around the HKCEC and at North Point. The new seawalls are expected to provide large area of hard substrata for settlement and recruitment of intertidal fauna similar to those previously recorded from existing intertidal habitats.	Work site / during construction phase	Contractor		1			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

^{*}Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Table A13.7 Implementation Schedule for Landscape and Visual

EIA Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	Implementation Stages*			ion	Relevant Legislation and Guidelines
					Des	C	O	Dec	
Construction	Phase				<u> </u>				
For the Whole	Project								
Table 10.5	CM1	Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	V	1			EIAO TM
Table 10.5	CM2	Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	1	√			EIAO TM
Table 10.5	CM3	Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM4	Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM5	Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6	Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP1 - CV	VB (With	in the Project Boundary)	1					•	
Table 10.5	CM1	Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor		1			EIAO TM
Table 10.5	CM2	Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	1	V			EIAO TM
Table 10.5	CM3	Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	V	1			EIAO TM
Table 10.5	CM4	Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	V	1			EIAO TM
Table 10.5	CM5	Control of night-time lighting.	Work site / During Construction Phase	Contractor		V			EIAO TM

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Envir	onmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
					Des	C	О	Dec	
Table 10.5	CM6	Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		V			EIAO TM
For DP2 – WI	II Majo	r Roads (Road P2)							
Table 10.5		Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	1	1			EIAO TM
Table 10.5	CM2	Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM3	Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	1	V			EIAO TM
Table 10.5	CM4	Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM5	Control of night-time lighting.	Work site / During Construction Phase	Contractor		V			EIAO TM
Table 10.5	CM6	the surrounding setting.	Work site / During Construction Phase	Contractor		V			EIAO TM
For DP3 - Red									
Table 10.5		Control of night-time lighting.	Work site / During Construction Phase	Contractor		V			EIAO TM
Table 10.5	CM6	Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		V			EIAO TM
For DP5 - Wa	n Chai I	East Sewage Outfall							
Refer to EIA- 058/2001 Table 10.13	CM2	Minimisation of works areas.	Work site / During Construction Phase	Contractor		1			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM3	Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
					Des	C	0	Dec	
Refer to EIA- 058/2001 Table 10.13	CM4	Control night-time lighting.	Work site / During Construction Phase	Contractor		V			EIAO TM
Refer to EIA- 058/2001	CM5	Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.13	an II anh	our Water Mains from Wan Chai to Tsim Sha Tsui							
Refer to EIA- 058/2001 Table 10.13		Minimisation of works areas.	Work site / During Construction Phase	Contractor		1			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM3	Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		1			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM4	Control night-time lighting.	Work site / During Construction Phase	Contractor		1			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM5	Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		V			EIAO TM
Operation Pha				•					
For the Whole	Project	- Schedule 3 DP							
Table 10.6, Figure 10.5.1- 10.5.5	OM1	Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD	1	1	1		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM2	Shrub and Climbing Plants to soften proposed structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD	V	1	V		ETWB TCW 2/2004

Appendix 3.1

Contract no. HK/2011/07

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 2)

EIA Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	1 Implementation Stages*				Relevant Legislation and Guidelines
					Des	C	0	Dec	
Table 10.6,	OM3	Buffer Tree and Shrub Planting to screen proposed roads	Work site / During	CEDD/HyD/	√	V	V		ETWB TCW 2/2004
Figure 10.5.1- 10.5.5		and associated structures.	Design Stage and Operation Phases						
Table 10.6, Figure 10.5.1- 10.5.5	OM4	Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD <u></u>	V	1	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM5	Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM6	Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	CEDD/HyD	1	1	V		ETWB TCW 2/2004
For DP1 - CW	B (Withi	in the Project Boundary)							
Table 10.6,	OM1	Aesthetic design of buildings and road-related structures,	Work site / During	HyD	√	√			ETWB TCW 2/2004
Figure 10.5.1- 10.5.5		including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Design Stage and Operation Phases						
Table 10.6, Figure 10.5.1- 10.5.5	OM2	Shrub and Climbing Plants to soften proposed structures	Work site / During Design Stage and Operation Phases	HyD	V	1	1		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM3	Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	HyD	1	1	1		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM5	Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	HyD	1	1	1		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM6	Aesthetic design of roadside amenity areas. *Roads (Road P2)	Work site / During Design Stage and Operation Phases	HyD	V	1	V		ETWB TCW 2/2004

⁴ CEDD will identify an implementation agent

Monthly EM&A Report

EIA Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	tion Implementation Stages*				Relevant Legislation and Guidelines
					Des	C	0	Dec	
Table 10.6, Figure 10.5.1- 10.5.5	OM1	Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD		1	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM3	Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD		1	1		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM5	Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD		V	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM6	Aesthetic design of roadside amenity areas	Work site / During Design Stage and Operation Phases	CEDD/HyD		1	V		ETWB TCW 2/2004
For DP3 - Rec	lamatior	n Works							
Table 10.6, Figure 10.5.1- 10.5.5	OM4	Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD⁵_	√	V	√		ETWB TCW 2/2004

^{*}Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

 $^{^{\}rm 5}$ CEDD will identify an implementation agent

Appendix 4.1

Action and Limit Level

Lam Geotechnics Limited

Action and Limit Level

Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A) ^{Note 1}

Note 1:

- 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.
- If works are to be carried out during the restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

Action and Limit Level for Air Monitoring

Monitoring Location	1-hour TSP Leve	el in μ g/m ³	in μ g/m ³ 24-hour TSP Lev		
	Action Level	Limit Level	Action Level	Limit Level	
CMA1b Note 2	320.1	500	176.7	260	
CMA2a	323.4	500	169.5	260	
CMA3a Note 2	311.3	500	171.0	260	
CMA4a	312.5	500	171.2	260	
CMA5a Note 2	332.0	500	181.0	260	
CMA6a Note 2	300.1	500	187.3	260	

Note 2:

- As per facing owner's rejection in allowing the implementation of long-term air quality impact monitoring at their premises, alternative monitoring stations and justification were proposed for IEC verification and EPD approval.
- The established Action and Limit Levels from the baseline air monitoring will be adopted to the alternative monitoring stations.

Action and Limit Level for Water Monitoring

Parameters	Dry S	eason	Wet S	Season					
r ai ailletei S	Action	Limit	Action	Limit					
WSD Salt Water Intake									
SS in mg L ⁻¹	13.00	14.43	16.26	19.74					
Turbidity in NTU	8.04	9.49	10.01	11.54					
DO in mg/L	3.66	3.28	3.17	2.63					
Cooling Water Inta	ke								
SS in mg L ⁻¹	15.00	22.13	18.42	27.54					
Turbidity in NTU	9.10	10.25	11.35	12.71					
DO in mg/L	3.36	2.73	3.02	2.44					

Remarks:

 Action and Limit Level for the wet season are applied after the EPD approval of Updated EM&A Manual on 29 April 2011.

Action and Limit Levels for Odour Patrol

Parameters	Action	Limit
Odour Nuisance (from odour intensity analysis or odour patrol)	 When two documented complaint are received; or Odour Intensity of 2 is measured from odour intensity analysis. 	 Five or more consecutive genuine documented complaints within a week; or Odour Intensity of 3 or above is measured from odour intensity analysis.

Appendix 4.2

Copies of Calibration Certificates



綜合試驗有限公司

G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com





CERTIFICATE OF CALIBRATION

Certificate No.:

14CA0529 01-01

Page

Item tested

Description: Manufacturer: Sound Level Meter (Type 1)

Microphone

Type/Model No.:

B&K 2236

B&K

Serial/Equipment No.: Adaptors used:

2100736

4188 2157055

Item submitted by

Customer Name:

Lam Geotechnics Limited

Address of Customer:

Request No.: Date of receipt:

29-May-2014

Date of test:

29-May-2014

Reference equipment used in the calibration

Description:

Multi function sound calibrator

Model: B&K 4226

Serial No. 2288444

Expiry Date: 22-Jun-2014

Traceable to: CIGISMEC CEPREI CEPREI

Signal generator Signal generator

DS 360 DS 360

33873 61227

09-Apr-2015 09-Apr-2015

Ambient conditions

Temperature: Relative humidity: 22 ± 1 °C 60 ± 10 %

Air pressure:

1000 ± 10 hPa

Test specifications

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 1, and the lab calibration procedure SMTP004-CA-152.

2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of +20%.

The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference 3, between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

30-May-2014

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

C Soils & Materials Engineering Co. Ltd.

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號刊達中心地下,9樓~12樓~13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

14CA0529 01-01

Page

2

2

1, Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Nuk List Living		2		
Self-generated noise	A	Pass	0.3	
	С	Pass	1.0	2.1
	Lin	Pass	2.0	2.2
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	Α	Pass	0.3	
Control of the state of the sta	С	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/103 at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/104 at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

V - 1

End

Checked by:

Lam Tze Wai

Date:

Fung Chr Yip 29-May-2014

Date:

30-May-2014

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd

Form No CARP152-2/Issue 1/Rev C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



Test Data for Sound Level Meter

Page 3 of 5

Sound level me Microphone	eter type: type:	2236 4188		Serial No. Serial No.		0736 7055		29-May-2014
7943.0	94.0		01.0	00.0	1 4 =	20		14CA0529 01-01
N. 36.75			91.0	90.9	1.5	3.0	-0.1	
12590.0	94.0		87.8	87.7	3.0	6.0	-0.1	
Frequency weig	ghting Lin:							
Frequency	Ref. lev	/el E	xpected level	Actual level	Tolera	nce(dB)	Deviation	
Hz	dB		dB	dB	+	- A	dB	
1000.0	94.0		94.0	94.0	0.0	0.0	0.0	
31.6	94.0		94.0	94.0	1.5	1.5	0.0	
63.1	94.0		94.0	93.9	1.5	1.5	-0.1	
125.9	94.0		94.0	94.0	1.0	1.0	0.0	
251.2	94.0		94.0	94.0	1.0	1.0	0.0	
501.2	94.0		94.0	94.0	1.0	1.0	0.0	

94.0

94.0

94.1

94.1

1.0

1.0

1.5

3.0

1.0

1.0

3.0

6.0

0.0

0.0

0.1

0.1

TIME WEIGHTING FAST TEST

94.0

94.0

94.0

94.0

1995.0

3981.0

7943.0

12590.0

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	100	dB
109.0	108.0	108.0	1.0	1.0	0.0

94.0

94.0

94.0

94.0

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A. Maximum hold)

when the signal is continuous.	(Weight A, Maximum Hold)						
Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation		
dB	dB	dB	+	-	dB		
109.0	104.9	105.2	1.0	1.0	0.3		

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities:	(Weighting C, set the generator signal to single, Lcpmax)						
Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation			
dB	dB	dB	+/- dB	dB			
112.0	112.0	111.7	2.0	-0.3			

legative polarities:				
Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
112.0	112.0	111.7	2.0	-0.3

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency:

2000 Hz

Amplitude:

2 dB below the upper limit of the primary indicator range.

(c)Soils Materials Eng. Co., Ltd.

Form No.: CAWS 152/Issue 1/Rev /B/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港 黃竹 坑 道 3 7 號 利 達 中 心 地 下 , 9 樓 , 1 2 樓 , 1 3 樓 及 2 0 樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



Test Data for Sound Level Meter

Page 4 of 5

Sound level meter type:

2236 4188

Serial No.

2100736

Date

29-May-2014

Microphone

type:

Serial No.

2157055

Report: 14CA0529 01-01

Tone burst sig		40 Hz 11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)					
	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation		
Time wighting	dB	dB	indication(dB)	+/- dB	dB		
Slow	111.0+6.6	111.0	110.8	0.5	-0.2		

TIME WEIGHTING IMPULSE TEST

Time weighting I is tested on the reference range (Set the SLM to LAImax)

Test frequency:

2000 Hz

Amplitude:

The upper limit of the primary indicator range.

Single sinusoidal burst of duration 5 ms:

Ref. Level	Single burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
113.0	104.2	104.2	2.0	0.0

Repeated at 100 Hz

Ref. Level	Repeated burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
113.0	110.3	110.3	1.0	0.0

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst:

4000 Hz

Duration of tone burst:

1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks
msec	dB	dB	dB	+/- dB	dB	
1000	83.0	83.0	82.7	1.0	-0.3	60s integ.
10000	73.0	73.0	72.7	1.0	-0.3	6min. integ

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency:

4000 Hz

Integration time:

10 sec

The integrating sound level meter set to Leg:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10	116.0	86.0	85.8	1.7	-0.2

The integrating sound level meter set to SEL:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10.0	116.0	96.0	95.9	1.7	-0.1

OVERLOAD INDICATION TEST

For SLM capable of operating in a non-integrating mode.

Test frequency:

2000 Hz



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



Test Data for Sound Level Meter

Page 5 of 5

Sound level meter type:

2236

Serial No.

2100736

Date

29-May-2014

Microphone

type:

4188

Serial No.

2157055

Report: 14CA0529 01-01

Amplitude: Tone burst signal: 2 dB below the upper limit of the primary indicator range.

Burst repetition frequency:

40 Hz

11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
126.7	125.7	122.7	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following: The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency:

4000 Hz

Integration time:

10 sec 1 msec

Single burst	duration:	1 msec			
Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
130.6	129.6	89.6	89.4	2.2	-0.2

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency	Expected level	Actual level	Tolera	nce (dB)	Deviation
Hz	dB	Measured (dB)	+	-	dB
1000	94.0	94.0	0.0	0.0	0.0
125	77.9	78.2	1.0	1.0	0.3
8000	92.9	92.8	1.5	3.0	-0.1





G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

Certificate No.:

14CA0529 01-02

Page:

of

2

to:

Item tested

Description:

Acoustical Calibrator (Class 1)

Manufacturer: Type/Model No .: Rion Co., Ltd. NC-73

Serial/Equipment No.:

10465798

Adaptors used:

Item submitted by

Curstomer:

Lam Geotechnics Limited

Address of Customer:

Request No : Date of receipt:

29-May-2014

Date of test:

30-May-2014

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable
Lab standard microphone	B&K 4180	2412857	13-May-2015	SCL
Preamplifier	B&K 2673	2239857	10-Apr-2015	CEPREI
Measuring amplifier	B&K 2610	2346941	08-Apr-2015	CEPREI
Signal generator	DS 360	61227	09-Apr-2015	CEPREI
Digital multi-meter	34401A	US36087050	17-Dec-2014	CEPREI
Audio analyzer	8903B	GB41300350	07-Apr-2015	CEPREI
Universal counter	53132A	MY40003662	11-Apr-2015	CEPREI

Ambient conditions

Temperature:

22 ± 1 °C

Relative humidity:

60 ± 10 %

Air pressure: 1000 ± 10 hPa

Test specifications

- 1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2. The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference 3, pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Approved Signatory:

Date:

30-May-2014

Company Chop:

Comments: The results reported in his certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

Soils & Materials Engineering Co., Ltd.

Form No.CARP156-1/Issue 1/Rev D/01/03/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓、12樓、13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

14CA0529 01-02

Page:

2

of

2

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

			(Output level in dB re 20 µPa
Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Expanded Uncertainty dB
1000	94.00	94.57	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz

STF = 0.001 dB

Estimated expanded uncertainty

0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz

Actual Frequency = 965.6 Hz

Estimated expanded uncertainty

0.1 Hz

Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz

TND = 0.9 %

Estimated expanded uncertainty

0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

End

Date:

Fung Chi Yip 30-May-2014 Checked by:

Date:

Lam Tze Wai 30-May-2014

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

Form No CARP156-2/Issue 1/Rev.C/01/05/2005





Information supplied by customer:

CONTACT: <u>DEREK LO</u> WORK ORDER: <u>HK1410093</u>

CLIENT: LAM GEOTECHNICS LIMITED

DATE RECEIVED: <u>23/05/2014</u>
DATE OF ISSUE: <u>30/05/2014</u>

ADDRESS: 11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD,

WANCHAI, HONG KONG

PROJECT: ---

METHOD OF PERFORMANCE CHECK/ CALIBRATION:

Ref: APHA22nd ed 2130B

COMMENTS

It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.

Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity	
Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203010	
Equipment No.:		
Date of Calibration:	28 May, 2014	

Remarks:

This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Peter Lee

Director



WORK ORDER: <u>HK1410093</u>
DATE OF ISSUE: <u>28th May</u>, <u>2014</u>

CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203010	
Equipment No.:		
Date of Calibration:	28 May, 2014	
Date of next Calibration:	28 August, 2014	

Parameters:

Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.02	
4	4.16	+4.0
10	9.80	-2.0
40	38.5	-3.75
100	104	+4.0
400	420	+5.0
1000	970	-3.0
	Tolerance Limit (±%)	10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.



Information supplied by customer:

CONTACT: DEREK LO WORK ORDER: HK1410260

CLIENT: LAM GEOTECHNICS LIMITED

DATE RECEIVED: 2014-08-28 DATE OF ISSUE: 2014-09-04

ADDRESS: 11/F, CENTRE POINT, 181-185, GLOUCESTER

ROAD, WANCHAI, HONG KONG

PROJECT: ---

METHOD OF PERFORMANCE CHECK/ CALIBRATION:

Ref: APHA22nd ed 2130B

COMMENTS

It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.

Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity	
Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203010	
Equipment No.:		
Date of Calibration:	28-Aug-14	

Remarks:

This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Peter Lee Director



WORK ORDER: HK1410260 **DATE OF ISSUE:** 2014-09-04

CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203010	
Equipment No.:		
Date of Calibration:	28-Aug-14	
Date of next Calibation:	28-Nov-14	

Parameters:

Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)
0	0.00	
4	4.21	5.3
10	9.62	-3.8
40	42.0	5.0
100	100	0.0
400	410	2.5
1000	997	-0.3
	Tolerance Limit (±%)	10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.



Information supplied by customer:

CONTACT: DERE

DEREK LO

WORK ORDER: HK1410202

CLIENT:

LAM GEOTECHNICS LIMITED

DATE RECEIVED 1/8/2014 DATE OF ISSUE: 4/8/2014

ADDRESS:

11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD,

WANCHAI, HONG KONG

PROJECT:

METHOD OF PERFORMANCE CHECK/ CALIBRATION:

Ref: APHA22nd ed 2130B

COMMENTS

It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.

Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity	
Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203016	
Equipment No.:	<u> </u>	
Date of Calibration:	04-Aug-14	

Remarks:

This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Peter Lee Director

Tawam kan



WORK ORDER: HK1410202 **DATE OF ISSUE:** 4/8/2014

CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203016	
Equipment No.:		
Date of Calibration:	04-Aug-14	
Date of next Calibation:	04-Nov-14	

Parameters: Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	
0	0.02		
4	3.96	-1.0	
10	9.97	-0.3	
40	40.0	-0.1	
100	99	-1.2	
400	400	0.0	
1000	1004	0.4	
	Tolerance Limit (±%)	10.0	

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.



Information supplied by customer:

CONTACT: DE

DEREK LO

WORK ORDER: HK1410201

CLIENT:

LAM GEOTECHNICS LIMITED

DATE RECEIVED 1/8/2014 DATE OF ISSUE: 4/8/2014

ADDRESS:

11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD,

WANCHAI, HONG KONG

PROJECT:

METHOD OF PERFORMANCE CHECK/ CALIBRATION:

Ref: APHA22nd ed 2130B

COMMENTS

It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.

Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity	
Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203025	
Equipment No.:		
Date of Calibration:	04-Aug-14	

Remarks:

This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Peter Lee Director



WORK ORDER: HK1410201 **DATE OF ISSUE:** 4/8/2014

CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter	
Brand Name:	Xin Rui	
Model No.:	WGZ-3B	
Serial No.:	1203025	
Equipment No.:		
Date of Calibration:	04-Aug-14	
Date of next Calibation:	04-Nov-14	

Parameters:

Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	
0	0.00		
4	3.92	-2.0	
10	9.87	-1.3	
40	39.1	-2.3	
100	100	0.0	
400	400	0.0	
1000	1000	0.0	
	Tolerance Limit (±%)	10.0	

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.



ALS Technichem (HK) Pty Ltd 11/F, Chung Shun Knitting Centre 1-3 Wing Yip Street

Kwai Chung, N.T., Hong Kong

T: +852 2610 1044 F: +852 2610 2021 www.alsglobal.com

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR ALAN LI

CLIENT: LAM GEOTECHNICS LIMITED ADDRESS: 11/F., CENTRE POINT,

181-185 GLOUCESTER ROAD,

WAN CHAI, HONG KONG

PROJECT: --

WORK ORDER: HK1423982 LABORATORY: HONG KONG DATE RECEIVED: 28/07/2014 DATE OF ISSUE: 04/08/2014

COMMENTS

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the ALS Hong Kong laboratory or quoted from relevant international standards.

The "Next Calibration Date" is recommended according to best practice principals as practised by the ALS Hong Kong laboratory or quoted from relevant international standards.

Scope of Test: pH, Dissolved Oxygen, Salinity and Temperature

Description: Multimeter

Brand Name: YSI

Model No.: Professional Plus

Serial No.: 11F100597

Equipment No.:

Date of Calibration: 4 August 2014

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Fung Lim Chee Richard

General Manager

Greater China & Hong Kong

Work Order: Date of Issue: HK1423982 04/08/2014

Client:

LAM GEOTECHNICS LIMITED

Description:

Multimeter

Brand Name:

YSI

Model No.:

Professional Plus

Serial No .:

11F100597

Equipment No.:

Date of Calibration: 4 August 2014

Date of next Calibration:

4 November 2014

Parameters:

Dissolved Oxygen Method Ref: APHA (21st edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.71	3.79	+0.08
5.55	5.65	+0.10
7.40	7.52	+0.12
	Tolerance Limit (mg/L)	+0.20

pH Value

Method Ref: APHA (21st edition), 4500H:B

Expected Reading (pH Unit)	Displayed Reading (pH Unit)	Tolerance (pH unit)
4.0	4.04	+0.04
7.0	6.90	-0.10
10.0	9.97	-0.03
	Tolerance Limit (pH Unit)	±0.20

Salinity

Method Ref: APHA (21st edition), 2520B

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)
0	0.0	-2-
10	10.07	+0.7
20	20.72	+3.6
30	30.87	+2.9
	Tolerance Limit (%)	±10.0

Temperature

Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)
12.0	11.9	-0.1
22.5	22.5	0.0
33.5	33.0	-0.5
	Tolerance Limit (°C)	±2.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

> Mr. Fung Lim Chee, Richard General Manager -

> Greater China & Hong Kong

ALS Technichem (HK) Pty Ltd ALS Environmental



ALS Technichem (HK) Pty Ltd 11/F, Chung Shun Knitting Centre

1-3 Wing Yip Street

Kwai Chung, N.T., Hong Kong

T: +852 2610 1044 F: +852 2610 2021 www.alsglobal.com

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR ALAN LI

CLIENT: LAM GEOTECHNICS LIMITED ADDRESS: 11/F., CENTRE POINT,

181-185 GLOUCESTER ROAD,

WAN CHAI, HONG KONG

PROJECT: --

WORK ORDER: HK1423939
LABORATORY: HONG KONG
DATE RECEIVED: 25/07/2014
DATE OF ISSUE: 31/07/2014

COMMENTS

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the ALS Hong Kong laboratory or quoted from relevant international standards.

The "Next Calibration Date" is recommended according to best practice principals as practised by the ALS Hong Kong laboratory or quoted from relevant international standards.

Scope of Test: Dissolved Oxygen, pH, Salinity and Temperature

Equipment Type: YSI SONDE

Brand Name: YSI

131

Model No.: YSI Professional plus

Serial No.: 14E 100105

Equipment No.:

Date of Calibration: 29 July, 2014

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Fung Lim Chee, Richard

General Manager -

Greater China & Hong Kong

Work Order: HK1423939 **Date of Issue:** 31/07/2014

Client: LAM GEOTECHNICS LIMITED



Equipment Type: YSI SONDE

Brand Name: YSI

Model No.: YSI Professional plus

Serial No.: 14E 100105

Equipment No.: --

Date of Calibration: 29 July, 2014 Date of next Calibration: 29 October, 2014

Parameters:

Dissolved Oxygen Method Ref: APHA (21st edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.60	3.45	-0.15
5.55	5.64	+0.09
7.31	7.26	-0.05
	Tolerance Limit (±mg/L)	0.20

pH Value Method Ref: APHA (21st edition), 4500H:B

Expected Reading (pH Unit)	Displayed Reading (pH Unit)	Tolerance (pH unit)
4.0	4.00	0.00
7.0	7.03	+0.03
10.0	9.99	-0.01
	Tolerance Limit (±pH unit)	0.20

Salinity Method Ref: APHA (21st edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)		
0	0.00	44		
10	9.25	-7.5		
20	18.83	-5.9		
30	28.03	-6.6		
	Tolerance Limit (±%)	10.0		

Temperature Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)		
10.5	11.0	+0.5		
22.5	22.6	+0.1		
33.5	33.6	+0.1		
	Tolerance Limit (±°C)	2.0		

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Mr. Fung Lim Chee, Richard

General Manager -

Greater China & Hong Kong

ALS Technichem (HK) Pty Ltd

ALS Environmental



TISCH ENVIRONMENTAL, INC. 145 SOUTH MIAMI AVE VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

					METER	ORFICE
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	DIFF Hg (mm)	DIFF H2O (in.)
1	NA	NA	1.00	1.3870	3.2	2.00
2	NA	NA	1.00	0.9830	6.4	4.00
3	NA	NA	1.00	0.8760	7.9	5.0
4	NA	NA	1.00	0.8340	8.8	5.5
5	NA	NA	1.00	0.6860	12.7	8.0

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
0.9817 0.9775 0.9754 0.9743 0.9692	0.7078 0.9944 1.1135 1.1683 1.4128	1.4042 1.9859 2.2203 2.3286 2.8084		0.9957 0.9915 0.9894 0.9882 0.9830	0.7179 1.0086 1.1294 1.1849 1.4330	0.8919 1.2613 1.4101 1.4790 1.7837
Qstd slo	t (b) =	1.99175 -0.00041 0.99991		Qa slop intercep coeffici	t (b) =	1.24720 -0.00026 0.99991
y axis =	SQRT [H2O (F	a/760) (298/7	ra)]	y axis =	SQRT [H20 (T	[a/Pa)]

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)
Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]
Qa = Va/Time

For subsequent flow rate calculations:

Qstd = $1/m\{ [SQRT(H2O(Pa/760)(298/Ta))] - b\}$ Qa = $1/m\{ [SQRT H2O(Ta/Pa)] - b\}$



_ocation :		CMA1b				Calbrati	on Date	:	30-Aug-14
Equipment no.		EL452				Calbrati	on Due Date	:	30-Oct-14
	TINULOUS	- FI OW DI							
CALIBRATION OF CON	IIINUUUS	FLOW RI							
				Ambient Co			T		
Геmperature, Т _а		302	2	Kelvin F	Pressure, P	a	1	1006	mmHg
			Orifice Tr	ansfer Star	dard Inform	mation			
Equipment No.		EL086		Slope, m _c	1.991	75	Intercept, bc	-0.00041	
Last Calibration Date		14-Jul-1	4	l.	(Hx	P _a / 10	13.3 x 298 /	'T _a)	1/2
Next Calibration Date		14-Jul-1	5		=		$Q_{std} + b_c$		
				Calibratian	~4 TCD				
0.111 - 11		. 5		Calibration		0 1			10
Calibration		ometer R	•		Q _{std} Continuous				IC
Point	H (i	nches of	water)	(m³ /	(m³ / min.) Reco		order, W	(W(Pa	/1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-a	xis	(0	CFM)		Y-axis
1	6.4	6.4	12.8	1.7	781	1 62		61.3658	
2	5.1	5.1	10.2	1.5	373	50		49.4885	
3	4.2	4.2	8.4	1.4	405		41	40.5806	
4	2.5	2.5	5.0	1.1	114		25		24.7443
5	1.3	1.3	2.6	0.8	015		10		9.8977
By Linear Regression of	Y on X		•						
	Slope, m	=	52.0	603	Inte	ercept, b =	-32	2.7404	
Correlation Co	pefficient*	=	0.99	981			-		
Calibration	Accepted	=	Yes/	No**					
if Correlation Coefficier	nt < 0.990,	check and	d recalibration	n again.					
* Delete as appropriate.									
Remarks :									
-									
Calibrated by		Felix Li				Checke	d by	:	Pauline Wong
) ate	: 30-Aug-14			Date		: _	30-Aug-14		



				_		•	-	-	
Location :		CMA2a				Calbratio	on Date	:	30-Aug-14
Equipment no.		EL449				Calbratio	on Due Date	:	30-Oct-14
CALIBRATION OF CON	ITINUOUS	S FLOW RI	CORDER						
				Ambient Cor	dition				
Temperature, T _a		302	:	Kelvin Pr	essure, P	a	1	006	mmHg
			Orifice Tr	ansfer Stand	ard Inform	mation			
Equipment No.		EL086		Slope, mc	1.991		Intercept, bc	Т	-0.00041
Last Calibration Date		14-Jul-1					3.3 x 298 /	 T.)	
Next Calibration Date		14-Jul-1	5		=		$Q_{std} + b_c$	· a/	
				0.111	(TOD	· ·	· stu		
0.17		. 5		Calibration o		0 (i	E.		10
Calibration		nometer R			Q std Continuous Flow				IC
Point		inches of	-	(m ³ / m			rder, W	(W(P _a /	1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-ax			FM)		Y-axis
1	6.0	6.0	12.0	1.72		62			61.3658
2	4.8	4.8	9.6	1.539			53		52.4579
3	3.5	3.5	7.0	1.315	50	4	46		45.5295
4	2.2	2.2	4.4	1.042	26	;	39		38.6011
5	1.5	1.5	3.0	0.860)9	:	29		28.7034
By Linear Regression of	Y on X								
	Slope, m	=	35.4	011	Inte	ercept, b =	-0.	5484	
Correlation Co	oefficient*	=	0.99)21					
Calibration	Accepted	=	Yes/P	No**					
* if Correlation Coefficier	nt < 0.990.	. check and	d recalibration	n again.					
				3.					
** Delete as appropriate.									
Remarks :									
Calibrated by		Felix Li				Checked	by	:	Pauline Wong
Date	3	0-Aug-14				Date		:	30-Aug-14



				_			-	-	
Location :		CMA3a				Calbrati	on Date	:	22-Aug-14
Equipment no.		EL333				Calbrati	on Due Date	:	22-Oct-14
CALIBRATION OF CON	TINUOUS	FLOW RI	CORDER						
				Ambient Co	ndition				
Temperature, T _a		303	1	Kelvin P	ressure, P	a	1	009	mmHg
			Orifice Tra	ansfer Stan	dard Inforn	nation			
Equipment No.		EL086		Slope, m _c	1.991		Intercept, bc		-0.00041
Last Calibration Date		14-Jul-1		- 1, 3, 4 -			3.3 x 298 /	/ T .)	
Next Calibration Date		14-Jul-1			=		$Q_{std} + b_c$	' a /	
				.		C	· stu		
Orlibration	•••			Calibration		Ozatina	51		IC
Calibration		nometer R	_	Q,		Continuous Flow			
Point		inches of		(m ³ /		Recorder, W		(W(P _a /	1013.3x298/T _a) ^{1/2} /35.31)
_	(up)	(down)	(difference)	X-a		(CFM)			Y-axis
1	5.6	5.6	11.2	1.66		62			61.3557
2	4.3	4.3	8.6	1.45			51		50.4700
3	3.8	3.8	7.6	1.36			44		43.5428
4	2.5	2.5	5.0	1.11			27		26.7194
5	1.4	1.4	2.8	0.83	316		15		14.8441
By Linear Regression of									
	Slope, m	=	57.5		Inte	ercept, b =	-34	1.6006	
Correlation Co		=	0.99						
Calibration	Accepted	=	Yes/						
* if Correlation Coefficier	nt < 0.990,	check and	d recalibration	n again.					
** Delete as appropriate.									
Remarks :									
Calibrated by		Felix Li				Checked	d by	:	Pauline Wong
Date :	2	2-Aug-14				Date		:	22-Aug-14



Location

CMA4a

Felix Li

30-Aug-14

Calibrated by

Calibration Data for High Volume Sampler (TSP Sampler)

Calbration Date

Checked by

Date

Pauline Wong

30-Aug-14

30-Aug-14

Equipment no.		EL390				Calbr	ation Due Date	:	30-Oct-14	
CALIBRATION OF CON	ITINUOUS	FLOW RI	CORDER							
				Ambient (Condition					
Temperature, T _a		302	!	Kelvin	Pressure, P	a		1006	mmHg	
Orifice Transfer Standard Information										
Equipment No.		EL086		Slope, m _c	1.991	75	Intercept, bo	;	-0.00041	
Last Calibration Date		14-Jul-1	4		(Нх	P _a / 1	013.3 x 298	/ T _a)	1/2	
Next Calibration Date	$= m_c \times Q_{std} + b_c$									
Calibration of TSP										
Calibration	Mar	nometer R	eading	C	Q _{std} Continuo		inuous Flow		IC	
Point	H (i	inches of	water)	(m ³	³ / min.) Reco		corder, W	(W(P _a /	(1013.3x298/T _a) ^{1/2} /35.3	
	(up)	(down)	(difference)	X-	axis		(CFM)		Y-axis	
1	6.4	6.4	12.8	1.	7781		61		60.3760	
2	5.2	5.2	10.4	1.	6028		50		49.4885	
3	4.3	4.3	8.6	1.	4575		41		40.5806	
4	2.8	2.8	5.6	1.	1762		25		24.7443	
5	1.5	1.5	3.0	0.	3609		10		9.8977	
By Linear Regression of	Y on X									
	Slope, m	=	55.1	108	Inte	ercept, b	= -3	8.7651		
Correlation Co	pefficient*	=	0.99	983						
Calibration	Accepted	=	Yes/	No**						
* if Correlation Coefficier	nt < 0.990,	check and	d recalibratio	n again.						
** Delete as appropriate.										
Remarks :										



				_	-	_	_	-	
Location :		CMA5a				Calbratio	on Date	:	22-Aug-14
Equipment no.		EL380				Calbratio	on Due Date	:	22-Oct-14
CALIBRATION OF CON	TINUOUS	S FLOW RI	CORDER						
				Ambient Conditi	on				
Temperature, T _a		303	1	Kelvin Press	ure, P _a		1	009	mmHg
			Orifice Tr	ansfer Standard	Informa	tion			
Equipment No.		EL086			1.99175		Intercept, bc		-0.00041
Last Calibration Date		14-Jul-1					3.3 x 298 /		
Next Calibration Date		14-Jul-1	5	,	=		$Q_{std} + b_c$	' a /	
					-		- Sid - C		
Orliburation	•••			Calibration of TS	5P	0	Fl		10
Calibration		nometer R	_	Q _{std}					IC
Point		inches of		(m ³ / min.)		Recorder, W		(W(P _a /	1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axis			FM)		Y-axis
1	5.8	5.8	11.6	1.6924		60			59.3765
2	4.7	4.7	9.4	1.5235			54		53.4389
3	3.6	3.6	7.2	1.3334			11		40.5739
	2.4	2.4	4.8	1.0888			28		27.7090
5 Du Linear Degraceion of	1.3	1.3	2.6	0.8014			15		14.8441
By Linear Regression of		_	F4 C	200	lmtore		27	2722	
Correlation Co	Slope, m		0.99		merc	cept, b =	-21	.3733	
Calibration		=	Yes/f						
Calibration	Accepted	_	1 65/1						
* if Correlation Coefficier	nt < 0.990,	, check and	d recalibration	n again.					
** Delete as appropriate.									
Remarks :									
							_		
Calibrated by		Felix Li				Checked	by	:	Pauline Wong
Date :	2	2-Aug-14				Date		:	22-Aug-14



				_	• •	_	-	
Location :		CMA6a			Calbrati	on Date	: 30-Aug-14	
Equipment no.		EL448			Calbrati	on Due Date	: 30-Oct-14	
CALIBRATION OF CON	TINUOUS	FLOW RI	CORDER					
				Ambient Condition				
Temperature, T _a		302		Kelvin Pressure	, P _a	1	006 mmHg	
			Orifice Tr	ansfer Standard In	formation			
Equipment No.		EL086		Slope, m _c 1.9	-0.00041			
Last Calibration Date		14-Jul-1			1 x P ₂ / 10	13.3 x 298 /	$(T_3)^{1/2}$	
Next Calibration Date		14-Jul-1	5	,		$Q_{std} + b_c$	<i>a</i> /	
				Calibration of TSP				
Calibration	Mar	nometer R	eading	Q _{std}	Contin	uous Flow	IC	
Point		inches of		(m ³ / min.)		order, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)	
i omi	(up)	(down)	(difference)			CFM)	Y-axis	
1	6.5	6.5	13.0	1.7919		61	60.3760	
2	5.2	5.2	10.4	1.6028		50	49.4885	
3	4.4	4.4	8.8	1.4744		43	42.5601	
4	2.0	2.0	4.0	0.9941		26	25.7340	
5	1.5	1.5	3.0	0.8609		15	14.8466	
By Linear Regression of	Y on X							
	Slope, m	=	45.3	852	Intercept, b =	-22	2.4334	
Correlation Co	pefficient*	=	0.99	928				
Calibration	Accepted	=	Yes/	No**				
* if O = === - - - - - - - -		-11	!!b !	!				
* if Correlation Coefficier	it < 0.990,	cneck and	recalibration	n again.				
** Delete as appropriate.								
Remarks :								
Calibrated by		Felix Li			Checke	d by	: Pauline Wong	
Date	3	0-Aug-14			Date		: 30-Aug-14	

Appendix 5.1

Monitoring Schedules for Reporting Month and Coming Reporting Month

Contract No. HK/2011/07 Wan Chai Development Phase II and Central-Wan Chai Bypass Sampling, Field Measurement and Testing Works (Stage 2)

Environmental Monitoring Schedule

			September	2014		
				28-Aug	29-Aug	30-Aug
					Impact WQM	
					Mid-ebb 14:32	
					Mid-flood 20:41	
31-Aug	1-Se	p 2-Sep	3-Sep	4-Sep	5-Sep	6-Sep
	24hr TSP					24hr TSP
		1hr TSP				
	Noise (Daytime)					
	(M1a, M2b, M3a, M4b, M5b, M	6)				
	Impact WQM			Impact WQM		Impact WQM
	Mid-ebb 4:	2		Mid-ebb 7:50		Mid-ebb 9:51
	Mid-flood 10:4			Mid-fllod 15:26		Mid-flood 17:05
70			40.0		40.0	
7-Sep	8-Se	p 9-Sep	10-Sep	11-Sep	12-Sep	13-Sep
					24hr TSP	
	1hr TSP					1hr TSP
			Noise (Daytime)	Noise (Daytime)		
			(M1a, M2b, M3a)	(M4b, M5b, M6)		
				(M4b, M5b, M6)		
	Impact WQM		Impact WQM		Impact WQM	
	Mid-ebb 11:3		Mid-ebb 13:03		Mid-flood 8:22	
	Mid-flood 18:	5	Mid-flood 19:26		Mid-ebb 14:28	
14-Sep	15-Se	p 16-Sep	17-Sep	18-Sep	19-Sep	20-Sep
				24hr TSP		
					1hr TSP	
		Noise (Daytime)	Noise (Daytime)	Noise (Daytime)		
		(M1a)	(M1a, M2b, M3a, M4b, M5b)	(M6)		
	Impact WQM	, ,	Impact WQM		Impact WQM	
	Mid-ebb 4:4	0	Mid-ebb 7:18		Mid-ebb 9:25	
21-Sep	22-Se	p 23-Sep	24-Sep	25-Sep	26-Sep	27-Sep
				24hr TSP		
			24hr TSP	(CMA5a)		
			2 10.	1hr TSP		
		Naine (Dections)		1111 131"		
		Noise (Daytime)]			
		(M1a, M2b, M3a, M4b, M5b, M6				
	Impact WQM		Impact WQM		Impact WQM	
	Mid-ebb 11:2	4	Mid-ebb 12:28		Mid-ebb 13:35	
	Mid-flood 17:5		Mid-flood 18:33		Mid-flood 19:28	

Contract No. HK/2011/07 Wan Chai Development Phase II and Central-Wan Chai Bypass Sampling, Field Measurement and Testing Works (Stage 2)

Tentative Environmental Monitoring Schedule

vii Oilillelitai	World	Scriedule
October	2014	

			October 2			
28-Sep	29-S	ер 30-Ѕер		2-Oct	3-Oct	4-Oct
	24hr TSP					
		1hr TSP				24hr TSP
	Noise (Daytime)	Noise (Daytime)				
	Impact WQM			Impact WQM		Impact WQM
	Mid-ebb 2:			Mid-ebb 5:52		Mid-ebb 8:29
5-Oct	Mid-flood 9:		8-Oct	Mid-flood 13:39 9-Oct	10-Oct	Mid-flood 15:47 11-Oct
5-001	6-0	7-061	6-Oct	9-001	10-Oct	TI-Oct
					24hr TSP	
	1hr TSP					1hr TSP
	Noise (Daytime)	Noise (Daytime)				
	Impact WQM		Impact WQM		Impact WQM	
	Mid-ebb 10:		Mid-ebb 11:59		Mid-ebb 13:25	
12-Oct	Mid-flood 17:		Mid-flood 18:12 15-Oct	16-Oct	Mid-flood 19:21 17-Oct	18-Oct
12-001	13-0	14-061	15-001	16-Oct	17-Oct	16-Oct
				24hr TSP		
					1hr TSP	
	Noise (Daytime)	Noise (Daytime)				
	Impact WQM		Impact WQM		Impact WQM	
	Mid-ebb 3: Mid-flood 10:		Mid-ebb 5:00 Mid-flood 17:27		Mid-ebb 7:18 Mid-flood 15:30	
19-Oct	20-0		22-Oct	23-Oct	24-Oct	25-Oct
13-001	20-0	21-000	22-001	25-001	24-001	25-001
			24hr TSP			
				1hr TSP		
	Noise (Daytime)	Noise (Daytime)				
	Impact WQM		Impact WQM		Impact WQM	
	Mid-ebb 10: Mid-flood 16:		Mid-ebb 11:24 Mid-flood 17:21		Mid-ebb 12:35 Mid-flood 18:16	
26-Oct	27-0		Wild-1100d 17.21		Wild-11000 15.10	
20 000	2. 0					
	Noise (Daytime)					
	Impact WQM Mid-ebb 1:	22				
	Mid-ebb 1: Mid-flood 8:					
	wiiu-1100u 0.	~	1	I	I	I

Appendix 5.2

Noise Monitoring Results and Graphical Presentations



Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

Location: M1a - Harbour Road Sports Centre

			Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level				
Date	Time	Weather	Leq	L10	L90	Leq	Leq	Leq				
			Unit: dB(A), (30-min)									
01/09/14	9:23	Fine	76.1	76.1 79.0 70.5 72		72	74	75				
10/09/14	14:23	Fine	73.9	73.9 76.0 69.0 72		69	75					
16/09/14	15:43	Fine	71.1 73.0 66.5		72	71	75					
23/09/14	9:45	Fine	73.6 76.5 71.5		72	68	75					

Location: M2b - Noon-day gun area

			Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level			
Date	Time	Weather	Leq	L10	L90	Leq	Leq	Leq			
			Unit: dB(A), (30-min)								
01/09/14	10:32	Fine	69.9	71.0	67.5	68	66	75			
10/09/14	15:07	Fine	68.4 69.5 66.0		68	61	75				
17/09/14	14:02	Cloudy	70.8 72.0 68.0		68	68	75				
23/09/14	10:30	Cloudy	72.5 75.5 68.5		68	71	75				

Location: M3a - Tung Lo Wan Fire Station

			Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level					
Date Time		Weather	Leq	L10	L90	Leq	Leq	Leq					
				Unit: dB(A), (30-min)									
01/09/14	11:21	Fine	66.9	68.0	65.5	69	67	75					
10/09/14	15:51	Fine	69.5	72.7	64.0	69	61	75					
17/09/14	14:42	Cloudy	65.5 67.0 63.5		69	66	75						
23/09/14	11:10	Cloudy	67.7 68.5 65.5		69	68	75						

Location: M4b - Victoria Centre

			Measurement Noise Level			Baseline Noise Level	Construction Noise Level	Limit Level				
Date	Date Time W		Leq	Leq L10 L90 Leq		Leq	Leq					
			Unit: dB(A), (30min)									
01/09/14	13:00	Fine	72.5	73.0	71.5	67	71	75				
11/09/14	14:40	Fine	70.3	72.0	67.5	67	67	75				
17/09/14	15:24	Fine	68.2	69.0	66.0	67	61	75				
23/09/14	13:00	Cloudy	69.2	70.5	67.0	67	65	75				

Location: M5b - City Garden

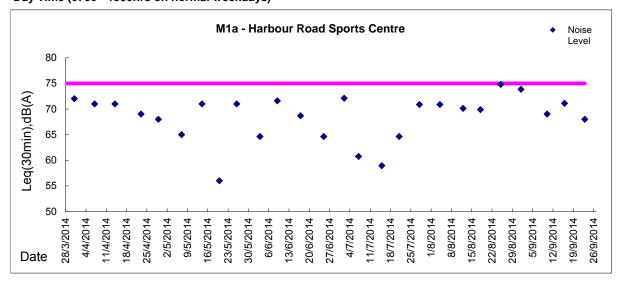
			Measure	ement Noi	se Level	Baseline Level	Construction Noise Level	Limit Level					
Date	Time	Weather	Leq	L10	L90	Leq	Leq	Leq					
				Unit: dB(A), (30min)									
01/09/14	14:01	Fine	71.3			68	69	75					
11/09/14	15:25	Fine	70.6	70.6 71.5 69.0		68	67	75					
17/09/14	16:16	Cloudy	72.5	73.5	71.5	68	71	75					
23/09/14	13:50	Cloudy	70.0 71.0 68.5		68	66	75						

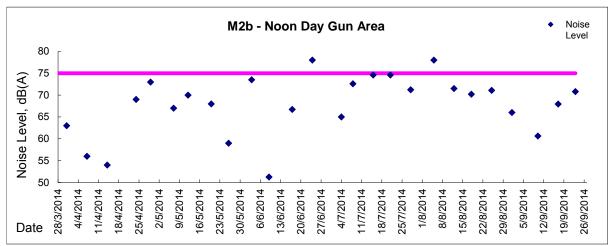
Location: M6 - HK Baptist Church Henrietta Secondary School

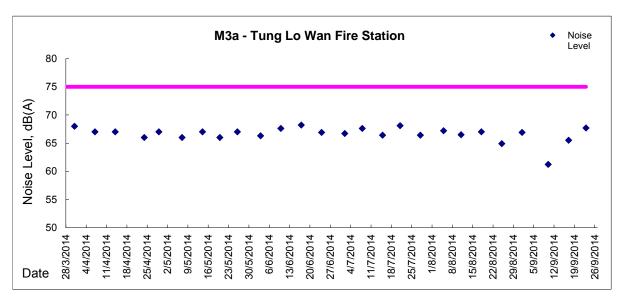
			Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level				
Date	Time Weather		Leq	L10	L90	Leq	Leq	Leq				
			Unit: dB(A), (30-min)									
01/09/14	14:42	Fine	72.8 74.0 70.5		71	69	70					
11/09/14	16:00	Fine	73.3	74.0 71.5 71 70		70	70					
18/09/14	14:25	Fine	71.7	73.0	69.5	71	65	70				
23/09/14	14:35	Cloudy	72.5 73.5 70.5		71	68	70					



Graphic Presentation of Noise Monitoring Result Day Time (0700 - 1900hrs on normal weekdays)

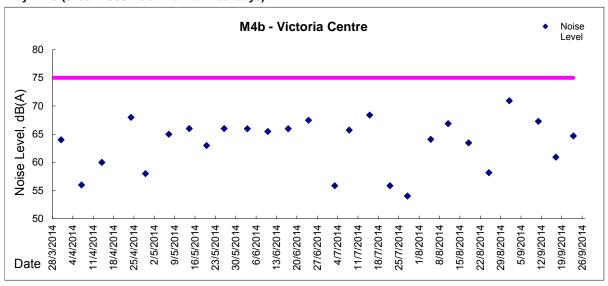


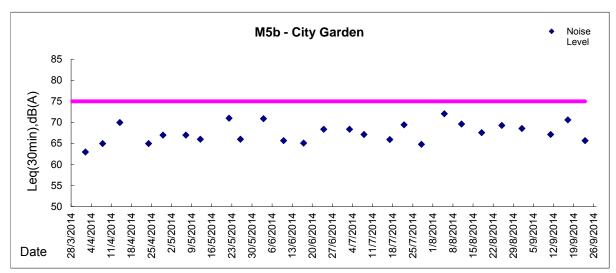


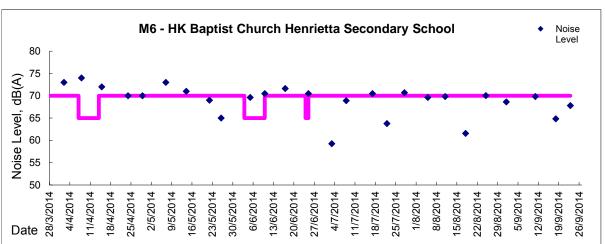




Graphic Presentation of Noise Monitoring Result Day Time (0700 - 1900hrs on normal weekdays)







Appendix 5.3

Air Quality Monitoring Results and Graphical Presentations, and odour Patrol Results



Location: CMA1b - Oil Street Site Office

Report on 24-hour TSP monitoring Action Level (μ g/m3) - 176.7 Limit Level (μ g/m3) - 260

Date	Sampling	Weather	Filter	Filter Weight, g		Elapse Time	Elapse Time, hr		Flo	w Rate, m ³ /	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m³
1-Sep-14	8:00	Rainy	009687	2.8454	2.9655	15082.90	15106.90	24.00	1.42	1.42	1.42	2039	59
6-Sep-14	8:00	Fine	009678	2.8493	3.0144	15109.90	15133.90	24.00	1.41	1.41	1.41	2037	81
12-Sep-14	8:00	Rainy	009458	2.8511	2.9365	15136.90	15160.90	24.00	1.36	1.36	1.36	1959	44
18-Sep-14	8:00	Fine	009746	2.8310	3.0317	15163.89	15187.89	24.00	1.36	1.36	1.36	1959	102
24-Sep-14	8:00	Fine	009731	2.8324	3.0905	15190.90	15214.90	24.00	1.36	1.36	1.36	1962	132

Report on 1-hour TSP monitoring Action Level (μ g/m3) - 320.1 Limit Level (μ g/m3) - 500

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q_{sf}	Average	Volume, m ³	μg/m³
2-Sep-14	8:07	Fine	009748	2.8156	2.8264	15106.90	15107.90	1.00	1.42	1.42	1.42	85	127
2-Sep-14	9:25	Fine	009751	2.8133	2.8226	15107.90	15108.90	1.00	1.42	1.42	1.42	85	109
2-Sep-14	10:33	Fine	009675	2.8437	2.8499	15108.90	15109.90	1.00	1.42	1.42	1.42	85	73
8-Sep-14	13:00	Fine	009519	2.8082	2.8124	15133.90	15134.90	1.00	1.36	1.36	1.36	82	51
8-Sep-14	14:11	Fine	009524	2.8125	2.8183	15134.90	15135.90	1.00	1.36	1.36	1.36	82	71
8-Sep-14	15:15	Fine	009456	2.8555	2.8600	15135.90	15136.90	1.00	1.36	1.36	1.36	82	55
13-Sep-14	8:10	Cloudy	009679	2.8478	2.8526	15160.90	15161.90	1.00	1.36	1.36	1.36	82	59
13-Sep-14	9:17	Cloudy	009964	2.7370	2.7399	15161.89	15162.89	1.00	1.36	1.36	1.36	82	36
13-Sep-14	10:20	Cloudy	009739	2.8234	2.8296	15162.89	15163.89	1.00	1.36	1.36	1.36	82	76
19-Sep-14	8:10	Fine	009726	2.8283	2.8542	15187.90	15188.90	1.00	1.36	1.36	1.36	82	318
19-Sep-14	9:20	Fine	009727	2.8191	2.8414	15188.90	15189.90	1.00	1.36	1.36	1.36	82	273
19-Sep-14	10:30	Fine	009729	2.8290	2.8537	15189.90	15190.90	1.00	1.36	1.36	1.36	82	303
25-Sep-14	11:00	Fine	009733	2.8309	2.8485	15214.90	15215.90	1.00	1.36	1.36	1.36	82	215
25-Sep-14	13:00	Fine	008536	2.8560	2.8745	15215.90	15216.90	1.00	1.36	1.36	1.36	82	226
25-Sep-14	14:08	Fine	010057	2.7601	2.7745	15216.90	15217.90	1.00	1.36	1.36	1.36	82	176



Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring Action Level (µg/m3) - 169.5 Limit Level (µg/m3) - 260

Date	Sampling	Weather	Filter	Filter Weigh	ıt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m³
1-Sep-14	8:00	Rainy	009686	2.8385	2.9177	14793.38	14817.38	24.00	1.17	1.04	1.11	1592	50
6-Sep-14	8:00	Fine	009677	2.8592	3.0070	14820.38	14844.38	24.00	1.09	1.09	1.09	1570	94
12-Sep-14	8:00	Rainy	009451	2.8548	2.9135	14847.38	14871.38	24.00	1.04	1.04	1.04	1494	39
18-Sep-14	8:00	Fine	009745	2.8203	2.9353	14874.36	14898.36	24.00	1.12	1.12	1.12	1610	71
24-Sep-14	8:00	Fine	009732	2.8174	2.9368	14901.38	14925.38	24.00	0.99	0.99	0.99	1420	84

Report on 1-hour TSP monitoring Action Level (µg/m3) - 323.4 Limit Level (µg/m3) - 500

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/r	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m ³
2-Sep-14	8:19	Fine	009510	2.8588	2.8673	14817.38	14818.38	1.00	1.04	1.04	1.04	62	136
2-Sep-14	9:27	Fine	009750	2.8233	2.8327	14818.38	14819.38	1.00	1.04	1.04	1.04	62	151
2-Sep-14	10:36	Fine	009753	2.8292	2.8367	14819.38	14820.38	1.00	1.04	1.04	1.04	62	120
8-Sep-14	13:00	Fine	009239	2.8467	2.8526	14844.38	14845.38	1.00	1.04	1.04	1.04	62	95
8-Sep-14	14:02	Fine	009523	2.8104	2.8151	14845.38	14846.38	1.00	1.04	1.04	1.04	62	76
8-Sep-14	15:05	Fine	009525	2.8170	2.8219	14846.38	14847.38	1.00	1.04	1.04	1.04	62	79
13-Sep-14	8:10	Cloudy	009680	2.8359	2.8423	14871.38	14872.38	1.00	1.04	1.04	1.04	62	103
13-Sep-14	9:15	Cloudy	009965	2.7444	2.7475	14872.38	14873.38	1.00	1.04	1.04	1.04	62	50
13-Sep-14	10:20	Cloudy	009501	2.8521	2.8584	14873.38	14874.38	1.00	1.04	1.04	1.04	62	101
19-Sep-14	8:15	Fine	009725	2.8334	2.8489	14898.38	14899.38	1.00	1.09	1.09	1.09	65	237
19-Sep-14	9:35	Fine	009728	2.8189	2.8348	14899.38	14900.38	1.00	1.14	1.14	1.14	69	232
19-Sep-14	10:40	Fine	009730	2.8297	2.8389	14900.38	14901.38	1.00	1.14	1.09	1.12	67	137
25-Sep-14	11:00	Fine	010051	2.7686	2.7803	14925.38	14926.38	1.00	1.04	1.04	1.04	62	188
25-Sep-14	13:00	Fine	008535	2.8368	2.8493	14926.38	14927.38	1.00	1.04	1.04	1.04	62	200
25-Sep-14	14:10	Fine	010056	2.7425	2.7551	14927.38	14928.38	1.00	1.04	1.09	1.07	64	197



Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring Action Level (μ g/m3) - 171 Limit Level (μ g/m3) - 260

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m³
1-Sep-14	8:00	Rainy	009454	2.8557	2.9569	2212.39	2236.39	24.00	1.39	1.40	1.39	2009	50
6-Sep-14	8:00	Fine	009781	2.8339	2.9826	2239.39	2263.39	24.00	1.39	1.39	1.39	2007	74
12-Sep-14	8:00	Rainy	008532	2.8469	2.9048	2266.38	2290.38	24.00	1.45	1.45	1.45	2082	28
18-Sep-14	8:00	Fine	009969	2.7586	2.7973	2293.38	2317.38	24.00	1.36	1.36	1.36	1958	20
24-Sep-14	8:00	Fine	009789	2.8294	3.0580	2320.37	2344.37	24.00	1.43	1.40	1.41	2035	112

Report on 1-hour TSP monitoring Action Level (µg/m3) - 311.3 Limit Level (µg/m3) - 500

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q_{sf}	Average	Volume, m ³	μg/m³
2-Sep-14	8:54	Fine	009511	2.8528	2.8696	2236.39	2237.39	1.00	1.31	1.31	1.31	79	213
2-Sep-14	13:53	Fine	009514	2.8161	2.8300	2237.39	2238.39	1.00	1.31	1.31	1.31	79	176
2-Sep-14	15:20	Fine	009780	2.8262	2.8340	2238.39	2239.39	1.00	1.31	1.31	1.31	79	99
8-Sep-14	8:35	Fine	009201	2.8165	2.8274	2263.39	2264.39	1.00	1.31	1.31	1.31	79	138
8-Sep-14	9:43	Fine	008540	2.8402	2.8472	2264.39	2265.39	1.00	1.31	1.31	1.31	79	89
8-Sep-14	10:47	Fine	008533	2.8539	2.8627	2265.39	2266.39	1.00	1.31	1.31	1.31	79	112
13-Sep-14	10:03	Cloudy	010012	2.7543	2.7604	2290.38	2291.38	1.00	1.26	1.26	1.26	76	80
13-Sep-14	13:00	Cloudy	009744	2.8158	2.8191	2291.38	2292.38	1.00	1.26	1.30	1.28	77	43
13-Sep-14	14:10	Cloudy	009747	2.8377	2.8435	2292.38	2293.38	1.00	1.26	1.28	1.27	76	76
19-Sep-14	13:15	Fine	010009	2.7370	2.7390	2317.38	2318.38	1.00	1.26	1.26	1.26	76	26
19-Sep-14	14:20	Fine	010019	2.7854	2.8018	2318.38	2319.38	1.00	1.26	1.26	1.26	76	216
19-Sep-14	15:30	Fine	010007	2.7454	2.7566	2319.38	2320.38	1.00	1.26	1.23	1.25	75	150
25-Sep-14	8:25	Fine	009790	2.8220	2.8406	2344.37	2345.37	1.00	1.30	1.30	1.30	78	239
25-Sep-14	9:30	Fine	009792	2.8204	2.8412	2345.37	2346.37	1.00	1.27	1.27	1.27	76	274
25-Sep-14	10:40	Fine	009794	2.8343	2.8501	2346.37	2347.37	1.00	1.27	1.27	1.27	76	208



Location: CMA4a - SPCA

Report on 24-hour TSP monitoring Action Level (µg/m3) - 171.2 Limit Level (µg/m3) - 260

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m³
1-Sep-14	8:00	Rainy	009767	2.8358	2.9021	19020.00	19044.00	24.00	1.36	1.36	1.36	1959	34
6-Sep-14	8:00	Fine	009782	2.8259	2.9986	19070.99	19094.99	24.00	1.39	1.39	1.39	2007	86
12-Sep-14	8:00	Rainy	008537	2.8524	2.9074	19097.97	19121.97	24.00	1.43	1.43	1.43	2058	27
18-Sep-14	8:00	Fine	010000	2.7370	2.8751	19124.97	19148.97	24.00	1.43	1.43	1.43	2058	67
24-Sep-14	8:00	Fine	010008	2.7357	2.9174	19151.95	19175.95	24.00	1.43	1.43	1.43	2060	88

Report on 1-hour TSP monitoring Action Level (µg/m3) - 312.5 Limit Level (µg/m3) - 500

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m³
2-Sep-14	9:06	Fine	009512	2.8392	2.8471	19044.00	19045.00	1.00	1.36	1.36	1.36	82	97
2-Sep-14	10:22	Fine	009513	2.8517	2.8598	19045.00	19046.00	1.00	1.36	1.36	1.36	82	99
2-Sep-14	15:10	Fine	009779	2.8275	2.8329	19046.00	19047.00	1.00	1.36	1.36	1.36	82	66
8-Sep-14	8:49	Fine	008531	2.8626	2.8684	19094.99	19095.99	1.00	1.43	1.43	1.43	86	68
8-Sep-14	9:53	Fine	008539	2.8396	2.8453	19095.99	19096.99	1.00	1.36	1.36	1.36	82	70
8-Sep-14	10:58	Fine	008538	2.8518	2.8583	19096.99	19097.99	1.00	1.36	1.36	1.36	82	80
13-Sep-14	9:50	Cloudy	010011	2.7433	2.7469	19121.97	19122.97	1.00	1.36	1.36	1.36	82	44
13-Sep-14	10:55	Cloudy	009743	2.8127	2.8162	19122.97	19123.97	1.00	1.36	1.36	1.36	82	43
13-Sep-14	13:30	Cloudy	009999	2.7442	2.7480	19123.97	19124.97	1.00	1.36	1.36	1.36	82	47
19-Sep-14	13:05	Fine	010005	2.7517	2.7705	19148.97	19149.97	1.00	1.39	1.39	1.39	84	225
19-Sep-14	14:10	Fine	010020	2.7497	2.7703	19149.97	19150.97	1.00	1.39	1.39	1.39	84	246
19-Sep-14	15:15	Fine	010006	2.7477	2.7567	19150.97	19151.97	1.00	1.39	1.39	1.39	84	108
25-Sep-14	8:35	Fine	009791	2.8254	2.8345	19175.95	19176.95	1.00	1.36	1.36	1.36	82	111
25-Sep-14	9:40	Fine	009793	2.8075	2.8164	19176.95	19177.95	1.00	1.33	1.33	1.33	80	112
25-Sep-14	10:50	Fine	009487	2.8502	2.8640	19177.95	19178.95	1.00	1.33	1.33	1.33	80	173



Location: CMA5a - Children Garden opposite to Pedestrian Plaza

 $\begin{array}{ccc} \text{Report on 24-hour TSP monitoring} \\ \text{Action Level } (\mu g/m3) - & 181 \\ \text{Limit Level } (\mu g/m3) - & 260 \\ \end{array}$

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μg/m³
1-Sep-14	8:00	Rainy	009240	2.8497	2.9474	20015.09	20039.09	24.00	1.32	1.32	1.32	1904	51
6-Sep-14	8:00	Fine	009778	2.8245	2.9827	20042.09	20066.09	24.00	1.30	1.30	1.30	1876	84
12-Sep-14	8:00	Rainy	009498	2.8485	2.9344	20069.08	20093.08	24.00	1.30	1.30	1.30	1877	46
18-Sep-14	8:00	Fine	009968	2.7473	2.9870	20096.08	20120.08	24.00	1.30	1.30	1.30	1877	128
25-Sep-14	16:25	Fine	009940	2.7515	2.9202	20126.08	20150.08	24.00	1.27	1.27	1.27	1827	92

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 24 September 2014 to 25 September 2014

Report on 1-hour TSP monitoring Action Level (µg/m3) - 332 Limit Level (µg/m3) - 500

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q_{sf}	Average	Volume, m ³	μ g /m³
2-Sep-14	8:45	Fine	009770	2.8333	2.8444	20039.09	20040.09	1.00	1.32	1.32	1.32	79	140
2-Sep-14	9:50	Fine	009773	2.8240	2.8335	20040.09	20041.09	1.00	1.32	1.32	1.32	79	120
2-Sep-14	10:55	Fine	009295	2.8452	2.8564	20041.09	20042.09	1.00	1.32	1.32	1.32	79	141
8-Sep-14	8:35	Fine	009785	2.8315	2.8397	20066.09	20067.09	1.00	1.30	1.30	1.30	78	105
8-Sep-14	9:40	Fine	009502	2.8449	2.8623	20067.09	20068.09	1.00	1.30	1.30	1.30	78	223
8-Sep-14	10:55	Fine	009497	2.8432	2.8518	20068.09	20069.09	1.00	1.30	1.30	1.30	78	110
13-Sep-14	9:00	Cloudy	009736	2.8378	2.8471	20093.08	20094.08	1.00	1.30	1.30	1.30	78	119
13-Sep-14	10:05	Cloudy	010013	2.7401	2.7469	20094.08	20095.08	1.00	1.30	1.30	1.30	78	87
13-Sep-14	13:00	Cloudy	009740	2.8200	2.8266	20095.08	20096.08	1.00	1.30	1.30	1.30	78	84
19-Sep-14	9:28	Fine	009461	2.8562	2.8770	20120.08	20121.08	1.00	1.30	1.30	1.30	78	266
19-Sep-14	13:00	Fine	009464	2.8888	2.9135	20121.08	20122.08	1.00	1.30	1.30	1.30	78	316
19-Sep-14	14:48	Fine	009466	2.8620	2.8801	20122.08	20123.08	1.00	1.30	1.30	1.30	78	232
25-Sep-14	13:00	Fine	009963	2.7441	2.7612	20123.08	20124.08	1.00	1.23	1.23	1.23	74	232
25-Sep-14	14:15	Fine	009970	2.7383	2.7560	20124.08	20125.08	1.00	1.23	1.23	1.23	74	240
25-Sep-14	15:20	Fine	009937	2.7389	2.7528	20125.08	20126.08	1.00	1.23	1.23	1.23	74	188



Location: CMA6a - WD2 PRE Office

 $\begin{tabular}{ll} Report on 24-hour TSP monitoring \\ Action Level - & 187.3 & \mu g/m3 \\ Limit Level - & 260 & \mu g/m3 \end{tabular}$

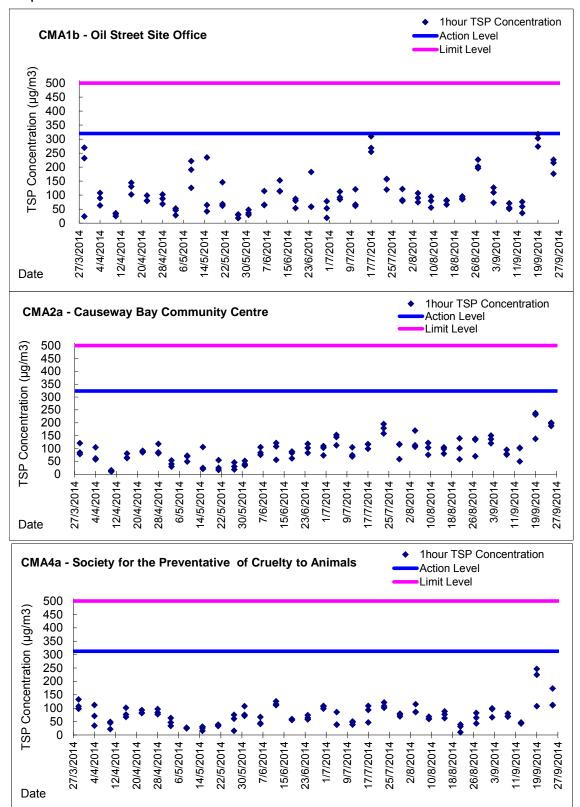
Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μ g /m³
1-Sep-14	8:00	Rainy	009508	2.8423	2.9663	18352.62	18376.62	24.00	1.29	1.29	1.29	1861	67
6-Sep-14	8:00	Fine	009776	2.8241	2.9877	18379.61	18403.61	24.00	1.42	1.42	1.42	2040	80
12-Sep-14	8:00	Rainy	009500	2.8462	2.9229	18406.61	18430.61	24.00	1.33	1.29	1.31	1890	41
18-Sep-14	8:00	Fine	009967	2.7459	2.9058	18433.61	18457.61	24.00	1.29	1.29	1.29	1860	86
24-Sep-14	8:00	Fine	010044	2.7645	2.9222	18460.61	18484.61	24.00	1.25	1.25	1.25	1802	88

Report on 1-hour TSP monitoring Action Level - 300.1 μ g/m³ Limit Level - 500 μ g/m3

Date	Sampling	Weather	Filter	Filter Weigh	nt, g	Elapse Time	e, hr	Sampling	Flo	w Rate, m³/ı	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q_{sf}	Average	Volume, m ³	μg/m³
2-Sep-14	8:30	Fine	009294	2.8436	2.8500	18376.62	18377.62	1.00	1.33	1.33	1.33	80	80
2-Sep-14	9:35	Fine	009771	2.8272	2.8326	18377.62	18378.62	1.00	1.29	1.29	1.29	78	70
2-Sep-14	10:40	Fine	009774	2.8372	2.8421	18378.62	18379.62	1.00	1.29	1.29	1.29	78	63
8-Sep-14	8:15	Fine	009783	2.8235	2.8302	18403.61	18404.61	1.00	1.33	1.33	1.33	80	84
8-Sep-14	9:20	Fine	009787	2.8347	2.8402	18404.61	18405.61	1.00	1.33	1.33	1.33	80	69
8-Sep-14	10:30	Fine	009495	2.8552	2.8608	18405.61	18406.61	1.00	1.33	1.33	1.33	80	70
13-Sep-14	8:45	Cloudy	009737	2.8349	2.8413	18430.61	18431.61	1.00	1.29	1.29	1.29	77	83
13-Sep-14	9:50	Cloudy	010015	2.7684	2.7734	18431.61	18432.61	1.00	1.29	1.29	1.29	77	65
13-Sep-14	13:00	Cloudy	009742	2.8222	2.8259	18432.61	18433.61	1.00	1.29	1.29	1.29	77	48
19-Sep-14	9:03	Fine	009459	2.8467	2.8652	18457.61	18458.61	1.00	1.33	1.33	1.33	80	232
19-Sep-14	13:00	Fine	009462	2.8611	2.8844	18458.61	18459.61	1.00	1.33	1.33	1.33	80	292
19-Sep-14	14:59	Fine	009797	2.8193	2.8319	18459.81	18460.81	1.00	1.33	1.33	1.33	80	158
25-Sep-14	13:00	Fine	009961	2.7442	2.7600	18484.61	18485.61	1.00	1.29	1.29	1.29	78	204
25-Sep-14	14:06	Fine	009734	2.8257	2.8395	18485.61	18486.61	1.00	1.29	1.29	1.29	78	178
25-Sep-14	15:10	Fine	009935	2.7580	2.7748	18486.61	18487.61	1.00	1.27	1.29	1.28	77	218

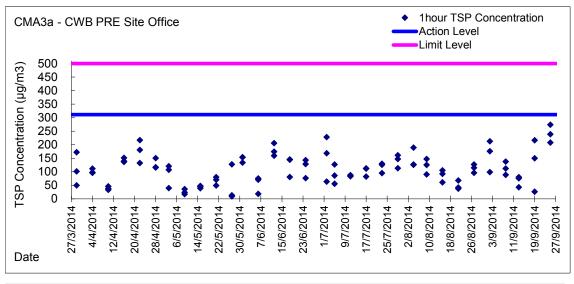


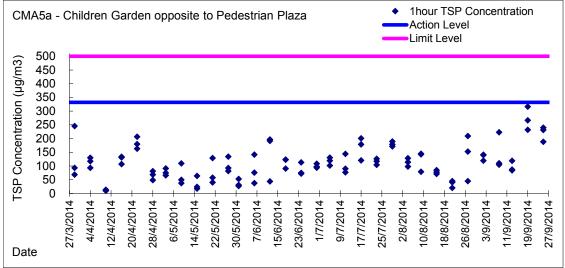
Graphic Presentation of 1 hour TSP Result

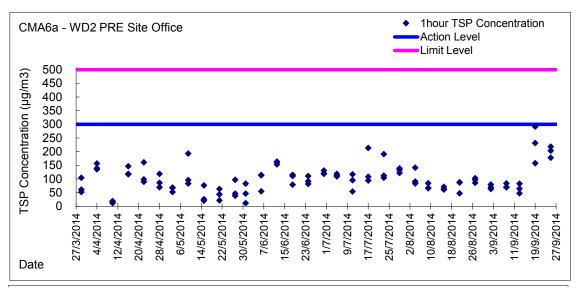




Graphic Presentation of 1 hour TSP Result

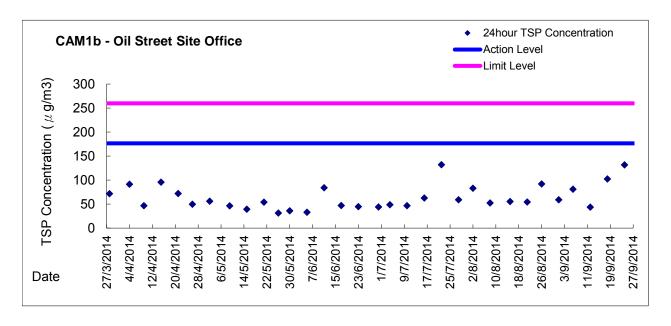


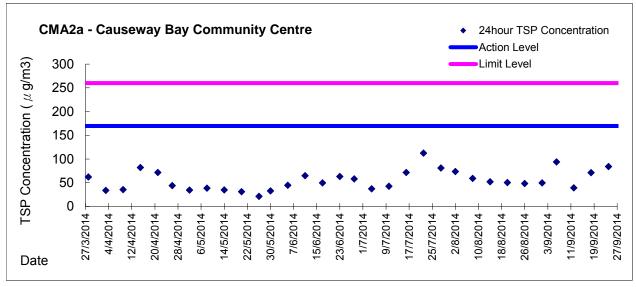


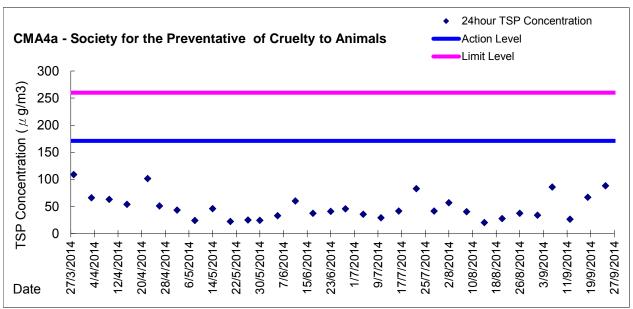




Graphic Presentation of 24 hour TSP Result

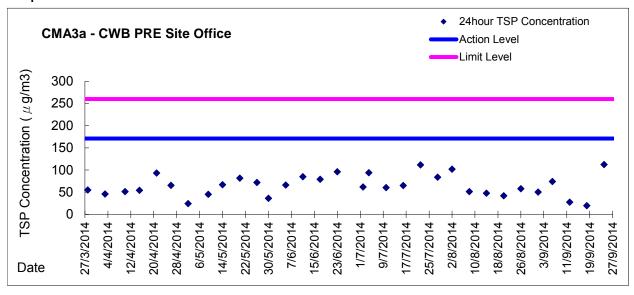


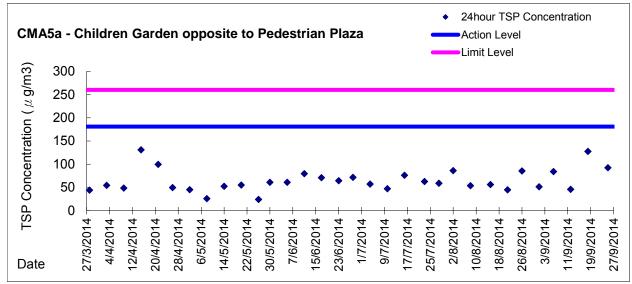


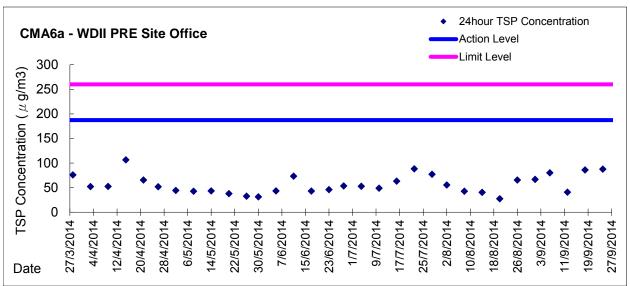




Graphic Presentation of 24 hour TSP Result







Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Proposal on Impact Monitoring for Odour Patrol along the shorelines of CBTS and ex-PCWA

Field Data Record Sheet

Monitoring	2 September 2014	Weather Condition:	Fine	Tidal	Flood
Date:				Condition:	

Temperature: 31.6°C - 34.9°C Relative Humidity: 62.4% - 67.4%

Location	Time	Temperature (°C)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:49	31.7	64.5	0	/	/	1	3.9	NNE	
OP6	14:00	32.5	66.0	0	/	/	1	1.5	NNW	
OP5	14:03	31.6	63.3	0	/	/	1	4.8	WNW	
OP4	14:07	34.9	62.4	0	/	/	1	4.5	NNW	
OP3	14:11	34.5	67.1	0	/	/	1	3.7	ENE	
OP2	14:15	33.0	66.8	0	/	/	1	1.7	NNE	
OP1	14:19	33.3	67.4	0	/	/	/	3.8	NNE	

Remarks for Odour Intensity:

The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
- 1 Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 Moderate Identifiable odour, and moderate chance to have odour nuisance
- 3 Strong Identifiable, likely to have odour nuisance;
- 4 Extreme Severe odour, and unacceptable level



Meteorological Conditions on 2 September 2014

Hong Kong Observatory Weather Station at Hong Kong Observatory

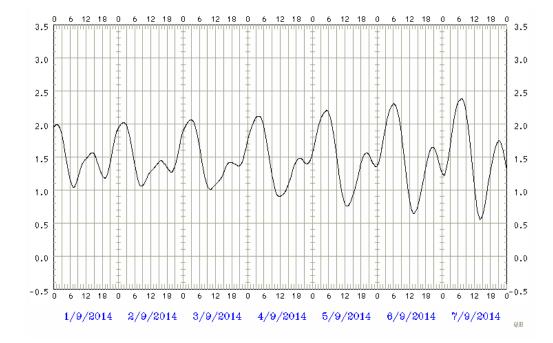
Air Temperature: 27.4-32.2 °C Relative humidity: 59-88%

Hong Kong Observatory Weather Station at Hong Kong Park

Air Temperature: 26.1-32.9 ℃

· The tidal data at Quarry Bay Station

Tide Time	Tide Height (m)
01:53	2.0
08:30	1.1
15:45	1.5
19:35	1.3



Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Proposal on Impact Monitoring for Odour Patrol along the shorelines of CBTS and ex-PCWA

Field	Data	Record	Sheet
-------	------	--------	-------

Monitoring	18 September 2014	Weather Condition:	Overcast	_ Tidal	Flood
Date:				Condition:	

Temperature: 31.2°C - 34.9°C Relative Humidity: 58.8% - 68.5%

Location	Time	Temperature (°C)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:00	31.2	68.5	0	1	1	/	0.6	NW	
OP6	13:05	32.9	67.9	0	/	/	1	1.1	NNW	
OP5	13:10	33.7	65.1	0	/	/	1	0.9	W	
OP4	13:16	31.7	65.8	0	/	/	1	1.2	NNW	
OP3	13:21	34.9	58.8	1	Plant Exhaust	Plant	Intermittent	0.8	ENE	
OP2	13:28	34.2	63.6	0	1	/	1	0.5	WNW	
OP1	13:32	32.5	64.9	1	Culvert Discharge	Culvert	Persistent	1.6	NNE	

Remarks for Odour Intensity:

The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
- 1 Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 Moderate Identifiable odour, and moderate chance to have odour nuisance
- 3 Strong Identifiable, likely to have odour nuisance;
- 4 Extreme Severe odour, and unacceptable level



Meteorological Conditions on 18 September 2014

Hong Kong Observatory Weather Station at Hong Kong Observatory

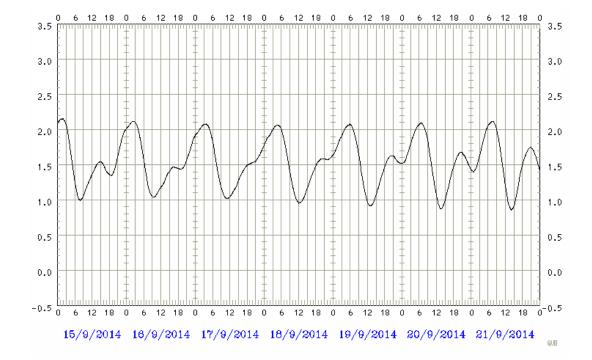
Air Temperature: 26.9-32.5 °C Relative humidity: 68-92%

Hong Kong Observatory Weather Station at Hong Kong Park

Air Temperature: 25.7-31.8 ℃

· The tidal data at Quarry Bay Station

Tide Time	Tide Height (m)
04:48	2.1
12:12	1.0



Contract No. HK/2011/07 Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 2) Proposal on Impact Monitoring for Odour Patrol along the shorelines of CBTS and ex-PCWA

Field	Data	Record	Sheet
-------	------	--------	-------

Monitoring	29 September 2014	Weather Condition:	Fine	Tidal	Ebb	
Date:				Condition:		

Temperature: <u>30.9°C – 34.4°C</u> Relative Humidity: <u>61.7% - 68.6%</u>

Location	Time	Temperature (℃)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:54	33.3	63.3	0	1	/	/	0.4	NNW	
OP6	13:47	34.4	61.7	0	/	/	1	0.5	WNW	
OP5	13:42	31.9	67.4	0	/	/	1	2.0	W	
OP4	13:39	34.1	63.2	0	/	/	1	0.8	NE	
OP3	13:34	33.3	64.1	0	/	/	1	1.3	NE	
OP2	13:30	33.8	65.9	0	/	/	1	0.5	N	
OP1	13:27	30.9	68.6	0	/	/	1	1.6	NNW	

Remarks for Odour Intensity:

The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
- 1 Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 Moderate Identifiable odour, and moderate chance to have odour nuisance
- 3 Strong Identifiable, likely to have odour nuisance;
- 4 Extreme Severe odour, and unacceptable level



Meteorological Conditions on 29 September 2014

Hong Kong Observatory Weather Station at Hong Kong Observatory

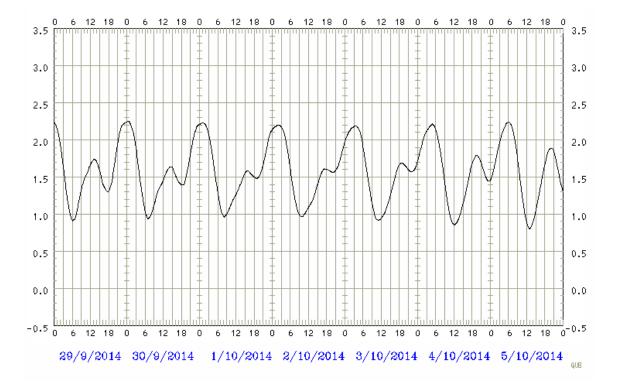
Air Temperature: 27.2-32.4 °C Relative humidity: 58-84%

Hong Kong Observatory Weather Station at Hong Kong Park

Air Temperature: 25.6-32.4 ℃

· The tidal data at Quarry Bay Station

Tide Time	Tide Height (m)
06:13	0.9
13:11	1.7
17:45	1.3



Appendix 5.4

Water Quality Monitoring Results and Graphical Presentations



Water Monitoring Result at WSD9 - Tai Wan Mid-Flood Tide

Date	Time	Weater Condition		g Depth	Wat	Water Temperature °C			pH -			Salinity ppt			DO Saturation			DO mg/L			Turbidity NTU			ed Solids g/L
			I	n	Va	lue	Average	Va	ılue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	ılue	Average	Value	Average
29/8/2014	19:19	Fine	Middle	2.5	28.20	28.20	28.25	8.09	8.09	8.10	31.53	31.53	31.53	88.5	89.8	89.3	5.77	5.85	5.81	3.99	3.93	3.97	5	5.50
20/0/2014	19:20	1 1110	Middle	2.5	28.30	28.30	20.20	8.11	8.11	0.10	31.53	31.53	01.00	89.4	89.3	00.0	5.82	5.81	0.01	3.95	4.01	0.01	6	0.00
1/9/2014	9:15	Fine	Middle	2.5	27.90	27.90	28.00	7.99	7.99	8.00	31.11	31.11	31.12	72.4	72.2	71.5	4.77	4.75	4.71	3.69	3.75	3.81	3	3.50
1/9/2014	9:17	rille	Middle	2.5	28.10	28.10	28.00	8.00	8.00	6.00	31.13 31.	31.13	31.12	71.1	70.4	71.5	4.68	4.63	4.71	3.89	3.91	3.01	4	3.50
4/9/2014	14:15	Fine	Middle	2.5	28.50	28.50	28.55	7.94	7.94	7.94	30.06	30.06	30.06	57.2	57.5	58.2	3.76	3.77	3.82	6.09	6.09	6.22	12	12.00
4/9/2014	14:17	Tille	Middle	2.5	28.60	28.60	20.55	7.94	7.94	7.54	30.06	30.06	30.00	59.8	58.4	30.2	3.92	3.82	3.02	6.34	6.35	0.22	12	12.00
6/9/2014	17:45	Fine	Middle	3.0	28.40	28.40	28.50	8.08	8.08	8.09	31.12	31.13	31.10	73.0	72.3	71.6	4.76	4.71	4.67	5.07	4.90	5.00	10	10.50
0/3/2014	17:47	Tillo	Middle	3.0	28.60	28.60	20.50	8.09	8.09	0.00	31.08	31.08	31.10	71.2	70.0	71.0	4.64	4.57	4.07	5.04	4.99	3.00	11	10.50



Water Monitoring Result at WSD17 - Quarry Bay Mid-Flood Tide

Date	Time	Weater Condition		g Depth	Wat	Water Temperature °C			pH -			Salinity ppt			DO Saturation			DO mg/L			Turbidity NTU			ed Solids g/L
			I	n	Va	lue	Average	Value Average		Va	Value Average		Value Average		Average	Value		Average	Va	lue	Average	Value	Average	
29/8/2014	21:36	Fine	Middle	3.5	26.80	26.80	26.80	8.20	8.20	8.21	32.15	32.15	32.15	84.9	83.2	86.9	5.67	5.52	5.40	3.25	3.55	3.38	6	6.00
20/0/2014	21:37	1 1110	Middle	3.5	26.80	26.80	20.00	8.21	8.21	0.21	32.15	32.15		89.7	89.9	00.0	4.55	5.85	0.40	3.35	3.37	0.00	6	0.00
1/9/2014	10:02	Fine	Middle	2.5	28.10	28.10	28.25	8.00	8.00	8.00	31.17	31.17	31.16	71.7	71.9	72.2	4.70	4.71	4.73	6.53	6.51	6.45	6	6.50
1/9/2014	10:04	riile	Middle	2.5	28.40	28.40	26.25	8.00	8.00	8.00	31.15	.15 31.15		72.9	72.3	12.2	4.77	4.73	4.73	6.39	6.38	0.45	7	0.50
4/9/2014	14:50	Fine	Middle	3.0	28.40	28.40	28.45	7.97	7.97	7.97	30.00	30.00	30.00	66.1	65.2	64.7	4.34	4.28	4.25	2.49	2.57	2.55	2	2.00
4/3/2014	14:52	TING	Middle	3.0	28.50	28.50	20.40	7.97	7.97	7.51	30.00	30.00	30.00	64.6	63.0	04.7	4.25	4.14	4.25	2.57	2.56	2.00	2	2.00
6/9/2014	16:36	Fine	Middle	3.0	28.60	28.60	28.65	8.07	8.07	8.07	31.52	31.52	31.53	72.6	73.0	72.5	4.72	4.74	4.71	2.46	2.46	2.46	11	10.50
0/3/2014	16:38	1 1110	Middle	3.0	28.70	28.70	20.00	8.07	8.07	0.07	31.53	31.53	31.55	72.2	72.3	72.0	4.69	4.70	7.71	2.45	2.45	2.40	10	10.50



Water Monitoring Result at C7 - Windsor House Mid-Flood Tide

Date	Time	Weater Condition		ng Depth	Wat	er Temp	erature		pH -			Salini ppt	ty	С	OO Satur	ation		DO mg/L			Turbid NTU		Suspend	ed Solids g/L
			ı	n	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	llue	Average	Value	Average
29/8/2014	21:00	Fine	Middle	1.5	27.10	27.10	27.10	7.84	7.84	7.86	30.61	30.61	30.61	67.2	66.0	67.1	4.50	4.42	4.49	1.88	1.96	1.91	6	6.00
	21:01		Middle	1.5	27.10	27.10		7.87	7.87		30.61	30.61		68.5	66.5		4.59	4.45		1.89	1.91	1.01	6	
1/9/2014	11:32	Fine	Middle	1.5	28.20	28.20	28.35	7.88	7.88	7.88	29.97	29.97	29.97	65.7	66.9	66.7	4.32	4.40	4.39	3.04	3.04	3.04	4	3.50
	11:34		Middle	1.5	28.50	28.50		7.88	7.88		29.96	29.96		67.4	66.9		4.42	4.40		3.05	3.01		3	
4/9/2014	16:45	Fine	Middle	1.5	28.30	28.30	28.30	7.92	7.92	7.92	27.53	27.53	27.59	50.9	50.5	50.8	3.40	3.37	3.39	5.75	5.76	5.65	9	9.50
	16:47		Middle	1.5	28.30	28.30		7.92	7.92		27.64	27.64		50.6	51.2		3.37	3.42		5.55	5.52		10	
6/9/2014	16:06	Fine	Middle	1.5	28.90	28.90	29.00	7.92	7.92	7.92	30.11	30.11	30.11	57.4	57.4	57.7	3.74	3.73	3.76	3.30	3.28	3.29	4	3.50
	16:08		Middle	1.5	29.10	29.10		7.92	7.92		30.10	30.10		58.2	57.9		3.79	3.77		3.28	3.28		3	
8/9/2014	17:53	Cloudy	Middle	1.5	28.20	28.20	28.25	7.94	7.94	7.94	30.80	30.80	30.80	49.5	50.3	50.2	3.25	3.30	3.29	8.20	8.16	8.15	6	6.00
	17:55		Middle	1.5	28.30	28.30		7.94	7.94		30.80	30.80	1	50.5	50.3		3.31	3.30		8.15	8.10	1	6	1
10/9/2014	19:15	Fine	Middle	1.5	28.50	28.50	28.55	8.13	8.13	8.13	30.71	30.71	30.72	69.9	65.0	71.9	4.57	4.24	4.71	2.45	2.28	2.34	3	3.00
	19:16		Middle	1.5	28.60	28.60		8.13	8.13		30.72	30.72		74.3	78.5		4.89	5.12		2.33	2.31		3	
12/9/2014	9:17	Fine	Middle	1.5	28.60	28.60	28.60	7.82	7.82	7.82	29.92	29.92	29.92	54.5	55.7	55.2	3.58	3.68	3.63	3.56	3.56	3.57	6	6.00
	9:19		Middle	1.5	28.60	28.60		7.82	7.82		29.92	29.92		55.2	55.4		3.62	3.64		3.57	3.58		6	
15/9/2014	10:29	Fine	Middle	1.5	29.00	29.00	29.00	7.80	7.80	7.80	29.91	29.91	29.91	56.3	56.7	56.6	3.67	3.69	3.69	4.79	4.86	4.86	5	5.50
	10:31		Middle Middle	1.5	29.00	29.00		7.80	7.80		29.91	29.91 31.05		57.1 63.8	56.4 65.2		3.72	3.68		4.88	1.62		6	
17/9/2014	19:00	Cloudy		1.5	28.30	28.30	28.30		7.93 7.93	7.93	31.05		31.05		64.0	64.4	4.18	4.27 4.19	4.22	1.64	1.62	1.66	5	4.50
	17:02		Middle Middle	1.5	28.30	29.20		7.93 7.85	7.85		31.05 29.67	31.05 29.67		64.6 56.6	57.2		4.23 3.68	3.72		2.33	2.32		3	
19/9/2014	17:04	Cloudy	Middle	1.5	29.20	29.20	29.20	7.85	7.85	7.85	29.67	29.67	29.67	57.0	57.6	57.1	3.71	3.75	3.72	2.32	2.31	2.32	2	2.50
	16:54		Middle	1.5	28.70	28.70		8.02	8.02	<u> </u>	31.75	31.75	<u> </u>	59.9	61.0		3.88	3.95		3.78	3.79	<u> </u>	4	<u> </u>
22/9/2014	16:56	Cloudy	Middle	1.5	28.80	28.80	28.75	8.02	8.02	8.02	31.74	31.74	31.75	60.9	60.7	60.6	3.95	3.93	3.93	3.79	3.79	3.79	4	4.00
	17:30		Middle	1.0	27.70	27.70		7.96	7.96		31.84	31.84	<u> </u>	70.9	70.4		4.67	4.64		4.93	4.96		4	<u> </u>
24/9/2014	17:31	Cloudy	Middle	1.0	27.70	27.70	27.70	7.96	7.96	7.96	31.84	31.84	31.84	69.7	70.8	70.5	4.59	4.66	4.64	4.91	4.99	4.95	5	4.50
	18:15		Middle	1.5	28.40	28.40		7.94	7.94		31.29	31.29		57.4	56.8		3.74	3.71		4.40	4.49		4	
26/9/2014	18:16	Fine	Middle	1.5	28.50	28.50	28.45	7.94	7.94	7.94	31.29	31.29	31.29	56.9	57.0	57.0	3.71	3.72	3.72	4.34	4.36	4.40	4	4.00



Water Monitoring Result at C1 - HKCEC Extension Mid-Flood Tide

Date	Time	Weater Condition		g Depth	Wat	er Temp	erature		pH -			Salini	ty	С	O Satur	ation		DO ma/L			Turbid			led Solids a/L
			r	n	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	alue	Average	Value	Average
29/8/2014	22:49	Fine	Middle	2.5	27.00	27.00	27.00	8.16	8.16	8.16	31.47	31.47	31.48	75.5	79.6	77.3	5.05	5.32	5.17	3.45	3.23	3.30	6	6.00
29/0/2014	22:50	TITIE	Middle	2.5	27.00	27.00	27.00	8.16	8.16	0.10	31.48	31.48	31.40	76.4	77.5	11.5	5.11	5.19	5.17	3.25	3.27	3.30	6	0.00
1/9/2014	10:38	Fine	Middle	2.5	27.40	27.40	27.45	8.12	8.12	8.10	30.05	30.05	30.04	54.4	54.1	54.6	3.63	3.61	3.64	5.55	5.56	5.57	3	4.00
17972014	10:40	i iiic	Middle	2.5	27.50	27.50	27.43	8.08	8.08	0.10	30.02	30.02	30.04	55.4	54.3	34.0	3.70	3.63	3.04	5.59	5.57	3.37	5	4.00
4/9/2014	15:00	Fine	Middle	2.5	27.90	27.90	27.85	8.01	8.01	8.01	29.68	29.68	29.67	74.3	75.0	74.8	4.98	4.99	4.98	4.59	4.62	4.56	9	9.00
47072014	15:02	1 1110	Middle	2.5	27.80	27.80	27.00	8.01	8.01	0.01	29.66	29.66	20.01	74.9	74.8	74.0	4.96	4.98	4.00	4.52	4.51	4.00	9	0.00
6/9/2014	15:34	Fine	Middle	2.5	27.50	27.50	27.50	7.99	7.99	7.99	30.66	30.66	30.66	65.3	65.3	65.1	4.35	4.34	4.35	6.15	6.14	6.15	10	10.00
0,0,2011	15:36		Middle	2.5	27.50	27.50	27.00	7.99	7.99	7.00	30.66	30.66	00.00	64.7	64.9	00.1	4.37	4.32		6.15	6.16	0.10	10	10.00
8/9/2014	15:38	Cloudy	Middle	2.0	27.90	27.90	27.90	8.10	8.10	8.10	29.97	29.97	29.97	68.2	68.3	68.9	4.52	4.53	4.58	7.02	7.02	7.03	4	4.50
	15:40	,	Middle	2.0	27.90	27.90		8.09	8.09		29.97	29.97		69.5	69.6		4.62	4.63		7.04	7.05		5	
10/9/2014	17:54	Fine	Middle	2.5	28.70	28.70	28.70	7.99	7.99	7.98	30.08	30.08	30.09	49.5	49.2	49.6	3.24	3.22	3.25	6.14	6.12	6.12	3	3.00
	17:56		Middle	2.5	28.70	28.70		7.96	7.96		30.09	30.09		49.5	50.2		3.24	3.28		6.11	6.11		3	
12/9/2014	10:07	Fine	Middle	3.0	27.50	27.50	27.50	8.23	8.23	8.23	31.13	31.13	31.16	56.3	55.9	56.0	3.73	3.71	3.72	7.89	7.90	7.86	6	7.00
	10:09		Middle	3.0	27.50	27.50		8.22	8.22		31.19	31.19		56.6	55.3		3.76	3.67		7.88	7.75		8	
15/9/2014	11:02	Fine	Middle	2.5	28.90	28.90	28.90	8.22	8.22	8.22	30.13	30.13	30.13	63.6	63.2	63.2	4.15	4.12	4.13	8.32	8.35	8.33	4	4.50
	11:04		Middle	2.5	28.90	28.90		8.22	8.22		30.13	30.13		63.0	63.1		4.11	4.12		8.36	8.30		5	
17/9/2014	16:07	Cloudy	Middle	2.5	28.70	28.70	28.70	7.92	7.92	7.92	31.86	31.86	31.86	72.5	71.3	72.0	4.69	4.62	4.67	8.32	8.35	8.37	4	4.00
	16:09	Í	Middle	2.5	28.70	28.70		7.92	7.92		31.86	31.86		72.9	71.4		4.72	4.63		8.40	8.42		4	
19/9/2014	15:42	Cloudy	Middle	2.5	28.90	28.90	28.85	7.94	7.94	7.93	30.87	30.87	30.90	64.5	65.0	64.4	4.20	4.23	4.19	8.91	8.87	8.85	5	5.00
	15:44	-	Middle	2.5	28.80	28.80		7.92	7.92		30.92	30.92		64.5	63.4		4.20	4.13		8.83	8.80		5	
22/9/2014	16:18	Cloudy	Middle	2.5	28.20	28.20	28.20	7.66	7.66	7.66	31.17	31.17	31.17	72.3	72.8	72.0	4.74	4.76	4.72	8.46	8.45	8.44	7	6.50
	16:20		Middle	2.5	28.20	28.20		7.66	7.66		31.17	31.17		71.5	71.3		4.68	4.68		8.44	8.41		6	
24/9/2014	17:02	Cloudy	Middle	2.5	28.50	28.50	28.40	7.96	7.96	7.96	31.97	31.97	31.98	53.4	56.3	56.1	3.47	3.68	3.65	5.87	5.64	5.69	5	5.50
	17:04		Middle	2.5	28.30	28.30		7.96	7.96		31.98	31.98		57.6	57.1		3.75	3.71		5.63	5.60		6	
26/9/2014	18:33	Fine	Middle	3.0	28.70	28.70	28.60	8.03	8.03	8.02	31.43	31.43	31.54	55.9	56.4	56.6	3.64	3.67	3.69	5.94	5.83	5.85	6	6.00
	18:35		Middle	3.0	28.50	28.50		8.00	8.00		31.65	31.65		57.9	56.3		3.77	3.67		5.81	5.81		6	



Water Monitoring Result at P1 - HKCEC Phase I Mid-Flood Tide

Date	Time	Weater Condition		ng Depth	Wat	er Temp	erature		pH -			Salini	ty	С	OO Satur	ation		DO mg/L			Turbid NTU		Suspend	ed Solids g/L
			ſ	n	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	llue	Average	Value	Average
29/8/2014	22:02	Fine	Middle	2.5	27.00	27.00	27.00	8.17	8.17	8.17	31.31	31.31	31.31	82.3	86.3	83.8	5.52	5.79	5.62	1.49	1.51	1.80	5	5.50
	22:03		Middle	2.5	27.00	27.00		8.17	8.17		31.30	31.30		86.2	80.5		5.78	5.40		2.00	2.19		6	
1/9/2014	11:00	Fine	Middle	2.5	27.60	27.60	27.65	7.94	7.94	7.94	30.26	30.26	30.26	56.1	54.5	54.2	3.74	3.63	3.61	5.07	4.97	5.05	6	6.50
	11:02		Middle	2.5	27.70	27.70		7.93	7.93		30.26	30.26		53.4	52.7		3.55	3.51		5.09	5.07		7	
4/9/2014	15:30	Fine	Middle	2.5	29.30	29.30	29.30	8.00	8.00	8.00	29.66	29.66	29.66	70.1	70.9	71.4	4.55	4.60	4.63	2.88	2.89	2.90	6	6.50
	15:32		Middle	2.5	29.30	29.30		8.00	8.00		29.66	29.66		71.6	72.9		4.65	4.73		2.91	2.90		7	
6/9/2014	15:59	Fine	Middle	2.5	28.00	28.00	28.00	7.99	7.99	7.99	30.55	30.55	30.57	68.1	69.7	69.1	4.49	4.60	4.56	7.61	7.62	7.63	9	9.00
	16:01		Middle	2.5	28.00	28.00		7.99	7.99		30.58	30.58		68.6	70.0		4.52	4.61		7.64	7.65		9	
8/9/2014	16:17	Cloudy	Middle	2.5	28.70	28.70	28.70	8.05	8.05	8.05	30.54	30.54	30.54	70.6	70.8	70.5	4.67	4.69	4.67	6.98	6.99	7.00	8	8.00
	16:19	,	Middle	2.5	28.70	28.70		8.05	8.05		30.54	30.54		70.3	70.4		4.65	4.66	-	7.01	7.03		8	
10/9/2014	18:29	Fine	Middle	2.5	28.50	28.50	28.55	7.93	7.93	7.93	30.15	30.15	30.13	50.5	50.7	50.9	3.31	3.32	3.34	8.06	7.90	7.83	5	4.50
	18:31		Middle	2.5	28.60	28.60		7.92	7.92		30.11	30.11		51.4	51.1		3.37	3.35		7.73	7.61		4	
12/9/2014	10:22	Fine	Middle	3.0	28.10	28.10	28.10	7.87	7.87	7.87	30.82	30.82	30.83	60.1	59.0	59.4	3.95	3.88	3.91	9.63	9.63	9.63	12	11.00
	10:24		Middle	3.0	28.10	28.10		7.86	7.86		30.84	30.84		58.9	59.4		3.88	3.91		9.63	9.63		10	
15/9/2014	11:32	Fine	Middle	2.5	29.00	29.00	29.00	7.93	7.93	7.93	30.34	30.34	30.34	61.9	62.4	62.3	4.10	4.04	4.06	8.10	8.09	8.08	5	5.50
	11:34		Middle	2.5	29.00	29.00		7.93	7.93		30.34	30.34		62.3	62.5		4.03	4.06		8.07	8.06		6	
17/9/2014	16:40	Cloudy	Middle	2.5	28.90	28.90	28.90	8.04	8.04	8.04	31.80	31.80	31.80	67.9	66.9	68.0	4.39	4.33	4.40	7.02	7.01	7.06	6	6.00
	16:42	·	Middle	2.5	28.90	28.90		8.04	8.04		31.80	31.80		68.3	69.0		4.41	4.48		7.09	7.10		6	
19/9/2014	16:13	Cloudy	Middle	2.5	28.80	28.80	28.90	7.91	7.91	7.91	31.07	31.07	31.06	56.4	56.1	55.4	3.67	3.62	3.59	8.22	8.26	8.27	8	8.50
	16:15	-	Middle	2.5	29.00	29.00		7.90	7.90		31.04	31.04		54.8	54.3		3.53	3.52		8.29	8.31		9	
22/9/2014	16:52	Cloudy	Middle	2.5	28.70	28.70	28.70	7.68	7.68	7.68	32.50	32.50	32.50	69.1	69.4	69.0	4.47	4.49	4.46	8.93	8.91	8.83	9	9.00
	16:54		Middle	2.5	28.70	28.70		7.68	7.68		32.50	32.50		68.7	68.6		4.45	4.44		8.76	8.72		9	
24/9/2014	17:20	Cloudy	Middle	2.5	28.80	28.80	28.85	7.93	7.93	7.94	32.03	32.03	32.05	60.2	60.2	59.3	3.88	3.88	3.82	6.45	6.51	6.54	6	7.00
	17:22		Middle	2.5	28.90	28.90		7.94	7.94		32.07	32.07		58.9	57.7		3.80	3.72		6.53	6.65		8	
26/9/2014	19:04	Fine	Middle	3.0	29.10	29.10	29.05	7.96	7.96	7.96	31.54	31.54	31.55	54.3	54.8	54.4	3.51	3.54	3.51	8.03	8.03	8.02	11	11.50
	19:06		Middle	3.0	29.00	29.00		7.95	7.95		31.56	31.56		54.6	54.0		3.53	3.47		8.01	8.00		12	



Water Monitoring Result at P3 - APA Mid-Flood Tide

Date	Time	Weater Condition	'	ng Depth	Wat	ter Temp	erature		pH -			Salini	ty	С	O Satur	ation		DO mg/L			Turbid		Suspend	led Solids
		Condition	r	n	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va		Average	Va	lue	Average	Value	Average
29/8/2014	22:11	Fine	Middle	2.5	27.10	27.10	27.10	8.17	8.17	8.17	31.30	31.30	31.30	72.5	72.6	72.5	4.84	4.85	4.86	3.76	3.65	3.43	8	8.00
29/6/2014	22:12	rille	Middle	2.5	27.10	27.10	27.10	8.17	8.17	0.17	31.30	31.30	31.30	73.7	71.2	12.5	4.96	4.78	4.00	3.20	3.10	3.43	8	8.00
1/9/2014	10:53	Fine	Middle	2.5	27.40	27.40	27.45	7.95	7.95	7.95	30.20	30.20	30.20	55.6	55.0	55.2	3.71	3.67	3.68	3.85	3.96	3.93	5	5.00
1/9/2014	10:55	rille	Middle	2.5	27.50	27.50	27.45	7.95	7.95	7.95	30.20	30.20	30.20	55.6	54.5	55.2	3.71	3.64	3.00	3.95	3.95	3.93	5	5.00
4/9/2014	15:22	Fine	Middle	2.5	28.10	28.10	28.10	7.98	7.98	7.97	29.80	29.80	29.82	72.4	72.2	72.2	4.80	4.79	4.79	3.44	3.45	3.47	4	4.00
4/9/2014	15:24	Tille	Middle	2.5	28.10	28.10	20.10	7.96	7.96	7.91	29.83	29.83	29.02	71.7	72.5	12.2	4.75	4.80	4.79	3.49	3.50	3.47	4	4.00
6/9/2014	15:51	Fine	Middle	2.5	27.70	27.70	27.70	7.98	7.98	7.98	30.63	30.63	30.63	61.0	61.9	61.4	4.04	4.10	4.07	4.92	4.81	4.82	6	5.50
0/3/2014	15:53	TINC	Middle	2.5	27.70	27.70	21.10	7.98	7.98	7.50	30.63	30.63	30.03	61.5	61.3	01.4	4.08	4.06	4.07	4.75	4.79	4.02	5	3.30
8/9/2014	16:06	Cloudy	Middle	2.5	28.20	28.20	28.20	8.05	8.05	8.05	30.55	30.55	30.55	65.7	66.4	66.3	4.33	4.37	4.37	6.54	6.55	6.56	6	6.00
0.0.2011	16:08	oloudy	Middle	2.5	28.20	28.20	20.20	8.05	8.05	0.00	30.55	30.55	00.00	66.2	66.9	00.0	4.36	4.41		6.57	6.58	0.00	6	0.00
10/9/2014	18:20	Fine	Middle	2.5	28.80	28.80	28.80	7.93	7.93	7.92	30.09	30.09	30.10	50.9	49.4	49.5	3.32	3.23	3.23	6.00	5.76	5.78	3	3.00
	18:22		Middle	2.5	28.80	28.80		7.90	7.90		30.10	30.10		48.8	48.7		3.19	3.18		5.69	5.68		3	
12/9/2014	10:17	Fine	Middle	3.0	28.20	28.20	28.15	8.00	8.00	7.98	30.83	30.83	30.84	53.1	52.2	51.9	3.49	3.43	3.41	8.93	9.05	9.03	10	9.50
	10:19		Middle	3.0	28.10	28.10		7.95	7.95		30.84	30.84		50.3	51.8		3.29	3.41	-	9.06	9.06		9	
15/9/2014	11:24	Fine	Middle	2.5	28.60	28.60	28.60	7.93	7.93	7.93	30.29	30.29	30.29	59.9	60.0	59.9	3.89	3.92	3.91	7.73	7.74	7.71	8	7.00
	11:26		Middle	2.5	28.60	28.60		7.93	7.93		30.29	30.29		59.8	59.7		3.91	3.90		7.71	7.66		6	
17/9/2014	16:33	Cloudy	Middle	2.5	29.00	29.00	29.00	8.02	8.02	8.02	31.72	31.72	31.72	67.4	67.1	67.2	4.35	4.33	4.34	6.95	6.93	6.92	4	3.50
	16:35	-	Middle	2.5	29.00	29.00		8.02	8.02		31.72	31.72		67.0	67.3		4.33	4.35		6.91	6.90		3	
19/9/2014	16:06	Cloudy	Middle	2.5	28.80	28.80	28.80	7.93	7.93	7.92	30.86	30.86	30.91	58.5	56.8	56.6	3.80	3.69	3.68	8.83	8.82	8.88	6	6.00
	16:08		Middle	2.5	28.80	28.80		7.91	7.91		30.96	30.96		55.7	55.5		3.62	3.60		8.83	9.05		6	
22/9/2014	16:45	Cloudy	Middle	2.5	28.40	28.40	28.40	7.54	7.54	7.54	32.49	32.49	32.49	65.1	65.6	65.0	4.23	4.26	4.72	8.44	8.43	8.43	8	8.50
	16:47		Middle	2.5	28.40	28.40		7.54	7.54		32.49	32.49		64.5	64.7		4.19	6.20		8.41	8.43		9	
24/9/2014	17:13	Cloudy	Middle	2.5	28.60	28.70	28.63	7.93	7.93	7.93	31.08	31.08	31.09	53.2	54.0	53.4	3.45	3.50	3.46	4.29	4.28	4.30	6	6.00
	17:15		Middle	2.5	28.60	28.60		7.93	7.93		31.10	31.10		53.2	53.0		3.45	3.43		4.30	4.34		6	
26/9/2014	18:55	Fine	Middle	3.0	29.00	29.00	29.00	7.94	7.94	7.94	31.46	31.46	31.48	53.3	52.7	52.4	3.45	3.41	3.39	4.49	4.42	4.43	5	5.00
	18:57		Middle	3.0	29.00	29.00		7.94	7.94		31.50	31.50		52.4	51.3		3.39	3.31		4.40	4.40		5	



Water Monitoring Result at P4 - SOC Mid-Flood Tide

Date	Time	Weater Condition		ng Depth	Wat	er Temp	erature		pH -			Salini	ty	С	O Satur	ation		DO ma/L			Turbid			led Solids a/L
			r	m	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	alue	Average	Value	Average
29/8/2014	22:23	Fine	Middle	2.5	27.10	27.10	27.10	8.17	8.17	8.17	31.12	31.12	31.30	82.7	84.1	82.9	5.52	5.62	5.54	1.63	1.57	1.58	4	4.00
23/0/2014	22:24	TINC	Middle	2.5	27.10	27.10	27.10	8.17	8.17	0.17	31.47	31.47	31.00	82.8	82.0	02.3	5.53	5.48	0.04	1.54	1.59	1.50	4	4.00
1/9/2014	10:47	Fine	Middle	2.5	27.50	27.50	27.55	8.04	8.04	8.03	30.22	30.22	30.22	64.1	62.2	62.9	4.22	4.14	4.19	4.47	4.70	4.64	4	5.00
110/2014	10:49	1 1110	Middle	2.5	27.60	27.60	27.00	8.01	8.01	0.00	30.22	30.22	00.22	62.2	63.0	02.0	4.18	4.20	4.10	4.72	4.65	4.04	6	0.00
4/9/2014	15:13	Fine	Middle	2.5	27.90	27.90	27.85	8.02	8.02	8.01	29.83	29.83	29.84	69.6	71.2	70.9	4.63	4.73	4.71	3.42	3.41	3.41	4	4.00
	15:15		Middle	2.5	27.80	27.80	27.00	8.00	8.00	0.01	29.84	29.84	20.0	71.1	71.5	7 0.0	4.72	4.75		3.40	3.39	0.11	4	
6/9/2014	15:44	Fine	Middle	2.5	27.90	27.90	27.90	7.98	7.98	7.98	30.61	30.61	30.61	63.2	63.5	63.1	4.18	4.20	4.17	5.30	5.31	5.33	9	9.00
	15:46		Middle	2.5	27.90	27.90		7.98	7.98		30.61	30.61		62.6	62.9		4.14	4.16		5.36	5.36		9	
8/9/2014	16:00	Cloudy	Middle	2.5	28.10	28.10	28.10	8.06	8.06	8.06	30.46	30.46	30.46	68.0	67.8	67.5	4.46	4.47	4.45	6.90	6.91	6.95	5	4.50
	16:02	,	Middle	2.5	28.10	28.10		8.06	8.06		30.46	30.46		67.2	66.9		4.44	4.41	-	6.99	7.00		4	
10/9/2014	18:11	Fine	Middle	2.5	28.70	28.70	28.70	7.90	7.90	7.90	30.09	30.09	30.10	50.9	51.1	50.8	3.33	3.34	3.32	7.12	7.09	7.03	5	4.50
	18:13		Middle	2.5	28.70	28.70		7.90	7.90		30.10	30.10		51.1	50.0		3.34	3.27		6.96	6.93		4	
12/9/2014	11:00	Fine	Middle	3.0	27.80	27.80	27.85	7.99	7.99	7.97	31.28	31.28	31.28	53.5	53.6	52.9	3.53	3.54	3.49	7.15	7.14	7.14	7	7.00
	11:02		Middle	3.0	27.90	27.90		7.94	7.94		31.27	31.27		52.7	51.9		3.47	3.43		7.15	7.10		7	
15/9/2014	11:15	Fine	Middle	2.5	28.50	28.50	28.50	7.99	7.99	7.99	30.12	30.12	30.12	60.2	60.1	60.2	3.95	3.94	3.97	7.51	7.55	7.56	6	5.50
	11:17		Middle	2.5	28.50	28.50		7.99	7.99		30.12	30.12		60.4	60.2		3.97	4.00		7.57	7.60		5	
17/9/2014	16:23	Cloudy	Middle	2.5	28.90	28.90	28.90	8.00	8.00	8.00	31.44	31.44	31.44	65.9	65.7	65.5	4.26	4.25	4.23	7.37	7.36	7.33	4	4.00
	16:25		Middle	2.5	28.90	28.90		8.00	8.00		31.44	31.44		65.4	65.1		4.21	4.19		7.31	7.26		4	
19/9/2014	15:57	Cloudy	Middle	2.5	28.30	28.30	28.45	7.92	7.92	7.92	31.14	31.14	31.12	59.6	61.7	61.6	3.89	4.03	4.02	8.47	8.43	8.43	10	10.50
	15:59		Middle	2.5	28.60	28.60		7.91	7.91		31.10	31.10		63.1	62.1		4.12	4.05		8.41	8.39		11	
22/9/2014	16:32	Cloudy	Middle	2.5	28.60	28.60	28.60	7.83	7.83	7.83	32.11	32.11	32.11	66.1	65.8	66.1	4.28	4.26	4.28	8.40	8.36	8.38	5	5.50
	16:34		Middle	2.5	28.60	28.60		7.83	7.83	<u> </u>	32.11	32.11		66.2	66.4		4.29	4.30		8.38	8.37		6	
24/9/2014	17:10	Cloudy	Middle	2.5	28.50	28.50	28.55	7.98	7.98	7.96	31.93	31.93	32.00	53.6	53.0	53.2	3.47	3.43	3.44	5.29	5.30	5.30	5	5.00
	17:12		Middle	2.5	28.60	28.60		7.94	7.94	<u> </u>	32.06	32.06		53.0	53.1		3.43	3.44		5.29	5.31		5	
26/9/2014	18:46	Fine	Middle	3.0	28.90	28.90	28.85	7.94	7.94	7.94	31.52	31.52	31.57	53.9	53.4	53.6	3.49	3.45	3.47	4.56	4.55	4.55	6	6.00
	18:48		Middle	3.0	28.80	28.80		7.93	7.93		31.62	31.62		53.8	53.4		3.48	3.46		4.55	4.55		6	



Water Monitoring Result at P5 - WCT / RT / IT Mid-Flood Tide

Date	Time	Weater Condition		g Depth	Wat	ter Temp	erature		pН			Salini	ty	С	O Satur	ation		DO mg/L			Turbid		Suspend	led Solids
		Condition	r	n	Va	alue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	alue	Average	Value	Average
29/8/2014	22:37	Fine	Middle	2.5	27.10	27.10	27.05	8.17	8.17	8.17	31.46	31.46	31.46	86.0	81.9	82.9	5.75	5.47	5.54	2.20	2.47	2.14	6	6.50
29/0/2014	22:38	TITIE	Middle	2.5	27.00	27.00	27.03	8.17	8.17	0.17	31.46	31.46	31.40	82.3	81.5	02.9	5.50	5.45	5.54	1.91	1.96	2.14	7	0.30
1/9/2014	10:44	Fine	Middle	2.5	27.50	27.50	27.65	8.05	8.05	8.03	30.12	30.12	30.14	53.6	53.7	53.9	3.57	3.57	3.58	5.14	5.08	5.20	4	4.00
	10:46		Middle	2.5	27.80	27.80	27.00	8.01	8.01	0.00	30.15	30.15	00	53.3	54.9	00.0	3.53	3.65	0.00	5.28	5.30	0.20	4	
4/9/2014	15:05	Fine	Middle	2.5	27.80	27.80	27.80	8.03	8.03	8.03	29.75	29.75	29.75	68.0	69.3	69.6	4.52	4.61	4.62	4.50	4.52	4.55	4	4.00
	15:07	_	Middle	2.5	27.80	27.80		8.03	8.03		29.75	29.75		71.1	69.9		4.72	4.64	-	4.53	4.64		4	
6/9/2014	15:40	Fine	Middle	2.5	27.80	27.80	27.80	8.01	8.01	8.01	30.56	30.56	30.56	61.7	62.0	62.1	4.09	4.10	4.11	4.45	4.44	4.43	6	6.50
	15:42		Middle	2.5	27.80	27.80		8.01	8.01		30.56	30.56		62.5	62.2		4.13	4.11		4.43	4.41		7	
8/9/2014	15:49	Cloudy	Middle	2.5	28.10	28.10	28.10	8.09	8.09	8.09	30.45	30.45	30.45	73.6	72.3	73.2	4.85	4.76	4.82	7.51	7.50	7.52	6	6.00
	15:51		Middle	2.5	28.10	28.10		8.09	8.09		30.45	30.45		73.0	73.7		4.81	4.86		7.52	7.55		6	
10/9/2014	18:00	Fine	Middle	2.5	28.80	28.80	28.80	7.95	7.95	7.93	30.12	30.12	30.13	48.9	48.8	48.6	3.19	3.19	3.18	8.21	8.23	6.73	4	3.50
	18:02		Middle	2.5	28.80	28.80		7.91	7.91		30.13	30.13		47.8	48.9		3.12	3.20		5.24	5.24		3	
12/9/2014	10:12	Fine	Middle	3.0	27.70	27.70	27.75	7.99	7.99	7.98	31.18	31.18	31.20	56.4	55.4	54.5	3.73	3.66	3.60	7.47	7.44	7.44	7	6.50
	10:14		Middle	3.0	27.80	27.80		7.97	7.97		31.21	31.21		53.6	52.6		3.54	3.48		7.42	7.41		6	
15/9/2014	11:11	Fine	Middle	2.5	28.60	28.60	28.60	8.07	8.07	8.07	30.21	30.21	30.21	60.4	61.6	61.2	3.95	4.03	4.00	9.64	9.65	9.48	8	8.00
	11:13		Middle	2.5	28.60	28.60		8.07	8.07		30.21	30.21		61.3	61.5		4.01	4.02		9.31	9.30		8	
17/9/2014	16:18	Cloudy	Middle	2.5	28.90	28.90	28.90	8.01	8.01	8.01	31.71	31.71	31.71	65.2	64.6	64.9	4.21	4.19	4.20	7.71	7.72	7.78	6	6.00
	16:20		Middle	2.5	28.90	28.90		8.01	8.01		31.71	31.71		65.4	64.5		4.22	4.17		7.83	7.85		6	
19/9/2014	15:53	Cloudy	Middle	2.5	28.30	28.30	28.45	7.94	7.94	7.93	31.34	31.34	31.25	64.7	64.1	63.9	4.22	4.21	4.18	8.41	8.45	8.46	5	5.50
	15:55		Middle	2.5	28.60	28.60		7.92	7.92		31.16	31.16		64.2	62.4		4.20	4.08		8.48	8.50		6	<u> </u>
22/9/2014	16:28	Cloudy	Middle	2.5	28.00	28.00	28.00	7.79	7.79	7.78	32.43	32.43	32.43	65.7	63.6	63.7	4.30	4.17	4.18	9.07	9.06	9.05	9	8.50
	16:30		Middle	2.5	28.00	28.00		7.79	7.74		32.43	32.43		62.6	62.9		4.10	4.13		9.05	9.03		8	<u> </u>
24/9/2014	17:07	Cloudy	Middle	2.5	28.80	28.80	28.70	7.97	7.97	7.96	31.96	31.96	31.98	59.0	57.7	58.2	3.82	3.74	3.77	5.13	5.06	5.02	6	6.00
	17:09		Middle	2.5	28.60	28.60		7.95	7.95		31.99	31.99		57.6	58.6		3.73	3.80		4.94	4.95		6	<u> </u>
26/9/2014	18:42	Fine	Middle	3.0	28.80	28.80	28.70	7.97	7.97	7.96	31.59	31.59	31.62	54.2	54.3	53.1	3.52	3.52	3.45	3.55	3.52	3.51	6	5.50
	18:44		Middle	3.0	28.60	28.60		7.95	7.95		31.64	31.64		52.8	51.0		3.43	3.31		3.49	3.46		5	



Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre Mid-Flood Tide

Date	Time	Weater Condition		g Depth	Wat	er Temp	perature		pН			Salini	ty	D	O Satur	ation		DO ma/L			Turbio		Suspend	ded Solids
		Condition	r	n	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	alue	Average	Value	Average
29/8/2014	20:15	Fine	Middle	2.5	27.20	27.20	27.25	8.32	8.31	8.31	30.90	30.90	30.90	83.2	80.6	79.7	5.56	5.37	5.31	6.52	5.93	5.97	9	9.50
29/0/2014	20:16	TITIE	Middle	2.5	27.30	27.30	21.23	8.30	8.30	0.51	30.90	30.90	30.90	77.0	77.8	19.1	5.15	5.17	5.51	5.73	5.68	3.91	10	9.30
1/9/2014	10:55	Fine	Middle	3.5	27.80	27.80	27.90	7.92	7.92	7.93	30.25	30.25	30.25	69.9	71.3	70.7	4.63	4.72	4.68	4.38	4.40	4.31	4	4.00
	10:57		Middle	3.5	28.00	28.00	27.00	7.93	7.93	7.00	30.25	30.25	00.20	70.9	70.5		4.69	4.66		4.30	4.14		4	1.00
4/9/2014	15:52	Fine	Middle	3.0	28.20	28.20	28.25	7.98	7.98	7.98	29.52	29.52	29.51	66.6	68.5	67.5	4.40	4.53	4.47	1.97	1.97	1.97	24	24.00
	15:54	_	Middle	3.0	28.30	28.30		7.98	7.98		29.50	29.50		68.4	66.6		4.52	4.41		1.97	1.97		24	
6/9/2014	15:13	Fine	Middle	3.0	29.00	29.00	29.10	7.97	7.97	7.97	30.66	30.66	30.66	70.9	73.1	72.9	4.60	4.74	4.73	6.73	6.62	6.58	10	10.00
	15:15		Middle	3.0	29.20	29.20		7.97	7.97		30.65	30.65		74.5	73.2		4.82	4.74		6.53	6.44		10	<u> </u>
8/9/2014	17:00	Cloudy	Middle	3.0	28.40	28.40	28.45	7.99	7.99	7.99	30.69	30.69	30.68	60.4	60.4	60.3	3.95	3.95	3.95	8.28	8.25	8.24	9	9.00
	17:02		Middle	3.0	28.50	28.50		7.99	7.99		30.66	30.66		60.0	60.4		3.93	3.95		8.22	8.21		9	
10/9/2014	18:30	Fine	Middle	2.5	28.90	28.90	28.95	8.14	8.14	8.14	31.17	31.17	31.16	88.7	89.4	83.9	5.73	5.77	5.42	6.38	6.96	6.66	7	7.00
	18:31		Middle	2.5	29.10	28.90		8.14	8.14		31.15	31.15		76.8	80.8		4.95	5.21		6.42	6.87		7	
12/9/2014	8:10	Fine	Middle	4.0	28.00	28.00	28.05	7.92	7.92	7.92	30.72	30.72	30.72	65.1	65.5	65.5	4.29	4.32	4.32	10.32	10.44	10.46	11	10.50
	8:12		Middle	4.0	28.10	28.10		7.92	7.92		30.72	30.72		66.2	65.3		4.36	4.30		10.54	10.54		10	<u> </u>
15/9/2014	9:50	Fine	Middle	3.5	29.10	29.10	29.15	7.86	7.86	7.87	30.18	30.18	30.19	64.8	65.6	64.6	4.21	4.26	4.20	8.08	8.04	8.04	7	7.00
	9:52		Middle	3.5	29.20	29.20		7.87	7.87		30.19	30.19		65.0	63.1		4.22	4.09		8.02	8.00		7	<u> </u>
17/9/2014	20:50	Cloudy	Middle	2.5	28.20	28.20	28.20	8.03	8.03	8.04	31.75	31.75	31.75	72.3	74.5	72.5	4.73	4.87	4.74	4.68	4.70	4.66	5	5.50
	20:51		Middle	2.5	28.20	28.20		8.05	8.05		31.75	31.75		72.8	70.5		4.76	4.61		4.61	4.66		6	
19/9/2014	15:20	Cloudy	Middle	3.0	29.50	29.50	29.60	7.94	7.94	7.94	30.73	30.73	30.73	77.7	77.3	77.3	4.99	4.96	4.96	5.12	5.11	5.11	8	7.50
	15:22		Middle	3.0	29.70	29.70		7.94	7.94		30.73	30.73		77.8	76.4		4.99	4.90		5.11	5.10		7	
22/9/2014	16:20	Cloudy	Middle	3.5	28.60	28.60	28.60	8.12	8.12	8.12	32.72	32.72	32.73	76.1	76.8	76.3	4.92	4.96	4.93	1.64	1.64	1.64	11	11.50
	16:22		Middle	3.5	28.60	28.60		8.12	8.12		32.73	32.73		76.3	76.0		4.93	4.89		1.63	1.63	<u> </u>	12	<u> </u>
24/9/2014	18:52	Cloudy	Middle	2.5	27.90	27.90	27.85	8.00	8.00	8.00	32.36	32.36	32.36	73.5	73.7	73.0	4.82	4.83	4.78	9.25	9.20	9.30	8	8.00
	18:53		Middle	2.5	27.80	27.80		7.99	8.00		32.36	32.36		71.6	73.1		4.69	4.79		9.36	9.40	1	8	
26/9/2014	20:35	Fine	Middle	3.0	28.20	28.20	28.20	7.94	7.94	7.95	31.79	31.79	31.79	63.6	64.3	63.6	4.16	4.21	4.16	6.55	6.70	6.66	7	6.50
	20:36		Middle	3.0	28.20	28.20		7.96	7.96		31.79	31.79		63.0	63.4		4.11	4.14		6.61	6.78		6	



Water Monitoring Result at WSD19 - Sheung Wan Mid-Flood Tide

Date	Time	Weater Condition		g Depth	Wat	er Temp	erature		pH -			Salini	ty	D	O Satur	ation		DO mg/L			Turbid NTU		Suspend	led Solids g/L
			r	n	Va	lue	Average	Va	ılue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	alue	Average	Value	Average
29/8/2014	23:15	Fine	Middle	2.5	27.10	27.10	27.10	8.15	8.15	8.16	31.37	31.37	31.37	73.2	70.2	70.3	4.89	4.59	4.65	3.38	3.12	3.05	7	7.50
20/0/2014	23:16	TINC	Middle	2.5	27.10	27.10	27.10	8.16	8.16	0.10	31.37	31.37	01.07	68.3	69.6	70.0	4.56	4.57	4.00	2.99	2.70	0.00	8	7.00
1/9/2014	10:30	Fine	Middle	3.0	28.10	28.10	28.20	7.94	7.94	7.94	30.50	30.50	30.50	74.4	74.3	73.8	4.90	4.89	4.86	6.53	6.60	6.54	7	7.00
17072014	10:32	TINC	Middle	3.0	28.30	28.30	20.20	7.94	7.94	7.04	30.50	30.50	00.00	72.4	74.1	70.0	4.76	4.88	4.00	6.59	6.44	0.04	7	7.00
4/9/2014	15:28	Fine	Middle	3.0	28.30	28.30	28.30	7.89	7.89	7.89	29.66	29.66	29.67	62.6	62.1	61.5	4.14	4.10	4.07	3.05	3.04	3.04	<2	<2
7072011	15:30	1 1110	Middle	3.0	28.30	28.30	20.00	7.89	7.89	7.00	29.67	29.67	20.01	61.1	60.3	01.0	4.04	3.98		3.04	3.02	0.01	<2	_
6/9/2014	14:41	Fine	Middle	3.0	29.80	29.80	29.80	7.90	7.90	7.90	30.50	30.50	30.40	63.0	61.6	62.1	4.03	3.94	3.97	3.81	3.82	3.76	5	5.00
0/0/2011	14:43	0	Middle	3.0	29.80	29.80	20.00	7.90	7.90	7.00	30.29	30.29	00.10	62.0	61.8	02	3.97	3.94	0.07	3.75	3.66	0.10	5	0.00
8/9/2014	18:58	Cloudy	Middle	1.5	28.00	28.00	28.05	7.90	7.90	7.90	30.69	30.69	30.69	53.3	52.9	52.7	3.51	3.49	3.48	7.01	7.05	7.02	5	5.00
	19:00		Middle	1.5	28.10	28.10		7.90	7.90		30.69	30.69		52.3	52.4	<u> </u>	3.45	3.46		7.02	7.01		5	
10/9/2014	20:03	Fine	Middle	2.5	28.50	28.50	28.50	8.14	8.14	8.14	31.18	31.18	31.18	70.3	72.6	74.6	4.61	4.73	4.87	7.55	7.51	7.42	7	7.00
	20:04		Middle	2.5	28.50	28.50		8.14	8.14		31.18	31.18		79.7	75.8		5.19	4.93		7.37	7.26		7	
12/9/2014	7:55	Fine	Middle	3.5	28.00	28.00	28.05	7.93	7.93	7.94	30.32	30.32	30.59	74.8	75.6	74.9	4.93	4.98	4.93	8.39	8.40	8.38	10	9.50
	7:57	-	Middle	3.5	28.10	28.10		7.94	7.94		30.85	30.85		74.8	74.4		4.92	4.90		8.38	8.36		9	
15/9/2014	11:50	Fine	Middle	3.0	29.10	29.10	29.15	7.77	7.77	7.77	30.11	30.11	30.12	63.3	63.2	63.2	4.11	4.11	4.11	6.60	6.57	6.56	4	5.00
	11:52		Middle	3.0	29.20	29.20		7.77	7.77		30.12	30.12		63.2	63.2		4.11	4.10		6.55	6.52		6	
17/9/2014	20:25	Cloudy	Middle	2.5	28.30	28.30	28.25	8.01	8.01	8.01	31.54	31.54	31.56	75.0	75.7	74.7	4.90	4.95	4.89	5.67	5.80	5.71	6	6.00
	20:26		Middle	2.5	28.20	28.20		8.01	8.01		31.57	31.57		73.0	75.2		4.78	4.92		5.76	5.61		6	
19/9/2014	14:55	Cloudy	Middle	2.5	31.40	31.40	31.45	7.96	7.96	7.96	30.83	30.83	30.58	83.3	83.9	82.8	5.19	5.23	5.16	6.36	6.30	6.74	7	6.50
	14:57		Middle	2.5	31.50	31.50		7.96	7.96		30.32	30.32		81.8	82.3		5.08	5.12		6.18	8.13		6	<u> </u>
22/9/2014	18:10	Cloudy	Middle	3.5	28.30	28.30	28.30	8.04	8.04	8.03	32.48	32.48	32.48	69.4	71.7	70.8	4.51	4.65	4.60	6.38	6.39	6.39	5	5.00
	18:12		Middle	3.5	28.30	28.30		8.01	8.01		32.48	32.48		70.6	71.4		4.59	4.64		6.39	6.38		5	
24/9/2014	18:30	Cloudy	Middle	2.0	27.70	27.70	27.70	8.00	8.00	8.00	32.33	32.33	32.33	71.0	71.5	72.1	4.66	4.70	4.74	9.72	9.13	9.62	7	7.00
	18:31		Middle	2.0	27.70	27.70		8.00	8.00		32.33	32.33		72.6	73.1		4.77	4.81		9.92	9.71		7	<u> </u>
26/9/2014	19:15	Fine	Middle	2.5	28.90	28.90	28.93	7.96	7.96	7.96	31.75	31.75	31.74	69.5	69.5	68.1	4.48	4.48	4.39	13.79	13.48	<u>13.36</u>	14	14.00
	19:16		Middle	2.5	29.00	28.90		7.95	7.95		31.73	31.73		66.8	66.6		4.31	4.30		13.13	13.02		14	



Water Monitoring Result at WSD9 - Tai Wan Mid-Ebb Tide

Date	Time	Weater	Samplin	g Depth	Wat	er Temp	erature		рН			Salini	ty	D	O Satur	ation		DO			Turbid			led Solids
		Condition	r	n	Va	lue	Average	Va	lue	Average	Va	ppt alue	Average	Va	ilue	Average	Va	mg/L lue	Average	Va	ilue	Average	Value	g/L Average
29/8/2014	11:55	Fine	Middle	2.5	27.20	27.20	27.35	8.06	8.06	8.06	31.14	31.14	31.15	76.7	78.0	76.3	5.10	5.18	5.09	2.56	2.59	2.80	8	9.00
29/6/2014	11:57	rine	Middle	2.5	27.50	27.50	21.35	8.06	8.06	8.00	31.15	31.15	31.15	76.5	74.0	70.3	5.08	5.01	5.09	3.04	3.01	2.00	10	9.00
1/9/2014	1:30	Cloudy	Middle	2.5	27.50	27.50	27.50	8.18	8.18	8.19	32.20	32.20	32.21	84.9	81.3	85.6	5.42	5.19	5.46	2.93	2.91	2.90	5	4.50
1/9/2014	1:31	Cloudy	Middle	2.5	27.50	27.50	27.50	8.19	8.19	0.19	32.21	32.21	32.21	88.7	87.4	65.0	5.67	5.56	5.40	3.04	2.70	2.90	4	4.50
4/9/2014	7:15	Fine	Middle	3.0	28.30	28.30	28.40	7.91	7.91	7.92	30.03	30.03	30.04	55.4	53.2	53.7	3.64	3.50	3.53	4.69	4.73	4.73	20	20.50
4/3/2014	7:17	Tille	Middle	3.0	28.50	28.50	20.40	7.92	7.92	7.92	30.05	30.05	30.04	52.9	53.1	55.7	3.48	3.48	3.33	4.74	4.75	4.73	21	20.30
6/9/2014	9:00	Sunny	Middle	3.0	28.10	28.10	28.15	7.97	7.97	7.97	31.02	31.02	31.01	59.7	59.9	60.5	3.92	3.93	3.97	2.15	2.12	2.12	5	5.00
0/3/2014	9:02	Odniny	Middle	3.0	28.20	28.20	20.13	7.97	7.97	1.51	31.00	31.00	31.01	60.9	61.6	00.5	4.00	4.04	0.01	2.10	2.10	2.12	5	3.00
8/9/2014	8:48	Cloudy	Middle	3.0	28.20	28.30	28.33	8.10	8.10	8.11	31.82	31.82	31.83	71.2	71.0	71.9	4.64	4.63	4.69	5.18	5.20	5.18	3	2.50
0/3/2014	8:50	Cioddy	Middle	3.0	28.40	28.40	20.55	8.12	8.12	0.11	31.84	31.84	31.03	71.9	73.5	71.9	4.68	4.79	4.05	5.13	5.21	5.10	2	2.30



Water Monitoring Result at WSD17 - Quarry Bay Mid-Ebb Tide

Date	Time	Weater Condition	Samplin	g Depth	Wat	ter Temp	erature		рН			Salini	ty	Г	O Satur	ation		DO			Turbid			ded Solids
		Condition	r	n	Va	alue	Average	Va	lue -	Average	Va	ppt ilue	Average	Va	ilue	Average	Va	mg/L lue	Average	Va	NTU ilue	Average	Value	g/L Average
29/8/2014	15:25	Fine	Middle	2	29.00	29.00	29.10	8.21	8.21	8.21	31.27	31.27	31.27	91.6	91.6	91.4	5.92	5.92	5.91	3.05	3.04	3.04	4	4.00
29/8/2014	15:27	Fine	Middle	2	29.20	29.20	29.10	8.21	8.21	8.21	31.26	31.26	31.27	90.7	91.7	91.4	5.86	5.92	5.91	3.04	3.04	3.04	4	4.00
1/9/2014	4:40	Cloudy	Middle	3	27.00	27.00	27.00	8.15	8.15	8.16	31.74	31.74	31.74	72.7	75.9	73.1	4.70	4.91	4.70	2.01	1.95	1.91	4	4.00
1/9/2014	4:41	Cloudy	Middle	3	27.00	27.00	27.00	8.16	8.16	6.10	31.74	31.74	31.74	72.3	71.6	73.1	4.57	4.62	4.70	1.89	1.78	1.91	4	4.00
4/9/2014	10:37	Fine	Middle	3	28.50	28.50	28.65	7.88	7.88	7.88	30.46	30.46	30.47	57.0	55.7	58.3	3.73	3.66	3.84	2.44	2.38	2.37	5	5.00
4/9/2014	10:39	Tille	Middle	3	28.80	28.80	20.03	7.88	7.88	7.00	30.47	30.47	30.47	59.7	60.9	30.3	3.90	4.07	5.04	2.31	2.33	2.51	5	3.00
6/9/2014	9:45	Sunny	Middle	3	27.80	27.80	27.85	7.94	7.94	7.94	31.52	31.52	31.51	58.3	58.0	57.8	3.82	3.80	3.79	4.03	4.04	3.95	6	5.50
0/3/2014	9:47	Odniny	Middle	3	27.90	27.90	21.00	7.94	7.94	7.54	31.50	31.50	31.31	57.7	57.0	37.0	3.79	3.75	0.75	3.85	3.86	0.00	5	3.30
8/9/2014	9:35	Cloudy	Middle	3	28.10	28.10	28.15	8.04	8.04	8.05	31.88	31.88	31.88	58.8	59.2	59.1	3.85	3.87	3.87	5.02	5.02	5.02	4	4.00
0/3/2014	9:37	Gloudy	Middle	3	28.20	28.20	20.13	8.05	8.05	0.03	31.87	31.87	31.00	59.1	59.3	55.1	3.87	3.88	5.57	5.02	5.02	5.02	4	7.50



Water Monitoring Result at C7 - Windsor House Mid-Ebb Tide

Date	Time	Weater Condition	·	g Depth	Wat	er Temp	perature		pH -			Salini	ty	С	OO Satur	ation		DO ma/L			Turbid NTU	ity	Suspend	led Solids
		00.10.001	r	n	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	lue	Average	Va		Average	Va	alue	Average	Value	Average
29/8/2014	15:04	Fine	Middle	2	28.30	28.30	28.40	7.92	7.92	7.93	30.13	30.13	30.13	69.5	71.3	70.5	4.58	4.69	4.64	5.03	5.12	5.10	8	7.50
29/6/2014	15:07	rille	Middle	2	28.50	28.50	20.40	7.93	7.93	7.93	30.12	30.12	30.13	70.9	70.4	70.5	4.66	4.62	4.04	5.12	5.12	5.10	7	7.50
1/9/2014	3:57	Cloudy	Middle	2	27.10	27.10	27.10	8.25	8.25	8.24	30.31	30.31	30.31	81.2	82.8	81.5	5.27	5.38	5.29	2.01	1.98	1.95	4	3.50
173/2014	3:58	Cloudy	Middle	2	27.10	27.10	27.10	8.23	8.23	0.24	30.31	30.32	30.31	81.7	80.1	01.5	5.30	5.20	5.25	1.93	1.89	1.00	3	3.50
4/9/2014	10:05	Fine	Middle	1	28.50	28.50	28.50	7.85	7.85	7.85	28.79	28.79	28.79	50.6	50.8	50.7	3.34	3.35	3.35	5.77	5.78	5.66	5	5.00
47072014	10:07	Tille	Middle	1	28.50	28.50	20.00	7.85	7.86	7.00	28.78	28.78	20.70	50.6	50.9	00.1	3.34	3.36	0.00	5.56	5.51	0.00	5	0.00
6/9/2014	11:28	Sunny	Middle	2	28.70	28.70	28.75	7.89	7.89	7.89	30.18	30.18	30.18	55.8	57.1	57.3	3.65	3.73	3.75	4.90	4.81	4.86	6	6.00
0,0,2011	11:30	ouy	Middle	2	28.80	28.80	20.70	7.89	7.89	7.00	30.18	30.18	00.10	58.2	58.2	01.0	3.80	3.80	0.70	4.86	4.88	11.00	6	0.00
8/9/2014	11:47	Cloudy	Middle	2	28.70	28.70	28.75	7.93	7.93	7.93	30.73	30.73	30.72	56.7	57.5	57.3	3.70	3.75	3.73	2.82	2.82	2.88	<2	<2
	11:49		Middle	2	28.80	28.80		7.92	7.92		30.71	30.71		57.8	57.0		3.77	3.71		2.93	2.94		<2	
10/9/2014	11:27	Fine	Middle	2	28.40	28.40	28.45	7.87	7.87	7.87	30.00	30.00	30.00	66.4	66.2	65.9	4.37	4.35	4.33	3.17	3.17	3.19	3	3.50
	11:29		Middle	2	28.50	28.50		7.87	7.87		30.00	30.00		65.9	65.1		4.33	4.28		3.17	3.26		4	
12/9/2014	15:48	Cloudy	Middle	2	28.10	28.10	28.10	7.88	7.88	7.88	28.30	28.30	28.30	62.9	63.2	63.0	4.20	4.22	4.21	8.08	8.08	8.07	7	7.50
	15:50	,	Middle	2	28.10	28.10		7.88	7.88		28.30	28.30		62.7	63.3		4.19	4.23		8.05	8.06		8	
15/9/2014	3:30	Cloudy	Middle	1	27.40	27.40	27.40	7.86	7.86	7.87	29.77	29.78	29.77	68.8	67.9	69.2	4.69	4.63	4.72	1.41	1.47	1.41	3	2.50
	3:31	•	Middle	1	27.40	27.40		7.87	7.87		29.77	29.77		69.9	70.3		4.77	4.79		1.38	1.36		2	
17/9/2014	7:15	Cloudy	Middle	2	28.00	28.00	28.00	7.95	7.95	7.95	31.36	31.36	31.37	57.9	59.2	58.9	3.80	3.89	3.87	3.65	3.65	3.65	2	2.50
	7:17	-	Middle	2	28.00	28.00		7.95	7.95		31.37	31.37		59.0	59.4		3.88	3.90		3.64	3.67		3	
19/9/2014	9:47	Fine	Middle	2	28.70	28.70	28.70	7.85	7.85	7.85	28.59	28.59	28.59	56.6	58.4	57.8	3.73	3.85	3.81	1.97	1.97	1.96	<2	<2
	9:49		Middle	2	28.70	28.70		7.85	7.85		28.59	28.59		57.8	58.3		3.81	3.85		1.96	1.94		<2	
22/9/2014	10:47	Fine	Middle	2	29.00	29.00	29.05	8.01	8.01	8.01	31.83	31.83	31.84	64.7	65.6	65.2	4.17	4.23	4.20	3.28	3.28	3.29	5	5.00
	10:49		Middle	2	29.10	29.10		8.01	8.01		31.84	31.84		65.3	65.0		4.21	4.18		3.29	3.29		5	
24/9/2014	11:22	Cloudy	Middle	2	28.50	28.50	28.50	7.97	7.97	7.97	31.95	31.95	31.95	59.2	60.8	60.5	3.81	3.95	3.93	7.96	8.02	8.03	7	6.50
	11:24		Middle	2	28.50	28.50		7.97	7.97		31.95	31.95		60.8	61.2		3.96	3.98		8.06	8.07		6	<u> </u>
26/9/2014	11:37	Fine	Middle	2	28.90	28.90	28.95	7.91	7.91	7.91	31.67	31.67	31.67	56.3	55.9	56.9	3.64	3.61	3.67	4.25	4.26	4.26	3	3.00
	11:39		Middle	2	29.00	29.00		7.91	7.91		31.67	31.67		57.8	57.6		3.70	3.72		4.26	4.26		3	



Water Monitoring Result at C1 - HKCEC Mid-Ebb Tide

Date	Time	Weater	Samplin	g Depth	Wat	er Temp	erature		рН			Salini	ty	С	O Satur	ation		DO			Turbid	,	Suspende	
54.0		Condition	r	n	Va	lue	Average	Va	lue -	Average	Va	ppt ilue	Average	Va	llue	Average	Va	mg/L lue	Average	Va	NTU ilue	Average	mg Value	g/L Average
00/0/0044	15:00	į.	Middle	2.5	26.90	26.90	00.00	8.04	8.04	0.00	30.02	30.02		70.0	68.6	07.7	4.89	4.65	4.00	4.81	4.81	4.04	6	0.50
29/8/2014	15:02	Fine	Middle	2.5	26.90	26.90	26.90	8.02	8.02	8.03	30.02	30.02	30.02	64.8	67.2	67.7	4.39	4.53	4.62	4.81	4.81	4.81	7	6.50
1/9/2014	5:46	Cloudy	Middle	2.5	28.40	28.40	28.35	8.18	8.18	8.18	31.18	31.18	31.18	88.8	82.1	84.6	5.64	5.21	5.36	2.64	2.61	2.72	5	4.50
1/9/2014	5:47	Cloudy	Middle	2.5	28.30	28.30	20.33	8.18	8.18	0.10	31.18	31.18	31.10	85.9	81.5	04.0	5.42	5.17	5.30	2.88	2.75	2.12	4	4.50
4/9/2014	10:17	Fine	Middle	2.5	28.90	28.90	28.95	8.17	8.17	8.17	29.29	29.29	29.29	74.6	74.9	75.0	4.88	4.90	4.90	2.72	2.73	2.76	3	3.00
	10:19		Middle	2.5	29.00	29.00	20.00	8.17	8.17	0	29.28	29.28	20.20	75.3	75.0	7 0.0	4.92	4.91	1100	2.79	2.78	2.70	3	0.00
6/9/2014	10:32	Sunny	Middle	2.5	28.40	28.40	28.40	8.01	8.01	8.02	29.31	29.31	29.43	85.1	85.9	85.1	5.86	5.96	5.74	4.33	4.32	4.32	7	7.50
0/3/2014	10:34	Outliny	Middle	2.5	28.40	28.40	20.40	8.03	8.03	0.02	29.55	29.55	20.40	84.8	84.7	03.1	5.58	5.57	5.74	4.30	4.33	4.02	8	7.50
8/9/2014	11:10	Cloudy	Middle	3.0	28.20	28.20	28.20	7.91	7.91	7.91	30.86	30.86	30.86	77.8	77.0	77.0	5.11	5.06	5.07	6.54	6.53	6.51	3	3.50
0,0,2011	11:12	0.000,	Middle	3.0	28.20	28.20	20.20	7.91	7.91	1.01	30.86	30.86	00.00	76.5	76.8		5.05	5.07	0.01	6.51	6.45	0.01	4	0.00
10/9/2014	14:30	Fine	Middle	2.5	28.80	28.80	28.80	8.05	8.05	8.05	30.13	30.13	30.13	61.3	61.4	61.1	4.01	4.01	4.00	8.57	8.47	8.47	6	6.50
	14:32		Middle	2.5	28.80	28.80		8.05	8.05		30.13	30.13		61.1	60.5		4.00	3.96		8.43	8.41		7	
12/9/2014	14:45	Cloudy	Middle	3.0	28.30	28.30	28.35	7.92	7.92	7.92	30.71	30.71	30.71	70.3	70.4	70.1	4.61	4.62	4.60	5.60	5.50	5.47	6	6.50
12/0/2011	14:47	0.000,	Middle	3.0	28.40	28.40	20.00	7.92	7.92	1.02	30.71	30.71	00.11	69.4	70.1		4.55	4.60		5.40	5.39	0.11	7	0.00
15/9/2014	6:21	Cloudy	Middle	2.0	27.40	27.40	27.40	8.09	8.09	8.09	30.83	30.83	30.83	68.4	67.7	67.8	4.63	4.59	4.59	1.89	1.91	1.93	4	3.50
	6:22		Middle	2.0	27.40	27.40	-	8.09	8.09		30.83	30.83		67.4	67.6		4.57	4.58		1.93	1.97		3	
17/9/2014	9:30	Cloudy	Middle	2.5	27.50	27.50	27.50	7.97	7.97	7.97	31.58	31.58	31.58	61.8	61.9	62.1	4.02	4.03	4.04	7.27	7.26	7.20	5	5.50
	9:32	,	Middle	2.5	27.50	27.50		7.97	7.97		31.58	31.58		62.1	62.5	-	4.04	4.06		7.13	7.12	-	6	
19/9/2014	10:17	Fine	Middle	2.5	29.30	29.30	29.25	8.10	8.10	8.07	30.45	30.45	30.48	55.4	56.6	56.9	3.59	3.66	3.68	6.84	6.82	6.81	3	3.00
	10:19		Middle	2.5	29.20	29.20		8.04	8.04		30.50	30.50		57.9	57.7		3.74	3.74		6.79	6.78		3	
22/9/2014	10:18	Fine	Middle	2.5	28.50	28.50	28.50	7.96	7.96	7.96	32.56	32.56	32.56	60.9	62.5	62.7	3.97	4.05	4.06	8.56	8.67	8.63	10	10.00
	10:20	-	Middle	2.5	28.50	28.50		7.96	7.96		32.56	32.56		64.4	62.9	-	4.13	4.08		8.68	8.61		10	
24/9/2014	10:40	Cloudy	Middle	3.0	28.90	28.90	28.90	7.93	7.93	7.94	32.14	32.14	32.16	58.1	59.4	58.7	3.74	3.82	3.78	9.54	9.53	9.50	8	7.50
	10:42		Middle	3.0	28.90	28.90		7.95	7.95		32.17	32.17		59.0	58.2		3.80	3.75		9.51	9.40		7	
26/9/2014	11:05	Fine	Middle	3.0	28.80	28.80	28.80	8.04	8.04	8.04	31.66	31.66	31.66	61.9	61.8	61.8	4.02	4.00	4.00	6.62	6.63	6.64	6	6.50
20.0.20 . 7	11:07		Middle	3.0	28.80	28.80	20.00	8.04	8.04	0.0.	31.66	31.66	000	61.7	61.6	00	3.99	3.98		6.65	6.67	0.0.	7	0.00



Water Monitoring Result at P1 - HKCEC Phase I Mid-Ebb Tide

Date	Time	Weater Condition	Samplin	g Depth	Wat	er Temp	erature		рН			Salini	ty	С	O Satur	ation		DO ma/L			Turbid	ity	Suspende	led Solids
		Condition	r	n	Va	lue	Average	Va	lue	Average	Va	alue	Average	Va	alue	Average	Va	lue	Average	Va	lue	Average	Value	Average
29/8/2014	15:25	Fine	Middle	2.5	26.90	26.90	26.90	7.96	7.96	7.97	30.12	30.12	30.13	72.0	74.9	74.0	4.85	5.05	5.00	4.17	4.17	4.18	7	7.50
29/6/2014	15:27	Fine	Middle	2.5	26.90	26.90	26.90	7.98	7.98	7.97	30.14	30.14	30.13	75.7	73.3	74.0	5.10	4.98	5.00	4.16	4.20	4.10	8	7.50
1/9/2014	5:00	Cloudy	Middle	2.5	27.40	27.40	27.40	8.21	8.21	8.21	31.22	31.22	31.23	80.7	83.6	82.2	5.19	5.38	5.29	3.44	3.69	3.37	6	5.00
1/3/2014	5:01	Cloudy	Middle	2.5	27.40	27.40	27.40	8.21	8.21	0.21	31.23	31.23	31.23	82.5	82.0	02.2	5.30	5.27	5.29	3.20	3.13	3.37	4	3.00
4/9/2014	10:50	Fine	Middle	2.5	29.20	29.20	29.20	8.00	8.00	8.00	28.46	28.46	28.46	84.4	84.2	84.3	5.50	5.48	5.49	2.82	2.83	2.86	<2	<2
	10:52		Middle	2.5	29.20	29.20	20.20	8.00	8.00	0.00	28.46	28.46	20.10	83.8	84.6	0 1.0	5.49	5.49	0.10	2.89	2.90	2.00	<2	
6/9/2014	11:06	Sunny	Middle	2.5	27.90	27.90	27.95	8.06	8.06	8.06	30.51	30.51	30.51	82.3	82.5	82.1	5.44	5.45	5.43	3.89	3.85	3.80	5	5.50
0,0,2011	11:08		Middle	2.5	28.00	28.00	27.00	8.05	8.05	0.00	30.51	30.51	00.01	81.3	82.2	02	5.37	5.44	0.10	3.74	3.73	0.00	6	0.00
8/9/2014	11:48	Cloudy	Middle	3.0	28.30	28.30	28.30	8.05	8.05	8.05	31.22	31.22	31.22	72.6	73.1	72.6	4.92	4.84	4.80	6.63	6.62	6.63	7	7.00
	11:50		Middle	3.0	28.30	28.30		8.05	8.05		31.22	31.22		72.4	72.2		4.73	4.72		6.64	6.63		7	
10/9/2014	15:02	Fine	Middle	2.5	29.00	29.00	29.00	7.95	7.95	7.95	29.41	29.41	29.41	59.2	59.4	59.5	4.02	4.04	4.05	9.41	9.39	9.36	7	6.00
	15:04	-	Middle	2.5	29.00	29.00		7.95	7.95		29.41	29.41		59.5	59.8		4.05	4.07		9.34	9.31		5	
12/9/2014	14:25	Cloudy	Middle	3.0	28.40	28.40	28.40	7.91	7.91	7.91	30.30	30.30	30.31	63.2	64.6	64.1	4.11	4.23	4.19	6.26	6.23	6.23	5	6.00
	14:27		Middle	3.0	28.40	28.40		7.91	7.91		30.31	30.31		64.2	64.4		4.20	4.22		6.20	6.21		7	
15/9/2014	5:40	Cloudy	Middle	2.0	27.40	27.40	27.40	8.08	8.08	8.09	30.80	30.80	30.80	83.1	82.8	84.0	5.63	5.61	5.69	1.40	1.48	1.38	6	6.00
	5:41	•	Middle	2.0	27.40	27.40		8.09	8.09		30.80	30.80		85.8	84.2		5.81	5.71		1.28	1.34		6	
17/9/2014	10:00	Cloudy	Middle	2.5	27.80	27.80	27.80	8.02	8.02	8.02	31.78	31.78	31.78	68.3	68.1	68.1	4.42	4.40	4.41	7.57	7.58	7.56	8	7.50
	10:02	-	Middle	2.5	27.80	27.80		8.02	8.02		31.78	31.78		68.1	68.0		4.41	4.40		7.56	7.53		7	
19/9/2014	10:51	Fine	Middle	2.5	29.50	29.50	29.55	7.93	7.93	7.93	30.55	30.55	30.56	69.9	70.6	69.5	4.50	4.55	4.47	5.18	5.20	5.21	3	3.50
	10:53		Middle	2.5	29.60	29.60		7.92	7.92		30.57	30.57		69.3	68.0		4.46	4.37		5.22	5.23		4	
22/9/2014	10:49	Fine	Middle	2.5	29.00	29.00	29.00	8.01	8.01	8.01	32.86	32.86	32.86	72.5	72.2	72.9	4.65	4.62	4.67	8.85	8.86	8.87	10	9.50
	10:51		Middle	2.5	29.00	29.00		8.01	8.01		32.86	32.86		73.5	73.3		4.71	4.69		8.87	8.88		9	
24/9/2014	11:08	Cloudy	Middle	3.0	28.80	28.80	28.80	7.96	7.96	7.96	32.30	32.30	32.30	63.2	63.0	63.8	4.08	4.07	4.12	9.50	9.48	9.46	6	5.50
	11:10		Middle	3.0	28.80	28.80		7.96	7.96		32.30	32.30	<u> </u>	65.0	64.1		4.19	4.14		9.44	9.43		5	
26/9/2014	11:30	Fine	Middle	3.0	29.00	29.00	29.00	7.95	7.95	7.95	32.10	32.10	32.10	61.3	60.8	61.6	3.95	3.92	3.97	8.90	8.88	8.87	12	12.50
	11:32		Middle	3.0	29.00	29.00		7.95	7.95		32.10	32.10		62.1	62.3		3.99	4.00		8.86	8.85		13	



Water Monitoring Result at P3 - APA Mid-Ebb Tide

Date	Time	Weater Condition	·	Sampling Depth m		Water Temperature °C		pH -			Salinity ppt			С	O Satur	ation		DO ma/L			Turbid NTU	ity	Suspended Solids mg/L		
		Condition	r	n	Va	lue	Average	Va	llue	Average	Va	lue	Average	Va	ilue	Average	Va		Average	Va	alue	Average	Value	Average	
29/8/2014	15:16	Fine	Middle	2.5	27.10	27.10	27.05	8.01	8.01	8.02	29.97	29.97	30.00	77.7	78.5	78.2	5.23	5.28	5.26	4.07	4.01	3.92	6	6.50	
23/0/2014	15:18	Tille	Middle	2.5	27.00	27.00	21.00	8.02	8.02	0.02	30.02	30.02	30.00	78.4	78.2	10.2	5.27	5.26	3.20	3.79	3.79	3.32	7	0.50	
1/9/2014	5:10	Cloudy	Middle	2.5	29.00	29.00	28.90	8.20	8.20	8.20	31.27	31.27	31.28	82.4	80.6	81.2	5.17	5.06	5.09	2.65	2.39	2.49	5	5.00	
	5:11	o.ouu,	Middle	2.5	28.80	28.80	20.00	8.20	8.20	0.20	31.28	31.28	01.20	81.2	80.6	01.2	5.11	5.02	0.00	2.47	2.44	2.10	5	0.00	
4/9/2014	10:40	Fine	Middle	2.5	28.40	28.40	28.40	8.01	8.01	8.01	29.10	29.10	29.10	74.3	73.5	74.2	4.92	4.92	4.92	3.06	3.05	3.04	3	2.50	
	10:42		Middle	2.5	28.40	28.40		8.01	8.01		29.10	29.10		74.6	74.2		4.93	4.91		3.03	3.02		2		
6/9/2014	10:58	Sunny	Middle	2.5	27.70	27.70	27.75	8.01	8.01	8.02	30.52	30.52	30.53	76.5	77.4	77.4	5.07	5.13	5.13	3.02	3.03	3.04	5	4.50	
	11:00	,	Middle	2.5	27.80	27.80		8.03	8.03		30.53	30.53		77.6	78.0		5.14	5.17		3.04	3.05		4		
8/9/2014	11:32	Cloudy	Middle	3.0	28.20	28.20	28.20	8.03	8.03	8.03	31.25	31.25	31.25	71.0	72.1	71.7	4.72	4.73	4.71	7.39	7.37	7.37	4	4.00	
	11:34	•	Middle	3.0	28.20	28.20		8.03	8.03		31.25	31.25		71.9	71.6		4.71	4.68		7.38	7.35		4		
10/9/2014	14:54	Fine	Middle	2.5	28.70	28.70	28.70	7.98	7.98	7.98	30.10	30.10	30.10	58.6	59.1	59.1	3.83	3.86	3.86	787	7.88	7.81	8	7.00	
	14:56		Middle	2.5	28.70	28.70		7.98	7.98		30.10	30.10		59.2	59.5		3.87	3.89		7.81	7.73		6		
12/9/2014	14:32	Cloudy	Middle	3.0	28.30	28.30	28.30	7.90	7.90	7.90	30.71	30.71	30.71	65.7	64.9	64.2	4.31	4.28	4.22	5.40	5.41	5.41	6	7.00	
	14:34		Middle	3.0	28.30	28.30		7.90	7.90		30.71	30.71		63.0	63.0		4.14	4.14		5.42	5.40		8		
15/9/2014	5:47	Cloudy	Middle	2.0	27.60	27.60	27.55	8.08	8.08	8.08	30.78	30.78	30.78	69.3	71.5	72.4	4.69	4.83	4.90	2.71	2.21	2.36	8	7.50	
	5:48		Middle	2.0	27.50	27.50		8.08	8.08		30.78	30.78		74.5	74.4		5.04	5.03		2.28	2.22		7		
17/9/2014	9:54	Cloudy	Middle	2.5	27.50	27.50	27.50	8.00	8.00	8.00	31.73	31.73	31.73	63.2	63.1	62.9	4.29	4.28	4.27	7.60	7.58	7.57	4	4.50	
	9:56		Middle	2.5	27.50	27.50		8.00	8.00		31.73	31.73		62.9	62.5		4.27	4.23		7.57	7.54		5		
19/9/2014	10:40	Fine	Middle	2.5	27.90	27.90	27.80	7.93	7.93	7.93	31.21	31.21	31.26	65.3	66.0	66.2	4.31	4.35	4.37	5.42	5.55	5.52	3	3.50	
	10:42		Middle	2.5	27.70	27.70		7.92	7.92		31.30	31.30		67.1	66.5		4.43	4.40		5.56	5.56		4		
22/9/2014	10:42	Fine	Middle	2.5	28.40	28.40	28.40	7.99	7.99	7.99	32.73	32.73	32.73	66.8	66.9	67.4	4.33	4.34	4.37	8.95	8.98	8.92	10	10.00	
	10:44		Middle	2.5	28.40	28.40		7.99	7.99		32.73	32.73		67.9	67.8		4.40	4.39		8.88	8.86		10		
24/9/2014	11:01	Cloudy	Middle	3.0	28.80	28.80	28.80	7.95	7.95	7.95	32.39	32.39	32.37	60.3	61.1	60.5	3.89	3.94	3.91	9.77	9.74	9.72	4	4.00	
	11:03		Middle	3.0	28.80	28.80		7.94	7.94		32.35	32.35		60.6	60.1		3.91	3.88		9.69	9.67				
26/9/2014	11:23	Fine	Middle	3.0	29.00	29.00	29.00	7.95	7.95	7.95	31.93	31.93	31.93	60.9	61.3	61.8	3.95	3.97	4.00	6.01	6.00	6.01	8	8.00	
	11:25		Middle	3.0	29.00	29.00		7.95	7.95		31.93	31.93		62.3	62.5		4.02	4.04		5.99	6.03		8		



Water Monitoring Result at P4 - SOC Mid-Ebb Tide

Date	Time	Weater	Samplin	Sampling Depth m		er Temp	erature	рН			Salinity			С	O Satur	ation		DO			Turbid	,	Suspende	
		Condition	r	n	Va	lue	Average	Va	lue -	Average	Va	ppt ilue	Average	Va	% alue	Average	Va	mg/L lue	Average	Va	NTL alue	Average	mg Value	g/L Average
00/0/0044	15:10	į	Middle	2.5	27.10	27.10	07.40	8.02	8.02	8.02	29.99	29.99	00.04	73.3	71.6	70.0	4.93	4.81		4.22	4.14		7	7.00
29/8/2014	15:12	Fine	Middle	2.5	27.10	27.10	27.10	8.02	8.02 8.02	6.02	30.03	30.03	30.01	71.7	72.2	72.2	4.82	4.85	4.85	4.11	4.10	4.14	7	7.00
1/9/2014	5:22	Cloudy	Middle	2.5	28.60	28.60	28.60	8.18	8.18	8.18	31.11	31.14	31.17	75.4	74.7	73.5	4.76	4.72	4.65	1.73	1.56	1.57	4	4.50
1/9/2014	5:23	Cloudy	Middle	2.5	28.60	28.60	26.00	8.18	8.18	0.10	31.21	31.22	31.17	70.4	73.6	75.5	4.45	4.65	4.05	1.52	1.46	1.57	5	4.50
4/9/2014	10:30	Fine	Middle	2.5	28.30	28.30	28.30	8.03	8.03	8.03	29.24	29.24	29.24	68.2	69.3	69.4	4.51	4.58	4.58	3.18	3.17	3.19	4	4.00
4/3/2014	10:32	Tille	Middle	2.5	28.30	28.30	20.50	8.03	8.03	0.00	29.24	29.24	25.24	70.3	69.7	03.4	4.64	4.60	4.50	3.19	3.20	3.13	4	4.00
6/9/2014	10:47	Sunnv	Middle	2.5	28.10	28.10	28.10	8.01	8.01	8.01	30.31	30.31	30.31	78.1	79.8	78.8	5.85	5.34	5.42	3.74	3.73	3.68	7	7.00
0/3/2014	10:49	Sullily	Middle	2.5	28.10	28.10	20.10	8.01	8.01	0.01	30.31	30.31	30.31	79.9	77.5	70.0	5.37	5.11	3.42	3.63	3.62	3.00	7	7.00
8/9/2014	11:22	Cloudy	Middle	3.0	28.30	28.30	28.30	8.00	8.00	8.00	31.12	31.12	31.12	72.3	71.2	72.3	4.73	4.65	4.73	5.86	5.81	5.82	4	4.00
0.0.2011	11:24	o.ouu,	Middle	3.0	28.30	28.30	20.00	8.00	8.00	0.00	31.12	31.12	02	72.5	73.1	. 2.0	4.79	4.75	0	5.80	5.79	0.02	4	
10/9/2014	14:44	Fine	Middle	2.5	28.90	28.90	28.90	7.97	7.97	7.97	30.01	30.01	30.01	61.5	61.4	61.6	4.00	4.00	4.02	7.50	7.51	7.46	6	6.00
	14:46		Middle	2.5	28.90	28.90		7.97	7.97		30.01	30.01		61.7	61.9		4.03	4.04		7.42	7.40		6	
12/9/2014	14:36	Cloudy	Middle	3.0	28.40	28.40	28.40	7.91	7.91	7.91	30.70	30.70	30.70	59.9	60.3	59.9	3.93	3.96	3.92	4.47	.4.48	4.45	5	5.50
12/0/2014	14:38	Cloudy	Middle	3.0	28.40	28.40	20.40	7.91	7.91	7.01	30.70	30.70	00.70	59.3	60.0	00.0	3.89	3.91	0.02	4.45	4.42	4.40	6	0.00
15/9/2014	5:55	Cloudy	Middle	2.0	27.50	27.50	27.50	8.08	8.08	8.08	30.76	30.76	30.76	71.4	68.0	70.3	4.84	4.60	4.76	2.60	2.62	2.57	4	3.50
10/0/2011	5:56	0.000,	Middle	2.0	27.50	27.50	27.00	8.08	8.08	0.00	30.76	30.76	00.70	69.9	71.8	7 0.0	4.75	4.86	0	2.51	2.53	2.0.	3	0.00
17/9/2014	9:47	Cloudy	Middle	2.5	27.50	27.50	27.50	8.00	8.00	8.00	31.66	31.66	31.66	68.9	69.0	69.2	4.45	4.52	4.51	7.73	7.71	7.70	4	4.00
	9:49	,	Middle	2.5	27.50	27.50		8.00	8.00		31.66	31.66		69.4	69.5		4.53	4.54		7.69	7.67		4	
19/9/2014	10:33	Fine	Middle	2.5	29.10	29.10	29.15	7.93	7.93	7.92	30.57	30.57	30.56	64.9	64.6	63.8	4.20	4.19	4.13	7.17	7.14	7.13	6	6.00
10/0/2014	10:35	Tille	Middle	2.5	29.20	29.20	20.10	7.91	7.91	7.02	30.54	30.54	00.00	63.4	62.2	00.0	4.10	4.02	4.10	7.11	7.10	7.10	6	0.00
22/9/2014	10:34	Fine	Middle	2.5	28.80	28.80	28.80	7.97	7.97	7.97	32.58	32.58	32.58	64.4	64.6	64.8	4.15	4.17	4.18	8.68	8.67	8.66	7	6.50
22.0.2011	10:36		Middle	2.5	28.80	28.80	20.00	7.97	7.97	7.01	32.58	32.58	02.00	64.9	65.2	0 1.0	4.18	4.20	0	8.64	8.65	0.00	6	0.00
24/9/2014	10:52	Cloudy	Middle	3.0	28.70	28.70	28.70	7.94	7.94	7.94	32.28	32.28	32.29	57.1	55.8	55.5	3.69	3.61	3.59	9.95	9.95	9.97	7	6.50
	10:54		Middle	3.0	28.70	28.70		7.94	7.94		32.29	32.29		54.7	54.3		3.54	3.51		9.98	10.00		6	
26/9/2014	11:15	Fine	Middle	3.0	28.80	28.80	28.80	7.94	7.94	7.94	30.81	30.81	30.81	61.2	61.8	61.7	3.96	4.00	4.00	7.21	7.26	7.26	9	8.50
20/0/2014	11:17	1 1110	Middle	3.0	28.80	28.80	20.00	7.94	7.94	7.07	30.81	30.81	00.01	62.0	61.9	01.7	4.01	4.01	4.00	7.28	7.30	7.20	8	0.00



Water Monitoring Result at P5 - WCT / RT / IT Mid-Ebb Tide

Date	Time	Weater Condition	Samplin	Sampling Depth m		Water Temperature °C			pH			Salinity ppt			O Satur	ation		DO mg/L			Turbid		Suspended Solids mg/L		
		Condition	r	n	Va	lue	Average	Va	lue	Average	Va	ılue	Average	Va	alue	Average	Va		Average	Va	lue	Average	Value	Average	
00/0/0044	15:06		Middle	2.5	27.00	27.00	07.05	8.03	8.03	0.00	30.03	30.03		72.9	72.0	74.0	4.90	4.85	4.00	4.10	4.10	5	7	0.50	
29/8/2014	15:08	Fine	Middle	2.5	27.10	27.10	27.05	8.02	8.02	8.03	30.03	30.03	30.03	71.9	68.2	71.3	4.84	4.59	4.80	4.19	4.20	4.15	6	6.50	
1/9/2014	5:31	Cloudy	Middle	2.5	27.80	27.80	27.80	8.20	8.20	8.20	31.10	31.10	31.11	84.4	81.8	83.2	5.39	5.18	5.30	2.02	1.95	1.86	6	6.00	
1/9/2014	5:32	Cloudy	Middle	2.5	27.80	27.80	27.00	8.20	8.20	6.20	31.11	31.11	31.11	83.1	83.4	63.2	5.31	5.33	5.30	1.83	1.63	1.00	6	0.00	
4/9/2014	10:23	Fine	Middle	2.5	28.50	28.50	28.50	8.06	8.06	8.06	29.34	29.34	29.35	71.9	72.3	72.0	4.74	4.76	4.74	3.84	3.89	3.86	3	3.00	
47072014	10:25	1 1110	Middle	2.5	28.50	28.50	20.00	8.06	8.06	0.00	29.36	29.36	20.00	71.6	72.2	72.0	4.71	4.75	7.77	3.86	3.85	0.00	3	0.00	
6/9/2014	10:42	Sunny	Middle	2.5	28.20	28.20	28.20	8.02	8.02	8.02	30.15	30.15	30.15	75.5	75.8	76.1	4.99	5.00	5.02	3.63	3.64	3.65	4	4.00	
	10:44	Jan,	Middle	2.5	28.20	28.20		8.02	8.02		30.15	30.15		76.5	76.4		5.05	5.04		3.67	3.66		4		
8/9/2014	11:16	Cloudy	Middle	3.0	28.60	28.60	28.60	8.02	8.02	8.02	31.08	31.08	31.08	69.0	68.1	68.9	4.49	4.43	4.48	6.51	6.59	6.61	5	4.50	
	11:18	,	Middle	3.0	28.60	28.60		8.02	8.02		31.08	31.08		69.1	69.4		4.49	4.51		6.66	6.67		4		
10/9/2014	14:40	Fine	Middle	2.5	29.40	29.40	29.40	8.06	8.06	8.06	30.18	30.18	30.18	59.2	59.5	59.2	4.35	4.38	4.29	7.73	7.72	7.71	6	5.50	
	14:42		Middle	2.5	29.40	29.40		8.06	8.06		30.18	30.18		59.3	58.9		4.36	4.06		7.71	7.67		5		
12/9/2014	14:40	Cloudy	Middle	3.0	28.40	28.40	28.40	7.91	7.91	7.92	30.69	30.69	30.70	66.9	67.5	66.5	4.39	4.43	4.36	4.47	4.42	4.43	5	5.00	
	14:42		Middle	3.0	28.40	28.40		7.92	7.92		30.70	30.70		66.2	65.3		4.34	4.27		4.41	4.41		5		
15/9/2014	6:11	Cloudy	Middle	2.0	27.40	27.40	27.35	8.08	8.08	8.08	30.80	30.80	30.80	69.4	67.8	68.1	4.70	4.60	4.62	1.75	1.73	1.74	4	4.00	
	6:12		Middle	2.0	27.30	27.30		8.08	8.08		30.80	30.80		67.9	67.3		4.61	4.57		1.78	1.70		4		
17/9/2014	9:36	Cloudy	Middle	2.5	27.40	27.40	27.40	8.01	8.01	8.01	31.66	31.66	31.66	70.1	70.3	70.6	4.57	4.58	4.61	7.79	7.81	7.82	6	5.50	
	9:38		Middle	2.5	27.40	27.40		8.01	8.01		31.66	31.66		70.5	71.3		4.60	4.67		7.83	7.85		5		
19/9/2014	10:27	Fine	Middle	2.5	29.30	29.30	29.40	7.95	7.95	7.94	30.51	30.50	30.50	64.4	66.7	65.5	4.16	4.30	4.23	5.30	5.34	5.35	3	3.00	
	10:29		Middle	2.5	29.50	29.50		7.93	7.93		30.50	30.50		65.7	65.1		4.24	4.20		5.37	5.40		3	<u> </u>	
22/9/2014	10:28	Fine	Middle	2.5	28.80	28.80	28.80	7.98	7.98	7.98	32.57	32.57	32.57	70.5	71.3	70.7	4.54	4.58	4.55	8.57	8.59	8.60	8	8.00	
	10:30		Middle	2.5	28.80	28.80		7.98	7.98		32.57	32.57		70.6	70.2		4.55	4.52		8.61	8.64		8	<u> </u>	
24/9/2014	10:49	Cloudy	Middle	3.0	28.80	28.80	28.80	7.95	7.95	7.95	32.21	32.21	32.23	53.3	53.6	53.8	3.44	3.46	3.48	10.45	10.43	10.55	7	7.00	
	10:51		Middle	3.0	28.80	28.80		7.94	7.94		32.24	32.24		54.1	54.3		3.50	3.51		10.49	10.84		7		
26/9/2014	11:11	Fine	Middle	3.0	28.70	28.70	28.70	7.98	7.98	7.98	31.85	31.85	31.85	61.2	61.8	61.7	3.96	4.01	4.00	8.12	8.13	8.11	10	9.50	
	11:13		Middle	3.0	28.70	28.70		7.98	7.98		31.85	31.85		61.7	61.9		3.99	4.02		8.11	8.09		9		



Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre Mid-Ebb Tide

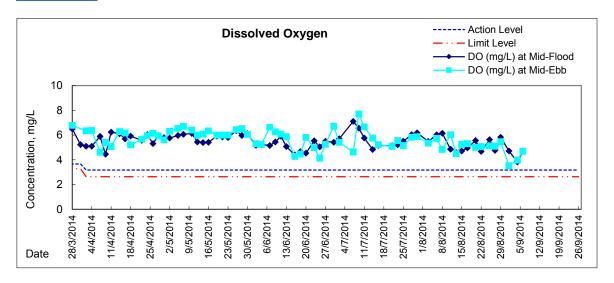
Date	Time	Weater Condition		Sampling Depth m		Water Temperature °C			pH -			Salinity ppt			O Satur	ation		DO ma/L			Turbid		Suspended Solids mg/L		
		oonalaon.	r	n	Va		Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Value	Average	
29/8/2014	14:25	Fine	Middle	3.5	28.20	28.20	28.35	8.00	8.00	8.00	30.60	30.60	30.60	77.4	76.7	77.5	5.08	5.03	5.08	4.80	4.91	4.94	7	6.50	
20/0/2014	14:27	1 1110	Middle	3.5	28.50	28.50	20.00	8.00	8.00	0.00	30.60	30.60	00.00	77.0	78.8	77.0	5.05	5.17	0.00	5.02	5.02	4.04	6	0.00	
1/9/2014	1:57	Cloudy	Middle	2.5	29.50	29.50	29.50	8.01	8.01	8.02	31.53	31.53	31.53	82.8	80.3	79.5	5.31	5.15	5.10	1.95	2.05	2.00	4	4.00	
	1:58	,	Middle	2.5	29.50	29.50		8.03	8.03		31.53	31.53		78.3	76.6		5.03	4.92		1.93	2.07		4		
4/9/2014	9:08	Fine	Middle	3.0	28.50	28.50	28.60	7.90	7.90	7.90	29.30	29.30	29.28	64.2	62.5	62.3	4.23	4.11	4.10	2.28	2.30	2.31	2	2.50	
	9:10		Middle	3.0	28.70	28.70		7.90	7.90		29.25	29.25		61.5	60.9		4.05	4.01		2.32	2.32		3		
6/9/2014	10:43	Sunny	Middle	3.0	28.80	28.70	28.63	7.97	7.97	7.97	30.76	30.76	30.73	70.7	71.3	70.9	4.63	4.61	4.62	4.02	4.01	4.01	7	7.00	
	10:45		Middle	3.0	28.50	28.50		7.97	7.97		30.70	30.70		71.1	70.3		4.65	4.60		4.01	4.01		7		
8/9/2014	10:55	Cloudy	Middle	3.0	28.60	28.60	28.70	8.01	8.01	8.02	31.56	31.56	31.57	67.2	66.0	66.2	4.37	4.29	4.30	7.01	7.04	7.07	3	2.50	
	10:57		Middle	3.0	28.80	28.80		8.02	8.02		31.57	31.57		65.1	66.4		4.22	4.31		7.12	7.11		2		
10/9/2014	10:50	Fine	Middle	4.0	28.80	28.80	28.90	7.89	7.89	7.90	30.63	30.63	30.64	67.4	68.5	67.3	4.38	4.45	4.37	6.12	6.11	6.12	5	5.00	
	10:52		Middle	4.0	29.00	29.00		7.91	7.91		30.64	30.64		67.5	65.7		4.39	4.27		6.15	6.10		5	<u> </u>	
12/9/2014	15:00	Cloudy	Middle	3.5	28.10	28.10	28.10	7.93	7.93	7.93	30.93	30.93	30.93	57.0	58.2	58.4	3.75	3.82	3.84	6.06	6.03	6.03	8	8.00	
	15:02		Middle Middle	3.5 2.5	28.10	28.10		7.93 8.06	7.93		30.93	30.93		58.6 69.4	59.6 67.2		3.86	3.92		6.02 2.90	6.01		3		
15/9/2014	5:00	Cloudy	Middle	2.5	27.40	27.40	27.45	8.06	8.06	8.06	31.45	31.45	31.45	66.7	66.0	67.3	4.63	4.54	4.54	2.42	2.46	2.53	4	3.50	
	6:52		Middle	3.5	28.00	28.00		8.07	8.07		32.04	32.04		76.5	77.4		5.01	5.06		6.49	6.48		6		
17/9/2014	6:54	Cloudy	Middle	3.5	28.00	28.00	28.00	8.08	8.08	8.08	32.04	32.04	32.04	76.3	76.6	76.7	5.00	5.01	5.02	6.45	6.44	6.47	6	6.00	
	8:55		Middle	3.5	28.60	28.60		7.94	7.94		30.66	30.66		69.2	72.0		4.52	4.70		5.47	5.49		5		
19/9/2014	8:57	Fine	Middle	3.5	28.70	28.70	28.65	7.94	7.94	7.94	30.66	30.66	30.66	72.2	71.7	71.3	4.72	4.68	4.66	5.49	5.48	5.48	4	4.50	
	10:05		Middle	3.0	28.50	28.50		8.06	8.06		32.70	32.70		78.6	78.7		5.08	5.10		5.25	5.25		4		
22/9/2014	10:07	Fine	Middle	3.0	28.50	28.50	28.50	8.06	8.06	8.06	32.70	32.70	32.70	78.3	79.4	78.8	5.07	5.14	5.10	5.13	5.13	5.19	4	4.00	
24/0/2014	10:50	Claudy	Middle	3.5	29.20	29.20	20.20	8.00	8.00	0.00	32.71	32.71	22.72	69.0	69.2	60.1	4.41	4.42	4.44	6.00	6.01	F 00	6	6.00	
24/9/2014	10:52	Cloudy	Middle	3.5	29.20	29.20	29.20	8.00	8.00	8.00	32.72	32.72	32.72	68.0	70.0	69.1	4.34	4.47	4.41	6.00	5.91	5.98	6	6.00	
26/9/2014	11:10	Fine	Middle	3.5	29.00	29.00	29.05	7.93	7.93	7.93	32.17	32.17	32.17	68.4	69.0	68 4	4.40	4.44	4.41	6.23	6.24	6.24	6	6.00	
20/9/2014	11:12	rifle	Middle	3.5	29.10	29.10	28.05	7.93	7.93	1.83	32.17	32.17	32.17	67.9	68.4	68.4	4.37	4.41	4.41	6.24	6.23	0.24	6	0.00	

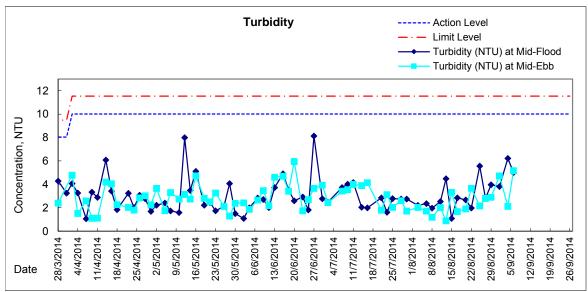


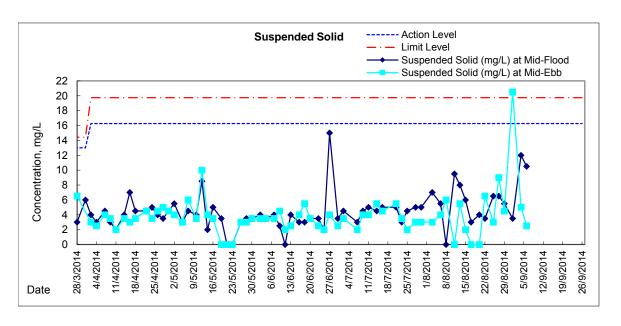
Water Monitoring Result at WSD19 - Sheung Wan Mid-Ebb Tide

Date	Time	Weater Condition		Sampling Depth m		Water Temperature °C			pH -			Salinity ppt			O Satur	ation		DO ma/L			Turbid		Suspended Solids mg/L		
		001101011	r	n	Va		Average	Va	llue	Average	Va	lue	Average	Va	, -	Average	Va	lue	Average	Va	lue	Average	Value	Average	
29/8/2014	14:05	Fine	Middle	3.0	29.10	29.10	29.25	7.91	7.91	7.91	30.57	30.57	30.57	66.3	66.9	65.8	4.29	4.33	4.29	4.90	4.88	4.81	6	6.00	
20/0/2014	14:07	1 1110	Middle	3.0	29.40	29.40	20.20	7.91	7.91	7.01	30.56	30.56	00.07	63.7	66.1	00.0	4.25	4.27	7.20	4.82	4.63	4.01	6	0.00	
1/9/2014	6:05	Cloudy	Middle	2.0	28.30	28.30	28.25	8.15	8.15	8.15	30.59	30.59	30.59	73.1	74.7	72.9	4.65	4.76	4.64	3.54	3.47	3.46	5	6.00	
	6:06	,	Middle	2.0	28.20	28.20		8.15	8.15		30.58	30.58		73.6	70.2		4.69	4.47		3.44	3.37		7		
4/9/2014	8:00	Fine	Middle	3.0	28.60	28.60	28.70	7.99	7.99	7.99	29.21	29.21	29.18	68.9	69.7	69.2	4.53	4.58	4.55	3.77	3.96	3.94	7	7.50	
	8:02		Middle	3.0	28.80	28.80		7.99	7.99		29.14	29.14		69.8	68.4		4.59	4.49		3.98	4.06		8		
6/9/2014	10:17	Sunny	Middle	3.0	28.70	28.70	28.75	8.08	8.08	8.08	30.05	30.05	30.04	73.8	75.4	73.5	4.83	4.93	4.81	3.63	3.72	3.72	6	6.00	
	10:19		Middle	3.0	28.80	28.80		8.08	8.08		30.03	30.03		73.3	71.4		4.79	4.67		3.76	3.75		6	<u> </u>	
8/9/2014	10:20	Cloudy	Middle	3.0	28.20	28.20	28.25	7.92	7.92	7.93	31.24	31.24	31.25	52.5	54.1	53.3	3.44	3.54	3.49	6.00	6.00	6.03	6	6.00	
	10:22		Middle	3.0	28.30	28.30		7.93	7.93		31.26	31.26		53.6	53.0		3.50	3.47		6.03	6.07		6		
10/9/2014	13:25	Fine	Middle	3.5	29.00	29.00	29.05	7.92	7.92	7.92	30.47	30.47	30.47	54.2	54.8	54.7	4.17	4.21	4.20	11.04	11.99	<u>11.23</u>	5	5.50	
	13:27		Middle	3.5	29.10	29.10		7.92	7.92		30.47	30.47		54.9	54.9		4.21	4.22		10.95	10.94		6	<u> </u>	
12/9/2014	14:00	Cloudy	Middle	3.5	28.50	28.50	28.50	7.88	7.88	7.88	30.76	30.76	30.76	56.0	57.5	56.8	3.66	3.76	3.72	3.53	3.53	3.53	7	7.50	
	14:02 6:40		Middle Middle	3.5 2.0	28.50	28.50		7.88	7.88		30.76	30.76		57.2 70.5	56.5 75.0		3.74	3.70		3.53 2.51	3.51		5		
15/9/2014	6:41	Cloudy	Middle	2.0	27.40	27.40	27.45	7.95	7.95	7.94	30.44	30.43	30.44	69.1	70.1	71.2	4.78	5.09 4.76	4.83	2.39	2.56	2.48	6	5.50	
	8:46		Middle	3.0	28.00	28.00		8.01	8.01		31.62	31.62		67.2	68.0		4.41	4.46		8.40	8.40		20		
17/9/2014	8:48	Cloudy	Middle	3.0	28.00	28.00	28.00	8.02	8.02	8.02	31.63	31.63	31.63	68.2	69.0	68.1	4.48	4.53	4.47	8.46	8.47	8.43	21	<u>20.50</u>	
	8:35		Middle	3.0	28.50	28.50		7.97	7.97		30.61	30.61		80.6	80.9		5.28	5.30		5.25	5.25		6		
19/9/2014	8:37	Fine	Middle	3.0	28.50	28.50	28.50	7.97	7.97	7.97	30.61	30.61	30.61	80.3	80.2	80.5	5.26	5.25	5.27	5.27	5.38	5.29	5	5.50	
	11:45		Middle	3.5	29.00	29.00		8.03	8.03		32.45	32.45		78.3	78.9		5.03	5.07		8.41	8.35		14		
22/9/2014	11:47	Fine	Middle	3.5	29.10	29.10	29.05	8.03	8.03	8.03	32.52	32.52	32.49	77.8	78.1	78.3	5.00	5.01	5.03	8.32	8.33	8.35	14	14.00	
24/0/2014	14:10	Cloudy	Middle	3.0	29.40	29.40	29.40	7.92	7.92	7.93	32.32	32.32	22.22	56.1	56.7	E6 0	3.59	3.63	2.50	18.00	17.98	17.09	6	6.00	
24/9/2014	14:12	Cloudy	Middle	3.0	29.40	29.40	29.40	7.93	7.93	1.93	32.32	32.31	32.32	55.8	55.4	56.0	3.57	3.54	3.58	17.98	17.97	<u>17.98</u>	6	6.00	
26/9/2014	14:10	Fine	Middle	3.5	29.10	29.10	29.15	8.04	8.04	8.04	31.66	31.66	31.66	72.0	71.4	71.3	4.64	4.50	4.56	6.88	7.17	7.15	9	8.50	
20/8/2014	14:12	1 1116	Middle	3.5	29.20	29.20	23.13	8.04	8.04	0.04	31.66	31.66	31.00	69.9	71.9	71.5	4.50	4.59	4.50	7.20	7.36	7.13	8	0.50	

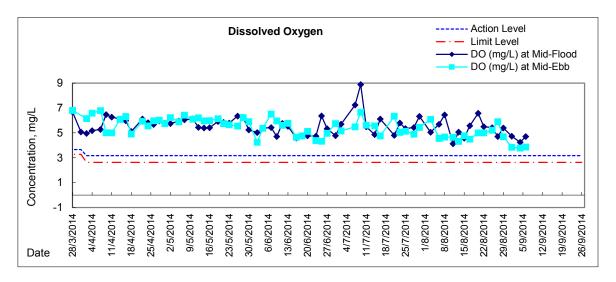
Graphic Presentation of Water Quality Result of WSD9 - Tai Wan

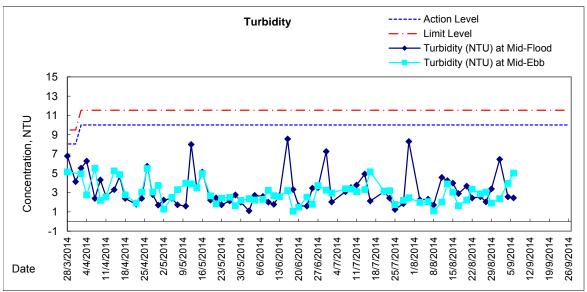


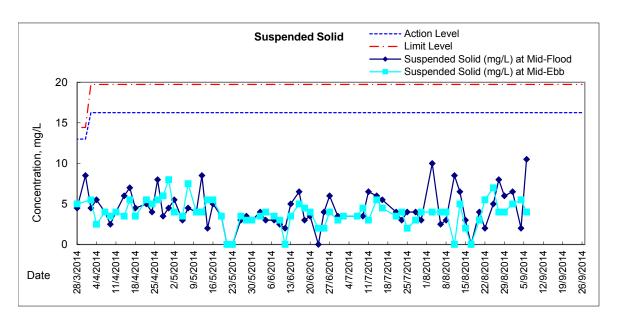




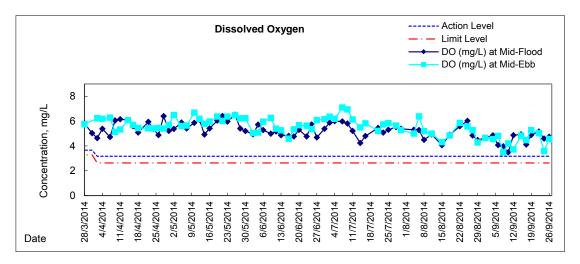
Graphic Presentation of Water Quality Result of WSD17 - Quarry Bay

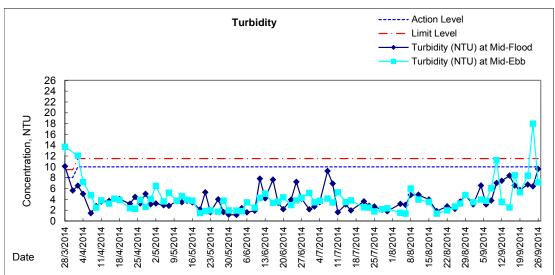


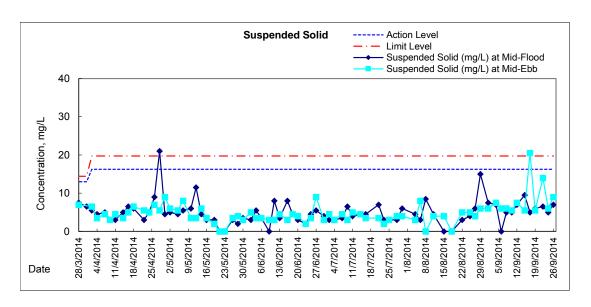




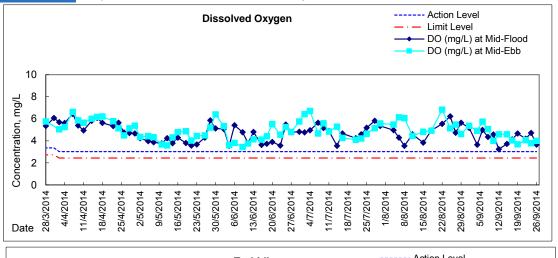
Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan

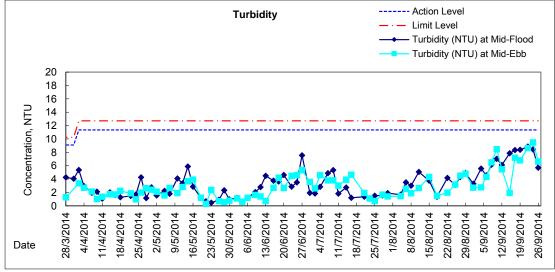


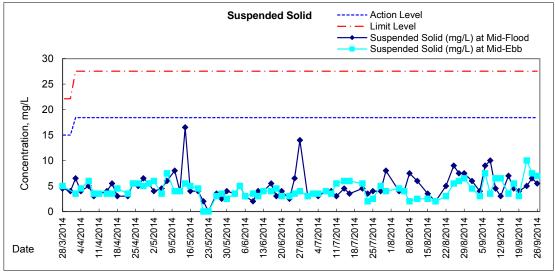




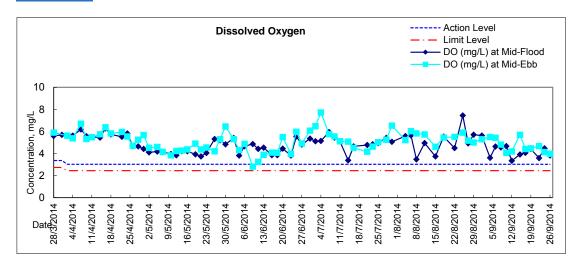
Graphic Presentation of Water Quality Result of C1 - HKCEC

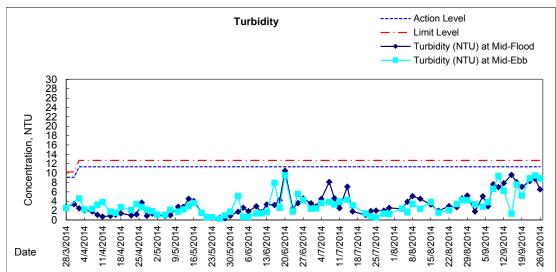


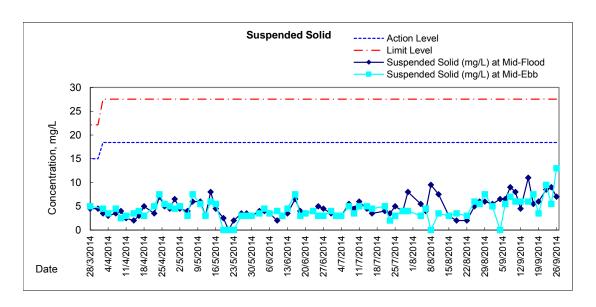




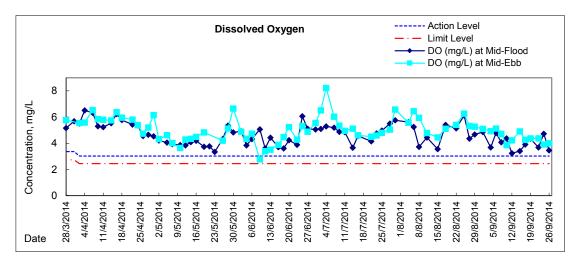
Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I

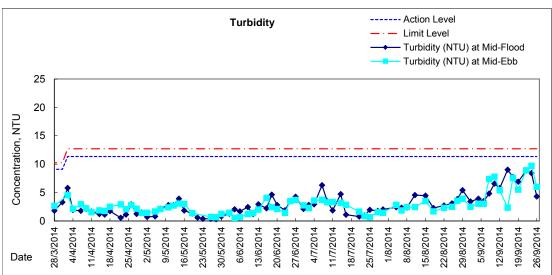


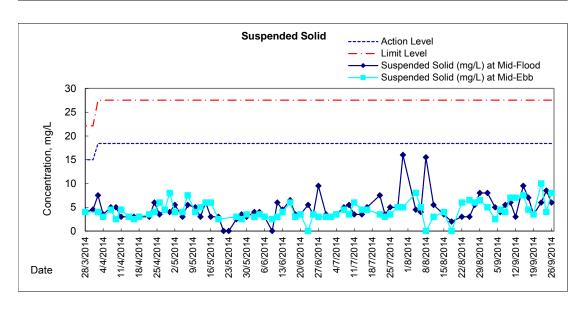




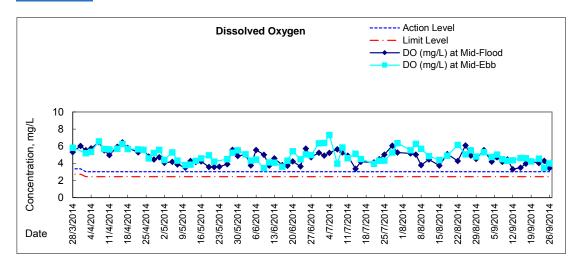


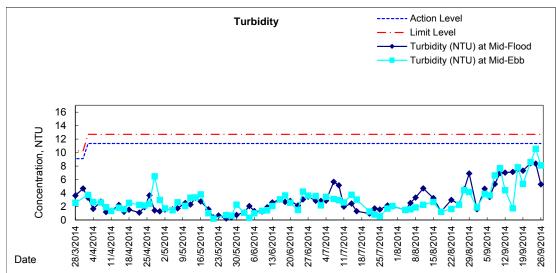


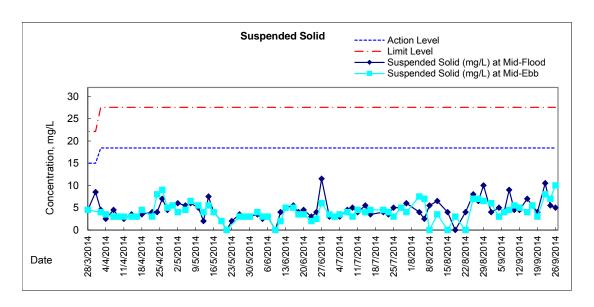




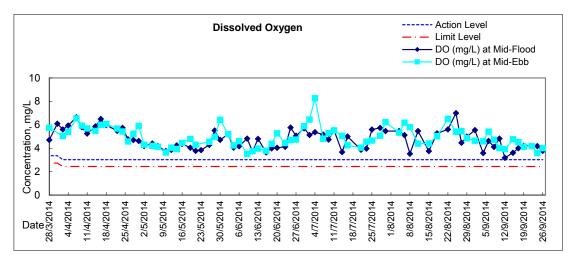
Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT

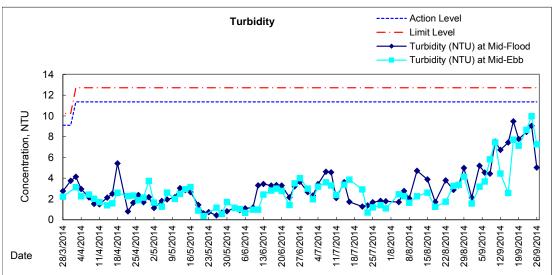


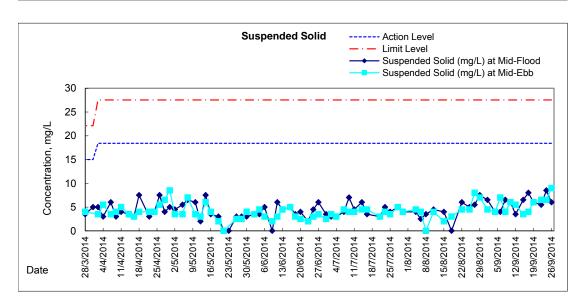




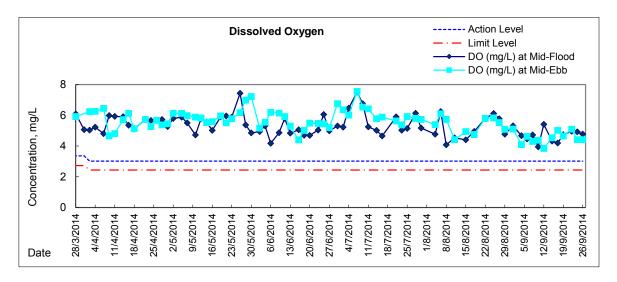
Graphic Presentation of Water Quality Result of P4 - SOC

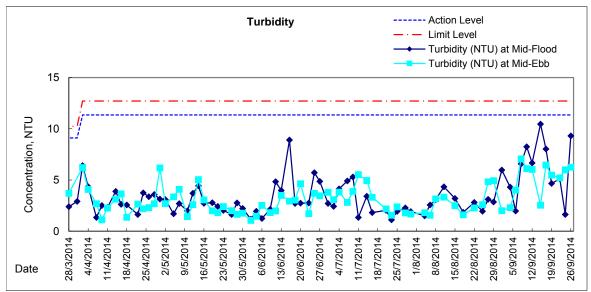


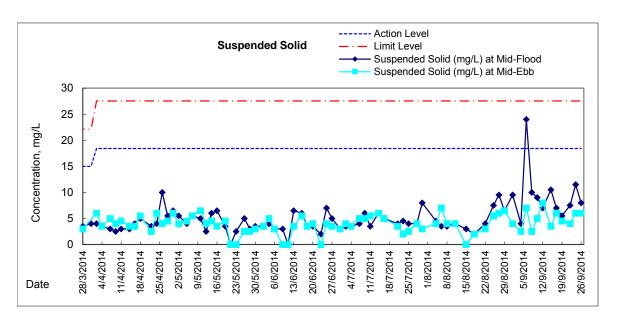




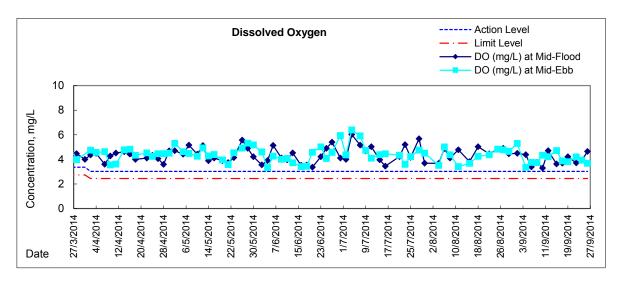
Graphic Presentation of Water Quality Result of RW21-P789 - GEC/CRC/SHK

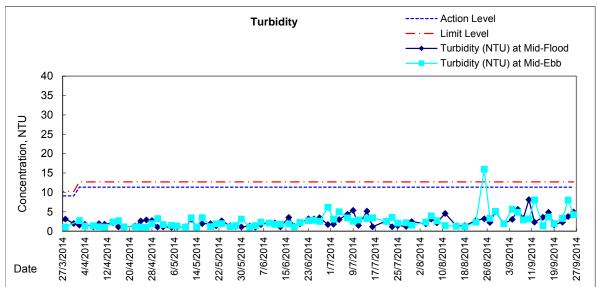


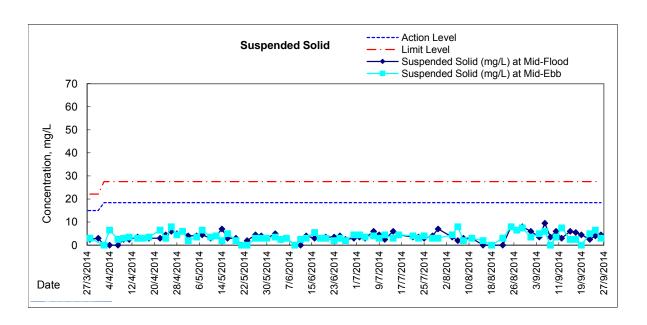




Graphic Presentation of Water Quality Result of C7 - Windsor House









Water Monitoring Result at C6 - Excelsior Hotel Mid-Flood Tide

	I																		
Date	Time	Weater Condition		ng Depth	Wat	er Temp °C	perature		pH -			Salinit ppt	ty	С	O Satur %	ation		DO mg/L	-
				n	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average
29/8/2014	21:15	Fine	Surface Middle	1.5	- 27.40	27.40	27.4	8.12	8.12	8.1	30.82	30.82	30.8	75.7	75.8	75.8	5.05	5.05	5.05
25/0/2014	-	Tille	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	5.05	5.05	5.05
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	11:25	Fine	Middle	1.5	27.90	27.90	27.9	8.01	8.01	8.0	30.05	30.05	30.1	63.1	61.6	62.4	4.17	4.07	4.12
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	16:40	Fine	Middle	1.5	28.30	28.30	28.3	8.07	8.07	8.1	28.57	28.58	28.6	61.8	60.6	61.2	4.11	4.03	4.07
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	16:00	Sunny	Middle	1.5	28.60	28.60	28.6	7.96	7.96	8.0	30.30	30.30	30.3	66.0	65.4	65.7	4.30	4.27	4.29
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	17:40	Cloudy	Middle	1.5	28.20	28.20	28.2	7.97	7.97	8.0	30.59	30.59	30.6	57.5	57.0	57.3	3.79	3.70	3.75
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/9/2014	19:25	Fine	Middle	1.5	28.70	28.70	28.7	8.14	8.14	8.1	30.97	30.97	31.0	86.2	81.4	83.8	5.61	5.30	5.46
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40/0/0044	-	Eta -	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/9/2014	9:05	Fine	Middle	1.5	28.20	28.20	28.2	7.92	7.92	7.9	30.02	30.02	30.0	74.4	75.4	74.9	4.91	4.98	4.95
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	10:20	Fine	Surface	1.5	29.00	29.00	29.0	7.85	7.85	7.9	29.27	29.27	29.3	64.3	64.3	64.3	4.21	4.21	4.21
13/3/2014	-	TING	Bottom	1.5	29.00	-	29.0	7.05	7.00	-	-	29.21	29.3	-	-	-	-	4.21	4.21
	_		Surface	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
17/9/2014	19:15	Cloudy	Middle	1.5	28.30	28.30	28.3	8.09	8.09	8.1	31.26	31.26	31.3	66.5	67.5	67.0	4.35	4.42	4.39
	-	,	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/9/2014	15:55	Cloudy	Middle	1.5	29.10	29.10	29.1	7.92	7.92	7.9	29.98	29.98	30.0	62.8	62.4	62.6	4.08	4.05	4.07
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	16:15	Fine	Middle	1.5	28.40	28.40	28.4	8.11	8.11	8.1	31.76	31.76	31.8	68.1	67.9	68.0	4.44	4.42	4.43
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	17:51	Cloudy	Middle	1.0	27.60	27.60	27.6	8.03	8.03	8.0	31.94	31.94	31.9	72.4	73.4	72.9	4.78	4.84	4.81
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	18:32	Fine	Middle	1.5	28.50	28.50	28.5	7.96	7.96	8.0	31.50	31.50	31.5	62.6	62.9	62.8	4.08	4.11	4.10
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Water Monitoring Result at C7 - Windsor House Mid-Flood Tide

Date	Time	Weater Condition		ng Depth	Wat	er Temp °C	perature		pH -			Salinit ppt	ty		O Satur %	ation		DO mg/L	
				n I	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average
29/8/2014	21:00	Fine	Surface Middle	1.5	27.20	27.20	27.2	7.90	7.90	7.9	30.61	30.61	30.6	61.4	62.7	62.1	4.11	4.19	- 4.15
23/0/2014	-	Tille	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	4.11	4.19	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	11:30	Fine	Middle	1.5	28.10	28.10	28.1	7.89	7.89	7.9	29.98	29.98	30.0	61.3	62.9	62.1	4.05	4.15	4.10
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	16:44	Fine	Middle	1.5	28.20	28.20	28.2	7.92	7.92	7.9	27.84	27.84	27.8	53.9	54.2	54.1	3.60	3.62	3.61
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	16:04	Sunny	Middle	1.5	28.60	28.60	28.6	7.92	7.92	7.9	30.11	30.13	30.1	56.4	56.3	56.4	3.68	3.68	3.68
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	17.50	Cloudy	Surface	-	- 20.40	- 20.40	- 20.4	7.04	7.04	- 70	- 20.02	- 20.02	- 20.0	- 50.4		- 51.0	- 2.42	- 2.40	- 2.42
0/9/2014	17:52	Cloudy	Middle Bottom	1.5	28.10	28.10	28.1	7.94	7.94	7.9	30.82	30.82	30.8	52.1	51.7	51.9	3.43	3.40	3.42
	_		Surface	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
10/9/2014	19:15	Fine	Middle	1.5	28.70	28.70	28.7	8.10	8.10	8.1	30.73	30.73	30.7	73.6	68.1	70.9	4.80	4.44	4.62
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/9/2014	9:15	Fine	Middle	1.5	28.50	28.50	28.5	7.82	7.82	7.8	29.92	29.92	29.9	52.8	53.9	53.4	3.47	3.54	3.51
	-		Bottom	-	-	-	-	1	1	-	-	-	-	1	i	-	1	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	10:27	Fine	Middle	1.5	28.80	28.80	28.8	7.81	7.81	7.8	29.91	29.91	29.9	56.3	57.0	56.7	3.67	3.72	3.70
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/9/2014	19:00	Cloudy	Middle	1.5	28.40	28.40	28.4	7.94	7.94	7.9	31.06	31.06	31.1	63.7	64.7	64.2	4.17	4.23	4.20
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/0/2014	47:00	Claudu	Surface	-	- 00.40	-	- 00.4	7.05	7.05	- 70	-	- 00.07				-	- 0.50		- 0.57
19/9/2014	17:00	Cloudy	Middle Bottom	1.5	29.10	29.10	29.1	7.85	7.85	7.9	29.67	29.67	29.7	54.7	54.8	54.8	3.56	3.58	3.57
	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	16:52	Fine	Middle	1.5	28.50	28.50	28.5	8.02	8.02	8.0	31.75	31.75	31.8	56.6	58.4	57.5	3.68	3.79	3.74
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	17:30	Cloudy	Middle	1.0	27.70	27.70	27.7	7.96	7.96	8.0	31.85	31.85	31.9	71.5	72.9	72.2	4.77	4.81	4.79
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	18:15	Fine	Middle	1.5	28.50	28.50	28.5	7.94	7.94	7.9	31.29	31.29	31.3	57.0	58.1	57.6	3.72	3.79	3.76
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area Mid-Flood Tide

	<u> </u>																		
Date	Time	Weater Condition		ng Depth	Wat	er Temp °C	perature		pH -			Salini ppt	ty		O Satur %	ation		DO mg/L	
				n I	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average
29/8/2014	20:32	Fine	Surface	1.5	- 27.10	- 27.10	27.1	8.28	8.28	8.3	22.67	22.67	22.7	54.3	57.9	56.1	3.81	4.05	3.93
23/0/2014	-	Tille	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	11:12	Fine	Middle	1.5	27.80	27.80	27.8	8.06	8.06	8.1	25.15	25.15	25.2	71.2	70.5	70.9	4.81	4.83	4.82
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
4/9/2014	16:27	Fine	Middle	1.5	27.70	27.70	27.7	7.79	7.79	7.8	19.70	19.70	19.7	51.3	51.9	51.6	3.62	3.66	3.64
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	15:47	Sunny	Middle	1.5	28.50	28.50	28.5	7.61	7.61	7.6	24.25	24.25	24.3	36.5	36.4	36.5	2.47	2.46	<u>2.47</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0/0/2044	-	Claudu	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	17:24	Cloudy	Middle Bottom	1.5	28.40	28.40	28.4	7.73	7.73	7.7	23.21	23.21	23.2	43.0	42.2	42.6	2.95	2.90	2.93
	_		Surface	_	_	_		-		-	_	-	_	-		_	-	-	-
10/9/2014	18:52	Fine	Middle	1.5	28.60	28.60	28.6	8.11	8.11	8.1	28.63	28.63	28.6	64.2	60.3	62.3	4.24	3.97	4.11
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/9/2014	8:52	Fine	Middle	1.5	28.10	28.10	28.1	7.90	7.90	7.9	29.81	29.81	29.8	80.0	78.9	79.5	5.30	5.22	5.26
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	10:12	Fine	Middle	1.5	28.60	28.60	28.6	7.80	7.80	7.8	25.35	25.35	25.4	67.1	67.8	67.5	4.51	4.55	4.53
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/9/2014	21:10	Cloudy	Middle	1.5	27.80	27.80	27.8	7.89	7.89	7.9	19.59	19.59	19.6	46.0	46.5	46.3	3.23	3.27	3.25
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/9/2014	15:47	Cloudy	Middle	1.5	28.90	28.90	28.9	7.67	7.67	7.7	24.34	24.34	24.3	42.6	43.1	42.9	2.87	2.90	<u>2.89</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	0:00	Fine	Surface	1.5	28.00	28.00	28.0	8.00	8.00	8.0	31.84	31.84	31.8	70.1	72.4	71.3	4.59	4.72	4.66
221312014	0:00	1 1110	Bottom	1.5	28.00	28.00	28.0	8.00	8.00	8.0	31.84	31.84	- 31.8	70.1	-		4.59	4.72	4.00
	-		Surface	_	-	_	_	-	-	-	_	-	_	-	-	_	-	_	-
24/9/2014	19:11	Cloudy	Middle	1.5	27.60	27.60	27.6	7.80	7.80	7.8	26.51	26.51	26.5	33.9	36.3	35.1	2.30	2.46	2.38
	-	-	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	20:51	Fine	Middle	1.5	28.20	28.20	28.2	8.07	8.07	8.1	28.29	28.29	28.3	37.6	38.4	38.0	2.51	2.56	<u>2.54</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Water Monitoring Result at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area Mid-Flood Tide

Date	Time	Weater Condition		ng Depth	Wat	er Temp °C	perature		pH -			Salinit ppt	ty		O Satur %	ation		DO mg/L	
				n I	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average
29/8/2014	20:39	Fine	Surface	1.5	27.00	27.00	27.0	8.25	8.25	8.3	19.31	19.32	19.3	69.6	77.6	73.6	4.97	5.14	5.06
23/0/2014	-	Tille	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	11:10	Fine	Middle	1.5	28.00	28.00	28.0	7.85	7.85	7.9	27.12	27.12	27.1	59.9	59.9	59.9	4.03	4.02	4.03
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	16:24	Fine	Middle	1.5	27.70	27.70	27.7	7.78	7.78	7.8	27.20	27.20	27.2	53.3	53.1	53.2	3.60	3.59	3.60
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	15:43	Sunny	Middle	1.5	28.90	28.90	28.9	7.77	7.77	7.8	26.49	26.49	26.5	49.1	49.4	49.3	3.26	3.27	3.27
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	17:22	Cloudy	Middle	1.5	28.40	28.40	28.4	7.75	7.75	7.8	21.95	21.95	22.0	42.2	41.2	41.7	2.90	2.85	<u>2.88</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/9/2014	18:57	Fine	Middle	1.5	28.60	28.60	28.6	8.06	8.06	8.1	28.50	28.50	28.5	65.7	68.0	66.9	4.37	4.48	4.43
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40/0/0044	-	Eta -	Surface	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
12/9/2014	8:50	Fine	Middle	1.5	28.20	28.20	28.2	7.85	7.85	7.9	29.63	29.63	29.6	59.7	59.5	59.6	3.95	3.93	3.94
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	10:10	Fine	Surface	1.5	29.10	29.10	29.1	7.80	7.80	7.8	29.73	29.73	29.7	67.5	65.1	66.3	4.39	4.23	4.31
13/3/2014	-	Tillo	Bottom	1.5	29.10	-	29.1	7.00	7.00	-	29.73	29.73	29.1	-	-	-	-	4.23	4.51
	_		Surface	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
17/9/2014	21:19	Cloudy	Middle	1.5	27.80	27.80	27.8	7.71	7.71	7.7	19.16	19.15	19.2	51.6	52.3	52.0	3.64	3.69	3.67
	-	,	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/9/2014	15:45	Cloudy	Middle	1.5	28.90	28.90	28.9	7.76	7.76	7.8	27.97	27.97	28.0	56.7	56.5	56.6	3.73	3.72	3.73
	-		Bottom	-	-	-	-	-	-1	-	-	-	-	-	1	-		-	-
	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	16:35	Fine	Middle	1.5	28.10	28.10	28.1	7.96	7.96	8.0	31.85	31.85	31.9	65.2	65.9	65.6	4.27	4.31	4.29
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	19:22	Cloudy	Middle	1.5	27.70	27.70	27.7	7.63	7.63	7.6	26.35	26.35	26.4	32.2	32.0	32.1	2.19	2.17	<u>2.18</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	21:04	Fine	Middle	1.5	28.20	28.20	28.2	8.08	8.08	8.1	28.21	28.21	28.2	39.5	41.2	40.4	2.63	2.75	<u>2.69</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Water Monitoring Result at C6 - Excelsior Hotel Mid-Ebb Tide

	IVIIG-EL						1						1			1			
Date	Time	Weater Condition	Samplir	ng Depth	Wat	er Temp °C	erature		pH -			Salinit ppt	у	D	O Satur	ation		DO mg/L	
		Contaition	r	n	Va	lue	Average	Va	lue	Average	Va	lue Ive	Average	Va	lue %	Average	Va	lue	Average
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29/8/2014	14:50	Fine	Middle	2	27.70	27.70	27.7	8.01	8.01	8.0	30.15	30.15	30.2	69.4	70.0	69.7	4.61	4.67	4.64
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	4:17	Cloudy	Middle	2	27.00	27.00	27.0	8.22	8.22	8.2	29.86	29.85	29.9	76.0	78.4	77.2	4.96	5.12	5.04
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	9:55	Fine	Middle	1	28.70	28.70	28.7	8.03	8.03	8.0	29.42	29.42	29.4	58.5	58.8	58.7	3.84	3.86	3.85
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	11:15	Sunny	Middle	2	28.20	28.20	28.2	7.93	7.93	7.9	30.56	30.56	30.6	65.4	64.5	65.0	4.30	4.25	4.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	11:33	Cloudy	Middle	2	28.60	28.60	28.6	7.95	7.95	8.0	30.79	30.79	30.8	62.3	62.0	62.2	4.07	4.05	4.06
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/9/2014	11:15	Fine	Middle	2	28.50	28.50	28.5	7.91	7.91	7.9	30.45	30.45	30.5	68.9	68.9	68.9	4.52	4.52	4.52
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-
12/9/2014	15:40	Cloudy	Middle	2	28.00	28.00	28.0	7.94	7.94	7.9	30.04	30.04	30.0	57.0	57.9	57.5	3.77	3.83	3.80
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_		Surface	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
15/9/2014	3:45	Cloudy	Middle	1	27.20	27.20	27.2	7.94	7.94	7.9	28.17	28.17	28.2	64.4	63.1	63.8	4.43	4.34	4.39
	_		Bottom	_	_	_	_	_	-	_	_	_	_	_	_	-	_	_	_
	-		Surface	_	_	_	_	_	_	-	_	-	_	_	_	_	_	_	_
17/9/2014	7:07	Cloudy	Middle	2	28.00	28.00	28.0	7.90	7.90	7.9	31.37	31.37	31.4	61.6	61.9	61.8	4.04	4.06	4.05
	-	5.522,	Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	_		Surface	_	-	-			_	-		-				-	-		
19/9/2014	9:19	Fine	Middle	2	28.80	28.80	28.8	7.85	7.85	7.9	28.58	28.58	28.6	58.2	54.0	56.1	3.84	3.46	3.65
10/0/2014	9.19	IIIG	Bottom	-	-	-	-	7.00	7.00	7.9	-	-	-	- 56.2	54.0	- 50.1	3.04	3.40	-
	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014		Einn																	
22/9/2014	10:35	Fine	Middle	2	28.90	28.90	28.9	8.03	8.03	8.0	31.82	31.82	31.8	69.7	70.9	70.3	4.50	4.57	4.54
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17.77	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	11:10	Fine	Middle	2	28.60	28.60	28.6	8.01	8.01	8.0	32.05	32.05	32.1	63.5	61.9	62.7	4.12	4.08	4.10
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	11:29	Fine	Middle	2	28.80	28.80	28.8	7.97	7.97	8.0	31.66	31.66	31.7	58.2	60.7	59.5	3.76	3.91	3.84
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area Mid-Ebb Tide

	I			- ·								0 11 11							
Date	Time	Weater Condition		ng Depth m		°C	perature		рН -			Salini ppt			O Satur			DO mg/L	
					Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average	Va	lue	Average
29/8/2014	14:47	Fine	Surface Middle	1.5	27.70	27.70	27.7	7.97	7.97	8.0	27.37	27.37	27.4	81.7	83.1	82.4	5.51	5.60	5.56
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	2:10	Cloudy	Middle	1.5	27.60	27.60	27.6	8.29	8.29	8.3	20.44	20.44	20.4	60.2	56.0	58.1	4.10	3.82	3.96
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	9:45	Fine	Middle	1.5	28.20	28.20	28.2	7.60	7.60	7.6	25.59	25.59	25.6	54.5	54.1	54.3	3.68	3.65	3.67
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	11:05	Sunny	Middle	1.5	27.90	27.90	27.9	7.63	7.63	7.6	24.18	24.18	24.2	52.0	52.8	52.4	3.56	3.62	3.59
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	11:24	Cloudy	Middle	1.5	28.30	28.30	28.3	7.76	7.76	7.8	24.76	24.76	24.8	68.6	68.4	68.5	4.65	4.64	4.65
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/9/2014	11:07	Fine	Middle	1.5	28.20	28.20	28.2	7.82	7.82	7.8	30.56	30.56	30.6	64.5	65.3	64.9	4.25	4.31	4.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/9/2014	15:22	Cloudy	Middle	1.5	27.50	27.50	27.5	7.95	7.95	8.0	30.16	30.16	30.2	72.9	72.2	72.6	4.86	4.81	4.84
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	5:15	Cloudy	Middle	1.0	27.40	27.40	27.4	8.21	8.21	8.2	20.04	20.04	20.0	45.8	46.2	46.0	3.31	3.33	3.32
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/9/2014	7:02	Cloudy	Middle	1.5	27.90	27.90	27.9	7.84	7.84	7.8	30.99	30.99	31.0	56.6	52.8	54.7	3.73	3.48	3.61
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/9/2014	9:07	Fine	Middle	1.5	28.40	28.40	28.4	7.91	7.91	7.9	29.63	29.63	29.6	73.2	73.6	73.4	4.83	4.85	4.84
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	10:27	Fine	Middle	1.5	28.10	28.10	28.1	7.94	7.94	7.9	30.58	30.58	30.6	77.7	78.9	78.3	5.12	5.19	5.16
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	11:02	Fine	Middle	1.5	28.30	28.30	28.3	7.94	7.94	7.9	29.41	29.41	29.4	70.3	70.2	70.3	4.61	4.60	4.61
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	11:24	Fine	Middle	1.5	28.70	28.70	28.7	7.91	7.91	7.9	31.67	31.67	31.7	71.4	71.9	71.7	6.43	6.46	6.45
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Water Monitoring Result at C7 - Windsor House Mid-Ebb Tide

	Time	Weater	Samplin	ng Depth	Wat	er Temr	perature		pН			Salinit	tv	С	O Satur	ation		DO	
Date		Condition		n		°C	Average	Va	lue	Average	Va	ppt	Average		% lue	Average	V/a	mg/L lue	Average
	_		Surface	-	-	-		-	-	-	-	-	-	-	-	-	-	-	
29/8/2014	15:02	Fine	Middle	2	27.90	27.90	27.9	7.93	7.93	7.9	30.13	30.13	30.1	67.1	69.8	68.5	4.43	4.61	4.52
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	3:57	Cloudy	Middle	2	27.20	27.20	27.2	8.20	8.20	8.2	30.31	30.31	30.3	82.0	81.1	81.6	5.32	5.26	5.29
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	10:00	Fine	Middle	1	28.50	28.50	28.5	7.85	7.85	7.9	28.78	28.78	28.8	50.6	51.1	50.9	3.34	3.37	3.36
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	11:26	Sunny	Middle	2	28.50	28.50	28.5	7.89	7.89	7.9	30.18	30.18	30.2	57.4	57.8	57.6	3.76	3.78	3.77
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	11:51	Cloudy	Middle	2	28.80	28.80	28.8	7.92	7.92	7.9	30.72	30.72	30.7	61.6	60.1	60.9	4.00	3.90	3.95
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/9/2014	11:25	Fine	Middle	2	28.40	28.40	28.4	7.88	7.88	7.9	29.99	29.99	30.0	63.7	64.2	64.0	4.19	4.23	4.21
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/9/2014	15:46	Cloudy	Middle	2	28.20	28.20	28.2	7.89	7.89	7.9	28.30	28.30	28.3	58.9	60.9	59.9	3.93	4.02	3.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	3:30	Cloudy	Middle	1	27.30	27.30	27.3	7.91	7.91	7.9	29.78	29.78	29.8	68.8	70.3	69.6	4.69	4.80	4.75
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/9/2014	7:13	Cloudy	Middle	2	28.10	28.10	28.1	7.95	7.95	8.0	31.36	31.36	31.4	57.3	58.4	57.9	3.76	3.84	3.80
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/0/22	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/9/2014	9:45	Fine	Middle	2	28.70	28.70	28.7	7.85	7.85	7.9	28.58	28.58	28.6	55.5	56.4	56.0	3.65	3.72	3.69
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
00/0/22	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	10:45	Fine	Middle	2	28.70	28.70	28.7	8.01	8.01	8.0	31.83	31.83	31.8	63.8	64.5	64.2	4.13	4.16	4.15
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/0/224		F:	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	11:20	Fine	Middle	2	28.50	28.50	28.5	7.98	7.98	8.0	31.95	31.95	32.0	58.0	59.8	58.9	3.77	3.89	3.83
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20/0/0011	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
26/9/2014	11:35	Fine	Middle	2	28.80	28.80	28.8	7.92	7.92	7.9	31.68	31.68	31.7	54.5	56.8	55.7	3.52	3.67	3.60
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

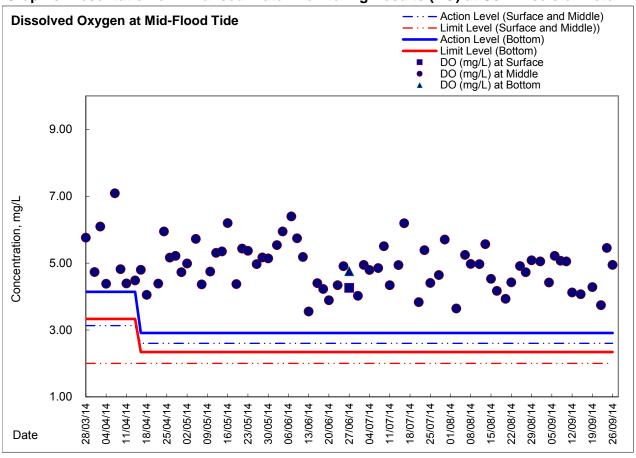


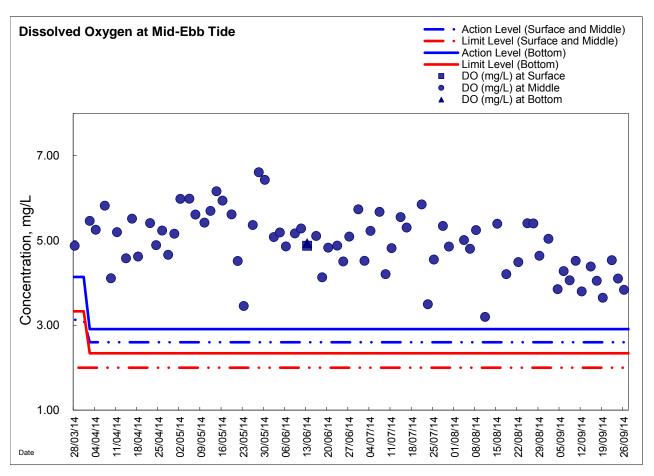
Water Monitoring Result at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area Mid-Ebb Tide

	Ti	10/	0"	D th	\A/-4	T			-11			0-11-11			0.0-1				
Date	Time	Weater Condition		ng Depth m		°C	perature		рН -			Salinit ppt	•		O Satur			DO mg/L	
	_		Surface	-	Va	lue	Average	Va	lue	Average	Va	lue -	Average	Va	lue	Average	Va	lue	Average
29/8/2014	14:45	Fine	Middle	1.5	28.30	28.30	28.3	7.95	7.95	8.0	27.60	27.60	27.6	72.3	74.0	73.2	4.82	4.90	4.86
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/9/2014	2:16	Cloudy	Middle	1.5	27.60	27.60	27.6	8.19	8.19	8.2	20.10	20.10	20.1	67.7	61.5	64.6	4.61	4.19	4.40
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/9/2014	9:41	Fine	Middle	1.5	28.60	28.60	28.6	7.67	7.67	7.7	25.25	25.25	25.3	47.3	47.0	47.2	3.18	3.16	<u>3.17</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/9/2014	11:03	Sunny	Middle	1.5	28.40	28.40	28.4	7.72	7.72	7.7	25.34	25.34	25.3	47.6	47.4	47.5	3.21	3.19	3.20
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2014	11:22	Cloudy	Middle	1.5	28.60	28.60	28.6	7.75	7.75	7.8	24.14	24.14	24.1	42.6	42.7	42.7	2.88	2.88	2.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/9/2014	11:05	Fine	Middle	1.5	28.40	28.40	28.4	7.83	7.83	7.8	29.64	29.64	29.6	63.3	62.9	63.1	4.16	4.14	4.15
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/9/2014	15:20	Cloudy	Middle	1.5	27.80	27.80	27.8	7.92	7.92	7.9	29.38	29.38	29.4	74.5	75.6	75.1	4.97	5.06	5.02
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/9/2014	5:25	Cloudy	Middle	1.0	27.30	27.30	27.3	8.08	8.08	8.1	19.07	19.07	19.1	57.1	52.7	54.9	3.92	3.82	3.87
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/9/2014	7:00	Cloudy	Middle	1.5	28.00	28.00	28.0	8.00	8.00	8.0	30.99	30.99	31.0	65.9	65.6	65.8	4.35	4.33	4.34
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/9/2014	9:05	Fine	Middle	1.5	28.30	28.30	28.3	7.88	7.88	7.9	29.25	29.25	29.3	76.5	77.3	76.9	5.05	5.10	5.08
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0:00		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/9/2014	10:25	Fine	Middle	1.5	28.50	28.50	28.5	7.92	7.92	7.9	29.70	29.70	29.7	65.0	64.9	65.0	4.28	4.28	4.28
	0:00		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/9/2014	11:00	Fine	Middle	1.5	28.70	28.70	28.7	7.93	7.93	7.9	31.20	31.20	31.2	50.7	51.5	51.1	3.95	4.00	3.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/9/2014	11:20	Fine	Middle	1.5	28.80	28.80	28.8	7.85	7.85	7.9	30.38	30.38	30.4	52.5	54.1	53.3	3.42	3.53	3.48
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



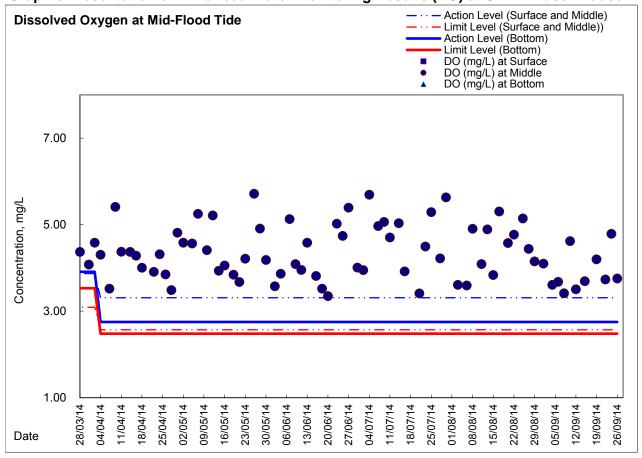
Graphic Presentation of Enhanced Water Monitoring Results (DO) at C6 - Excelsior Hotel

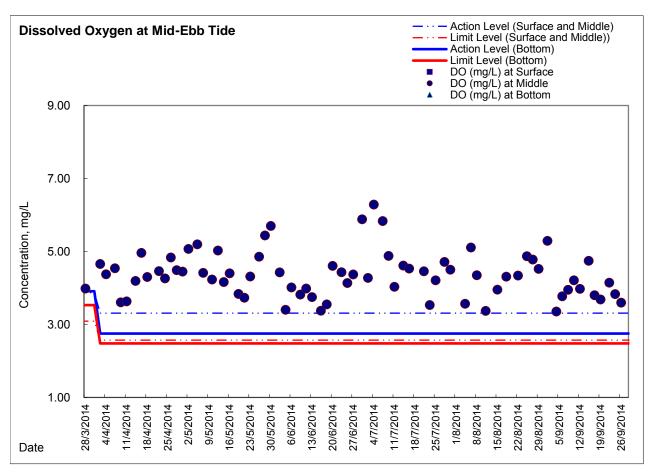






Graphic Presentation of Enhanced Water Monitoring Results (DO) at C7 - Windsor House

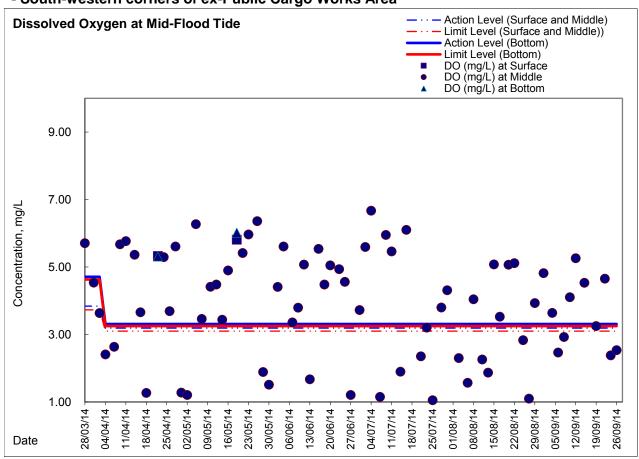


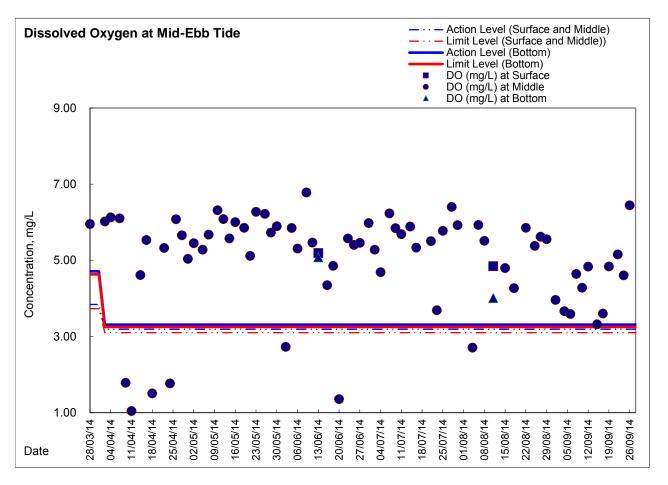




Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SW

- South-western corners of ex-Public Cargo Works Area

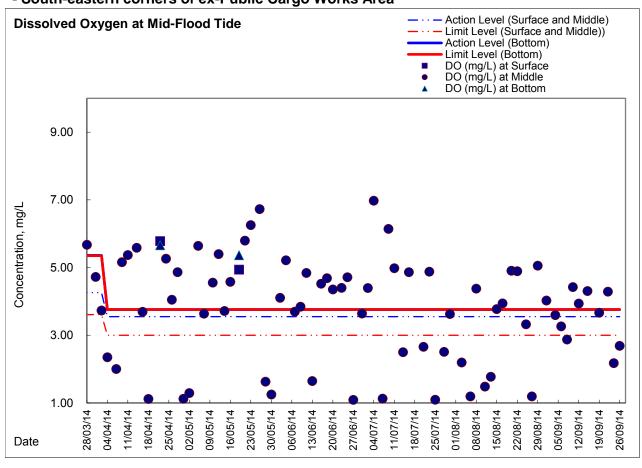


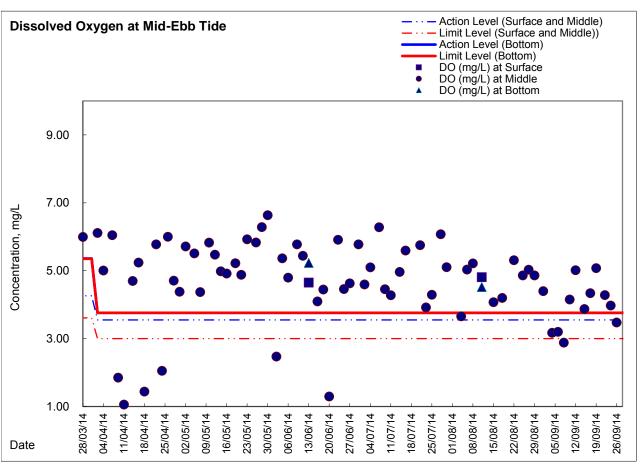




Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SE

- South-eastern corners of ex-Public Cargo Works Area





Appendix 5.5

Real-time Noise Monitoring Results and Graphical Presentations

Real-time Noise Data	RTN2a (Hong Kong Electric Centr	۵۱			
•	2/9/2014 12:01 58.9	6/9/2014 18:31 64.7	13/9/2014 13:01 69.9	19/9/2014 7:31 64.8	24/9/2014 14:01 63.5
Normal Day 07:00-19:00	2/9/2014 12:31 58.0	8/9/2014 7:01 64.0	13/9/2014 13:31 71.8	19/9/2014 8:01 61.1	24/9/2014 14:31 58.4
	2/9/2014 13:01 67.9	8/9/2014 7:31 64.7	13/9/2014 14:01 71.9	19/9/2014 8:31 70.0	24/9/2014 15:01 59.5
28/8/2014 7:01 64.8	2/9/2014 13:31 68.6	8/9/2014 8:01 57.2	13/9/2014 14:31 68.7	19/9/2014 9:01 67.7	24/9/2014 15:31 65.8
28/8/2014 7:31 65.1	2/9/2014 14:01 69.0	8/9/2014 8:31 70.7	13/9/2014 15:01 67.4	19/9/2014 9:31 67.2	24/9/2014 16:01 63.6
28/8/2014 8:01 60.5	2/9/2014 14:31 68.8	8/9/2014 9:01 71.5	13/9/2014 15:31 68.2	19/9/2014 10:01 72.6	24/9/2014 16:31 64.2
28/8/2014 8:31 70.4	2/9/2014 15:01 69.7	8/9/2014 9:31 68.5	13/9/2014 16:01 69.3	19/9/2014 10:31 71.3	24/9/2014 17:01 64.6
28/8/2014 9:01 69.5	2/9/2014 15:31 72.0	8/9/2014 10:01 68.2	13/9/2014 16:31 67.9	19/9/2014 11:01 69.8	24/9/2014 17:31 57.9
28/8/2014 9:31 70.4	2/9/2014 16:01 66.9	8/9/2014 10:31 70.4	13/9/2014 17:01 65.5	19/9/2014 11:31 61.5	24/9/2014 18:01 66.0
28/8/2014 10:01 68.2	2/9/2014 16:31 69.7	8/9/2014 11:01 69.8	13/9/2014 17:31 62.9	19/9/2014 12:01 66.5	24/9/2014 18:31 65.5
28/8/2014 10:31 69.4	2/9/2014 17:01 67.6	8/9/2014 11:31 66.1	13/9/2014 18:01 66.0	19/9/2014 12:31 66.3	25/9/2014 7:01 64.0
28/8/2014 11:01 77.0	2/9/2014 17:31 66.5	8/9/2014 12:01 51.2	13/9/2014 18:31 65.0	19/9/2014 13:01 66.3	25/9/2014 7:31 64.7
28/8/2014 11:31 68.0	2/9/2014 18:01 65.9	8/9/2014 12:31 66.1	15/9/2014 7:01 64.3	19/9/2014 13:31 69.7	25/9/2014 8:01 66.2
28/8/2014 12:01 64.8	2/9/2014 18:31 64.1	8/9/2014 13:01 70.0	15/9/2014 7:31 64.7	19/9/2014 14:01 68.8	25/9/2014 8:31 66.3
28/8/2014 12:31 63.7	3/9/2014 7:01 64.1	8/9/2014 13:31 70.9	15/9/2014 8:01 58.6	19/9/2014 14:31 70.0	25/9/2014 9:01 59.1
28/8/2014 13:01 69.5	3/9/2014 7:31 64.6	8/9/2014 14:01 72.3	15/9/2014 8:31 68.5	19/9/2014 15:01 69.4	25/9/2014 9:31 61.2
28/8/2014 13:31 70.5	3/9/2014 8:01 59.8	8/9/2014 14:31 69.6	15/9/2014 9:01 69.6	19/9/2014 15:31 66.4	25/9/2014 10:01 65.2
28/8/2014 14:01 69.9	3/9/2014 8:31 70.7	8/9/2014 15:01 71.8	15/9/2014 9:31 67.2	19/9/2014 16:01 66.0	25/9/2014 10:31 63.8
28/8/2014 14:31 70.5	3/9/2014 9:01 71.4	8/9/2014 15:31 65.8	15/9/2014 10:01 65.2	19/9/2014 16:31 69.9	25/9/2014 11:01 56.0
28/8/2014 15:01 69.0	3/9/2014 9:31 68.1	8/9/2014 16:01 65.8	15/9/2014 10:31 63.8	19/9/2014 17:01 69.3	25/9/2014 11:31 64.6
28/8/2014 15:31 70.2	3/9/2014 10:01 69.2	8/9/2014 16:31 65.2	15/9/2014 11:01 62.5	19/9/2014 17:31 64.2	25/9/2014 12:01 65.7
28/8/2014 16:01 69.5	3/9/2014 10:31 70.4	8/9/2014 17:01 66.0	15/9/2014 11:31 61.1	19/9/2014 18:01 62.0	25/9/2014 12:31 65.9
28/8/2014 16:31 70.2	3/9/2014 11:01 69.2	8/9/2014 17:31 63.6	15/9/2014 12:01 66.2	19/9/2014 18:31 66.2	25/9/2014 13:01 59.6
28/8/2014 17:01 70.4	3/9/2014 11:31 54.6	8/9/2014 18:01 63.9	15/9/2014 12:31 52.3 15/9/2014 13:01 64.1	20/9/2014 7:01 64.3	25/9/2014 13:31 61.8
28/8/2014 17:31 71.1 28/8/2014 18:01 60.7	3/9/2014 12:31 65.0	10/9/2014 7:01 63.9	15/9/2014 13:31 66.3	20/9/2014 8:01 58.1	25/9/2014 14:31 61.4
28/8/2014 18:31 66.6	3/9/2014 13:01 64.9	10/9/2014 7:31 65.1	15/9/2014 14:01 65.4	20/9/2014 8:31 69.3	25/9/2014 15:01 60.1
29/8/2014 7:01 65.1	3/9/2014 13:31 71.0	10/9/2014 8:01 58.6	15/9/2014 14:31 69.1	20/9/2014 9:01 69.4	25/9/2014 15:31 58.7
29/8/2014 7:31 65.7	3/9/2014 14:01 68.5	10/9/2014 8:31 68.7	15/9/2014 15:01 66.6	20/9/2014 9:31 70.4	25/9/2014 16:01 58.0
29/8/2014 8:01 59.6	3/9/2014 14:31 65.6	10/9/2014 9:01 70.0	15/9/2014 15:31 67.6	20/9/2014 10:01 70.6	25/9/2014 16:31 57.3
29/8/2014 8:31 68.5	3/9/2014 15:01 69.8	10/9/2014 9:31 68.6	15/9/2014 16:01 71.2	20/9/2014 10:31 71.1	25/9/2014 17:01 59.7
29/8/2014 9:01 71.2	3/9/2014 15:31 71.0	10/9/2014 10:01 70.0	15/9/2014 16:31 70.4	20/9/2014 11:01 70.4	25/9/2014 17:31 66.4
29/8/2014 9:31 70.7	3/9/2014 16:01 64.7	10/9/2014 10:31 68.7	15/9/2014 17:01 66.9	20/9/2014 11:31 63.8	25/9/2014 18:01 65.2
29/8/2014 10:01 68.4	3/9/2014 16:31 63.6	10/9/2014 11:01 69.6	15/9/2014 17:31 69.0	20/9/2014 12:01 65.7	25/9/2014 18:31 64.2
29/8/2014 10:31 68.9	3/9/2014 17:01 66.0	10/9/2014 11:31 65.8	15/9/2014 18:01 67.1	20/9/2014 12:31 67.1	26/9/2014 7:01 63.9
29/8/2014 11:01 68.5	3/9/2014 17:31 66.8	10/9/2014 12:01 66.0	15/9/2014 18:31 66.4	20/9/2014 13:01 62.9	26/9/2014 7:31 64.4
29/8/2014 11:31 61.9	3/9/2014 18:01 65.4	10/9/2014 12:31 65.5	16/9/2014 7:01 62.9	20/9/2014 13:31 66.0	26/9/2014 8:01 66.2
29/8/2014 12:01 65.2	3/9/2014 18:31 64.5	10/9/2014 13:01 65.0	16/9/2014 7:31 62.3	20/9/2014 14:01 63.1	26/9/2014 8:31 61.1
29/8/2014 12:31 65.3	4/9/2014 7:01 63.8	10/9/2014 13:31 66.7	16/9/2014 8:01 63.0	20/9/2014 14:31 65.2	26/9/2014 9:01 63.6
29/8/2014 13:01 67.8	4/9/2014 7:31 64.6	10/9/2014 14:01 67.1	16/9/2014 8:31 63.2	20/9/2014 15:01 70.2	26/9/2014 9:31 62.9
29/8/2014 13:31 72.9	4/9/2014 8:01 61.4	10/9/2014 14:31 69.4	16/9/2014 9:01 64.4	20/9/2014 15:31 68.7	26/9/2014 10:01 63.8
29/8/2014 14:01 71.6	4/9/2014 8:31 64.9	10/9/2014 15:01 69.3	16/9/2014 9:31 66.9	20/9/2014 16:01 67.6	26/9/2014 10:31 64.8
29/8/2014 14:31 69.3	4/9/2014 9:01 68.3	10/9/2014 15:31 69.6	16/9/2014 10:01 65.4	20/9/2014 16:31 69.0	26/9/2014 11:01 66.1
29/8/2014 15:01 70.9	4/9/2014 9:31 67.8	10/9/2014 16:01 67.8	16/9/2014 10:31 65.9	20/9/2014 17:01 68.4	26/9/2014 11:31 60.2
29/8/2014 15:31 70.6	4/9/2014 10:01 65.2	10/9/2014 16:31 67.8	16/9/2014 11:01 66.5	20/9/2014 17:31 58.1	26/9/2014 12:01 64.9
29/8/2014 16:01 70.4	4/9/2014 10:31 69.4	10/9/2014 17:01 69.0	16/9/2014 11:31 65.9	20/9/2014 18:01 65.8	26/9/2014 12:31 65.1
29/8/2014 16:31 70.5	4/9/2014 11:01 69.2	10/9/2014 17:31 66.7	16/9/2014 12:01 66.3	20/9/2014 18:31 65.2	26/9/2014 13:01 62.7
29/8/2014 17:01 68.1	4/9/2014 11:31 60.8	10/9/2014 18:01 66.9	16/9/2014 12:31 66.5	22/9/2014 7:01 64.2	26/9/2014 13:31 66.2
29/8/2014 17:31 64.3	4/9/2014 12:01 64.8	10/9/2014 18:31 65.2	16/9/2014 13:01 60.1	22/9/2014 7:31 65.0	26/9/2014 14:01 65.5
29/8/2014 18:01 64.9	4/9/2014 12:31 65.7	11/9/2014 7:01 64.1	16/9/2014 13:31 65.1	22/9/2014 8:01 62.6	26/9/2014 14:31 68.1
29/8/2014 18:31 64.5	4/9/2014 13:01 68.3	11/9/2014 7:31 64.6	16/9/2014 14:01 65.3	22/9/2014 8:31 66.5	26/9/2014 15:01 69.3
30/8/2014 7:01 63.8	4/9/2014 13:31 68.8	11/9/2014 8:01 57.9	16/9/2014 14:31 64.9	22/9/2014 9:01 70.0	26/9/2014 15:31 68.7
30/8/2014 7:31 64.7	4/9/2014 14:01 73.5	11/9/2014 8:31 70.1	16/9/2014 15:01 65.7	22/9/2014 9:31 68.0	26/9/2014 16:01 67.3
30/8/2014 8:01 67.2	4/9/2014 14:31 68.4	11/9/2014 9:01 72.3	16/9/2014 15:31 67.4	22/9/2014 10:01 70.4	26/9/2014 16:31 66.0
30/8/2014 8:31 65.2	4/9/2014 15:01 68.8	11/9/2014 9:31 71.6	16/9/2014 16:01 65.6	22/9/2014 10:31 70.0	26/9/2014 17:01 65.3
30/8/2014 9:01 69.8	4/9/2014 15:31 70.5	11/9/2014 10:01 70.3	16/9/2014 16:31 63.0	22/9/2014 11:01 71.1	26/9/2014 17:31 55.6
30/8/2014 9:31 69.8	4/9/2014 16:01 69.3	11/9/2014 10:31 71.0	16/9/2014 17:01 62.2	22/9/2014 11:31 65.6	26/9/2014 18:01 66.5
30/8/2014 10:01 69.6	4/9/2014 16:31 69.0	11/9/2014 11:01 68.6	16/9/2014 17:31 54.4	22/9/2014 12:01 66.1	26/9/2014 18:31 64.9
30/8/2014 10:31 70.2	4/9/2014 17:01 69.1	11/9/2014 11:31 67.6	16/9/2014 18:01 66.8	22/9/2014 12:31 66.3	27/9/2014 7:01 64.1
30/8/2014 11:01 70.2	4/9/2014 17:31 63.1	11/9/2014 12:01 59.3	16/9/2014 18:31 65.7	22/9/2014 13:01 67.8	27/9/2014 7:31 64.9
30/8/2014 11:31 65.9	4/9/2014 18:01 66.3	11/9/2014 12:31 66.0	17/9/2014 7:01 64.8	22/9/2014 13:31 70.4	27/9/2014 8:01 38.7
30/8/2014 12:01 63.2	4/9/2014 18:31 64.6	11/9/2014 13:01 68.5	17/9/2014 7:31 65.5	22/9/2014 14:01 69.6	27/9/2014 8:31 65.0
30/8/2014 12:31 61.3	5/9/2014 7:01 64.5	11/9/2014 13:31 72.7	17/9/2014 8:01 61.8	22/9/2014 14:31 69.7	27/9/2014 9:01 67.2
30/8/2014 13:01 69.1	5/9/2014 7:31 64.7	11/9/2014 14:01 69.7	17/9/2014 8:31 67.1	22/9/2014 15:01 66.4	27/9/2014 9:31 70.1
30/8/2014 13:31 71.4	5/9/2014 8:01 64.1	11/9/2014 14:31 69.3	17/9/2014 9:01 69.0	22/9/2014 15:31 66.7	27/9/2014 10:01 69.0
30/8/2014 14:01 71.1	5/9/2014 8:31 68.0	11/9/2014 15:01 70.8	17/9/2014 9:31 69.9	22/9/2014 16:01 69.0	27/9/2014 10:31 66.5
30/8/2014 14:31 72.3	5/9/2014 9:01 70.1	11/9/2014 15:31 72.5	17/9/2014 10:01 69.2	22/9/2014 16:31 70.3	27/9/2014 11:01 68.1
30/8/2014 15:01 69.9	5/9/2014 9:31 69.6	11/9/2014 16:01 71.2	17/9/2014 10:31 69.2	22/9/2014 17:01 71.7	27/9/2014 11:31 66.8
30/8/2014 15:31 70.4	5/9/2014 10:01 68.7	11/9/2014 16:31 71.8	17/9/2014 11:01 70.1	22/9/2014 17:31 67.6	27/9/2014 12:01 65.2
30/8/2014 16:01 69.2	5/9/2014 10:31 70.5	11/9/2014 17:01 72.0	17/9/2014 11:31 68.8	22/9/2014 18:01 67.6	27/9/2014 12:31 39.6
30/8/2014 16:31 66.4	5/9/2014 11:01 71.1	11/9/2014 17:31 67.6	17/9/2014 12:01 59.2	22/9/2014 18:31 66.0	27/9/2014 13:01 63.0
30/8/2014 17:01 65.9	5/9/2014 11:31 64.2	11/9/2014 18:01 52.5	17/9/2014 12:31 54.6	23/9/2014 7:01 64.0	27/9/2014 13:31 66.0
30/8/2014 17:31 66.6	5/9/2014 12:01 65.4	11/9/2014 18:31 65.1	17/9/2014 13:01 70.3	23/9/2014 7:31 64.8	27/9/2014 14:01 64.7
30/8/2014 18:01 65.9	5/9/2014 12:31 65.9	12/9/2014 7:01 65.3	17/9/2014 13:31 69.8	23/9/2014 8:01 67.7	27/9/2014 14:31 64.8
30/8/2014 18:31 64.3	5/9/2014 13:01 64.3	12/9/2014 7:31 65.3	17/9/2014 14:01 67.8	23/9/2014 8:31 71.2	27/9/2014 15:01 64.5
1/9/2014 7:01 64.4	5/9/2014 13:31 67.6	12/9/2014 8:01 63.9	17/9/2014 14:31 69.8	23/9/2014 9:01 71.9	27/9/2014 15:31 63.9
1/9/2014 7:31 65.2	5/9/2014 14:01 67.9	12/9/2014 8:31 70.8	17/9/2014 15:01 70.7	23/9/2014 9:31 69.5	27/9/2014 16:01 65.6
1/9/2014 8:01 64.0	5/9/2014 14:31 67.6	12/9/2014 9:01 70.2	17/9/2014 15:31 72.2	23/9/2014 10:01 68.9	27/9/2014 16:31 65.0
1/9/2014 8:31 69.6	5/9/2014 15:01 69.1	12/9/2014 9:31 69.3	17/9/2014 16:01 72.1	23/9/2014 10:31 69.6	27/9/2014 17:01 63.3
1/9/2014 9:01 71.6	5/9/2014 15:31 67.9	12/9/2014 10:01 69.0	17/9/2014 16:31 71.9	23/9/2014 11:01 67.8	27/9/2014 17:31 59.3
1/9/2014 9:31 72.5	5/9/2014 16:01 69.5	12/9/2014 10:31 68.1	17/9/2014 17:01 70.7	23/9/2014 11:31 63.5	27/9/2014 18:01 66.9
1/9/2014 10:01 71.7	5/9/2014 16:31 68.4	12/9/2014 11:01 68.3	17/9/2014 17:31 65.3	23/9/2014 12:01 65.5	27/9/2014 18:31 64.8
1/9/2014 10:31 71.5	5/9/2014 17:01 68.4	12/9/2014 11:31 67.3	17/9/2014 18:01 58.6	23/9/2014 12:31 66.3	Normal Day 19:00-23:00,
1/9/2014 11:01 72.8	5/9/2014 17:31 60.1	12/9/2014 12:01 66.7	17/9/2014 18:31 66.6	23/9/2014 13:01 63.8	
1/9/2014 11:31 68.2	5/9/2014 18:01 66.0	12/9/2014 12:31 65.8	18/9/2014 7:01 64.5	23/9/2014 13:31 70.2	Sunday & Holiday
1/9/2014 12:01 65.8	5/9/2014 18:31 64.4	12/9/2014 13:01 78.5	18/9/2014 7:31 65.6	23/9/2014 14:01 69.8	07:00-23:00
1/9/2014 12:31 66.1	6/9/2014 7:01 64.0	12/9/2014 13:31 71.3	18/9/2014 8:01 65.1	23/9/2014 14:31 69.9	
1/9/2014 13:01 67.5	6/9/2014 7:31 64.9	12/9/2014 14:01 68.4	18/9/2014 8:31 70.9	23/9/2014 15:01 68.5	28/8/2014 19:01 64.3
1/9/2014 13:31 73.3	6/9/2014 8:01 58.9	12/9/2014 14:31 68.0	18/9/2014 9:01 70.9	23/9/2014 15:31 70.2	28/8/2014 19:06 64.9
1/9/2014 14:01 72.0	6/9/2014 8:31 66.5	12/9/2014 15:01 68.3	18/9/2014 9:31 69.8	23/9/2014 16:01 68.1	28/8/2014 19:11 62.9
1/9/2014 14:31 70.9	6/9/2014 9:01 66.4	12/9/2014 15:31 67.4	18/9/2014 10:01 71.1	23/9/2014 16:31 66.6	28/8/2014 19:16 61.7
1/9/2014 15:01 69.6	6/9/2014 9:31 69.4	12/9/2014 16:01 69.1	18/9/2014 10:31 70.5	23/9/2014 17:01 66.6	28/8/2014 19:21 61.9
1/9/2014 15:31 68.9	6/9/2014 10:01 70.1	12/9/2014 16:31 68.7	18/9/2014 11:01 68.2	23/9/2014 17:31 62.3	28/8/2014 19:26 61.8
1/9/2014 16:01 71.9	6/9/2014 10:31 67.1	12/9/2014 17:01 67.4	18/9/2014 11:31 64.3	23/9/2014 18:01 60.5	28/8/2014 19:31 63.0
1/9/2014 16:31 70.7	6/9/2014 11:01 67.6	12/9/2014 17:31 59.2	18/9/2014 12:01 66.2	23/9/2014 18:31 66.2	28/8/2014 19:36 64.8
1/9/2014 17:01 70.0	6/9/2014 11:31 65.2	12/9/2014 18:01 65.3	18/9/2014 12:31 65.1	24/9/2014 7:01 63.9	28/8/2014 19:41 63.1
1/9/2014 17:31 62.4	6/9/2014 12:01 55.3	12/9/2014 18:31 64.9	18/9/2014 13:01 66.6	24/9/2014 7:31 65.1	28/8/2014 19:46 65.5
1/9/2014 18:01 67.2	6/9/2014 12:31 65.9	13/9/2014 7:01 65.0	18/9/2014 13:31 71.0	24/9/2014 8:01 62.9	28/8/2014 19:51 63.9
1/9/2014 18:31 65.5	6/9/2014 13:01 67.7	13/9/2014 7:31 66.2	18/9/2014 14:01 71.2	24/9/2014 8:31 69.5	28/8/2014 19:56 63.7
2/9/2014 7:01 63.9	6/9/2014 13:31 70.1	13/9/2014 8:01 61.7	18/9/2014 14:31 69.0	24/9/2014 9:01 68.4	28/8/2014 20:01 64.2
2/9/2014 7:31 65.4	6/9/2014 14:01 69.0	13/9/2014 8:31 68.9	18/9/2014 15:01 69.4	24/9/2014 9:31 68.7	28/8/2014 20:06 63.5
2/9/2014 8:01 64.0	6/9/2014 14:31 70.0	13/9/2014 9:01 68.6	18/9/2014 15:31 70.7	24/9/2014 10:01 69.2	28/8/2014 20:11 63.6
2/9/2014 8:31 74.3	6/9/2014 15:01 70.2	13/9/2014 9:31 68.8	18/9/2014 16:01 69.6	24/9/2014 10:31 68.6	28/8/2014 20:16 64.0
2/9/2014 9:01 70.1	6/9/2014 15:31 70.0	13/9/2014 10:01 68.1	18/9/2014 16:31 68.5	24/9/2014 11:01 68.0	28/8/2014 20:21 63.0
2/9/2014 9:31 70.4	6/9/2014 16:01 70.6	13/9/2014 10:31 68.2	18/9/2014 17:01 67.2	24/9/2014 11:31 64.9	28/8/2014 20:26 63.5
2/9/2014 10:01 70.7	6/9/2014 16:31 73.2	13/9/2014 11:01 69.3	18/9/2014 17:31 58.7	24/9/2014 12:01 66.8	28/8/2014 20:31 63.4
2/9/2014 10:31 68.2	6/9/2014 17:01 68.5	13/9/2014 11:31 55.7	18/9/2014 18:01 54.6	24/9/2014 12:31 67.0	28/8/2014 20:36 63.4
2/9/2014 11:01 71.4	6/9/2014 17:31 67.0	13/9/2014 12:01 66.2	18/9/2014 18:31 66.0	24/9/2014 13:01 62.7	28/8/2014 20:41 63.7
2/9/2014 11:31 68.2	6/9/2014 18:01 65.1	13/9/2014 12:31 66.0	19/9/2014 7:01 64.3	24/9/2014 13:31 63.6	28/8/2014 20:46 62.7

D 15 N D 1	DTNO (II II				
Real-time Noise Data 28/8/2014 20:51 65.0	RTN2a (Hong Kong Electric Central 30/8/2014 21:56 61.8	<u>e)</u> 31/8/2014 15:01 63.5	1/9/2014 20:06 62.6	3/9/2014 21:11 61.7	5/9/2014 22:16 61.3
28/8/2014 20:56 63.3	30/8/2014 22:01 61.4	31/8/2014 15:06 63.8	1/9/2014 20:11 62.8	3/9/2014 21:16 61.1	5/9/2014 22:21 61.7
28/8/2014 21:01 63.3	30/8/2014 22:06 62.3	31/8/2014 15:11 63.6	1/9/2014 20:16 62.6	3/9/2014 21:21 61.3	5/9/2014 22:26 61.9
28/8/2014 21:06 62.8	30/8/2014 22:11 61.5	31/8/2014 15:16 62.9	1/9/2014 20:21 63.0	3/9/2014 21:26 61.4	5/9/2014 22:31 61.1
28/8/2014 21:11 63.2	30/8/2014 22:16 62.6	31/8/2014 15:21 63.1	1/9/2014 20:26 62.5	3/9/2014 21:31 60.9	5/9/2014 22:36 61.0
28/8/2014 21:16 62.9	30/8/2014 22:21 65.7	31/8/2014 15:26 62.3	1/9/2014 20:31 62.9	3/9/2014 21:36 61.6	5/9/2014 22:41 61.5
28/8/2014 21:21 63.6	30/8/2014 22:26 61.6	31/8/2014 15:31 63.3	1/9/2014 20:36 62.0	3/9/2014 21:41 61.6	5/9/2014 22:46 61.5
28/8/2014 21:26 62.9	30/8/2014 22:31 61.4	31/8/2014 15:36 63.2	1/9/2014 20:41 61.9	3/9/2014 21:46 61.1	5/9/2014 22:51 61.3
28/8/2014 21:31 62.4	30/8/2014 22:36 61.7	31/8/2014 15:41 63.1	1/9/2014 20:46 62.1	3/9/2014 21:51 61.0	5/9/2014 22:56 62.1
28/8/2014 21:36 63.7	30/8/2014 22:41 61.2	31/8/2014 15:46 63.3	1/9/2014 20:51 61.5	3/9/2014 21:56 60.6	6/9/2014 19:01 65.0
28/8/2014 21:41 62.4	30/8/2014 22:46 61.1	31/8/2014 15:51 63.6	1/9/2014 20:56 61.6	3/9/2014 22:01 61.6	6/9/2014 19:06 61.9
28/8/2014 21:46 63.1	30/8/2014 22:51 61.3	31/8/2014 15:56 64.0	1/9/2014 21:01 63.5	3/9/2014 22:06 60.9	6/9/2014 19:11 61.9
28/8/2014 21:51 62.8	30/8/2014 22:56 60.9	31/8/2014 16:01 63.7	1/9/2014 21:06 62.0	3/9/2014 22:11 60.6	6/9/2014 19:16 63.0
28/8/2014 21:56 62.8	31/8/2014 7:01 52.3	31/8/2014 16:06 64.5	1/9/2014 21:11 62.4	3/9/2014 22:16 60.4	6/9/2014 19:21 62.1
28/8/2014 22:01 63.2	31/8/2014 7:06 53.8	31/8/2014 16:11 63.4	1/9/2014 21:16 61.9	3/9/2014 22:21 62.2	6/9/2014 19:26 62.2
28/8/2014 22:06 63.2 28/8/2014 22:11 63.2	31/8/2014 7:11 51.6	31/8/2014 16:16 63.5	1/9/2014 21:21 61.8	3/9/2014 22:26 60.9	6/9/2014 19:31 61.9 6/9/2014 19:36 62.8
28/8/2014 22:11 63.2	31/8/2014 7:16 58.6	31/8/2014 16:21 63.5	1/9/2014 21:26 60.8	3/9/2014 22:31 60.6	6/9/2014 19:36 62.8
28/8/2014 22:16 63.5	31/8/2014 7:21 60.4	31/8/2014 16:26 63.6	1/9/2014 21:31 61.3	3/9/2014 22:36 61.3	6/9/2014 19:41 61.4
28/8/2014 22:21 62.6	31/8/2014 7:26 57.5	31/8/2014 16:31 63.2	1/9/2014 21:36 62.1	3/9/2014 22:41 61.7	6/9/2014 19:46 61.7
28/8/2014 22:26 63.2	31/8/2014 7:31 55.0	31/8/2014 16:36 63.0	1/9/2014 21:41 61.8	3/9/2014 22:46 61.2	6/9/2014 19:51 61.9
28/8/2014 22:31 63.0	31/8/2014 7:36 56.3	31/8/2014 16:41 63.1	1/9/2014 21:46 61.5	3/9/2014 22:51 60.2	6/9/2014 19:56 62.1
28/8/2014 22:36 62.2	31/8/2014 7:41 55.8	31/8/2014 16:46 63.0	1/9/2014 21:51 61.5	3/9/2014 22:56 60.6	6/9/2014 20:01 62.6
28/8/2014 22:41 63.2	31/8/2014 7:46 57.8	31/8/2014 16:51 63.5	1/9/2014 21:56 62.0	4/9/2014 19:01 60.6	6/9/2014 20:06 60.9
28/8/2014 22:46 62.7	31/8/2014 7:51 57.1	31/8/2014 16:56 62.5	1/9/2014 22:01 61.5	4/9/2014 19:06 60.7	6/9/2014 20:11 61.1
28/8/2014 22:51 63.8	31/8/2014 7:56 57.3	31/8/2014 17:01 65.0	1/9/2014 22:06 62.4	4/9/2014 19:11 60.1	6/9/2014 20:16 61.4
28/8/2014 22:56 62.4	31/8/2014 8:01 57.4	31/8/2014 17:06 63.3	1/9/2014 22:11 61.7	4/9/2014 19:16 60.1	6/9/2014 20:21 60.6
29/8/2014 19:01 60.4	31/8/2014 8:06 58.7	31/8/2014 17:11 62.7	1/9/2014 22:16 61.6	4/9/2014 19:21 61.6	6/9/2014 20:26 60.9
29/8/2014 19:06 62.0	31/8/2014 8:11 57.3	31/8/2014 17:16 63.0	1/9/2014 22:21 61.6	4/9/2014 19:26 61.9	6/9/2014 20:31 59.7
29/8/2014 19:11 59.6	31/8/2014 8:16 60.5	31/8/2014 17:21 64.0	1/9/2014 22:26 61.1	4/9/2014 19:31 60.3	6/9/2014 20:36 60.7
29/8/2014 19:16 59.4	31/8/2014 8:21 59.7	31/8/2014 17:26 63.2	1/9/2014 22:31 62.4	4/9/2014 19:36 61.4	6/9/2014 20:41 61.1
29/8/2014 19:21 59.7	31/8/2014 8:26 59.3	31/8/2014 17:31 62.6	1/9/2014 22:36 61.2	4/9/2014 19:41 62.4	6/9/2014 20:46 60.0
29/8/2014 19:26 59.7	31/8/2014 8:31 60.3	31/8/2014 17:36 62.8	1/9/2014 22:41 60.8	4/9/2014 19:46 63.5	6/9/2014 20:51 60.6
29/8/2014 19:31 58.5	31/8/2014 8:36 60.0	31/8/2014 17:41 64.2	1/9/2014 22:46 62.3	4/9/2014 19:51 63.9	6/9/2014 20:56 61.8
29/8/2014 19:36 60.0	31/8/2014 8:41 60.0	31/8/2014 17:46 63.0	1/9/2014 22:51 60.6	4/9/2014 19:56 62.4	6/9/2014 21:01 60.6
29/8/2014 19:41 61.7	31/8/2014 8:46 59.9	31/8/2014 17:51 63.4	1/9/2014 22:56 60.6	4/9/2014 20:01 62.3	6/9/2014 21:06 60.4
29/8/2014 19:46 62.3	31/8/2014 8:51 59.6	31/8/2014 17:56 63.2	2/9/2014 19:01 59.0	4/9/2014 20:06 63.0	6/9/2014 21:11 61.9
29/8/2014 19:51 62.0	31/8/2014 8:56 61.2	31/8/2014 18:01 63.0	2/9/2014 19:06 59.9	4/9/2014 20:11 62.2	6/9/2014 21:16 61.4
29/8/2014 19:56 62.4	31/8/2014 9:01 60.5	31/8/2014 18:06 62.7	2/9/2014 19:11 59.9	4/9/2014 20:16 62.9	6/9/2014 21:21 60.0
29/8/2014 20:01 62.6	31/8/2014 9:06 61.3	31/8/2014 18:11 63.2	2/9/2014 19:16 60.0	4/9/2014 20:21 63.1	6/9/2014 21:26 60.5
29/8/2014 20:06 61.9	31/8/2014 9:11 59.5	31/8/2014 18:16 63.3	2/9/2014 19:21 60.4	4/9/2014 20:26 62.1	6/9/2014 21:31 59.7
29/8/2014 20:11 62.6	31/8/2014 9:16 62.2	31/8/2014 18:21 63.2	2/9/2014 19:26 58.8	4/9/2014 20:31 62.8	6/9/2014 21:36 59.4
29/8/2014 20:16 61.8	31/8/2014 9:21 62.3	31/8/2014 18:26 62.5	2/9/2014 19:31 59.4	4/9/2014 20:36 62.8	6/9/2014 21:41 61.2
29/8/2014 20:21 62.6	31/8/2014 9:26 62.1	31/8/2014 18:31 62.6	2/9/2014 19:36 59.5	4/9/2014 20:41 62.5	6/9/2014 21:46 61.8
29/8/2014 20:26 61.7	31/8/2014 9:31 61.8	31/8/2014 18:36 61.6	2/9/2014 19:41 60.7	4/9/2014 20:46 63.1	6/9/2014 21:51 61.9
29/8/2014 20:31 63.8	31/8/2014 9:36 61.1	31/8/2014 18:41 63.1	2/9/2014 19:46 62.5	4/9/2014 20:51 63.0	6/9/2014 21:56 62.8
29/8/2014 20:36 61.8	31/8/2014 9:41 61.3	31/8/2014 18:46 62.4	2/9/2014 19:51 63.0	4/9/2014 20:56 62.9	6/9/2014 22:01 61.1
29/8/2014 20:41 61.2	31/8/2014 9:46 60.6	31/8/2014 18:51 62.8	2/9/2014 19:56 63.0	4/9/2014 21:01 62.2	6/9/2014 22:06 62.4
29/8/2014 20:46 61.6	31/8/2014 9:51 59.8	31/8/2014 18:56 62.7	2/9/2014 20:01 62.5	4/9/2014 21:06 62.5	6/9/2014 22:11 60.7
29/8/2014 20:51 61.7	31/8/2014 9:56 59.6	31/8/2014 19:01 62.0	2/9/2014 20:06 62.1	4/9/2014 21:11 62.8	6/9/2014 22:16 60.8
29/8/2014 20:56 61.0	31/8/2014 10:01 58.2	31/8/2014 19:06 61.7	2/9/2014 20:06 62.1 2/9/2014 20:11 61.8	4/9/2014 21:16 62.3	6/9/2014 22:21 60.6
29/8/2014 21:01 61.7	31/8/2014 10:06 60.2	31/8/2014 19:11 62.6	2/9/2014 20:16 62.0	4/9/2014 21:21 62.3	6/9/2014 22:26 60.9
29/8/2014 21:06 60.9	31/8/2014 10:11 58.5	31/8/2014 19:16 62.1	2/9/2014 20:21 62.8	4/9/2014 21:26 64.2	6/9/2014 22:31 58.9
29/8/2014 21:11 61.5	31/8/2014 10:16 56.4	31/8/2014 19:21 62.2	2/9/2014 20:26 63.0	4/9/2014 21:31 62.7	6/9/2014 22:36 62.2
29/8/2014 21:16 63.6	31/8/2014 10:21 57.8	31/8/2014 19:26 62.6	2/9/2014 20:31 61.8	4/9/2014 21:36 61.4	6/9/2014 22:41 60.3
29/8/2014 21:21 60.7	31/8/2014 10:26 60.4	31/8/2014 19:31 62.3	2/9/2014 20:36 62.1	4/9/2014 21:41 63.7	6/9/2014 22:46 60.9
29/8/2014 21:26 61.8	31/8/2014 10:31 61.8	31/8/2014 19:36 61.2	2/9/2014 20:41 62.1	4/9/2014 21:46 62.1	6/9/2014 22:51 61.8
29/8/2014 21:31 60.9	31/8/2014 10:36 60.6	31/8/2014 19:41 61.7	2/9/2014 20:46 62.8	4/9/2014 21:51 63.5	6/9/2014 22:56 59.1
29/8/2014 21:36 61.1	31/8/2014 10:41 61.6	31/8/2014 19:46 62.0	2/9/2014 20:51 61.1	4/9/2014 21:56 62.7	7/9/2014 7:01 52.4
29/8/2014 21:41 61.9	31/8/2014 10:46 62.3	31/8/2014 19:51 61.2	2/9/2014 20:56 61.8	4/9/2014 22:01 61.9	7/9/2014 7:06 54.1
29/8/2014 21:46 62.0	31/8/2014 10:51 61.6	31/8/2014 19:56 61.6	2/9/2014 21:01 61.3	4/9/2014 22:06 62.0	7/9/2014 7:11 50.1
29/8/2014 21:51 61.4	31/8/2014 10:56 60.9	31/8/2014 20:01 60.8	2/9/2014 21:06 61.7	4/9/2014 22:11 62.5	7/9/2014 7:16 45.6
29/8/2014 21:56 61.4	31/8/2014 11:01 61.0	31/8/2014 20:06 61.4	2/9/2014 21:11 61.3	4/9/2014 22:16 61.9	7/9/2014 7:21 62.5
29/8/2014 22:01 61.0	31/8/2014 11:06 60.5	31/8/2014 20:11 61.6	2/9/2014 21:16 61.3	4/9/2014 22:21 62.0	7/9/2014 7:26 59.8
29/8/2014 22:06 61.5	31/8/2014 11:11 60.9	31/8/2014 20:16 63.5	2/9/2014 21:21 61.9	4/9/2014 22:26 63.1	7/9/2014 7:31 56.1
29/8/2014 22:11 61.7	31/8/2014 11:16 62.2	31/8/2014 20:21 61.5	2/9/2014 21:26 61.1	4/9/2014 22:31 62.9	7/9/2014 7:36 58.1
29/8/2014 22:16 61.6	31/8/2014 11:21 62.8	31/8/2014 20:26 61.2	2/9/2014 21:31 61.0	4/9/2014 22:36 62.8	7/9/2014 7:41 56.2
29/8/2014 22:21 61.7	31/8/2014 11:26 62.9	31/8/2014 20:31 62.0	2/9/2014 21:36 60.7	4/9/2014 22:41 62.9	7/9/2014 7:46 55.8
29/8/2014 22:26 61.8	31/8/2014 11:31 61.7 31/8/2014 11:36 63.5	31/8/2014 20:36 61.5	2/9/2014 21:41 61.2 2/9/2014 21:46 61.0	4/9/2014 22:46 62.2 4/9/2014 22:51 62.6	7/9/2014 7:51 56.8 7/9/2014 7:56 56.2
29/8/2014 22:31 60.9 29/8/2014 22:36 61.4	31/8/2014 11:41 61.7	31/8/2014 20:41 61.8 31/8/2014 20:46 61.0	2/9/2014 21:46 61.0 2/9/2014 21:51 62.2	4/9/2014 22:56 62.5	7/9/2014 7:56 56.2 7/9/2014 8:01 58.7
29/8/2014 22:41 61.3	31/8/2014 11:46 61.4	31/8/2014 20:51 62.0	2/9/2014 21:56 61.5	5/9/2014 19:01 60.1	7/9/2014 8:06 60.6
29/8/2014 22:46 61.8	31/8/2014 11:51 62.4	31/8/2014 20:56 61.7	2/9/2014 22:01 61.8	5/9/2014 19:06 59.1	7/9/2014 8:11 60.2
29/8/2014 22:51 61.2	31/8/2014 11:56 60.6	31/8/2014 21:01 62.1	2/9/2014 22:06 61.6	5/9/2014 19:11 59.4	7/9/2014 8:16 59.5
29/8/2014 22:56 61.6	31/8/2014 12:01 61.0	31/8/2014 21:06 61.3	2/9/2014 22:11 62.1	5/9/2014 19:16 60.0	7/9/2014 8:21 58.5
30/8/2014 19:01 60.6	31/8/2014 12:06 60.7	31/8/2014 21:11 61.5	2/9/2014 22:16 60.9	5/9/2014 19:21 60.9	7/9/2014 8:26 58.1
30/8/2014 19:06 61.5	31/8/2014 12:11 61.8	31/8/2014 21:16 63.4	2/9/2014 22:21 60.8	5/9/2014 19:26 61.6	7/9/2014 8:31 58.5
30/8/2014 19:11 62.2	31/8/2014 12:16 62.0	31/8/2014 21:21 61.4	2/9/2014 22:26 61.2	5/9/2014 19:31 61.0	7/9/2014 8:36 59.8
30/8/2014 19:16 62.0	31/8/2014 12:21 62.0	31/8/2014 21:26 61.9	2/9/2014 22:31 61.2	5/9/2014 19:36 62.2	7/9/2014 8:41 59.3
30/8/2014 19:21 62.3	31/8/2014 12:26 61.2	31/8/2014 21:31 61.9	2/9/2014 22:36 62.4	5/9/2014 19:41 63.5	7/9/2014 8:46 66.6
30/8/2014 19:26 62.0	31/8/2014 12:31 60.5	31/8/2014 21:36 62.1	2/9/2014 22:41 62.6	5/9/2014 19:46 63.1	7/9/2014 8:51 62.2
30/8/2014 19:31 62.2	31/8/2014 12:36 61.4	31/8/2014 21:41 63.0	2/9/2014 22:46 60.9	5/9/2014 19:51 65.3	7/9/2014 8:56 60.3
30/8/2014 19:36 62.2	31/8/2014 12:41 63.0	31/8/2014 21:46 61.3	2/9/2014 22:51 61.5	5/9/2014 19:56 63.3	7/9/2014 9:01 59.8
30/8/2014 19:41 62.4	31/8/2014 12:46 63.1	31/8/2014 21:51 62.0	2/9/2014 22:56 61.2	5/9/2014 20:01 62.8	7/9/2014 9:06 60.8
30/8/2014 19:46 62.8	31/8/2014 12:51 61.7	31/8/2014 21:56 61.4	3/9/2014 19:01 60.0	5/9/2014 20:06 62.9	7/9/2014 9:11 61.8
30/8/2014 19:51 62.2	31/8/2014 12:56 60.7	31/8/2014 22:01 62.1	3/9/2014 19:06 60.8	5/9/2014 20:11 62.4	7/9/2014 9:16 62.0
30/8/2014 19:56 61.9	31/8/2014 13:01 60.5	31/8/2014 22:06 60.0	3/9/2014 19:11 60.3	5/9/2014 20:16 62.8	7/9/2014 9:21 61.7
30/8/2014 20:01 61.8	31/8/2014 13:06 61.4	31/8/2014 22:11 61.2	3/9/2014 19:16 61.1	5/9/2014 20:21 63.0	7/9/2014 9:26 62.3
30/8/2014 20:06 61.5	31/8/2014 13:11 62.0	31/8/2014 22:16 62.2	3/9/2014 19:21 60.7	5/9/2014 20:26 66.2	7/9/2014 9:31 62.0
30/8/2014 20:11 60.6	31/8/2014 13:16 61.4	31/8/2014 22:21 62.2	3/9/2014 19:26 61.2	5/9/2014 20:31 62.3	7/9/2014 9:36 61.3
30/8/2014 20:16 61.0	31/8/2014 13:21 62.6	31/8/2014 22:26 61.5	3/9/2014 19:31 60.6	5/9/2014 20:36 62.7	7/9/2014 9:41 61.6
30/8/2014 20:21 61.4	31/8/2014 13:26 63.4	31/8/2014 22:31 61.4	3/9/2014 19:36 62.3	5/9/2014 20:41 62.7	7/9/2014 9:46 60.6
30/8/2014 20:26 60.4	31/8/2014 13:31 61.5	31/8/2014 22:36 61.8	3/9/2014 19:41 61.7	5/9/2014 20:46 61.8	7/9/2014 9:51 61.2
30/8/2014 20:31 60.5	31/8/2014 13:36 61.1	31/8/2014 22:41 61.6	3/9/2014 19:46 61.8	5/9/2014 20:51 62.1	7/9/2014 9:56 60.3
30/8/2014 20:36 60.6	31/8/2014 13:41 60.6	31/8/2014 22:46 60.9	3/9/2014 19:51 64.1	5/9/2014 20:56 63.1	7/9/2014 10:01 61.4
30/8/2014 20:41 60.3	31/8/2014 13:46 61.8	31/8/2014 22:51 60.8	3/9/2014 19:56 62.5	5/9/2014 21:01 62.2	7/9/2014 10:06 62.0
30/8/2014 20:46 60.8	31/8/2014 13:51 61.3	31/8/2014 22:56 59.7	3/9/2014 20:01 62.6	5/9/2014 21:06 62.5	7/9/2014 10:11 61.1
30/8/2014 20:51 61.3	31/8/2014 13:56 59.8	1/9/2014 19:01 59.8	3/9/2014 20:06 62.1	5/9/2014 21:11 62.5	7/9/2014 10:16 61.1
30/8/2014 20:56 61.1	31/8/2014 14:01 60.4	1/9/2014 19:06 59.8	3/9/2014 20:11 62.8	5/9/2014 21:16 63.2	7/9/2014 10:21 61.8
30/8/2014 21:01 62.1	31/8/2014 14:06 61.7	1/9/2014 19:11 60.4	3/9/2014 20:16 61.8	5/9/2014 21:21 63.8	7/9/2014 10:26 62.0
30/8/2014 21:06 61.7	31/8/2014 14:11 63.6	1/9/2014 19:16 62.3	3/9/2014 20:21 62.0	5/9/2014 21:26 62.7	7/9/2014 10:31 61.7
30/8/2014 21:11 60.5	31/8/2014 14:16 63.9	1/9/2014 19:21 61.7	3/9/2014 20:26 62.4	5/9/2014 21:31 61.8	7/9/2014 10:36 61.5
30/8/2014 21:16 60.8	31/8/2014 14:21 64.5	1/9/2014 19:26 61.3	3/9/2014 20:31 62.2	5/9/2014 21:36 61.3	7/9/2014 10:41 59.9
30/8/2014 21:21 61.1	31/8/2014 14:26 63.8	1/9/2014 19:31 61.8	3/9/2014 20:36 60.8	5/9/2014 21:46 62.0	7/9/2014 10:46 61.4
30/8/2014 21:26 61.3	31/8/2014 14:31 64.0	1/9/2014 19:36 62.1	3/9/2014 20:41 62.4		7/9/2014 10:51 61.4
30/8/2014 21:31 61.9	31/8/2014 14:36 63.8	1/9/2014 19:41 61.6	3/9/2014 20:46 60.4	5/9/2014 21:51 61.8	7/9/2014 10:56 61.2
30/8/2014 21:36 61.3	31/8/2014 14:41 63.4	1/9/2014 19:46 62.3	3/9/2014 20:51 62.0	5/9/2014 21:56 61.7	7/9/2014 11:01 62.5
30/8/2014 21:41 62.1	31/8/2014 14:46 64.3	1/9/2014 19:51 62.3	3/9/2014 20:56 61.0	5/9/2014 22:01 61.5	7/9/2014 11:06 62.1
30/8/2014 21:46 61.4	31/8/2014 14:51 63.4	1/9/2014 19:56 63.6	3/9/2014 21:01 61.0	5/9/2014 22:06 62.2	7/9/2014 11:11 62.1
30/8/2014 21:51 62.1	31/8/2014 14:56 63.4	1/9/2014 20:01 64.6	3/9/2014 21:06 60.8	5/9/2014 22:11 61.9	7/9/2014 11:16 60.7
		,			

D 10 N 2 D 4	DTNO (II K EL L'O				
Real-time Noise Data 7/9/2014 11:21 61.7	RTN2a (Hong Kong Electric Cent 7/9/2014 20:26 61.0	<u>(re)</u> 9/9/2014 9:31 61.4	9/9/2014 18:36 61.7	11/9/2014 19:41 63.0	13/9/2014 20:46 60.9
7/9/2014 11:26 61.0	7/9/2014 20:31 60.1	9/9/2014 9:36 62.7	9/9/2014 18:41 61.6	11/9/2014 19:46 62.7	13/9/2014 20:51 61.3
7/9/2014 11:31 62.0	7/9/2014 20:36 61.1	9/9/2014 9:41 61.9	9/9/2014 18:46 61.5	11/9/2014 19:51 62.3	13/9/2014 20:56 61.7
7/9/2014 11:36 61.3	7/9/2014 20:30 61:1	9/9/2014 9:46 60.3	9/9/2014 18:51 62.1	11/9/2014 19:56 62.2	13/9/2014 21:01 61.1
7/9/2014 11:41 62.0	7/9/2014 20:46 61.1	9/9/2014 9:51 61.1	9/9/2014 18:56 61.9	11/9/2014 20:01 63.3	13/9/2014 21:06 62.0
7/9/2014 11:46 60.6	7/9/2014 20:51 60.1	9/9/2014 9:56 61.1	9/9/2014 19:01 61.7	11/9/2014 20:06 62.6	13/9/2014 21:11 61.4
7/9/2014 11:51 62.0	7/9/2014 20:56 61.1	9/9/2014 10:01 61.3	9/9/2014 19:06 62.1	11/9/2014 20:11 61.4	13/9/2014 21:16 61.5
7/9/2014 11:56 60.0	7/9/2014 21:01 60.5	9/9/2014 10:06 61.6	9/9/2014 19:11 62.1	11/9/2014 20:16 61.6	13/9/2014 21:21 61.6
7/9/2014 12:01 60.1	7/9/2014 21:06 60.1	9/9/2014 10:11 62.0	9/9/2014 19:16 60.8	11/9/2014 20:21 61.4	
7/9/2014 12:06 61.0	7/9/2014 21:06 60:1	9/9/2014 10:16 61.2	9/9/2014 19:16 60.8 9/9/2014 19:21 62.0	11/9/2014 20:26 62.1	13/9/2014 21:26 61.1 13/9/2014 21:31 61.3
7/9/2014 12:11 60.7	7/9/2014 21:16 61.4	9/9/2014 10:21 61.7	9/9/2014 19:26 60.6	11/9/2014 20:31 61.8	13/9/2014 21:36 61.9
7/9/2014 12:16 62.3	7/9/2014 21:21 61.4	9/9/2014 10:26 61.7	9/9/2014 19:31 61.8	11/9/2014 20:36 61.7	13/9/2014 21:41 61.1
7/9/2014 12:21 67.6	7/9/2014 21:26 61.2	9/9/2014 10:31 62.8	9/9/2014 19:36 60.6	11/9/2014 20:41 62.0	13/9/2014 21:46 61.1
7/9/2014 12:26 61.7	7/9/2014 21:31 60.6	9/9/2014 10:36 62.0	9/9/2014 19:41 60.0	11/9/2014 20:46 62.8	13/9/2014 21:51 59.1
7/9/2014 12:31 61.2	7/9/2014 21:36 60.1	9/9/2014 10:41 61.8	9/9/2014 19:46 59.7	11/9/2014 20:51 61.1	13/9/2014 21:56 60.0
7/9/2014 12:36 60.4	7/9/2014 21:41 61.5	9/9/2014 10:46 62.2	9/9/2014 19:51 60.3	11/9/2014 20:56 60.9	13/9/2014 22:01 61.2
7/9/2014 12:41 62.0	7/9/2014 21:46 61.4	9/9/2014 10:51 64.2 9/9/2014 10:56 62.1	9/9/2014 19:56 60.7	11/9/2014 21:01 61.7	13/9/2014 22:06 60.9 13/9/2014 22:11 62.1
7/9/2014 12:46 62.1	7/9/2014 21:51 60.1	9/9/2014 10:56 62.1	9/9/2014 20:01 59.7	11/9/2014 21:06 61.1	13/9/2014 22:11 62.1
7/9/2014 12:51 61.3	7/9/2014 21:56 62.2	9/9/2014 11:01 62.6	9/9/2014 20:06 59.4	11/9/2014 21:11 61.5	13/9/2014 22:16 61.3
7/9/2014 12:56 61.1 7/9/2014 13:01 60.2	7/9/2014 22:01 61.0 7/9/2014 22:06 60.4	9/9/2014 11:06 62.9 9/9/2014 11:11 62.1	9/9/2014 20:11 60.1 9/9/2014 20:16 60.9	11/9/2014 21:16 61.4	13/9/2014 22:21 63.8
7/9/2014 13:01 60.2	7/9/2014 22:11 61.4	9/9/2014 11:11 62.1	9/9/2014 20:16 60.9	11/9/2014 21:21 62.2	13/9/2014 22:26 61.6
7/9/2014 13:06 60.9		9/9/2014 11:16 62.0	9/9/2014 20:21 61.6	11/9/2014 21:26 62.0	13/9/2014 22:31 62.2
7/9/2014 13:11 61.4	7/9/2014 22:16 58.0	9/9/2014 11:21 62.0	9/9/2014 20:26 60.4	11/9/2014 21:31 62.4	13/9/2014 22:36 63.3
7/9/2014 13:16 61.0	7/9/2014 22:21 60.8	9/9/2014 11:26 62.6	9/9/2014 20:31 60.4	11/9/2014 21:36 62.4	13/9/2014 22:41 61.3
7/9/2014 13:21 62.8	7/9/2014 22:26 61.2	9/9/2014 11:31 61.4	9/9/2014 20:36 60.2	11/9/2014 21:41 62.3	13/9/2014 22:46 61.9
7/9/2014 13:26 60.3	7/9/2014 22:31 61.9	9/9/2014 11:36 62.1	9/9/2014 20:41 61.3	11/9/2014 21:46 62.3	13/9/2014 22:51 61.9
7/9/2014 13:31 61.9	7/9/2014 22:36 50.0	9/9/2014 11:41 62.0	9/9/2014 20:46 61.1	11/9/2014 21:51 62.8	13/9/2014 22:56 61.5
7/9/2014 13:36 61.6	7/9/2014 22:41 61.5	9/9/2014 11:46 61.8	9/9/2014 20:51 60.4	11/9/2014 21:56 61.7	14/9/2014 7:01 57.1
7/9/2014 13:41 62.5	7/9/2014 22:46 61.6	9/9/2014 11:51 62.6	9/9/2014 20:56 60.9	11/9/2014 22:01 61.6	14/9/2014 7:06 58.8
7/9/2014 13:46 62.2	7/9/2014 22:51 42.5	9/9/2014 11:56 60.9	9/9/2014 21:01 60.9	11/9/2014 22:06 61.5	14/9/2014 7:11 58.5
7/9/2014 13:51 62.5	7/9/2014 22:56 50.1	9/9/2014 12:01 61.1	9/9/2014 21:06 60.4	11/9/2014 22:11 61.8	14/9/2014 7:16 57.2
7/9/2014 13:56 62.7	8/9/2014 19:01 58.2	9/9/2014 12:06 61.2	9/9/2014 21:11 60.4	11/9/2014 22:16 61.6	14/9/2014 7:21 62.3
7/9/2014 14:01 61.6	8/9/2014 19:06 61.0	9/9/2014 12:11 61.2	9/9/2014 21:16 60.9	11/9/2014 22:21 60.9	14/9/2014 7:26 59.5
7/9/2014 14:06 62.1	8/9/2014 19:11 62.6	9/9/2014 12:16 61.1	9/9/2014 21:21 60.6	11/9/2014 22:26 61.0	14/9/2014 7:31 60.0
7/9/2014 14:11 61.7	8/9/2014 19:16 63.8	9/9/2014 12:21 61.8	9/9/2014 21:26 63.6	11/9/2014 22:31 61.4	14/9/2014 7:36 58.1
7/9/2014 14:16 61.7	8/9/2014 19:21 62.4	9/9/2014 12:26 62.2	9/9/2014 21:31 66.0	11/9/2014 22:36 60.8	14/9/2014 7:41 57.5
7/9/2014 14:21 62.3	8/9/2014 19:26 63.0	9/9/2014 12:31 61.4	9/9/2014 21:36 60.0	11/9/2014 22:41 59.5	14/9/2014 7:46 57.4
7/9/2014 14:26 62.8	8/9/2014 19:31 62.6	9/9/2014 12:36 61.6	9/9/2014 21:41 61.2	11/9/2014 22:46 60.5	14/9/2014 7:51 56.9
7/9/2014 14:31 61.8	8/9/2014 19:36 62.9	9/9/2014 12:41 61.3	9/9/2014 21:46 60.9	11/9/2014 22:51 61.0	14/9/2014 7:56 62.5
7/9/2014 14:36 61.5	8/9/2014 19:41 62.5	9/9/2014 12:46 61.3	9/9/2014 21:51 60.5	11/9/2014 22:56 61.4	14/9/2014 8:01 57.9
7/9/2014 14:41 64.1	8/9/2014 19:46 62.2	9/9/2014 12:51 62.0	9/9/2014 21:56 60.5	12/9/2014 19:01 62.6	14/9/2014 8:06 59.9
7/9/2014 14:46 62.5	8/9/2014 19:51 62.4	9/9/2014 12:56 61.8	9/9/2014 22:01 62.1	12/9/2014 19:06 63.3	14/9/2014 8:11 59.2
7/9/2014 14:51 61.7	8/9/2014 19:56 62.4	9/9/2014 13:01 61.6	9/9/2014 22:06 61.2	12/9/2014 19:11 62.5	14/9/2014 8:16 60.5
7/9/2014 14:56 62.7	8/9/2014 20:01 62.4	9/9/2014 13:06 60.6	9/9/2014 22:11 60.6	12/9/2014 19:16 61.4	14/9/2014 8:21 60.1
7/9/2014 15:01 62.3	8/9/2014 20:06 62.4	9/9/2014 13:11 61.1	9/9/2014 22:16 61.0	12/9/2014 19:21 61.6	14/9/2014 8:26 59.0
7/9/2014 15:06 61.9	8/9/2014 20:11 61.8	9/9/2014 13:16 61.5	9/9/2014 22:21 60.2	12/9/2014 19:26 61.3	14/9/2014 8:31 61.2
7/9/2014 15:11 62.7	8/9/2014 20:16 61.4	9/9/2014 13:21 62.4	9/9/2014 22:26 59.2	12/9/2014 19:31 62.6	14/9/2014 8:36 61.3
7/9/2014 15:16 62.3	8/9/2014 20:21 62.2	9/9/2014 13:26 62.2	9/9/2014 22:31 60.3	12/9/2014 19:36 60.9	14/9/2014 8:41 59.9
7/9/2014 15:21 63.3	8/9/2014 20:26 61.7	9/9/2014 13:31 62.4	9/9/2014 22:36 59.8	12/9/2014 19:41 61.4	14/9/2014 8:46 61.1
7/9/2014 15:26 62.6	8/9/2014 20:31 60.7	9/9/2014 13:36 62.0	9/9/2014 22:41 60.7	12/9/2014 19:46 61.0	14/9/2014 8:51 64.5
7/9/2014 15:31 62.2	8/9/2014 20:36 61.7	9/9/2014 13:41 61.4	9/9/2014 22:46 60.3	12/9/2014 19:51 61.5	14/9/2014 8:56 61.7
7/9/2014 15:36 62.6	8/9/2014 20:41 61.1	9/9/2014 13:46 61.1	9/9/2014 22:51 60.9	12/9/2014 19:56 61.9	14/9/2014 9:01 61.4
7/9/2014 15:41 62.5	8/9/2014 20:46 61.3	9/9/2014 13:51 61.4	9/9/2014 22:56 64.4	12/9/2014 20:01 64.5	14/9/2014 9:06 63.0
7/9/2014 15:46 63.1	8/9/2014 20:51 61.4	9/9/2014 13:56 61.3	10/9/2014 19:01 60.9	12/9/2014 20:06 64.2	14/9/2014 9:11 61.3
7/9/2014 15:51 63.4	8/9/2014 20:56 60.4	9/9/2014 14:01 61.8	10/9/2014 19:06 62.0	12/9/2014 20:11 64.0	14/9/2014 9:16 62.3
7/9/2014 15:56 62.6	8/9/2014 21:01 60.9	9/9/2014 14:06 61.7	10/9/2014 19:11 62.6	12/9/2014 20:16 63.9	14/9/2014 9:21 62.4
7/9/2014 16:01 62.7	8/9/2014 21:06 61.7	9/9/2014 14:11 61.7	10/9/2014 19:16 63.4	12/9/2014 20:21 64.0	14/9/2014 9:26 63.0
7/9/2014 16:06 62.9	8/9/2014 21:11 61.1	9/9/2014 14:16 61.6	10/9/2014 19:21 63.3	12/9/2014 20:26 64.2	14/9/2014 9:31 62.2
7/9/2014 16:11 61.9	8/9/2014 21:16 61.5	9/9/2014 14:21 61.9	10/9/2014 19:26 62.4	12/9/2014 20:31 64.0	14/9/2014 9:36 62.8
7/9/2014 16:16 61.9	8/9/2014 21:21 61.8	9/9/2014 14:26 61.6	10/9/2014 19:31 64.8	12/9/2014 20:36 63.6	14/9/2014 9:41 62.8
7/9/2014 16:21 62.3	8/9/2014 21:26 62.6	9/9/2014 14:31 61.6	10/9/2014 19:36 63.1	12/9/2014 20:41 64.4	14/9/2014 9:46 62.9
7/9/2014 16:26 61.8	8/9/2014 21:31 62.4	9/9/2014 14:36 61.7	10/9/2014 19:41 62.8	12/9/2014 20:46 64.1	14/9/2014 9:51 63.4
7/9/2014 16:31 62.8	8/9/2014 21:36 61.5	9/9/2014 14:41 62.9	10/9/2014 19:46 63.0	12/9/2014 20:51 64.6	14/9/2014 9:56 63.0
7/9/2014 16:36 62.1	8/9/2014 21:41 63.2	9/9/2014 14:46 63.1	10/9/2014 19:51 62.2	12/9/2014 20:56 63.9	14/9/2014 10:01 62.9
7/9/2014 16:41 62.6	8/9/2014 21:46 62.4	9/9/2014 14:51 62.8	10/9/2014 19:56 63.4	12/9/2014 21:01 64.1	14/9/2014 10:06 62.6
7/9/2014 16:46 62.0	8/9/2014 21:51 62.8	9/9/2014 14:56 62.4	10/9/2014 20:01 62.5	12/9/2014 21:06 63.9	14/9/2014 10:11 61.9
7/9/2014 16:51 61.4	8/9/2014 21:56 62.0	9/9/2014 15:01 61.8	10/9/2014 20:06 62.1	12/9/2014 21:11 64.5	14/9/2014 10:16 62.3
7/9/2014 16:56 61.7	8/9/2014 22:01 62.0	9/9/2014 15:06 62.2	10/9/2014 20:11 62.5	12/9/2014 21:16 63.8	14/9/2014 10:21 63.4
7/9/2014 17:01 64.6	8/9/2014 22:06 62.4	9/9/2014 15:11 62.1	10/9/2014 20:16 62.3	12/9/2014 21:21 63.1	14/9/2014 10:26 63.2
7/9/2014 17:06 62.9	8/9/2014 22:11 62.0	9/9/2014 15:16 62.5	10/9/2014 20:21 62.2	12/9/2014 21:26 63.8	14/9/2014 10:31 62.8
7/9/2014 17:11 61.7	8/9/2014 22:16 62.0	9/9/2014 15:21 62.6	10/9/2014 20:26 61.5	12/9/2014 21:31 63.6	14/9/2014 10:36 62.3
7/9/2014 17:16 63.1	8/9/2014 22:21 62.0	9/9/2014 15:26 62.2	10/9/2014 20:31 62.7	12/9/2014 21:36 63.7	14/9/2014 10:41 63.5
7/9/2014 17:21 62.0	8/9/2014 22:26 60.5	9/9/2014 15:31 65.4	10/9/2014 20:36 61.3	12/9/2014 21:41 63.0	14/9/2014 10:46 66.6
7/9/2014 17:26 62.6	8/9/2014 22:31 63.8	9/9/2014 15:36 62.5	10/9/2014 20:41 61.3	12/9/2014 21:46 63.7	14/9/2014 10:51 63.2
7/9/2014 17:31 61.2	8/9/2014 22:36 67.0	9/9/2014 15:41 61.6	10/9/2014 20:46 62.1	12/9/2014 21:51 63.3	14/9/2014 10:56 61.8
7/9/2014 17:36 62.0	8/9/2014 22:41 62.2	9/9/2014 15:46 61.7	10/9/2014 20:51 61.4	12/9/2014 21:56 63.9	14/9/2014 11:01 64.4
7/9/2014 17:41 62.0	8/9/2014 22:46 62.0	9/9/2014 15:51 62.0	10/9/2014 20:56 60.9	12/9/2014 22:01 64.1	14/9/2014 11:06 62.3
7/9/2014 17:46 61.8	8/9/2014 22:51 61.6	9/9/2014 15:56 61.9	10/9/2014 21:01 61.1	12/9/2014 22:06 63.6	14/9/2014 11:11 63.4
7/9/2014 17:51 60.9	8/9/2014 22:56 61.4	9/9/2014 16:01 62.7	10/9/2014 21:06 60.5	12/9/2014 22:11 63.4	14/9/2014 11:16 61.5
7/9/2014 17:56 62.0	9/9/2014 7:01 49.3	9/9/2014 16:06 61.9	10/9/2014 21:11 61.2	12/9/2014 22:16 64.1	14/9/2014 11:21 63.8
7/9/2014 18:01 62.1	9/9/2014 7:06 57.4	9/9/2014 16:11 62.4	10/9/2014 21:16 63.0	12/9/2014 22:21 64.2	14/9/2014 11:26 64.8
7/9/2014 18:06 62.1	9/9/2014 7:11 57.3	9/9/2014 16:16 61.2	10/9/2014 21:21 61.3	12/9/2014 22:26 63.9	14/9/2014 11:31 62.5
7/9/2014 18:11 62.3	9/9/2014 7:16 56.1	9/9/2014 16:21 60.8	10/9/2014 21:26 61.6	12/9/2014 22:31 63.2	14/9/2014 11:36 62.8
7/9/2014 18:16 61.9	9/9/2014 7:21 60.5	9/9/2014 16:26 61.5	10/9/2014 21:31 62.3	12/9/2014 22:36 64.3	14/9/2014 11:41 62.2
7/9/2014 18:21 64.9	9/9/2014 7:26 58.5	9/9/2014 16:31 61.5	10/9/2014 21:36 61.5	12/9/2014 22:41 63.6	14/9/2014 11:46 62.6
7/9/2014 18:26 61.9	9/9/2014 7:31 55.8	9/9/2014 16:36 62.2	10/9/2014 21:41 61.3	12/9/2014 22:46 63.8	14/9/2014 11:51 62.5
7/9/2014 18:31 62.0	9/9/2014 7:36 56.8	9/9/2014 16:41 62.4	10/9/2014 21:46 61.0	12/9/2014 22:51 63.9	14/9/2014 11:56 62.2
7/9/2014 18:36 62.4	9/9/2014 7:41 56.1	9/9/2014 16:46 61.6	10/9/2014 21:51 62.2	12/9/2014 22:56 62.6	14/9/2014 12:01 62.5
7/9/2014 18:41 62.7	9/9/2014 7:46 56.5	9/9/2014 16:51 62.5	10/9/2014 21:56 61.3	13/9/2014 19:01 62.3	14/9/2014 12:06 62.8
7/9/2014 18:46 61.5	9/9/2014 7:51 53.8	9/9/2014 16:56 62.5	10/9/2014 22:01 61.4	13/9/2014 19:06 63.1	14/9/2014 12:11 62.6
7/9/2014 18:51 60.9	9/9/2014 7:56 56.4	9/9/2014 17:01 62.0	10/9/2014 22:06 61.6	13/9/2014 19:11 62.8	14/9/2014 12:16 62.3
7/9/2014 18:56 60.6	9/9/2014 8:01 55.6	9/9/2014 17:06 63.2	10/9/2014 22:11 61.8	13/9/2014 19:16 63.7	14/9/2014 12:21 63.0
7/9/2014 19:01 62.0	9/9/2014 8:06 57.4	9/9/2014 17:11 62.5	10/9/2014 22:16 61.5	13/9/2014 19:21 63.4	14/9/2014 12:26 62.1
7/9/2014 19:06 61.1	9/9/2014 8:11 57.2	9/9/2014 17:16 61.7	10/9/2014 22:21 61.0	13/9/2014 19:26 63.3	14/9/2014 12:31 61.4
7/9/2014 19:11 60.9	9/9/2014 8:16 58.1	9/9/2014 17:21 61.6	10/9/2014 22:26 60.9	13/9/2014 19:31 62.6	14/9/2014 12:36 62.4
7/9/2014 19:16 62.0	9/9/2014 8:21 58.7	9/9/2014 17:26 61.6	10/9/2014 22:31 65.5	13/9/2014 19:36 62.7	14/9/2014 12:41 62.5
7/9/2014 19:21 62.2	9/9/2014 8:26 60.7	9/9/2014 17:31 61.7	10/9/2014 22:36 65.2	13/9/2014 19:41 63.3	14/9/2014 12:46 62.8
7/9/2014 19:26 61.0	9/9/2014 8:31 59.0	9/9/2014 17:36 61.9	10/9/2014 22:41 61.1	13/9/2014 19:46 63.0	14/9/2014 12:51 62.2
7/9/2014 19:31 60.4	9/9/2014 8:36 59.0	9/9/2014 17:41 62.0	10/9/2014 22:46 61.1	13/9/2014 19:51 63.0	14/9/2014 12:56 62.6
7/9/2014 19:36 62.5	9/9/2014 8:41 60.3	9/9/2014 17:46 62.2	10/9/2014 22:51 60.0	13/9/2014 19:56 62.7	14/9/2014 13:01 62.6
7/9/2014 19:41 61.3	9/9/2014 8:46 60.7	9/9/2014 17:51 61.4	10/9/2014 22:56 60.1	13/9/2014 20:01 62.5	14/9/2014 13:06 62.1
7/9/2014 19:46 59.9	9/9/2014 8:51 58.4	9/9/2014 17:56 62.3	11/9/2014 19:01 61.9	13/9/2014 20:06 62.2	14/9/2014 13:11 62.7
7/9/2014 19:51 61.2	9/9/2014 8:56 61.7	9/9/2014 18:01 62.3	11/9/2014 19:06 62.8	13/9/2014 20:11 62.1	14/9/2014 13:16 61.9
7/9/2014 19:56 60.8	9/9/2014 9:01 60.7	9/9/2014 18:06 62.8	11/9/2014 19:11 64.0	13/9/2014 20:16 62.0	14/9/2014 13:21 62.1
7/9/2014 20:01 61.7	9/9/2014 9:06 60.9	9/9/2014 18:11 61.3	11/9/2014 19:16 62.9	13/9/2014 20:21 63.0	14/9/2014 13:26 62.0
7/9/2014 20:06 60.2	9/9/2014 9:11 61.2	9/9/2014 18:16 61.6	11/9/2014 19:21 62.5	13/9/2014 20:26 60.8	14/9/2014 13:31 62.3
7/9/2014 20:11 58.2	9/9/2014 9:16 61.0	9/9/2014 18:21 62.1	11/9/2014 19:26 62.6	13/9/2014 20:31 62.0	14/9/2014 13:36 62.1
7/9/2014 20:16 61.5	9/9/2014 9:21 61.5	9/9/2014 18:26 62.0	11/9/2014 19:31 62.4	13/9/2014 20:36 62.2	14/9/2014 13:41 62.3
7/9/2014 20:21 64.0	9/9/2014 9:26 61.0	9/9/2014 18:31 61.2	11/9/2014 19:36 62.4	13/9/2014 20:41 61.5	14/9/2014 13:46 61.9

Deal time Naise Date	DTNO- (Hear Keen Flectic Cont				
Real-time Noise Data 14/9/2014 13:51 62.0	RTN2a (Hong Kong Electric Cent 14/9/2014 22:56 61.5	<u>re)</u> 17/9/2014 20:01 65.2	19/9/2014 21:06 62.4	21/9/2014 10:11 61.8	21/9/2014 19:16 61.7
14/9/2014 13:56 60.8	15/9/2014 19:01 63.7	17/9/2014 20:06 64.6	19/9/2014 21:11 61.7	21/9/2014 10:16 59.6	21/9/2014 19:21 62.1
14/9/2014 14:01 61.0	15/9/2014 19:06 63.8	17/9/2014 20:11 64.1	19/9/2014 21:16 61.6	21/9/2014 10:21 61.8	21/9/2014 19:26 62.7
14/9/2014 14:06 60.7	15/9/2014 19:11 63.8	17/9/2014 20:16 64.2	19/9/2014 21:21 62.5	21/9/2014 10:26 61.9	21/9/2014 19:31 61.2
14/9/2014 14:11 61.4	15/9/2014 19:16 64.2	17/9/2014 20:21 64.2	19/9/2014 21:26 62.5	21/9/2014 10:31 62.5	21/9/2014 19:36 61.6
14/9/2014 14:16 61.4	15/9/2014 19:21 64.2	17/9/2014 20:26 64.4	19/9/2014 21:31 62.3	21/9/2014 10:36 62.6	21/9/2014 19:41 62.0
14/9/2014 14:21 60.4	15/9/2014 19:26 64.4	17/9/2014 20:31 63.9	19/9/2014 21:36 62.2	21/9/2014 10:41 61.8	21/9/2014 19:46 61.7
14/9/2014 14:26 61.6	15/9/2014 19:31 64.2	17/9/2014 20:36 64.0	19/9/2014 21:41 62.2	21/9/2014 10:46 61.0	21/9/2014 19:51 62.2
14/9/2014 14:31 61.5	15/9/2014 19:36 62.8	17/9/2014 20:41 63.9	19/9/2014 21:46 61.1	21/9/2014 10:51 60.4	21/9/2014 19:56 62.1
14/9/2014 14:36 61.1	15/9/2014 19:41 63.3	17/9/2014 20:46 64.0	19/9/2014 21:51 62.3	21/9/2014 10:56 61.8	21/9/2014 20:01 60.8
14/9/2014 14:41 61.4	15/9/2014 19:46 62.2	17/9/2014 20:51 63.9	19/9/2014 21:56 62.0	21/9/2014 11:01 61.8	21/9/2014 20:06 61.8
14/9/2014 14:46 60.7	15/9/2014 19:51 63.8	17/9/2014 20:56 63.6	19/9/2014 22:01 61.8	21/9/2014 11:06 62.0	21/9/2014 20:11 60.8
14/9/2014 14:51 60.6	15/9/2014 19:56 63.0	17/9/2014 21:01 63.1	19/9/2014 22:06 62.6	21/9/2014 11:11 63.5	21/9/2014 20:16 61.1
14/9/2014 14:56 61.5	15/9/2014 20:01 64.3	17/9/2014 21:06 64.0	19/9/2014 22:11 61.1	21/9/2014 11:16 63.0	21/9/2014 20:21 61.3
14/9/2014 15:01 59.9	15/9/2014 20:06 64.4	17/9/2014 21:11 63.8	19/9/2014 22:16 61.8	21/9/2014 11:10 63:0	21/9/2014 20:26 61.3
14/9/2014 15:06 61.6	15/9/2014 20:11 63.6	17/9/2014 21:16 63.8	19/9/2014 22:21 62.1	21/9/2014 11:26 61.8	21/9/2014 20:31 61.8
14/9/2014 15:11 60.5	15/9/2014 20:16 64.7	17/9/2014 21:21 63.6	19/9/2014 22:26 61.5	21/9/2014 11:31 62.3	21/9/2014 20:36 61.1
14/9/2014 15:16 60.5	15/9/2014 20:21 64.5	17/9/2014 21:26 64.1	19/9/2014 22:31 61.8	21/9/2014 11:36 60.9	21/9/2014 20:41 61.4
14/9/2014 15:21 61.9	15/9/2014 20:26 64.6	17/9/2014 21:31 63.7	19/9/2014 22:36 62.2	21/9/2014 11:41 60.4	21/9/2014 20:46 60.8
14/9/2014 15:26 61.7	15/9/2014 20:31 64.5	17/9/2014 21:36 63.5	19/9/2014 22:41 62.1	21/9/2014 11:46 60.2	21/9/2014 20:51 60.7
14/9/2014 15:31 62.0	15/9/2014 20:36 63.8	17/9/2014 21:41 64.0	19/9/2014 22:46 62.0	21/9/2014 11:51 61.2	21/9/2014 20:56 62.4
14/9/2014 15:36 62.1	15/9/2014 20:41 63.7	17/9/2014 21:46 63.9	19/9/2014 22:51 61.9	21/9/2014 11:56 60.8	21/9/2014 21:01 61.1
14/9/2014 15:41 62.6	15/9/2014 20:46 63.0	17/9/2014 21:51 63.7	19/9/2014 22:56 62.6	21/9/2014 12:01 60.7	21/9/2014 21:06 60.5
14/9/2014 15:46 61.7	15/9/2014 20:51 62.5	17/9/2014 21:56 63.9 17/9/2014 22:01 62.9	20/9/2014 19:01 62.7	21/9/2014 12:06 60.5	21/9/2014 21:11 61.6 21/9/2014 21:16 61.1
14/9/2014 15:51 62.2 14/9/2014 15:56 63.1	15/9/2014 20:56 61.9 15/9/2014 21:01 62.2	17/9/2014 22:06 63.3	20/9/2014 19:06 63.2 20/9/2014 19:11 62.7	21/9/2014 12:11 61.7 21/9/2014 12:16 62.2	21/9/2014 21:21 60.7
14/9/2014 16:01 63.0	15/9/2014 21:06 62.8	17/9/2014 22:11 62.8	20/9/2014 19:16 62.1	21/9/2014 12:21 61.8	21/9/2014 21:26 62.4
14/9/2014 16:06 61.8	15/9/2014 21:11 63.6	17/9/2014 22:16 63.5	20/9/2014 19:21 63.2	21/9/2014 12:26 62.4	21/9/2014 21:31 60.8
14/9/2014 16:11 62.1	15/9/2014 21:16 63.7	17/9/2014 22:21 62.6	20/9/2014 19:26 62.3	21/9/2014 12:31 62.6	21/9/2014 21:36 61.5
14/9/2014 16:16 62.2	15/9/2014 21:21 63.5	17/9/2014 22:26 62.6	20/9/2014 19:31 64.2	21/9/2014 12:36 61.9	21/9/2014 21:41 61.2
14/9/2014 16:21 62.4	15/9/2014 21:26 63.9	17/9/2014 22:31 63.3	20/9/2014 19:36 62.7	21/9/2014 12:41 61.9	21/9/2014 21:46 60.9
14/9/2014 16:26 62.3	15/9/2014 21:31 63.6	17/9/2014 22:36 62.0	20/9/2014 19:41 62.1	21/9/2014 12:46 62.6	21/9/2014 21:51 60.3
14/9/2014 16:31 61.8	15/9/2014 21:36 63.3	17/9/2014 22:41 62.5	20/9/2014 19:46 62.0	21/9/2014 12:51 63.3	21/9/2014 21:56 63.3
14/9/2014 16:36 62.0	15/9/2014 21:41 63.3	17/9/2014 22:46 62.0	20/9/2014 19:51 62.9	21/9/2014 12:56 62.1	21/9/2014 22:01 61.7
14/9/2014 16:41 62.4	15/9/2014 21:46 63.3	17/9/2014 22:51 62.2	20/9/2014 19:56 63.2	21/9/2014 13:01 62.0	21/9/2014 22:06 61.4
14/9/2014 16:46 61.3	15/9/2014 21:51 63.8	17/9/2014 22:56 61.8	20/9/2014 20:01 63.2	21/9/2014 13:06 62.3	21/9/2014 22:11 61.3
14/9/2014 16:51 63.1	15/9/2014 21:56 67.8	18/9/2014 19:01 62.8	20/9/2014 20:06 62.7	21/9/2014 13:11 62.0	21/9/2014 22:16 61.6
14/9/2014 16:56 63.2	15/9/2014 22:01 61.6	18/9/2014 19:06 62.7	20/9/2014 20:11 62.0	21/9/2014 13:16 63.1	21/9/2014 22:21 61.4
14/9/2014 17:01 62.3	15/9/2014 22:06 60.7	18/9/2014 19:11 62.7	20/9/2014 20:16 62.1	21/9/2014 13:21 61.9	21/9/2014 22:26 60.6
14/9/2014 17:06 62.7	15/9/2014 22:11 63.4	18/9/2014 19:16 62.4	20/9/2014 20:21 61.9	21/9/2014 13:26 61.7	21/9/2014 22:31 60.6
14/9/2014 17:11 62.5	15/9/2014 22:16 61.5	18/9/2014 19:21 63.0	20/9/2014 20:26 61.7	21/9/2014 13:31 62.1	21/9/2014 22:36 60.7
14/9/2014 17:16 62.5	15/9/2014 22:21 61.2		20/9/2014 20:31 62.5	21/9/2014 13:36 62.0	21/9/2014 22:41 61.1
14/9/2014 17:10 62.5	15/9/2014 22:26 60.1	18/9/2014 19:26 62.8 18/9/2014 19:31 62.3	20/9/2014 20:36 61.6	21/9/2014 13:41 61.6	21/9/2014 22:46 60.2
14/9/2014 17:26 61.9	15/9/2014 22:31 60.6	18/9/2014 19:36 63.0	20/9/2014 20:41 63.4	21/9/2014 13:46 61.7	21/9/2014 22:51 59.5
14/9/2014 17:31 62.2	15/9/2014 22:36 61.4	18/9/2014 19:41 62.8	20/9/2014 20:46 61.3	21/9/2014 13:51 61.9	21/9/2014 22:56 60.9
14/9/2014 17:36 61.9	15/9/2014 22:41 60.7	18/9/2014 19:46 62.9	20/9/2014 20:51 60.9	21/9/2014 13:56 62.6	22/9/2014 19:01 61.1
14/9/2014 17:41 62.7	15/9/2014 22:46 60.6	18/9/2014 19:51 62.7	20/9/2014 20:56 61.7	21/9/2014 14:01 62.4	22/9/2014 19:06 61.7
14/9/2014 17:46 62.1	15/9/2014 22:51 62.2	18/9/2014 19:56 63.2	20/9/2014 21:01 61.4	21/9/2014 14:06 63.1	22/9/2014 19:11 60.7
14/9/2014 17:51 61.9	15/9/2014 22:56 63.8	18/9/2014 20:01 63.5	20/9/2014 21:06 61.7	21/9/2014 14:11 62.3	22/9/2014 19:16 61.8
14/9/2014 17:56 62.3	16/9/2014 19:01 61.3	18/9/2014 20:06 63.4	20/9/2014 21:11 62.1	21/9/2014 14:16 62.5	22/9/2014 19:21 61.6
14/9/2014 18:01 61.6	16/9/2014 19:06 62.1	18/9/2014 20:11 63.0	20/9/2014 21:16 61.9	21/9/2014 14:21 62.0	22/9/2014 19:26 63.2
14/9/2014 18:06 62.5	16/9/2014 19:11 61.8	18/9/2014 20:16 63.1	20/9/2014 21:21 62.9	21/9/2014 14:26 62.4	22/9/2014 19:31 63.0
14/9/2014 18:11 64.8	16/9/2014 19:16 61.6	18/9/2014 20:21 63.1	20/9/2014 21:26 61.1	21/9/2014 14:31 62.4	22/9/2014 19:36 65.4
14/9/2014 18:16 62.0	16/9/2014 19:21 62.3	18/9/2014 20:26 63.2	20/9/2014 21:31 62.3	21/9/2014 14:36 62.2	22/9/2014 19:41 62.9
14/9/2014 18:21 62.4	16/9/2014 19:26 63.5	18/9/2014 20:31 62.5	20/9/2014 21:36 62.5	21/9/2014 14:41 62.3	22/9/2014 19:46 62.8
14/9/2014 18:26 61.9	16/9/2014 19:31 63.4	18/9/2014 20:36 62.9	20/9/2014 21:41 61.4	21/9/2014 14:46 62.8	22/9/2014 19:51 62.4
14/9/2014 18:31 62.1	16/9/2014 19:36 65.1	18/9/2014 20:41 62.9	20/9/2014 21:46 61.8	21/9/2014 14:51 62.7	22/9/2014 19:56 62.8
14/9/2014 18:36 63.0 14/9/2014 18:41 61.6	16/9/2014 19:41 66.1 16/9/2014 19:46 65.1	18/9/2014 20:46 62.6	20/9/2014 21:51 62.1	21/9/2014 14:56 62.5	22/9/2014 20:01 62.0
14/9/2014 18:46 62.8	16/9/2014 19:51 64.3	18/9/2014 20:51 63.1 18/9/2014 20:56 62.8	20/9/2014 21:56 62.6 20/9/2014 22:01 63.6	21/9/2014 15:01 62.7 21/9/2014 15:06 62.6	22/9/2014 20:06 63.4 22/9/2014 20:11 64.9
14/9/2014 18:51 63.0	16/9/2014 19:56 64.0	18/9/2014 21:01 62.6	20/9/2014 22:06 61.9	21/9/2014 15:11 62.7	22/9/2014 20:16 62.7
14/9/2014 18:56 62.1	16/9/2014 20:01 64.9	18/9/2014 21:06 63.0	20/9/2014 22:11 61.3	21/9/2014 15:16 62.0	22/9/2014 20:21 62.9
14/9/2014 19:01 61.7	16/9/2014 20:06 68.5	18/9/2014 21:11 61.7	20/9/2014 22:16 61.1	21/9/2014 15:21 62.6	22/9/2014 20:26 63.4
14/9/2014 19:06 62.6	16/9/2014 20:11 66.5	18/9/2014 21:16 62.4	20/9/2014 22:21 62.2	21/9/2014 15:26 62.0	22/9/2014 20:31 61.7
14/9/2014 19:11 61.9	16/9/2014 20:16 65.5	18/9/2014 21:21 62.6	20/9/2014 22:26 61.2	21/9/2014 15:31 61.7	22/9/2014 20:36 62.5
14/9/2014 19:16 62.4	16/9/2014 20:21 65.9	18/9/2014 21:26 62.3	20/9/2014 22:31 61.6	21/9/2014 15:36 61.8	22/9/2014 20:41 62.3
14/9/2014 19:21 61.6	16/9/2014 20:26 64.8	18/9/2014 21:31 61.4	20/9/2014 22:36 61.8	21/9/2014 15:41 61.4	22/9/2014 20:46 62.2
14/9/2014 19:26 61.8	16/9/2014 20:31 65.6	18/9/2014 21:36 61.8	20/9/2014 22:41 61.9	21/9/2014 15:46 62.9	22/9/2014 20:51 61.4
14/9/2014 19:31 61.1	16/9/2014 20:36 63.9	18/9/2014 21:41 61.5	20/9/2014 22:46 62.9	21/9/2014 15:51 62.1	22/9/2014 20:56 61.3 22/9/2014 21:01 61.5
14/9/2014 19:36 61.8	16/9/2014 20:41 63.7	18/9/2014 21:46 62.2	20/9/2014 22:51 61.4	21/9/2014 15:56 61.8	22/9/2014 21:06 60.9
14/9/2014 19:41 63.0	16/9/2014 20:46 63.6	18/9/2014 21:51 62.7	20/9/2014 22:56 61.6	21/9/2014 16:01 62.6	
14/9/2014 19:46 62.3	16/9/2014 20:51 63.2	18/9/2014 21:56 62.4	21/9/2014 7:01 51.3	21/9/2014 16:06 62.1	22/9/2014 21:11 62.6
14/9/2014 19:51 61.6	16/9/2014 20:56 63.3	18/9/2014 22:01 61.8	21/9/2014 7:06 58.1	21/9/2014 16:11 62.7	22/9/2014 21:16 62.4
14/9/2014 19:56 61.1	16/9/2014 21:01 63.4	18/9/2014 22:06 62.2	21/9/2014 7:11 58.3	21/9/2014 16:16 62.1	22/9/2014 21:21 61.5
14/9/2014 20:01 61.8	16/9/2014 21:06 63.9	18/9/2014 22:11 62.2	21/9/2014 7:16 56.9	21/9/2014 16:21 62.9	22/9/2014 21:26 61.8
14/9/2014 20:06 62.0	16/9/2014 21:11 64.6	18/9/2014 22:16 64.2	21/9/2014 7:21 64.1	21/9/2014 16:26 63.0	22/9/2014 21:31 62.1
14/9/2014 20:11 61.2	16/9/2014 21:16 62.8	18/9/2014 22:21 62.1	21/9/2014 7:26 57.5	21/9/2014 16:31 62.4	22/9/2014 21:36 61.3
14/9/2014 20:16 61.8	16/9/2014 21:21 63.7	18/9/2014 22:26 61.8	21/9/2014 7:31 60.9	21/9/2014 16:36 61.7	22/9/2014 21:41 62.1
14/9/2014 20:21 61.9	16/9/2014 21:26 63.8	18/9/2014 22:31 61.5	21/9/2014 7:36 62.1	21/9/2014 16:41 62.1	22/9/2014 21:46 60.7
14/9/2014 20:26 61.1	16/9/2014 21:31 63.9	18/9/2014 22:36 61.1	21/9/2014 7:41 58.4	21/9/2014 16:46 61.9	22/9/2014 21:51 60.8
14/9/2014 20:31 60.9	16/9/2014 21:36 62.7	18/9/2014 22:41 61.4	21/9/2014 7:46 59.1	21/9/2014 16:51 62.3	22/9/2014 21:56 59.8
14/9/2014 20:36 60.9	16/9/2014 21:41 63.6	18/9/2014 22:46 61.4	21/9/2014 7:51 58.5	21/9/2014 16:56 62.7	22/9/2014 22:01 62.0
14/9/2014 20:41 61.6	16/9/2014 21:46 64.3	18/9/2014 22:51 62.1	21/9/2014 7:56 60.0	21/9/2014 17:01 62.8	22/9/2014 22:06 61.4
14/9/2014 20:46 61.0	16/9/2014 21:51 63.1	18/9/2014 22:56 60.5	21/9/2014 8:01 58.9	21/9/2014 17:06 62.9	22/9/2014 22:11 61.0
14/9/2014 20:51 62.4	16/9/2014 21:56 63.2	19/9/2014 19:01 60.0	21/9/2014 8:06 58.5	21/9/2014 17:11 62.7	22/9/2014 22:16 61.4
14/9/2014 20:56 60.8	16/9/2014 22:01 63.7	19/9/2014 19:06 60.1	21/9/2014 8:11 59.9	21/9/2014 17:16 62.9	22/9/2014 22:21 61.2
14/9/2014 21:01 61.4	16/9/2014 22:06 63.3	19/9/2014 19:11 60.3	21/9/2014 8:16 61.5	21/9/2014 17:21 62.6	22/9/2014 22:26 61.3
14/9/2014 21:06 60.7	16/9/2014 22:11 63.5	19/9/2014 19:16 60.4	21/9/2014 8:21 59.8	21/9/2014 17:26 62.6	22/9/2014 22:31 60.8
14/9/2014 21:11 61.7	16/9/2014 22:16 63.7	19/9/2014 19:21 60.2	21/9/2014 8:26 60.4	21/9/2014 17:31 62.0	22/9/2014 22:36 60.1
14/9/2014 21:16 62.3	16/9/2014 22:21 63.1	19/9/2014 19:26 61.3	21/9/2014 8:31 60.8	21/9/2014 17:36 62.0	22/9/2014 22:41 60.9
14/9/2014 21:21 61.8	16/9/2014 22:26 64.1	19/9/2014 19:31 60.7	21/9/2014 8:36 61.9	21/9/2014 17:41 63.0	22/9/2014 22:46 60.1
14/9/2014 21:26 61.8	16/9/2014 22:31 63.4	19/9/2014 19:36 61.1	21/9/2014 8:41 60.7	21/9/2014 17:46 63.2	22/9/2014 22:51 60.0
14/9/2014 21:31 62.7	16/9/2014 22:36 63.3	19/9/2014 19:41 60.3	21/9/2014 8:46 61.0	21/9/2014 17:51 61.9	22/9/2014 22:56 61.6
14/9/2014 21:36 61.4	16/9/2014 22:41 62.9	19/9/2014 19:46 59.5	21/9/2014 8:51 61.2	21/9/2014 17:56 62.2	23/9/2014 19:01 63.2
14/9/2014 21:41 62.1	16/9/2014 22:46 63.6	19/9/2014 19:51 60.0	21/9/2014 8:56 60.6	21/9/2014 18:01 61.9	23/9/2014 19:06 62.5
14/9/2014 21:46 61.2	16/9/2014 22:51 62.5	19/9/2014 19:56 60.4	21/9/2014 9:01 60.6	21/9/2014 18:06 62.3	23/9/2014 19:11 63.9
14/9/2014 21:51 60.6	16/9/2014 22:56 63.5	19/9/2014 20:01 59.2	21/9/2014 9:06 61.0	21/9/2014 18:11 62.1	23/9/2014 19:16 62.9
14/9/2014 21:56 61.4	17/9/2014 19:01 64.2	19/9/2014 20:06 61.7	21/9/2014 9:11 61.3	21/9/2014 18:16 62.8	23/9/2014 19:21 62.8
14/9/2014 22:01 60.8	17/9/2014 19:06 65.1	19/9/2014 20:11 62.5	21/9/2014 9:16 61.7	21/9/2014 18:21 63.6	23/9/2014 19:26 64.5
14/9/2014 22:06 61.6	17/9/2014 19:11 64.8	19/9/2014 20:16 62.4	21/9/2014 9:21 62.6	21/9/2014 18:26 63.0	23/9/2014 19:31 64.0
14/9/2014 22:11 61.1	17/9/2014 19:16 65.1	19/9/2014 20:21 62.9	21/9/2014 9:26 61.7	21/9/2014 18:31 63.3	23/9/2014 19:36 62.5
14/9/2014 22:16 60.3	17/9/2014 19:21 64.7	19/9/2014 20:26 62.6	21/9/2014 9:31 61.8	21/9/2014 18:36 61.9	23/9/2014 19:41 63.4
14/9/2014 22:21 61.4	17/9/2014 19:26 64.5	19/9/2014 20:31 62.5	21/9/2014 9:36 62.2	21/9/2014 18:41 62.1	23/9/2014 19:46 62.5
14/9/2014 22:26 60.3	17/9/2014 19:31 64.8	19/9/2014 20:36 62.9	21/9/2014 9:41 62.5	21/9/2014 18:46 61.7	23/9/2014 19:51 62.1
14/9/2014 22:31 61.3	17/9/2014 19:36 65.1	19/9/2014 20:41 62.5	21/9/2014 9:46 62.8	21/9/2014 18:51 61.9	23/9/2014 19:56 62.1
14/9/2014 22:36 61.5	17/9/2014 19:41 64.6	19/9/2014 20:46 61.9	21/9/2014 9:51 62.6	21/9/2014 18:56 62.1	23/9/2014 20:01 63.3
14/9/2014 22:41 60.8	17/9/2014 19:46 64.5	19/9/2014 20:51 62.5	21/9/2014 9:56 62.2	21/9/2014 19:01 62.4	23/9/2014 20:06 62.6
14/9/2014 22:46 60.8	17/9/2014 19:51 64.7	19/9/2014 20:56 62.1	21/9/2014 10:01 62.1	21/9/2014 19:06 61.7	23/9/2014 20:11 61.1
14/9/2014 22:51 61.5	17/9/2014 19:56 65.0	19/9/2014 21:01 62.5	21/9/2014 10:06 62.3	21/9/2014 19:11 62.1	23/9/2014 20:16 61.8

Real-time Noise Data 23/9/2014 20:21 61.6	RTN2a (Hong Kong Electric Centr 25/9/2014 21:26 62.4	<u>e)</u> 27/9/2014 22:31 61.1	29/8/2014 0:21 62.8	30/8/2014 1:26 61.8	31/8/2014 2:31 59.0
23/9/2014 20:26 62.1	25/9/2014 21:31 63.2	27/9/2014 22:36 63.3	29/8/2014 0:26 62.8	30/8/2014 1:31 60.7	31/8/2014 2:36 59.6
23/9/2014 20:31 61.3	25/9/2014 21:36 61.2	27/9/2014 22:41 60.9	29/8/2014 0:31 62.4	30/8/2014 1:36 61.2	31/8/2014 2:41 58.5
23/9/2014 20:36 62.5	25/9/2014 21:41 61.7	27/9/2014 22:46 62.4	29/8/2014 0:36 62.1	30/8/2014 1:41 60.1	31/8/2014 2:46 58.2
23/9/2014 20:41 61.4	25/9/2014 21:46 63.1	27/9/2014 22:51 60.2	29/8/2014 0:41 62.2	30/8/2014 1:46 62.9	31/8/2014 2:51 58.3
23/9/2014 20:46 61.5	25/9/2014 21:51 62.0	27/9/2014 22:56 61.5	29/8/2014 0:46 62.0	30/8/2014 1:51 59.6	31/8/2014 2:56 57.6
23/9/2014 20:51 61.7	25/9/2014 21:56 62.9		29/8/2014 0:51 62.2	30/8/2014 1:56 60.7	31/8/2014 3:01 57.9
23/9/2014 20:56 62.7	25/9/2014 22:01 60.9	Night time: 23:00-07:00	29/8/2014 0:56 61.9	30/8/2014 2:01 60.0	31/8/2014 3:06 57.6
23/9/2014 21:01 62.3	25/9/2014 22:06 61.2		29/8/2014 1:01 61.7	30/8/2014 2:06 60.2	31/8/2014 3:11 57.5
23/9/2014 21:06 61.5	25/9/2014 22:11 62.4	28/8/2014 0:01 63.0	29/8/2014 1:06 61.2	30/8/2014 2:11 60.3	31/8/2014 3:16 57.4
23/9/2014 21:11 63.6	25/9/2014 22:16 62.1	28/8/2014 0:06 62.4	29/8/2014 1:11 61.9	30/8/2014 2:16 60.4	31/8/2014 3:21 57.9
23/9/2014 21:16 62.9	25/9/2014 22:21 61.4	28/8/2014 0:11 61.9	29/8/2014 1:16 62.4	30/8/2014 2:21 59.7	31/8/2014 3:26 57.9
23/9/2014 21:21 61.5	25/9/2014 22:26 61.8	28/8/2014 0:16 62.5	29/8/2014 1:21 61.9	30/8/2014 2:26 60.3	31/8/2014 3:31 57.7
23/9/2014 21:26 63.0	25/9/2014 22:31 61.2	28/8/2014 0:21 61.7	29/8/2014 1:26 61.6	30/8/2014 2:31 60.4	31/8/2014 3:36 58.6
23/9/2014 21:31 61.2	25/9/2014 22:36 60.9	28/8/2014 0:26 62.5	29/8/2014 1:31 60.7	30/8/2014 2:36 59.5	31/8/2014 3:41 56.6
23/9/2014 21:36 62.8	25/9/2014 22:41 61.7	28/8/2014 0:31 62.2	29/8/2014 1:36 60.5	30/8/2014 2:41 58.7	31/8/2014 3:46 57.0
23/9/2014 21:41 62.2	25/9/2014 22:46 61.7	28/8/2014 0:36 61.9	29/8/2014 1:41 61.8	30/8/2014 2:46 59.8	31/8/2014 3:51 56.7
23/9/2014 21:46 61.5	25/9/2014 22:51 61.6	28/8/2014 0:41 60.8	29/8/2014 1:46 61.0	30/8/2014 2:51 60.6	31/8/2014 3:56 58.3
23/9/2014 21:51 60.7	25/9/2014 22:56 61.8	28/8/2014 0:46 60.9	29/8/2014 1:51 61.4	30/8/2014 2:56 58.1	31/8/2014 4:01 56.1
23/9/2014 21:56 61.4	26/9/2014 19:01 60.9	28/8/2014 0:51 60.7	29/8/2014 1:56 60.8	30/8/2014 3:01 58.9	31/8/2014 4:06 57.2
23/9/2014 22:01 60.9	26/9/2014 19:06 60.6	28/8/2014 0:56 60.8	29/8/2014 2:01 60.4	30/8/2014 3:06 58.2	31/8/2014 4:11 56.4
23/9/2014 22:06 62.5	26/9/2014 19:11 61.1	28/8/2014 1:01 59.4	29/8/2014 2:06 60.4	30/8/2014 3:11 59.6	31/8/2014 4:16 57.3
23/9/2014 22:11 61.6	26/9/2014 19:16 60.4	28/8/2014 1:06 60.3	29/8/2014 2:11 60.2	30/8/2014 3:16 59.4	31/8/2014 4:21 57.3
23/9/2014 22:16 60.7	26/9/2014 19:21 62.0	28/8/2014 1:11 60.5	29/8/2014 2:16 60.0	30/8/2014 3:21 58.2	31/8/2014 4:26 56.5
23/9/2014 22:21 60.7	26/9/2014 19:26 61.5	28/8/2014 1:16 59.8	29/8/2014 2:21 59.5	30/8/2014 3:26 57.2	31/8/2014 4:31 56.9
23/9/2014 22:26 61.1	26/9/2014 19:31 62.3	28/8/2014 1:21 58.9	29/8/2014 2:26 60.0	30/8/2014 3:31 57.8	31/8/2014 4:36 56.4
23/9/2014 22:31 62.6	26/9/2014 19:36 61.9	28/8/2014 1:26 59.8	29/8/2014 2:31 60.7	30/8/2014 3:36 58.6	31/8/2014 4:41 55.6
23/9/2014 22:36 60.2	26/9/2014 19:41 62.7	28/8/2014 1:31 59.2	29/8/2014 2:36 59.4	30/8/2014 3:41 58.3	31/8/2014 4:46 57.3
23/9/2014 22:41 60.7	26/9/2014 19:46 63.1	28/8/2014 1:36 58.8	29/8/2014 2:41 59.8	30/8/2014 3:46 56.7	31/8/2014 4:51 55.6
23/9/2014 22:46 61.3	26/9/2014 19:51 62.6	28/8/2014 1:41 60.2	29/8/2014 2:46 59.5	30/8/2014 3:51 57.4	31/8/2014 4:56 56.5
23/9/2014 22:51 62.0	26/9/2014 19:56 63.7	28/8/2014 1:46 61.0	29/8/2014 2:51 59.2	30/8/2014 3:56 57.7	31/8/2014 5:01 56.0
23/9/2014 22:56 60.6	26/9/2014 20:01 62.6	28/8/2014 1:51 59.4	29/8/2014 2:56 59.0	30/8/2014 4:01 58.2	31/8/2014 5:06 56.8
24/9/2014 19:01 62.8	26/9/2014 20:06 63.2	28/8/2014 1:56 58.7	29/8/2014 3:01 58.7	30/8/2014 4:06 57.5	31/8/2014 5:11 56.3
24/9/2014 19:06 63.9	26/9/2014 20:11 62.8	28/8/2014 2:01 58.1	29/8/2014 3:06 59.4	30/8/2014 4:11 55.9	31/8/2014 5:16 58.1
24/9/2014 19:11 63.1	26/9/2014 20:16 62.5	28/8/2014 2:06 58.4	29/8/2014 3:11 58.3	30/8/2014 4:16 58.2	31/8/2014 5:21 58.3
24/9/2014 19:16 63.5	26/9/2014 20:21 62.5	28/8/2014 2:11 57.6	29/8/2014 3:16 58.6	30/8/2014 4:21 57.3	31/8/2014 5:26 56.5
24/9/2014 19:21 63.5	26/9/2014 20:26 63.0	28/8/2014 2:16 57.1	29/8/2014 3:21 59.4	30/8/2014 4:26 57.1	31/8/2014 5:31 57.4
24/9/2014 19:26 62.4	26/9/2014 20:31 62.6	28/8/2014 2:21 58.0	29/8/2014 3:26 59.4	30/8/2014 4:31 57.4	31/8/2014 5:36 56.5
24/9/2014 19:31 63.2	26/9/2014 20:36 62.1	28/8/2014 2:26 57.8	29/8/2014 3:31 58.2	30/8/2014 4:36 56.1	31/8/2014 5:41 56.7
24/9/2014 19:36 63.3	26/9/2014 20:41 62.7	28/8/2014 2:31 56.9	29/8/2014 3:36 57.8	30/8/2014 4:41 57.2	31/8/2014 5:46 57.1
24/9/2014 19:41 63.2	26/9/2014 20:46 62.3	28/8/2014 2:36 56.3	29/8/2014 3:41 58.2	30/8/2014 4:46 56.6	31/8/2014 5:51 58.3
24/9/2014 19:46 62.5	26/9/2014 20:51 62.8	28/8/2014 2:41 56.1	29/8/2014 3:46 62.3	30/8/2014 4:51 58.7	31/8/2014 5:56 57.0
24/9/2014 19:51 63.5	26/9/2014 20:56 62.2	28/8/2014 2:46 56.4	29/8/2014 3:51 58.7	30/8/2014 4:56 56.2	31/8/2014 6:01 57.6
24/9/2014 19:56 63.4	26/9/2014 21:01 62.2	28/8/2014 2:51 54.9	29/8/2014 3:56 58.8	30/8/2014 5:01 56.4	31/8/2014 6:06 58.2
24/9/2014 20:01 63.0	26/9/2014 21:06 61.5	28/8/2014 2:56 57.3	29/8/2014 4:01 58.1	30/8/2014 5:06 56.4	31/8/2014 6:11 59.4
24/9/2014 20:06 62.3	26/9/2014 21:11 61.8	28/8/2014 3:01 54.5	29/8/2014 4:06 58.7	30/8/2014 5:11 54.7	31/8/2014 6:16 58.5
24/9/2014 20:11 64.9	26/9/2014 21:16 62.4	28/8/2014 3:06 56.5	29/8/2014 4:11 58.0	30/8/2014 5:16 59.0	31/8/2014 6:21 59.3
24/9/2014 20:16 62.3	26/9/2014 21:21 61.8	28/8/2014 3:11 55.7	29/8/2014 4:16 58.1	30/8/2014 5:21 56.2	31/8/2014 6:26 59.1
24/9/2014 20:21 61.3	26/9/2014 21:26 62.6	28/8/2014 3:16 55.6	29/8/2014 4:21 57.2	30/8/2014 5:26 57.4	31/8/2014 6:31 60.1
24/9/2014 20:26 62.5	26/9/2014 21:31 61.4	28/8/2014 3:21 52.4	29/8/2014 4:26 58.2	30/8/2014 5:31 57.4	31/8/2014 6:36 60.3
24/9/2014 20:31 62.5	26/9/2014 21:36 63.5	28/8/2014 3:26 53.1	29/8/2014 4:31 58.4	30/8/2014 5:36 56.8	31/8/2014 6:41 60.9
24/9/2014 20:36 62.1	26/9/2014 21:41 64.3	28/8/2014 3:31 52.5	29/8/2014 4:36 58.3	30/8/2014 5:41 57.3	31/8/2014 6:46 61.0
24/9/2014 20:41 62.8	26/9/2014 21:46 63.0	28/8/2014 3:36 55.1	29/8/2014 4:41 58.8	30/8/2014 5:46 58.4	31/8/2014 6:51 61.2
24/9/2014 20:46 61.7	26/9/2014 21:51 62.3	28/8/2014 3:41 52.2	29/8/2014 4:46 57.9	30/8/2014 5:51 58.1	31/8/2014 6:56 60.9
24/9/2014 20:51 62.8	26/9/2014 21:56 61.7	28/8/2014 3:46 52.9	29/8/2014 4:51 57.8	30/8/2014 5:56 57.4	31/8/2014 23:01 62.9
24/9/2014 20:56 63.0	26/9/2014 22:01 61.5	28/8/2014 3:51 55.4	29/8/2014 4:56 58.4	30/8/2014 6:01 58.2	31/8/2014 23:06 62.8
24/9/2014 21:01 61.0	26/9/2014 22:06 61.3	28/8/2014 3:56 54.6	29/8/2014 5:01 59.1	30/8/2014 6:06 58.7	31/8/2014 23:11 62.4
24/9/2014 21:06 61.9	26/9/2014 22:11 61.6	28/8/2014 4:01 52.2	29/8/2014 5:06 59.7	30/8/2014 6:11 58.5	31/8/2014 23:16 62.7
24/9/2014 21:11 61.5	26/9/2014 22:16 62.3	28/8/2014 4:06 54.0	29/8/2014 5:11 59.1	30/8/2014 6:16 59.7	31/8/2014 23:21 63.1
24/9/2014 21:16 61.4	26/9/2014 22:21 62.1	28/8/2014 4:11 50.2	29/8/2014 5:16 59.1	30/8/2014 6:21 59.2	31/8/2014 23:26 62.8
24/9/2014 21:21 62.2	26/9/2014 22:26 61.8	28/8/2014 4:16 53.7 28/8/2014 4:21 52.0	29/8/2014 5:21 59.7	30/8/2014 6:26 60.3	31/8/2014 23:31 62.2
24/9/2014 21:26 62.3 24/9/2014 21:31 62.1	26/9/2014 22:31 62.7 26/9/2014 22:36 62.9	28/8/2014 4:26 51.0	29/8/2014 5:31 58.5	30/8/2014 6:36 59.9	31/8/2014 23:36 62.2 31/8/2014 23:41 62.7
24/9/2014 21:36 61.9	26/9/2014 22:41 62.4	28/8/2014 4:31 54.4	29/8/2014 5:36 60.3	30/8/2014 6:41 60.9	31/8/2014 23:46 61.8
24/9/2014 21:41 63.5	26/9/2014 22:46 61.5	28/8/2014 4:36 54.2	29/8/2014 5:41 58.8	30/8/2014 6:46 61.4	31/8/2014 23:51 62.2
24/9/2014 21:46 61.8	26/9/2014 22:51 60.5	28/8/2014 4:41 52.8	29/8/2014 5:46 60.0	30/8/2014 6:51 61.3	31/8/2014 23:56 62.4
24/9/2014 21:51 61.1	26/9/2014 22:56 60.7	28/8/2014 4:46 51.9	29/8/2014 5:51 59.9	30/8/2014 6:56 61.9	1/9/2014 0:01 63.1
24/9/2014 21:56 62.1	27/9/2014 19:01 62.1	28/8/2014 4:51 51.9	29/8/2014 5:56 60.2	30/8/2014 23:01 62.7	1/9/2014 0:06 61.9
24/9/2014 22:01 61.7	27/9/2014 19:06 62.2	28/8/2014 4:56 55.4	29/8/2014 6:01 60.0	30/8/2014 23:06 63.7	1/9/2014 0:11 61.3
24/9/2014 22:06 61.8	27/9/2014 19:11 62.0	28/8/2014 5:01 55.0	29/8/2014 6:06 60.3	30/8/2014 23:11 62.3	1/9/2014 0:16 61.4
24/9/2014 22:11 61.3	27/9/2014 19:16 62.6	28/8/2014 5:06 55.2	29/8/2014 6:11 61.2	30/8/2014 23:16 62.3	1/9/2014 0:21 60.6
24/9/2014 22:16 62.3	27/9/2014 19:21 63.1	28/8/2014 5:11 54.5	29/8/2014 6:16 61.4	30/8/2014 23:21 65.7	1/9/2014 0:26 61.2
24/9/2014 22:21 61.0	27/9/2014 19:26 62.6	28/8/2014 5:16 57.8	29/8/2014 6:21 62.2	30/8/2014 23:26 63.4	1/9/2014 0:31 61.1
24/9/2014 22:26 62.0	27/9/2014 19:31 62.0	28/8/2014 5:21 55.7	29/8/2014 6:26 62.1	30/8/2014 23:31 62.4	1/9/2014 0:36 60.1
24/9/2014 22:31 61.8	27/9/2014 19:36 62.2	28/8/2014 5:26 56.9	29/8/2014 6:31 62.2	30/8/2014 23:36 62.6	1/9/2014 0:41 59.8
24/9/2014 22:36 60.6	27/9/2014 19:41 62.1	28/8/2014 5:31 54.8	29/8/2014 6:36 62.4	30/8/2014 23:41 62.6	1/9/2014 0:46 59.7
24/9/2014 22:41 61.7	27/9/2014 19:46 62.5	28/8/2014 5:36 54.8	29/8/2014 6:41 62.8	30/8/2014 23:46 62.6	1/9/2014 0:51 59.4
24/9/2014 22:46 60.3	27/9/2014 19:51 61.8	28/8/2014 5:41 55.5	29/8/2014 6:46 63.0	30/8/2014 23:51 62.4	1/9/2014 0:56 59.0
24/9/2014 22:51 61.7	27/9/2014 19:56 62.0	28/8/2014 5:46 57.1	29/8/2014 6:51 63.7	30/8/2014 23:56 62.0	1/9/2014 1:01 58.7
24/9/2014 22:56 62.0	27/9/2014 20:01 61.6	28/8/2014 5:51 56.8	29/8/2014 6:56 63.9	31/8/2014 0:01 61.9	1/9/2014 1:06 59.4
25/9/2014 19:01 60.3	27/9/2014 20:06 62.0	28/8/2014 5:56 58.6	29/8/2014 23:01 64.1	31/8/2014 0:06 62.7	1/9/2014 1:11 58.6
25/9/2014 19:06 59.0	27/9/2014 20:11 61.3	28/8/2014 6:01 56.9	29/8/2014 23:06 63.9 29/8/2014 23:11 63.0	31/8/2014 0:11 62.9	1/9/2014 1:16 58.9
25/9/2014 19:11 60.5 25/9/2014 19:16 60.0	27/9/2014 20:16 61.7 27/9/2014 20:21 60.9	28/8/2014 6:11 59.8	29/8/2014 23:16 63.3	31/8/2014 0:21 61.8	1/9/2014 1:21 58.7 1/9/2014 1:26 59.3
25/9/2014 19:21 60.8	27/9/2014 20:26 61.5	28/8/2014 6:16 59.7	29/8/2014 23:21 63.5	31/8/2014 0:26 62.0	1/9/2014 1:31 57.3
25/9/2014 19:26 63.6	27/9/2014 20:31 60.5	28/8/2014 6:21 61.1	29/8/2014 23:26 63.1	31/8/2014 0:31 63.9	1/9/2014 1:36 58.6
25/9/2014 19:31 60.9	27/9/2014 20:36 62.2	28/8/2014 6:26 59.9	29/8/2014 23:31 63.1	31/8/2014 0:36 61.7	1/9/2014 1:41 57.4
25/9/2014 19:36 60.6	27/9/2014 20:41 60.0	28/8/2014 6:31 60.7	29/8/2014 23:36 62.8	31/8/2014 0:41 62.8	1/9/2014 1:46 56.9
25/9/2014 19:41 64.3	27/9/2014 20:46 61.8	28/8/2014 6:36 61.1	29/8/2014 23:41 62.9	31/8/2014 0:46 61.2	1/9/2014 1:51 58.8
25/9/2014 19:46 63.2	27/9/2014 20:51 62.6	28/8/2014 6:41 61.6 28/8/2014 6:46 62.7	29/8/2014 23:46 63.4	31/8/2014 0:51 61.5 31/8/2014 0:56 61.3	1/9/2014 1:56 57.0
25/9/2014 19:51 63.0 25/9/2014 19:56 61.8	27/9/2014 20:56 60.2 27/9/2014 21:01 61.5	28/8/2014 6:51 62.3	29/8/2014 23:51 62.7 29/8/2014 23:56 63.0	31/8/2014 1:01 62.2	1/9/2014 2:01 55.8 1/9/2014 2:06 56.2
25/9/2014 20:01 62.7	27/9/2014 21:06 61.0	28/8/2014 6:56 62.5	30/8/2014 0:01 62.9	31/8/2014 1:06 61.7	1/9/2014 2:11 56.3
25/9/2014 20:06 62.2	27/9/2014 21:11 62.0	28/8/2014 23:01 64.2	30/8/2014 0:06 63.3	31/8/2014 1:11 60.6	1/9/2014 2:16 57.3
25/9/2014 20:11 61.5	27/9/2014 21:16 61.5	28/8/2014 23:06 63.5	30/8/2014 0:11 63.4	31/8/2014 1:16 59.7	1/9/2014 2:21 56.1
25/9/2014 20:16 62.4	27/9/2014 21:21 62.8	28/8/2014 23:11 63.8	30/8/2014 0:16 63.0	31/8/2014 1:21 60.6	1/9/2014 2:26 56.1
25/9/2014 20:21 62.6	27/9/2014 21:26 59.8	28/8/2014 23:16 64.1	30/8/2014 0:21 62.5	31/8/2014 1:26 60.6	1/9/2014 2:31 55.5
25/9/2014 20:26 62.1	27/9/2014 21:31 61.1	28/8/2014 23:21 63.5	30/8/2014 0:26 62.4	31/8/2014 1:31 60.1	1/9/2014 2:36 57.2
25/9/2014 20:31 62.0	27/9/2014 21:36 61.3	28/8/2014 23:26 63.6	30/8/2014 0:31 63.2	31/8/2014 1:36 60.5	1/9/2014 2:41 52.9
25/9/2014 20:36 63.1	27/9/2014 21:41 60.3	28/8/2014 23:31 63.4	30/8/2014 0:36 62.6	31/8/2014 1:41 59.5	1/9/2014 2:46 55.9
25/9/2014 20:41 62.7	27/9/2014 21:46 62.2	28/8/2014 23:36 64.1	30/8/2014 0:41 61.9	31/8/2014 1:46 60.3	1/9/2014 2:51 55.3
25/9/2014 20:46 62.0	27/9/2014 21:51 61.7	28/8/2014 23:41 63.3	30/8/2014 0:46 61.9	31/8/2014 1:51 60.0	1/9/2014 2:56 55.7
25/9/2014 20:51 61.2	27/9/2014 21:56 61.2	28/8/2014 23:46 63.5	30/8/2014 0:51 62.1	31/8/2014 1:56 60.4	1/9/2014 3:01 54.9
25/9/2014 20:56 61.6	27/9/2014 22:01 61.8	28/8/2014 23:51 64.1	30/8/2014 0:56 61.7	31/8/2014 2:01 60.5	1/9/2014 3:06 55.3
25/9/2014 21:01 61.6	27/9/2014 22:06 60.6	28/8/2014 23:56 63.3	30/8/2014 1:01 63.1	31/8/2014 2:06 60.3	1/9/2014 3:11 51.6
25/9/2014 21:06 62.1	27/9/2014 22:11 61.1	29/8/2014 0:01 63.2	30/8/2014 1:06 61.2	31/8/2014 2:11 61.3	1/9/2014 3:16 48.6
25/9/2014 21:11 62.4	27/9/2014 22:16 61.7	29/8/2014 0:06 64.0	30/8/2014 1:11 61.8	31/8/2014 2:16 59.4	1/9/2014 3:21 51.4
25/9/2014 21:16 61.8	27/9/2014 22:21 60.7	29/8/2014 0:11 63.6	30/8/2014 1:16 62.3	31/8/2014 2:21 59.8	1/9/2014 3:26 50.2
25/9/2014 21:21 62.3	27/9/2014 22:26 60.6	29/8/2014 0:16 62.7	30/8/2014 1:21 61.3	31/8/2014 2:26 59.8	1/9/2014 3:31 47.3

Real-time Noise 1/9/2014 3:36	Data 54.5	RTN2a (Hong Kong Electric Centr 2/9/2014 4:41 50.0	<u>e)</u> 3/9/2014 5:46 57.9	4/9/2014 6:51 62.7	5/9/2014 23:56 62.9	7/9/2014 1:01 61.3
1/9/2014 3:41	49.6	2/9/2014 4:46 51.7	3/9/2014 5:51 57.3	4/9/2014 6:56 62.4	6/9/2014 0:01 63.7	7/9/2014 1:06 60.8
1/9/2014 3:46 1/9/2014 3:51	49.8 50.4	2/9/2014 4:51 53.1 2/9/2014 4:56 51.2	3/9/2014 5:56 57.3 3/9/2014 6:01 59.0	4/9/2014 23:01 64.3 4/9/2014 23:06 63.9	6/9/2014 0:06 63.2 6/9/2014 0:11 64.2	7/9/2014 1:11 61.2 7/9/2014 1:16 60.6
1/9/2014 3:56	49.2	2/9/2014 5:01 50.8	3/9/2014 6:06 58.7	4/9/2014 23:11 63.8	6/9/2014 0:16 63.6	7/9/2014 1:21 61.2
1/9/2014 4:01 1/9/2014 4:06	55.0 52.7	2/9/2014 5:06 53.4 2/9/2014 5:11 54.8	3/9/2014 6:11 59.3 3/9/2014 6:16 59.7	4/9/2014 23:16 63.7 4/9/2014 23:21 65.1	6/9/2014 0:21 63.5 6/9/2014 0:26 62.8	7/9/2014 1:26 60.6 7/9/2014 1:31 60.4
1/9/2014 4:11	50.6	2/9/2014 5:16 56.2	3/9/2014 6:21 61.3	4/9/2014 23:26 63.6	6/9/2014 0:31 62.5	7/9/2014 1:36 59.8
1/9/2014 4:16	52.3 54.4	2/9/2014 5:21 55.7 2/9/2014 5:26 55.4	3/9/2014 6:26 61.2 3/9/2014 6:31 61.3	4/9/2014 23:31 63.5 4/9/2014 23:36 63.6	6/9/2014 0:36 62.5 6/9/2014 0:41 62.0	7/9/2014 1:41 59.7 7/9/2014 1:46 60.0
1/9/2014 4:21 1/9/2014 4:26	54.4 52.8	2/9/2014 5:26 55.4 2/9/2014 5:31 55.4	3/9/2014 6:31 61.3 3/9/2014 6:36 61.6	4/9/2014 23:36 63.6 4/9/2014 23:41 63.0	6/9/2014 0:41 62.0	7/9/2014 1:51 59.9
1/9/2014 4:31	53.6	2/9/2014 5:36 55.3	3/9/2014 6:41 62.1	4/9/2014 23:46 63.9	6/9/2014 0:51 62.6	7/9/2014 1:56 60.4
1/9/2014 4:36 1/9/2014 4:41	51.9 36.7	2/9/2014 5:41 55.3 2/9/2014 5:46 56.3	3/9/2014 6:46 62.5 3/9/2014 6:51 63.4	4/9/2014 23:51 63.3 4/9/2014 23:56 62.7	6/9/2014 0:56 62.3 6/9/2014 1:01 61.9	7/9/2014 2:01 60.0 7/9/2014 2:06 59.4
1/9/2014 4:46	48.0	2/9/2014 5:51 59.1	3/9/2014 6:56 62.5	5/9/2014 0:01 62.7	6/9/2014 1:06 61.9	7/9/2014 2:11 59.6
1/9/2014 4:51 1/9/2014 4:56	49.7 52.1	2/9/2014 5:56 58.3 2/9/2014 6:01 57.8	3/9/2014 23:01 63.4 3/9/2014 23:06 63.0	5/9/2014 0:06 62.4 5/9/2014 0:11 62.4	6/9/2014 1:11 63.5 6/9/2014 1:16 61.2	7/9/2014 2:16 60.1 7/9/2014 2:21 59.3
1/9/2014 5:01	52.2	2/9/2014 6:06 58.0	3/9/2014 23:11 63.7	5/9/2014 0:16 62.6	6/9/2014 1:21 60.9	7/9/2014 2:26 61.1
1/9/2014 5:06 1/9/2014 5:11	52.6 50.1	2/9/2014 6:11 58.4 2/9/2014 6:16 60.7	3/9/2014 23:16 64.9 3/9/2014 23:21 64.0	5/9/2014 0:21 61.5 5/9/2014 0:26 61.7	6/9/2014 1:26 60.6 6/9/2014 1:31 61.1	7/9/2014 2:31 59.6 7/9/2014 2:36 58.6
1/9/2014 5:16	53.6	2/9/2014 6:21 60.3	3/9/2014 23:26 62.3	5/9/2014 0:20 01:7	6/9/2014 1:36 61.4	7/9/2014 2:41 58.7
1/9/2014 5:21	55.9	2/9/2014 6:26 60.1	3/9/2014 23:31 63.3 3/9/2014 23:36 62.3	5/9/2014 0:36 61.9	6/9/2014 1:41 60.5	7/9/2014 2:46 58.6 7/9/2014 2:51 58.0
1/9/2014 5:26 1/9/2014 5:31	55.6 54.3	2/9/2014 6:31 61.1 2/9/2014 6:36 61.0	3/9/2014 23:36 62.3 3/9/2014 23:41 62.3	5/9/2014 0:41 61.0 5/9/2014 0:46 61.6	6/9/2014 1:46 60.8 6/9/2014 1:51 60.3	7/9/2014 2:56 57.7
1/9/2014 5:36	56.6	2/9/2014 6:41 61.7	3/9/2014 23:46 61.7	5/9/2014 0:51 61.3	6/9/2014 1:56 61.4	7/9/2014 3:01 60.6
1/9/2014 5:41 1/9/2014 5:46	57.3 57.0	2/9/2014 6:46 62.8 2/9/2014 6:51 63.1	3/9/2014 23:51 62.3 3/9/2014 23:56 61.9	5/9/2014 0:56 60.5 5/9/2014 1:01 60.9	6/9/2014 2:01 60.1 6/9/2014 2:06 59.3	7/9/2014 3:06 58.8 7/9/2014 3:11 58.2
1/9/2014 5:51	58.4	2/9/2014 6:56 62.9	4/9/2014 0:01 62.2	5/9/2014 1:06 59.6	6/9/2014 2:11 59.4	7/9/2014 3:16 56.7
1/9/2014 5:56 1/9/2014 6:01	58.7 59.2	2/9/2014 23:01 63.2 2/9/2014 23:06 62.8	4/9/2014 0:06 62.2 4/9/2014 0:11 62.2	5/9/2014 1:11 60.4 5/9/2014 1:16 60.9	6/9/2014 2:16 59.6 6/9/2014 2:21 60.4	7/9/2014 3:21 58.0 7/9/2014 3:26 57.0
1/9/2014 6:06	59.4	2/9/2014 23:11 62.2	4/9/2014 0:16 61.6	5/9/2014 1:21 59.9	6/9/2014 2:26 60.4	7/9/2014 3:31 58.3
1/9/2014 6:11 1/9/2014 6:16	59.5 60.3	2/9/2014 23:16 63.4 2/9/2014 23:21 62.1	4/9/2014 0:21 61.7 4/9/2014 0:26 61.5	5/9/2014 1:26 60.4 5/9/2014 1:31 59.9	6/9/2014 2:31 60.3 6/9/2014 2:36 59.9	7/9/2014 3:36 58.5 7/9/2014 3:41 57.0
1/9/2014 6:10	61.8	2/9/2014 23:21 62:1	4/9/2014 0:31 61.4	5/9/2014 1:36 59.3	6/9/2014 2:41 60.5	7/9/2014 3:46 57.1
1/9/2014 6:26	60.6	2/9/2014 23:31 62.7	4/9/2014 0:36 61.2	5/9/2014 1:41 59.1	6/9/2014 2:46 60.2	7/9/2014 3:51 57.4
1/9/2014 6:31 1/9/2014 6:36	61.0 61.6	2/9/2014 23:36 63.3 2/9/2014 23:41 63.0	4/9/2014 0:41 60.6 4/9/2014 0:46 60.4	5/9/2014 1:46 59.7 5/9/2014 1:51 59.2	6/9/2014 2:51 59.8 6/9/2014 2:56 59.3	7/9/2014 3:56 57.2 7/9/2014 4:01 55.6
1/9/2014 6:41	62.4	2/9/2014 23:46 62.4	4/9/2014 0:51 59.8	5/9/2014 1:56 59.0	6/9/2014 3:01 59.5	7/9/2014 4:06 57.0
1/9/2014 6:46 1/9/2014 6:51	62.8 63.4	2/9/2014 23:51 62.0 2/9/2014 23:56 64.9	4/9/2014 0:56 60.5 4/9/2014 1:01 59.5	5/9/2014 2:01 59.2 5/9/2014 2:06 57.8	6/9/2014 3:06 59.3 6/9/2014 3:11 59.5	7/9/2014 4:11 54.9 7/9/2014 4:16 56.2
1/9/2014 6:56	63.2	3/9/2014 0:01 62.4	4/9/2014 1:06 59.5	5/9/2014 2:11 57.9	6/9/2014 3:16 58.4	7/9/2014 4:21 55.9
1/9/2014 23:01 1/9/2014 23:06	62.3 63.3	3/9/2014 0:06 61.8 3/9/2014 0:11 61.7	4/9/2014 1:11 59.6 4/9/2014 1:16 57.9	5/9/2014 2:16 56.5 5/9/2014 2:21 57.6	6/9/2014 3:21 59.4 6/9/2014 3:26 58.3	7/9/2014 4:26 54.5 7/9/2014 4:31 57.8
1/9/2014 23:11	62.3	3/9/2014 0:16 62.0	4/9/2014 1:21 58.6	5/9/2014 2:26 56.7	6/9/2014 3:31 59.2	7/9/2014 4:36 57.4
1/9/2014 23:16 1/9/2014 23:21	63.2 62.8	3/9/2014 0:21 61.1 3/9/2014 0:26 61.1	4/9/2014 1:26 58.4 4/9/2014 1:31 57.8	5/9/2014 2:31 58.9 5/9/2014 2:36 55.1	6/9/2014 3:36 58.9 6/9/2014 3:41 57.8	7/9/2014 4:41 55.4 7/9/2014 4:46 56.1
1/9/2014 23:26	62.6	3/9/2014 0:20 61:1	4/9/2014 1:36 59.0	5/9/2014 2:41 56.3	6/9/2014 3:46 58.1	7/9/2014 4:51 56.0
1/9/2014 23:31	62.1	3/9/2014 0:36 60.8	4/9/2014 1:41 58.4	5/9/2014 2:46 56.6	6/9/2014 3:51 57.1	7/9/2014 4:56 55.3
1/9/2014 23:36 1/9/2014 23:41	62.4 61.8	3/9/2014 0:41 60.9 3/9/2014 0:46 60.1	4/9/2014 1:46 59.3 4/9/2014 1:51 58.4	5/9/2014 2:51 53.5 5/9/2014 2:56 54.2	6/9/2014 3:56 59.0 6/9/2014 4:01 56.4	7/9/2014 5:01 56.6 7/9/2014 5:06 56.1
1/9/2014 23:46	64.2	3/9/2014 0:51 60.0	4/9/2014 1:56 58.1	5/9/2014 3:01 49.9	6/9/2014 4:06 56.5	7/9/2014 5:11 56.0
1/9/2014 23:51 1/9/2014 23:56	62.1 61.3	3/9/2014 0:56 60.0 3/9/2014 1:01 60.8	4/9/2014 2:01 58.7 4/9/2014 2:06 56.5	5/9/2014 3:06 55.3 5/9/2014 3:11 53.6	6/9/2014 4:11 57.2 6/9/2014 4:16 57.7	7/9/2014 5:16 57.9 7/9/2014 5:21 56.5
2/9/2014 0:01	61.2	3/9/2014 1:06 59.4	4/9/2014 2:11 57.9	5/9/2014 3:16 55.4	6/9/2014 4:21 57.5	7/9/2014 5:26 56.5
2/9/2014 0:06 2/9/2014 0:11	61.4 61.6	3/9/2014 1:11 59.0 3/9/2014 1:16 58.7	4/9/2014 2:16 57.3 4/9/2014 2:21 58.2	5/9/2014 3:21 54.8 5/9/2014 3:26 54.7	6/9/2014 4:26 57.4 6/9/2014 4:31 55.9	7/9/2014 5:31 56.1 7/9/2014 5:36 56.0
2/9/2014 0:16	62.2	3/9/2014 1:21 60.4	4/9/2014 2:26 55.7	5/9/2014 3:31 52.7	6/9/2014 4:36 56.9	7/9/2014 5:41 55.5
2/9/2014 0:21 2/9/2014 0:26	60.2 61.7	3/9/2014 1:26 57.9 3/9/2014 1:31 57.0	4/9/2014 2:31 56.2 4/9/2014 2:36 56.1	5/9/2014 3:36 55.1 5/9/2014 3:41 52.0	6/9/2014 4:41 57.6 6/9/2014 4:46 56.9	7/9/2014 5:46 56.1 7/9/2014 5:51 57.2
2/9/2014 0:31	60.9	3/9/2014 1:36 58.4	4/9/2014 2:41 56.4	5/9/2014 3:46 55.4	6/9/2014 4:51 63.2	7/9/2014 5:56 57.0
2/9/2014 0:36	60.2	3/9/2014 1:41 58.0	4/9/2014 2:46 55.4	5/9/2014 3:51 55.2	6/9/2014 4:56 57.2	7/9/2014 6:01 57.2
2/9/2014 0:41 2/9/2014 0:46	59.6 60.5	3/9/2014 1:46 58.0 3/9/2014 1:51 57.7	4/9/2014 2:51 54.6 4/9/2014 2:56 55.5	5/9/2014 3:56 51.5 5/9/2014 4:01 50.2	6/9/2014 5:01 56.3 6/9/2014 5:06 56.6	7/9/2014 6:06 57.8 7/9/2014 6:11 58.2
2/9/2014 0:51	59.6	3/9/2014 1:56 57.9	4/9/2014 3:01 52.9	5/9/2014 4:06 52.3	6/9/2014 5:11 59.9	7/9/2014 6:16 57.8
2/9/2014 0:56 2/9/2014 1:01	59.9 59.5	3/9/2014 2:01 56.2 3/9/2014 2:06 56.8	4/9/2014 3:06 54.5 4/9/2014 3:11 54.9	5/9/2014 4:11 49.2 5/9/2014 4:16 53.3	6/9/2014 5:16 56.2 6/9/2014 5:21 58.4	7/9/2014 6:21 59.1 7/9/2014 6:26 58.9
2/9/2014 1:06	60.0	3/9/2014 2:11 58.2	4/9/2014 3:16 55.6	5/9/2014 4:21 53.3	6/9/2014 5:26 58.2	7/9/2014 6:31 59.2
2/9/2014 1:11 2/9/2014 1:16	59.5 58.4	3/9/2014 2:16 56.4 3/9/2014 2:21 57.6	4/9/2014 3:21 52.2 4/9/2014 3:26 55.5	5/9/2014 4:26 53.6 5/9/2014 4:31 52.4	6/9/2014 5:31 57.4 6/9/2014 5:36 57.9	7/9/2014 6:36 59.7 7/9/2014 6:41 59.8
2/9/2014 1:21	59.8	3/9/2014 2:26 55.5	4/9/2014 3:31 36.7	5/9/2014 4:36 56.0	6/9/2014 5:41 58.4	7/9/2014 6:46 59.5
2/9/2014 1:26 2/9/2014 1:31	58.8 58.1	3/9/2014 2:31 56.0 3/9/2014 2:36 57.5	4/9/2014 3:36 52.1 4/9/2014 3:41 50.5	5/9/2014 4:41 56.2 5/9/2014 4:46 55.2	6/9/2014 5:46 58.4 6/9/2014 5:51 58.6	7/9/2014 6:51 60.2 7/9/2014 6:56 60.1
2/9/2014 1:36	58.2	3/9/2014 2:41 53.6	4/9/2014 3:46 52.6	5/9/2014 4:51 52.9	6/9/2014 5:56 58.5	7/9/2014 23:01 58.7
2/9/2014 1:41 2/9/2014 1:46	57.8 58.6	3/9/2014 2:46 53.7 3/9/2014 2:51 54.2	4/9/2014 3:51 52.7 4/9/2014 3:56 53.6	5/9/2014 4:56 52.8 5/9/2014 5:01 53.7	6/9/2014 6:01 57.8 6/9/2014 6:06 59.7	7/9/2014 23:06 59.1 7/9/2014 23:11 59.1
2/9/2014 1:51	58.6	3/9/2014 2:56 53.5	4/9/2014 4:01 51.6	5/9/2014 5:06 54.9	6/9/2014 6:11 59.7	7/9/2014 23:16 57.5
2/9/2014 1:56	57.0	3/9/2014 3:01 53.5	4/9/2014 4:06 49.5	5/9/2014 5:11 56.2	6/9/2014 6:16 59.8	7/9/2014 23:21 57.5
2/9/2014 2:01 2/9/2014 2:06	58.6 55.9	3/9/2014 3:06 53.8 3/9/2014 3:11 53.2	4/9/2014 4:16 53.4	5/9/2014 5:21 55.2	6/9/2014 6:21 58.4 6/9/2014 6:26 60.9	7/9/2014 23:26 56.6 7/9/2014 23:31 57.6
2/9/2014 2:11	56.5	3/9/2014 3:16 52.1	4/9/2014 4:21 50.5	5/9/2014 5:26 55.5	6/9/2014 6:31 60.5	7/9/2014 23:36 56.9
2/9/2014 2:16 2/9/2014 2:21	55.4 57.3	3/9/2014 3:21 53.6 3/9/2014 3:26 52.6	4/9/2014 4:26 51.3 4/9/2014 4:31 51.7	5/9/2014 5:31 56.9 5/9/2014 5:36 55.8	6/9/2014 6:36 60.8 6/9/2014 6:41 61.1	7/9/2014 23:41 58.1 7/9/2014 23:46 57.7
2/9/2014 2:26	56.0	3/9/2014 3:31 54.7	4/9/2014 4:36 50.5	5/9/2014 5:41 56.7	6/9/2014 6:46 61.7	7/9/2014 23:51 56.5
2/9/2014 2:31 2/9/2014 2:36	53.3 57.2	3/9/2014 3:36 49.9 3/9/2014 3:41 50.5	4/9/2014 4:41 48.6 4/9/2014 4:46 54.0	5/9/2014 5:46 57.7 5/9/2014 5:51 59.0	6/9/2014 6:51 62.7 6/9/2014 6:56 61.4	7/9/2014 23:56 57.5 8/9/2014 0:01 58.2
2/9/2014 2:41	55.7	3/9/2014 3:46 56.7	4/9/2014 4:51 53.8	5/9/2014 5:56 57.3	6/9/2014 23:01 64.3	8/9/2014 0:06 57.5
2/9/2014 2:46	53.3	3/9/2014 3:51 54.0	4/9/2014 4:56 49.4	5/9/2014 6:01 58.6	6/9/2014 23:06 62.2	8/9/2014 0:11 56.9
2/9/2014 2:51 2/9/2014 2:56	55.6 53.6	3/9/2014 3:56 53.4 3/9/2014 4:01 48.9	4/9/2014 5:01 54.6 4/9/2014 5:06 53.8	5/9/2014 6:06 58.9 5/9/2014 6:11 59.8	6/9/2014 23:11 62.3 6/9/2014 23:16 62.3	8/9/2014 0:16 56.9 8/9/2014 0:21 58.3
2/9/2014 3:01	52.0	3/9/2014 4:06 54.5	4/9/2014 5:11 54.4	5/9/2014 6:16 60.0	6/9/2014 23:21 62.0	8/9/2014 0:26 55.8
2/9/2014 3:06 2/9/2014 3:11	54.3 50.2	3/9/2014 4:11 53.5 3/9/2014 4:16 47.1	4/9/2014 5:16 50.7 4/9/2014 5:21 53.4	5/9/2014 6:21 60.7 5/9/2014 6:26 62.0	6/9/2014 23:26 62.4 6/9/2014 23:31 62.3	8/9/2014 0:31 56.4 8/9/2014 0:36 56.7
2/9/2014 3:16	51.5	3/9/2014 4:21 50.2	4/9/2014 5:26 54.4	5/9/2014 6:31 62.1	6/9/2014 23:36 63.5	8/9/2014 0:41 54.4
2/9/2014 3:21 2/9/2014 3:26	54.3 52.2	3/9/2014 4:26 53.3 3/9/2014 4:31 51.6	4/9/2014 5:31 57.1 4/9/2014 5:36 56.4	5/9/2014 6:36 62.0 5/9/2014 6:41 62.6	6/9/2014 23:41 62.7 6/9/2014 23:46 63.4	8/9/2014 0:46 54.2 8/9/2014 0:51 50.9
2/9/2014 3:31	43.5	3/9/2014 4:36 53.5	4/9/2014 5:41 54.3	5/9/2014 6:46 62.8	6/9/2014 23:51 62.0	8/9/2014 0:56 36.7
2/9/2014 3:36 2/9/2014 3:41	57.0 49.5	3/9/2014 4:41 51.2 3/9/2014 4:46 54.5	4/9/2014 5:46 57.3 4/9/2014 5:51 57.8	5/9/2014 6:51 63.1 5/9/2014 6:56 62.6	6/9/2014 23:56 62.7 7/9/2014 0:01 62.4	8/9/2014 1:01 45.7 8/9/2014 1:06 52.7
2/9/2014 3:41 2/9/2014 3:46	49.5 52.2	3/9/2014 4:51 53.4	4/9/2014 5:56 57.4	5/9/2014 23:01 63.2	7/9/2014 0:06 62.5	8/9/2014 1:11 51.6
2/9/2014 3:51	50.6	3/9/2014 4:56 54.2	4/9/2014 6:01 57.1	5/9/2014 23:06 63.9	7/9/2014 0:11 62.4	8/9/2014 1:16 38.9
2/9/2014 3:56 2/9/2014 4:01	50.7 51.8	3/9/2014 5:01 54.9 3/9/2014 5:06 54.5	4/9/2014 6:06 58.1 4/9/2014 6:11 58.2	5/9/2014 23:11 63.6 5/9/2014 23:16 64.0	7/9/2014 0:16 62.5 7/9/2014 0:21 62.5	8/9/2014 1:21 46.7 8/9/2014 1:26 45.5
2/9/2014 4:06	49.8	3/9/2014 5:11 53.1	4/9/2014 6:16 59.6	5/9/2014 23:21 63.5	7/9/2014 0:26 62.6	8/9/2014 1:31 57.6
2/9/2014 4:11 2/9/2014 4:16	46.8 46.8	3/9/2014 5:16 53.5 3/9/2014 5:21 57.3	4/9/2014 6:21 59.2 4/9/2014 6:26 60.6	5/9/2014 23:26 63.1 5/9/2014 23:31 63.3	7/9/2014 0:31 62.3 7/9/2014 0:36 64.0	8/9/2014 1:36 57.9 8/9/2014 1:41 57.9
2/9/2014 4:21	52.4	3/9/2014 5:26 56.4	4/9/2014 6:31 60.4	5/9/2014 23:36 63.2	7/9/2014 0:41 62.4	8/9/2014 1:46 57.5
2/9/2014 4:26 2/9/2014 4:31	52.5 50.4	3/9/2014 5:31 55.2 3/9/2014 5:36 56.6	4/9/2014 6:36 60.9 4/9/2014 6:41 61.9	5/9/2014 23:41 63.7 5/9/2014 23:46 63.3	7/9/2014 0:46 61.5 7/9/2014 0:51 61.0	8/9/2014 1:51 47.3 8/9/2014 1:56 55.3
2/9/2014 4:36	52.2	3/9/2014 5:41 57.2	4/9/2014 6:46 62.6	5/9/2014 23:51 63.6	7/9/2014 0:56 60.8	8/9/2014 2:01 56.0

Daal tinaa Naisa	D-4-	DTNO. (Hann Kann Flantin Control				
Real-time Noise 8/9/2014 2:06	55.4	RTN2a (Hong Kong Electric Centre 9/9/2014 3:11 58.7	<u>)</u> 10/9/2014 4:16 57.2	11/9/2014 5:21 56.1	12/9/2014 6:26 62.2	13/9/2014 23:31 64.2
8/9/2014 2:11 8/9/2014 2:16	53.5 53.9	9/9/2014 3:16 57.4 9/9/2014 3:21 58.7	10/9/2014 4:21 51.5 10/9/2014 4:26 47.5	11/9/2014 5:26 56.8 11/9/2014 5:31 56.9	12/9/2014 6:31 62.5 12/9/2014 6:36 63.0	13/9/2014 23:36 63.5 13/9/2014 23:41 63.2
8/9/2014 2:10	54.6	9/9/2014 3:26 58.0	10/9/2014 4:31 51.8	11/9/2014 5:36 54.5	12/9/2014 6:36 63.6	13/9/2014 23:46 62.6
8/9/2014 2:26	54.2	9/9/2014 3:31 57.6	10/9/2014 4:36 50.5	11/9/2014 5:41 54.0	12/9/2014 6:46 64.0	13/9/2014 23:51 62.5
8/9/2014 2:31 8/9/2014 2:36	51.2 52.1	9/9/2014 3:36 58.9 9/9/2014 3:41 57.8	10/9/2014 4:41 47.5 10/9/2014 4:46 50.4	11/9/2014 5:46 56.7 11/9/2014 5:51 56.5	12/9/2014 6:51 64.0 12/9/2014 6:56 64.2	13/9/2014 23:56 63.3 14/9/2014 0:01 62.9
8/9/2014 2:41	53.3	9/9/2014 3:46 57.5	10/9/2014 4:51 46.7	11/9/2014 5:56 56.5	12/9/2014 23:01 65.2	14/9/2014 0:06 64.1
8/9/2014 2:46 8/9/2014 2:51	53.3 58.5	9/9/2014 3:51 58.4 9/9/2014 3:56 58.2	10/9/2014 4:56 52.1 10/9/2014 5:01 52.2	11/9/2014 6:01 57.3 11/9/2014 6:06 58.1	12/9/2014 23:06 68.3 12/9/2014 23:11 64.8	14/9/2014 0:11 63.7 14/9/2014 0:16 62.3
8/9/2014 2:56	50.8	9/9/2014 4:01 56.9	10/9/2014 5:06 54.0	11/9/2014 6:11 59.0	12/9/2014 23:16 64.7	14/9/2014 0:21 62.7
8/9/2014 3:01 8/9/2014 3:06	46.4 48.4	9/9/2014 4:06 57.0 9/9/2014 4:11 57.3	10/9/2014 5:11 50.5 10/9/2014 5:16 53.4	11/9/2014 6:16 59.1 11/9/2014 6:21 60.3	12/9/2014 23:21 64.7 12/9/2014 23:26 64.9	14/9/2014 0:26 62.6 14/9/2014 0:31 62.7
8/9/2014 3:11	57.7	9/9/2014 4:11 57:3	10/9/2014 5:21 52.9	11/9/2014 6:26 61.1	12/9/2014 23:20 04:3	14/9/2014 0:36 62.0
8/9/2014 3:16	48.8	9/9/2014 4:21 61.4	10/9/2014 5:26 55.7	11/9/2014 6:31 60.8	12/9/2014 23:36 64.1	14/9/2014 0:41 63.1
8/9/2014 3:21 8/9/2014 3:26	40.4 48.6	9/9/2014 4:26 57.1 9/9/2014 4:31 61.9	10/9/2014 5:31 54.1 10/9/2014 5:36 55.6	11/9/2014 6:36 61.6 11/9/2014 6:41 61.7	12/9/2014 23:41 64.5 12/9/2014 23:46 64.8	14/9/2014 0:46 61.7 14/9/2014 0:51 61.3
8/9/2014 3:31	58.2	9/9/2014 4:36 58.3	10/9/2014 5:41 57.3	11/9/2014 6:46 62.8	12/9/2014 23:51 64.2	14/9/2014 0:56 61.3
8/9/2014 3:36 8/9/2014 3:41	49.8 51.4	9/9/2014 4:41 59.1 9/9/2014 4:46 59.4	10/9/2014 5:46 56.1 10/9/2014 5:51 57.8	11/9/2014 6:51 62.8 11/9/2014 6:56 62.7	12/9/2014 23:56 64.2 13/9/2014 0:01 64.5	14/9/2014 1:01 60.9 14/9/2014 1:06 60.3
8/9/2014 3:46	46.0	9/9/2014 4:51 57.0	10/9/2014 5:56 57.3	11/9/2014 23:01 62.9	13/9/2014 0:06 64.5	14/9/2014 1:11 60.4
8/9/2014 3:51 8/9/2014 3:56	50.2 49.6	9/9/2014 4:56 57.3 9/9/2014 5:01 57.9	10/9/2014 6:01 58.9 10/9/2014 6:06 57.2	11/9/2014 23:06 62.7 11/9/2014 23:11 62.6	13/9/2014 0:11 64.1 13/9/2014 0:16 63.8	14/9/2014 1:16 60.7 14/9/2014 1:21 60.2
8/9/2014 4:01	58.0	9/9/2014 5:06 57.0	10/9/2014 6:11 59.3	11/9/2014 23:16 63.1	13/9/2014 0:21 63.2	14/9/2014 1:26 60.9
8/9/2014 4:06 8/9/2014 4:11	42.4 40.4	9/9/2014 5:11 56.9 9/9/2014 5:16 57.9	10/9/2014 6:16 59.5 10/9/2014 6:21 60.1	11/9/2014 23:21 62.6 11/9/2014 23:26 63.2	13/9/2014 0:26 63.3 13/9/2014 0:31 63.9	14/9/2014 1:31 60.6 14/9/2014 1:36 60.6
8/9/2014 4:16	58.2	9/9/2014 5:21 58.3	10/9/2014 6:26 60.8	11/9/2014 23:20 03:2	13/9/2014 0:36 63.7	14/9/2014 1:41 60.2
8/9/2014 4:21	49.4	9/9/2014 5:26 57.3	10/9/2014 6:31 61.3	11/9/2014 23:36 62.2	13/9/2014 0:41 63.3	14/9/2014 1:46 60.7
8/9/2014 4:26 8/9/2014 4:31	51.9 46.0	9/9/2014 5:31 58.4 9/9/2014 5:36 57.3	10/9/2014 6:36 61.0 10/9/2014 6:41 62.1	11/9/2014 23:41 63.4 11/9/2014 23:46 62.3	13/9/2014 0:46 62.9 13/9/2014 0:51 63.2	14/9/2014 1:51 60.5 14/9/2014 1:56 60.7
8/9/2014 4:36	43.1	9/9/2014 5:41 61.0	10/9/2014 6:46 62.2	11/9/2014 23:51 62.8	13/9/2014 0:56 62.9	14/9/2014 2:01 59.7
8/9/2014 4:41 8/9/2014 4:46	54.4 49.7	9/9/2014 5:46 57.8 9/9/2014 5:51 58.4	10/9/2014 6:51 63.4 10/9/2014 6:56 62.3	11/9/2014 23:56 62.2 12/9/2014 0:01 61.7	13/9/2014 1:01 62.3 13/9/2014 1:06 62.8	14/9/2014 2:06 60.7 14/9/2014 2:11 59.8
8/9/2014 4:51	52.5	9/9/2014 5:56 59.0	10/9/2014 23:01 63.0	12/9/2014 0:06 61.3	13/9/2014 1:11 62.4	14/9/2014 2:16 59.7
8/9/2014 4:56 8/9/2014 5:01	48.7 51.3	9/9/2014 6:01 59.0 9/9/2014 6:06 58.3	10/9/2014 23:06 62.1 10/9/2014 23:11 63.0	12/9/2014 0:11 61.6 12/9/2014 0:16 61.8	13/9/2014 1:16 62.5 13/9/2014 1:21 63.6	14/9/2014 2:21 60.4 14/9/2014 2:26 59.7
8/9/2014 5:06	58.1	9/9/2014 6:11 59.4	10/9/2014 23:16 62.5	12/9/2014 0:10 01:0	13/9/2014 1:26 62.2	14/9/2014 2:31 60.5
8/9/2014 5:11	50.0	9/9/2014 6:16 60.2	10/9/2014 23:21 63.4	12/9/2014 0:26 61.9	13/9/2014 1:31 62.1	14/9/2014 2:36 59.8
8/9/2014 5:16 8/9/2014 5:21	48.7 52.8	9/9/2014 6:21 59.5 9/9/2014 6:26 59.7	10/9/2014 23:26 62.6 10/9/2014 23:31 62.3	12/9/2014 0:31 60.8 12/9/2014 0:36 60.6	13/9/2014 1:36 62.0 13/9/2014 1:41 62.2	14/9/2014 2:41 58.9 14/9/2014 2:46 59.7
8/9/2014 5:26	53.1	9/9/2014 6:31 60.5	10/9/2014 23:36 62.4	12/9/2014 0:41 60.2	13/9/2014 1:46 61.8	14/9/2014 2:51 60.3
8/9/2014 5:31 8/9/2014 5:36	52.9 55.9	9/9/2014 6:36 60.8 9/9/2014 6:41 61.0	10/9/2014 23:41 62.5 10/9/2014 23:46 62.6	12/9/2014 0:46 60.0 12/9/2014 0:51 59.0	13/9/2014 1:51 61.3 13/9/2014 1:56 61.3	14/9/2014 2:56 59.9 14/9/2014 3:01 58.9
8/9/2014 5:41	56.4	9/9/2014 6:46 61.0	10/9/2014 23:51 61.9	12/9/2014 0:56 59.4	13/9/2014 2:01 61.5	14/9/2014 3:06 59.6
8/9/2014 5:46 8/9/2014 5:51	55.4 57.1	9/9/2014 6:51 61.1 9/9/2014 6:56 62.7	10/9/2014 23:56 61.8 11/9/2014 0:01 61.4	12/9/2014 1:01 59.5 12/9/2014 1:06 58.8	13/9/2014 2:06 61.5 13/9/2014 2:11 61.5	14/9/2014 3:11 59.7 14/9/2014 3:16 58.6
8/9/2014 5:56	57.0	9/9/2014 23:01 63.4	11/9/2014 0:06 61.4	12/9/2014 1:11 58.9	13/9/2014 2:16 61.4	14/9/2014 3:21 58.5
8/9/2014 6:01	56.0 56.5	9/9/2014 23:06 62.6 9/9/2014 23:11 63.5	11/9/2014 0:11 62.0 11/9/2014 0:16 60.7	12/9/2014 1:16 58.9 12/9/2014 1:21 58.7	13/9/2014 2:21 60.8 13/9/2014 2:26 62.3	14/9/2014 3:26 57.4
8/9/2014 6:06 8/9/2014 6:11	58.6	9/9/2014 23:11 63.5 9/9/2014 23:16 63.2	11/9/2014 0:16 60.7 11/9/2014 0:21 61.0	12/9/2014 1:21 58.7 12/9/2014 1:26 58.8	13/9/2014 2:26 62.3 13/9/2014 2:31 63.5	14/9/2014 3:31 57.4 14/9/2014 3:36 58.2
8/9/2014 6:16	59.7	9/9/2014 23:21 62.5	11/9/2014 0:26 60.9	12/9/2014 1:31 58.8	13/9/2014 2:36 61.3	14/9/2014 3:41 57.7
8/9/2014 6:21 8/9/2014 6:26	59.6 59.9	9/9/2014 23:26 62.3 9/9/2014 23:31 62.0	11/9/2014 0:31 60.0 11/9/2014 0:36 60.8	12/9/2014 1:36 57.1 12/9/2014 1:41 57.6	13/9/2014 2:41 61.1 13/9/2014 2:46 60.8	14/9/2014 3:46 57.4 14/9/2014 3:51 57.9
8/9/2014 6:31	61.1	9/9/2014 23:36 62.4	11/9/2014 0:41 61.2	12/9/2014 1:46 57.1	13/9/2014 2:51 60.1	14/9/2014 3:56 58.6
8/9/2014 6:36 8/9/2014 6:41	61.6 61.5	9/9/2014 23:41 61.5 9/9/2014 23:46 61.6	11/9/2014 0:46 60.5 11/9/2014 0:51 60.7	12/9/2014 1:51 56.8 12/9/2014 1:56 55.4	13/9/2014 2:56 60.9 13/9/2014 3:01 60.5	14/9/2014 4:01 58.7 14/9/2014 4:06 57.4
8/9/2014 6:46	62.0	9/9/2014 23:51 61.5	11/9/2014 0:56 59.1	12/9/2014 2:01 56.0	13/9/2014 3:06 59.9	14/9/2014 4:11 59.0
8/9/2014 6:51 8/9/2014 6:56	62.3 62.9	9/9/2014 23:56 61.2 10/9/2014 0:01 61.5	11/9/2014 1:01 60.8 11/9/2014 1:06 59.7	12/9/2014 2:06 54.2 12/9/2014 2:11 55.9	13/9/2014 3:11 58.7 13/9/2014 3:16 60.4	14/9/2014 4:16 56.7 14/9/2014 4:21 57.7
8/9/2014 23:01	63.8	10/9/2014 0:06 60.6	11/9/2014 1:11 58.2	12/9/2014 2:16 55.0	13/9/2014 3:21 60.3	14/9/2014 4:26 56.3
8/9/2014 23:06 8/9/2014 23:11	63.9 63.5	10/9/2014 0:11 61.0 10/9/2014 0:16 60.6	11/9/2014 1:16 58.7 11/9/2014 1:21 58.7	12/9/2014 2:21 55.7 12/9/2014 2:26 55.8	13/9/2014 3:26 61.1 13/9/2014 3:31 59.0	14/9/2014 4:31 56.8 14/9/2014 4:36 57.9
8/9/2014 23:16	63.2	10/9/2014 0:10 00:0	11/9/2014 1:26 58.1	12/9/2014 2:20 55.6	13/9/2014 3:36 60.1	14/9/2014 4:41 57.8
8/9/2014 23:21	63.7	10/9/2014 0:26 61.2	11/9/2014 1:31 57.4	12/9/2014 2:36 54.0	13/9/2014 3:41 59.6	14/9/2014 4:46 56.1
8/9/2014 23:26 8/9/2014 23:31	63.8 63.6	10/9/2014 0:31 59.5 10/9/2014 0:36 62.0	11/9/2014 1:36 57.5 11/9/2014 1:41 59.0	12/9/2014 2:41 54.6 12/9/2014 2:46 55.5	13/9/2014 3:46 58.7 13/9/2014 3:51 59.5	14/9/2014 4:51 58.2 14/9/2014 4:56 58.0
8/9/2014 23:36	63.5	10/9/2014 0:41 59.3	11/9/2014 1:46 57.7	12/9/2014 2:51 53.6	13/9/2014 3:56 59.5	14/9/2014 5:01 57.3
8/9/2014 23:41 8/9/2014 23:46	63.3 62.7	10/9/2014 0:46 59.4 10/9/2014 0:51 59.8	11/9/2014 1:51 59.0 11/9/2014 1:56 57.4	12/9/2014 2:56 56.3 12/9/2014 3:01 54.9	13/9/2014 4:01 58.3 13/9/2014 4:06 58.4	14/9/2014 5:06 55.7 14/9/2014 5:11 57.0
8/9/2014 23:51	63.0	10/9/2014 0:56 59.7	11/9/2014 2:01 57.7	12/9/2014 3:06 54.1	13/9/2014 4:11 58.3	14/9/2014 5:16 56.7
8/9/2014 23:56 9/9/2014 0:01	62.4 62.7	10/9/2014 1:01 59.9 10/9/2014 1:06 59.5	11/9/2014 2:06 57.3 11/9/2014 2:11 56.7	12/9/2014 3:11 50.3 12/9/2014 3:16 51.5	13/9/2014 4:16 57.7 13/9/2014 4:21 59.7	14/9/2014 5:21 57.0 14/9/2014 5:26 58.0
9/9/2014 0:06	63.1	10/9/2014 1:00 59:5	11/9/2014 2:16 55.2	12/9/2014 3:10 51:5	13/9/2014 4:21 59:7	14/9/2014 5:31 58.4
9/9/2014 0:11 9/9/2014 0:16	64.6	10/9/2014 1:16 58.7	11/9/2014 2:21 56.9	12/9/2014 3:26 55.0	13/9/2014 4:31 58.8 13/9/2014 4:36 60.1	14/9/2014 5:36 57.2
9/9/2014 0:16	63.1 63.0	10/9/2014 1:21 58.0 10/9/2014 1:26 58.7	11/9/2014 2:26 57.0 11/9/2014 2:31 58.2	12/9/2014 3:31 50.6 12/9/2014 3:36 52.7	13/9/2014 4:36 60.1 13/9/2014 4:41 59.7	14/9/2014 5:41 57.3 14/9/2014 5:46 58.9
9/9/2014 0:26	62.6	10/9/2014 1:31 57.5	11/9/2014 2:36 55.4	12/9/2014 3:41 52.9	13/9/2014 4:46 58.5	14/9/2014 5:51 57.0
9/9/2014 0:31 9/9/2014 0:36	62.9 62.4	10/9/2014 1:36 57.6 10/9/2014 1:41 56.5	11/9/2014 2:41 53.5 11/9/2014 2:46 58.0	12/9/2014 3:46 51.7 12/9/2014 3:51 51.4	13/9/2014 4:51 58.3 13/9/2014 4:56 57.8	14/9/2014 5:56 58.9 14/9/2014 6:01 59.1
9/9/2014 0:41	62.1	10/9/2014 1:46 56.6	11/9/2014 2:51 52.8	12/9/2014 3:56 54.8	13/9/2014 5:01 58.0	14/9/2014 6:06 59.1
9/9/2014 0:46 9/9/2014 0:51	62.3 62.1	10/9/2014 1:51 58.3 10/9/2014 1:56 60.7	11/9/2014 2:56 53.5 11/9/2014 3:01 51.8	12/9/2014 4:01 50.0 12/9/2014 4:06 54.7	13/9/2014 5:06 58.5 13/9/2014 5:11 59.1	14/9/2014 6:11 59.4 14/9/2014 6:16 59.6
9/9/2014 0:56	63.5	10/9/2014 2:01 55.9	11/9/2014 3:06 53.6	12/9/2014 4:11 50.9	13/9/2014 5:16 58.6	14/9/2014 6:21 60.4
9/9/2014 1:01 9/9/2014 1:06	61.8 62.2	10/9/2014 2:06 56.6 10/9/2014 2:11 55.4	11/9/2014 3:11 54.7 11/9/2014 3:16 51.8	12/9/2014 4:16 51.8 12/9/2014 4:21 53.2	13/9/2014 5:21 58.9 13/9/2014 5:26 59.2	14/9/2014 6:26 59.7 14/9/2014 6:31 59.9
9/9/2014 1:11	61.2	10/9/2014 2:16 56.5	11/9/2014 3:21 53.0	12/9/2014 4:26 57.2	13/9/2014 5:31 59.4	14/9/2014 6:36 60.8
9/9/2014 1:16	61.5	10/9/2014 2:21 58.4	11/9/2014 3:26 53.3	12/9/2014 4:31 63.8	13/9/2014 5:36 59.4	14/9/2014 6:41 61.6
9/9/2014 1:21 9/9/2014 1:26	61.1 61.1	10/9/2014 2:26 53.4 10/9/2014 2:31 54.9	11/9/2014 3:31 47.0 11/9/2014 3:36 53.6	12/9/2014 4:36 55.6 12/9/2014 4:41 57.9	13/9/2014 5:41 60.1 13/9/2014 5:46 60.3	14/9/2014 6:46 61.6 14/9/2014 6:51 63.7
9/9/2014 1:31	60.7	10/9/2014 2:36 53.3	11/9/2014 3:41 53.7	12/9/2014 4:46 55.6	13/9/2014 5:51 59.2	14/9/2014 6:56 61.4
9/9/2014 1:36 9/9/2014 1:41	60.8 59.7	10/9/2014 2:41 53.3 10/9/2014 2:46 54.9	11/9/2014 3:46 52.7 11/9/2014 3:51 47.3	12/9/2014 4:51 56.1 12/9/2014 4:56 55.8	13/9/2014 5:56 60.3 13/9/2014 6:01 60.3	14/9/2014 23:01 62.0 14/9/2014 23:06 61.9
9/9/2014 1:46	60.5	10/9/2014 2:51 54.0	11/9/2014 3:56 52.5	12/9/2014 5:01 56.4	13/9/2014 6:06 60.7	14/9/2014 23:11 62.0
9/9/2014 1:51 9/9/2014 1:56	60.9 61.4	10/9/2014 2:56 52.2 10/9/2014 3:01 52.5	11/9/2014 4:01 50.2 11/9/2014 4:06 51.5	12/9/2014 5:06 55.6 12/9/2014 5:11 56.8	13/9/2014 6:11 61.3 13/9/2014 6:16 61.2	14/9/2014 23:16 62.2 14/9/2014 23:21 61.9
9/9/2014 2:01	60.8	10/9/2014 3:06 45.8	11/9/2014 4:11 49.8	12/9/2014 5:16 56.1	13/9/2014 6:21 61.4	14/9/2014 23:26 61.4
9/9/2014 2:06	60.7	10/9/2014 3:11 52.9	11/9/2014 4:16 53.1	12/9/2014 5:21 57.5	13/9/2014 6:26 62.4	14/9/2014 23:31 61.2
9/9/2014 2:11 9/9/2014 2:16	60.5 59.9	10/9/2014 3:16 58.2 10/9/2014 3:21 48.9	11/9/2014 4:21 50.3 11/9/2014 4:26 51.0	12/9/2014 5:26 57.1 12/9/2014 5:31 57.2	13/9/2014 6:31 62.2 13/9/2014 6:36 62.4	14/9/2014 23:36 62.5 14/9/2014 23:41 61.1
9/9/2014 2:21	59.2	10/9/2014 3:26 51.6	11/9/2014 4:31 58.3	12/9/2014 5:36 58.0	13/9/2014 6:41 62.6	14/9/2014 23:46 62.1
9/9/2014 2:26 9/9/2014 2:31	60.3 60.9	10/9/2014 3:31 58.1 10/9/2014 3:36 46.5	11/9/2014 4:36 52.0 11/9/2014 4:41 54.0	12/9/2014 5:41 57.5 12/9/2014 5:46 59.7	13/9/2014 6:46 62.3 13/9/2014 6:51 63.4	14/9/2014 23:51 61.6 14/9/2014 23:56 61.2
9/9/2014 2:36	60.3	10/9/2014 3:41 49.1	11/9/2014 4:46 51.7	12/9/2014 5:51 60.0	13/9/2014 6:56 63.9	15/9/2014 0:01 61.2
9/9/2014 2:41 9/9/2014 2:46	60.1 59.8	10/9/2014 3:46 58.1 10/9/2014 3:51 51.2	11/9/2014 4:51 52.1 11/9/2014 4:56 49.2	12/9/2014 5:56 58.8 12/9/2014 6:01 57.6	13/9/2014 23:01 65.9 13/9/2014 23:06 63.9	15/9/2014 0:06 61.1 15/9/2014 0:11 61.8
9/9/2014 2:51	58.4	10/9/2014 3:56 48.8	11/9/2014 5:01 52.3	12/9/2014 6:06 59.7	13/9/2014 23:11 63.0	15/9/2014 0:16 60.7
9/9/2014 2:56	58.6 58.9	10/9/2014 4:01 38.0 10/9/2014 4:06 58.3	11/9/2014 5:06 53.4 11/9/2014 5:11 54.2	12/9/2014 6:11 60.7 12/9/2014 6:16 61.8	13/9/2014 23:16 63.9 13/9/2014 23:21 64.0	15/9/2014 0:21 59.9 15/9/2014 0:26 61.0
9/9/2014 3:01 9/9/2014 3:06	58.9	10/9/2014 4:06 58.3 10/9/2014 4:11 52.5	11/9/2014 5:11 54.2 11/9/2014 5:16 49.3	12/9/2014 6:16 61.8 12/9/2014 6:21 61.2	13/9/2014 23:26 63.1	15/9/2014 0:26 61.0 15/9/2014 0:31 59.1
		·				

Real-time Noise Data 15/9/2014 0:36 59.6	RTN2a (Hong Kong Electric Center 16/9/2014 1:41 55.5	r <u>e)</u> I 17/9/2014 2:46 57.1	18/9/2014 3:51 53.6	19/9/2014 4:56 52.4	20/9/2014 6:01 59.0
15/9/2014 0:41 58.8	16/9/2014 1:46 65.1	17/9/2014 2:40 57:1	18/9/2014 3:56 54.8	19/9/2014 4:50 52:4	20/9/2014 6:06 61.1
15/9/2014 0:46 59.2	16/9/2014 1:51 57.3	17/9/2014 2:56 56.6	18/9/2014 4:01 56.1	19/9/2014 5:06 55.6	20/9/2014 6:11 60.2
15/9/2014 0:51 59.6 15/9/2014 0:56 58.7	16/9/2014 1:56 57.0 16/9/2014 2:01 60.5	17/9/2014 3:01 56.8 17/9/2014 3:06 56.8	18/9/2014 4:06 53.7 18/9/2014 4:11 53.9	19/9/2014 5:11 53.2 19/9/2014 5:16 56.2	20/9/2014 6:16 60.2 20/9/2014 6:21 60.4
15/9/2014 1:01 58.7	16/9/2014 2:06 58.0	17/9/2014 3:11 54.9	18/9/2014 4:16 55.8	19/9/2014 5:21 55.5	20/9/2014 6:26 60.3
15/9/2014 1:06 59.6	16/9/2014 2:11 64.3	17/9/2014 3:16 56.3	18/9/2014 4:21 55.8	19/9/2014 5:26 56.5	20/9/2014 6:31 60.6
15/9/2014 1:11 58.1 15/9/2014 1:16 58.5	16/9/2014 2:16 60.5 16/9/2014 2:21 53.3	17/9/2014 3:21 55.6 17/9/2014 3:26 56.3	18/9/2014 4:26 53.4 18/9/2014 4:31 56.6	19/9/2014 5:31 55.8 19/9/2014 5:36 54.5	20/9/2014 6:36 60.9 20/9/2014 6:41 61.5
15/9/2014 1:21 58.0	16/9/2014 2:26 56.5	17/9/2014 3:31 56.7	18/9/2014 4:36 55.5	19/9/2014 5:41 56.8	20/9/2014 6:46 62.8
15/9/2014 1:26 57.1 15/9/2014 1:31 58.3	16/9/2014 2:31 60.3 16/9/2014 2:36 48.4	17/9/2014 3:36 56.5 17/9/2014 3:41 57.0	18/9/2014 4:41 53.5 18/9/2014 4:46 54.0	19/9/2014 5:46 57.4 19/9/2014 5:51 58.5	20/9/2014 6:51 62.3 20/9/2014 6:56 63.2
15/9/2014 1:36 57.3	16/9/2014 2:30 48.4	17/9/2014 3:41 57:0	18/9/2014 4:40 54:0 18/9/2014 4:51 55:3	19/9/2014 5:56 57.8	20/9/2014 23:01 63.4
15/9/2014 1:41 56.4	16/9/2014 2:46 58.3	17/9/2014 3:51 60.9	18/9/2014 4:56 52.4	19/9/2014 6:01 58.3	20/9/2014 23:06 63.3
15/9/2014 1:46 55.9 15/9/2014 1:51 55.8	16/9/2014 2:51 57.3 16/9/2014 2:56 52.1	17/9/2014 3:56 59.9 17/9/2014 4:01 57.7	18/9/2014 5:01 56.5 18/9/2014 5:06 54.7	19/9/2014 6:06 58.5 19/9/2014 6:11 60.0	20/9/2014 23:11 63.0 20/9/2014 23:16 63.6
15/9/2014 1:56 55.9	16/9/2014 3:01 53.7	17/9/2014 4:01 57:7	18/9/2014 5:00 54:7 18/9/2014 5:11 55.7	19/9/2014 6:16 60.2	20/9/2014 23:21 63.0
15/9/2014 2:01 55.2	16/9/2014 3:06 51.4	17/9/2014 4:11 55.6	18/9/2014 5:16 55.8	19/9/2014 6:21 61.0	20/9/2014 23:26 63.8
15/9/2014 2:06 54.2 15/9/2014 2:11 53.3	16/9/2014 3:11 53.1 16/9/2014 3:16 47.7	17/9/2014 4:16 54.6 17/9/2014 4:21 56.5	18/9/2014 5:21 53.8 18/9/2014 5:26 56.9	19/9/2014 6:26 61.4 19/9/2014 6:31 61.9	20/9/2014 23:31 63.4 20/9/2014 23:36 63.3
15/9/2014 2:16 55.0	16/9/2014 3:21 55.7	17/9/2014 4:26 53.8	18/9/2014 5:31 56.7	19/9/2014 6:36 62.1	20/9/2014 23:41 63.2
15/9/2014 2:21 55.5 15/9/2014 2:26 54.4	16/9/2014 3:26 58.7 16/9/2014 3:31 45.2	17/9/2014 4:31 55.1 17/9/2014 4:36 54.9	18/9/2014 5:36 57.9 18/9/2014 5:41 56.6	19/9/2014 6:41 62.7 19/9/2014 6:46 62.7	20/9/2014 23:46 62.8 20/9/2014 23:51 62.8
15/9/2014 2:31 56.4	16/9/2014 3:36 51.1	17/9/2014 4:30 54:9	18/9/2014 5:46 58.6	19/9/2014 6:51 63.4	20/9/2014 23:56 63.2
15/9/2014 2:36 54.2	16/9/2014 3:41 60.8	17/9/2014 4:46 55.7	18/9/2014 5:51 58.3	19/9/2014 6:56 63.0	21/9/2014 0:01 62.8
15/9/2014 2:41 46.0 15/9/2014 2:46 55.3	16/9/2014 3:46 60.6 16/9/2014 3:51 47.1	17/9/2014 4:51 56.0 17/9/2014 4:56 54.4	18/9/2014 5:56 58.7 18/9/2014 6:01 58.3	19/9/2014 23:01 64.2 19/9/2014 23:06 64.5	21/9/2014 0:06 62.8 21/9/2014 0:11 63.1
15/9/2014 2:51 46.2	16/9/2014 3:56 57.3	17/9/2014 5:01 54.2	18/9/2014 6:06 59.1	19/9/2014 23:11 63.8	21/9/2014 0:16 62.7
15/9/2014 2:56 52.1 15/9/2014 3:01 50.7	16/9/2014 4:01 50.6 16/9/2014 4:06 47.9	17/9/2014 5:06 55.2 17/9/2014 5:11 55.2	18/9/2014 6:11 59.8 18/9/2014 6:16 61.3	19/9/2014 23:16 64.4 19/9/2014 23:21 64.1	21/9/2014 0:21 64.5 21/9/2014 0:26 62.3
15/9/2014 3:01 50.7 15/9/2014 3:06 57.8	16/9/2014 4:06 47.9 16/9/2014 4:11 52.5	17/9/2014 5:11 55.2 17/9/2014 5:16 56.3	18/9/2014 6:16 61.3 18/9/2014 6:21 61.1	19/9/2014 23:21 64.1 19/9/2014 23:26 63.9	21/9/2014 0:26 62.3 21/9/2014 0:31 62.3
15/9/2014 3:11 47.7	16/9/2014 4:16 36.7	17/9/2014 5:21 58.0	18/9/2014 6:26 61.8	19/9/2014 23:31 63.6	21/9/2014 0:36 62.7
15/9/2014 3:16 54.9 15/9/2014 3:21 58.0	16/9/2014 4:21 53.5 16/9/2014 4:26 49.9	17/9/2014 5:26 56.4 17/9/2014 5:31 57.5	18/9/2014 6:31 62.6 18/9/2014 6:36 62.1	19/9/2014 23:36 63.7 19/9/2014 23:41 63.6	21/9/2014 0:41 62.1 21/9/2014 0:46 63.5
15/9/2014 3:26 51.0	16/9/2014 4:31 47.8	17/9/2014 5:36 58.4	18/9/2014 6:41 63.1	19/9/2014 23:46 63.6	21/9/2014 0:51 61.8
15/9/2014 3:31 34.9	16/9/2014 4:36 49.3	17/9/2014 5:41 58.4	18/9/2014 6:46 63.7	19/9/2014 23:51 63.0	21/9/2014 0:56 62.9
15/9/2014 3:36 54.3 15/9/2014 3:41 57.9	16/9/2014 4:41 48.6 16/9/2014 4:46 50.4	17/9/2014 5:46 59.0 17/9/2014 5:51 58.7	18/9/2014 6:51 63.6 18/9/2014 6:56 65.6	19/9/2014 23:56 63.0 20/9/2014 0:01 62.9	21/9/2014 1:01 61.1 21/9/2014 1:06 61.3
15/9/2014 3:46 50.7	16/9/2014 4:51 63.2	17/9/2014 5:56 59.6	18/9/2014 23:01 63.2	20/9/2014 0:06 63.5	21/9/2014 1:11 61.9
15/9/2014 3:51 49.0	16/9/2014 4:56 53.1	17/9/2014 6:01 59.3	18/9/2014 23:06 62.9	20/9/2014 0:11 63.0	21/9/2014 1:16 60.6
15/9/2014 3:56 41.5 15/9/2014 4:01 58.1	16/9/2014 5:01 51.2 16/9/2014 5:06 53.6	17/9/2014 6:06 59.2 17/9/2014 6:11 60.6	18/9/2014 23:11 63.0 18/9/2014 23:16 63.1	20/9/2014 0:16 63.0 20/9/2014 0:21 62.9	21/9/2014 1:21 60.5 21/9/2014 1:26 61.0
15/9/2014 4:06 47.7	16/9/2014 5:11 59.9	17/9/2014 6:16 61.0	18/9/2014 23:21 63.2	20/9/2014 0:26 63.0	21/9/2014 1:31 60.6
15/9/2014 4:11 56.7 15/9/2014 4:16 38.9	16/9/2014 5:16 56.7 16/9/2014 5:21 52.2	17/9/2014 6:21 61.1 17/9/2014 6:26 62.5	18/9/2014 23:26 63.3 18/9/2014 23:31 62.8	20/9/2014 0:31 62.9 20/9/2014 0:36 62.7	21/9/2014 1:36 60.2 21/9/2014 1:41 60.1
15/9/2014 4:21 58.1	16/9/2014 5:26 53.2	17/9/2014 6:31 62.2	18/9/2014 23:36 63.0	20/9/2014 0:41 62.1	21/9/2014 1:46 61.3
15/9/2014 4:26 57.9	16/9/2014 5:31 65.0	17/9/2014 6:36 63.6	18/9/2014 23:41 63.2	20/9/2014 0:46 61.5	21/9/2014 1:51 60.3
15/9/2014 4:31 50.9 15/9/2014 4:36 50.4	16/9/2014 5:36 54.5 16/9/2014 5:41 54.4	17/9/2014 6:41 63.7 17/9/2014 6:46 64.0	18/9/2014 23:46 63.5 18/9/2014 23:51 63.3	20/9/2014 0:51 62.3 20/9/2014 0:56 62.2	21/9/2014 1:56 61.1 21/9/2014 2:01 60.3
15/9/2014 4:41 42.4	16/9/2014 5:46 63.7	17/9/2014 6:51 64.4	18/9/2014 23:56 62.6	20/9/2014 1:01 64.0	21/9/2014 2:06 60.7
15/9/2014 4:46 52.0 15/9/2014 4:51 49.7	16/9/2014 5:51 58.5 16/9/2014 5:56 59.7	17/9/2014 6:56 64.8 17/9/2014 23:01 63.9	19/9/2014 0:01 62.7 19/9/2014 0:06 62.9	20/9/2014 1:06 61.6 20/9/2014 1:11 62.2	21/9/2014 2:11 59.9 21/9/2014 2:16 59.0
15/9/2014 4:56 58.1	16/9/2014 6:01 57.0	17/9/2014 23:06 63.5	19/9/2014 0:06 62.9 19/9/2014 0:11 63.4	20/9/2014 1:11 62.2 20/9/2014 1:16 61.8	21/9/2014 2:21 58.9
15/9/2014 5:01 52.5	16/9/2014 6:06 56.5	17/9/2014 23:11 63.6	19/9/2014 0:16 62.2	20/9/2014 1:21 62.1	21/9/2014 2:26 60.3
15/9/2014 5:06 54.4 15/9/2014 5:11 50.9	16/9/2014 6:11 55.4 16/9/2014 6:16 56.1	17/9/2014 23:16 64.2 17/9/2014 23:21 64.6	19/9/2014 0:21 62.1 19/9/2014 0:26 62.6	20/9/2014 1:26 61.4 20/9/2014 1:31 61.8	21/9/2014 2:31 58.9 21/9/2014 2:36 59.3
15/9/2014 5:16 52.4	16/9/2014 6:21 58.7	17/9/2014 23:26 64.1	19/9/2014 0:31 62.0	20/9/2014 1:36 61.0	21/9/2014 2:41 59.9
15/9/2014 5:21 52.3	16/9/2014 6:26 57.7	17/9/2014 23:31 63.4	19/9/2014 0:36 61.6	20/9/2014 1:41 60.9	21/9/2014 2:46 59.3
15/9/2014 5:26 55.7 15/9/2014 5:31 54.0	16/9/2014 6:31 63.4 16/9/2014 6:36 58.5	17/9/2014 23:36 63.8 17/9/2014 23:41 63.2	19/9/2014 0:41 61.5 19/9/2014 0:46 61.4	20/9/2014 1:46 61.3 20/9/2014 1:51 60.9	21/9/2014 2:51 58.9 21/9/2014 2:56 58.8
15/9/2014 5:36 55.9	16/9/2014 6:41 61.1	17/9/2014 23:46 63.5	19/9/2014 0:51 61.8	20/9/2014 1:56 61.7	21/9/2014 3:01 61.3
15/9/2014 5:41 58.0 15/9/2014 5:46 55.0	16/9/2014 6:46 59.0 16/9/2014 6:51 58.7	17/9/2014 23:51 62.7 17/9/2014 23:56 63.5	19/9/2014 0:56 60.2 19/9/2014 1:01 60.9	20/9/2014 2:01 61.3 20/9/2014 2:06 60.6	21/9/2014 3:06 57.7 21/9/2014 3:11 61.6
15/9/2014 5:51 57.9	16/9/2014 6:56 58.8	18/9/2014 0:01 62.8	19/9/2014 1:06 60.4	20/9/2014 2:11 59.8	21/9/2014 3:16 58.6
15/9/2014 5:56 56.5	16/9/2014 23:01 64.8	18/9/2014 0:06 63.5	19/9/2014 1:11 62.0	20/9/2014 2:16 61.3	21/9/2014 3:21 57.4
15/9/2014 6:01 57.3 15/9/2014 6:06 58.0	16/9/2014 23:06 64.5 16/9/2014 23:11 64.2	18/9/2014 0:11 62.6 18/9/2014 0:16 62.5	19/9/2014 1:16 61.0 19/9/2014 1:21 60.4	20/9/2014 2:21 59.7 20/9/2014 2:26 61.2	21/9/2014 3:26 58.3 21/9/2014 3:31 60.9
15/9/2014 6:11 59.1	16/9/2014 23:16 64.3	18/9/2014 0:21 63.0	19/9/2014 1:26 59.9	20/9/2014 2:31 60.0	21/9/2014 3:36 57.5
15/9/2014 6:16 59.7 15/9/2014 6:21 60.6	16/9/2014 23:21 65.0 16/9/2014 23:26 64.4	18/9/2014 0:26 62.8 18/9/2014 0:31 62.5	19/9/2014 1:31 61.7 19/9/2014 1:36 61.3	20/9/2014 2:36 59.7 20/9/2014 2:41 60.1	21/9/2014 3:41 57.2 21/9/2014 3:46 58.9
15/9/2014 6:26 61.2	16/9/2014 23:31 64.5	18/9/2014 0:36 60.5	19/9/2014 1:41 59.8	20/9/2014 2:46 58.7	21/9/2014 3:51 58.1
15/9/2014 6:31 61.1	16/9/2014 23:36 64.3	18/9/2014 0:41 61.2	19/9/2014 1:46 59.3	20/9/2014 2:51 59.5	21/9/2014 3:56 56.5
15/9/2014 6:36 61.9 15/9/2014 6:41 62.1	16/9/2014 23:41 64.0 16/9/2014 23:46 63.9	18/9/2014 0:46 61.6 18/9/2014 0:51 61.2	19/9/2014 1:51 58.7 19/9/2014 1:56 58.3	20/9/2014 2:56 59.8 20/9/2014 3:01 59.3	21/9/2014 4:01 57.0 21/9/2014 4:06 59.2
15/9/2014 6:46 62.7	16/9/2014 23:51 63.3	18/9/2014 0:56 60.8	19/9/2014 2:01 58.3	20/9/2014 3:06 59.3	21/9/2014 4:11 57.1
15/9/2014 6:51 62.7 15/9/2014 6:56 63.4	16/9/2014 23:56 63.7 17/9/2014 0:01 63.6	18/9/2014 1:01 60.8 18/9/2014 1:06 61.6	19/9/2014 2:06 59.1 19/9/2014 2:11 57.3	20/9/2014 3:11 59.6 20/9/2014 3:16 60.8	21/9/2014 4:16 56.3 21/9/2014 4:21 57.4
15/9/2014 23:01 63.8	17/9/2014 0:06 63.5	18/9/2014 1:11 60.6	19/9/2014 2:16 57.4	20/9/2014 3:21 58.2	21/9/2014 4:26 56.0
15/9/2014 23:06 63.0 15/9/2014 23:11 63.5	17/9/2014 0:11 63.7 17/9/2014 0:16 63.7	18/9/2014 1:16 61.4 18/9/2014 1:21 60.7	19/9/2014 2:21 59.0 19/9/2014 2:26 56.6	20/9/2014 3:26 59.2 20/9/2014 3:31 57.7	21/9/2014 4:31 57.8 21/9/2014 4:36 55.6
15/9/2014 23:11 63.5 15/9/2014 23:16 63.9	17/9/2014 0:16 63.7 17/9/2014 0:21 62.9	18/9/2014 1:21 60.7 18/9/2014 1:26 60.6	19/9/2014 2:26 56.6	20/9/2014 3:31 57.7 20/9/2014 3:36 57.7	21/9/2014 4:36 55.6 21/9/2014 4:41 56.7
15/9/2014 23:21 62.3	17/9/2014 0:26 64.3	18/9/2014 1:31 62.5	19/9/2014 2:36 60.8	20/9/2014 3:41 57.9	21/9/2014 4:46 56.3
15/9/2014 23:26 62.3 15/9/2014 23:31 64.1	17/9/2014 0:31 63.2 17/9/2014 0:36 63.0	18/9/2014 1:36 60.7 18/9/2014 1:41 59.6	19/9/2014 2:41 56.2 19/9/2014 2:46 56.3	20/9/2014 3:46 58.4 20/9/2014 3:51 58.4	21/9/2014 4:51 57.3 21/9/2014 4:56 55.8
15/9/2014 23:36 61.9	17/9/2014 0:41 62.7	18/9/2014 1:46 62.6	19/9/2014 2:51 55.8	20/9/2014 3:56 62.9	21/9/2014 5:01 55.2
15/9/2014 23:41 61.5	17/9/2014 0:46 61.9	18/9/2014 1:51 58.6	19/9/2014 2:56 55.6	20/9/2014 4:01 57.0	21/9/2014 5:06 56.4
15/9/2014 23:46 62.2 15/9/2014 23:51 61.6	17/9/2014 0:51 61.9 17/9/2014 0:56 61.6	18/9/2014 1:56 59.8 18/9/2014 2:01 59.3	19/9/2014 3:01 55.3 19/9/2014 3:06 56.4	20/9/2014 4:06 57.5 20/9/2014 4:11 58.4	21/9/2014 5:11 56.5 21/9/2014 5:16 56.4
15/9/2014 23:56 63.9	17/9/2014 1:01 62.0	18/9/2014 2:06 58.1	19/9/2014 3:11 54.6	20/9/2014 4:16 56.1	21/9/2014 5:21 57.1
16/9/2014 0:01 62.1 16/9/2014 0:06 59.9	17/9/2014 1:06 61.5 17/9/2014 1:11 61.3	18/9/2014 2:11 60.5 18/9/2014 2:16 58.4	19/9/2014 3:16 55.1 19/9/2014 3:21 56.0	20/9/2014 4:21 56.1 20/9/2014 4:26 56.9	21/9/2014 5:26 56.1 21/9/2014 5:31 57.8
16/9/2014 0:06 59.9	17/9/2014 1:11 61.3	18/9/2014 2:21 57.8	19/9/2014 3:21 56.0 19/9/2014 3:26 56.2	20/9/2014 4:31 57.1	21/9/2014 5:36 56.3
16/9/2014 0:16 59.7	17/9/2014 1:21 61.9	18/9/2014 2:26 62.7	19/9/2014 3:31 56.9	20/9/2014 4:36 57.7	21/9/2014 5:41 57.7
16/9/2014 0:21 60.5 16/9/2014 0:26 61.9	17/9/2014 1:26 61.5 17/9/2014 1:31 61.3	18/9/2014 2:31 57.3 18/9/2014 2:36 57.0	19/9/2014 3:36 56.8 19/9/2014 3:41 55.3	20/9/2014 4:41 55.8 20/9/2014 4:46 57.5	21/9/2014 5:46 57.9 21/9/2014 5:51 58.5
16/9/2014 0:31 65.1	17/9/2014 1:36 60.8	18/9/2014 2:41 57.7	19/9/2014 3:46 59.6	20/9/2014 4:51 57.2	21/9/2014 5:56 57.4
16/9/2014 0:36 64.6 16/9/2014 0:41 60.8	17/9/2014 1:41 61.1	18/9/2014 2:46 57.9	19/9/2014 3:51 53.2	20/9/2014 4:56 56.3	21/9/2014 6:01 58.0
16/9/2014 0:41 60.8 16/9/2014 0:46 57.5	17/9/2014 1:46 60.4 17/9/2014 1:51 60.0	18/9/2014 2:51 58.1 18/9/2014 2:56 59.5	19/9/2014 3:56 49.8 19/9/2014 4:01 53.1	20/9/2014 5:01 59.0 20/9/2014 5:06 56.9	21/9/2014 6:06 58.2 21/9/2014 6:11 59.6
16/9/2014 0:51 62.0	17/9/2014 1:56 60.6	18/9/2014 3:01 56.6	19/9/2014 4:06 57.2	20/9/2014 5:11 57.8	21/9/2014 6:16 59.1
16/9/2014 0:56 57.5 16/9/2014 1:01 61.1	17/9/2014 2:01 59.2 17/9/2014 2:06 60.0	18/9/2014 3:06 56.9 18/9/2014 3:11 56.6	19/9/2014 4:11 52.8 19/9/2014 4:16 56.2	20/9/2014 5:16 56.5 20/9/2014 5:21 55.8	21/9/2014 6:21 59.9 21/9/2014 6:26 59.8
16/9/2014 1:06 57.9	17/9/2014 2:11 59.9	18/9/2014 3:16 56.9	19/9/2014 4:21 53.9	20/9/2014 5:26 56.5	21/9/2014 6:31 59.7
16/9/2014 1:11 58.7	17/9/2014 2:16 59.5	18/9/2014 3:21 56.8	19/9/2014 4:26 52.3	20/9/2014 5:31 57.0	21/9/2014 6:36 61.3
16/9/2014 1:16 57.5 16/9/2014 1:21 55.4	17/9/2014 2:21 58.0 17/9/2014 2:26 59.2	18/9/2014 3:26 55.6 18/9/2014 3:31 56.0	19/9/2014 4:31 53.7 19/9/2014 4:36 53.6	20/9/2014 5:36 58.4 20/9/2014 5:41 57.3	21/9/2014 6:41 60.5 21/9/2014 6:46 61.4
16/9/2014 1:26 61.3	17/9/2014 2:31 57.8	18/9/2014 3:36 53.6	19/9/2014 4:41 55.2	20/9/2014 5:46 60.0	21/9/2014 6:51 61.4
16/9/2014 1:31 66.7 16/9/2014 1:36 60.4	17/9/2014 2:36 58.5 17/9/2014 2:41 56.6	18/9/2014 3:41 57.6 18/9/2014 3:46 60.6	19/9/2014 4:46 57.0 19/9/2014 4:51 56.5	20/9/2014 5:51 59.7 20/9/2014 5:56 59.0	21/9/2014 6:56 60.7 21/9/2014 23:01 62.7
		,		,	

Real-time Noise Data	RTN2a (Hong Kong Electric Centre	a)		
21/9/2014 23:06 62.5	23/9/2014 0:11 62.0	24/9/2014 1:16 58.6	25/9/2014 2:21 58.2	26/9/2014 3:26 54.4
21/9/2014 23:11 62.1	23/9/2014 0:16 61.8	24/9/2014 1:21 59.2	25/9/2014 2:26 57.3	26/9/2014 3:31 54.0
21/9/2014 23:16 62.4 21/9/2014 23:21 62.3	23/9/2014 0:21 61.8 23/9/2014 0:26 61.7	24/9/2014 1:26 58.7 24/9/2014 1:31 59.5	25/9/2014 2:31 55.3 25/9/2014 2:36 58.0	26/9/2014 3:36 56.1 26/9/2014 3:41 53.7
21/9/2014 23:26 61.9	23/9/2014 0:20 01:7	24/9/2014 1:36 58.5	25/9/2014 2:41 55.1	26/9/2014 3:46 53.5
21/9/2014 23:31 61.4	23/9/2014 0:36 61.4	24/9/2014 1:41 57.4	25/9/2014 2:46 55.3	26/9/2014 3:51 55.4
21/9/2014 23:36 62.9 21/9/2014 23:41 61.6	23/9/2014 0:41 60.1 23/9/2014 0:46 59.1	24/9/2014 1:46 57.0 24/9/2014 1:51 58.7	25/9/2014 2:51 55.5 25/9/2014 2:56 59.0	26/9/2014 3:56 53.5 26/9/2014 4:01 51.3
21/9/2014 23:46 61.5	23/9/2014 0:51 59.2	24/9/2014 1:56 57.3	25/9/2014 3:01 56.2	26/9/2014 4:06 53.6
21/9/2014 23:51 61.2	23/9/2014 0:56 59.2	24/9/2014 2:01 57.3	25/9/2014 3:06 59.7	26/9/2014 4:11 51.8
21/9/2014 23:56 61.7 22/9/2014 0:01 61.2	23/9/2014 1:01 58.4 23/9/2014 1:06 58.2	24/9/2014 2:06 58.6 24/9/2014 2:11 55.3	25/9/2014 3:11 53.5 25/9/2014 3:16 51.7	26/9/2014 4:16 51.6 26/9/2014 4:21 50.7
22/9/2014 0:06 61.3	23/9/2014 1:11 58.5	24/9/2014 2:16 54.9	25/9/2014 3:21 53.7	26/9/2014 4:26 51.4
22/9/2014 0:11 62.0	23/9/2014 1:16 58.3	24/9/2014 2:21 57.6	25/9/2014 3:26 55.7	26/9/2014 4:31 51.1
22/9/2014 0:16 60.5 22/9/2014 0:21 59.8	23/9/2014 1:21 57.3 23/9/2014 1:26 57.8	24/9/2014 2:26 56.0 24/9/2014 2:31 57.2	25/9/2014 3:31 54.1 25/9/2014 3:36 55.9	26/9/2014 4:36 52.9 26/9/2014 4:41 51.9
22/9/2014 0:26 60.2	23/9/2014 1:31 56.9	24/9/2014 2:36 54.0	25/9/2014 3:41 54.2	26/9/2014 4:46 54.0
22/9/2014 0:31 60.8	23/9/2014 1:36 56.4	24/9/2014 2:41 55.2 24/9/2014 2:46 55.9	25/9/2014 3:46 53.2 25/9/2014 3:51 54.1	26/9/2014 4:51 54.3 26/9/2014 4:56 53.5
22/9/2014 0:36 57.8 22/9/2014 0:41 59.8	23/9/2014 1:41 58.1 23/9/2014 1:46 55.2	24/9/2014 2:40 55:9	25/9/2014 3:51 54.1 25/9/2014 3:56 53.6	26/9/2014 4:56 53.5 26/9/2014 5:01 54.4
22/9/2014 0:46 58.3	23/9/2014 1:51 55.3	24/9/2014 2:56 55.3	25/9/2014 4:01 49.5	26/9/2014 5:06 54.7
22/9/2014 0:51 58.1 22/9/2014 0:56 57.4	23/9/2014 1:56 57.7 23/9/2014 2:01 55.9	24/9/2014 3:01 51.3 24/9/2014 3:06 54.1	25/9/2014 4:06 52.5 25/9/2014 4:11 53.2	26/9/2014 5:11 54.6 26/9/2014 5:16 52.5
22/9/2014 1:01 58.7	23/9/2014 2:06 55.7	24/9/2014 3:00 54:1	25/9/2014 4:11 33:2	26/9/2014 5:10 32:3
22/9/2014 1:06 60.0	23/9/2014 2:11 55.9	24/9/2014 3:16 50.5	25/9/2014 4:21 51.1	26/9/2014 5:26 55.8
22/9/2014 1:11 59.2 22/9/2014 1:16 57.1	23/9/2014 2:16 56.8 23/9/2014 2:21 56.9	24/9/2014 3:21 51.2 24/9/2014 3:26 55.2	25/9/2014 4:26 55.6 25/9/2014 4:31 47.7	26/9/2014 5:31 51.4 26/9/2014 5:36 54.0
22/9/2014 1:21 57.1	23/9/2014 2:26 57.3	24/9/2014 3:31 49.7	25/9/2014 4:36 54.1	26/9/2014 5:41 55.6
22/9/2014 1:26 58.0	23/9/2014 2:31 54.0	24/9/2014 3:36 54.2	25/9/2014 4:41 51.2	26/9/2014 5:46 56.1
22/9/2014 1:31 55.6 22/9/2014 1:36 56.1	23/9/2014 2:36 53.6 23/9/2014 2:41 53.6	24/9/2014 3:41 56.7 24/9/2014 3:46 52.6	25/9/2014 4:46 53.7 25/9/2014 4:51 54.4	26/9/2014 5:51 58.4 26/9/2014 5:56 57.9
22/9/2014 1:41 58.1	23/9/2014 2:46 52.9	24/9/2014 3:51 51.9	25/9/2014 4:56 53.3	26/9/2014 6:01 56.0
22/9/2014 1:46 54.9	23/9/2014 2:51 53.4	24/9/2014 3:56 56.8	25/9/2014 5:01 51.9 25/9/2014 5:06 54.1	26/9/2014 6:06 58.9
22/9/2014 1:51 55.4 22/9/2014 1:56 54.0	23/9/2014 2:56 54.7 23/9/2014 3:01 60.7	24/9/2014 4:01 53.9 24/9/2014 4:06 58.3	25/9/2014 5:06 54.1 25/9/2014 5:11 55.7	26/9/2014 6:11 58.7 26/9/2014 6:16 59.7
22/9/2014 2:01 54.8	23/9/2014 3:06 52.1	24/9/2014 4:11 50.5	25/9/2014 5:16 57.8	26/9/2014 6:21 60.5
22/9/2014 2:06 53.5 22/9/2014 2:11 53.4	23/9/2014 3:11 54.8 23/9/2014 3:16 54.1	24/9/2014 4:16 52.3 24/9/2014 4:21 50.6	25/9/2014 5:21 57.4 25/9/2014 5:26 56.7	26/9/2014 6:26 61.3 26/9/2014 6:31 60.6
22/9/2014 2:16 46.8	23/9/2014 3:16 54:1	24/9/2014 4:21 50:6	25/9/2014 5:20 56.7	26/9/2014 6:36 60.7
22/9/2014 2:21 51.4	23/9/2014 3:26 52.9	24/9/2014 4:31 50.4	25/9/2014 5:36 54.5	26/9/2014 6:41 61.5
22/9/2014 2:26 55.9 22/9/2014 2:31 55.1	23/9/2014 3:31 52.0 23/9/2014 3:36 55.5	24/9/2014 4:36 56.3 24/9/2014 4:41 51.6	25/9/2014 5:41 56.9 25/9/2014 5:46 57.2	26/9/2014 6:46 62.6 26/9/2014 6:51 62.3
22/9/2014 2:36 52.8	23/9/2014 3:41 38.9	24/9/2014 4:41 51:0	25/9/2014 5:51 57.3	26/9/2014 6:56 63.9
22/9/2014 2:41 53.7	23/9/2014 3:46 46.4	24/9/2014 4:51 48.4	25/9/2014 5:56 56.6	26/9/2014 23:01 64.1
22/9/2014 2:46 55.7 22/9/2014 2:51 56.0	23/9/2014 3:51 53.5 23/9/2014 3:56 52.0	24/9/2014 4:56 52.7 24/9/2014 5:01 52.8	25/9/2014 6:01 57.9 25/9/2014 6:06 58.7	26/9/2014 23:06 63.1 26/9/2014 23:11 63.6
22/9/2014 2:56 45.0	23/9/2014 4:01 59.5	24/9/2014 5:06 52.0	25/9/2014 6:11 59.0	26/9/2014 23:16 63.2
22/9/2014 3:01 57.6	23/9/2014 4:06 46.5	24/9/2014 5:11 53.3	25/9/2014 6:16 61.9	26/9/2014 23:21 63.6
22/9/2014 3:06 52.1 22/9/2014 3:11 38.0	23/9/2014 4:11 54.8 23/9/2014 4:16 46.8	24/9/2014 5:16 54.7 24/9/2014 5:21 55.6	25/9/2014 6:21 59.9 25/9/2014 6:26 61.2	26/9/2014 23:26 63.4 26/9/2014 23:31 63.5
22/9/2014 3:16 46.0	23/9/2014 4:21 54.7	24/9/2014 5:26 56.1	25/9/2014 6:31 61.5	26/9/2014 23:36 62.9
22/9/2014 3:21 58.3	23/9/2014 4:26 47.9 23/9/2014 4:31 44.8	24/9/2014 5:31 56.1 24/9/2014 5:36 55.0	25/9/2014 6:36 61.0 25/9/2014 6:41 61.6	26/9/2014 23:41 62.6
22/9/2014 3:26 52.0 22/9/2014 3:31 57.7	23/9/2014 4:31 44.8 23/9/2014 4:36 56.4	24/9/2014 5:36 55.0 24/9/2014 5:41 56.6	25/9/2014 6:41 61.6 25/9/2014 6:46 62.5	26/9/2014 23:46 63.5 26/9/2014 23:51 63.3
22/9/2014 3:36 51.8	23/9/2014 4:41 48.5	24/9/2014 5:46 57.1	25/9/2014 6:51 62.9	26/9/2014 23:56 63.1
22/9/2014 3:41 50.6 22/9/2014 3:46 45.8	23/9/2014 4:46 52.9 23/9/2014 4:51 51.4	24/9/2014 5:51 56.8 24/9/2014 5:56 57.4	25/9/2014 6:56 63.1 25/9/2014 23:01 63.1	27/9/2014 0:01 63.2 27/9/2014 0:06 62.3
22/9/2014 3:51 34.9	23/9/2014 4:56 50.3	24/9/2014 6:01 56.9	25/9/2014 23:06 62.7	27/9/2014 0:11 62.8
22/9/2014 3:56 55.4	23/9/2014 5:01 51.5	24/9/2014 6:06 58.0	25/9/2014 23:11 62.4	27/9/2014 0:16 62.6
22/9/2014 4:01 46.4 22/9/2014 4:06 58.3	23/9/2014 5:06 52.4 23/9/2014 5:11 52.1	24/9/2014 6:11 58.3 24/9/2014 6:16 59.5	25/9/2014 23:16 62.5 25/9/2014 23:21 62.0	27/9/2014 0:21 62.5 27/9/2014 0:26 62.9
22/9/2014 4:11 42.8	23/9/2014 5:16 48.8	24/9/2014 6:21 60.2	25/9/2014 23:26 60.4	27/9/2014 0:31 62.9
22/9/2014 4:16 36.7 22/9/2014 4:21 58.2	23/9/2014 5:21 50.8 23/9/2014 5:26 53.4	24/9/2014 6:26 60.2 24/9/2014 6:31 61.1	25/9/2014 23:31 60.9 25/9/2014 23:36 60.9	27/9/2014 0:36 61.8 27/9/2014 0:41 62.5
22/9/2014 4:26 49.3	23/9/2014 5:26 53.4 23/9/2014 5:31 54.4	24/9/2014 6:31 61.1 24/9/2014 6:36 61.4	25/9/2014 23:41 60.6	27/9/2014 0:46 61.4
22/9/2014 4:31 58.3	23/9/2014 5:36 56.0	24/9/2014 6:41 62.0	25/9/2014 23:46 60.7	27/9/2014 0:51 61.0
22/9/2014 4:36 50.7 22/9/2014 4:41 55.2	23/9/2014 5:41 56.1 23/9/2014 5:46 56.1	24/9/2014 6:46 62.1 24/9/2014 6:51 63.2	25/9/2014 23:51 60.1 25/9/2014 23:56 60.2	27/9/2014 0:56 61.2 27/9/2014 1:01 61.4
22/9/2014 4:46 45.8	23/9/2014 5:51 57.1	24/9/2014 6:56 63.3	26/9/2014 0:01 60.9	27/9/2014 1:06 61.2
22/9/2014 4:51 50.8	23/9/2014 5:56 56.8	24/9/2014 23:01 65.6	26/9/2014 0:06 60.6	27/9/2014 1:11 60.5
22/9/2014 4:56 58.3 22/9/2014 5:01 52.6	23/9/2014 6:01 56.2 23/9/2014 6:06 58.7	24/9/2014 23:06 62.6 24/9/2014 23:11 62.7	26/9/2014 0:11 60.1 26/9/2014 0:16 61.1	27/9/2014 1:16 60.3 27/9/2014 1:21 60.9
22/9/2014 5:06 50.8	23/9/2014 6:11 59.0	24/9/2014 23:16 62.8	26/9/2014 0:21 60.5	27/9/2014 1:26 60.8
22/9/2014 5:11 51.2 22/9/2014 5:16 58.3	23/9/2014 6:16 60.2	24/9/2014 23:21 63.5 24/9/2014 23:26 63.3	26/9/2014 0:26 60.0 26/9/2014 0:31 61.5	27/9/2014 1:31 61.0
22/9/2014 5:16 58.3 22/9/2014 5:21 52.7	23/9/2014 6:21 59.4 23/9/2014 6:26 60.8	24/9/2014 23:20 63:3	26/9/2014 0:31 61.5 26/9/2014 0:36 59.8	27/9/2014 1:36 60.5 27/9/2014 1:41 60.6
22/9/2014 5:26 54.5	23/9/2014 6:31 61.3	24/9/2014 23:36 62.3	26/9/2014 0:41 59.8	27/9/2014 1:46 59.8
22/9/2014 5:31 54.2 22/9/2014 5:36 55.4	23/9/2014 6:36 61.3 23/9/2014 6:41 62.5	24/9/2014 23:41 61.6 24/9/2014 23:46 61.1	26/9/2014 0:46 59.5 26/9/2014 0:51 60.1	27/9/2014 1:51 62.4 27/9/2014 1:56 60.1
22/9/2014 5:41 56.8	23/9/2014 6:46 63.0	24/9/2014 23:51 61.4	26/9/2014 0:56 57.8	27/9/2014 2:01 60.2
22/9/2014 5:46 57.0	23/9/2014 6:51 62.2	24/9/2014 23:56 60.7 25/9/2014 0:01 62.0	26/9/2014 1:01 58.7	27/9/2014 2:06 59.4
22/9/2014 5:51 56.3 22/9/2014 5:56 56.9	23/9/2014 6:56 63.6 23/9/2014 23:01 62.6	25/9/2014 0:01 62.0 25/9/2014 0:06 61.5	26/9/2014 1:06 58.4 26/9/2014 1:11 58.7	27/9/2014 2:11 60.0 27/9/2014 2:16 59.4
22/9/2014 6:01 57.7	23/9/2014 23:06 64.0	25/9/2014 0:11 62.9	26/9/2014 1:16 58.6	27/9/2014 2:21 59.9
22/9/2014 6:06 58.7 22/9/2014 6:11 59.0	23/9/2014 23:11 62.7 23/9/2014 23:16 62.8	25/9/2014 0:16 61.3 25/9/2014 0:21 60.7	26/9/2014 1:21 60.7 26/9/2014 1:26 59.0	27/9/2014 2:26 59.8 27/9/2014 2:31 59.3
22/9/2014 6:16 59.7	23/9/2014 23:10 02:8	25/9/2014 0:21 00:7	26/9/2014 1:31 61.5	27/9/2014 2:36 59.7
22/9/2014 6:21 59.8	23/9/2014 23:26 62.3	25/9/2014 0:31 60.5	26/9/2014 1:36 56.2	27/9/2014 2:41 63.2
22/9/2014 6:26 61.9 22/9/2014 6:31 61.8	23/9/2014 23:31 62.4 23/9/2014 23:36 62.0	25/9/2014 0:36 59.7 25/9/2014 0:41 58.9	26/9/2014 1:41 56.2 26/9/2014 1:46 56.2	27/9/2014 2:46 59.5 27/9/2014 2:51 58.4
22/9/2014 6:36 61.6	23/9/2014 23:41 61.6	25/9/2014 0:46 60.1	26/9/2014 1:51 56.0	27/9/2014 2:56 59.3
22/9/2014 6:41 63.8	23/9/2014 23:46 61.9	25/9/2014 0:51 59.8	26/9/2014 1:56 55.2	27/9/2014 3:01 59.0
22/9/2014 6:46 62.5 22/9/2014 6:51 63.0	23/9/2014 23:51 61.9 23/9/2014 23:56 62.6	25/9/2014 0:56 61.6 25/9/2014 1:01 58.6	26/9/2014 2:01 58.1 26/9/2014 2:06 54.7	27/9/2014 3:06 59.9 27/9/2014 3:11 58.1
22/9/2014 6:56 62.9	24/9/2014 0:01 62.3	25/9/2014 1:06 58.4	26/9/2014 2:11 55.6	27/9/2014 3:16 58.2
22/9/2014 23:01 62.6	24/9/2014 0:06 61.2 24/9/2014 0:11 61.5	25/9/2014 1:11 59.2 25/9/2014 1:16 58.1	26/9/2014 2:16 55.9 26/9/2014 2:21 55.3	27/9/2014 3:21 58.1 27/9/2014 3:26 58.2
22/9/2014 23:06 62.1 22/9/2014 23:11 62.8	24/9/2014 0:11 61.5 24/9/2014 0:16 61.6	25/9/2014 1:16 58.1 25/9/2014 1:21 58.9	26/9/2014 2:21 55.3 26/9/2014 2:26 59.9	27/9/2014 3:26 58.2 27/9/2014 3:31 58.3
22/9/2014 23:16 61.8	24/9/2014 0:21 61.4	25/9/2014 1:26 57.8	26/9/2014 2:31 59.8	27/9/2014 3:36 58.6
22/9/2014 23:21 62.3 22/9/2014 23:26 63.2	24/9/2014 0:26 61.9 24/9/2014 0:31 61.1	25/9/2014 1:31 58.4 25/9/2014 1:36 58.3	26/9/2014 2:36 55.5 26/9/2014 2:41 62.5	27/9/2014 3:41 56.7 27/9/2014 3:46 57.2
22/9/2014 23:31 61.4	24/9/2014 0:36 60.9	25/9/2014 1:41 58.4	26/9/2014 2:46 53.1	27/9/2014 3:51 58.6
22/9/2014 23:36 61.5	24/9/2014 0:41 60.6	25/9/2014 1:46 55.8	26/9/2014 2:51 61.3	27/9/2014 3:56 57.7
22/9/2014 23:41 61.7 22/9/2014 23:46 62.3	24/9/2014 0:46 60.6 24/9/2014 0:51 60.1	25/9/2014 1:51 57.1 25/9/2014 1:56 57.4	26/9/2014 2:56 56.6 26/9/2014 3:01 54.4	27/9/2014 4:01 56.6 27/9/2014 4:06 57.6
22/9/2014 23:51 61.6	24/9/2014 0:56 59.2	25/9/2014 2:01 56.6	26/9/2014 3:06 56.4	27/9/2014 4:11 57.1
22/9/2014 23:56 62.5 23/9/2014 0:01 63.1	24/9/2014 1:01 59.4 24/9/2014 1:06 59.7	25/9/2014 2:06 57.9 25/9/2014 2:11 57.3	26/9/2014 3:11 52.1 26/9/2014 3:16 53.7	27/9/2014 4:16 57.7 27/9/2014 4:21 56.6
23/9/2014 0:06 63.5	24/9/2014 1:11 59.0	25/9/2014 2:16 58.8	26/9/2014 3:21 54.3	27/9/2014 4:26 57.1

27/9/2014 4:31 27/9/2014 4:36 27/9/2014 4:46 27/9/2014 4:56 27/9/2014 4:56 27/9/2014 5:06 27/9/2014 5:01 27/9/2014 5:16 27/9/2014 5:12 27/9/2014 5:21 27/9/2014 5:36 27/9/2014 5:36 27/9/2014 5:36 27/9/2014 5:46 27/9/2014 5:55 27/9/2014 5:55 27/9/2014 5:55 27/9/2014 5:51 27/9/2014 5:51 27/9/2014 5:51 27/9/2014 5:51 27/9/2014 5:51

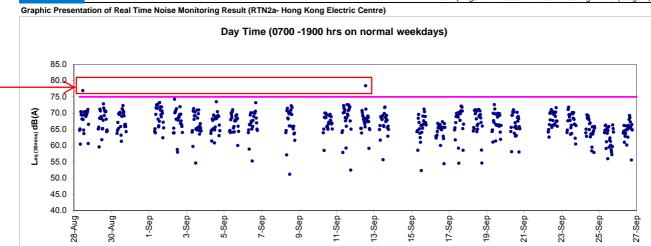
27/9/2014 6:06 59.1
27/9/2014 6:06 59.1
27/9/2014 6:16 60.6
27/9/2014 6:11 60.6
27/9/2014 6:21 59.9
27/9/2014 6:31 61.2
27/9/2014 6:34 61.2
27/9/2014 6:36 62.1
27/9/2014 6:36 62.1
27/9/2014 6:36 62.1
27/9/2014 23:01 64.0
27/9/2014 23:01 64.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:01 62.0
27/9/2014 23:31 62.6
27/9/2014 23:31 62.6
27/9/2014 23:31 62.0
27/9/2014 23:31 62.0
27/9/2014 23:31 62.0
27/9/2014 23:31 62.0

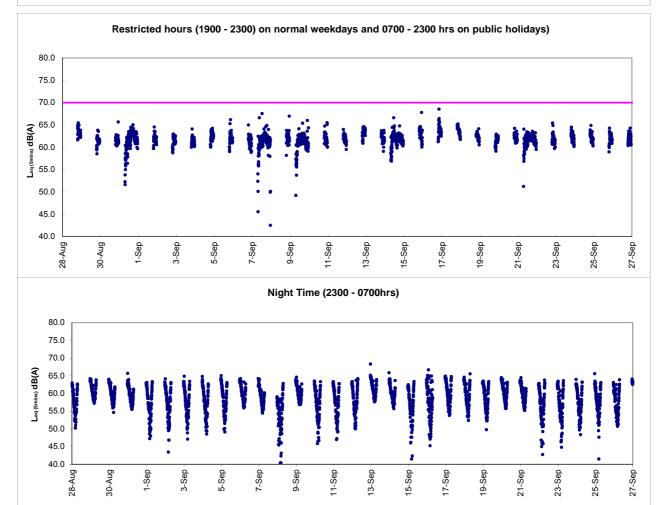
57.4 57.7 55.9 57.5 57.7 56.3 56.2 56.0 56.3 57.5 57.6 58.1 56.1

58.0 57.9

58.0 58.0 57.9 58.7 59.1







After checking with contractor HY/2009/19, despite bored piling works and socket piling were conducted, contractor mitigation measures including erection of temporary noise barrier and noise blanket were in place .In view of the exceedances are non-continuous, the exceedances are considered to be non-Project related and contributed by the IEC traffic and adjacent non-CWB piling site.

Appendix 6.1

Event Action Plans

Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level being exceeded	 Notify ER, IEC and Contractor; Carry out investigation; Report the results of investigation to the IEC, ER and Contractor; Discuss with the IEC and Contractor on remedial measures required; Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working days after the exceedance is identified) 	 Review the investigation results submitted by the ET; Review the proposed remedial measures by the Contractor and advise the ER accordingly; Advise the ER on the effectiveness of the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified) 	 Confirm receipt of notification of failure in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified) 	Submit noise mitigation proposals to IEC and ER; Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified)

am	Lam Geotechnics Lin

EVENT	ACTION				
	ET	IEC	ER	CONTRACTOR	
Limit Level being exceeded	 Inform IEC, ER, Contractor and EPD; Repeat measurements to confirm findings; Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and ER on remedial measures required; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified) 	Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified)	of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures;	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC and ER within 3 working days of notification; Implement the agreed proposals; Submit further proposal if problem still not under control; Stop the relevant portion of works as instructed by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified) 	



Event / Action Dian for Construction Air Quality

EVENT		ACTION		
EVENI	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
Exceedance for one sample	Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC and ER; Repeat measurement to confirm finding; Increase monitoring frequency to daily. (The above actions should be taken within 2 working days after the exceedance is identified)	Check monitoring data submitted by ET; Check Contractor's working method. (The above actions should be taken within 2 working days after the exceedance is identified)	Notify Contractor. (The above actions should be taken within 2 working days after the exceedance is identified)	Rectify any unacceptable practice; Amend working methods if appropriate (The above actions should be taken within 2 working days after the exceedance is identified)
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. (The above actions should be taken within 2 working days after the exceedance is identified)	Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET on the effectiveness of the proposed remedial measures; Supervise Implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	Submit proposals for remedial to ER within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
LIMIT LEVEL				
Exceedance for one sample	Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. (The above actions should be taken within 2 working days after the exceedance is identified)	Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	Take immediate action to avoid further exceedance; Submit proposals for remedial actions IEC within 3 working days of notificatio IEC mithin 3 working days of notificatio Implement the agreed proposals; Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
Exceedance for two or more consecutive samples	Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; Supervise the implementation of remedial measures.	Confirm receipt of notification of failure in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	Take immediate action to avoid further exceedance; Submit proposals for remedial actions IEC within 3 working days of notification Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified.)

EVENT		ACTION		
	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; (The above actions should be taken within 1 working day after the exceedance is identified) Repeat measurement on next day of exceedance.	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the ER and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and ER; Implement the agreemitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)
Action level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; (The above actions should be taken within 1 working day after the exceedance is identified) Repeat measurement on next working day of exceedance.	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)

EVENT		ACTION		
	ET	IEC	ER	CONTRACTOR
Limit level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC, contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, ER and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 3 working days Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)
Limit level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC, contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, ER and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures; Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit level. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the ER and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 3working days Implement the agreed mitigation measures; As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities. (The above actions should be taken within 1 working day after the exceedance is identified)



Event and Action Plan for Odour Patrol

Event		ACTION
	Person-in-charge of Odour Monitoring	Implementation Agent Identified by CEDD
Action Level		
Exceedance of Action Level	Identify source/reason of exceedance; Repeat odour patrol to confirm finding.	 Carry out investigation to identify the source/reason of exceedance; Rectify any unacceptable practice Implement more mitigation measures if necessary; Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.
Limit Level		
Exceedance of Limit Level	1. Identify source / reason of exceedance; 2. Repeat odour patrol to confirm findings; 3. Increase odour patrol frequency; 4. If exceedance stops, cease additional odour patrol.	 Carry out investigation to identify the source/reason of exceedance. Investigation shall be completed within 2 weeks; Rectify any unacceptable practice; Formulate remedial actions; Ensure remedial actions properly implemented; If exceedance continues, consider what more/enhanced mitigation measures shall be implemented; Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.

Appendix 6.2

Summary for Notification of Exceedance



Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_10C61	3 4-Sep-14	Mid-flood	RW21-P789	DO(mg/l)	4.47	3.02	2.44		Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	1.97	11.35		taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checked with Contractor works.
				SS	24.00	18.42	27.54		No marine work was conducted under contract HK/2009/02 during the monitoring date on 4 September 2014, silt screen installed around intake location was generally in place. In view that no marine activity was conducted and the exceedance was not continuous, it was considered the exceedance was not related to Project.



Ref no.	Date	Tidal	Location	Depth	Parameters	Measured	Action	Limit Level	Follow-up action	
X_10D459	4-Sep-14		Ex-WPCWA SE	Middle	DO(mg/l)	3.17	3.55		Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 4 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. Upstream discharge at the concerned location were consistently observed. No dreding works for marine sediment was conducted. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project.
X_10D460	6-Sep-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.47	3.19	3.10	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 6 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. Upstream discharge at the concerned location were consistently observed. No dreding works for marine sediment was conducted. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project.
X_10D461	6-Sep-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	3.27	3.55	3.00	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 6 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. No dredging works for marine sediment was conducted. Upstream discharge at the concerned location were consistently observed. As such, it was considered the exceedance was not related to Project.
X_10D462	6-Sep-14	Mid-Ebb	Ex-WPCWA SE	Middle	DO(mg/l)	3.20	3.55	3.00	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 6 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. No dredging works for marine sediment was conducted. Upstream discharge at the concerned location were consistently observed. As such, it was considered the exceedance was not related to Project.



Ref no.	Date	Tidal	Location	Depth	Parameters	Measured	Action	Limit Level	Follow-up action	
X 10D463		Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.93	3.19		Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 8 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. Upstream discharge at the concerned location were consistently observed. No dreding works for marine sediment was conducted. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project.
X_10D464	8-Sep-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	2.88	3.55	3.00	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 8 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. No dredging works for marine sediment was conducted. Upstream discharge at the concerned location were consistently observed that it was considered the exceedance was not related to Project.
X_10D465	8-Sep-14	Mid-Ebb	Ex-WPCWA SE	Middle	DO(mg/l)	2.88	3.55	3.00	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	Despite temporary reclamation removal work was conducted on monitoring date on 8 Sep 2014 at Ex-WPCWA, Contractor mitigation measures including use of silt curtain was generally in place. Upstream discharge at the concerned location were consistently observed. No dreding works for marine sediment was conducted. In view of the exceedance was not continuous, it was considered the exceedance was not related to Project.
X_10D466	19-Sep-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.89	3.19	3.10	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	No marine work was conducted on monitoring date on 19 Sep 2014 at Ex-WPCWA. Upstream discharge at the concerned location were consistently observed. In view that no marine activities at Ex-WPCWA, it was considered the exceedance was not related to Project.



Ref no.	Date	Tidal	Location	Depth	Parameters	Measured	Action		Follow-up action	
X_10D467	24-Sep-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.38	3.19	3.10	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	No marine work was conducted on monitoring date on 24 Sep 2014 at Ex-WPCWA. Upstream discharge at the concerned location were consistently observed. In view that no marine activities at Ex-WPCWA, it was considered the exceedance was not related to Project.
X_10D468	24-Sep-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	2.18	3.55	3.00	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	No marine work was conducted on monitoring date on 24 Sep 2014 at Ex-WPCWA. Upstream discharge at the concerned location were consistently observed. In view that no marine activities at Ex-WPCWA, it was considered the exceedance was not related to Project.
X_10D469	26-Sep-14	Mid-Flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.54	3.19	3.10	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	No marine work was conducted on monitoring date on 26 Sep 2014 at Ex-WPCWA, and Contractor mitigation measures including use of silt curtain was generally in place. In addition, upstream discharge at the concerned location were consistently observed. In view that no marine activities at Ex-WPCWA, it was considered the exceedance was not related to Project.
X_10D470	26-Sep-14	Mid-Flood	Ex-WPCWA SE	Middle	DO(mg/l)	2.69	3.55	3.00	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works.
									Remarks/ Other Obs:	No marine work was conducted on monitoring date on 26 Sep 2014 at Ex-WPCWA. Upstream discharge at the concerned location were consistently observed. In view that no marine activities at Ex-WPCWA, it was considered the exceedance was not related to Project.



Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_W566	4-Sep-14	Mid-ebb	WSD9	DO(mg/l)	3.82	3.17	2.63	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	6.22	10.01	11.54	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checked with Contractor works.
				ss	20.50	16.26	19.74	Remarks/ Other Obs:	No marine works was conducted under contract HK/2009/02 during the monitoring date on 4 September 2014. No exceedance was recorded at upstream monitoring stations. In view that no marine activity was conducted and no exceedance was recorded in subsequent monitoring, it was considered that the exceedance was not project related.
X_W567	10-Sep-14	Mid-ebb	WSD19	DO(mg/l)	4.2	3.17	2.63	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	11.23	10.01	11.54	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checked with Contractor works.
				SS	5.50	16.26	19.74	Remarks/ Other Obs:	Preparation work for installation of caisson seawall under contract HK/2012/08 was conducted during the monitoring date on 10 September 2014. Silt screen at monitoring station was generally in order. In view that the construction area was located at the downstream of WSD19 monitoring station and no exceedance was recorded in subsequent monitoring, it was considered that the exceedance was not project related.
X_W568	17-Sep-14	Mid-ebb	WSD19	DO(mg/I)	4.47	3.17	2.63	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.43	10.01	11.54	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checked with Contractor works.
				SS	20.50	16.26	19.74	Remarks/ Other Obs:	Surveying of caisson seawall and restoration of silt curtain after typhoon under contract HK/2012/08 was conducted during the monitoring date on 17 September 2014. Silt screen at monitoring station was generally in order. In view that the construction area was located at the downstream of WSD19 monitoring station during the same monitoring period and no exceedance was recorded in subsequent monitoring, it was considered that the exceedance was not project related.

Lam Geotechnices Limited

	1							1	
Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_W569	24-Sep-14	Mid-ebb	WSD19	DO(mg/l)	3.58	3.17	2.63	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	17.98	10.01	11.54	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checked with Contractor works.
				ss	6.00	16.26	19.74	Remarks/ Other Obs:	Surveying of caisson seawall under contract HK/2012/08 was conducted during the monitoring date on 24 September 2014. Silt screen at monitoring station was generally in order. In view that the construction area was located at the downstream of WSD19 monitoring station during the same monitoring period and no exceedance was recorded in subsequent monitoring, it was considered that the exceedance was not project related.
X_W570	26-Sep-14	Mid-flood	WSD19	DO(mg/l)	4.39	3.17	2.63	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	13.36	10.01	11.54	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checked with Contractor works.
				SS	14.00	16.26	19.74	Remarks/ Other Obs:	Surveying of caisson seawall under contract HK/2012/08 was conducted during the monitoring date on 26 September 2014. Silt screen at monitoring station was generally in order. In view that the construction area was located at the downstream of WSD19 monitoring station during the same monitoring period and no exceedance was recorded in subsequent monitoring, it was considered that the exceedance was not project related.

Appendix 9.1

Complaint Log

Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	tcome	Status
100321a	21/3/2010	ICC Case no. 1-224618029, Ms. Tsang	Location near Tin Hau	Complaint regarding the loud noise and dark smoke in the course of dredging works on 21 March 2010 (Sunday).	1)	A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18 th Feb. 2010 for the dredging works which carry out at area for North Point Reclamation.	Closed
					2)	Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.	
					3)	The Contractor (CHEC-CRBC JV) strictly comply all the conditions in CNP and take all mitigation measures in order to minimize the potential impacts to surrounding sensitive receivers. A formal letter was issued out by CHEC-CRBC JV and to explain the status of the recent construction activities.	
					4)	No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring.	
					5)	No further complaints were received from Mr. Tsang in the reporting month. The complaint is considered closed.	
100321b	21/3/2010	Unknown	Near the eastern breakwater of the Causeway Bay Typhoon Shelter	21/3/2010 (Sunday) until 2220 hours and between 1920-1946 hours in the evening of 22 March	1)	A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18 th Feb. 2010 for the dredging works at area for North Point Reclamation during general holidays including Sunday between 0700-2300 hours and any day not being a general holiday between 1900-2300hours. It is complied with the condition of CNP.	Closed
				2010(Monday).	2)	Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.	
					3)	No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring.	
					4)	No further complaints were received in the reporting month. The complaint is considered closed.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	come	Status
100504	complainant due to the large scale of dredging machine (face to Islan (ICC case: 1-		Complaint on the noise nuisance due to the large scale of dredging machine (face to Island East Corridor) in particular the hours 1900 to 0800 and request	,	Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0119-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.	Closed	
		233384048)		to reduce the noise level.	2)	According to RSS 's record, no more daytime and night time dredging since the departure of the split hopper barge from the workplace on 29 April 2010 at 1900 hrs to 5 May 2010.	
					3)	No further complaints were received in the reporting month. The complaint is considered closed.	
100731	31/7/2010	Mr. Lee received by ICC (CC Case:		due to the dredging works.	1)	Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works.	Closed
		1-250702681)		Three construction plants were operated concurrently.	2)	There was only 1 grab dredger operated by Contractor within NPR project site area for dredging works.	
					3)	No noise exceedance was recorded at noise monitoring station at Victoria Centre on 27 July and 3 August 2010 during daytime and evening time period.	
					4)	It is considered as invalid from the EP and CNP point of view. $ \\$	
100812	12/8/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the dredging works at the marine	,	Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.	Closed
	works area adjacent to the Harbour Height during the period from 0700 to 2200.		2)	No noise exceedance was recorded at noise monitoring station at Victoria Centre on 10 and 17 August 2010 during daytime and evening time period.			
			3)	It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.			



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	come	Status		
101108	8/11/2010	Mr. Nip received by ICC (CC Case)	Sai Wan Ho	Visual concern around the seaside silt screen outside the WSD freshwater intake pump at Sai Wan Ho (Monitoring station ref no WSD15)	1)	Contractor for HY/2009/11has been regular checked of condition and removal of trapped rubbish before the dismantling of the floating silt screen to be replaced by wall mount silt screen.	Closed		
			Station for no Web to)	2)	Follow-up action had been immediately carried out to check and clear the floating refuse around the seaside silt screen after receipt of the complaint.				
					3)	Removal of seaside silt screen outside the WSD freshwater intake (WSD15) by contractor HY/2009/11 was checked and confirmed dated 9 November 2010. Silt screen has been deployed into the existing steel frame at WSD15 for the protection of WSD salt water intake.			
101110	10/11/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the power mechanical equipment during the 0700 to 2200hrs	1)	Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0870-10 for their dredging works during evening time. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.	Closed		
							2)	No noise exceedance was recorded at noise monitoring station at Victoria Centre on 4 and 10 November 2010 during daytime and evening time period.	
									3)
101203	01:45a.m. Block 11, Garden by referral	01:45a.m. Block 11, City Garden by ICC referral from	01:45a.m. Block 11, City Garden by ICC referral from	:45a.m. Block 11, City Garden by ICC the dredging plant off N	Bad odour was generated from the dredging plant off North Point	1)	The first investigation was carried out by Marine Department patrol in the morning on 3 Dec 2010 at around 10:00 and revealed that a few working barges were anchoring in the vicinity without carrying out dredging work.	Closed	
		Department			2)	A further specific investigation inspection on contractor's backhoe barge in the vicinity of City Garden was jointly conducted with Engineer Representatives (AECOM/RSS), and ET on 8 Dec 2010 at 11:30. No bad odour was noted during the investigation.			
					3)	Routine dredging operation of the backhoe barge was performed during the jointed investigation inspection and it was revealed that no bad odour was attributed by the dredged materials inspected.			
101206	6/12/2010	Ms Lui, the resident of 27/F, Block 10, City		Two barges were generating noise at 22:00 on 6 December 2010 in which the noise from	1)	ET confirmed the following information with resident site staff on the complaint: • It was referred to the filling operation at North Point	Closed		



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		Garden by ICC (ICC case: 1-266039336)		filling operation was louder than the traffic noise & visual impact was generated due to the spotlight pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II; Complainant also raised the same complaint to District Councillor, Mr. Hui on 7 Dec 2010 regarding the night-time noise and suspected earlier start of work at 06:30. Complaint also requested for limiting the plant operating hours from 09:00-21:00.	Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II; • Two derrick barges were in operation at the time of complaint for placing 400 rockfill onto the excavation trench and for levelling the formation level to receive the pre-cast caisson seawall; • Flood light on the control mast of derrick barge have no lighting shields for the prevention of glare of flood lights; • No starting work on 7 Dec 2010 at 0630hours. 2) PME used in restricted hours were checked and confirmed compliant with valid CNP no. GW-RS0870-10. The noise level recorded on 6 Dec 2010 was complied with the noise criteria during restricted hour; 3) It was found that the occasional noise nuisance might be caused by the hitting or scratching onto the rock surface during loading down the grab onto the Grade 400 rockfill; 4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time. 5) Contractor was advised to minimize the finishing time of placing Grade 400 rockfill at 2100hrs and switch off all unnecessary flood lights apart from the light for the safety and security purpose; 6) No further complaint was received after implementation of proposed measures	
110415	15/04/2011	The resident, Mr Law at Victoria Centre by ICC (ICC#1- 281451236)	North Point	A dust generation and a concern of mosquitoes breeding complaint in which suspected the filling operation was part of North Point Reclamation.	 The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work. Water spraying on the haul road and potential dust generating material at least 4 times a day was conducted by contractor that complies with the requirement. It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant. It was recommended that increasing the frequency of water spraying shall be conducted to all potential dust generating materials and activities. Besides, Contractor should consider to cover the idle part of the stockpile The concern of mosquitoes breeding is out the scope of EM&A, the follow-up action is not reported in this monthly EM&A report. 	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	utcome	Status
110419	19/04/2011	Ms Chiu at Victoria Centre at Victoria Centre by ICC (ICC# 1- 272874759)	North Point	The episode of night noise on 19/4/11 and 20/4/11 at 2:50 am and the noise lasted for 30 minutes per night.	According to the RSS's record, works undertaken under the concern time period. There was no abnormal real-ti recorded in RTN1 - FEHD Hor Whitefield Depot which is next to	EP-356/2009 during the me noise monitoring data ng Kong Transport Section
			3	It is considered as invalid compl	aint under this Project.	
110617	110617 9/06/2011 Mr. Law from Victoria Centre Management Office	Victoria Centre Management Victoria Centre Management generating from the dischargement generating ge	The complaint was received by the weekly site inspection on 7 was no any odour impact detect	and 17 June 2011, there		
		Office	related	related to CWB under Contract no. HY/2009/11	According to the site record, discharged from the unknowr Channel T during heavy rains runoff to the Channel T and observed in the inspection.	n source at upstream of corm. No any site surface
			In order to prevent muddy water body under heavy rainstorm, at the outfall of the channel by Cothe Resident Site Staff that as the outfall of the channel to preout to the water body under regular cleaning of refuse in conducted by Contractor.	silt curtain was installed at ntractor. ET confirmed with silt curtain was installed at vent muddy water washing neavy rainstorm. Besides,		
					A further site investigation on 2 no odour nuisance was detect Channel T and no source of odd at site. As such, it was conclude nuisance was not related to the	ed at the upstream of the our nuisance was identified ed that the source of odour
			Although no source of odour is site, the muddy water and dirt frupstream of Channel T may cau low tide and low water flow. C remove the silt curtain at the chas to avoid the accumulation of the water channel.	om the unknown source at use a potential smell during contractor was reminded to cannel on non-rainy day so		



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	come	Status
110709	09/07/2011	Mr. Au from City Garden Management Office	North Point	A complaint letter to Contractor HY/2009/11 was raised by Cayley Property Management Limit on 9 July 2011 regarding a series of pump breakdown events at seawater intake of City Garden on 4, 6, 7 and 8 July 2011. A lot of rubbish such as plastic bags, nylon bags, nylonwire mesh was observed sucking from the seawater intake at the seawater front of Block 7 of City Garden affecting the operation of seawater pump plant.	2)	Contractor conducted formation works for installation of caisson seawall at C27, C28, C29 and C30 on 4, 6, 7 and 8 July 2011 and no dredging work was conducted during this time period Water mitigation measures of an 80m long silt curtain at the site boundary in front of City Garden Relocation of silt curtain and silt curtain at the outfall of the channel were provided and maintained to accommodate the site works. All vessels are equipped with rubbish collection facilities and disposed the rubbish regularly. Also, daily cleaning actions had been taken by contractor to minimize floating refuse within the site boundary. Moreover, it has been reported several times that discharged from outfall pipeline outside the site boundary near the intake of the pump maybe considered as another source of rubbish generation.	Closed
					4)	Referring to the record provided by Cayley Property Management Limit, the trapped rubbish was unlikely generated from the construction works. It was considered that complaint is invalid and not related to project.	
110710	09/07/2011	Complainant by ICC (ICC no. 1-301520309	North Point	It was received at 00:56 on 10 July 2011. There was complained a derrick barge unloading rockfill material off the shore facing the Harbour Grant HK Hotel causing noise nuisance.	')	ET confirmed with the Resident Site Staff that the complaint was referred to Contract HY/2009/15 for the loading and unloading of fill material at two barges operation in the sea at around 300m adjacent to Island Eastern Corridor (Oil Street Chainage) where is outside the Site of HY/2009/15 in the period of around 19:45 on 9 July to 1:00 on 10 July 2011.	Closed
					2)	The material loading and unloading operation processed in restricted hours was checked without a valid CNP. It was found that the operation was due to an unexpected water leakage of the hopper barge and considered an incident.	
					3)	According to the incident report provided from RSS on 20 July 2011, around 7:30 pm the barge S22 was inclined slightly and slightly water leakage might occur. Due to marine safety concern, the hopper barge would open the hopper to release the contained materials in order to reduce the weight and stabilize the barge. In consider of slight water leakage, the operator decided to use the nearby Derrick Barge ST32 to help for unload the general fill materials first and the unloading operation was started at around 7:45pm, and end at around 1:00 am. Contractor was reminder to provide frequent check of vessel condition	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	tcome	Status
						so as to prevent recurrent by barge defect	
110723a	23/07/2011	Ms. Law at Victoria Centre by ICC no. 1-303887687	Victoria Centre by ICC no. 1- Department published a notice in their Management Office 2	1) 2) 3)	It was referred by AECOM to ET on 28 July 2011 RSS confirmed that the notice was prepared by Victoria Centre's Management office to their resident and the advice was only given on the extension construction works (for Contract HY/2009/15) to 7am-9pm from Monday to Saturday except Public Holidays and Sundays. As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-		
					4)	August 2011. No noise exceedance was recorded at construction noise monitoring station at Victoria Centre on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring.	Closed
		5)	In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.				
110723b	23/07/2011	Ms. Yau at Block	North Point	Reclamation work was	1)	It was referred by AECOM to ET on 8 August 2011	
		2, Victoria Centre by ICC no. 1- 304013959	by ICC no. 1- 304013959	conducted at Causeway Bay Typhoon Shelter at 7am on 23 July 2011. She complained that the works shall be started later to minimize the noise nuisance to the vicinity of the residents in early morning	2)	With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring	
					3)	As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid- August 2011.	Closed
					4)	In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.	
110727a	27/07/2011	Mr. Law from Victoria Centre Management Office by ICC no. 1-304616162	North Point	It was complained by Mr. Law from Victoria Centre Management Office on 27 July 2011 regarding construction noise generated by the construction operations of	1) 2) 3)	It was referred by AECOM to ET on 28 July 2011 RSS confirmed to start the rock breaking activities for Contract HY/2009/15 at 8am as a mitigation measure to minimize the noise nuisance in the vicinity of the residents. No noise exceedance was recorded at construction noise	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	tcome	Status
				Central-Wanchai Bypass at noon rather than in morning at 7am.		monitoring station at Victoria Centre on 25 July and 4 August 2011 during daytime while breaking and excavation works were undertaken during monitoring.	
					4)	In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. No further complaint from complainant was received after proposed the mitigation measure.	
110727b	27/07/2011	IVIS. Cliff by ICC North Form	Noise nuisance from the excavation works for the	1)	It was referred by AECOM to ET on 28 July 2011		
		no.1-304615409	Highways Department adjacent to the Victoria Centre was conducted from 7am	2)	With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 25 July and 4 and 10 August 2011 during daytime while breaking and excavation works were undertaken during monitoring.		
					3)	As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am.	
	08/08/2011			4)	However, complainant did not satisfy with the response on the noise nuisance from the rock-breaking during morning in front of Victoria Centre and then further complaint via 1823 on 7 August 2011.	Closed	
			5)	Highways contacted the complainant on 15 August 2011 that the noisy rock breaking operation had been completed.			
					Rer	marks: There will be counted as two complaints in this complaint log.	
110810	10/08/2011	Mr. Yip by ICC	North Point	Muddy water was discharged from work site to the seafront	1)	It was referred by AECOM to ET on 17 August 2011.	Closed
	no. 1 – 306740207		near Oil Street during heavy rain. The environmental protection measures were not good enough and are needed to rectify.	2)	Confirmed with RE, Muddy water was caused by a heap of earth being washed to the sea by heavy rain. The heap of earth was referred as a small stockpile placed close to the seafront in front of Oil Street within the site area under handover transition period from contract HY/2009/11 to contract HY/2009/19. The necessary mitigation measures to protect the small stockpile against rainfall were missing at the time of complaint.		
					3)	Due to the missing of mitigation measures to protect the small stockpile during handover transition period, loose material was washed into the harbour when heavy rain came. Muddy water was formed and dispersed in the sea that caused the water quality and visual concern to the public. The complaint was considered as valid. Contractors were advised to relocate the loose materials	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	tcome	Status
						away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover.	
110826	26/08/2011	Grand Hyatt and a complainant by ICC	Wan Chai	nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area.	1)	Confirmed with the Resident Site Staff that the construction works were referred to the Contractor HK/2009/01.	
		ICC			2)	The Excavator mounted breaker at Convention Avenue and Drilling rig at HKCEC1 reclamation area were the dominant construction noise source during this period.	
					3)	The drilling rig at HKCEC1 reclamation area and excavator mounted breaker at Convention Avenue were then temporary suspended after received the complaint.	
					4)	Investigation revealed that the erected noise barrier (4m cantilevered movable noise barrier for the drilling rig and 1m movable noise barrier for the excavator mounted breaker) were not located close to the plants to provide adequate noise screening.	Closed
					5)	Contractor was advised to avoid concurrent operation of construction plants at site. Further enhancement of movable noise barriers at HKCEC1 and providing noise enclosure for the excavator mounted breaker at Convention Avenue are needed.	
					6)	Further site investigation and checking on 31 August and 7 September 2011 revealed that the implemented noise mitigation measures were in proper and minimize the noise impact.	
110826A	26/08/2011	A complaint letter from Mr. Au of Cayley Property of City Garden	North Point	Harbor front adjacent to their cooling water intake suction which caused 3 times of system breakdown of the sea water pump on 9, 22 and 25 August 2011.	1)	It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the • construction works were referred to the Contractors HY/2009/11 and HY/2009/19. • The pump is located on the site area of HY/2009/19	Closed
						 A temporary garbage defender was installed on 23 July 2011 by HY/2009/11 and the shape of the defender was adjusted on 8 August 2011 in order to excluse the outfall. 	
						 An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project 	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	come	Status
						team), contractor of HY/200911 and HY/2009/19 and IECon 29 August 2011. Inspection report of it was submitted to RSS on 19 September 2011.	
						 Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19. 	
						 In response to City Garden request, the contractors have set up the temporary garbage defender in function and collect the floating refuses, but cannot eliminate all refuses, in particular the refuse coming from the seabed 	
					2)	According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying wih their expectation.	
					3)	During on-site inspection, floating refuses observed occasionally outside the garbage defender. No conclusion could be made for the source of these floating refuses. On the other hand, some of the refuses were observed floating behind the garbage defender during investigation.	
					4)	All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site.	
					5)	It was noted that the cooling water intake was accessible to the public. As such, fish breeding and fishing activities were observed even though a notice has already hoisted. Also, tripping of rubbish by the passers-by could result in a lot of rubbish accumulated around the intake point.	
					6)	Referring to the record provided by CPML, there were a lot of nylon/ plastic bags and nylon wire mesh that matched those rubbishes generated from the public activities.	
					7)	Contractors have fulfilled the requirement of site cleanness and no exceedance was recorded during Water Quality Monitoring. It is consider the cause of this complaint is not related to project and environmental issue in this project as well. No more complaint received after ad-hoc inspection	
111014	14/10/2011	The complainant, Ms. Tam complained via hotline 1823	Wan Chai	The polluted fumes and exhaust from the excavation by sub-contractor of CEDD on pedestrian way outside no.25 Harbour Road (in front of the Harbour Centre)	1)	RSS notified ET to carry out investigation on 17 October 2011. ET confirmed with the Resident Site Staff that the location of the excavator was within site area of Contract no. HK/2009/02 undertaking the water cooling main reprovision works along the Harbour Road. The plants including the excavator have been checked before using	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site. 3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011. 4) Contractor was reminded to enhance regular checking and maintenance to all plants at site. 5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.	
111104	04/11/2011	Mr. Liu from LCSD complained via Contractor Complaint Hotline	Wan Chai	Complain about a tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road, the status is not healthy and roof ball of two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue were half cut.	 ET confirmed with the Resident Site Staff that A tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road is the Tree no. TA1122 under Contract no. HK/2009/02. Leaves of a branch of this tree were shrivelled. Two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue are the tree nos. A160 and A161 under Contract no. HK/2009/01. Part of roof ball of these two trees was covered by the metal plate. Independent Tree Specialists for these two inspected the trees. Contractor HK/2009/01 has taken the measure as recommend downgrading the soil level around the trunk base. Reinstating of the ground works will be conducted in mid-December 2011. For the tree no. TA1122 under Contract no. HK/2009/02, the brown leaves were removed and fenced the tree with orange net is provided to prevent damage of tree trunk by construction works. The distance between the tree and the edge of the trench is kept approximate 2m. Two Contractors were reminded to carry out regular watering to the trees within their site area. 	Waiting RSS respond
111106	06/11/2011	Police officer	Wan Chai	Construction noise generated from the site at about 6:30 a.m on 6 November 2011 and require to stop the machine operation	According to the information reported by Contractor, one BC cutter and hoist were operated for Diaphragm Wall construction of Shatin-Central Link to inspect bentonite pipes and ensure no damages and all the joints are tightened in good position. Then, the subcontractor for Diaphragm wall, SAMBO Korean foreman stopped the engine of the BC cutter immediately. The police officer recorded the details and HKID number of the foreman and then left. Due to the different language communication between the police officer and the Korean foreman, no	Keep in view for three months from the date of complaint recevied



Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	come	Status
				2)	CNP was checked by the police officer. ET confirmed with the Resident Site Staff that same issue was also raised out by RSS at about 7:00a.m on the same day. Besides, it was confirmed that there is no valid Construction Noise Permit for the conducted construction works in the period between 2300 and 0700.	
				3)	Due to insufficient communication between Contractor HK/2009/01 and their Korean Sub-contractor, Korean Sub-contractor had not notified to Contractor before carrying out the inspection of the BC cutter, hoists and bentonite pipes at about 6:00a.m to ensure no damages and all the pipe joints should be tightened and in good position.	
				4)	Contractor was advised to enhance the communication between Contractor and sub-contractor and provide sufficient environmental training to all foreman and operators on restricted hour operation. Futhermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour	
				5)	This complaint was considered in relation to the conducted construction works during restricted hours without valid Construction Noise Permit. No more construction works were conducted during night time period. The construction works will be conducted in accordance with the time period stated in valid CNP. This complaint will be kept in view of any follow-up action from the relevant government activities.	
05/04/2012	N/A	North Point	noise from construction sites of CBTS was observed daily before	3)	RSS notified ET on 5 April 2012. ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period. After reviewing the results of noise monitoring (M2b and M3a), no exceedance was recorded during daytime period and the noise level was below 75dB(A). Site inspection for HY/2009/15 was conducted on 10 April 2012. The condition of noise mitigation measures around CBTS was found satisfactory. RSS confirmed that no pilings were performed during the concerned period. The major works included drilling, diaphragm wall construction and excavations. HyD made a reply to the complainant on 16 April 2012 via 1823. HyD replied that the current works at CBTS were	Closed
	Complaint	Complaint and Received By	Complaint and Received By Complainant	Complaint and Received By Complainant 05/04/2012 N/A North Point A complaint regarding excessive noise from construction sites of CBTs was observed daily before 7:30am except on public holidays, and the noise source was mainly from pilling works. The complainant requested that construction works should start after 8:30am to avoid nuisance to nearby residents and a	Complaint and Received By Complainant 2) 3) 05/04/2012 N/A North Point North Point A complaint regarding excessive noise from construction sites of CBTS was observed daily before 7:30am except on public holidays, and the noise source was mainly from piling works. The complainant requested that construction works should start after 8:30am to avoid nuisance to nearby residents and a speedy follow-up and reply.	CNP was checked by the police officer.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					from the above works, the Contractor had erected temporary noise barriers and provided noise blankets on plants. RSS would continue to work with the Contractor on the effectiveness of the environmental mitigation measures implemented on site. No further complaint was received after the response.	
130308	06/03/2013	ICC Case#1- 407181502	Tin Hau	A complaint regarding the dropping of fine rock material into surrounding waterbody was observed during rock breaking operation with two excavators in active operation at the Eastern Breakwater of Causeway Bay Typhoon Shelter near the North Point lighthouse.	 1) RSS notified ET on 8 March 2013 2) ET confirmed with RSS that excavation works, installation of buoy, flashing light and silt curtain and dredging works were undertaken at Eastern Breakwater during the concerned period on 6 March 2013. One backhoe equipped with breaker and one derrick barge were confirmed in operation while another backhoe was at idle during the concerned period on 6 March 2013. 3) Reviewing the photo record provided by RSS, the condition of the silt curtain deployed around the Eastern Breakwater on 6 March 2013 was found to be in good condition. It is considered that the silt curtain was properly in place during the concerned period and the concerned act of dropping of fine rock material was confined within the silt curtain boundary without adverse impact to the nearby water quality. Further follow up was conducted on 12 March 2013 during weekly environmental audit inspection, the silt curtain deployed around the concerned area was found to be maintained in good condition and the water quality at the concerned work area was generally satisfactory. No violation of the Environmental Permit condition was found. The contracotr was advised and committed to implement preventive meaures to miminize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequtae back up stock of silt curtain for emergency use. 	Closed
140612	12/06/2014	EPD ref: EP/860/F2/24 Annex IV	Wan Chai	The complaint is regarding to the water quality of the waterfront outside the Hong Kong Academy for Performing Arts Theatre Block, where a large piece of muddy water was found.	,	Interim Report was submitted to EPD on 20 June 2014.

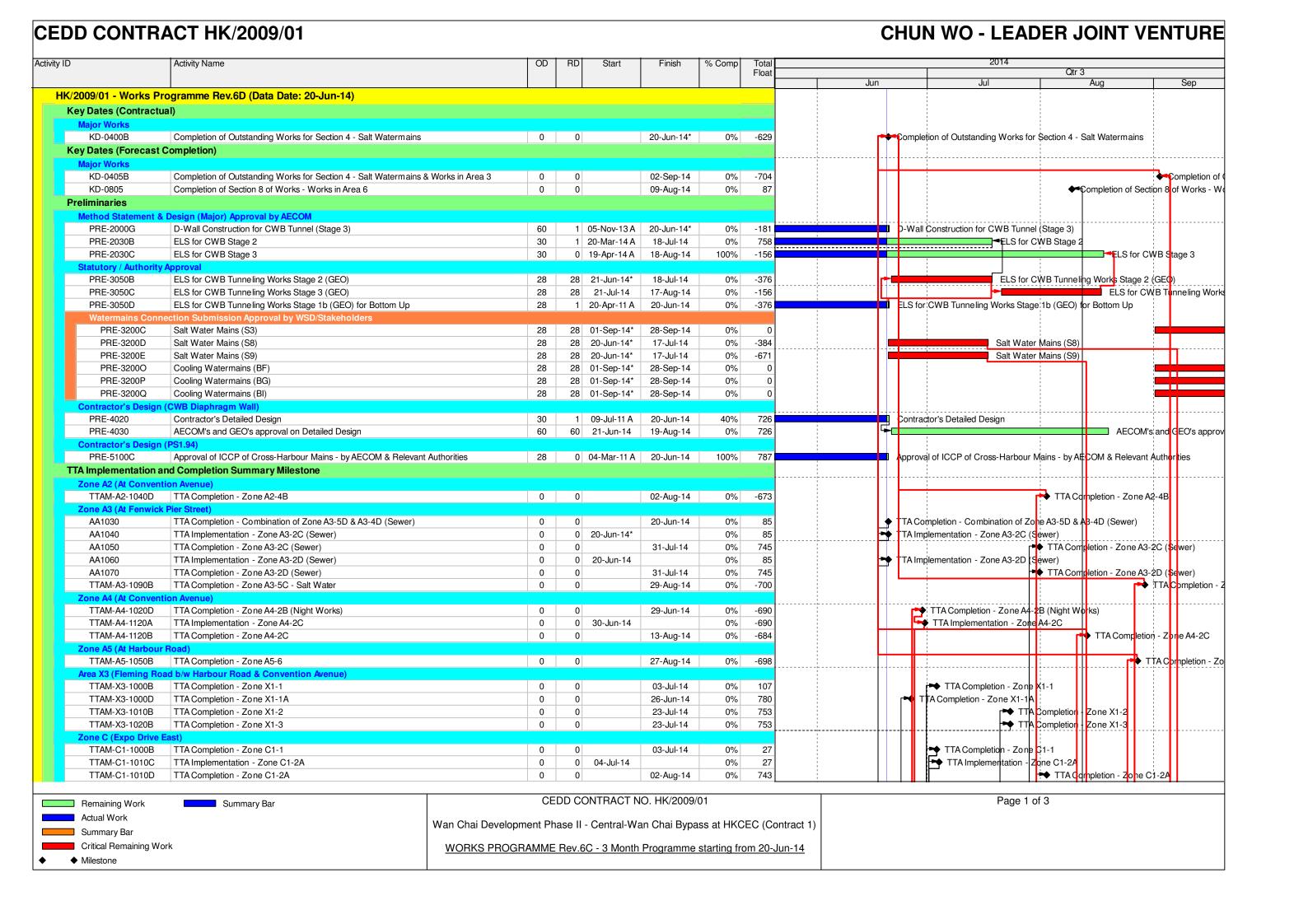
am	Lam Geotechnics

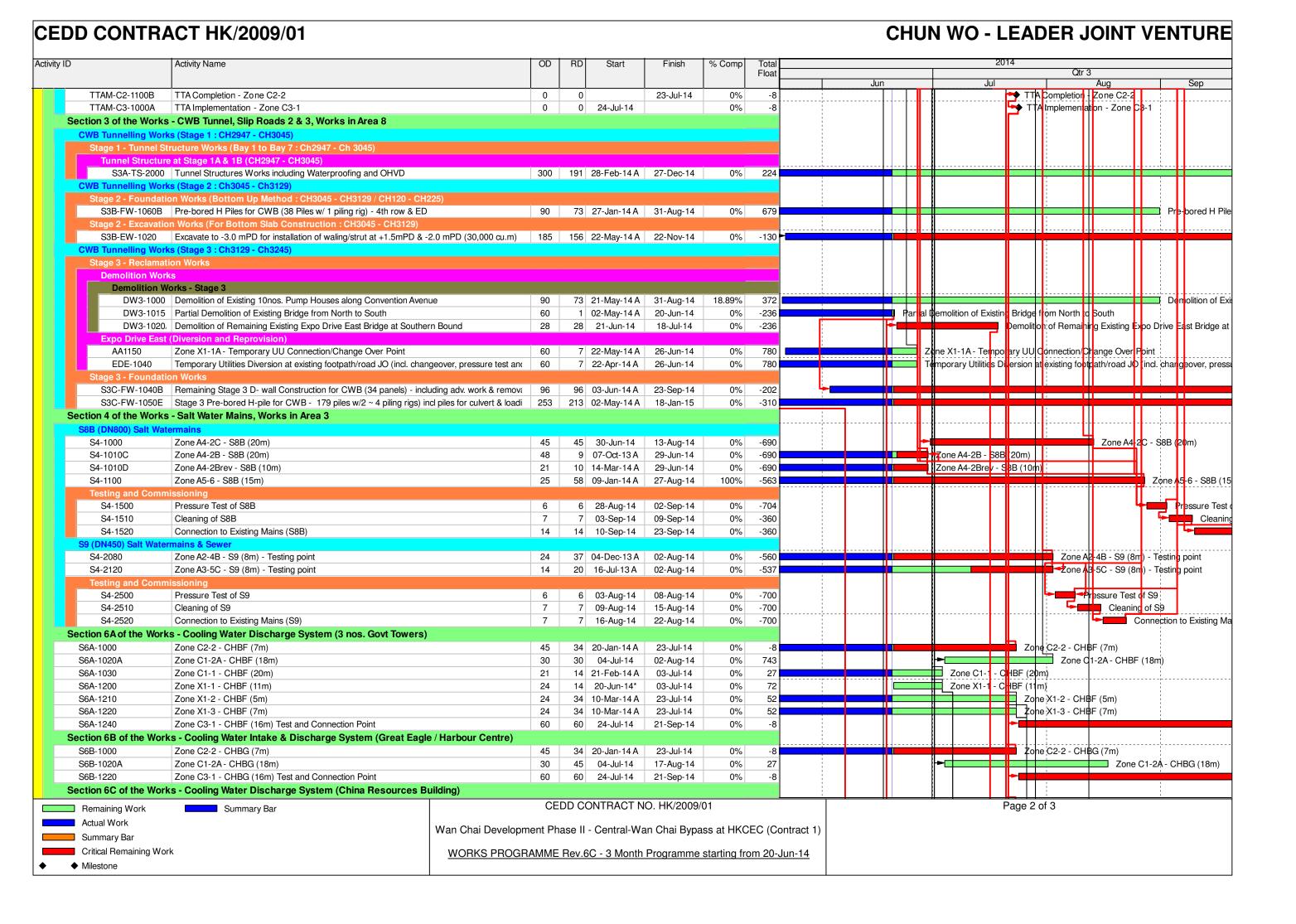
Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	come	Status
	•				3)	the dispersion was observed partly extended beyond the outermost layer silt curtain at 1000hrs. Immediate follow up action was requested. It is considered that Contractor's mitigation measures would require further review on the effectiveness to avoid seepage of muddy dispersion such as regular diver inspection check and daily visual checking of silt curtains. Additional silt curtain at marine access zone was installed by Contractor on 12 June 2014 and the double layer silt curtain were generally in order. Follow-up inspection was further conducted on 16 June 2014.	
140723	21/07/2014	ICC Case Ref: 2-341537112	Works area opposite to Ngan Tao Building	The complaint is regarding to construction noise impact to the complainant who could not sleep due to work and machine at the project site opposite to the Ngan Tao Building.	٥,	case was submitted to EPA via email on 18 June 2014. Construction noise impact referred by RSS was received by ET on 25 July 2014 ET confirmed with RSS that horizontal cutting and removal of D-wall at Eastern, Southern and Northern side of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter before 23:00hrs on 20 July 2014 that total 3 numbers of derrick lighter and 3 numbers of saw cut machine were in operation, and removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter around 00:25hrs to 00:56hrs on 21 July 2014 that total 1 number of derrick lighter was in operation.	Final report (Issue1) issued on 31 July 2014. Further to complainant follow-up, Final report (Issue2) Issued on 12 Aug 2014.
					3)	According to the relevant site records under Contract HY/2009/15, before 23:00hrs on 20 July 2014, horizontal cutting and removal of Diaphragm Wall at Eastern, Southern and Northern side of TS2 was conducted under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 3 nos. of derrick lighter and 3 nos. of saw cut machine were in operation at the above period. From around 00:25hrs to 00:56hrs on 21 July 2014, removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter. Total 1 no. of derrick lighter was found operating at the above period	
					4)	It was considered the condition of CNP GW-RS0592-14 was not fulfilled by the Contractor of HY/2009/15. "From 00:25hrs to 00:57hrs on 21 July 2014, the PME(s) (1 no. of Derrick Lighter) on-site could not follow with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0592-14."	

Complaint Log No.	 Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
				Notwithstanding the above, according to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting procedure was incomplete. Under safety and navigation consideration, the completion of diaphragm wall removal was necessary and of imminent need. 5) The Contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works.	

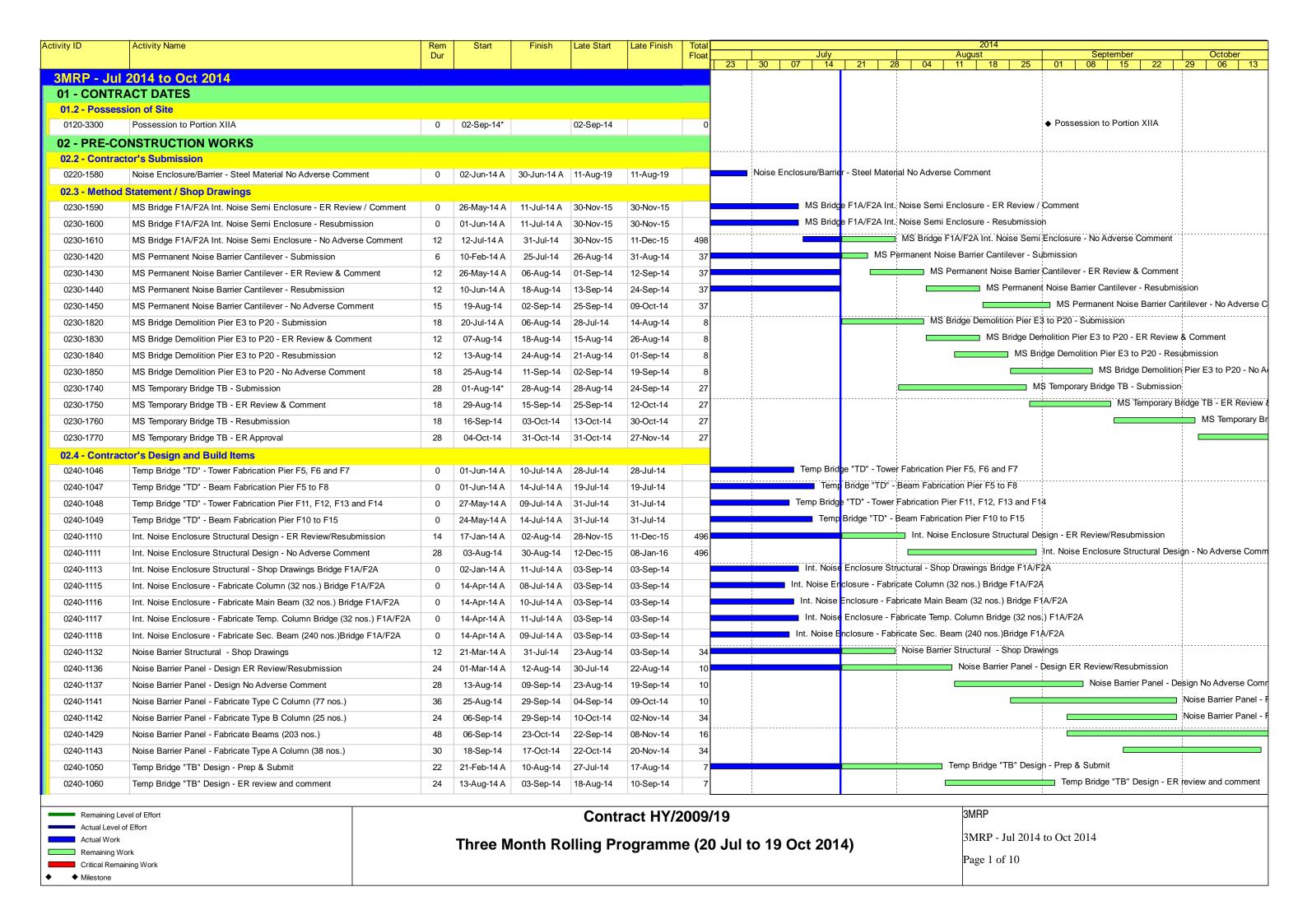
Appendix 10.1

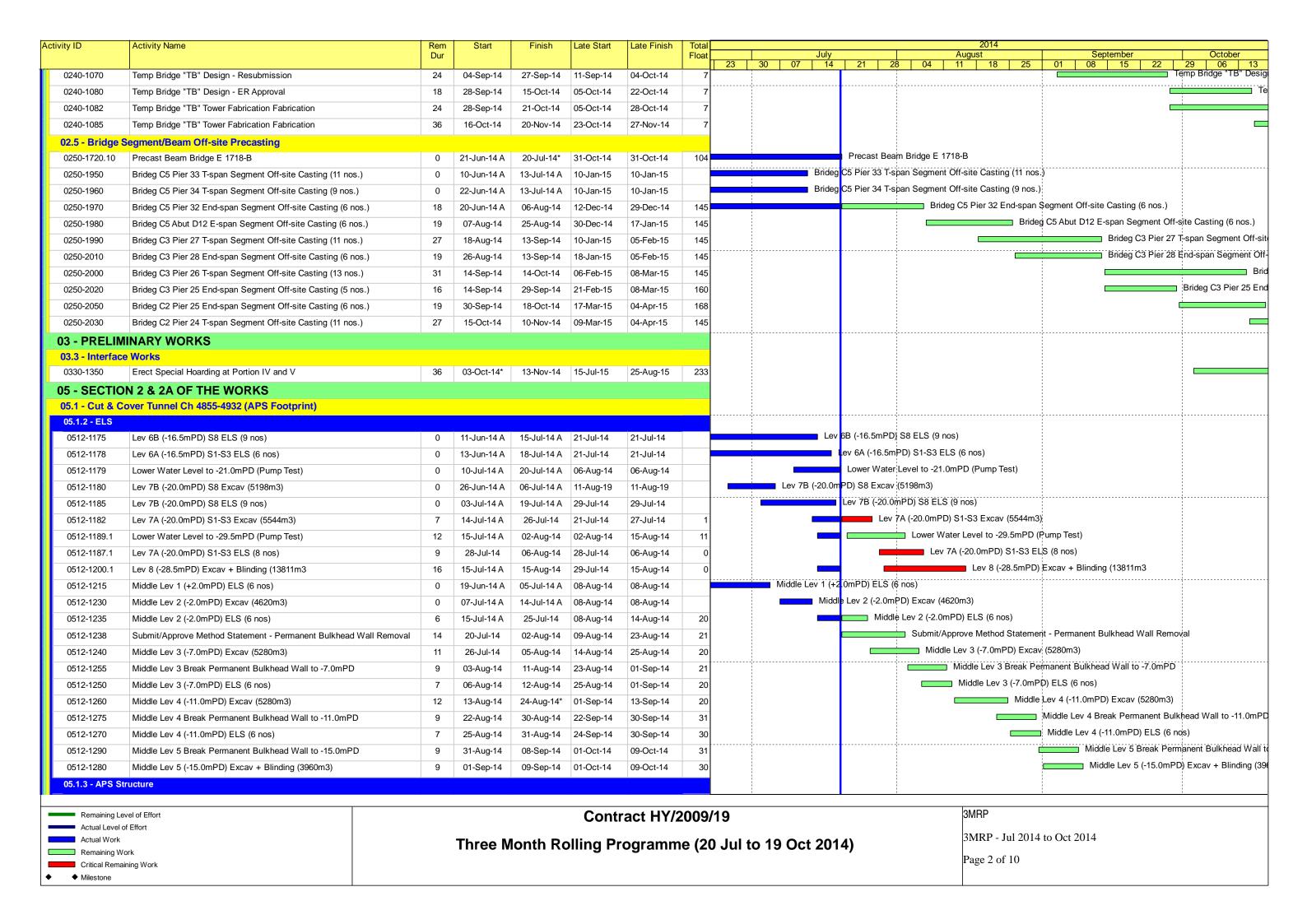
Construction Programme of Individual Contracts

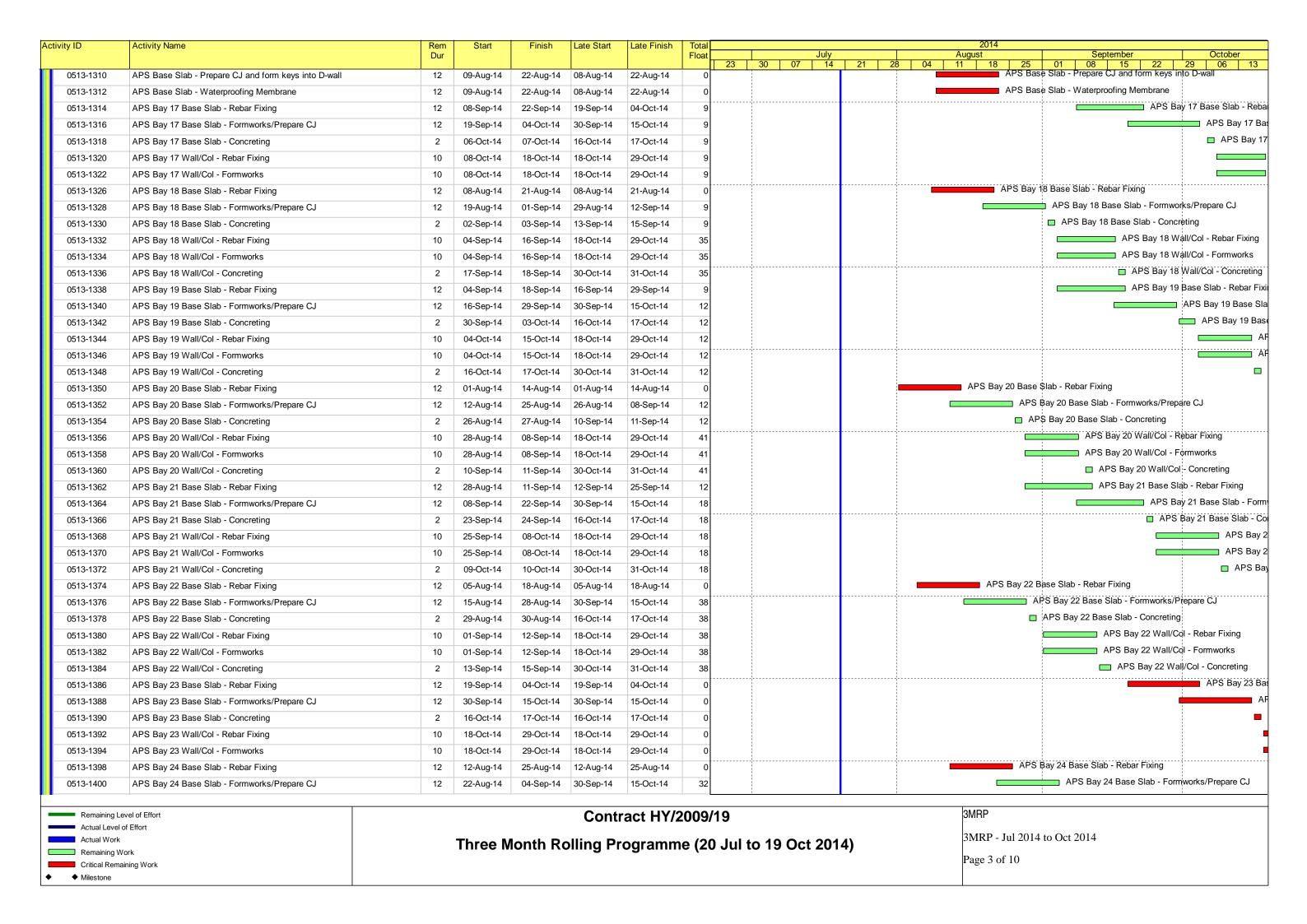


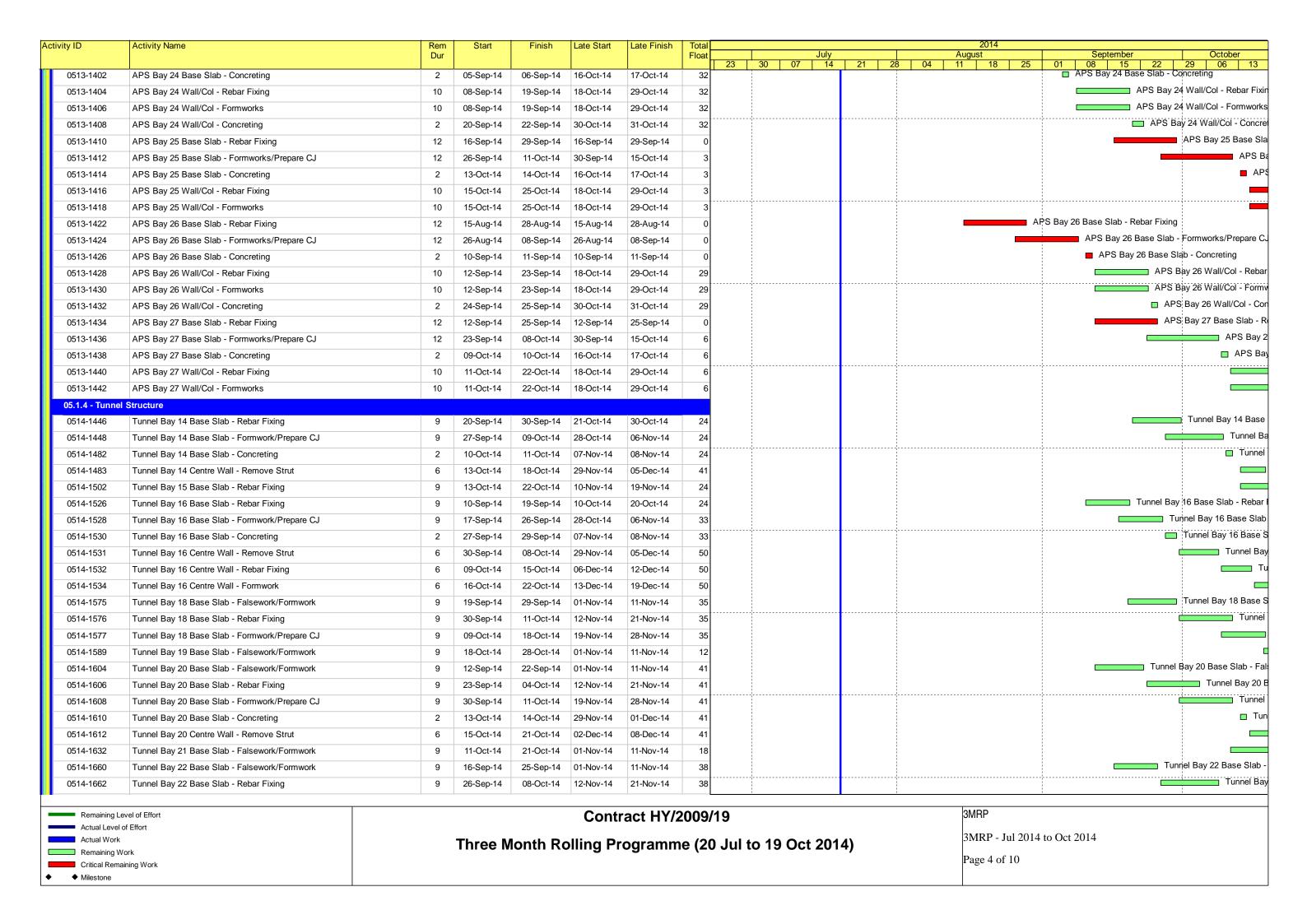


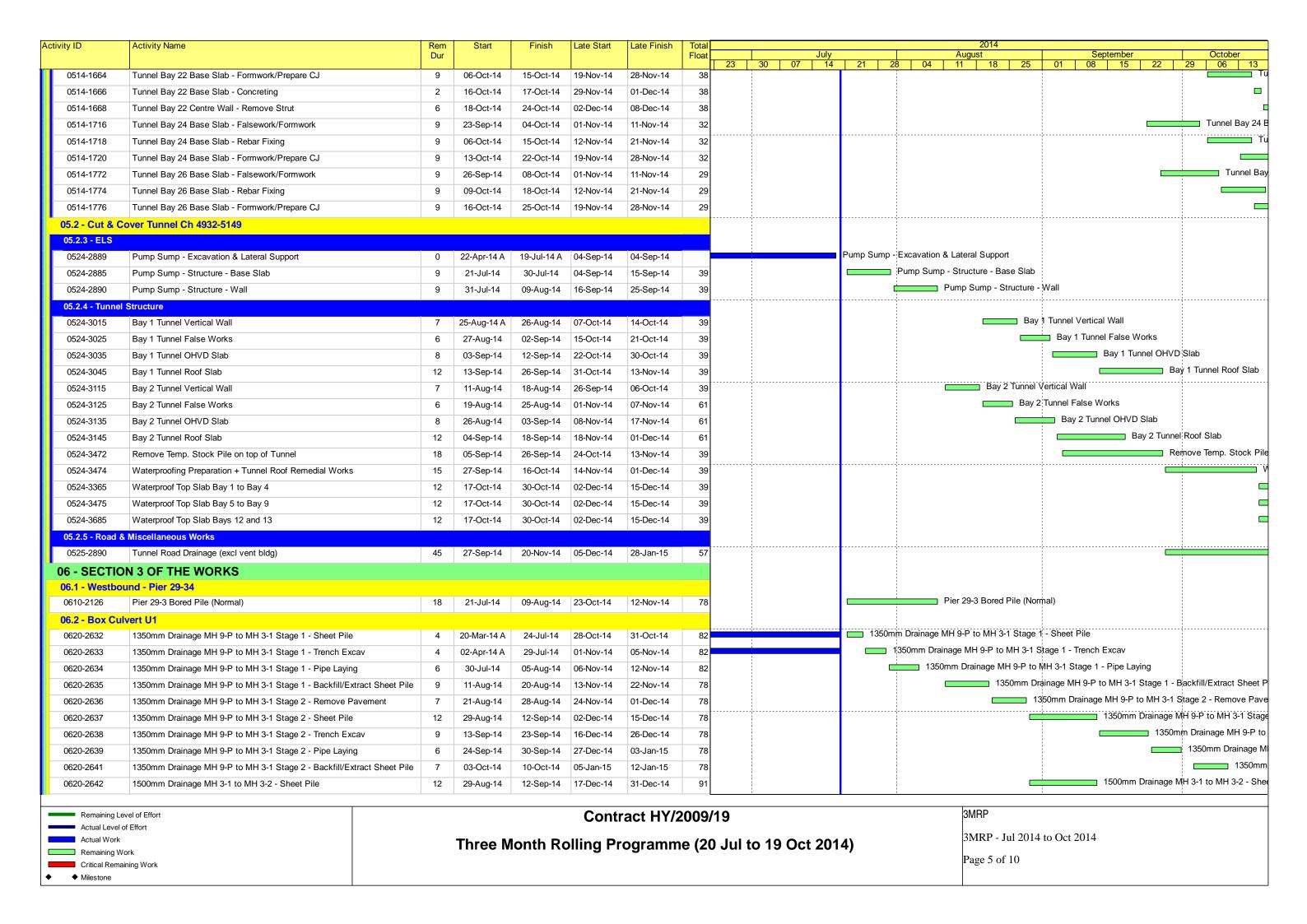
CEDD CONTRACT HK/2009/01 **CHUN WO - LEADER JOINT VENTURE** Activity ID Activity Name OD Start Finish % Comp Tota Qtr 3 Floa Jun Jul Aug Sep S6C-1000 Zone C2-2 - CHBI (7m) 45 34 20-Jan-14 A 23-Jul-14 100% Zone C2-2 - CHBI (7m) S6C-1020A Zone C1-2A - CHBI (18m) 30 30 04-Jul-14 02-Aug-14 Zone Q1-2A - CHBI (18m) 0% 42 60 S6C-1600 Zone C3-1 - CHBI (16m) Test and Connection Point 60 24-Jul-14 21-Sep-14 0% Section 8 of the Works - Works in Area 6 (Utilities other than Watermains in Fenwick Pier Street) AA1170 Relocation of existing light pole by Others 20-Jun-14* 787 0 0 0% ♦ Relocation of existing light pole by Others S8-1040 Zone A3-2C - 9 m pipe 23 35 20-Jun-14 31-Jul-14 0% 71 Zone A3-2C - 9 m pipe Zone A3-2D - 8m pipe & Connection with dow S8-1050 Zone A3-2D - 8m pipe & Connection with downstream existing manhole 23 35 20-Jun-14 31-Jul-14 0% 71 S8-2500 1 01-Aug-14 01-Aug-14 0% 71 CCTV Survey Zone A2-1 - Connection with Upstream S8-3000 Zone A2-1 - Connection with Upstream Existing Manhole & Abandon Used Pipe 7 7 02-Aug-14 09-Aug-14 0% 71 Section 9 of the Works - Remaindar of the Works S9-1030 Construction of Transition Chamber for Existing Box Culvert Diversion 30 30 19-Jul-14 22-Aug-14 0% -186 Construction of Transition S9-1040 Pre-bored H Piles (8 nos) for Box Culvert 40 10-Jun-14 A 06-Aug-14 0% -186 Pre-bored H Piles (8 nos) for Box Culver Installation of Sheet Pile for Bay7 45 06-Oct-14 0% -234 S9-1040A 45 23-Aug-14 45 S9-1040B Installation of Sheet Pile for Bay 2 45 23-Aug-14 06-Oct-14 0% -234 S9-5500A Zone X1-1 - S3 (5m) 03-Jul-14 **★**Zone X1-1 - S3 (5m) 0 0% 107 Zone X1-2 - S3 (5m) 0 23-Jul-14 S9-5500B Zone X1-2 - S3 (5m) 0 0% 167 Zone X1-3 - S3 (5m) Zone X1-3 - S3 (5m) 0 23-Jul-14 167 S9-5500C 0 0% AA1180 Zone X1-1 - F3 (5m) 0 03-Jul-14 0% 187 ◆ Zone X1-1 - F3 (5m) AA1190 Zone X1-2 - F3 (5m) 0 0 23-Jul-14 0% 167 **₹**Zone X1-2 - F3 (5m) AA1200 Zone X1-3 - F3 (5m) 0 0 23-Jul-14 0% 167 ◆ Zone X1-3 - F3 (5m) Section 13 of the Works - Works in Area 11 (other than Section 11) S13-3000 Completion of Backfilling to +5.0mPD 0 20-Jun-14 0% 253 ◆ Completion of Backfilling to +5.0mPD Section 9A of the Works - Landscape Softworks in Area 9 S9A-1000 Transplanting at Expo Drive East and Convention Avenue Junction 180 180 20-Jun-14 16-Dec-14 0% 242 CEDD CONTRACT NO. HK/2009/01 Page 3 of 3 Remaining Work Summary Bar Actual Work Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1) Summary Bar Critical Remaining Work WORKS PROGRAMME Rev.6C - 3 Month Programme starting from 20-Jun-14 Milestone

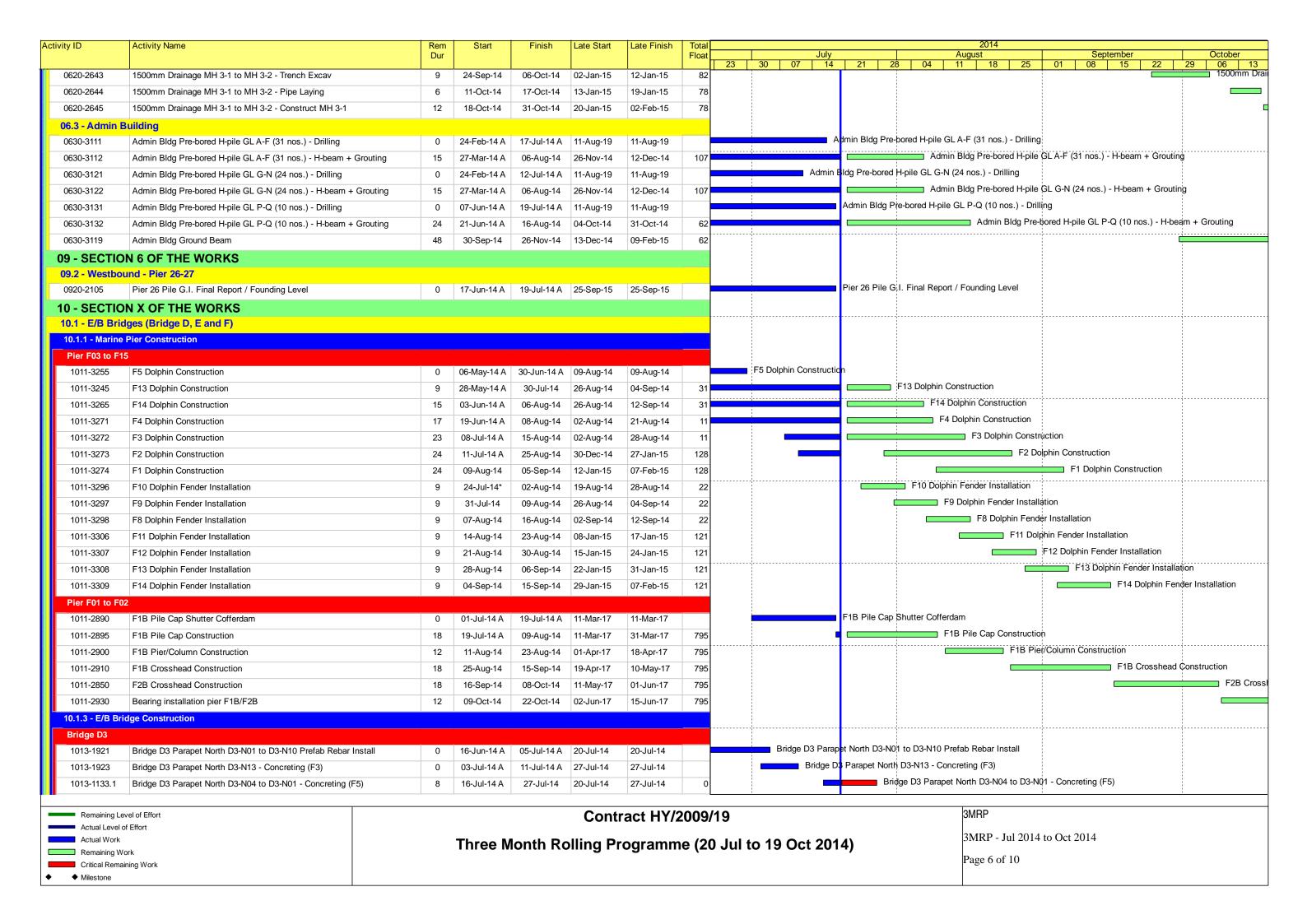


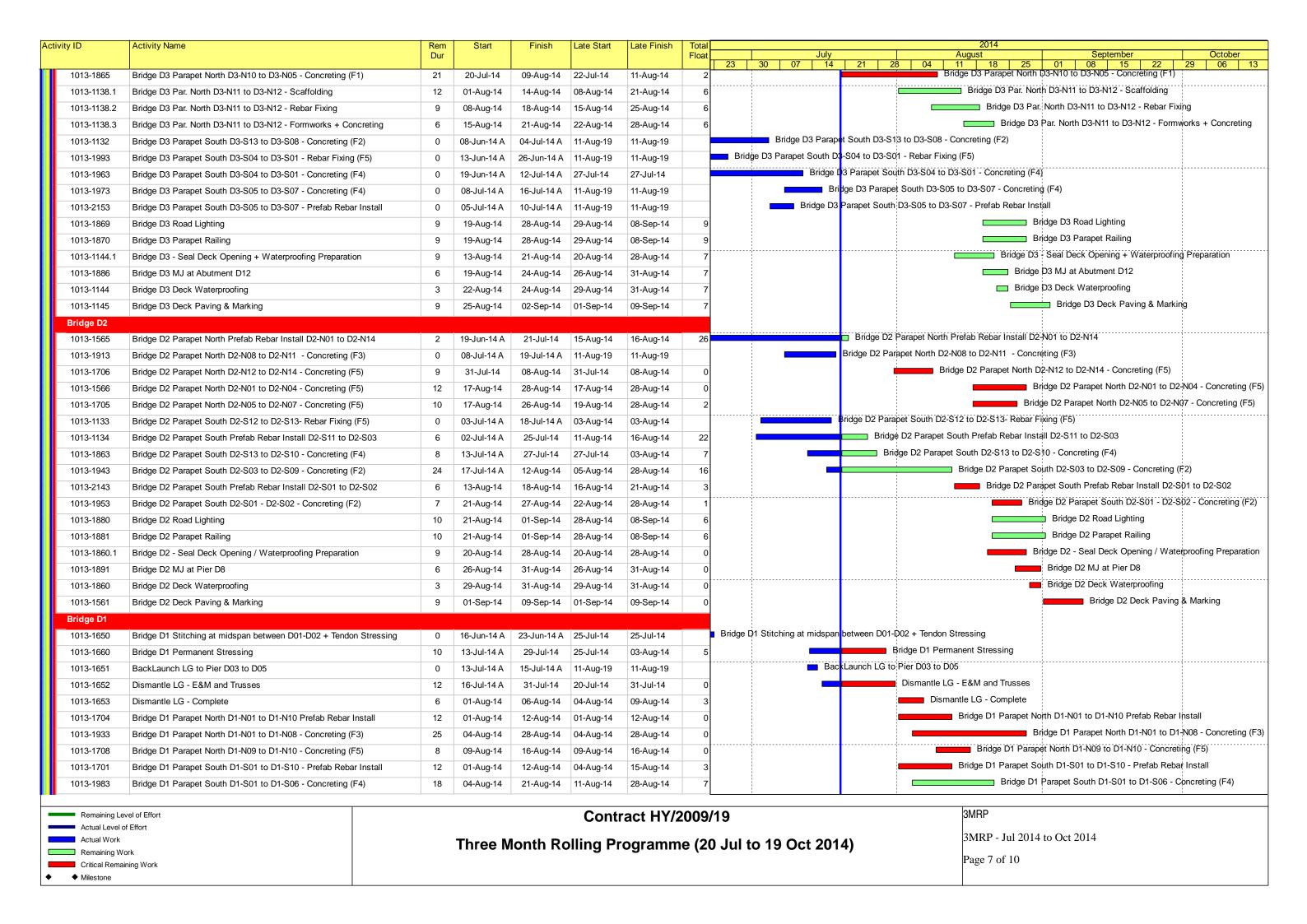


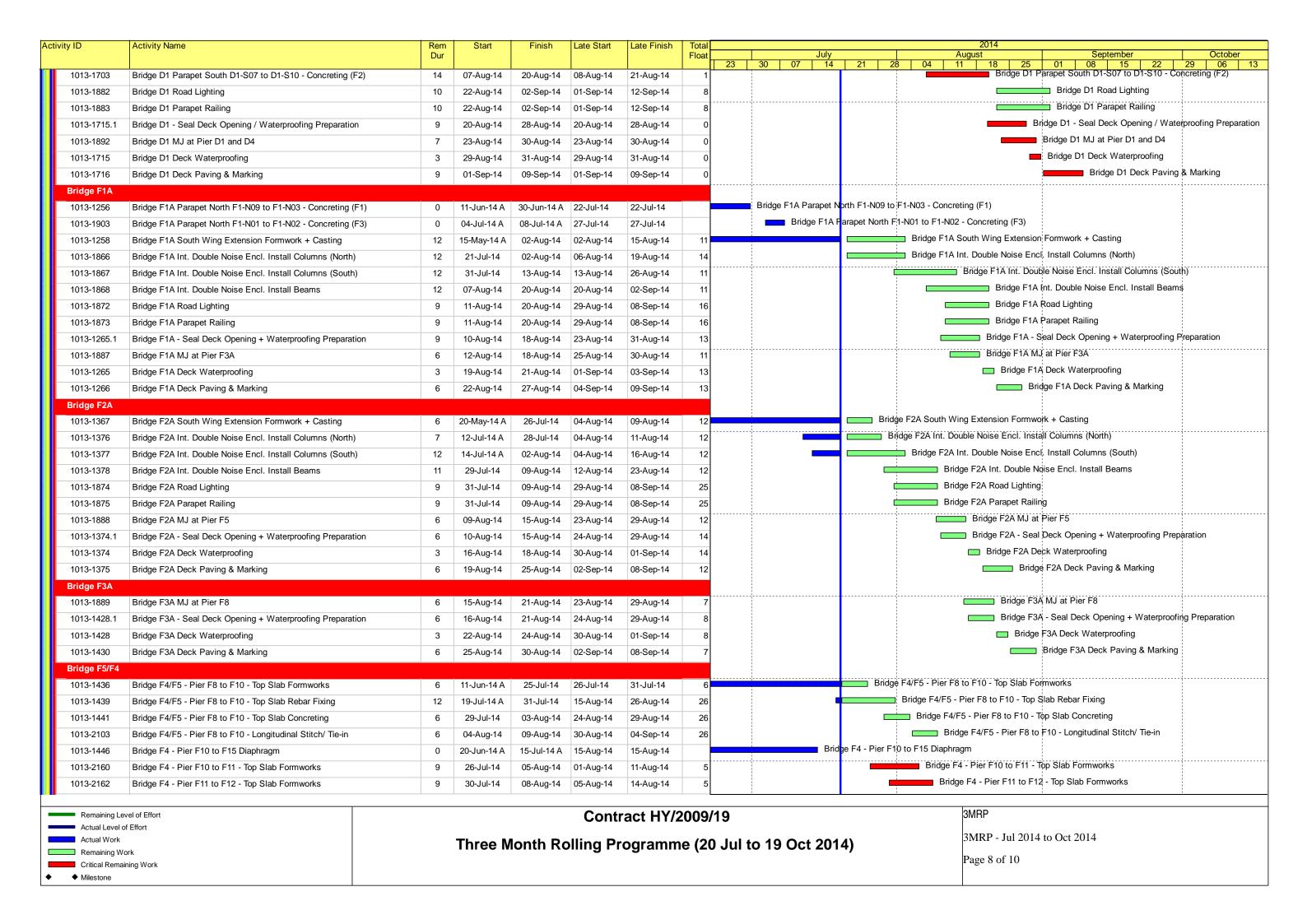


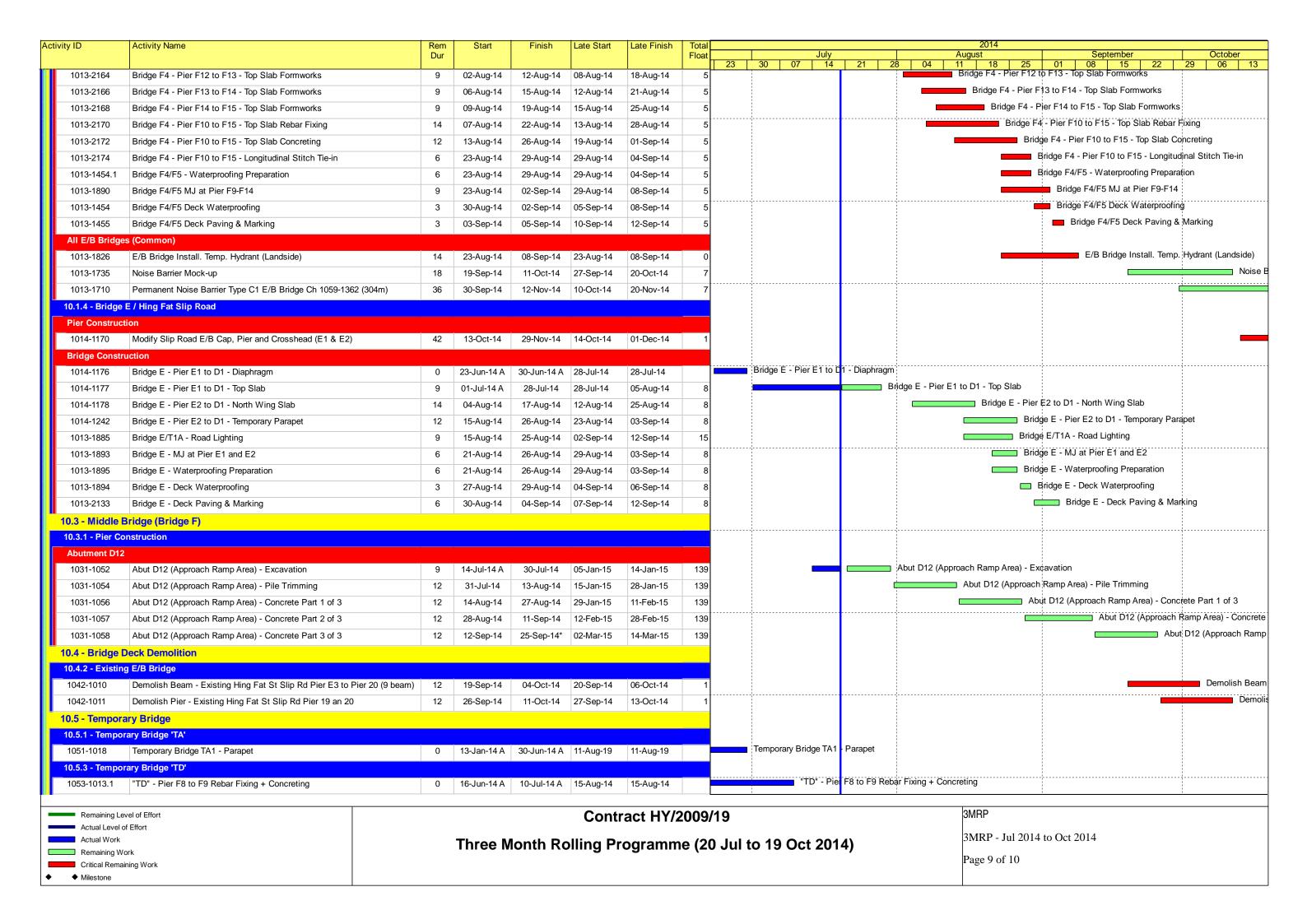


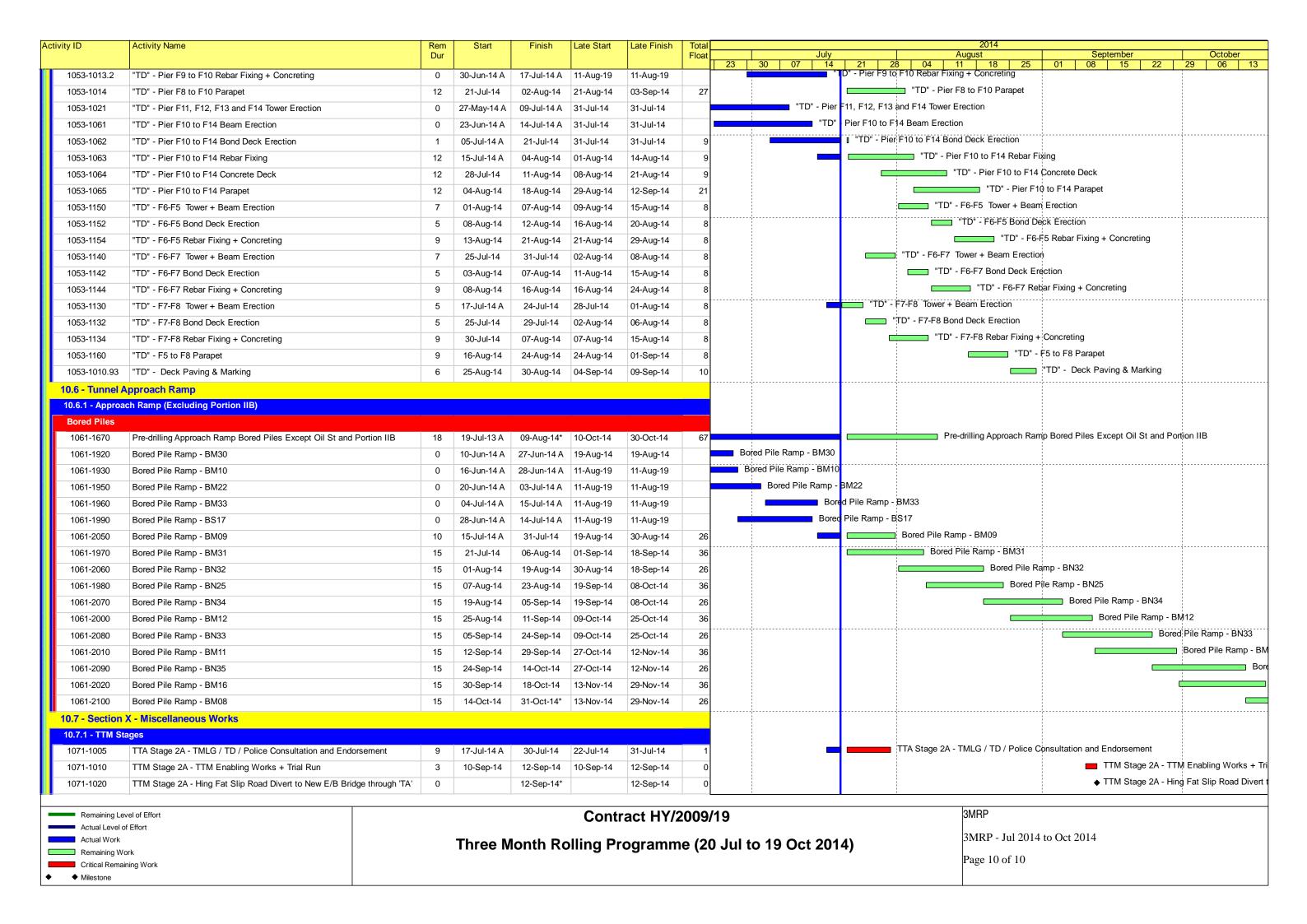


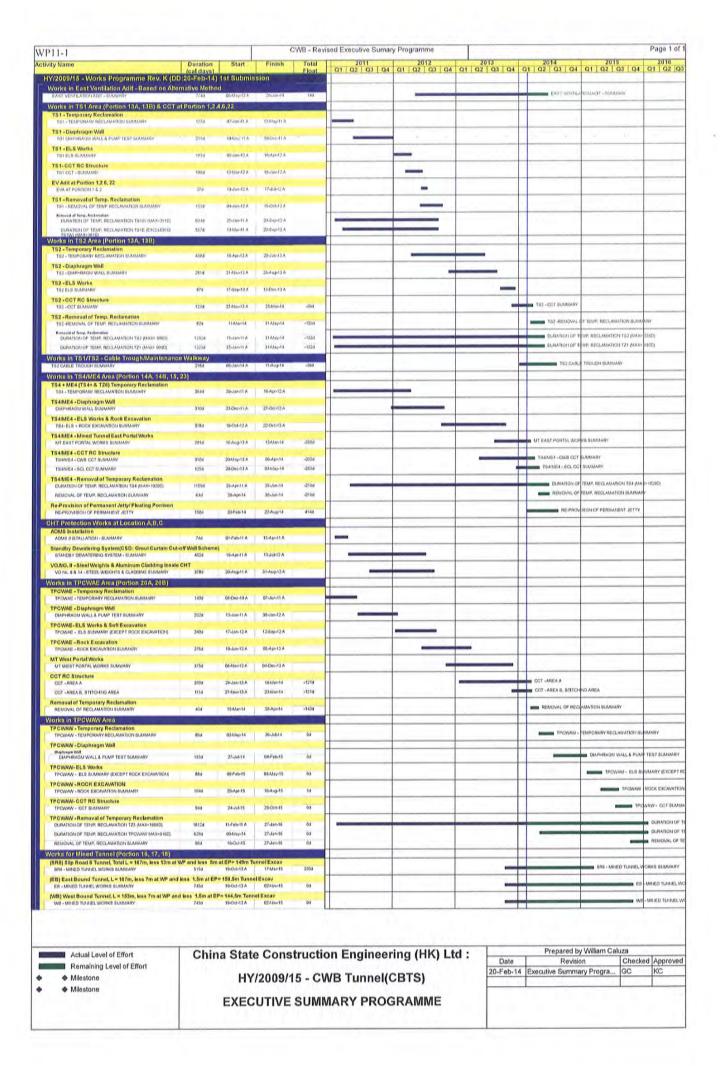


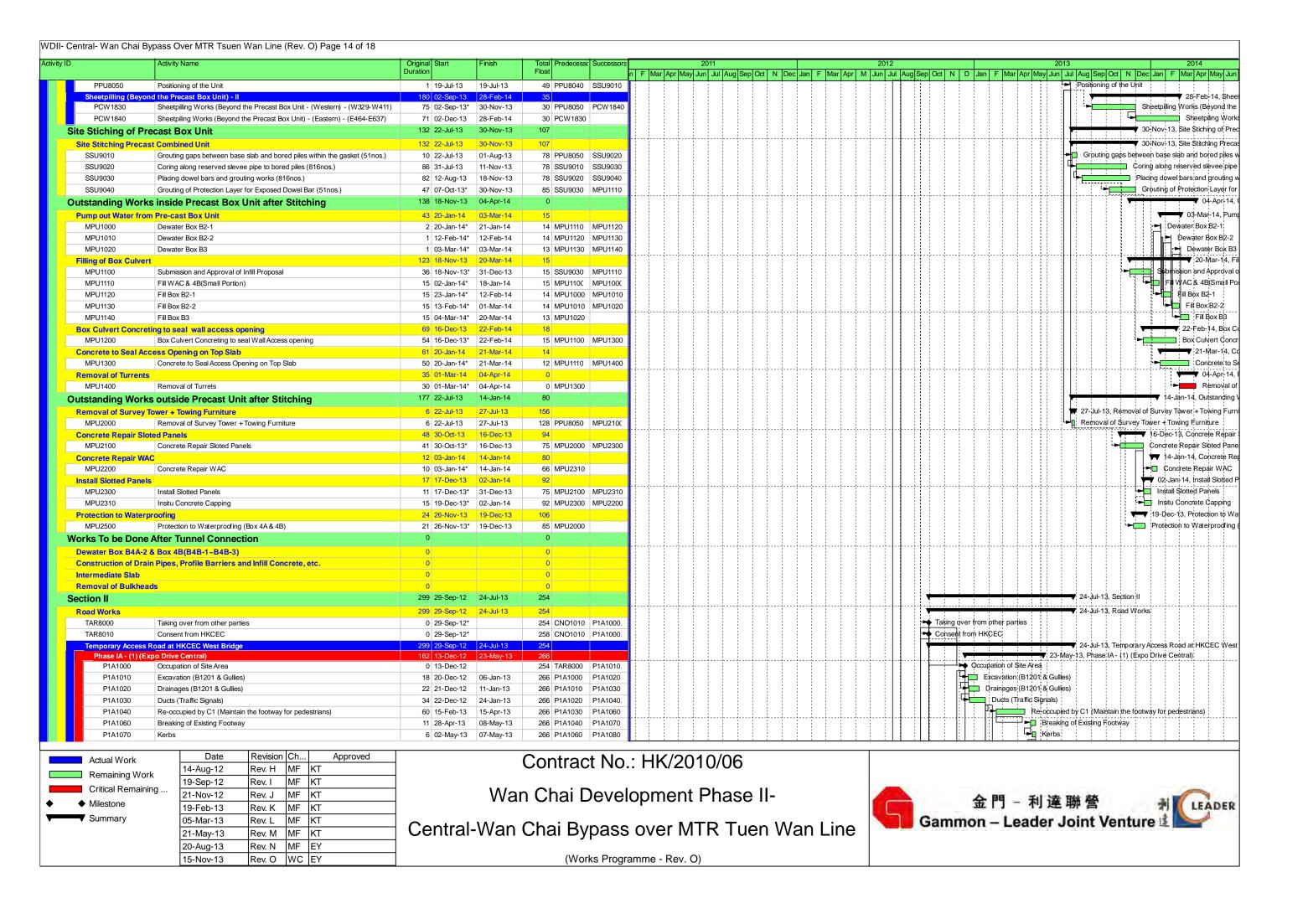










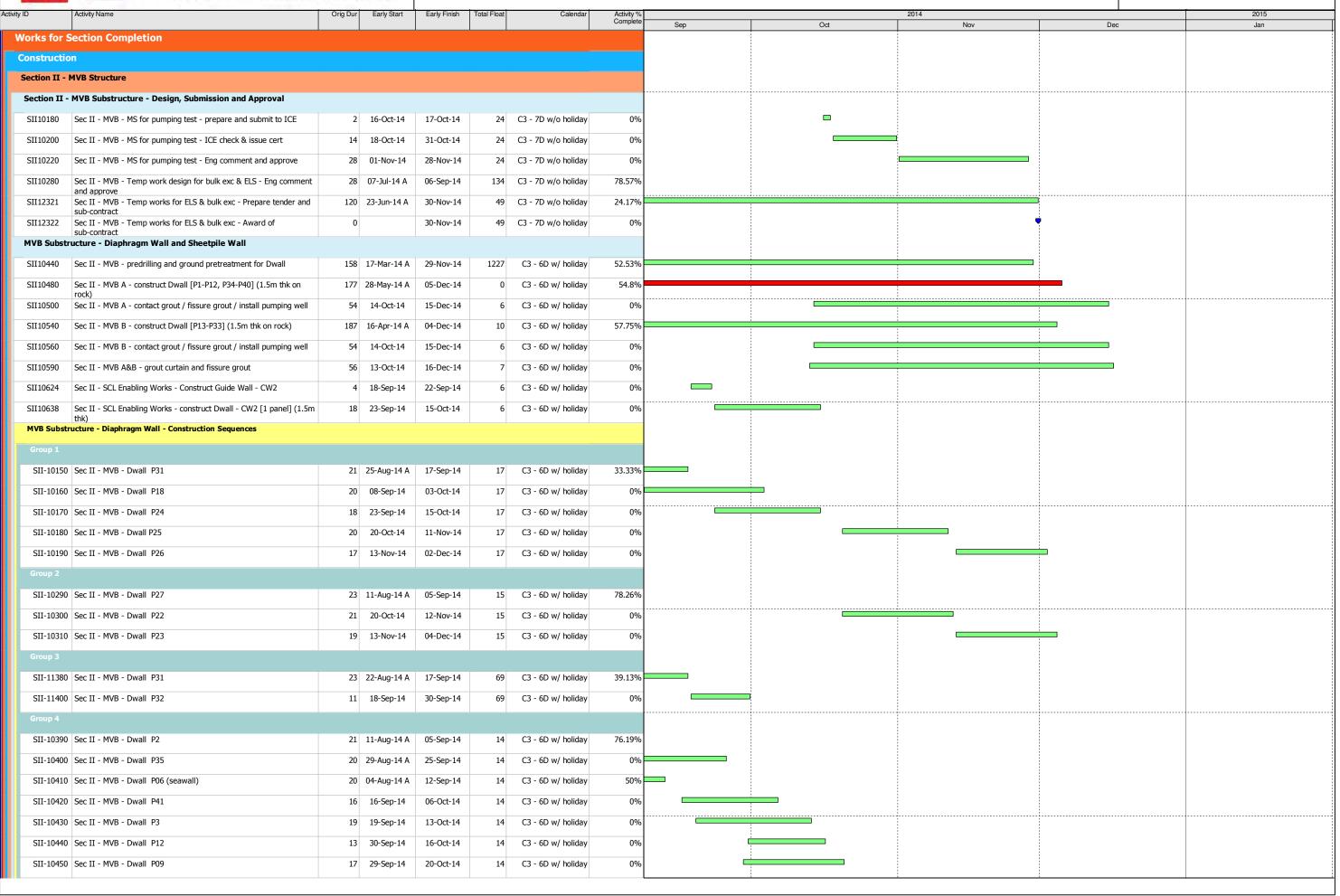




Page : 1 /



Page : 2 / 6



Page : 3 / 6

y ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	Calendar	Activity % Complete	Con	0.4	2014	
SII-10460	Sec II - MVB - Dwall P40	19	07-Oct-14	28-Oct-14	14	C3 - 6D w/ holiday	0%	Sep	Oct	Nov	
SII-10470	Sec II - MVB - Dwall P05 (seawall)	11	21-Oct-14	01-Nov-14	14	C3 - 6D w/ holiday	0%				
SII-10480	Sec II - MVB - Dwall P34	18	17-Oct-14	06-Nov-14	14	C3 - 6D w/ holiday	0%				
SII-10490	Sec II - MVB - Dwall P12A	23	22-Oct-14	17-Nov-14	14	C3 - 6D w/ holiday	0%				
	P. Sec II - MVB - Dwall P7		03-Nov-14	18-Nov-14		C3 - 6D w/ holiday	0%				
	Sec II - MVB - Dwall P39		30-Oct-14	25-Nov-14		C3 - 6D w/ holiday	0%				
	Sec II - MVB - Dwall P33		06-Nov-14	03-Dec-14		C3 - 6D w/ holiday	0%				
						. ,					
	Sec II - MVB - Dwall P4	15	19-Nov-14	05-Dec-14	14	C3 - 6D w/ holiday	0%				
	ructure - Bored Pile and Prebored H-Pile										
	Sec II - MVB A&B - Predrilling for bored pile		10-May-14 A		52	C3 - 6D w/ holiday	86.67%				
SII10340	Sec II - MVB A&B - Construct bored piles	146	26-Jun-14 A	17-Dec-14	4	C3 - 6D w/ holiday	38.36%				
SII10360	Sec II - MVB A&B - bored pile sonic test, interface core & full cor	re 90	11-Sep-14	29-Dec-14	16	C3 - 6D w/ holiday	0%				
MVB Subst	ructure - Bored Pile - Construction Sequences									-	
Group 1											
SII-11040	Ssec II - MVB - Bored Pile BC2-B	14	01-Sep-14	17-Sep-14	10	C3 - 6D w/ holiday	0%				
SII-11050	Ssec II - MVB - Bored Pile BC4-B	15	06-Sep-14	24-Sep-14	10	C3 - 6D w/ holiday	0%				
SII-11060	Ssec II - MVB - Bored Pile BC1-A	16	26-Sep-14	16-Oct-14	10	C3 - 6D w/ holiday	0%				
SII-11070	Ssec II - MVB - Bored Pile BC5	15	06-Oct-14	22-Oct-14	10	C3 - 6D w/ holiday	0%				
SII-11080	Ssec II - MVB - Bored Pile BC3-B	15	24-Oct-14	10-Nov-14	10	C3 - 6D w/ holiday	0%				,
SII-11200	Ssec II - MVB - Bored Pile BC7	15	30-Oct-14	15-Nov-14	10	C3 - 6D w/ holiday	0%				
SII-11210	Ssec II - MVB - Bored Pile BC9	15	18-Nov-14	04-Dec-14	10	C3 - 6D w/ holiday	0%				
SII-11240	Ssec II - MVB - Bored Pile BC18	15	24-Nov-14	10-Dec-14	10	C3 - 6D w/ holiday	0%				
Group 2						<u>′</u>					
	Ssec II - MVB - Bored Pile BC10	15	20-Aug-14 A	06-Sep-14	4	C3 - 6D w/ holiday	60%				
	Ssec II - MVB - Bored Pile BC6		29-Aug-14 A			C3 - 6D w/ holiday	40%	_			
	Ssec II - MVB - Bored Pile BC14		13-Sep-14	27-Sep-14	4	C3 - 6D w/ holiday	0%				
			·		7		0%				
	Ssec II - MVB - Bored Pile BC3-A		19-Sep-14	06-Oct-14	4	C3 - 6D w/ holiday					
	Ssec II - MVB - Bored Pile BC16		08-Oct-14	24-Oct-14	4	C3 - 6D w/ holiday	0%				
	Ssec II - MVB - Bored Pile BC8		14-Oct-14	29-Oct-14	4	C3 - 6D w/ holiday	0%				
SII-11160	Ssec II - MVB - Bored Pile BC17	15	31-Oct-14	17-Nov-14	4	C3 - 6D w/ holiday	0%				
SII-11170	Ssec II - MVB - Bored Pile BC11	15	06-Nov-14	22-Nov-14	4	C3 - 6D w/ holiday	0%				
SII-11180	Ssec II - MVB - Bored Pile BC15	15	25-Nov-14	11-Dec-14	4	C3 - 6D w/ holiday	0%				
ection II A	- CWB Tunnel & Slip Road Structures and Facilities										
Section II	A - CWB Tunnel - Design, Submission and Approval										
SIIA10500	CWB Tunnel - Temp work design for bulk exc & ELS - ICE check	& 26	17-Apr-14 A	26-Sep-14	149	C3 - 7D w/o holiday	0%				
SIIA10520	issue check cert CWB Tunnel - Temp work design for bulk exc & ELS - Eng comme	ent 26	24-Apr-14 A	26-Sep-14	149	C3 - 7D w/o holiday	10%				
CWB CRII	& approve										
CWB CRIII	& A1 - Dwall and Pile Construction										
	Sec II A - CWB A1 - predrilling for Dwall and piles	55	23-Jun-14 A	07-Oct-14	23	C3 - 6D w/ holiday	47.27%				
	Sec II A - CWB A1 - carry out ground pretreatment for Dwall		19-Jul-14 A	27-Sep-14		C3 - 6D w/ holiday	61.67%				
	Sec II A - CWB A1 - carry out ground pred earliers for bwall		09-Aug-14 A			C3 - 6D w/ holiday	39.58%				
211A11100	Sec 11 W - CAAD WT - COURLACT GRIDE ANGII	48	09-Aug-14 A	07-UCC-14	23	C3 - OD W/ NOIIday	39.58%				

Sec VI A - Area 1 - Culvert L bay 1 base slab - curing, backfill and

CUL10675 Sec VI A - Area 1 - Culvert L bay 1 invert slab connected to existing

CUL10680 Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 1 - wall

remove upper layer of strut

5 21-Oct-14

5 27-Oct-14

9 01-Nov-14

25-Oct-14

31-Oct-14

11-Nov-14

C3 - 6D w/ holiday

C3 - 6D w/ holiday

C3 - 6D w/ holiday

-55

0%

0%

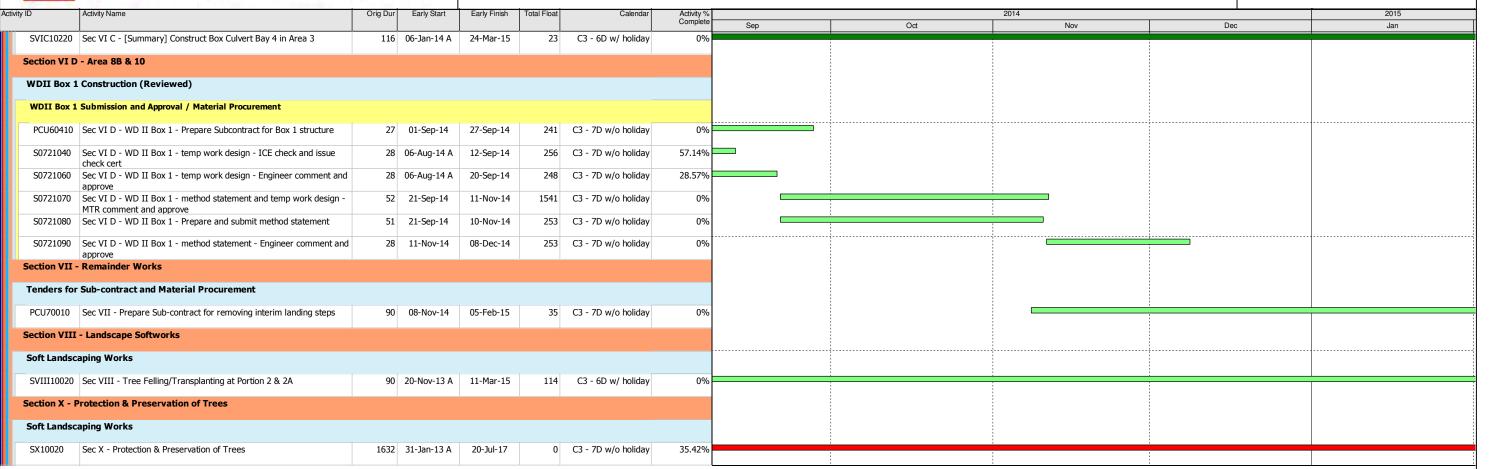
0%



Page : 5 / 6

Annes	CHINA STATE - LEADER JO	IN I VE	VIURE				Cen	ral - Wan Chai Bypass at Wan Chai West	
tivity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	Calendar	Activity % Complete	2014 Sep Oct Nov	2015 Dec Jan
CUL10700	Sec VI A - Area 1 - Culvert L bay 1-3 - construct bay 1 - top slab	8	04-Nov-14	12-Nov-14	-55	C3 - 6D w/ holiday	0%	ocp ou nor	Dec dan
	Sec VI A - Area 1 - Culvert L bay 2 wall and roof slab - curing,	5	13-Nov-14	18-Nov-14	-55	C3 - 6D w/ holiday	0%		
	backfill and remove upper layer of strut Sec VI A - Area 1 - Culvert L bay 1-3 - construct manhole DO-01;	6	17-Nov-14	22-Nov-14	-55	C3 - 6D w/ holiday	0%	_	-
CUL10720	IM-01 Sec VI A - Area 1 - Culvert L bay 1-3 - backfill to pavement formation	12	24-Nov-14	06-Dec-14	-55	C3 - 6D w/ holiday	0%		
Section VI A	- Area 2 - Lung King Street Roadwork & Utilities								
SVIA10040	Sec VI A - Area 1 - Summary of Box Culvert La Construction	136	11-Nov-13 A	23-Dec-14	-55	C3 - 6D w/ holiday	30.15%		
SVIA10080	Sec VI A - Area 2 - Reinstate the area	50	07-Nov-14	07-Jan-15	-61	C3 - 6D w/ holiday	0%		
Sec VI C - B	ox Culvert La bay 4 and Roadwork								
_	Sec VI C - Culvert L - bay 4 - sheetpile, ELS & Excavation	45	06-Jan-14 A	01-Nov-14	23	C3 - 6D w/ holiday	0%		
	Sec VI C - Culvert L - bay 4 (south half) - construct base slab		03-Nov-14	08-Nov-14	23	· '	0%		
	Sec VI C - Culvert L - bay 4 (south half) - construct wall and roof		10-Nov-14	22-Nov-14	23	C3 - 6D w/ holiday	0%		
	· · · · · · · · · · · · · · · · · · ·					· '			
	Sec VI C - Culvert L - bay 4 (south half) - curing and remove internal formwork		24-Nov-14	20-Dec-14	23	C3 - 6D w/ holiday	0%		
	Sec VI C - Culvert L - bay 4 (north half) - drive pipe pile	24	24-Nov-14	20-Dec-14	35	C3 - 6D w/ holiday	0%		
	.1 & FRP-L Construction (Bay 5 - Bay 13)								
Box Culvert	L1 & FRP-L - Bay 5 to 7								
	Drainage Impact Assessment for ex. box culvert L diversion - Eng, DSD comment and approve	60	22-Jul-13 A	26-Sep-14	103	C3 - 7D w/o holiday	56.67%		
CUL10015	Culvert L - form temp opening at existing box culvert Bay 4 for temp flow diversion	35	01-Sep-14	14-Oct-14	1267	C3 - 6D w/ holiday	0%		
CUL10275	Sec VI C - Culvert L - bay 5,6,7 - erect temp platform for predrilling	65	13-Sep-14	29-Nov-14	30	C3 - 6D w/ holiday	0%		
CUL10280	Sec VI C - Culvert L - bay 5,6,7 - predrilling	45	15-Oct-14	05-Dec-14	30	C3 - 6D w/ holiday	0%		
CUL10800	Sec VI C - Culvert L - bay 7 - construct pre-bored H-pile	30	31-Oct-14	04-Dec-14	30	C3 - 6D w/ holiday	0%		
CUL10820	Sec VI C - Culvert L - bay 6 - construct pre-bored H-pile	30	14-Nov-14	18-Dec-14	30	C3 - 6D w/ holiday	0%		
	Sec VI C - Culvert L - bay 5-7 - Form Dry Dock for precast culvert	75	14-Aug-14 A	12-Nov-14	48	C3 - 6D w/ holiday	20%		
CUL10870	units Sec VI C - Culvert L - bay 5-7 - Construct bottom slabs for precast	15	13-Nov-14	29-Nov-14	48	C3 - 6D w/ holiday	0%		
Section VI B	culvert units - Area 8								
Area 8 - Der	nolish Ex. Cooling Water Pumping Station								
SVIB10580	Sec VI B - trim down existing seawall	25	02-Aug-14 A	01-Sep-14	0	C3 - 6D w/ holiday	96%		
SVIB10600	Sec VI B - backfill and compaction to formation level	14	20-Aug-14 A	04-Sep-14	0	C3 - 6D w/ holiday	87.14%		
SVIB10620	Achievement of Section VIB of the Works	0		04-Sep-14	0	C3 - 7D w/o holiday	0%		
	- Area 3, 6, 8A & 8C			<u> </u>		. ,			
	C - Seawall Modification (Reviewed)								
	nission & Approval								
	Sec VI C - Temp Work Design for Seawall Modification & MTR Pump	20	02-Apr-14 A	20-Son-14	25	C3 - 6D w/ holiday	10.71%		
	Set VIC - Termy work Design for Seawaii Modification & MTR Pump Room Stabilization - Engineer / MTR comment and approve Sub-contractor and Procurement	20	02-Apr-14 A	20-2ch-14	33	C5 - OD W/ HOHLdy	10.7170		
		00	14 N 12 4	26.6 4.4		62 65	75 500		
	Sec VI C - Prepare Sub-contract for Seawall Modification and Procurement of Materials		14-Nov-13 A	26-Sep-14	4	C3 - 6D w/ holiday	75.56%		
	Sec VI C - Assessement and Award of Sub-contract for Seawall Modification	53	27-Sep-14	29-Nov-14	4	C3 - 6D w/ holiday	0%		
	Room Stabilization (Reviewed)								
PRS-1020	Sec VI C - Place counter weight on top of MTR pump house	24	03-Oct-14	30-Oct-14	35	C3 - 6D w/ holiday	0%		
PRS-1030	Sec VI C - Trim existing rubble mound	27	31-Oct-14	01-Dec-14	35	C3 - 6D w/ holiday	0%		
Area 6 - Box	Culvert bay 5-6								
SVIC10000	Sec VI C - [Summary] Construct Box Culvert Bay 5-6	109	13-Nov-14	28-Mar-15	30	C3 - 6D w/ holiday	0%		

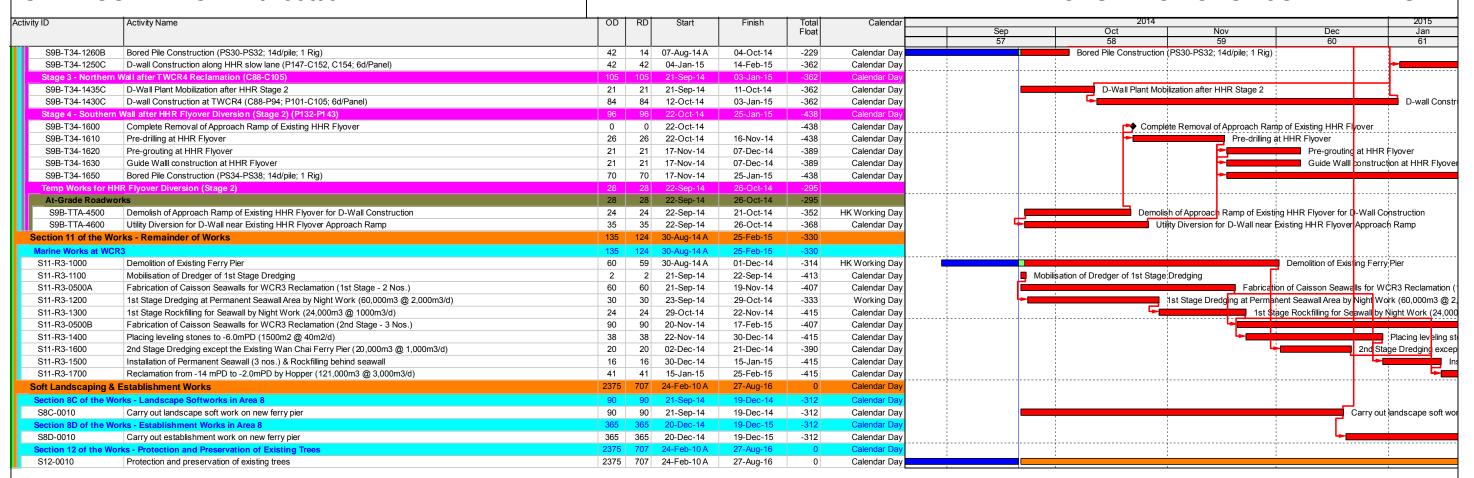
Page : 6 / 6



CHUN WO - CRGL JOINT VENTURE CEDD CONTRACT HK/2009/02 Float 1909 567 24-Feb-10 A Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East (dd 20-Sep-14) 27-Aug-16 Programme Milestones (Revised up to EOTO No.10 Issued on 29-Nov-13) 0 0 Section 7 Works (831 days) - Box Culvert N1 & Works at Aea 7 (7-May-12) Section 7 Works (831 days) - Box Culvert N1 & Works at Aea 7 (7-May-12) KDC0110 20-Sep-14* -866 Calendar Day Soft Land & Establishment Key Dates KDC0140 Section 8C Works (1473 days) - Landscape Softworks in Area 8 (10-Feb-14) 20-Sep-14* Calendar Day Section: 8C Works (1473 days) - Landscape Softworks in Area 8 (10-Feb-14) Soft Landscaping & Establishment Key Dates 19-Dec-14 KDF0140 Section 8C Works (1473 days) - Landscape Softworks in Area 8 0 0 19-Dec-14 -312 Calendar Da ection 8C Works (1473 da PRE-PRO-1100A GRP Roof Panel for Temp Covered Walkway (Type 1) 60 21 15-Jun-14 A 11-Oct-14 1473 Calendar Day GRP Roof Panel for Temp Covered Walkway (Type 1) PRE-PRO-1100B GRP Roof Panel for Temp Covered Walkway (Type 2) 21 15-Jun-14 A 11-Oct-14 1473 Calendar Day GRP Roof Panel for Temp Covered Walkway (Type 2) Section 3 of the Works - Reprovisioning of Government Helipad and Public Toilet 25 11-Aug-12 A 22-Oct-14 1173 HK Working Da Reinstatement of armour rock, retaining walls & new covered walkway along Expo Drive East 254 25 11-Aug-12 A S3-0070-1499 22-Oct-14 1173 HK Working Da Reinstatement of armour rock, retaining walls & new covered walkway along Expo Dr Section 4A of the Works - Cooling Water Pumping System for Sun Hung Kai Centre (P8) 148 16-Feb-14 A S4A-0900 Outstanding Works 365 148 16-Feb-14 A 15-Feb-15 1346 Calendar Da Section 4B of the Works - Cooling Water Pumping System for China Resources Building (P9) S4B-0900 Outstanding Works 365 10 01-Oct-13 A 30-Sep-14 Calendar Day Outstanding Works Section 4C of the Works - Cooling Water Pumping System for Great Eagle Centre / Harbour Centre (P7 S4C-0900 Outstanding Works 365 61 21-Nov-13 A 20-Nov-14 1433 Calendar Da Outstanding Works Section 5 of the Works - WSD Salt Water Pu 23 7 20-Apr-13 A 29-Sep-14 -707 HK Working Da Bay 6 - Bay 18: Ex-Pet Garden & Hung Hing Road S5-100-3333 Backfilling to Bay 6 to Bay 11 (2,000m3; 150m3/d) 7 20-Apr-13 A 29-Sep-14 -707 HK Working Day Backfilling to Bay 6 to Bay 11 (2,000m3; 150m3/d) S5-0900 Outstanding Works 365 166 06-Mar-14 A 05-Mar-15 1328 Calendar Da orks - Box Culvert N1 & Flood Relief System S7-191212-260 Backfilling for 1050mm FRP installation & Strut Removal 4 4 22-Sep-14 26-Sep-14 -339 HK Working Day Backfilling for 1050mm FRP installation & Strut Removal S7-1700 D-Wall Trimming, Drain Installation & Backfilling to Ground Level (13,500m3; 1,000m3/d) D-Wall Trimming, Drain Installation & Backfilling to Ground Level (13,500 n3; 1,000 m3/d) 21 16 05-Sep-14 A 06-Oct-14 -1132 Calendar Day S7-1800 Completion of Tunnel Portion 1 Backfilling 0 0 06-Oct-14 -882 Calendar Day Completion of Tunnel Portion 1 Backfilling Civil Works Lay 500mm thk. Rubble Mound 2 2 07-Oct-14 Lay 500mm thk. Rubble Mound S7-TB-2000 08-Oct-14 -907 HK Working Day S7-TB-2010 Blinding Layer 09-Oct-14 09-Oct-14 -907 HK Working Day Blinding Layer S7-TB-2020 Base Slab Construction (9.3m x 4.9m x 1m thick) Base Slab Construction (9.3m x 4.9m x 1m thick) 10-Oct-14 17-Oct-14 -907 HK Working Day S7-TB-2030 14 Concrete Plinth, Side Wall, Beam & Corbel Concrete Plinth, Side Wall, Beam & Corbel 14 21-Oct-14 -907 HK Working Day 05-Nov-14 S7-TB-2040 Concrete In-Fill at Basement 3 10-Nov-14 12-Nov-14 -907 HK Working Day Concrete In-Fill at Basement S7-TB-2050 Outer Wall & Partition Wall 21 21 13-Nov-14 -907 HK Working Day Outer Wall & Partition Wall 06-Dec-14 S7-TB-2060 Scaffolding Erection & Roof Construction 21 08-Dec-14 -907 HK Working Day Scaffolding E 21 03-Jan-15 S7-TB-2070 Curing 14 04-Jan-15 17-Jan-15 -1131 Calendar Day S7-TB-2080 Formwork Removal & Scaffolding Dismantling 4 19-Jan-15 22-Jan-15 -907 HK Working Day E&M Works 22kV Cable across HHR to Transformer Building by HEC 45 45 07-Oct-14 22kV Cable across HHR to Transformer Building by HEC S7-TB-4100 20-Nov-14 -1016 Calendar Day Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8 212 30 10-Sep-13 A 20-Oct-14 1464 Calendar Da 212 30 10-Sep-13 A 20-Oct-14 1464 S8A-BS-4010 E&M Installation 28 10 10-Sep-13 A 30-Sep-14 1484 E&M Installation 120 30 28-Oct-13 A S8B-FP-01100 Roof Finishes & Misc. ABWF Installation 20-Oct-14 1464 Roof Finishes & Misc. ABWF Installation Calendar Da S8B-FP-01300 Handrail & Glass Balustrade Installation 7 21-Dec-13 A 27-Sep-14 1487 Calendar Day Handrail & Glass Balustrade Installation ection 9B of the Works - CWB Tunnel Structure (CH3400 - CH37 Installation of Pump Test Equipment S9B-T2-1125 Installation of Pump Test Equipment 12 11-Jun-14 A 07-Oct-14 117 HK Working Day S9B-T2-1130 14 08-Oct-14 147 Tun nel portion 2 Pump Test Tunnel portion 2 Pump Test 21-Oct-14 Calendar Day Tun nel portion 2 ELSW excavation (62,500m3; 500m3/d) 125 105 06-Aug-14 A 27-Jan-15 HK Working Da 295 121 11-Feb-14 A 14-Feb-15 -297 S9B-T34-1230C Pre-grouting & Guidewall for P147-P154 28 14 11-Feb-14 A 04-Oct-14 -271 Calendar Day Pre-grouting & Guidewall for P147-P154 Date Checked Approved Remaining Work CEDD CONTRACT NO. HK/2009/02 Page 1 of 2 20-Sep-14 3MRP Actual Work TASK filters: 3-Month Rolling, Temp Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai 20-Feb-14 Baseline Prog 俊和-中國中鐵聯營 CHUN WO-CRGL JOINT VENTURE Summary Bar East (Contract 2) Critical Remaining Work Print on: 24-Sep-14 10:22 3-MONTH ROLLING PROGRAMME (dd 20-Sep-14) Milestone

CEDD CONTRACT HK/2009/02

CHUN WO - CRGL JOINT VENTURE







CEDD CONTRACT NO. HK/2009/02

Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai

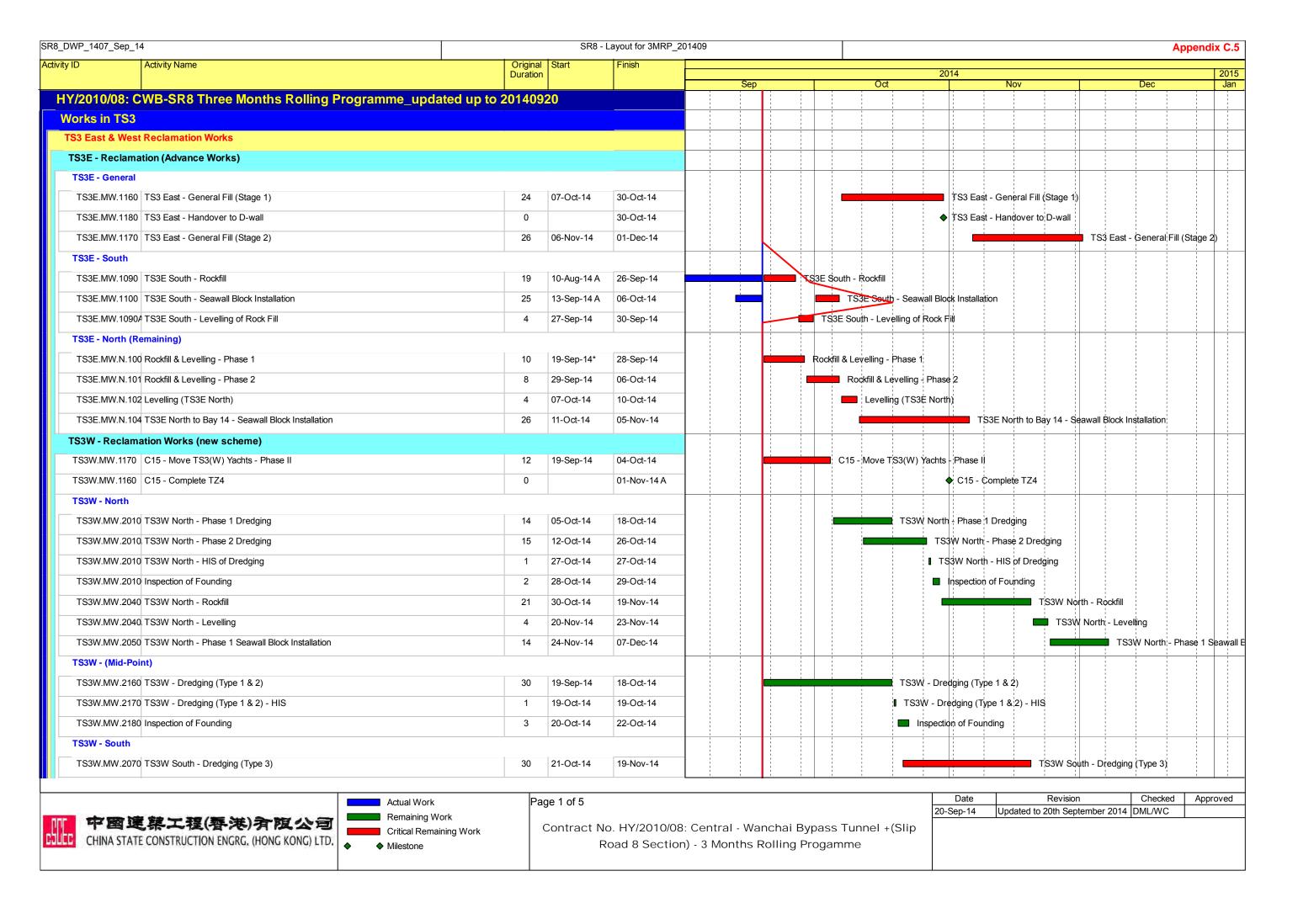
East (Contract 2)

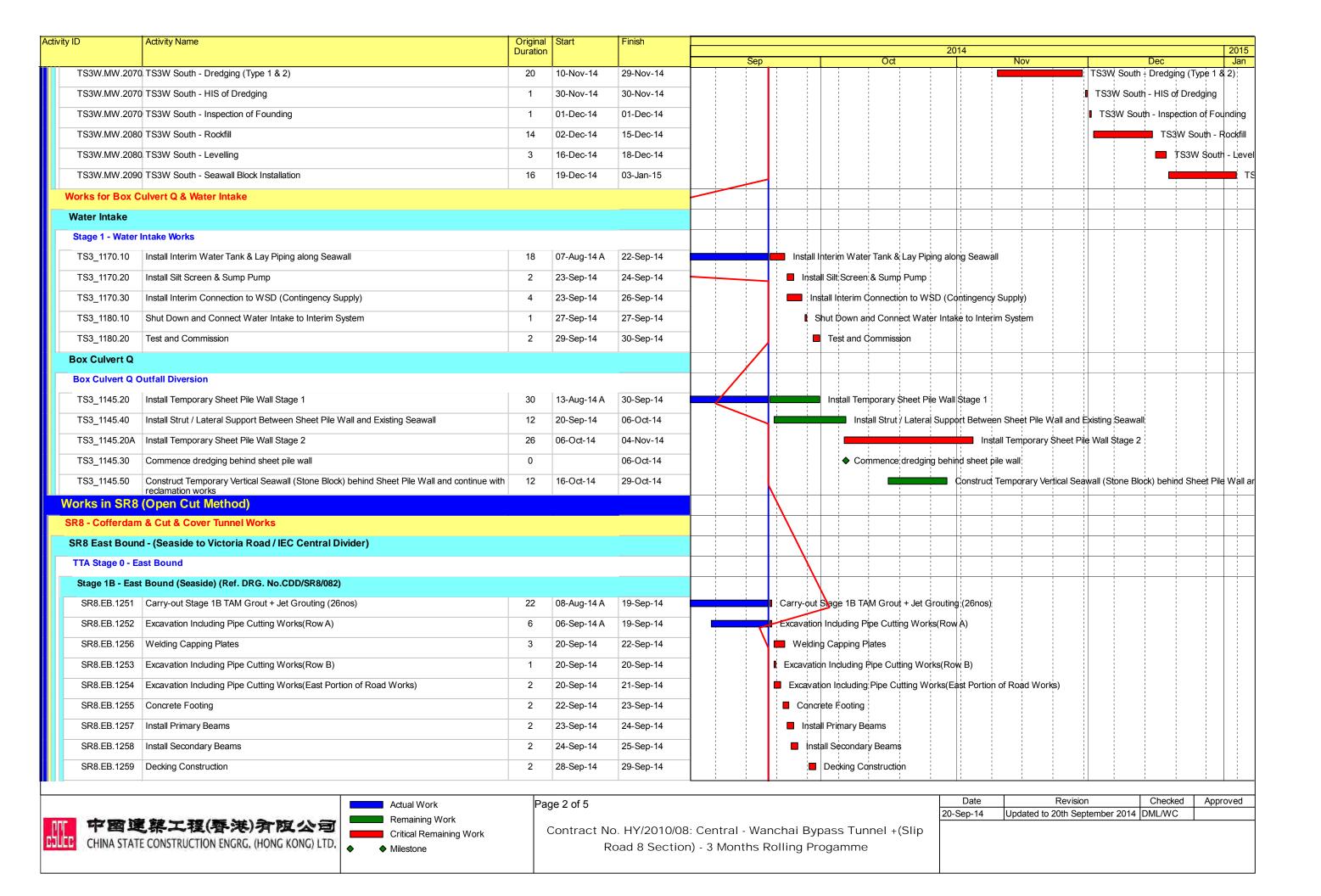
3-MONTH ROLLING PROGRAMME (dd 20-Sep-14)

Date	Revision	Checked	Approved	
20-Sep-14	3MRP			l
20-Feb-14	Baseline Prog			TAS
				2_3
				Prir
				1

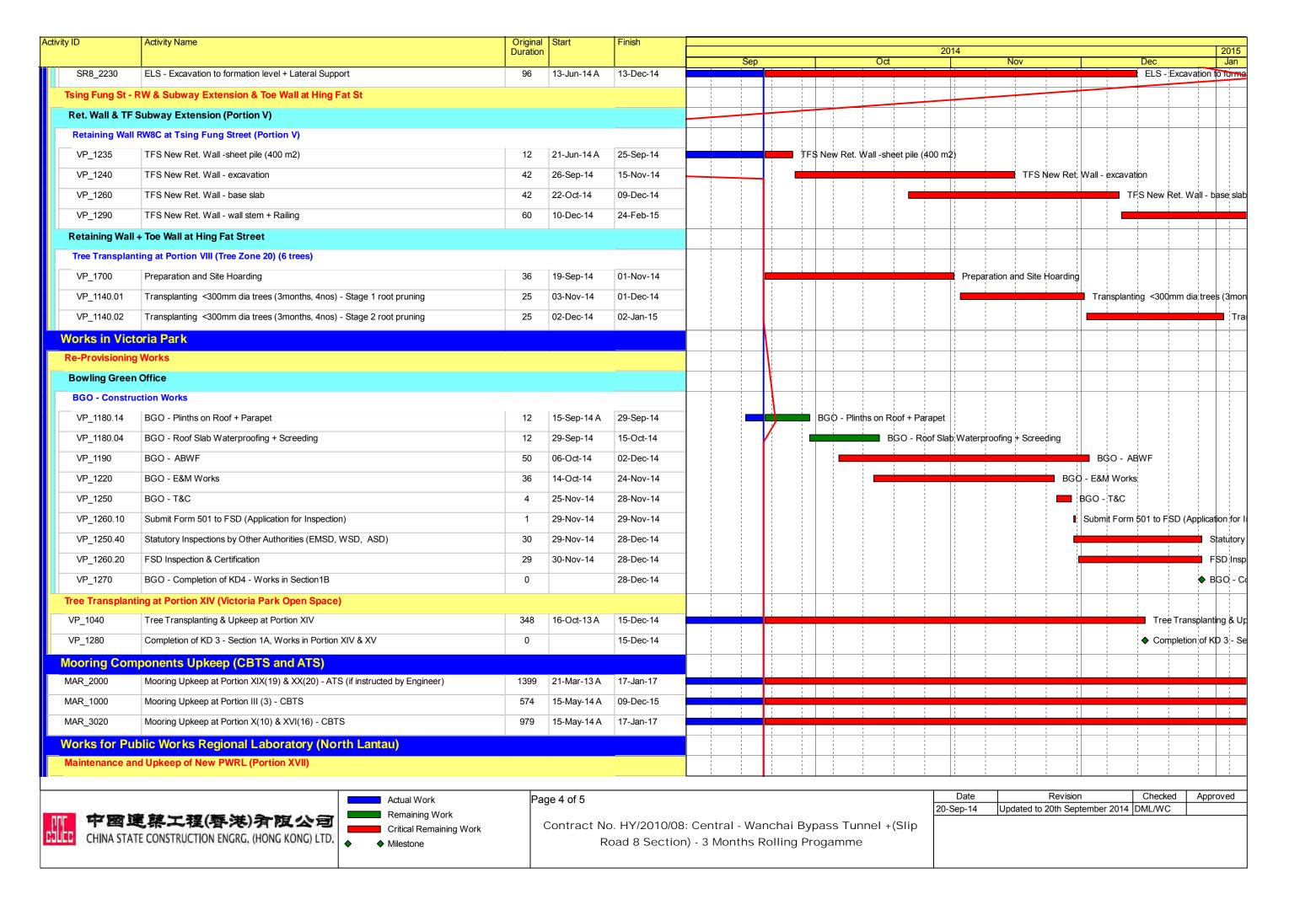
Page 2 of 2 ASK filters: 3-Month Rolling, Temp 3.

Print on: 24-Sep-14 10:22





Activi	ty ID	Activity Name	Original	Start	Finish								2014						2015
			Duration			S	Sep				Ос	t	2014	١	lov		Dec		Jan
	SR8.EB.1260	Road Formation	1	01-Oct-14	01-Oct-14				I R	oad Fo	rmation	ו							
	SR8.EB.1261	Temporary Road Furnitures - Lighting, Barrier, Drainage	2	02-Oct-14	03-Oct-14					Tempo	rary R	oad Furnitur	es - Lighti	ng, Barrie	r, Drainage				
	SR8.EB.1270	Install Temporary Traffic Directional Signs for TTA Stage 1	1	03-Oct-14	03-Oct-14				ı	Install	Tempo	rary Traffic D	irectional	Signs for	TTA Stage 1				
	SR8.EB.1262	Aphalt Laying	1	03-Oct-14	03-Oct-14				ı	Aphalt	Laying								
Ш-	TTA Stage 1 - Ea	ast Bound	'	'	'					 	1								
	Stage 2 - East E	Bound (Ref. DRG. No.CDD/SR8/083)								 	1		1					!	
	SR8.EB.1310	Implement TTA Stage 1 - Traffic Diversion at East Bound (DRG Ref. 4843/011/021E)	0	05-Oct-14						lmpl	ment -	TTA Stage 1	- Traffic [Diversion a	it East Bound (DF	G Ref. 4843/0	11/021E)		
	SR8.EB.1315	Excavate Trench and Expose underground utilities (Carriage way)	6	06-Oct-14	11-Oct-14						Exca	vate Trench	and Expo	ose under	ground utilities (Ca	rriage way)			
Ш	SR8.EB.1320	Divert Gas Main to pre-laid Gas Main Pipe at Planter Area Gas Main Trough	18	13-Oct-14	01-Nov-14					 			Di [*]	vert Gas N	lain to pre-laid G	as Main Pipe at	Planter Are	a Gas Ma	in Troi
	SR8.EB.1325	Protect and Shift HV 22kv Cable on carraige way (as required)	18	13-Oct-14	01-Nov-14					 			Pr	otect and	Shift HV 22kv Cat	le on carraige v	way (as rec	uired)	
Ш	SR8.EB.1327	Cut and By pass Drainage to the next (existing) collection point (MH)	18	13-Oct-14	01-Nov-14					 			Cı	ıt and By p	ass Drainage to t	ne next (existing	g) collection	point (MI	1)
	SR8.EB.1330	Carry out pre-boring work for stage 2 sheet pile	14	03-Nov-14	18-Nov-14					 	1			-	Carry out p	re-boring work	for stage 2	sheet pile	
	SR8.EB.1340	Stage 2 - Sheet Pile Work	18	12-Nov-14	02-Dec-14					 	1			_		Stage 2 - S	Sheet Pile \	Nork	
	SR8.EB.1350	Stage 2 - Pipe Piling Work	52	03-Dec-14	04-Feb-15					1 1 1 1	1		1						$\dot{+}$
	SR8 West Boun	d - Ch. 459.000 to 385.000 (Victoria Road / IEC Central Divider)								 	1 1 1						1 1		
	TTA Stage 1 - W	est Bound								 	1 1 1 1		1						- I
	Stage 2A - Wes	t Bound (Ref. DRG. No.CDD/SR8/086)								 	1 1 1		1						1
	SR8.WB.2130	Pre-treatment Grouting	10	10-Jul-14 A	23-Sep-14			Pre-	treatm	ent Gr	uting								1
	SR8.WB.2030	Carry out Stage 2A Pipe Piling Work	42	21-Aug-14 A	27-Oct-14					1		 	Carry or	ut Stage 2/	A Pipe Piling Work				1
	SR8.WB.2040	Carry out Stage 2A TAM Grout	14	27-Oct-14	12-Nov-14					1 1 1 1	1			-	Carry out Stage 2	A TAM Grout			1
	SR8.WB.2050	Trim Down Sheet Pile / Pipe Pile and construct Gas Main Trough	8	27-Oct-14	05-Nov-14					1 1 1 1	1 1 1			Trim Do	wn Sheet Pile / Pi	pe Pile and con	struct Gas	Main Trou	gh
	SR8.WB.2060	Divert Gas Main to Gas Main Trough	6	05-Nov-14	12-Nov-14					1 1 1 1	 				Divert Gas Main t	Gas Main Tro	ugh		1
	SR8.WB.2140	Testing of Gas Pipe	6	12-Nov-14	19-Nov-14					1 1 1 1	 			_	Testing of	Gas Pipe			1
	Stage 2B - Wes	t Bound (Ref. DRG. No.CDD/SR8/086)				1 1				 	1 1 1		1						
	SR8.WB.2070	Carry out Stage 2B Sheet Pile	7	19-Nov-14	27-Nov-14					1 1 1 1	1					arry out Stage	2B Sheet F	Pile	
	SR8.WB.2080	Carry out Stage 2B Pipe Piling	12	27-Nov-14	11-Dec-14					1 1 1 1	1						Carry out S	tage 2B P	ipe Pili
	SR8.WB.2090	Carry out Stage 2B TAM Grout	14	11-Dec-14	30-Dec-14					1 1 1 1	1					_			Carry
	SR8.WB.2100	Demolish Part (WB) Wing Wall of Abutment M	2	14-Dec-14	21-Dec-14					1 1 1 1	 							Demolish	⊃art (V
	SR8.WB.2120	Construct Temporary IEC West Bound Down Ramp	57	22-Dec-14	04-Mar-15					1 1 1 1	 						•		\rightleftharpoons
-	SR8 Ch.385.000	to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)								<u> </u> 	1 1 1 1		1	-					
	Stage 4 - SR8 C	h.385.000 to Ch317.500 (Tunnel Portal) (Ref. DRG. No.CDD/SR8/087)				1 1 1 1 1 1 1 1				 	1 1 1 1		1		1 1 1 1 1 1 1 1 1				
	SR8.VP.4010	Carry Out Stage 4 Sheet Pile Works	90	13-Mar-14 A	09-Oct-14						Carry	Out Stage 4	Sheet Pile	e Works					
	SR8.VP.4020	Carry Out Stage 4 Pipe Piling Works	145	24-Jul-14 A	06-Feb-15						1	1 1		-			: :	1	<u> </u>
	SR8 Ch 317.500	0 to Ch 210.000 - U-Structure & Slab (Victoria Park)								 	1 1 1 1		1						
	Excavation and	Lateral Support				1 1				 	1 1 1	1 1 1 1 1 1 1 1	1	 					1
_						1 1		1		<u> </u>	1	1 1	1	1	1 1	1	1		
		Actual Work	Pa	ge 3 of 5									Date		Revision		Checked	Appro	ved
ПП	中国建	是禁工程(唇港)有限公司 Remaining Work		Contract N	0 HV/2010/0	Q. Control 1	\//or	shai Di	/DOC	c T	nnol		20-Sep-1	4 JUp	dated to 20th Sep	tember 2014 L	JIVIL/WC		
	CHINA STATI	E CONSTRUCTION ENGRG. (HONG KONG) LTD. Critical Remaining Work Milestone			o. HY/2010/0 load 8 Sectic			-	•			+(SIIP							
	Unablide a graffee	ACTION TO THE PROPERTY OF THE CASE OF THE CASE OF THE STATE OF THE STA		K	.544 0 556116	any onvioliti	13 INC	ming r	. ogc		•								



ID	Activity Name	Original Duration	Start	Finish					0044				
		Duration				Sep		Oct	2014	Nov		Dec	201 Ja
PWRL_1050	Maintenance/ Upkeep of New PWRL	1301	19-Jul-13 A	20-Nov-17									
						1 1		<u> </u>	1 1	1 1	1 1	1 1	1 1
	Actual	Work Pa	ge 5 of 5						Date	R	evision	Checked	Approve
		nina Work							20-Sep-14	Updated to 20t	th September 2014	DML/WC	
		Remaining Work	Contract No	o. HY/2010/0	08: Central	- Wanchai	Bypass Tun	nel +(Slip					
	◆ ◆ Milesto	~		oad 8 Sectio									
						9	_		I				